

INITIAL DRAFT

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SANTA MARGARITA RIVER

NUTRIENT TOTAL MAXIMUM DAILY LOADS (TMDLS)

**CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
ENVIRONMENTAL CHECKLIST**

INITIAL DRAFT

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A. PROJECT TITLE

Santa Margarita River Nutrient Total Maximum Daily Loads

B. LEAD AGENCY NAME AND ADDRESS

California Regional Water Quality Control Board, San Diego Region
(San Diego Water Board)
2375 Northside Drive, Suite 100,
San Diego, CA 92108-2700

C. LEAD AGENCY CONTACT PERSON

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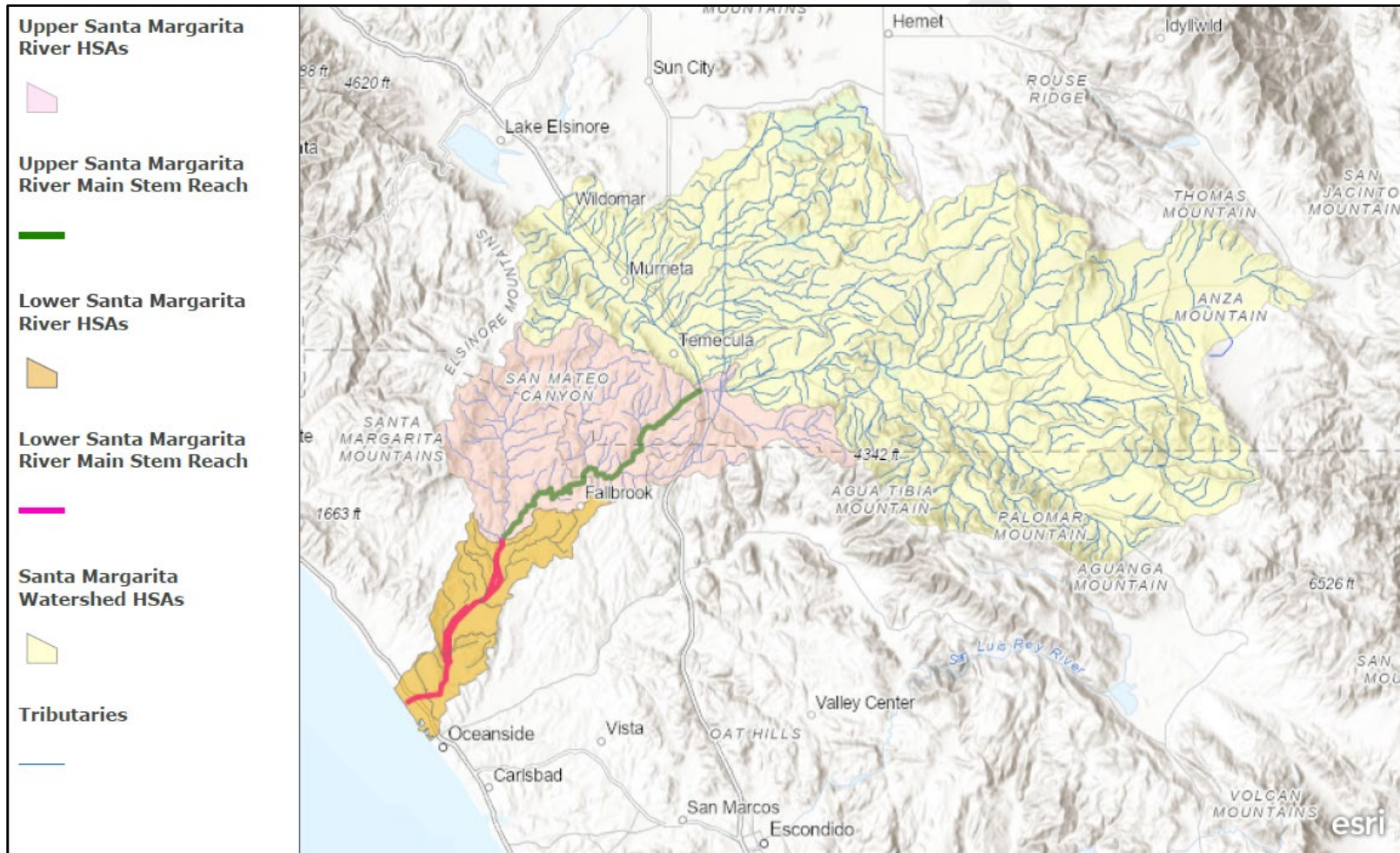
D. PROJECT LOCATION

The Santa Margarita River runs through the roughly 750 square mile Santa Margarita watershed, 27 percent of which lies within San Diego County and 73 percent of which lies in Riverside County. The Santa Margarita watershed borders the San Juan watershed to the northwest and San Luis Rey watershed to the south and is one of the least developed watersheds in southern California. It includes parts of the Cleveland National Forest, the Santa Rosa Plateau Ecological Preserve, and Agua Tibia Wilderness. It also includes portions of the Pechanga, and Cahuilla Indian Reservations, the cities of Murrieta and Temecula, the community of Fallbrook, and portions of the Marine Corps Base Camp Pendleton. Large scale agricultural land use has taken place in the Santa Margarita watershed for decades and in recent years the upper part of the Santa Margarita watershed near the Cities of Murrieta and Temecula have become one of the fastest growing urban areas in California. According to 2010 U.S. Census data, the Santa Margarita watershed is estimated as home to approximately 320,000 residents, with the majority of development concentrated in Riverside County. The principal land uses in the Santa Margarita watershed are open space, developed land, agricultural land, and military facilities that include open space. Open space in the Santa Margarita watershed plays a vital role as a wildlife corridor between the Santa Ana Mountains and Inland San Diego and provides habitat to hundreds of native species and critical habitat for threatened and endangered species including the southern California steelhead (*Oncorhynchus mykiss*). Of the species that inhabit the Santa Margarita watershed, over 80 are considered of special concern.

The Santa Margarita River originates at the confluence of Murrieta Creek and Temecula Creek near the City of Temecula at the southern end of the Santa Ana Mountains, with the lower reach originating at the confluence of De Luz Creek and the Santa Margarita River (Figure 1). The 19 miles of the lower Santa Margarita River flows through the Marine Corps Base Camp Pendleton and discharges to the Pacific Ocean through the Santa Margarita Estuary. The Santa Margarita River is one of the longest free-flowing, undammed rivers in southern California, with intermittent flow in the lower reach and perennial flows in the upper reach. The lower Santa Margarita River has largely escaped the development typical of other regions of coastal Southern California and is therefore able to support a relative abundance of functional habitats and wildlife.

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FIGURE 1: SANTA MARGARITA RIVER NUTRIENT TMDLS PROJECT AREA



Notes: HSA = Hydrologic Sub-Area

E. PROJECT DESCRIPTION

The San Diego Water Board is developing TMDLs and an implementation plan for nutrients to attain Water Quality Objectives that support beneficial uses in the upper and lower Santa Margarita River segments. The goals of the TMDLs are to reduce nutrient pollution and resulting eutrophication in order to attain and support beneficial uses.

The proposed TMDLs will include load and waste load allocations for nutrients in the River's watershed, numeric targets to protect the River's most sensitive beneficial uses, and an implementation plan. The TMDLs will be developed through utilizing models of the River and its tributaries to estimate the nutrient assimilative capacity of the Santa Margarita River and the load reductions required under different scenarios. A peer reviewed Staff Report will summarize the TMDLs, implementation plan, and/or water quality restoration strategy.

F. PROBLEM STATEMENT

Despite mostly wild and undeveloped conditions in the Santa Margarita River, large-scale agriculture and rapid urbanization in the Santa Margarita watershed has resulted in the discharge of excess nitrogen and phosphorus into the Santa Margarita River and its tributaries. Discharges of nutrient-laden wastes from municipal storm water and agricultural sources to the Santa Margarita River and its tributaries cause and/or contribute to exceedances of Water Quality Objectives and adversely impact the Cold Freshwater Habitat (COLD) and Rare, Threatened, or Endangered Species (RARE) beneficial uses designated to the River. The discharge of excess nutrient-laden wastes also has the potential to adversely impact the Municipal and Domestic Supply (MUN) beneficial use through impact to large groundwater basins in the Santa Margarita watershed. Furthermore, nutrients discharged to the surface waters and groundwater in the Santa Margarita watershed have been shown to contribute to the impairment of the Santa Margarita River Estuary downstream of the Santa Margarita River.

The San Diego Water Board first identified nutrient impairments in the Santa Margarita watershed in the 1980's. In 1986 the Santa Margarita Estuary was added to the Clean Water Act (CWA) section 303(d) List of Water Quality Limited Segments (303(d) list) for eutrophic conditions. The Board adopted a TMDL for nitrogen and phosphorus for Rainbow Creek in 2005, and in 2018 endorsed a TMDL alternative for the Santa Margarita Estuary. The alternative to a TMDL for the Santa Margarita Estuary addresses eutrophication through commitments to reduce nutrient loads through municipal separate stormwater (MS4) permits, national pollutant discharge elimination system (NPDES) permits, agricultural waste discharge requirements (WDRs), and commitments from Camp Pendleton and other primary dischargers. Although separate, the Santa Margarita River Nutrient TMDLs project continues the restoration of the Santa Margarita watershed through addressing nutrient pollution in the Santa Margarita River.

The Santa Margarita River was added to the 303(d) list for nutrients (nitrogen and phosphorus) in 2012, and the most recent 2014/2016 303(d) list includes nutrients as pollutants in the lower 19 miles and upper 18 miles of the Santa Margarita River. The lower Santa Margarita River is also listed as impaired for toxicity, pesticides, and benthic community effects, and the upper Santa Margarita is also listed for fecal indicator bacteria and metals/metalloids.

Although the proposed TMDL only addresses nutrient impairment, it is anticipated that the reduction of anthropogenic sources of nutrients will also contribute towards delisting the Santa Margarita River for toxicity and benthic community effects. Toxicity can be caused by certain forms of nitrogen, including ammonia nitrogen^{1 2} or via ingestion of toxic algae blooms which form due to excess nutrients³ and benthic community effects will likely improve with reduced eutrophication and improved water quality.

The proposed TMDL will also include an implementation plan. Since 2011, the San Diego Water Board has been working collaboratively with the Santa Margarita River Watershed Nutrient Initiative Stakeholder Group (Stakeholder Group) to develop a Water Quality Restoration Strategy for the Santa Margarita Estuary and Santa Margarita River. The Stakeholder Group includes representatives from the Riverside County Flood Control and Water Conservation District, the County of San Diego, and the Marine Corps Base Camp Pendleton, Tribes, members of the agricultural community, and others.

The expected manner(s) of compliance, i.e., achieving the TMDL water quality goals sufficiently to remove the Santa Margarita River from the CWA 303(d) list, will be identified based on the results of the watershed loading model, which will calculate load and waste load allocations for different climate change scenarios and determine a set of biostimulatory targets that will attain beneficial uses. The actual environmental impacts will depend on the specific actions taken by those complying with the TMDLs and will be subject to subsequent project-level environmental reviews.

¹ Thurston and Russo 1981. Ammonia toxicity to fishes. Effect of pH on the Toxicity of the Unionized Ammonia Species. *Environmental Science and Technology* 15, 7, 837–840.

² United States Environmental Protection Agency. Aquatic Life Criteria – Ammonia. <https://www.epa.gov/wqc/aquatic-life-criteria-ammonia>. Accessed September 8, 2020.

³ Anderson et al. 2002. Harmful algal blooms and eutrophication: Nutrient sources, composition, and consequences. *Estuaries* 25, 704–726.

G. ENVIRONMENTAL IMPACTS – CEQA CHECKLIST

The San Diego Water Board is soliciting input from public agencies and members of the public on all possible environmental impacts from the Santa Margarita River Nutrient TMDLs from project implementation and compliance including: the range of project actions, alternatives, reasonably foreseeable methods of compliance, significant impacts to be analyzed, cumulative impacts if any, and mitigation measures that will reduce impacts to a less than significant level.

The checklist below represents an initial draft of potential environmental impacts and will consider public comments. San Diego Water Board Staff are especially interested in comments on the level of environmental impact and potential mitigation options for agriculture and forestry.

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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:

Item	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

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

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:

Item	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?				
B	Conflict with existing zoning for agricultural use or a Williamson Act contract?				

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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))?				
D	Result in the loss of forest land or conversion of forest land to non-forest use?				
E	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. 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:

Item	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?			Less than Significant 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?			Less than Significant 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:

Item	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 Impact	
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?				No 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?				No Impact

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No 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 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:

Item	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?				No Impact
B	Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?				No Impact
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:

Item	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?				No Impact
B	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				No 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:

Item	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 a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				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

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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?			Less Than Significant 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:

Item	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	
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:

Item	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

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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
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?			Less Than Significant 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:

Item	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 substantial erosion or siltation on- or off-site?				No Impact

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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
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 storm water 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?				No Impact

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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

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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:

Item	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 RESOURCES

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:

Item	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:

Item	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 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?				No 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:

Item	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

Levels of impact to public services are evaluated in the matrix below. This takes into account any foreseeable need for new or physically altered governmental facilities and potential adverse environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives associated with these public services:

Item	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:

Item	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:

Item	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)?			Less Than Significant 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, or 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:

Item	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.				No Impact

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:

Item	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?				No Impact
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

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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

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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:

Item	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:

Item	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.)?				No Impact

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
C	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				No Impact

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H. ENVIRONMENTAL CHECKLIST DISCUSSION

The San Diego Water Board is soliciting input from public agencies and members of the public on all possible environmental impacts from the Santa Margarita River Nutrient TMDLs from project implementation and compliance including: the range of project actions, alternatives, reasonably foreseeable methods of compliance, significant impacts to be analyzed, cumulative impacts if any, and mitigation measures that will reduce impacts to a less than significant level. Listed below are the issues for which San Diego Water Board staff have initially identified as most likely to have a “less than significant impact” or higher.

2. AGRICULTURE AND FORESTRY RESOURCES DISCUSSION

The San Diego Water Board is soliciting public comment to determine the level of environmental impact and potential mitigation measures within all sections of the CEQA Checklist, with a special emphasis on agriculture and forestry.

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?
- 2B. Conflict with existing zoning for agricultural use or a Williamson Act contract?
- 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))?
- 2D. 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?

3. AIR QUALITY DISCUSSION

Will the project:

- 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?

Less Than Significant Impact.

Implementation of the proposed TMDL could potentially and temporarily result in a cumulative net increase of criteria pollutants for which the region is in non-attainment under an applicable federal or state ambient air quality standard during the installation or maintenance of structural Best Management Practices (BMPs) and management measure, due to increased transportation, construction, and other activities.

However, it is anticipated that the majority of implementation would be low development, and result in less than significant impacts.

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

Less Than Significant Impact.

Implementation of the proposed TMDL could potentially and temporarily expose sensitive receptors to substantial pollutant concentrations during installation and maintenance of structural BMPs.

Short-term emissions of particulates (i.e., dust, clay, silt, and fine sand) may be generated by the equipment disturbing relatively small areas while preparing the terrain for the construction of structural BMPs.

Impacts from the proposed actions taken for TMDL compliance would be reduced through standard construction measures to control airborne dust generation and excessive vehicle emissions.

The individual and cumulative contribution of these activities are anticipated to be less than significant and will not expose sensitive receptors to any substantial pollution concentrations.

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

Less Than Significant Impact.

The proposed TMDL could potentially and temporarily create objectionable odors during installation and maintenance of structural BMPs.

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?

Less Than Significant Impact.

The California Department of Fish and Wildlife Service (CDFW) has identified over 80 Federally Endangered, Federally Threatened, State Endangered, State Threatened, Species of Special Concern, Fully Protected, or Watch List species in the Santa Margarita watershed.

It is not anticipated that implementation of the proposed TMDL will significantly impact candidate, sensitive, or special status species (species) directly. However, the construction of and use of localized BMPs may cause temporary impacts to water quality and habitat and create minor reductions in habitat area and quality.

The project will benefit species through improved water quality and habitat and will help meet some of the goals in the Southern California Steelhead Recovery Plan.⁴

- 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?

Less Than Significant Impact.

Most project implementation actions, such as monitoring or enforcement of existing laws, regulations, or treaties, will not have a significant adverse effect on habitats or species.

The construction of and use of localized BMPs may cause temporary and minor impacts to water quality and habitat. All implementation actions will avoid migratory wildlife corridors and nursery sites.

⁴ National Marine Fisheries Service 2012. Southern California Steelhead Recovery Plan Summary.

It is anticipated that the installation of BMPs will reduce pollutants in the lower Santa Margarita River and improve water quality downstream in the Santa Margarita Estuary, including increasing nursery habitat.

7. GEOLOGY AND SOILS DISCUSSION

Will the project:

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

Less Than Significant Impact.

Due to the construction of structural BMPs, limited grading for new construction may occur in limited areas and could alter erosion and sedimentation in natural drainage areas.

Compliance with current construction storm water permits, local government codes and use of BMPs for construction can limit these impacts. Geotechnical investigation for design can ensure limited impacts to geologic resources from construction.

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?

Less Than Significant Impact.

Implementation of the proposed TMDL could lead to the generation of limited greenhouse gas emissions during the installation and maintenance of structural BMPs required under the WDRs of the General Agricultural Order or MS4 Permits.

Greenhouse gas emissions due to construction equipment would be short-term and limited to minor amounts and therefore would not significantly increase greenhouse gas levels in the environment. Greenhouse gas levels are not expected to rise significantly since mitigation measures are available to reduce greenhouse gas emissions due to construction and maintenance activities.

For minor construction activities, the California Department of Water Resources (CDWR) has developed a set of BMPs to reduce greenhouse

gas emissions from CDWR construction and maintenance activities⁵. These BMPs can be used and modified to fit specific situations by the implementing agencies to reduce greenhouse gas emissions from their activities:

- BMP 1. Evaluate project characteristics, including location, project workflow, site conditions, and equipment performance requirements, to determine whether specifications of the use of equipment with repowered engines, electric drive trains, or other high efficiency technologies are appropriate and feasible for the project.
- BMP 2. Evaluate the feasibility and efficacy of performing on-site material hauling with trucks equipped with on-road engines.
- BMP 3. Ensure that all feasible avenues have been explored for providing an electrical service drop to the construction site for temporary construction power. When generators must be used, use alternative fuels, such as propane or solar, to power generators to the maximum extent feasible.
- BMP 4. Evaluate the feasibility and efficacy of producing concrete on-site and specify that batch plants be set up on-site or as close to the site as possible.
- BMP 5. Evaluate the performance requirements for concrete used on the project and specify concrete mix designs that minimize greenhouse gas emissions from cement production and curing while preserving all required performance characteristics.
- BMP 6. Minimize idling time by requiring that equipment be shut down after five minutes when not in use (as required by the state airborne toxics control measure [CCR, title 13, section 2485]). Provide clear signage that posts this requirement for workers at the entrances to the site and provide a plan for the enforcement of this requirement.

⁵ California Department of Water Resources 2012. Greenhouse Gas Emissions Reduction Plan.

- BMP 7. Maintain all construction equipment in proper working condition and perform all preventative maintenance. Required maintenance includes compliance with all manufacturer recommendations, proper upkeep and replacement of filters and mufflers, and maintenance of all engine and emissions systems in proper operating condition. Maintenance schedules shall be detailed in an Air Quality Control Plan prior to commencement of construction.
- BMP 8. Implement tire inflation program on jobsite to ensure that equipment tires are correctly inflated. Check tire inflation when equipment arrives on-site and every two weeks for equipment that remains on-site. Check vehicles used for hauling materials off-site weekly for correct tire inflation. Procedures for the tire inflation program shall be documented in an Air Quality Management Plan prior to commencement of construction.
- BMP 9. Develop a project specific ride share program to encourage carpools, shuttle vans, transit passes, and secure bicycle parking for construction worker commutes.
- BMP 10. Reduce electricity use in temporary construction offices by using high efficiency lighting and requiring that heating and cooling units be Energy Star compliant. Require that all contractors develop and implement procedures for turning off computers, lights, air conditioners, heaters, and other equipment each day at close of business.
- BMP 11. For deliveries to project sites where the haul distance exceeds 100 miles and a heavy-duty class 7 or class 8 semi-truck or 53-foot or longer box type trailer is used for hauling, a SmartWay1 certified truck would be used to the maximum extent feasible.

Greenhouse gas emissions from the operation of focused or modified treatment technologies or maintenance facilities could be mitigated with the use of BMPs.

9. HAZARDS AND HAZARDOUS MATERIALS DISCUSSION

Will the project:

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

Less Than Significant Impact.

A potential implementation option is the restoration of riparian habitat. Under this action, more natural material would be generated, which could become fuel for wildfires during extended periods of drought.

Mitigation measures to reduce impacts include:

- Planning restoration so it will not overlap with defensible space around a business, home or other establishment
- Surveys for fire risk, with special attention to ladder, surface, and aerial fuels.
- Fuel reduction using Cal Fire guidelines

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?

Less Than Significant Impact.

Implementation of the proposed TMDL could potentially and temporarily result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinances, including the County of San Diego Regulatory Ordinances Relating to Noise Control and Abatement and An Ordinance of the County of Riverside Amending Ordinance Number 847 Regulating Noise or applicable standards of other agencies, during the installation and maintenance of Structural BMPs. The proposed TMDL may result in a temporary or periodic increase in ambient noise levels during Structural BMP installation and maintenance.

The County of San Diego and County of Riverside noise ordinances regulate noise for a variety of land uses, including residential, agricultural,

civic, commercial, industrial, rural and open space uses. This includes regulating the hours of operation for construction equipment (prohibited between 7pm -7am and on Sundays/holidays in the County of San Diego) and the decibel level (cannot exceed an average sound level of 75 decibels for an eight-hour period, between 7am-7pm in the County of San Diego).

The construction and maintenance of BMPs will follow the hours defined in the Noise Ordinances and take any mitigation measures necessary to protect biological communities.

Noise associated with construction may also have temporary impacts to human receptors and biological resources.

To reduce the impacts, construction noise will not exceed noise standards. Mitigation measures also include: restricting construction to avoid nesting season, pre-construction biological surveys, noise barriers, and monitoring by a qualified biologist and a noise specialist during construction. If construction must occur during breeding season, measures shall be implemented to prevent noise levels reaching riparian habitat from exceeding the 60-dB threshold.

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

Less Than Significant Impact.

Implementation of the proposed TMDL could potentially and temporarily expose persons to, or generation of excessive ground borne vibration or ground borne noise levels, during the installation and maintenance of Structural BMPs.

17. TRANSPORTATION DISCUSSION

Will the project:

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

Less Than Significant Impact.

Actions taken in response to the adoption of the TMDL will not conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b).

Construction and maintenance of structural BMPs may temporary and infrequently increase vehicle miles travelled. However, implementation actions would not significantly affect vehicle miles traveled in project areas.