California Environmental Quality Act Checklist and Analysis

For

Total Maximum Daily Loads
for Organophosphate Pesticides and Toxicity
in the Lower Salinas River Watershed,
Monterey County, California
(Resolution No. R3 -2022-0020)
Updated Resolution No. R3-2024-0002

A Proposed Amendment to the
Water Quality Control Plan for the Central Coastal Basin

February 2022

Prepared under the California Environmental Quality Act (CEQA)
Requirements of a Certified Regulatory Program

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A. PROJECT TITLE

Total maximum daily loads (TMDLs) for organophosphate pesticides and toxicity in the lower Salinas River watershed, Monterey County California.

B. LEAD AGENCY NAME AND ADDRESS

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D. PROJECT DESCRIPTION

This project establishes Total Maximum Daily Loads (TMDLs) for the organophosphate (OP) pesticides chlorpyrifos, diazinon, and malathion, and addresses water column toxicity (toxicity) within waterbodies of the lower Salinas River watershed (TMDL Project). The TMDL Project establishes a plan to reduce these pesticide pollutants and conditions of toxicity so these waterbodies will support beneficial uses and are no longer impaired. Several waterbodies within the lower Salinas River watershed are on the federal Clean Water Act section 303(d) List of impaired waterbodies (303(d) List) due to one or more of the following conditions: excessive concentrations of organophosphate pesticides chlorpyrifos, diazinon, and malathion, or toxicity. Impaired waterbodies on the 303(d) List for chlorpyrifos, diazinon, malathion, or toxicity include: Alisal Creek, Alisal Slough, Blanco Drain, Chualar Creek, Espinosa Slough, Espinosa Lake, Gabilan Creek, Merritt Ditch, Moro Cojo Slough, Moss Landing Harbor, Old Salinas River Estuary, Natividad Creek, Old Salinas River, Quail Creek, Salinas Reclamation Canal, Salinas River (lower, estuary to near Gonzales Rd), Salinas River Lagoon (North), and Tembladero Slough.

Chlorpyrifos, diazinon, and malathion are broad-spectrum OP insecticides that have been detected in surface waters at concentrations that do not meet water quality objectives and, as a result, impair aquatic life beneficial uses. The three OP pesticides share the same mode of action and have individual and additive toxic effects on aquatic invertebrates.

Chlorpyrifos is a broad-spectrum OP insecticide that was first registered for use on food and feed crops in 1965. In 2019, California Department of Pesticide Regulation (CDPR) announced the cancellation of chlorpyrifos, ending its use on crops by December 31, 2020. Chlorpyrifos was also a widely used residential pesticide until 2001 when United States Environmental Protection Agency (USEPA) canceled residential use of chlorpyrifos. The properties of chlorpyrifos include relatively low water solubility, a relatively high soil sorption coefficient, and moderate half-life in soil and water.

Diazinon is a broad-spectrum contact OP insecticide. It was a very widely used home lawn and garden pesticide until residential use was restricted. In 2004 all residential sales of diazinon were stopped. Diazinon is currently used on agricultural crops within the lower Salinas River watershed, primarily strawberries and beets.

Malathion is a broad-spectrum residential and agricultural insecticide. Malathion is currently used on agricultural crops within the lower Salinas River watershed, primarily lettuce, strawberries, celery, and berries. It has a short half-life in water and soil, is highly soluble, and has a low intermediate soil sorption coefficient. These properties make malathion susceptible to run-off into surface waters and leaching into ground water.

From 2006 to 2018, concentrations of chlorpyrifos and diazinon in streams of the lower Salinas River watershed have decreased significantly, while malathion concentrations have significantly increased over the same period.

In addition to the three OP pesticides mentioned above, this TMDL Project also addresses the condition of toxicity in water. All waterbodies within the lower Salinas River watershed exhibit significant toxicity to one or more test species using the survival endpoint. Staff reviewed available toxicity sublethal effects, as measured by growth or reproduction endpoints, and concluded that all waterbodies exhibiting toxicity impairment due to the significant mortality also exhibit significant sublethal effects (growth and/or reproduction). This condition does not support the toxicity water quality objective.

This TMDL Project proposes amending the Water Quality Control Plan for the Central Coastal Basin (Basin Plan). This Basin Plan amendment and the associated implementation measures could cause physical changes in the environment. An Environmental Checklist (Section J below) has been completed as required by the Central Coast Regional Water Quality Control Board's (Central Coast Water Board) section 207 Basin Planning Program and the California Environmental Quality Act (CEQA). (Public Resources Code, division 13, section 21065.).

E. PROJECT LOCATION

The lower Salinas River watershed is a coastal watershed within the northern portion of Monterey County in the Central Coast Region of California (refer to Figure 1).

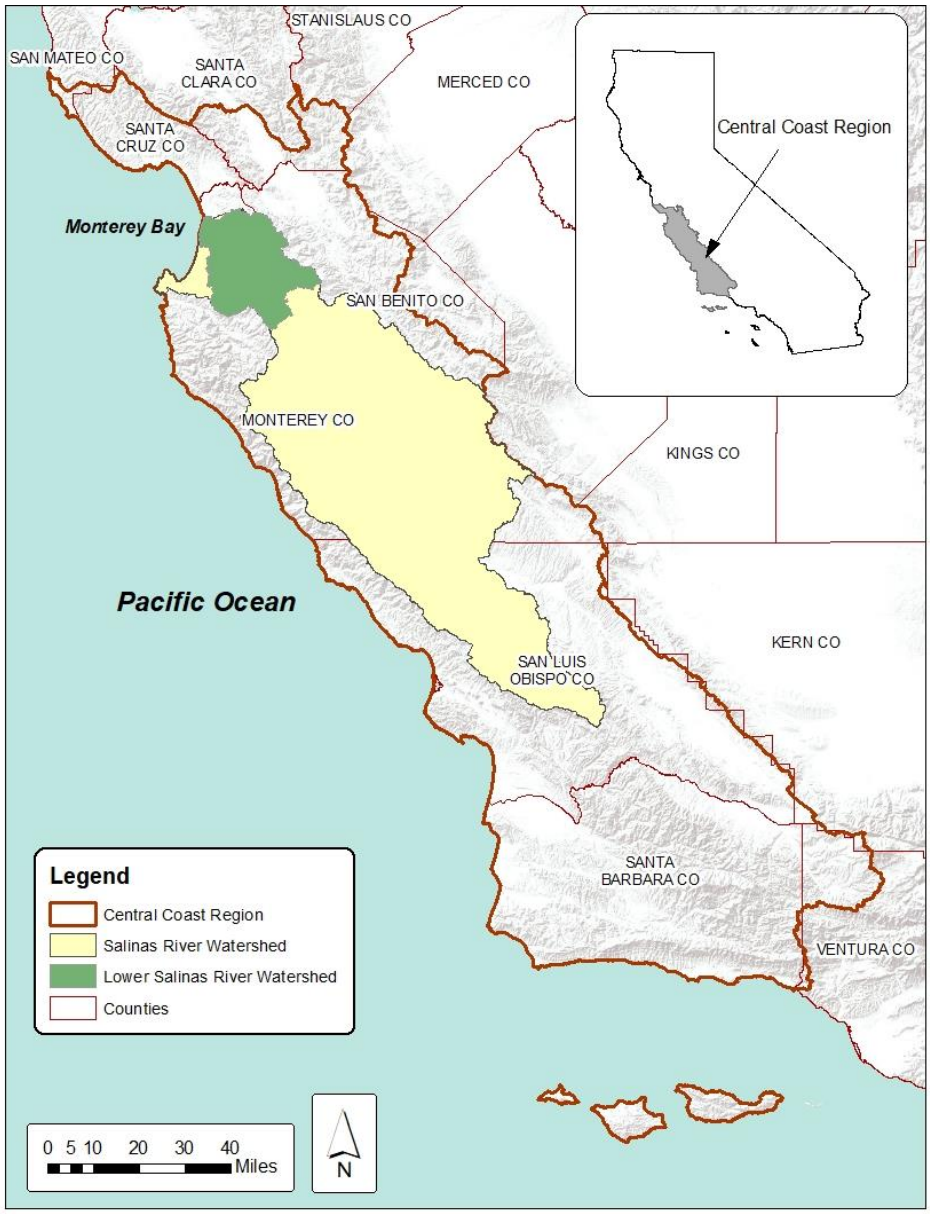

Figure 1. A map showing the location of the lower Salinas River watershed, which is in the northwest corner of the greater Salinas River watershed and within the Central Coast Region of California.

There are two major drainages in the project area which terminate at Moss Landing Harbor, one is the lower Salinas River and its tributaries, and the other is the Salinas Reclamation Canal and its tributaries. Tributaries to the lower Salinas River include Chualar Creek, Esperanza Creek, Quail Creek, Toro Creek, and Blanco Drain. The lower portion of the Salinas River forms the Salinas River Lagoon (North) where flows are regulated into the Old Salinas River and Moss Landing Harbor. Tributaries to the Salinas Reclamation Canal include Alisal Creek, Natividad Creek, Gabilan Creek, Santa Rita Creek, Alisal Slough, Espinosa Slough, and Merritt Ditch. The lower portion of Salinas Reclamation Canal forms the Tembladero Slough where flows join the Old Salinas River and eventually terminate at Moss Landing Harbor. Moro Cojo Slough is tributary to Moss Landing Harbor.

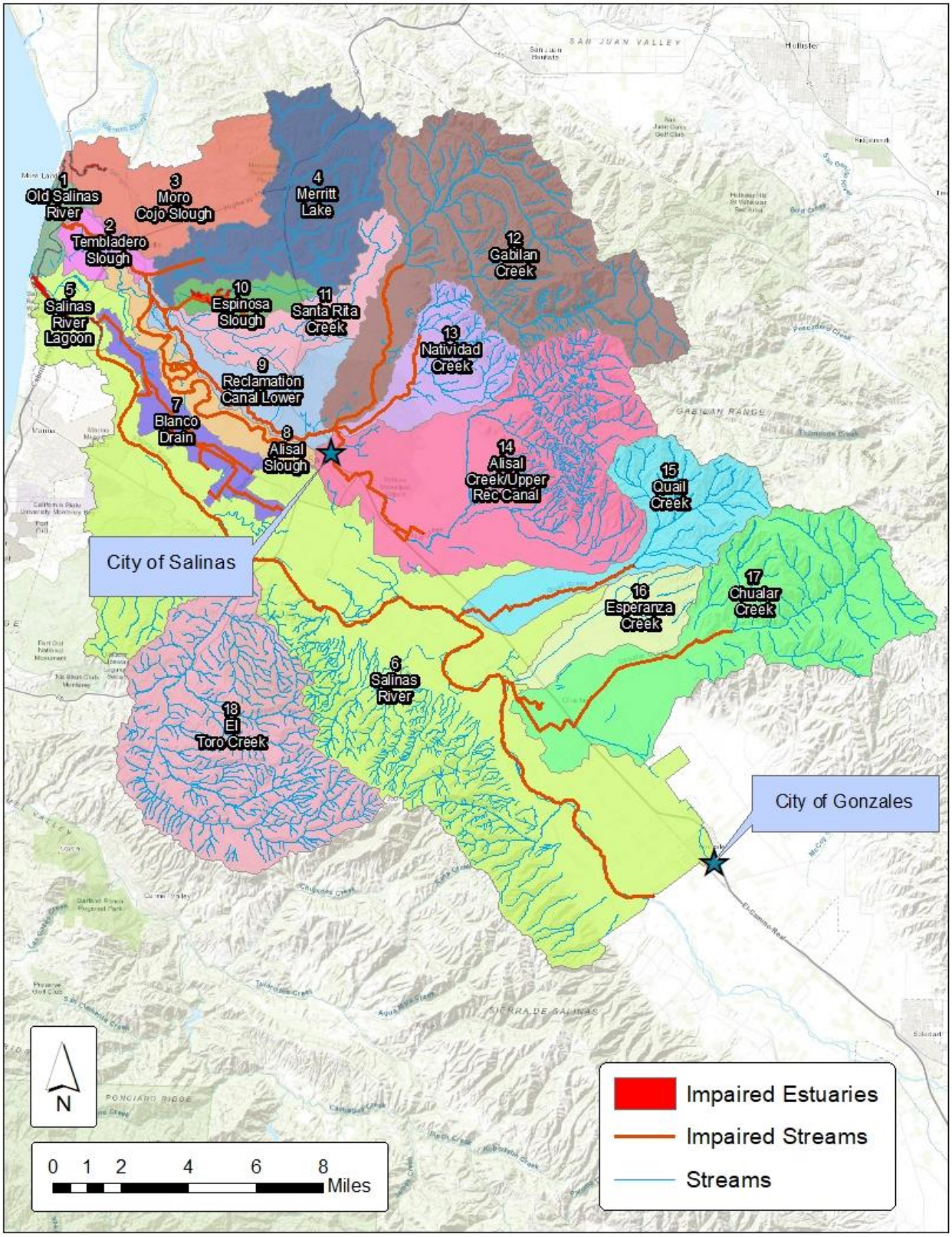

Figure 2. Map of the lower Salinas River and Gabilan Creek Watersheds.

F. REGULATORY REQUIREMENTS FOR ENVIRONMENTAL IMPACT ANALYSIS

This section presents the regulatory requirements for assessing environmental impacts of a TMDL Project implemented through a Basin Plan amendment by the Central Coast Water Board. TMDL Projects are evaluated at a programmatic level (e.g., a watershed or planning area) and not at the project level (e.g., a specific project site) of detail. As a Basin Plan amendment, this TMDL Project is considered a certified regulatory program and the information and analyses are presented in Substitute Environmental Documentation (SED). The SED is comprised of this CEQA checklist and analysis report along with the organophosphate pesticide and toxicity TMDL Project report and implementation plan, and a proposed Basin Plan amendment.

1. Exemption from Certain CEQA Requirements

The California Secretary of Resources has certified the State and Regional Water Boards' basin planning process as exempt from certain requirements of CEQA, including preparation of an initial study, negative declaration, and environmental impact report. (California Code of Regulations, title 14, section 15251(g).) As the proposed amendment to the Basin Plan is part of the basin planning process, the environmental information developed for and included with the amendment can substitute for an initial study, negative declaration, and/or environmental impact report.

2. California Code of Regulations and Public Resources Code Requirements

While the certified regulatory program of the Central Coast Water Board is exempt from certain CEQA requirements, it is subject to the substantive requirements of California Code of Regulations, title 23, section 3777(a), which requires a written report containing environmental analysis of the project and an Environmental Checklist (see Section J of this document). Further, section 3777(b) requires identification of any significant or potentially significant adverse environmental impacts of the project and analysis of reasonable alternatives to the project and mitigation measures to avoid or reduce significant impacts, and an analysis of the reasonably foreseeable methods of compliance with the TMDL Project.

In addition, the Central Coast Water Board must fulfill substantive obligations when adopting performance standards such as TMDLs, as described in Public Resources Code section 21159. Public Resources Code section 21159, which allows expedited environmental review for mandated projects, provides that an agency shall perform, at the time of the adoption of a rule or regulation requiring the installation of pollution control equipment, or a performance standard or treatment requirement, an environmental analysis of the reasonably foreseeable methods of compliance. Further, the Public Resources Code, section 21159(a) requires that the environmental analysis, at a minimum, include the following:

1. An analysis of the reasonably foreseeable environmental impacts of the methods of compliance.
2. An analysis of reasonably foreseeable feasible mitigation measures.

3. An analysis of reasonably foreseeable alternative means of compliance with the rule or regulation.

Public Resources Code section 21159(c) requires that the Environmental Analysis consider a reasonable range of:

- Environmental, economic, and technical factors,
- Population and geographic areas, and
- Specific sites.

3. Program and Project Level Analyses

Public Resources Code section 21159(d) states that agencies such as the Water Boards preparing SEDs are not required to conduct a project level analysis. Rather, if a project level analysis is required, it must be performed by the public agencies that are required to implement the requirements of the TMDL Project. (Public Resources Code, section 21159.2.) Notably, the Central Coast Water Board is prohibited from specifying the manner of compliance with its regulations or requirements (Wat. Code, section 13360), and accordingly, the actual environmental impacts resultant from this TMDL project will depend upon the compliance strategies selected by responsible parties.

4. Purpose of CEQA

CEQA's basic purposes (California Code of Regulations, title 14, section 15002(a)) are to:

1. inform the decision makers and public about the potential significant environmental effects of a proposed project,
2. identify ways that environmental damage may be avoided or significantly reduced,
3. prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternative or mitigation measures when feasible, and
4. disclose to the public why an agency approved a project if significant effects are involved.

To fulfill these functions, a CEQA review need not be exhaustive and CEQA documents need not be perfect. They need only be adequate, complete, and good faith efforts at full disclosure. (California Code of Regulations, title 14, section 15151.) The court in *River Valley Preservation Project v. Metropolitan Transit Development Board* (1995) 37 Cal.App.4th 154, 178 noted:

> [a]s we have stated previously, "[our] limited function is consistent with the principle that " ' "[t]he purpose of CEQA is not to generate paper, but to compel government at all levels to make decisions with environmental consequences in mind…" ' " [citations omitted] "We look 'not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.' (Guidelines, 15151.)" [citation omitted]

Nor does a CEQA document require unanimity of opinion among experts. The analysis is satisfactory if those opinions are considered. In this document, Central Coast Water

Board staff has performed a good faith effort at full disclosure of the reasonably foreseeable environmental impacts that could be associated with the proposed TMDLs.

5. Determining Significant Impacts and Thresholds of Significance

A key component of CEQA is determining whether environmental impacts are significant. A significant effect on the environment is defined as a substantial or potentially substantial adverse change in the environment. (Public Resources Code, sections 21068, 21100(d)); California Code of Regulations, title 14, section 15382.) To assess the impact of a proposed project on the environment, the lead agency examines the changes to existing environmental conditions that would occur in the affected area if the proposed project were implemented. (California Code of Regulations, title 14, section 15125.2(a); *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645.)

The basis of determining whether an environmental impact is potentially significant is the comparison of reasonably foreseeable project impacts to thresholds of significance for protecting the resource. Thresholds of significance are quantitative or qualitative analytical criteria used to determine the effects of a project on the environment. The thresholds may vary with the setting of the TMDL Project and may be developed for an individual project or the lead agency may have established thresholds. The lead agency can also consider thresholds of significance adopted for other projects or by other agencies (California Code of Regulations, title 14, section 15064.7). For this TMDL Project, Central Coast Water Board staff considered thresholds of significance adopted in other TMDL Projects, along with ones used by other regulatory programs and public agencies.

G. ENVIRONMENTAL SETTING

This section describes the current environmental conditions of the lower Salinas River watershed. The regional geographic setting is described above in the project description section and the geographic and environmental settings are also more extensively described in the Organophosphate Pesticide and Toxicity TMDL Report. The following are descriptions of the natural and built environments of the lower Salinas River watershed in the context of the TMDL Project.

1. Land use:

Cultivated cropland is the predominant land use in the lower Salinas River watershed. Cultivated crops and developed land uses dominate the valley floor of the watershed (refer to Figure 3 and Table 1). The surrounding foothills are much less developed and are covered with forests, grasslands, and native scrub. The City of Salinas is the largest developed area in the lower Salinas River watershed and has a population of just over 150,000. Other communities in the lower Salinas River watershed include the City of Gonzales and the unincorporated communities of Castroville, Chualar, and Spreckels with a combined population of over 16,000.

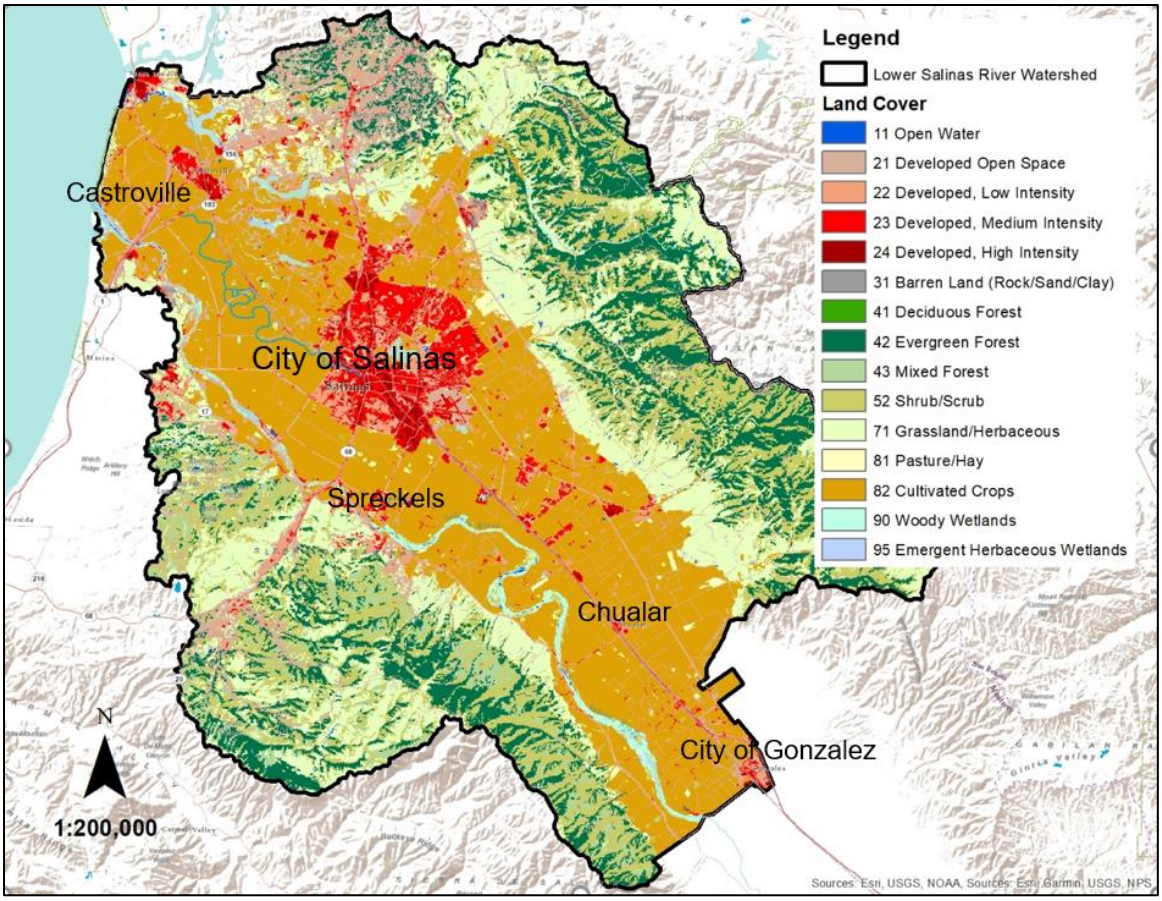

Figure 3. Map of land cover in the lower Salinas River watershed, (Source: National Land Cover Dataset, 2011).

Table 1. Table of land cover acreage and percentage in the lower Salinas River watershed.

Id Code	Land Cover Name	Percent Land Cover	Acres
11	Open Water	0%	560
21	Developed Open Space	9%	23,276
22	Developed, Low Intensity	4%	11,557
23	Developed, Medium Intensity	4%	10,674
24	Developed, High Intensity	1%	2,234
31	Barren Land (Rock/Sand/Clay)	0%	577
41	Deciduous Forest	0%	5
42	Evergreen Forest	14%	35,273
43	Mixed Forest	3%	7,388
52	Shrub/Scrub	16%	42,428
71	Grassland/Herbaceous	17%	44,666
81	Pasture/Hay	1%	1,595
82	Cultivated Crops	29%	74,852
90	Woody Wetlands	1%	2,997

Id Code	Land Cover Name	Percent Land Cover	Acres
95	Emergent Herbaceous Wetlands	0%	1,259
	Total	100%	259,342

Source: National Land Cover Dataset 2011

2. Agriculture:

Monterey County is a highly productive agricultural area with crop production valued at over $4.65 billion in 2019 (CMAC, 2019.). Some of the major crops grown in the county are lettuce, broccoli, and strawberry crops. Countywide crop values are summarized in Table 2. The lower Salinas River watershed is a very productive agricultural area due to its proximity to the coast and highly productive soils. The Pacific Ocean has a moderating influence on the climate making the lower Salinas River watershed highly suitable for vegetable and strawberry production. The alluvial valley soils are extremely rich and productive.

Table 2. Table of major crops grown in Monterey County and estimated 2019 crop values.

Crop	2019 Crop Value
Artichoke	$53,152,000
Broccoli	$457,390,000
Cauliflower	$212,375,000
Celery	$186,391,000
Head Lettuce	$514,088,000
Leaf Lettuce	$840,555,000
Spinach	$127,120,000
Other Vegetable Crops	$708,017,000
Strawberry total	$732,761,000
Grapes (Wine)	$186,096,000
Other Fruit and Nuts	$481,481,000
Livestock and Poultry	$110,580,000
Seed Production	$3,449,000
Field Crops	$24,554,000
Cut Flowers and Cut Foliage	$12,568,000
Total	$4,650,577,000

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) is responsible for evaluating the location and categorizing the conservation quality of agricultural lands in the state. The FMMP categorizes agricultural land according to soil quality and irrigation status; the best quality land is called Prime Farmland. The location and conservation quality of farmland in the watershed are mapped in Figure 4 and total acre of land in each conservation category are summarized in Table 3. The map and table show that Prime Farmland is the predominant farmland in the watershed with over 67,000 acres. To protect farmland, Monterey County has an agricultural preserve program that

enrolls farmland in Williamson Act contracts that restrict changes in land use to agricultural only. In return, landowners receive property tax assessments based on agricultural uses only, instead of full potential market value; typically resulting in lower property taxes. Figure 5 shows parcels mapped under Williamson Act contracts. Almost 100,000 acres are enrolled in these contracts.

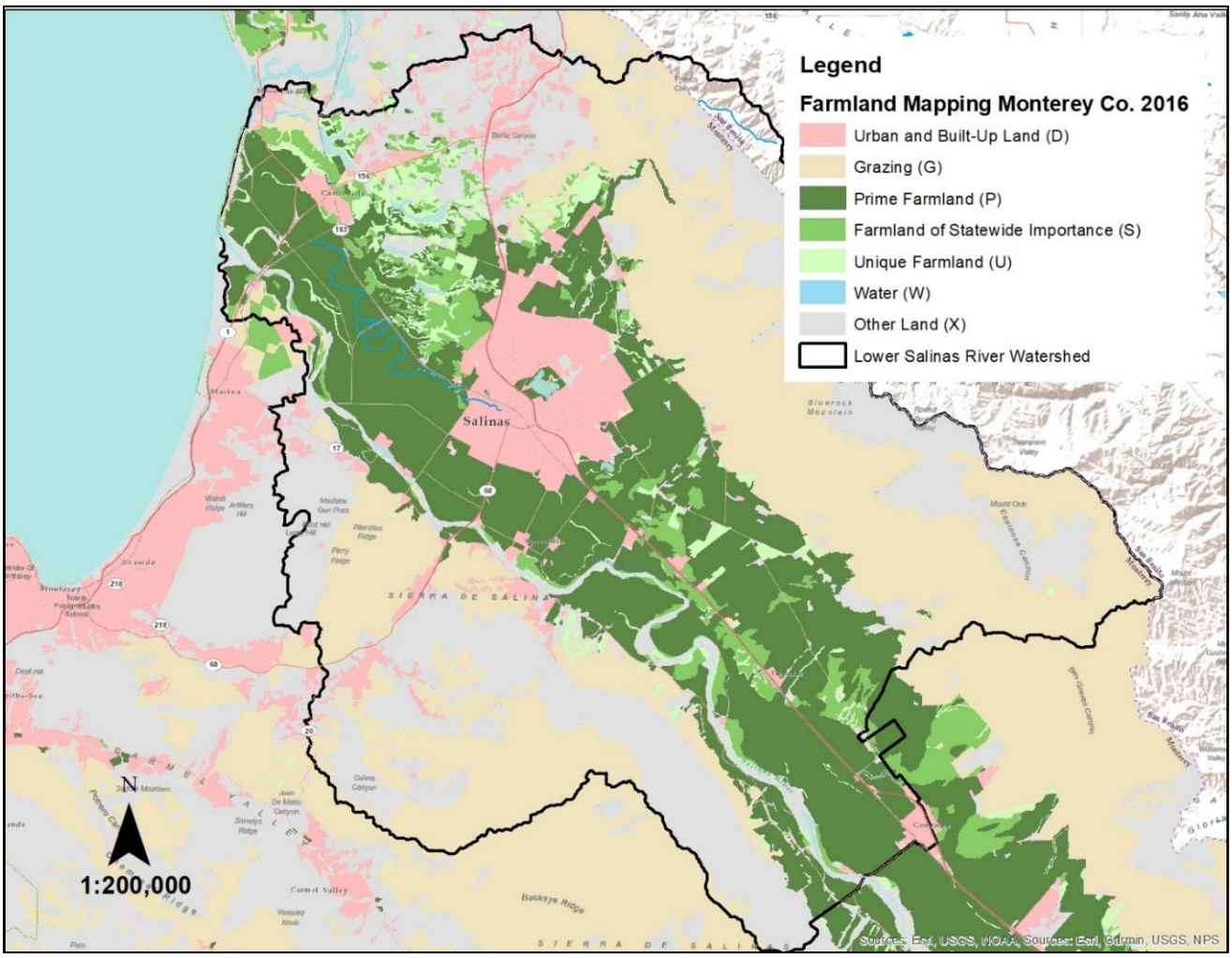

Figure 4. Map of farmland in the lower Salinas River watershed. The source of the map layer is the 2016 FMMP.

Table 3. Table summarizing categories of farmland in the lower Salinas River watershed as defined by FFMP (2016).

Description (Map Code)	Acres
Urban and Built-Up Land (D)	22,143
Grazing (G)	80,526
Prime Farmland (P)	67,377
Farmland of Statewide Importance (S)	12,086
Unique Farmland (U)	8,939
Other Land (X)	64,846
Water (W)	114
Total Acres	256,032

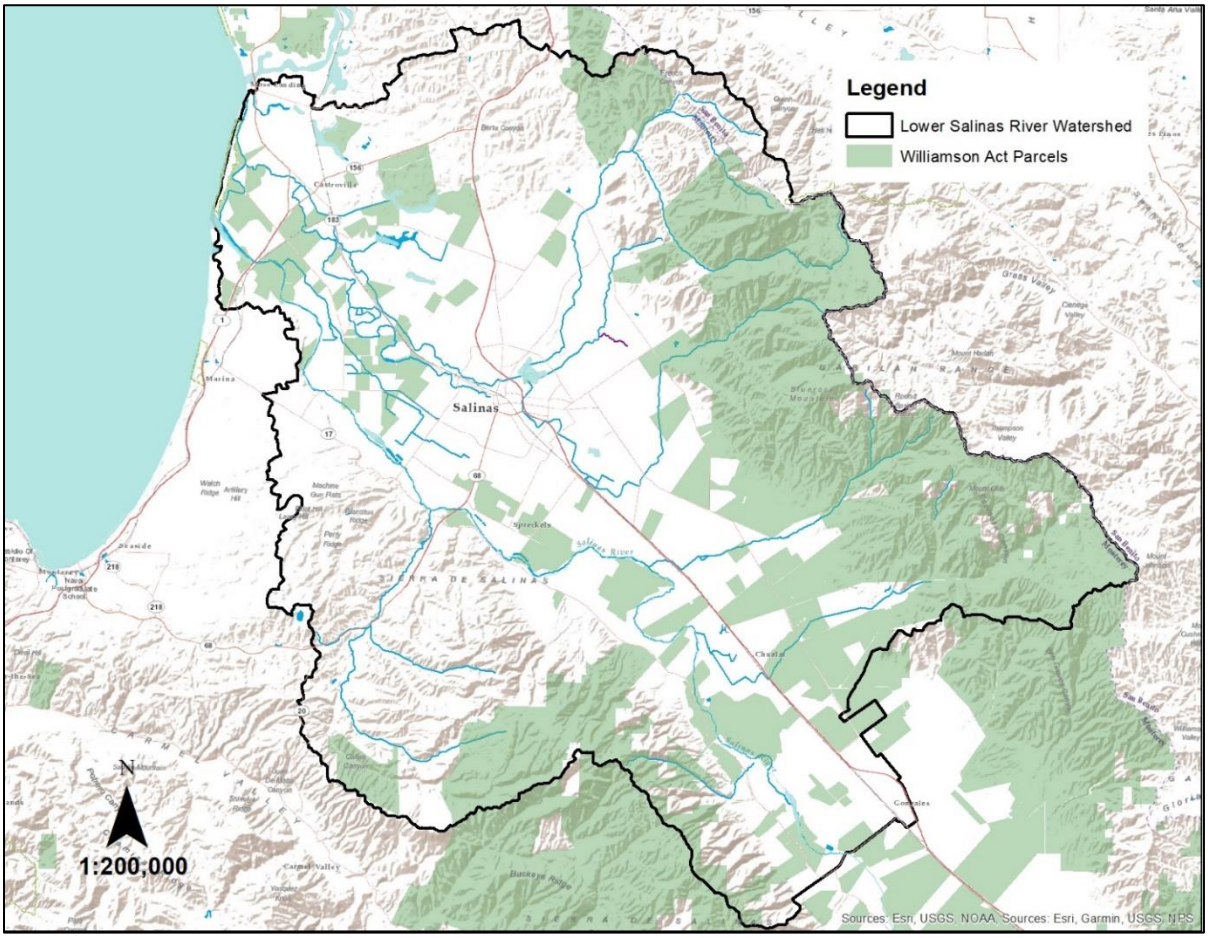

Figure 5. Map of parcels in the project area enrolled in the Monterey County Williamson Act contracts. Source County of Monterey 2011.

3. Soils and Geology:

The lower Salinas River watershed lies in a southeast to northwest-trending intermundane trough (lower Salinas's valley) filled principally by unconsolidated alluvial sediments (quaternary alluvium) (refer to Figure 6). The lower Salinas valley is bound to the northeast by the Gabilan Mountains and to the southwest by the Santa Lucia Mountains, which are formed by uplift and tranpressional tectonic forces and which are underlain by consolidated sedimentary assemblages, igneous rocks, and metamorphic rocks. The Salinian and the Franciscan are the major rock types in the mountain ranges. Erosion of the steep mountains surrounding the valley formed broad alluvial fans of nutrient rich soils that support the productive farmland. The valley overlies productive aquifers that provide groundwater for farms and communities in the watershed. The lower end of the watershed along the coast is bound by sand deposits (sand dunes) that separate the Salinas Valley from Monterey Bay.

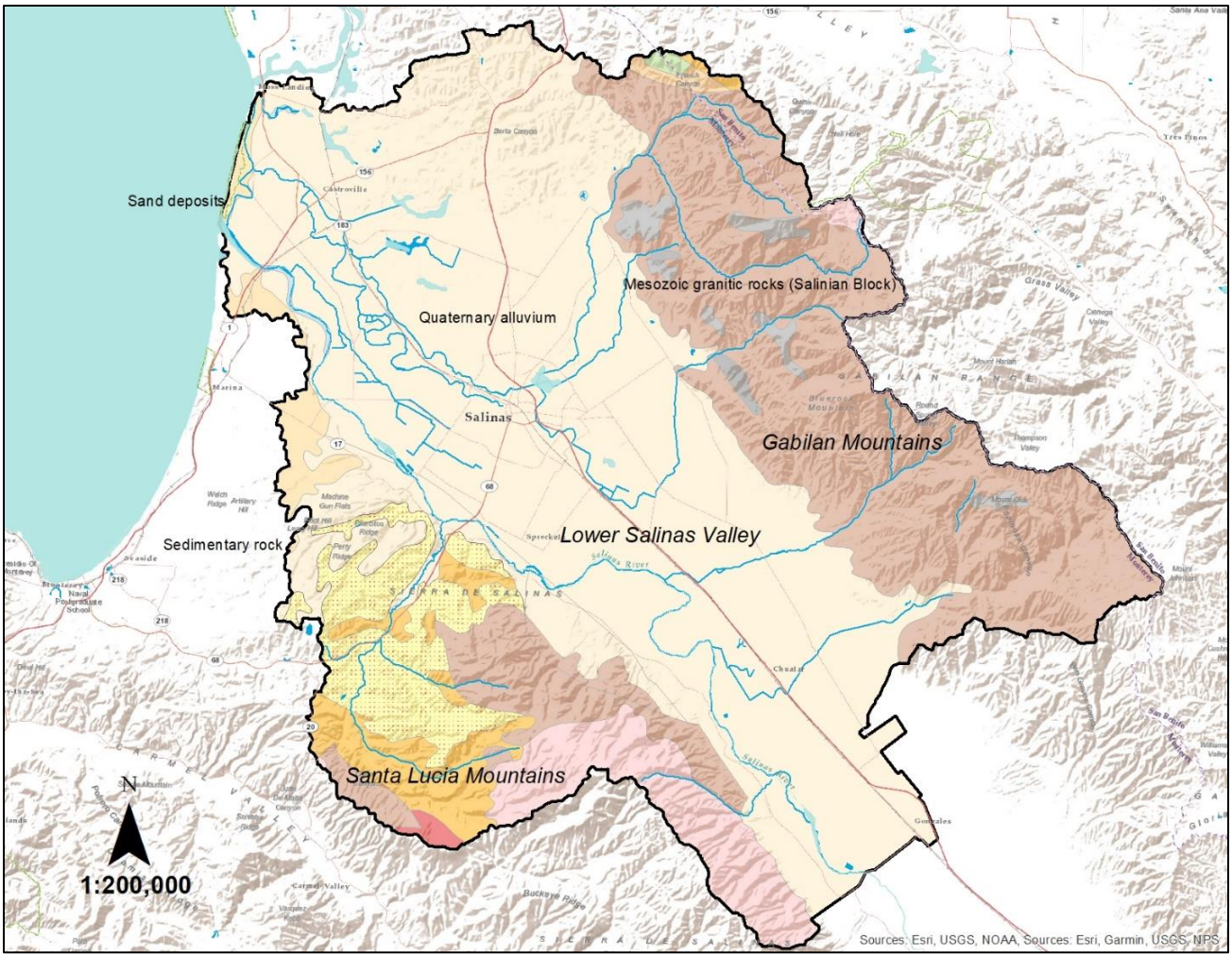

Figure 6. Map of geomorphic features in the lower Salinas River watershed.

4. Mineral Deposits:

Mineral resources are present in the lower Salinas River watershed as is evident by mineral extraction operations and abandoned mines in the hills. Active mining sites include the following: an active dolomitic lime quarry in the Gabilan Mountains near Gabilan Creek; two active sand and gravel operations along the Salinas River channel and one in the Santa Lucia Mountains. Inactive resource extraction sites include three abandoned oil wells as well as several mine and well sites located mainly in the foothills around the valley but not on the valley floor near farms or municipalities.

5. Biology (vegetation and wildlife):

The lower Salinas River watershed supports diverse natural vegetation communities and wildlife habitats. While the valley floor is mainly developed with irrigated agriculture and urban lands, the Salinas River and Gabilan Creek drainages are important wildlife and steelhead trout corridors. The Salinas River is a broad channel that transects the valley and the River provides riparian habitat and is a wildlife corridor to much less disturbed habitats in the hills that flank the valley. In the uplands around the valley there is a mix of less disturbed coastal plant communities including grasslands, chaparral, scrub, and oak and pine woodlands (refer to Figure 7). Grasslands are altered from historic and current cattle grazing and the plant community is dominated by non-native grasses, which have replaced native perennial grasses. Woodlands are characterized by coast live oak and include other species such as non-native eucalyptus and pines. Upland chaparral and scrub communities are dominated by a mixture of lower evergreen species such as manzanita, salvia, ceanothus, and coyote brush (ESF, 2002).

In addition to the Salinas River, there are many important wetland habitats including the Salinas River estuary, the Old Salinas River, and the slough systems in the lower Salinas River watershed that flows from west of the City of Salinas to the coast. These wetlands support many rare and endangered species such as the California red-legged frog (*Rana draytonii)* and the California tiger salamander (*Ambystoma californiense*).

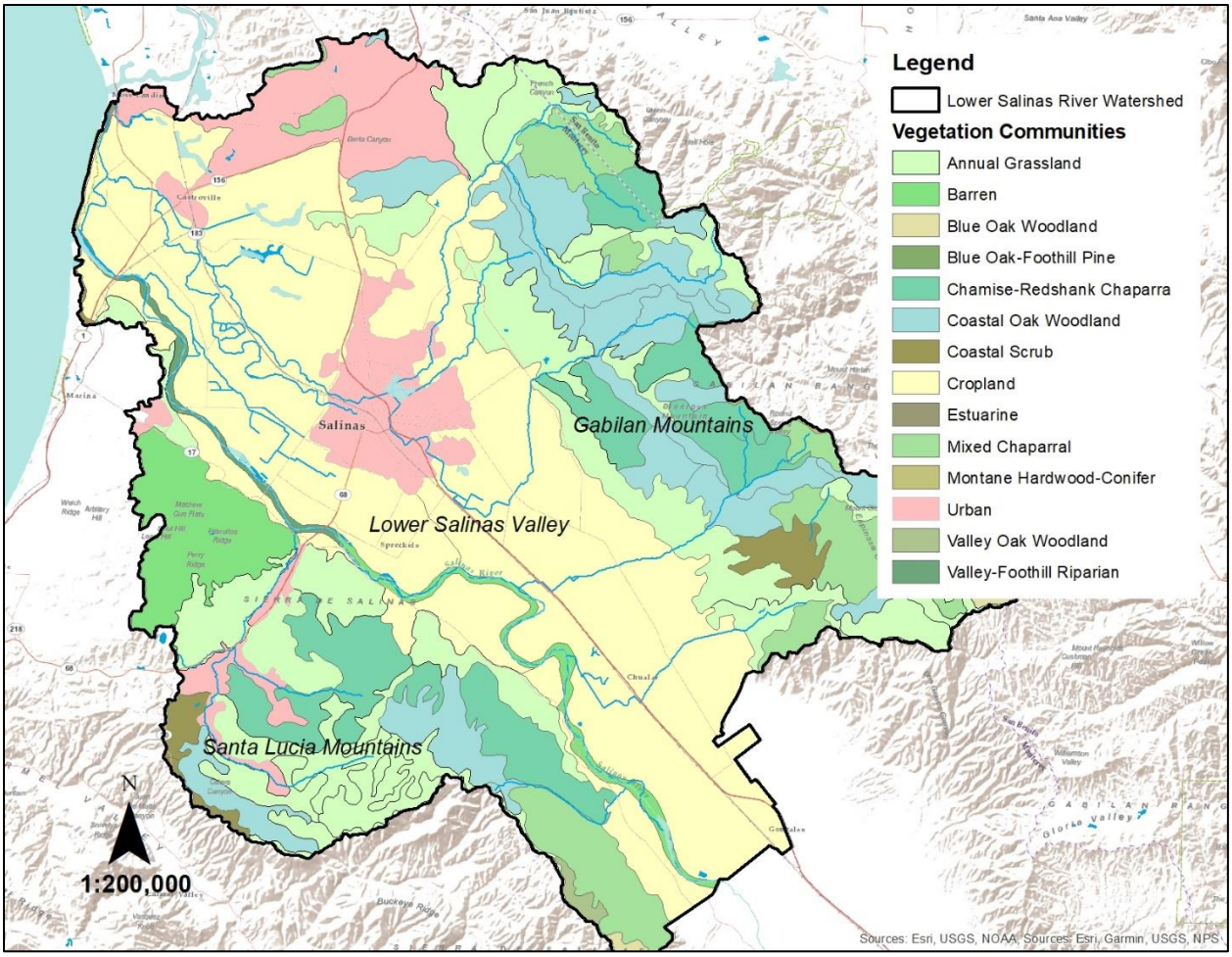

Figure 7. Map of plant communities in the lower Salinas River watershed.

The special status species known to occur within the lower Salinas River watershed are tabulated in Table 4; this information is based on data available from the California Departmentof Fish and Wildlife Via the California Natural Diversity Database tracks “special status species,” which is a broad term used to refer to the list of “species at risk” or the “special animals” list. To be included on the “special status species” list, the animal or plant taxa must meet certain conditions indicating the species is rare, threatened, endangered, declining in population, sensitive, or otherwise meeting some level of conservation concern.

Note that the California Natural Diversity Database is a “positive detection” database, meaning that records of sensitive species only exist in the database where these species were observed. Geographic areas in the database that have no records simply mean there is limited information there, or that no organized surveys have takenplace. One cannot conclude that there is less biological diversity in these places, simply due to lack of information. Therefore, these designations are not definitive and are to be supplemented with subsequent program and project level resource study and mapping.

Table 4. Table listing rare, sensitive, threatened, or endangered species in the vicinity of the TMDL Project area.

Scientific Name	Common Name	Federal Legal Status	California Legal Status	State Ranking Threat Designation
Accipiter cooperii	Cooper's hawk	None	None	S4
Agelaius tricolor	tricolored blackbird	None	Threatened	S1S2
Agrostis lacuna-vernalis	vernal pool bent grass	None	None	S1
Allium hickmanii	Hickman's onion	None	None	S2
Ambystoma californiense	California tiger salamander	Threatened	Threatened	S2S3
Ambystoma macrodactylum croceum	Santa Cruz long-toed salamander	Endangered	Endangered	S1S2
Anniella pulchra	Northern California legless lizard	None	None	S3
Arctostaphylos hookeri ssp. Hookeri	Hooker's manzanita	None	None	S2
Arctostaphylos montereyensis	Toro manzanita	None	None	S2?
Arctostaphylos pajaroensis	Pajaro manzanita	None	None	S1
Arctostaphylos pumila	sandmat manzanita	None	None	S1
Asio flammeus	short-eared owl	None	None	S3
Astragalus tener var. tener	alkali milk-vetch	None	None	S1
Athene cunicularia	burrowing owl	None	None	S3
Bombus caliginosus	obscure bumble bee	None	None	S1,S2
Bombus crotchii	Crotch bumble bee	None	Candidate Endangered	S1,S2
Bombus occidentalis	western bumble bee	None	Candidate Endangered	S1
Castilleja ambigua var. insalutata	pink Johnny-nip	None	None	S2
Central Dune Scrub	Central Dune Scrub	None	None	S2.2
Central Maritime Chaparral	Central Maritime Chaparral	None	None	S2.2
Centromadia parryi ssp. Congdonii	Congdon's tarplant	None	None	S1S2
Charadrius nivosus nivosus	western snowy plover	Threatened	None	S2
Chorizanthe minutiflora	Fort Ord spineflower	None	None	S1
Chorizanthe pungens var. pungens	Monterey spineflower	Threatened	None	S2

Scientific Name	Common Name	Federal Legal Status	California Legal Status	State Ranking Threat Designation
Chorizanthe robusta var. robusta	robust spineflower	Endangered	None	S1
Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	None	None	S2.1
Coastal Brackish Marsh	Coastal Brackish Marsh	None	None	S2.1
Coelus globosus	globose dune beetle	None	None	S1, S2
Cordylanthus rigidus ssp. Littoralis	seaside bird's-beak	None	Endangered	S2
Corynorhinus townsendii	Townsend's big-eared bat	None	None	S2
Coturnicops noveboracensis	yellow rail	None	None	S1, S2
Danaus plexippus pop. 1	monarch – California overwintering population	None	None	S2, S3
Dipodomys venustus venustus	Santa Cruz kangaroo rat	None	None	S1
Emys marmorata	western pond turtle	None	None	S3
Eremophila alpestris actia	California horned lark	None	None	S4
Ericameria fasciculata	Eastwood's goldenbush	None	None	S2
Eriogonum nortonii	Pinnacles buckwheat	None	None	S2
Erysimum ammophilum	sand-loving wallflower	None	None	S2
Eucyclogobius newberryi	tidewater goby	Endangered	None	S3
Falco peregrinus anatum	American peregrine falcon	Delisted	Delisted	S3, S4
Fritillaria liliacea	fragrant fritillary	None	None	S2
Gilia tenuiflora ssp. Arenaria	Monterey gilia	Endangered	Threatened	S2
Horkelia cuneata var. sericea	Kellogg's horkelia	None	None	S1?
Lasthenia conjugens	Contra Costa goldfields	Endangered	None	S1
Lavinia exilicauda harengus	Monterey hitch	None	None	S2, S4
Legenere limosa	legenere	None	None	S2
Linderiella occidentalis	California linderiella	None	None	S2, S3
Microseris paludosa	marsh microseris	None	None	S2

Scientific Name	Common Name	Federal Legal Status	California Legal Status	State Ranking Threat Designation
Monolopia gracilens	woodland woollythreads	None	None	S3
Neotoma macrotis luciana	Monterey dusky-footed woodrat	None	None	S3
Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	None	None	S3.2
Oncorhynchus mykiss	steelhead – south-central California coast DPS	Threatened	None	S2
Piperia yadonii	Yadon's rein orchid	Endangered	None	S1
Plagiobothrys chorisianus var. chorisianus	Choris' popcornflower	None	None	S1
Rallus obsoletus obsoletus	California Ridgway's rail	Endangered	Endangered	S1
Rana draytonii	California red-legged frog	Threatened	None	S2, S3
Reithrodontomys megalotis distichlis	Salinas harvest mouse	None	None	S1
Riparia riparia	bank swallow	None	Threatened	S2
Sorex ornatus salarius	Monterey shrew	None	None	S1, S2
Spea hammondii	western spadefoot	None	None	S3
Spirinchus thaleichthys	longfin smelt	Candidate	Threatened	S1
Taricha torosa	Coast Range newt	None	None	S4
Trifolium buckwestiorum	Santa Cruz clover	None	None	S2
Trifolium hydrophilum	saline clover	None	None	S2
Tryonia imitator	mimic tryonia (=California brackishwater snail)	None	None	S2

Scientific Name	Common Name	Federal Legal Status	California Legal Status	State Ranking Threat Designation
The State Rank (S-rank) is a ranking methodology which is intended to reflect of the overall conditions and conservation status of an element over its state distribution to inform biodiversity conservation. State Ranking Threat Designations **S1** = Less than 6 Element Occurrences (Eos) OR less than 1,000 individuals OR less than 2,000 acres S1.1 = very threatened S1.2 = threatened S1.3 = no current threats known **S2** = 6-20 Eos OR 1,000-3,000 individuals OR 2,000-10,000 acres S2.1 = very threatened S2.2 = threatened S2.3 = no current threats known **S3** = 21-100 Eos or 3,000-10,000 individuals OR 10,000-50,000 acres S3.1 = very threatened S3.2 = threatened S3.3 = no current threats known **S4** – Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat. NO THREAT				

Source: CNDDB 2021.

6. Air Quality:

The lower Salinas River watershed is in the North Central Coast Air Basin and the Monterey Bay Unified Air Pollution Control District monitors and reports on air quality in the basin. The air quality is assessed by comparison of monitoring data to federal and state government air quality standards and is assessed for the following parameters: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, carbon monoxide, inhalable fine particulate matter ($PM_{2.5}$), inhalable particulate matter (PM_{10}), and lead (Monterey Bay Unified Air Pollution Control District, 2007, 2015). As of January 2015, air quality standards in North Central Coast air basin were attained for all pollutants except the state standards for ozone and inhalable particulate matter (PM_{10}); however, the North Central Coast air basin meets the national PM_{10} particulate matter standard – see Table 5.

Table 5. North Central Coast air basin air quality attainment status, January 2015.

Pollutant	State Standards	National Standards
Ozone (O_3)	Nonattainment	Attainment/Unclassified
Inhalable Particulates (PM_{10})	Nonattainment	Attainment
Fine Particulates ($PM_{2.5}$)	Attainment	Attainment/Unclassified
Carbon Monoxide (CO)	Attainment	Attainment/Unclassified
Nitrogen Dioxide (NO_2)	Attainment	Attainment/Unclassified

Pollutant	State Standards	National Standards
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead	Attainment	Attainment/Unclassified

7. Water Resources:

Water is a critical resource in the lower Salinas River watershed for irrigated agriculture, municipal use, and aquatic habitats. Groundwater is the sole source of municipal water and the primary source for agricultural irrigation in the watershed. In addition to groundwater, recycled wastewater, through the Castroville Seawater Intrusion Project, is used to irrigate approximately 12,000 acres of farmland near Castroville. The recycled water is pumped to farms from Monterey Regional Water Pollution Control Agency. In addition to recycled waters, growers receive water delivered from the Salinas Valley Water Project's rubber dam on the Salinas River near the City of Marina. The rubber dam seasonally stores water on the Salinas River that is delivered to farms using the Castroville Seawater Intrusion Project pipelines.

Groundwater aquifers in the lower Salinas River watershed are recharged in most part from infiltration of stream flows along the Salinas River along with some agricultural return flows and rainfall. Recharge is from sources in the Salinas River watershed and no water is imported from outside sources. The major tributaries and sources of recharge to the Salinas River are the undeveloped Arroyo Seco River watershed and the Nacimiento and San Antonio watersheds which have reservoirs. Reservoir releases are managed to optimize groundwater recharge, while sustaining aquatic habitats and critical species such as endangered steelhead trout (*Oncorhynchus mykiss)* in the Salinas River. Reservoir releases are managed by the Monterey Water Resource Agency, which also reports on groundwater extraction from the basins.

The lower Salinas River watershed overlies two major hydrologic subareas, the Pressure (180- and 400-foot aquifers) and the East Side aquifer. The Forebay and the Upper Valley hydrologic subareas are up valley from the project area but are hydrologically linked as part of the broader Salinas River Groundwater Basin and are the primary water producing units of the Salinas Watershed in Monterey County. Within the project area the City of Salinas is the largest municipal water user and in 2019 it used 17,382 acre-feet (MCWRA, 2021). The next largest municipal user is the Castroville, which used 767 acre-feet in 2019. The Pressure and East Side aquifers are in overdraft and, along with seawater intrusion, account for loss of aquifer storage. Seawater intrusion into groundwater wells has been identified in the Castroville area since the 1930 and is attributed to over pumping of groundwater. Aggressive measures have been recommended in the watershed to protect water supplies (Brown and Caldwell, 2014). Seawater intrusion has been observed moving further inland from original investigations in the 1940s.

Table 6. Table of total groundwater extraction by hydrologic subarea and type of use in 2019.

Subarea	Agricultural Pumping (acre-feet)	Urban Pumping (acre-feet)	Total Pumping (acre-feet)
Pressure	93,829	15,885	109,714
East Side	73,006	12,822	85,828
Total	166,835	28,707	195,542
Percent of Total	85%	15%	100%

Source: MCWRA Groundwater Extraction Summary Report 2019.

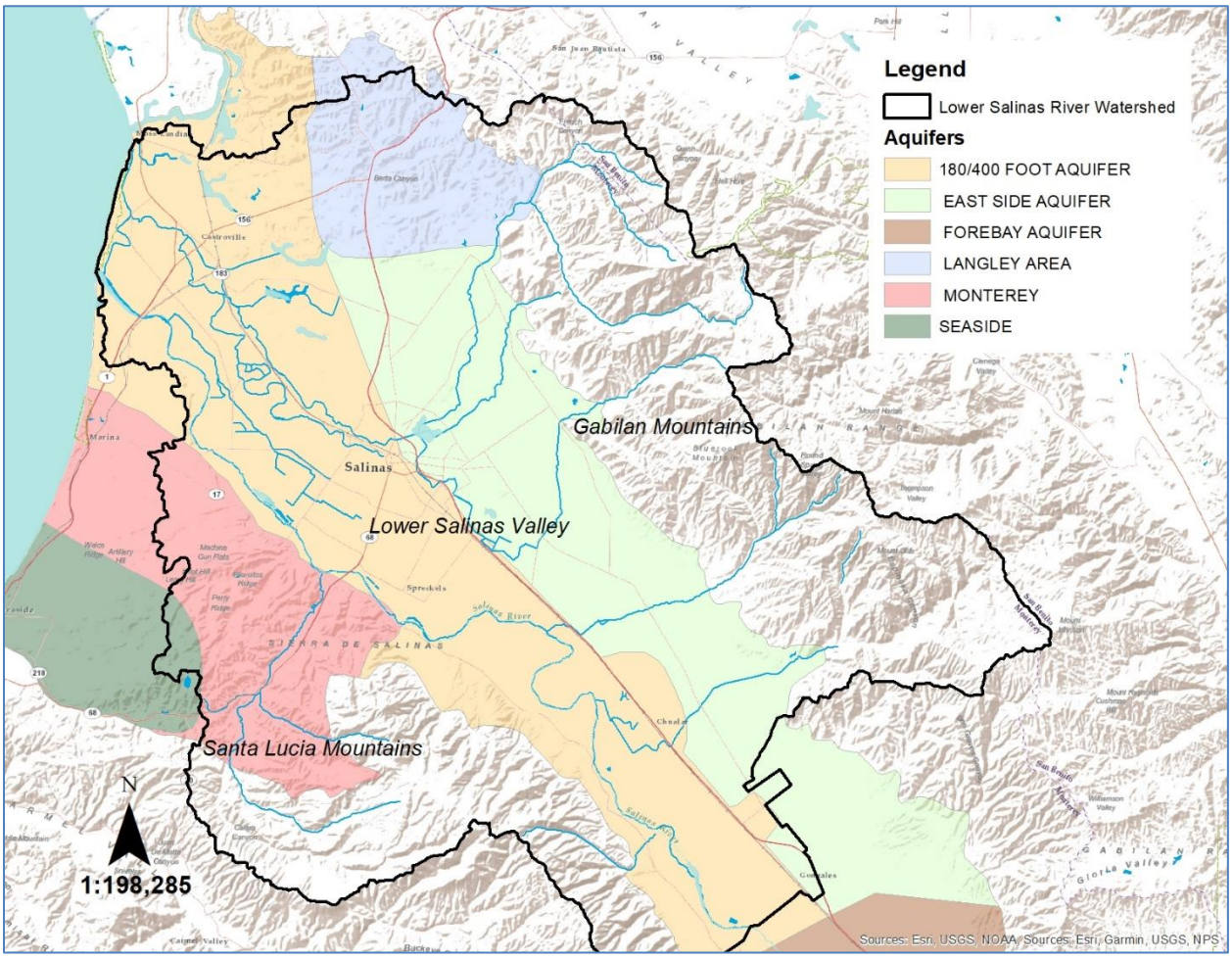

Figure 8. Map of groundwater aquifers in the lower Salinas River watershed. Source: DWR Bulletin 118.

8. Wastewater Treatment:

Monterey Regional Water Pollution Control Agency (MRWPCA) treats wastewater from communities in the southern Monterey Bay region at a centralized facility (refer to Figure 9). The communities of Salinas and Castroville area pump wastewater to the MRWPCA regional treatment plant. Farmlands in the lower watershed receive treated wastewater for irrigation. Wastewater is also discharged through an ocean outfall pipe to Monterey Bay.

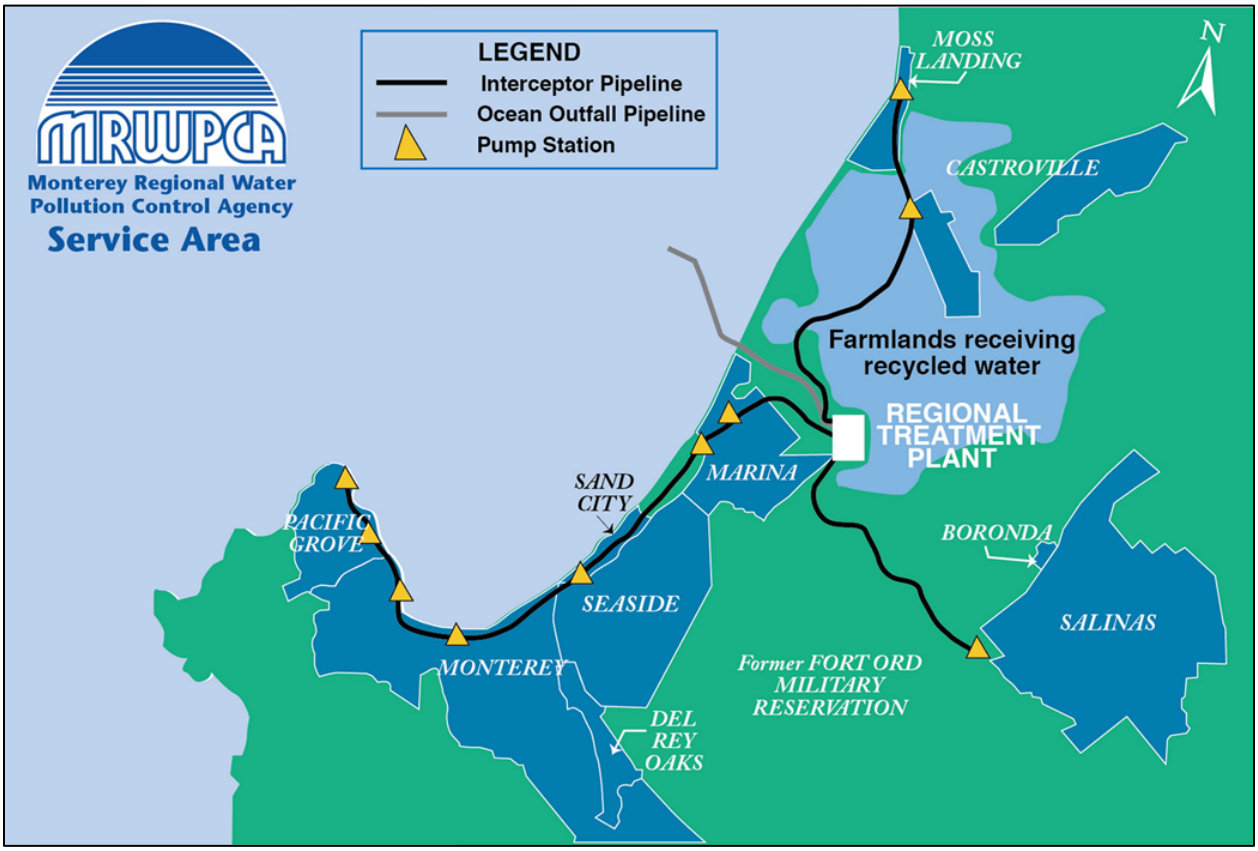

Figure 9. Map of areas served by MRWPCA, Source: MRWPCA

9. Flood Control/Drainage:

The lower Salinas River watershed drains to the ocean via two major streams, the Salinas River and the Salinas Reclamation Canal. The Salinas Reclamation Canal receives runoff out the three tributaries in the Gabilan Mountains including Gabilan Creek, Natividad Creek, and Alisal Creek. The Salinas River originates in many miles south in San Luis Obispo County. Three major tributaries that drain into the upper Salinas River are the Nacimiento, San Antonio, and Arroyo Seco Rivers. The lower Salinas Valley floor is a broad alluvial plain with surface layers filled with sediments deposited from historic flooding. The valley floor has urban and agricultural development and is prone to flooding (MCWRA, 2015). Major flooding events occurred in 1983 during an El Niño period and again in 1995 when many homes and business in Castroville were damaged (refer to Figure 10).

Figure 10. Photos taken from the air of flooding in the lower Salinas River watershed after a large storm event, March 1995 (MCWRA, 2015).

Properties in the Salinas Reclamation Canal subwatershed are particularly susceptible to flooding. The Salinas Reclamation Canal is a major drainage artery for the City of Salinas and adjacent farms. It has been described by the Monterey County Water Resources Agency (MCWRA) as lacking sufficient hydrologic capacity to maintain watershed flood protection. The MCWRA maintains portions of the canal to optimize flow and free of debris and vegetation. MCWRA also operates drainage systems and pumps in areas such Blanco Drain and Merritt Lake that drain low lying historic lake beds for farming. MCWRA operates a series of tide gates in the lower part of the watershed to prevent inflows of high tides into the sloughs and channels and prevent flooding of farmland.

10.Transportation/Traffic:

The leading industry in Monterey County is agriculture, which is heavily dependent on the movement of products within and out of the county (MCRMA, 2007) The lower Salinas River watershed is the hub of agricultural production in the valley with many processing, cooling, packing, and transportation facilities for the region located in the City of Salinas. Tourism is the second largest industry in Monterey County and routes to major tourist attractions on the Monterey Peninsula are through the lower Salinas River watershed. The transportation system also functions to provide residents access to work, commercial services and centers, and recreational areas.

Major transportation system components in the lower Salinas River watershed include:

- Regional Highways: Four-lane U.S. Highway 101 is the major route north and south from the City of Salinas and it transects the project area. State Highway 183 connects the City of Salinas to Castroville. State Highway 1 crosses the northwestern edge of the watershed;
- Major County Roads: Blanco Road, River Road;

- Arterial and Local Roads: Boronda Road, Castroville Boulevard, Cooper Road, Espinosa Road, Jon Road;
- Regional Transit: Monterey-Salinas Transit service;
- Rail Services: Amtrak passenger service, Union Pacific freight; and
- Public Airport: Salinas Municipal Airport.

H. DESCRIPTION OF TMDL ALTERNATIVES

CEQA environmental analysis of the TMDL Project includes an analysis of potentially feasible alternatives that encompass actions within the jurisdiction of the Central Coast Water Board and implementing parties. During development of the TMDL Project, Central Coast Water Board staff considered alternatives that are described below. The program alternatives considered are: a.) no action alternative, b.) toxicity TMDL alternative, and c.) TMDLs for organophosphate pesticide and toxicity.

a. No Action Alternative

The no action alternative compares the impacts of approving a proposed alternative and its components compared with the impacts of not approving a proposed alternative. Under the No Action Alternative, existing programs would be relied upon to address water quality impairments, but the Central Coast Water Board would not require standard TMDL Project components such as targets, TMDLs, allocations, implementation plans, time schedules, or monitoring. Existing efforts would continue to implement management practices and monitor water quality under existing programs, and it is likely that water quality would continue to improve. However, the efforts would not be directed towards the specific water quality impairments identified in the TMDL Project and progress towards meeting TMDL Project goals would not be monitored. This could leave designated beneficial uses of surface waters unprotected or unrestored for a longer period.

It is important to recognize that the no action alternative is not consistent with federal law. The federal Clean Water Act requires states to establish lists of impaired waters and develop TMDLs (or alternative plans or actions) to restore those waters. Therefore, the failure to adopt and implement TMDLs for organophosphate pesticides and toxicity would be incompatible with statutory requirements.

b. Toxicity TMDL Alternative

During the initial planning of this TMDL Project, staff considered developing a toxicity TMDL alternative to address pesticide and toxicity water quality impairments. With the toxicity TMDL alternative, dischargers would receive TMDL allocations based on a comparison of the test organisms' (invertebrate test species) response to the receiving water sample compared to the control using the Test of Significant Toxicity, also referred to as the TST statistical approach (USEPA 2010; Denton et al., 2011). If a sample is declared "fail" (i.e., toxic), then the target is not met and additional receiving water sample(s) should be collected and evaluated to determine the pattern of toxicity and whether a toxicity identification evaluation, also referred to as a TIE, needs to be conducted to determine the causative toxicant(s). Using these methods, significant toxicity is determined for samples where: 1) the statistical test confirms significant differences in

test organism when compared to the control sample, and 2) a test organism performance is more than 20% lower in the sample than in the control sample.

The utility of having a toxicity target is that the TMDL project will address pesticides currently identified as causing the impairment, as well as other potential toxicants. It is important to use toxicity as an indicator because the approach incorporates the potential effects of the pesticide active ingredient, the additive effects of multiple organophosphate pesticides present in the waterbody, as well as the interaction or organophosphate pesticides in the presence of other chemicals. It also addresses any alternative pesticides which may be used in the future. The toxicity target assessment is an interpretation of the Basin Plan toxicity narrative objective.

Central Coast Water Board staff considered the toxicity-only TMDL Project as an alternative and determined that it would be achievable and protective of aquatic life beneficial uses. However, test organisms are susceptible to multiple classes of pesticides (e.g., pyrethroids and neonicotinoids) and other chemical agents. Therefore, identifying and providing allocations for specific organophosphate pesticides as well as incorporating appropriate implementation actions will provide for a more direct approach to addressing the impairments. With more focused implementation, water quality impairments will likely be addressed more quickly. Staff compared the potential environmental impacts of the toxicity-only TMDL Project alternative to the organophosphate pesticides and toxicity TMDL Project and concluded that that the impacts would be equivalent.

c. TMDLs for Organophosphate Pesticides and Toxicity

This alternative is based the Organophosphate Pesticide and Toxicity TMDLs that are presented and proposed for Central Coast Water Board consideration. The TMDL Project Report provides a summary of surface waters in the lower Salinas River watershed that are impaired due to organophosphate pesticides (chlorpyrifos, diazinon, and malathion) and toxicity, along with Clean Water Act TMDL requirements. The TMDL Project establishes numeric targets for these specific pesticides along with toxicity targets. Point and nonpoint sources of pollutants are also identified and assigned allocations to meet the targets. This alternative presents TMDLs that will assure the protection of water quality and beneficial uses.

The following TMDLs are included in the preferred alternative:

- Organophosphate pesticides (chlorpyrifos, diazinon, and malathion) and toxicity TMDLs

The TMDL Project Report (Attachment 2 to the Staff Report) describes existing and proposed implementation and monitoring programs to address impaired waters. Staff acknowledges that the implementation of reasonably foreseeable compliance methods identified in Section I could result in potential environmental impacts. However, the CEQA documentation provides the necessary information pursuant to state law to conclude that the potential environmental impacts from TMDL Project implementation are outweighed by the environmental benefits achieved from improving and protecting the beneficial uses of water.

d. Recommended Program Alternative

This environmental analysis finds that the recommended program alternative, c. TMDLs for Organophosphate Pesticides and Toxicity, is the most environmentally feasible alternative. The key difference between this alternative and the toxicity only TMDLs is an increased focus on specific organophosphate pesticides that were identified as sources of toxicity. This reduces the negative impact to the environment from these pesticides and increases awareness of the specific materials causing toxicity. This should lead to the implementation of management practices that are more appropriate to the specific fate and transport properties of the detected pesticides, instead of broad generic pesticide management practices. This approach contains chronic and acute numeric targets for each of the organophosphate pesticides (chlorpyrifos, diazinon, and malathion), including their additive affects, as well as the toxicity numeric target presented as alternative “b” above. This provides for pesticide-specific implementation actions, allows for tangible (numeric) and toxicity milestones that will track TMDL Project implementation, and protect water quality and beneficial uses.

I. REASONABLY FORESEEABLE METHODS OF COMPLIANCE

This section summarizes the reasonably foreseeable methods of compliance that implementing programs would use to achieve the organophosphate pesticides and toxicity TMDLs in the watershed. The foreseeable methods of compliance are summarized into the following categories:

1. Irrigated Agricultural Practices
2. Stormwater Management Practices
3. Regional Stormwater Management Practices

1. Irrigated Agricultural Practices

Owners and operators of irrigated agricultural land (growers) must comply with the General Waste Discharge Requirements for Discharges from Irrigated Lands (Order No. R3-2021-0040; the “Agricultural Order”). The Agricultural Order requires growers to implement pesticide management practices to protect water quality. Growers must report practices they implement in an annual compliance form that is submitted to the Central Coast Water Board.

Currently growers report management practices for over 310,000 irrigated agricultural acres on the central coast with reporting from annual compliance forms summarized in Table 7 (from Agricultural Order CEQA environmental impact report (Horizon, 2020)). Table 7Table 7 summarizes grower implementation of pesticide management practices, methods used by growers to assess the effectiveness of management practice implementation, and the level that growers adjust management practices implementation based on the assessments (outcomes).

The summary table indicates that some pesticide management practices are utilized for a relatively large amount of irrigated agricultural acreage in the Central Coast Region. For example, integrated pest management utilization accounted for 91% of irrigated acreage, while following pesticide label instructions (91%), and timing pesticide application to avoid rain events (84%) and high winds (93%) were also used. However, there could be an increase in several pesticide management practices are not currently utilized at a greater extent. For example:

- Only 14% of the total acreage reported the installation of filter strips, vegetated treatment or other systems to remove pesticides and pollutants from irrigation runoff or tile drain water;
- Only 59% of the total acreage reported the elimination or control of sediment erosion and movement to avoid transport of pesticides;
- Only 68% of the total acreage reported the avoidance of pesticide application in areas adjacent to streams, creeks, or other surface water bodies: and,
- Only 67% of the total acreage reported the elimination or control of irrigation runoff during and after pesticide applications.

With regards to methods used by growers to assess the effectiveness of management practice implementation, only 1% of the total acreage reported four key implementation assessment methods that include conducting field quick test methods, laboratory analysis, measurements of pesticide concentrations or toxicity in surface receiving waters, and measurements of pesticide concentrations or toxicity in tile drain water. Increasing the number of growers that employ these implementation assessment methods is warranted.

The eventual outcomes of implementation actions indicate that existing pesticide management methods have not been employed to the extent necessary to attain water quality standards. For example:

- Only 2% of the total reported acreage reduced pesticide concentration or toxicity in surface receiving waters;
- Only 5% of the total reported acreage reduced pesticide concentration or toxicity in irrigation runoff; and,
- Only 10% of the total reported acreage achieved water quality standards.

Table 7. Table of irrigated agricultural management practice implementation, effectiveness assessment methods, and outcomes of assessments for the Central Coast Region.

Management Practice / Monitoring Action (March 2018)	Total Irrigated Acres N: 314,814	Percent of Total Reporting
Implementation: Certified Organic	32,271	10%
Implementation: Utilized Integrated Pest Management to reduce pesticide use (e.g., pest scouting, beneficial insects, other).	287,262	91%
Implementation: Selected lower risk pesticides to minimize risk to water quality (e.g., based on toxicity, runoff potential, leaching potential).	242,719	77%
Implementation: Followed specific label instructions and any local use restrictions.	286,338	91%
Implementation: Avoided pesticide applications prior to rain events to prevent runoff.	263,668	84%
Implementation: Avoided pesticide applications during windy conditions to prevent drift.	291,945	93%
Implementation: Avoided pesticide application in areas adjacent to streams, creeks, or other surface water bodies.	213,363	68%
Implementation: Eliminated or controlled irrigation runoff during and after pesticide applications.	209,618	67%
Implementation: Eliminated or controlled sediment erosion and movement to avoid transport of pesticides.	185,752	59%
Implementation: Treated irrigation runoff with enzymes or other products to break down pesticides.	1,957	1%
Implementation: Used filter strips, vegetated treatment or other systems to remove pesticides and pollutants from irrigation runoff or tile drain water.	42,878	14%
Implementation: Mixed and loaded pesticides on low runoff hazard sites (e.g., away from creeks and wells).	253,085	80%
Assessment: Conducted field quick tests or used handheld meters to determine pesticide concentration or toxicity in irrigation runoff or tile drain water.	3,274	1%
Assessment: Conducted laboratory analysis to determine pesticide concentrations or toxicity in irrigation runoff.	3,839	1%
Assessment: Measured pesticide concentrations or toxicity in surface receiving water.	2,620	1%
Assessment: Measured pesticide concentrations or toxicity in tile drain water.	1,678	1%
Assessment: Modeled or studied pesticides or toxicity in surface water or groundwater.	7,766	2%
Assessment: Conducted photo monitoring before and after practice implementation.	8,818	3%

Management Practice / Monitoring Action (March 2018)	Total Irrigated Acres N: 314,814	Percent of Total Reporting
Assessment: Consulted with a qualified professional to assess practice implementation (e.g., CCA, PCA, UCCE Specialist, NRCS, RCD, agronomist, or other).	247,123	78%
Outcome(s): Annual pesticide application reduced.	113,182	36%
Outcome(s): Reduction in pesticide concentration or toxicity in irrigation runoff.	15,296	5%
Outcome(s): Reduction in pesticide concentration or toxicity in surface receiving water.	5,610	2%
Outcome(s): Water quality standards achieved.	31,524	10%
Outcome(s): Annual pesticide application reduced.	113,182	36%
Outcome(s): Reduction in pesticide concentration or toxicity in irrigation runoff.	15,296	5%

In addition to the management practices reported in the annual compliance forms, the Agricultural Order CEQA document identifies additional reasonably foreseeable management practices as determined from available literature. The following are identified as practices to reduce or eliminate pesticides from entering surface water or groundwater:

- Reduce/eliminate irrigation discharge
- Reduce/eliminate stormwater discharge
- Treat irrigation discharge
- Plant cover crops; use them and manage them appropriately
- Rotate crops
- Manage irrigation, examples include:
  - Irrigation distribution uniformity
  - Reduce irrigation water applied
  - Use micro-irrigation
  - Maintain irrigation system; check for leaks and broken emitters, and fix/replace as needed
- Install buffer strip, vegetated filter strip, or swale
- Install constructed wetlands or other vegetated treatment system
- Install backflow prevention devices
- Apply pesticide per labeling directions, for example:
  - Do not apply during windy conditions
  - Do not apply right before forecasted rain
  - Do not irrigate directly after pesticide application
  - Apply lowest dose
  - Apply based on infestation thresholds
- Use an IPM strategy
- Install appropriate storage of chemicals, if kept on site
- Use Pesticide Analytical Manual (PAM)2 or LanGuard™3

- Install hedgerows
- Install treatment system such as granular activated carbon (GAC)
- Treat stormwater discharge
- Use beneficial insects to reduce pesticide applications
- Scout for pests prior to pesticide applications
- Minimize deep percolation
- Reduce pesticide applications
- No dormant spray
- Spot-treat infestations
- Rinse and dispose of chemical containers safely Limit movement of water to surface waters

Based on the low level of pesticide management practices reported by growers in the annual compliance forms and the extent of pesticide and toxicity pollution at agricultural monitoring sites within the watershed, it is reasonable to assume that significant improvement is necessary to achieve the TMDLs.

2. Stormwater Management Practices

Municipal, construction, and industrial permittees are required to implement stormwater management practices to achieve TMDLs. The methods of compliance involve practices that reduce, slow, and/or collect stormwater runoff and improve the water quality of runoff. Methods of compliance include the following specific management practices:

- Bioretention
- Buffer Strips
- Filter Strips
- Vegetated Swales
- Straw Waddles
- Rain Gardens
- Green Roofs
- Detention Ponds
- Infiltration
- Low-Impact Development (LID)
- Vegetated Treatment Systems
- Media/Sand Filtration
- Local Infiltration Systems

3. Regional Stormwater Management

Stakeholders in the lower Salinas River watershed have developed a comprehensive regional stormwater resource management plan (Regional Plan) to reduce the impacts from stormwater. The Regional Plan is an integrated approach to be implemented by collaborating stormwater management agencies and stakeholders to optimize their stormwater planning and implementation efforts. The Regional Plan includes the following types of stormwater management projects:

- Constructing managed wetlands
- Restoring wetlands
- Vegetating stream channels
- Restoring riparian areas

J. CEQA CHECKLIST

The CEQA Checklist is a series of questions grouped by subject that identify different types of potential environmental impacts that a project may cause. CEQA analysis considers what are the existing conditions of the physical project site (baseline conditions). It then compares how much change will occur to the site if the project is implemented. Based on the CEQA Guidelines, the impact severity is rated on a scale of four impact levels: potentially significant impact, less than significant with mitigation incorporated, less than significant impact, or no impact.

1. Aesthetics

The level of impacts to aesthetics are evaluated based on the following questions posed under impact description in the matrix below, except as provided in Public Resources Code section 21099, will the project:

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

2. Agriculture and Forestry Resources

The level of impacts to agriculture and forestry resources are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			Less Than Significant Impact	
B	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				No Impact
C	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				No Impact
D	Result in the loss of forest land or conversion of forest land to non-forest use?				No Impact
E	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				No Impact

3. Air Quality

The level of impacts to air quality are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Conflict with or obstruct implementation of the applicable air quality plan?				No Impact
B	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality ?				No Impact
C	Expose sensitive receptors to substantial pollutant concentrations?			Less Than Significant Impact	
D	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				No Impact

4. Biological Resources

The level of impacts to biological resources are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		Less Than Significant With Mitigation Incorporated		
B	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			Less Than Significant Impact	
C	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			Less Than Significant Impact	
D	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		Less Than Significant With Mitigation Incorporated		

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
E	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				No Impact
F	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				No Impact

5. Cultural Resources

The level of impacts to cultural resources are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5?		Less Than Significant With Mitigation Incorporated		
B	Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?		Less Than Significant With Mitigation Incorporated		
C	Disturb any human remains, including those interred outside of dedicated cemeteries?				No Impact

6. Energy

The level of impacts to energy are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			Less Than Significant Impact	
B	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			Less Than Significant Impact	

7. Geology and Soils

The level of impacts to geology and soils are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving rupture of known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				No Impact
B	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking?				No Impact
C	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction?				No Impact
D	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving landslides?				No Impact
E	Result in substantial soil erosion or the loss of topsoil?				No Impact

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
F	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?				No Impact
G	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				No Impact
H	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				No Impact
I	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				No Impact

8. Greenhouse Gas Emissions

The level of impacts to greenhouse gas emissions are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			Less Than Significant Impact	

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
B	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				No Impact

9. Hazards and Hazardous Materials

The level of impacts to hazards and hazardous materials are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				No Impact
B	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				No Impact
C	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				No Impact
D	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				No Impact
E	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				No Impact

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
F	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				No Impact
G	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				No Impact

10. Hydrology and Water Quality

The level of impacts to hydrology and water quality are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				No Impact
B	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				No Impact
C	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in a substantial erosion or siltation on- or off-site?				No Impact
D	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?				No Impact

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
E	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				No Impact
F	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?		Less Than Significant With Mitigation Incorporated		
G	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				No Impact
H	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				No Impact

11. Land Use and Planning

The level of impacts to land use and planning are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Physically divide an established community?				No Impact
B	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				No Impact

12. Mineral Resource

The level of impacts to mineral resources are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				No Impact
B	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				No Impact

13. Noise

The level of impacts to noise are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			Less Than Significant Impact	
B	Generate excessive groundborne vibration or groundborne noise levels?		Less Than Significant With Mitigation Incorporated		

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
C	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			Less Than Significant Impact	

14. Population and Housing

The level of impacts to population and housing are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				No Impact
B	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				No Impact

15. Public Services

The level of impacts to public services are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to

maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Fire protection?				No Impact
B	Police protection?				No Impact
C	Schools?				No Impact
D	Parks?				No Impact
E	Other public facilities?				No Impact

16. Recreation

The level of impacts to recreation are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				No Impact
B	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				No Impact

17. Transportation

The level of impacts to transportation are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				No Impact
B	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				No Impact
C	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				No Impact
D	Result in inadequate emergency access?				No Impact

18. Tribal Cultural Resources

The level of impacts to tribal cultural resources are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?				No Impact
B	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		Less Than Significant With Mitigation Incorporated		

19. Utilities and Service Systems

The level of impacts to utilities and service systems are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?		Less Than Significant With Mitigation Incorporated		
B	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				No Impact
C	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				No Impact
D	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				No Impact
E	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				No Impact

20. Wildfire

The level of impacts to wildfire are evaluated based on the following questions posed under impact description in the matrix below as to whether the project is located in or near state responsibility areas or lands classified as very high fire hazard severity zones will the project:

No.	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Substantially impair an adopted emergency response plan or emergency evacuation plan?				No Impact
B	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				No Impact
C	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				No Impact
D	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				No Impact

21. Mandatory Findings of Significance

The level of impacts to mandatory findings of significance are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

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

K. ENVIRONMENTAL CHECKLIST DISCUSSION

The Environmental Substitute Document must include an analysis of the reasonably foreseeable environmental impacts of the methods of compliance/management practices, and the reasonably foreseeable mitigation measures relating to those impacts.

A significant effect on the environment is defined in regulation (California Code of Regulations, title 14 (CEQA Guidelines), section 15382) as:

> a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. A social or economic change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

Also noteworthy, CEQA Guidelines section 15064(b) states that:

> The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area.

The following includes Central Coast Water Board staff's environmental evaluation discussion on the basis of the CEQA Environmental Checklist presented previously in Section CEQA checklistJ.

This section provides detailed discussions on the items listed in the environmental checklist above.

1. Aesthetics Discussion

Will the project:

1A. **Have any substantial adverse effect on a scenic vista?**

Impact: No impact.

Discussion: None of the reasonably foreseeable management practices identified in Section **0**of this report are expected to have an adverse impact on a scenic vista. None of them would either block a scenic vista or substantially degrade a scenic vista.

1B. **Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

Impact. No impact.

Discussion: There are several scenic highways in the lower Salinas River watershed, Highway 68 and Highway 156 (refer to Figure 11). These highways have views of farms and drainages that could implement management practices for the TMDL. The types of management practices that could be implemented are consistent with existing agricultural and drainage management practices and would not be a substantial change in scenic resources.

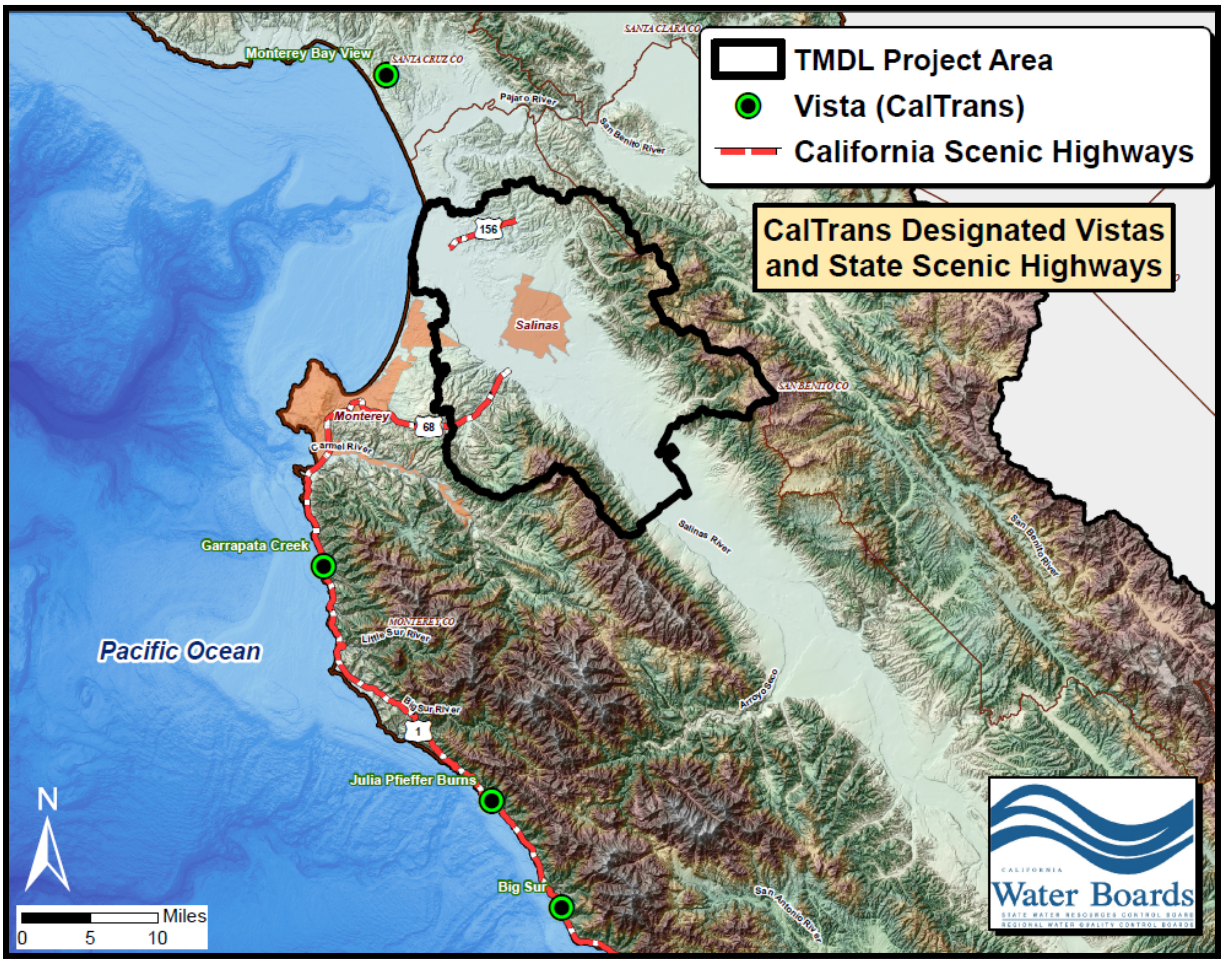

Figure 11. Map of State scenic highways and scenic vistas in the lower Salinas River watershed.

1C. **Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

Impact. No impact.

Discussion: Public areas have views of farms and drainages that could implement management practices for the TMDL. The types of practices potentially implemented for the TMDL are consistent with existing agricultural practices and should not impact aesthetic resources.

1D. **Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

Impact. No impact.

Discussion: Reasonably foreseeable management practices identified in Section I of this report are of a nature such that they would not create new sources of substantial light or glare which adversely affect day or nighttime views in the TMDL area.

2. Agriculture and Forestry Resources Discussion.

Will the project:

2A. **Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

Impact: Less than significant impact.

Discussion: The proposed TMDL Project does not suggest or require any person or party to take Farmland out of production. Rather, the proposed TMDL Project would rely on implementation requirements defined in the Agricultural Order, which is an existing regulatory program adopted by the Central Coast Water Board, after such time as the proposed TMDLs were incorporated into that Order. The Agricultural Order requires growers to comply with the Water Code and the Basin Plan by implementing management practices to reduce or eliminate discharges of pollutants into surface and groundwater to the extent that water quality objectives are achieved, and beneficial uses protected.

Certain management practices implemented to achieve compliance with the proposed TMDLs could result in the conversion of some amount of Farmland to non-agricultural uses. For example, the installation of sediment basins, vegetative filter strips, or regional stormwater treatment systems could require the conversion of Farmland to make room for these new features. However, the proposed TMDLs do not specify any particular manner of achieving compliance and thus there are a range of management practices that may be implemented in a range of locations to reach attainment of the proposed TMDLs. Because it is not possible to determine which dischargers will implement which management practices in which locations, it cannot be reasonably determined how many acres of Farmland may be converted due to the implementation of this project. Furthermore, some management practices that result in conversion of Farmland could be implemented to

serve other purposes, but incidentally work towards the attainment of the proposed TMDLs (e.g., measures to protect agricultural soil resources or development of a recreational use area that also serves as a retention basin). As a result, it is not possible to reasonably foresee the extent of Farmland impacts resultant from this particular project, as opposed to other projects that incidentally achieve this project's objectives. Therefore, this impact is speculative and less than significant.

2B. **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

Impact: No impact.

Discussion: None of the reasonably foreseeable non-structural or structural management practices identified in Section I of this report would be expected to conflict with existing zoning for agricultural uses or a Williamson Act contract. Agricultural management practices are consistent with agricultural zoning and would not change the land use designation.

2C. **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

Impact: No impact.

Discussion: None of the reasonably foreseeable methods of compliance would be expected to conflict with existing zoning or cause rezoning.

2D. **Result in the loss of forest land or conversion of forest land to non-forest use?**

Impact. No impact.

Discussion: None of the reasonably foreseeable methods of compliance would be expected to result in the loss of forest land or conversion of forest land to non-forest use.

2E. **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

Impact. No impact.

Discussion: None of the reasonably foreseeable methods of compliance would be expected to cause changes in the environment, which would result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. The

reasonably foreseeable methods of compliance are common agricultural practices, and many have been adopted by the NRCS for agricultural use with the goal of protecting agricultural soil resources.

3. Air Quality Discussion

Will the project:

3A. **Conflict with or obstruct implementation of the applicable air quality plan?**

3B. **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality?**

Impact: No impacts for either of the two above questions on impacts to air quality.

Discussion: None of the reasonably foreseeable management practices identified in Section I would be expected to result in any conflicts with or obstruction to the implementation of an applicable air quality plan. The implementation measures do not result in changes in traffic that could cause an increase in emission, therefore the TMDL is consistent with plans such as the Air Quality Management Plan (MBUAPCD, 2017) The Air Quality Management Plan is the County's plan to attain the state ozone standard and the plan accounts for construction and agricultural emissions, such as would be generated by implementing the TMDL.

3C. **Expose sensitive receptors to substantial pollutant concentrations?**

Impact: Less than significant impact.

Discussion: Construction of structural management practices could potentially expose sensitive receptors such as schools, residences, apartments, and hospitals to temporary increased levels of fine particulate matter. In the lower Salinas River watershed, urban areas are in close proximity to irrigated agricultural land uses and drainage channels that may be subject to excavation and grading for the construction of structural management practices identified in Section I of this report.

Standard dust control construction management practices would address fine particulate pollutions from soil disturbance activities such as grading and excavating basins or tilling for vegetation plantings. For most construction projects in Monterey County and within the City of Salinas, grading ordinances require standard dust control measures.

3D. **Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

Impact: No impact.

Discussion: Reasonably foreseeable management practices identified in Section I of this report should not generate odors affecting a substantial number of people.

4. Biological Resources Discussion

Will the project:

4A. **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Impact. Less than significant with mitigation incorporation.

Discussion: Reasonably foreseeable management practices identified in Section **0**of this report could have potentially significant impacts on special status species. Impacts to identified species could occur when installing structural management practices that involve significant earth-moving or land disturbance. Staff queried digital map files available from the California Natural Diversity Database (refer to Table 1) and identified 65 rare, sensitive, threatened, or endangered species in the TMDL Project area. Because potential implementation sites are in and along riparian and aquatic areas, these habitats for endangered California red-legged frog, *Rana draytonii*; tidewater goby, *Eucyclogobius newberryi*; and steelhead trout, *Oncorhynchus mykiss* are of special concern.

In areas where sensitive species are located, the California Department of Fish and Wildlife, National Marine Fisheries Service, and the U.S. Fish and Wildlife Service should be consulted prior to implementation. It is anticipated that in most cases installation of structural compliance measures would be of relatively small scale and any impacts could be avoided by adjusting the timing and/or location of the compliance measures and account for rare, sensitive, threatened, or endangered species or their habitats. Additionally, it may be necessary to monitor sites during construction for the presence of species of concern.

Staff concludes that there are potentially significant impacts from implementation of the TMDL but notes that there are mitigation measures available to reduce the potentially significant environmental impacts. Implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL Project. (California Code of Regulations, title 14, section 15091(a)(2).) These parties have the ability to implement these mitigation measures, can and should implement these mitigation measures, and are required under CEQA to implement mitigation measures unless mitigation measures are deemed infeasible through specific considerations. (California Code of Regulations, title 14, section 15091(a)(3).)

4B. **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Impact: Less than significant impact.

Discussion: Substantial adverse effects on any riparian habitat or other sensitive natural community are not anticipated. The management practices identified in Section I of this report promote the protection of riparian areas and are expected to be a net benefit to these sensitive communities. None of the reasonably foreseeable compliance methods would have the potential to adversely affect any riparian habitat or other sensitive natural community of plants identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

4C. **Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

Impact: Less than significant impact.

Discussion: The management practices identified in Section **0**of this report are not anticipated to have a substantial adverse impact on state or federally protected wetlands. The compliance methods identified would promote the protection of existing wetlands and the construction of new, engineered wetlands to protect water quality. The application of compliance measures in federally protected wetland areas would not be allowed if doing so would affect the beneficial uses associated with that wetland. Activities in federally protected wetlands require the responsible party to obtain a federal Clean Water Act 404 permit. The federal permit must include compliance measures that ensure that all water quality objectives for the wetland are protected.

4D. **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?**

Impact: Less than significant impact

Discussion: Management practices identified in Section **0**of this report could involve construction within stream channels and riparian corridors and interfere with movement of migratory fish or wildlife species or with native resident or migratory wildlife species. However potential impacts would be mitigated by measures such as preconstruction surveys, timing work to avoid migration periods, and biological monitoring during construction. Overall, the TMDL Project has long term benefits to sensitive species because many of the manage practices are designed for riparian and wetland protection,

restoration, and enhancement, which would enhance native resident populations and wildlife corridors.

4E. **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

Impact: No impact.

Discussion: None of the reasonably foreseeable non-structural or structural compliance methods identified in Section **0**of this report would be expected to conflict with ordinances protecting biological resources, such as a tree preservation policy or ordinance.

4F. **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

Impact: No impact.

Discussion: Based on available data there are no adopted Habitat Conservation Plans (HCPs) or Natural Community Conservation Plans (NCCPs) currently located in the TMDL Project area; therefore, there are no impacts to HCPs or NCCPs. The watershed is located within a steelhead recovery planning area; however, the goals of the TMDL are consistent with steelhead recovery goals (NMFS, 2013).

5. Cultural Resources Discussion

Will the project:

5A. **Cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5?**

Impact: Less than significant with mitigation incorporated.

Discussion: Implementation of most management practices is not expected to cause a substantial adverse change in the significance of historical resources in the project area as defined in CEQA regulations. Non-structural management practices do not involve land-disturbance or physical effects, which could impact historical resources. Similarly, staff concludes it is unlikely that implementation of structural management practices would result in a substantial adverse change in the significance of a historical resource. Most structural management practices do not involve substantial or large-scale disturbance to land which has not been disturbed previously (e.g., irrigated cropland or urban stormwater conveyance structures). If the installation of any structural management practices involves large scale excavation or land-disturbance activities, a cultural resources investigation should be conducted beforehand. The cultural resources investigation should include, at a minimum, a records search for previously identified cultural resources and previously conducted cultural resources investigations of the project parcel and vicinity. As an

additional mitigation measure during construction, onsite monitoring by a cultural resource specialist should occur.

Figure 12 depicts the existing known historical resources in the TMDL Project area, which number approximately two dozen sites. Notable historic resources in the TMDL Project area include the Site of the Battle of Natividad near Salinas and the Jose Eusebio Boronda Adobe Casa in Boronda (Monterey County 2007 General Plan).

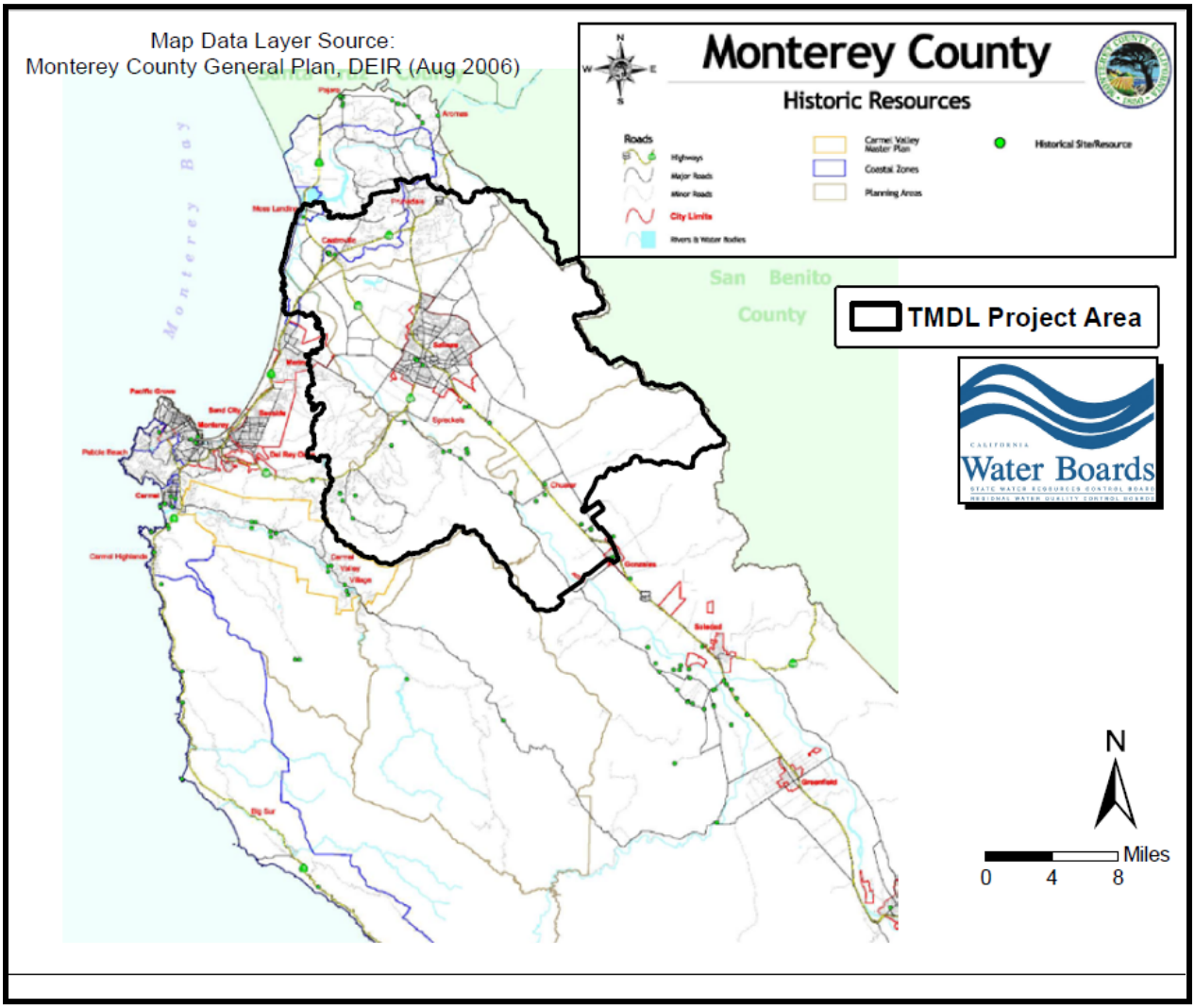

Figure 12. A map showing the location of historic resources in the vicinity of the project area.

5B. **Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?**

Impact: Less than significant with mitigation incorporation.

Discussion: With mitigation, the implementation of management practices in the TMDL Project area is not expected to result in substantial, or potentially substantial, adverse changes to the significance of archeological resources as defined in CEQA regulations. Installation of structural management practices may involve large scale excavation or land-disturbance activities and therefore a cultural resources investigation should be conducted beforehand. The cultural resources investigation should include, at a minimum, a records search for previously identified cultural resources in the vicinity of the site. The record search should also include, at a minimum, contacting the appropriate information center of the California Historical Resources Information System, operated under the auspices of the California Office of Historic Preservation. In coordination with the information center or a qualified archaeologist, a determination regarding whether previously identified cultural resources would be affected by the proposed project must be made. The investigation should determine if previously conducted investigations were performed to satisfy the requirements of CEQA. If not, a cultural resources survey would need to be conducted. The purpose of this investigation is to identify resources before they are affected by a proposed project and avoid the impact. If the impact is unavoidable, mitigation will be determined, as warranted, on a case-by-case basis.

For informational purposes, Figure 13 **Error! Not a valid bookmark self-reference.**depicts zones of estimated archeological sensitivity in Monterey County and the TMDL Project area (Monterey County 2007 General Plan). Sensitivity zones are based on several considerations and assumptions. Some considerations include known archeological resources, such as well-founded observations by archeologists that stream courses and drainages are common historical locations of human occupation or use.

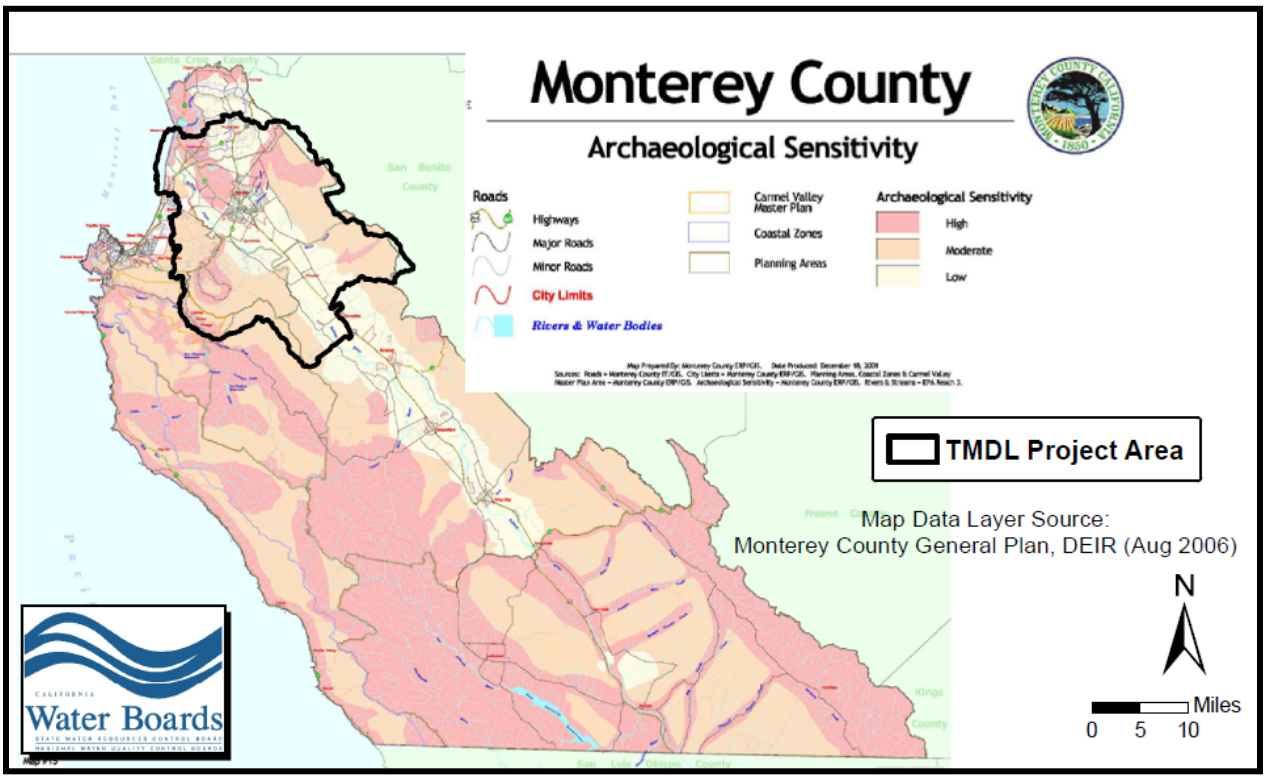

Figure 13. Map of estimated archeological sensitivity in Monterey County.

5C. **Disturb any human remains, including those interred outside of dedicated cemeteries?**

Impact: No impact.

Discussion: Staff concludes that management practices identified in Section I of this report are not expected to disturb any human remains, including those interred outside of formal cemeteries. Most of these compliance methods do not involve substantial or large-scale land disturbance to land which has not been disturbed previously (e.g., irrigated cropland or urban stormwater conveyance structures). If installation does involve large scale excavation or land-disturbance activities on previously undisturbed land, or if the construction of a large scale infrastructure is to be conducted that could result in the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the steps identified in CEQA Guidelines section 15064.5(e) will be followed.

6. Energy Resources Discussion

Will the project:

6A. **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Impact: Less Than significant impact.

Discussion: The management practices identified in Section **0**of this report will require the consumption of energy during construction and for maintenance. Construction of management practices can involve large earthmoving equipment along with the transportation of workers, materials, and equipment to project sites. Due to these types of construction related activities, staff anticipates that energy inefficiencies will occur but anticipates that they will be less than occurs during normal construction and therefore will have a less than significant impact.

The anticipated management practices generally operate passively and do not require additional energy inputs. Energy will be expended to maintain the practices. For example, vegetation may need to be mowed or trimmed but these activities should not consume unnecessary amounts of energy resources.

6B. **Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

Impact: Less than significant impact

Discussion: The State has several plans and policies in place that support renewable energy and energy efficiency. For example, Assembly Bill No. 32, the “California Global Warming Solution Act of 2006,” (Health & Safety Code, sections 38500 et seq.) requires the California Air Resources Board to set energy efficiency goals to reduce emissions of greenhouse gasses. California's Renewables Portfolio Standard (RPS), updated in 2018, sets a goal of obtaining 100 percent zero-carbon electricity for the state by 2045 and an interim goal of 50 percent by 2026 (CPUC 2019).

The operation of heavy equipment is essential for construction and the issues of energy efficiency and renewable alternatives to diesel engines are fundamental issues to be addressed to meet the goals of State policies and plans. These issues are not isolated to this project and staff anticipates that the construction industry will broadly address them.

7. Geology and Soils Discussion

Will the project:

7A. **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving rupture of known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

7B. **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking?**

7C. **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction?**

7D. **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving landslides?**

Impact: Answer to all the above questions having to do with Geology and Soils: No impact.

Discussion: The management practices identified in Section **0**of this report will not expose people or structures to seismic or other geologic hazards. Although some of the mitigation measures involve excavation, they are not to such a depth or on such a slope, or at such a scale as to result in the ground failure and liquefaction, nor would the compliance methods substantially increase the risk of loss, injury, or death of people or structures due to seismic activity above and beyond seismic risks that already exist.

To determine earthquake hazards, recent seismic activity of faults in the vicinity of the project area were evaluated. The Alquist-Priolo Earthquake Fault Zones Maps show active faults in California and around the TMDL Project area, the active faults are the San Andreas Fault in southeastern Monterey County and faults to the north in Santa Cruz County. These active faults are outside the project area and it is not considered an active earthquake hazard risk area (refer to Figure 14).

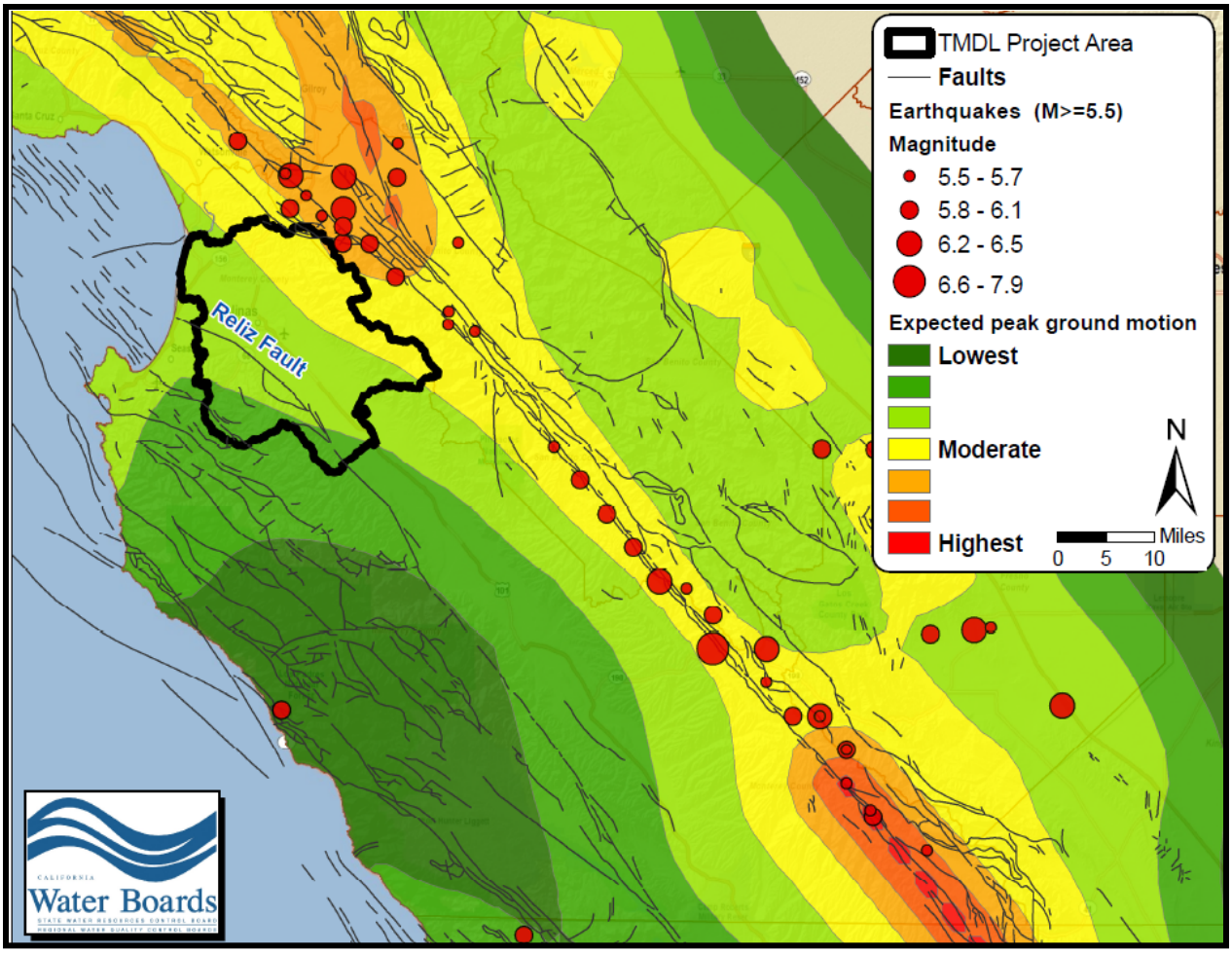

Figure 14. Map of California historical earthquakes – Monterey, Santa Cruz, and San Benito counties (1800 to 2000) and seismic risk (ground acceleration).

7E. **Result in substantial soil erosion or the loss of topsoil?**

Impact: No impact.

Discussion: The TMDL Project addresses organophosphate pesticides and toxicity. Chlorpyrifos, one of the organophosphate pesticides, is bound to soil and many of the management practices identified in Section I of this report reduce soil erosion and loss of topsoil, therefore the implementation of management practices should protect soil resources and there should be no impacts.

7F. **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?**

Impact: No impact.

Discussion: The management practices identified in Section **0**of this report do not occur at such a scale as to cause a substantial, or potentially substantial risk to soil instability, landslides, subsidence, liquefaction, or collapse.

Although some implementation strategies could potentially occur below ground or involve land disturbance, they are not constructed at such a depth or on such a slope, or at such a scale as to result or expose people and structures to substantial risk of ground failure, liquefaction conditions, or landslides. Furthermore, the TMDL Project area is located in a region which the U.S. Geological Survey has delineated as being at low and moderate risk for landslide incidence and susceptibility (http://www.nationalatlas.gov/mld/lsoverp.html). Figure 15 is a map of landslide susceptibility.

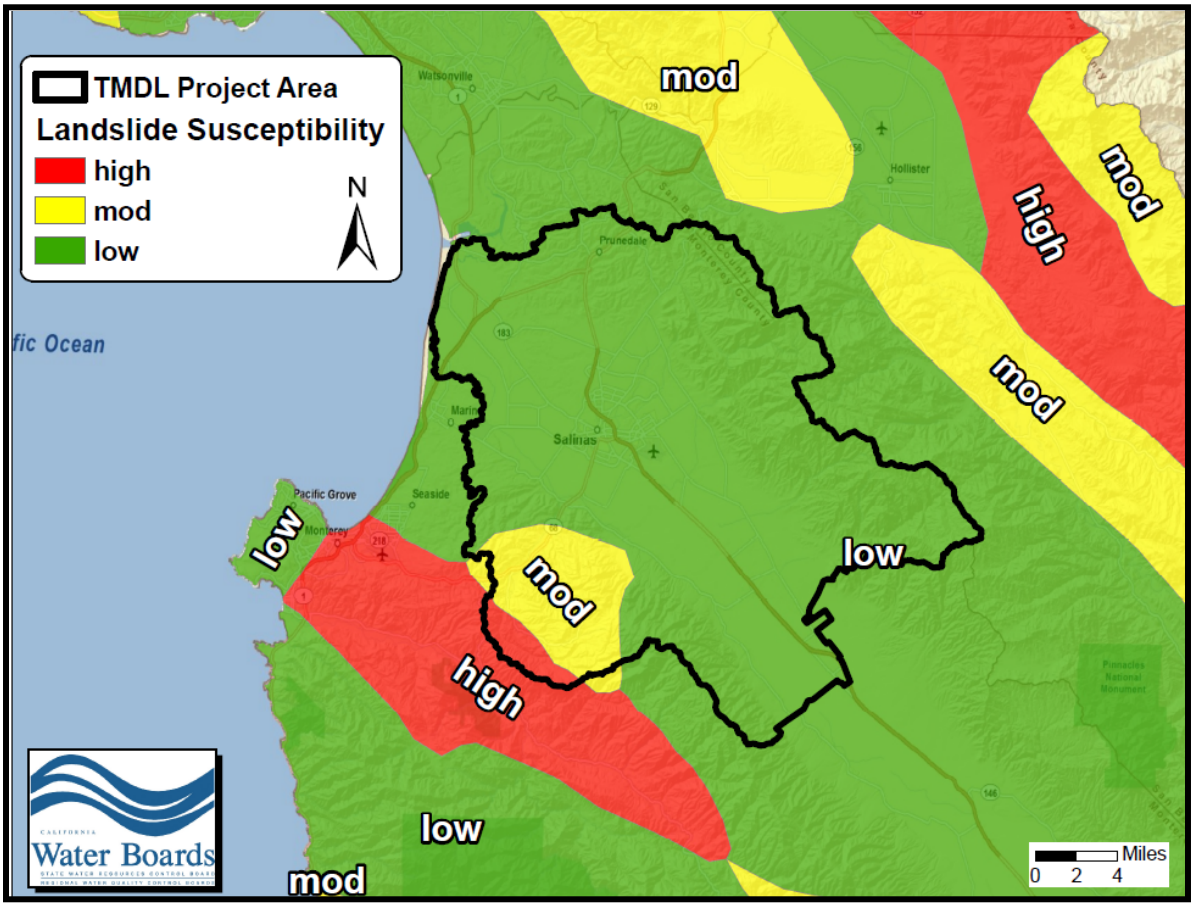

Figure 15. Map of landslide incidence and susceptibility in the project area.

7G. **Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

Impact: No impact.

Discussion: Implementation of this project should not result in building new structures intended for human occupancy.

7H. **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

Impact: No impact.

Discussion: The implementation of management practices will not increase development or housing that would need septic tanks or other waste-water disposal systems.

7I. **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Impact: No impact.

Discussion: Direct or indirect destruction of a unique paleontological resource or site or unique geologic feature is not expected to result from the implementation of management practices identified in Section I of this report. Most of these compliance methods do not involve substantial or large-scale land disturbance to land that has not been disturbed previously (e.g., irrigated cropland or urban stormwater conveyance structures). However, in cases where the installation of structural management practices may involve excavation activities of land that has not been previously disturbed, a trained professional may need to conduct a paleontological resource investigation.

In addition, paleontological sites are in the mountains around the watershed and not in proximity of impaired waters in the valley, where implementation of management practices would occur. Figure 16 depicts the approximate locations of paleontological sites considered by paleontologists to have outstanding scientific value in vicinity of the TMDL Project area. (Monterey County 2007 General Plan).

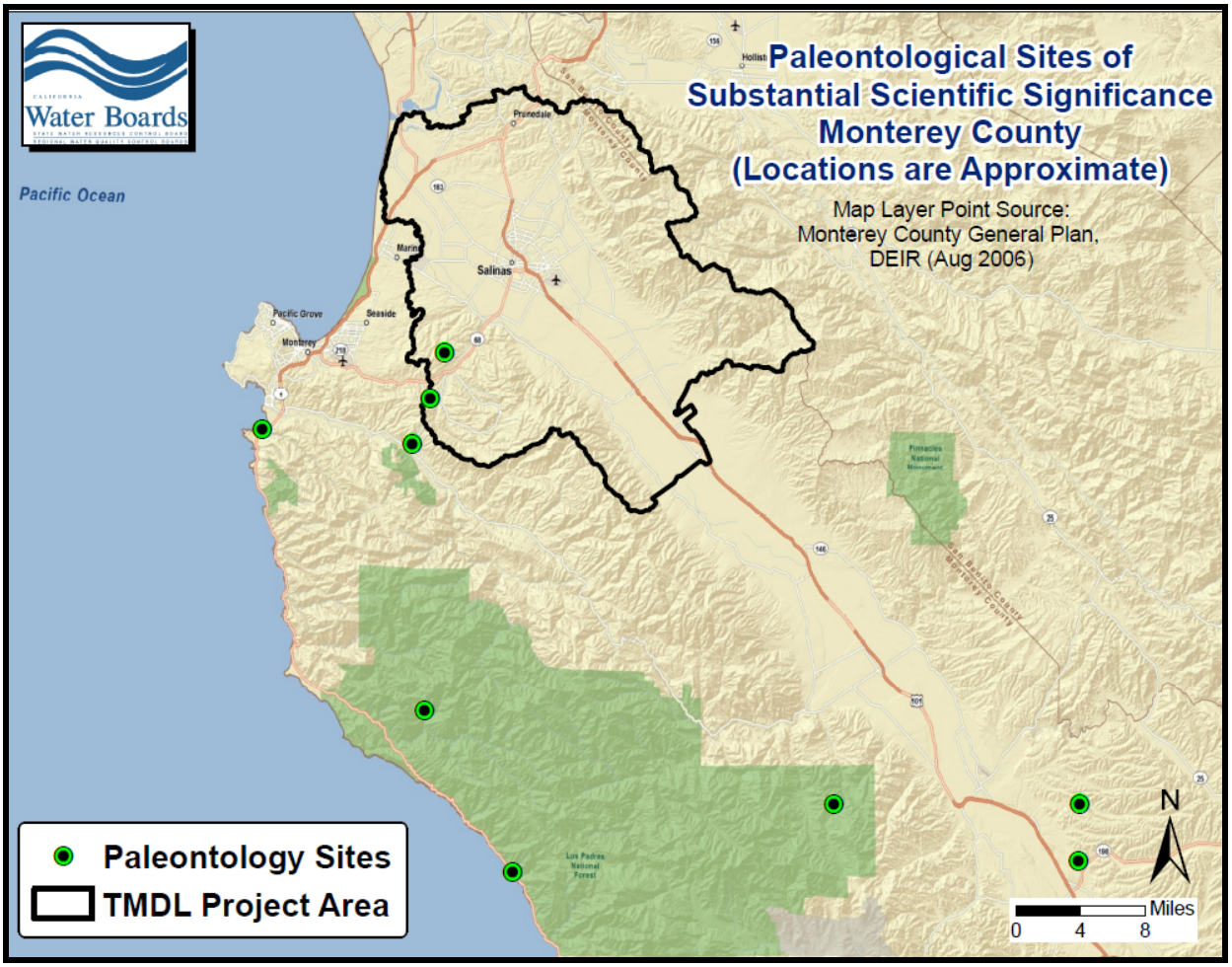

Figure 16. Map of paleontological resources in Monterey County.

8. Greenhouse Gas Emissions Discussion

Will the project:

8A. **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Impact: Less than significant.

Discussion: Substantial, or potentially substantial, adverse changes to the environment due to generation of greenhouse gas emissions are not expected to result from the TMDL. There could be short term increases in traffic during the construction and installation of structural management practices. However, these activities would be the same as typical construction and maintenance activities in urbanized or rural areas.

8B. **Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

Impact: No impact.

Discussion: The management practices identified in Section I of this report do not conflict with implementation of statewide plans to reduce the greenhouse gases that cause climate change (ARB, 2017).

9. Hazards and Hazardous Materials Discussion

Will the project:

9A. **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

9B. **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

9C. **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

9D. **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

9E. **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

9F. **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

9G. **Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

Impact: Answer to all the above questions having to do with Hazards and Hazardous Materials: No impact.

Discussion: Staff determined that here are no management practices identified in Section I of this report that would be expected to use or produce hazardous waste, or that would generate hazardous conditions. Therefore, staff determined there would be no impact in terms of Hazards and Hazardous Materials.

10.Hydrology and Water Quality Discussion

Will the project:

10A. **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

Impact: No impact.

Discussion: The management practices identified in Section **0**of this report should address pesticide and toxicity impairments and result in overall water quality improvement. For example, sediment and stormwater control basins, along with vegetative ditches could be used to control runoff and result in a reduction of pesticide, sediment, and nutrient loading.

10B. **Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

Impact: No impact

Discussion: The reasonably foreseeable methods should not result in an increase in groundwater pumping or interfere with recharge. The implementation of the TMDLs should improve groundwater supplies by encouraging practices such as cover crops, vegetative ditches and basins that increase infiltration and groundwater recharge.

10C. **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in a substantial erosion or siltation on or off site?**

10D. **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?**

10E. **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Impact: Answers to the three above questions on impacts to hydrology and water quality are no impact.

Discussion: Reasonably foreseeable structural methods of compliance identified in Section I of this report such as low impact development reduce impervious surfaces and encourage infiltration of runoff to reduce impacts to streams. Potential practices would not result in increased stormflows and flooding or additional sources of polluted runoff.

10F. **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?**

Impact: Less than significant with mitigation incorporation.

Discussion: Implementation of the management practices identified in Section **0**of this report could potentially increase the risk of flooding. For example, increasing stream channel vegetation could impede channel flows and cause water to flood adjacent lands. However, the potential for flooding could be mitigated by properly sizing channels and by implementing practices in the watershed such as cover crops, basins, and vegetative ditches that increase infiltration and reduce runoff into drainage systems.

10G. **In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

Impact: No impact.

Discussion: None of the management practices identified in Section I of this report would cause inundation by seiche, tsunami, or mudflow.

10H. **Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

Impact: No impact.

Discussion: None of the management practices identified in Section I of this report would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management. The potential management practices are designed to improve water quality and address water quality impairment. In addition to protecting water quality some of the potential management practices such as sediment and stormwater basins enhance groundwater recharge, which is a goal of sustainable groundwater management plans.

11.Land Use and Planning Discussion

Will the project:

11A. **Physically divide an established community?**

Impact: No impact.

Discussion: Management practices identified in Section **0**of this report that could potentially physically divide an established community would be physical measures of compliance, such as constructed wetlands, sediment and stormwater basins, and vegetative treatment systems. However, these management practices do not constitute the risk of a substantial, or potentially substantial, adverse change that would divide a community, because they would be dispersed, not contiguous, and would not be at a large geographic (community-sized) scale.

11B. **Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?**

Impact: No impact.

Discussion: Based on available data there are no adopted Habitat Conservation Plans (HCPs) or Natural Community Conservation Plans (NCCPs) currently located in the TMDL Project area; therefore, there are no impacts to HCPs or NCCPs. The lower Salinas River watershed is included in the South-Central California Coast Steelhead recovery planning area, which extends from the Pajaro River south to just above the Santa Maria River and the San Luis Obispo/Santa Barbara County line (NMFS, 2013). The TMDL is not in conflict with the steelhead recovery plan and it supports the goals of the steelhead recovery plan. The Salinas River and the Gabilan Creek/Salinas Reclamation Canal watersheds are identified as key steelhead habitat watersheds in need of protection from agricultural runoff and the TMDL addresses this issue.

12.Mineral Resources Discussion

Will the project:

12A. **Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?**

Impact: No impact.

Discussion: None of the management practices identified in Section **0**of this report would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

12B. **Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

Impact: No Impact.

Discussion: None of the management practices identified in Section **0**of this report would result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

13.Noise Discussion

Will the project:

13A. **Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Impact: Less than significant.

Discussion: The Monterey County general plan specifies compliance with land use compatibility noise exposure standards to assure a compatible noise level for various land uses. Thus, the foreseeable structural compliance methods identified in Section I of this report would be expected to conform to land use compatibility noise standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

13B. **Generate excessive groundborne vibration or groundborne noise levels?**

Impact: Less than significant with mitigation incorporation.

Discussion: Section I of this report includes management practices such as sediment and storm water basins, irrigation water retention basins, and constructed wetlands that would generate noise from excavation and grading during construction. A review of similar projects within the project area found that these types of projects had potential noise impacts that were mitigated. Construction mitigation measures used included: restricting hours of operation, siting and staging portable equipment away from noise sensitive locations, notifying adjacent residences and business in advance of construction work, and requiring all equipment to have noise abating measures.

13C. **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

Impact: Less than significant impact.

Discussion: Reasonably foreseeable management practices identified in Section I of this report could be implemented within two miles of the Salinas Municipal Airport. However, implementation is consistent with the County General Plan, which has policies in place to avoid and minimize adverse aviation noise impacts (County of Monterey, 2010).

14. Population and Housing Discussion

Will the project:

14A. **Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Impact: No impact.

Discussion: None of the management practices identified in Section **0**of this report would induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

14B. **Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

Impact. No impact.

Discussion: None of the management practices identified in Section **0**of this report would displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

15. Public Services Discussion

Will the project create impacts to:

15A. **Fire protection?**
15B. **Police protection?**
15C. **Schools?**
15D. **Parks?**
15E. **Other public facilities?**

Impact: Answer to all the questions to do with public services is no impact.

Discussion: None of the management practices identified in Section I of this report would have an effect upon, or result in a need for, new or altered fire protection services, schools, parks, or other public facilities.

16. Recreation Discussion

Will the project:

16A. **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

Impact: No impact.

Discussion: None of the management practices identified in Section **0**of this report would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

16B. **Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

Impact: No impact.

Discussion: None of the management practices identified in Section **0**of this report would require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

17. Transportation Discussion

Will the project:

17A. **Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

Impact: No impact.

Discussion: None of the reasonably foreseeable compliance methods identified in Section **0**of this report conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

17B. **Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

Impact: No impact.

Discussion: None of the reasonably foreseeable compliance methods identified in Section **0**of this report increase the amount and distance automobiles or other vehicles travel.

17C. **Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

Impact: No impact.

Discussion: None of the reasonably foreseeable compliance methods identified in Section **0**of this report contemplate the use of structural management practices that would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

17D. **Result in inadequate emergency access?**

Impact: No impact.

Discussion: None of the reasonably foreseeable compliance methods identified in Section I of this report contemplate the use of structural management practices that would affect emergency access.

18.Tribal Cultural Resources Discussion

Will the project:

18A. **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

Impact: No impact.

Discussion: To our knowledge, none of the reasonably foreseeable compliance methods identified in Section I of this report contemplate the use of structural BMPs that would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.

18B. **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Impact: Less than significant with mitigation incorporated

Discussion: With the mitigation, the implementation of management practices in the TMDL Project area is not expected to result in substantial, or potentially substantial, adverse changes to the significance of tribal archeological resources as defined in public resources code. Installation of structural management practices may involve large scale excavation or land-disturbance activities and therefore a tribal archeological resources investigation should be conducted beforehand. To avoid impacts, agencies approving projects shall perform a cultural investigation to identify resources before they are affected by a proposed project. If the impact is unavoidable, mitigation will be determined, as warranted, on a case-by-case basis.

19. Utilities and Service Systems Discussion

Will the project:

19A. **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

Impact: Less than significant with mitigation incorporated.

Discussion: Implementation of management practices in the TMDL Project area could result in the City of Salinas or the County of Monterey constructing new stormwater drainage facilities to control stormwater runoff, reduce sediment, or to increase infiltration. The construction of new facilities (stormwater management practices) could have potentially significant impacts on the environment. For example, the excavation and grading of drainage basins and channels could be a potential short-term source of fine particulates matter in the air and effect air quality. Construction could also affect noise levels. When lead agencies review projects, they should develop mitigation measure to offset potentially significant environmental impacts.

19B. **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

Impact: No impact.

Discussion: None of the reasonably foreseeable compliance methods identified in Section I of this report would require new or expanded entitlements for water supplies. Instead, management practices increase infiltration of rainfall, which could reduce water use and recharge groundwater basins.

19C. **Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Impact: No impact.

Discussion: None of the reasonably foreseeable compliance methods identified in Section I of this report would result in a wastewater treatment provider needing to expand existing treatment facilities.

19D. **Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

Impact: No impact.

Discussion: Reasonably foreseeable compliance methods identified in Section **0** of this report should generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

19E. **Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Impact: No impact.

Discussion: Reasonably foreseeable compliance methods identified in Section **0** of this report should generate little, if any, solid waste disposal nor would cause significant adverse effects with respect to compliance with federal, state, or local statutes related to solid waste disposal.

20. Wildfire Discussion

Will the project:

20A. **Substantially impair an adopted emergency response plan or emergency evacuation plan?**

Impact: No impact.

Discussion: Reasonably foreseeable compliance methods identified in Section **0**of this report should not substantially impair an adopted emergency response plan or emergency evacuation plan.

20B. **Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

Impact: No impact.

Discussion: Reasonably foreseeable compliance methods identified in Section **0**of this report should not exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

20C. **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

Impact: No impact.

Discussion: Reasonably foreseeable compliance methods identified in Section **0**should not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

20D. **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

Impact: No impact.

Discussion: Reasonably foreseeable compliance methods identified in Section **0**should not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

21. Mandatory Findings of Significance Discussion

21A. **Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

Impact: No impact.

Discussion: Attaining the TMDLs will result in attainment of water quality standards and restoration of beneficial uses such as supporting aquatic and riparian habitats important to

fish and wildlife. All the compliance measures identified in this environmental analysis are designed to improve water quality by reducing or eliminating pesticides and toxicity conditions within impaired waters. Attainment of water quality standards and restoration of designated beneficial uses are expected to result in a net benefit for the quality of the environment. As previously discussed, under Biological Resources - Category 4(a), there are endangered species in proximity to potential sites and the construction of management practices could impact them. However, any potential impacts to species would be mitigated and would not reduce populations or reduce habitats.

21B. **Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)?**

Impact: Less than significant.

Discussion: Cumulative impacts, defined in section 15355 of the CEQA Guidelines, refer to two or more individual effects, that when considered together, are considerable or that compound or increase other environmental impacts. Cumulative impact assessment must consider not only the impacts of the proposed TMDL implementation plan, but also the impacts from other Basin Plan amendments and municipal and private projects that have occurred in the past, are presently occurring, or may occur in the future in the TMDL Project area during the period of implementation.

There are several TMDLs established to address water quality impairments in the lower Salinas River watershed and staff assessed the potential for these projects to cumulatively impact the environment. Additional TMDLs in the lower Salinas River watershed are:

- TMDLs for Chlorpyrifos and Diazinon[1]
- TMDLs for Fecal Coliform
- TMDLs for Nitrogen Compounds and Orthophosphate
- TMDLs for Sediment Toxicity and Pyrethroids in Sediment
- TMDLs for Turbidity[2]

A range of management practices may be implemented to promote attainment of the proposed and existing TMDLs. However, because neither the proposed nor existing TMDLs specify the manner of achieving compliance, it is not possible to determine which dischargers will implement which management practices in which locations. Furthermore, many of the potential management practices that may be implemented to attain the proposed TMDLs are already being implemented pursuant to other programs and legal requirements (e.g., the Agricultural Order, MS4 Stormwater Permits, etc.). As a result, it is not reasonably foreseeable that the

[1] Approved by the Central Coast Water Board in 2011 but may be superseded by this TMDL Project if approved by the Central Coast Water Board, State Water Board, Office of Administrative Law, and U.S. EPA.

[2] Approved by the Central Coast Water Board in February 2022 and undergoing further approvals by State Water Board, Office of Administrative Law, and U.S. EPA.

incremental impacts associated with the adoption of the proposed TMDLs would result in cumulatively considerable impacts when viewed in connection with the effects of past, present, and future projects. Therefore, potential cumulative impacts of the proposed TMDLs are speculative and less than significant.

21C. **Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

Impact: No impact.

Discussion: The goal of the proposed TMDLs and associated actions are intended to improve long-term water quality by providing a program designed to protect and restore beneficial uses of surface waters in the TMDL Project area. The net result of these actions is anticipated to be improvements to surface and drinking water quality and improvements to aquatic habitat beneficial uses. Therefore, there should be no substantial adverse effects on human beings.

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