

Substitute Environmental Document

for the Malibu Creek watershed Nutrients TMDL and the
Malibu Creek and Lagoon Sedimentation and Nutrients
TMDL to Address Benthic Community Impairments

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

California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, California 90013

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1) Executive Summary

The California Regional Water Quality Control Board – Los Angeles Region (Regional Water Board) is the Lead Agency for evaluating the environmental impacts of a proposed Implementation Plan for two previously-established Total Maximum Daily Loads (TMDLs) for nutrient and sediment related pollutants in the Malibu Creek watershed. This Substitute Environmental Document (SED) analyzes environmental impacts that may occur from reasonably foreseeable methods of complying with the Implementation Plan for the two TMDLs. The two TMDLs are the Malibu Creek Nutrients TMDL and the Malibu Creek and Lagoon TMDL for Sedimentation and Nutrients to address Benthic Impairments established by the United States Environmental Protection Agency (U.S. EPA) on March 21, 2003, and July 2, 2013, respectively. The Implementation Plan will be considered by the Regional Water Board, and if approved by the Regional Water Board, implemented through an amendment to the Water Quality Control Plan, Los Angeles Region (Basin Plan). The proposed Implementation Plan is described in the Staff Report, Tentative Resolution, and Tentative Basin Plan Amendment, which are available on the Regional Water Board's website. This SED analyzes foreseeable methods of compliance with the Implementation Plan and provides the public information regarding environmental impacts, mitigation, and alternatives in accordance with the California Environmental Quality Act (CEQA).

The SED will be considered by the Regional Water Board when the Regional Water Board considers adoption of the Implementation Plan as a Basin Plan amendment. Approval of the SED is separate from approval of a specific project alternative or a component of an alternative. Approval of the SED refers to the process of: (1) addressing comments, (2) confirming that the Regional Water Board considered the information in the SED, and (3) affirming that the SED reflects independent judgment and analysis by the Regional Water Board (Section 15090 of CEQA Guidelines (Title 14 of California Code of Regulations)).

TMDLs to address nutrients and sedimentation in the Malibu Creek watershed are required under section 303 of the Clean Water Act, and mandated by a Consent Decree and amended Consent Decree between Heal the Bay, et al. and the U.S. EPA. Water quality in the Malibu Lagoon, segments of the Malibu Creek and tributaries, and lakes are listed on the 303(d) list as impaired by ammonia and nutrients and dissolved oxygen, algae, scum, and odor. In addition, Malibu Creek and Las Virgenes Creek are listed for benthic-macroinvertebrate bioassessments and sedimentation/siltation and Malibu Lagoon is listed for benthic community effects. Nutrient- and sediment-related pollution in the Malibu Creek watershed results in impairments of beneficial uses associated with water contact recreation (REC1), non-contact water recreation (REC2), warm freshwater habitat (WARM), cold freshwater habitat (COLD); estuarine habitat (EST); marine ecosystems (MAR); and wildlife habitat (WILD); rare, threatened, or endangered species habitat (RARE); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early

development (SPWN); and wetland land habitat (WET). The objective of the two EPA TMDLs is to restore the beneficial uses that are currently impaired due to nutrient and sediment related pollutants.

The 2003 and 2013 TMDLs assign waste load allocations (WLAs) to point sources and load allocations (LAs) to nonpoint sources. The proposed Implementation Plan provides for a 15-year implementation schedule to attain these TMDLs. WLAs will be implemented through the NPDES Permit for the Tapia Water Reclamation Facility (WRF), the Los Angeles County Municipal Separate Storm Sewer System (MS4) permit, the Ventura County MS4 permit, the Statewide Storm Water Permit for the State of California Department of Transportation, and for additional responsible entities in the future, MS4 permits under Phase II of the U.S. EPA Stormwater Permitting Program or the residual designation authority of the state under CWA section 402(p)(2)(E). LAs will be implemented through regulatory mechanisms that implement the State Board's 2004 Nonpoint Source Implementation and Enforcement Policy, such as waste discharge requirements (WDRs) and waivers of WDRs.

Potential compliance measures include the use of structural best management practices (BMPs) and non-structural BMPs by the MS4 permittees, lake management strategies, agriculture and livestock facility BMPs, water repurpose at the Tapia WRF, and upgrades to onsite wastewater treatment systems (OWTS), if deemed necessary. Potential adverse impacts to the environment as a result of the Implementation Plan stem principally from structural stormwater BMPs, lake management strategies such as dredging, possible upgrades to OWTS, and the Tapia WRF water repurpose projects.

This SED analyzes two program alternatives and several implementation alternatives (see Sections 4 and 5 of this SED for a description of the alternatives) that encompass actions within the jurisdiction of the Regional Water Board and implementing municipalities and agencies. A No Project Alternative is analyzed to allow decision makers to compare the impacts of approving the proposed alternative and its components compared with the impacts of not approving the proposed alternative. The SED analyzes the potential environmental impacts in accordance with significance criteria widely accepted by municipalities and government agencies in the Malibu Creek watershed for CEQA review.

CEQA requires the Regional Water Board to conduct a program-level analysis of environmental impacts (Public Resources Code §21159(d)). This analysis is a program-level analysis. Public Resources Code Section 21159(c) requires that the Environmental Analysis take into account a reasonable range of:

- (1) Environmental, economic, and technical factors,
- (2) Population and geographic areas, and
- (3) Specific sites.

A “reasonable range” does not require an examination of every site, but a reasonably representative sample of them. The statute specifically states that the section shall not require the agency to conduct a “project-level analysis” (Public Resources Code § 21159(d)). Rather, a project-level analysis must be performed by the responsible parties that are required to implement the requirements of the TMDL (Public Resources Code §21159.2). Notably, the Regional Water Board is prohibited from specifying the manner of compliance with a WDR or other order (Water Code §13360), and accordingly, the actual environmental impacts will necessarily depend upon the compliance strategy selected by responsible parties.

Approval of projects (i.e., project alternatives or components of project alternatives) refers to the decision of either the implementing municipalities or agencies to select and carry out an alternative or a component of an alternative (Section 5 of this SED summarizes the components that comprise the project alternatives analyzed in this SED). The components assessed at a project level have specific locations that will be determined by implementing municipalities and agencies. The project-level components will be subject to additional environmental review, including review by cities and municipalities implementing TMDL projects.

Many of the specific projects analyzed in this SED will involve construction and earth moving. The potential impacts from these projects can include, for example, dust generation from excavation, habitat disturbance, noise associated with construction, air emissions associated with vehicles to deliver materials during construction, and traffic and wear and tear on local roads associated with increased vehicle trips. These foreseeable impacts are analyzed in Section 6 of this SED. To address the environmental and nuisance impacts from these activities, responsible parties can employ a variety of mitigation measures. Generally accepted and recognized mitigation measures for construction projects on the scale of these projects include dust suppression, timing of activities and buffering to avoid breeding seasons for sensitive species, phasing of activities to allow habitat recovery, management of traffic by planning construction activities for certain times of the day, mitigation of excessive noise by planning construction activities for certain times of the day, and reduction of air emissions by use of lower emissions vehicles. These mitigation methods are discussed in detail in Section 6 of this SED. Mitigation measures are suggested to minimize site specific impacts to less than significant levels. Mitigation of adverse environmental impacts is strictly within the discretion of responsible parties. It is the obligation of the responsible parties to mitigate adverse environmental impacts associated with reasonably foreseeable means of compliance when impacts are deemed significant (Title 14, California Code of Regulations, Section 15091(a)(2)).

The SED can be used by responsible parties to expedite any additional environmental analysis of specific projects required to comply with the Implementation Plan. As discussed in this SED, California Water Code section 13360 prohibits the Regional Water Board from specifying the

manner of compliance with a WDR or other order. It is within the discretion the implementing party to select the most appropriate means of compliance and the use of measures which may mitigate potential adverse impacts associated with those means of compliance is recommended. To the extent that there are unavoidable adverse environmental impacts, the benefits of the Implementation Plan outweigh these impacts.

2) Regulatory Requirements for Environmental Impact Analysis

This section presents the regulatory requirements for assessing environmental impacts of an Implementation Plan implemented through a Basin Plan amendment by the Regional Water Board. The proposed Implementation Plan is evaluated at a program level of detail under a Certified Regulatory Program and the information and analyses are presented in this SED as discussed in this section.

2.1) 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 is considered a substitute for an initial study, negative declaration, and/or environmental impact report.

2.2) California Code of Regulations and Public Resources Code Requirements

While the "certified regulatory program" of the Regional 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 that includes a description of the proposed activity, an analysis of reasonable alternatives, and an identification of mitigation measures to minimize any significant adverse environmental impacts. Section 3777(a) also requires the Regional Water Board to complete an environmental checklist as part of its substitute environmental document. This checklist is provided in section 6 of this document.

In addition, the Regional Water Board must fulfill substantive obligations when adopting performance standards such as TMDL implementation plans, as described in Public Resources Code section 21159. 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.

The statute further requires that the environmental analysis at a minimum, include, all of 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 to lessen the adverse environmental impacts.
- (3) An analysis of reasonably foreseeable alternative means of compliance with the rule or regulation that would have less significant adverse impacts. (Pub. Resources Code, §21159(a).)

Section 21159(c) requires that the Environmental Analysis take into account a reasonable range of:

- (1) Environmental, economic, and technical factors,
- (2) Population and geographic areas, and
- (3) Specific sites.

2.3) Program and Project Level Analyses

Public Resources Code § 21159(d) specifically states that the public agency is not required to conduct a “project level analysis.” Rather, a project level analysis must be performed by the local agencies that are required to implement the requirements of the TMDL (Pub. Res. Code §21159.2). Notably, the Regional Water Board is prohibited from specifying the manner of compliance with a WDR or other order (Water Code § 13360), and accordingly, the actual environmental impacts will necessarily depend upon the compliance strategy selected by responsible parties.

This Substitute Environmental Document identifies the reasonably foreseeable environmental impacts of the reasonably foreseeable methods of compliance (Pub. Res. Code, § 21159(a)(1)), based on information developed before, during, and after the CEQA scoping process that is specified in California Public Resources Code section 21083.9. This analysis is a program level (i.e., macroscopic) analysis. CEQA requires the Regional Water Board to conduct a program level analysis of environmental impacts. (Pub. Res. Code, § 21159(d)). Similarly, the CEQA substitute document does not engage in speculation or conjecture (Pub. Res. Code, §21159(a)). When the CEQA analysis identifies a potentially significant environmental impact, the accompanying analysis identifies reasonably foreseeable feasible mitigation measures. (Pub. Res. Code, § 21159(a)(2)). Because responsible parties will most likely use a combination of

implementation alternatives, the SED has identified the reasonably foreseeable alternative means of compliance. (Pub. Res. Code, § 21159(a)(3).)

2.4) Purpose of CEQA

CEQA's basic purposes 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 mitigated, 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. (Cal. Code Regs., tit. 14, § 15002(a).)

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. (Cal. Code Regs., tit.14, § 15151.) The Court stated in *River Valley Preservation Project v. Metropolitan Transit Development Board* (1995) 37 Cal.App.4th 154, 178:

“[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...” (City of Santee v. County of San Diego (1989) 214 Cal.App.3d 1438, 1448 [263 Cal. Rptr. 340]; quoting *Laurel Heights I*, supra, 47 Cal.3d at p. 393.) “We look ‘not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.’ (Guidelines, §§ 15151.)” (City of Fremont v. San Francisco Bay Area Rapid Transit Dist., supra, 34 Cal.App.4th at p. 1786.)

Nor does a CEQA require unanimity of opinion among experts. The analysis is satisfactory as long as those opinions are considered. (Cal. Code Regs., tit. 14, § 15151.)

In this document, the Regional Water Board staff has performed a good faith effort at full disclosure of the reasonably foreseeable environmental impacts that could be attendant with the proposed Implementation Plan.

3) TMDL Overview and Program Objectives

3.1) Introduction- Legal Background

The Malibu Creek Nutrients TMDL and the Malibu Creek and Lagoon TMDL for Sedimentation and Nutrients to address Benthic Impairments were designed to attain the water quality standards for nutrients and sediment in waterbodies within Malibu Creek watershed. The TMDLs were

prepared pursuant to state and federal requirements to preserve and enhance water quality in the Malibu Creek watershed. The adoption of a TMDL is not discretionary and is compelled both by section 303(d) of the federal Clean Water Act (33 USC 1313(d)) and by a federal consent decree, *Heal the Bay Inc., et al. v. Browner, et al.* C 98-4825 SBA (United States District Court, Northern District of California, 1999) approved on March 22, 1999.

The Basin Plan sets water quality standards for surface waters and ground waters in the region. These standards are comprised of designated beneficial uses for surface and ground waters, numeric and narrative objectives necessary to support beneficial uses, and the state's antidegradation policy. Such standards are mandated for all waterbodies within the state under the Porter-Cologne Water Quality Act. In addition, the Basin Plan describes implementation programs to protect all waters in the region. The Basin Plan implements the Porter-Cologne Water Quality Control Act (commencing at Section 1300 of the "California Water Code") and serves as the State Water Quality Control Plan applicable to the waterbodies within the Malibu Creek watershed, also requiring water quality standards for all surface waters as required pursuant to the federal Clean Water Act (CWA).

Section 305(b) of the CWA mandates biennial assessments of the nation's water resources. These water quality assessments are used, with any other available data and information, to identify and prioritize waters not attaining water quality standards. The resulting amalgamation of waters is referred to as the "303(d) list" or the "Impaired Waters List." CWA section 303(d)(1)(C) and (d)(1)(D) require that the state establish TMDLs for each listed water. Those TMDLs, and the 303(d) list itself, must be submitted to U.S. EPA for approval under section 303(d)(2). Section 303(d)(3) requires that the state also develop TMDLs for all waters that are not on the 303(d) list as well, but TMDLs for waters that do not meet the criteria for listing are not subject to approval by U.S. EPA.

As part of the 1996, 1998, 2002, and 2010 303(d) Lists, several reaches, lakes and tributaries within Malibu Creek watershed are impaired due to nutrient and/or sediment related pollutants. These reaches, lakes and tributaries within Malibu Creek watershed require development of TMDLs.

TMDLs must be established at a level necessary to attain water quality standards, considering seasonal variations and a margin of safety. TMDLs must also include an allocation of parts of the total allowable load (or loading capacity) to all point sources, nonpoint sources, and natural background in the form of waste load and load allocations, accordingly. Waste load and load allocations must be assigned for all sources of the impairing pollutant, irrespective of whether they are discharged to the impaired reach or to an upstream tributary. TMDLs are generally established in California through the basin planning process, i.e., an amendment to the basin plan to incorporate a new or revised program of implementation of the water quality standards,

pursuant to Water Code section 13242. The process that the Regional Water Board uses for establishing TMDLs is the same whether under section 303(d)(1) or 303(d)(3).

U.S. EPA's authority over the 303(d) program includes the obligation to approve or disapprove the identification of impaired waters. If any list or TMDL is disapproved, U.S. EPA must establish its own list or TMDL.

The proposed Implementation Plan for the Malibu Creek Nutrients TMDL and the Malibu Creek and Lagoon Sedimentation and Nutrients TMDL is a Basin Plan amendment and is subject to Public Resources Code Section 21083.9 that requires a CEQA Scoping to be conducted for Regional Projects. CEQA Scoping involves identifying a range of project/program related actions, alternatives, mitigation measures, and significant effects to be analyzed in an EIR or its functionally equivalent document. On March 17, 2016, a CEQA Scoping meeting was held to present and discuss the foreseeable potential environmental impacts of compliance with the Implementation Plan at 320 W. 4th Street, Los Angeles, CA 90013. This SED considers all comments made at the March 17, 2016 CEQA Scoping meeting.

This SED is being released for public comments accompanying the staff report, Basin Plan amendment, and tentative resolution for adoption by the Regional Water Board; these documents should be considered as a whole when evaluating the environmental impacts of the Implementation Plan. Regional Water Board staff will respond to public comments received on these documents and these comments and responses and the documents will all be considered by the Regional Water Board when considering whether to adopt the Implementation Plan.

3.2) Project Purpose

The Regional Water Board proposes an amendment to the Basin Plan to incorporate an implementation plan for two previously adopted EPA TMDLs to reduce nutrient-related and sediment-related impairments in the Malibu Creek watershed.

As further set forth herein, this project's purpose is twofold:

- To adopt a regulation that will guide Regional Board permitting, enforcement, and other actions to require responsible parties to take appropriate measures to restore and maintain applicable Water Quality Standards pertaining to nutrients and sediments throughout the Malibu Creek watersheds; and
- To establish a TMDL implementation plan, including implementation schedules for Malibu Creek watershed.

The purpose of these amendments is to incorporate an Implementation Plan for TMDLs that were previously established by U.S. EPA. On March 21, 2003, U.S. EPA established the Malibu Nutrient TMDL. On July 2, 2013, U.S. EPA established the Malibu Creek and Lagoon Nutrient and Sediment TMDL to address benthic impairments. The U.S. EPA-established TMDLs include the problem statement, numeric targets, source analysis, loading capacity, load allocations, waste load allocations, and margin of safety. An implementation plan is not a required element of a TMDL established by U.S. EPA; therefore, these TMDLs do not include implementation plans or schedules for implementation. The proposed amendments incorporate as Implementation Plan for the Malibu Nutrient TMDL and the Malibu Creek and Lagoon Nutrient and Sediment TMDL to address benthic impairments.

4) Description of Program Alternatives

This substitute environmental document analyzes two program alternatives that encompass actions within the jurisdiction of the Regional Water Board and implementing parties. The program alternatives include:

- 1) The Implementation Plan as it is proposed for Regional Water Board adoption;
- 2) No Program Alternative in which the TMDLs established by USEPA remain in place with no associated implementation plan or schedule.

The no Program Alternative is analyzed to allow decision makers to compare the impacts of approving a proposed alternative and its components compared with the impacts of not approving a proposed alternative. The specifics of the many projects which would make up a program alternative are discussed in detail in Section 5 and include lake management strategies, runoff BMPs, and possible treatment upgrades that are reasonably foreseeable to be implemented under the program alternatives.

The components assessed at a program level generally are program elements that would be implemented as part of the Implementation Plan, but these elements do not have specific locations or design details identified. The components assessed at a project level have specific locations which will be determined by implementing parties. The project level components will be subject to additional future environmental review, including review by responsible parties implementing TMDL projects.

4.1) Alternative 1 - Regional Water Board TMDL Implementation Plan

This program alternative is based on the TMDLs that have been established by U.S. EPA. The implementation plans for the EPA-adopted TMDLs are established through amendments to Basin Plan and implemented through NPDES permits and other regulatory mechanisms consistent with the Nonpoint Source Enforcement Policy. This alternative provides a program for addressing the adverse impacts of nutrients and sedimentation through a progressive reduction in discharges to the MCW through a 15-year schedule. This schedule is both reasonable and as short as practicable. The implementation schedule, once it is incorporated into the Basin Plan, will be considered by NPDES permit, WDR, and Waiver writers when developing requirements that are adopted in separate subsequent actions by the Regional Water Board.

During the development of the TMDL, the reasonably foreseeable means of compliance were examined. These include the use of structural best management practices (BMPs) and non-structural BMPs by the MS4 permittees, lake management strategies, agriculture and livestock facility BMPs, water repurpose at the Tapia WRF, and upgrades to onsite wastewater treatment systems (OWTS), if deemed necessary. Potential adverse impacts to the environment as a result of the Implementation Plan stem principally from structural stormwater BMPs, lake management strategies such as dredging, possible upgrades to OWTS, and the Tapia WRF water repurpose projects.

This alternative is reasonable and feasible. It accomplishes the project's purposes, as described in Section 3.2. It also achieves the Regional Water Board's goal of removing nutrients and sedimentation impairments from the Malibu Creek Watershed over a reasonable implementation schedule.

4.2) Alternative 2 – USEPA TMDL

This program alternative is based on the TMDLs that were established by U.S. EPA on March 21, 2003, and July 2, 2013. The technical portions and WLAs of this TMDL Program Alternative will be the same as Program Alternative 1. However, because the EPA-established TMDLs would not be implemented through a Basin Plan amendment, the WLAs will be implemented directly through NPDES permit limits as the permits are renewed without consideration of a compliance schedule. Because NPDES permits are renewed every five years, all responsible parties, municipalities and Caltrans, could be required to be in full compliance immediately, or within five years.

Like Alternative 1, this TMDL program alternative also anticipates compliance through the use of structural best management practices (BMPs) and non-structural BMPs by the MS4 permittees, lake management strategies, agriculture and livestock facility BMPs, water repurpose

at the Tapia WRF, and upgrades to onsite wastewater treatment systems (OWTS), if deemed necessary. Potential adverse impacts to the environment likewise stem principally from the installation, operation, and maintenance of the structural BMPs and water repurpose at the Tapia WRF. Any significant impacts can be mitigated or there are alternative means of compliance available that would have less impacts.

If the USEPA-established TMDLs remained in place without any implementation plans, any adverse impacts would be more significant, not less. The same WLAs will need to be met and the same technological choices will be available under both this alternative and Alternative 1. Alternative 1 will allow a measured implementation plan, resulting in full compliance in 15 years. Alternative 2, in contrast, will require compliance at the time of permit renewal, in all permit cases, in less than five years. The environmental impacts due to Alternative 2 may be of greater severity however, as the intensity of implementation actions will be greater to comply with the shorter time frame. The longer schedule of Alternative 1 allows for prioritization and planning, more thoroughly mitigated impacts, temporal distribution of compliance measures resulting in less concentration of impacts, more appropriately designed, sited and sized structural devices and, therefore, less environmental impact, in general. In addition, prioritization and planning will likely result in more efficient use of funds and lower overall costs.

4.3) Recommended Program Alternative

This environmental analysis finds that Program Alternative 1 is the most environmentally advantageous alternative, has the least associated significant adverse impacts, and is the only alternative that would achieve all the major project purposes.

Either Alternative 1 or 2 will restore beneficial uses in the Malibu Creek Watershed by removing nutrient and sediment related impairments. As such, either Alternative 1 or 2 represents a benefit to the environment. The key environmental difference between program Alternatives 1 and 2 is the establishment of an implementation schedule. Alternative 1 contains an implementation schedule that allows compliance projects to be spread out over time to lessen potential environmental impacts. Alternative 2, therefore would foreseeably result in more significant impacts, not less. Alternative 1 is therefore the recommended alternative.

5) Description of Implementation Alternatives

This Section of the SED provides a description of implementation alternatives and the type of sites where they might be placed within the TMDL area. The Regional Water Board is prohibited from specifying the manner of compliance with its WDRs or other orders (Water Code § 13360), and accordingly, the actual compliance strategies will be selected by responsible parties. Although the Regional Water Board does not mandate the manner of compliance, foreseeable methods of compliance are well known.

The project-level components will be subject to additional future environmental review. A project level environmental analysis must be performed by the local agencies that are required to implement the requirements of the TMDLs (Pub. Res. Code § 21159.2.).

The most likely measures of compliance include Tapia WRF's water storage plans, Tapia WRF's use of dilution water or a side stream treatment facility; agriculture's irrigation and nutrient management, filter strips, and mulching; horse and livestock grazing and manure management; stormwater structural BMPs and treatment systems such biofiltration, bioretention, infiltration trenches and basins, and constructed wetlands; nonpoint source BMPs such as street sweeping, stormdrain and catch basin cleaning, and public outreach; OWTS inspections and upgrades; lake aeration systems, floating islands, and hydrologic dredging; and watershed-wide restoration such as riparian buffers and steam bank stabilization.

5.1) Tapia WRF Implementation Alternatives

Winter (November 16-April 14)

Repurpose Water for Storage

Possible implementation measures to attain the nutrient WLAs were presented to the Regional Water Board by the Las Virgenes-Triunfo Joint Powers Authority (JPA). The JPA's preliminary plans to meet the nutrient WLAs include the reduction of discharge to Malibu Creek during the winter except during major storm events. In order to reduce discharge during the winter, the JPA plans to seasonally store and repurpose the water for irrigation and potable water using advanced treatment, at the Las Virgenes Reservoir (JPA Board of Directors, 2015). The Las Virgenes Reservoir scenario includes plans for recycled water from Tapia WRF to be conveyed through existing and expanded piping to a new indirect potable water treatment plant of about 6 mgd capacity before being conveyed to Las Virgenes Reservoir. Once in the reservoir, the water would be mixed with existing surface water supplies and eventually treated by the existing potable water treatment plant for delivery to the potable distribution system. This option will need to consider brine disposal options, potentially needing to build a brine line.

Summer (April 15-November15)

Side Stream Treatment Facility or Dilution and Restoration

During the summer, the Tapia WRF would continue to discharge to Malibu Creek when conducting flow augmentation to maintain 2.5 cfs, during operational emergencies, and for certain rain events when all other disposal options are exhausted. In order to meet the summer allocations for these prohibition exceptions, the treated wastewater will be expected to undergo additional treatment. JPA is considering multiple options to meet the summer WLAs, such as further treating the wastewater through a side stream treatment facility and/or dilution using imported potable water. Wastewater could be treated through a 1 MGD mgd side stream treatment facility. The facility would likely be comprised of a membrane bio reactor (MBR) and reverse osmosis (RO) system or with a micro/ultrafiltration, reverse osmosis, and ion exchange system. Both systems would have a brine system returning to the headworks. Tapia WTF may also obtain imported water to dilute the discharge to meet the TMDL WLAs.

5.2) Agriculture/Vineyards Implementation Alternatives

Irrigation and Nutrient Management

Low-volume irrigation systems such as drip tapes or micro sprinklers are effective in preventing irrigation water runoff. A well-designed system loses practically no water through runoff, deep percolation, or evaporation. For example, drip irrigation reduces water contact with crop leaves, stems, and fruit. Thus, conditions may be less favorable for the onset of diseases. Irrigation scheduling can be managed precisely to meet crop demands, holding the promise of increased yield and quality. Agricultural chemicals can be applied more efficiently with drip and micro irrigation. Since only the crop root zone is irrigated, nitrogen already in the soil is less subject to leaching losses, and applied fertilizer nitrogen can be used more efficiently.

Nutrient management includes applying nutrients at rates necessary to achieve realistic crop yields, improving the timing of nutrient application, and using agronomic crop production technology to increase nutrient use efficiency (USEPA, 2003).

Mulching

Mulching is effective at reducing runoff from agricultural areas and reducing nutrients entering surface waters as well as groundwater. The NRCS Conservation Practice Standard for Mulching (Code 484) specifies that mulching should be applied at a rate to achieve a minimum of 70 percent ground cover to provide erosion control. According to the NRCS Field Office Technical Guide (FOTG) for mulching, the reported lifespan for this practice is one year, but local NRCS staff has reported that woody mulch can last two to three years and mulch residue can last up to five years (NRCS, 2000).

Filter Strips

According to the NRCS Conservation Practice Standard for Filter Strips (Code 393), a filter strip is a strip or area of vegetation that lies between cropland or grazing land and riparian areas. Filter strips treat runoff and are not part of the adjacent cropland rotation. Overland flow entering the filter strip must be sheet flow and concentrated flow must be dispersed (NRCS, 2000).

5.3) Horse and Livestock Implementation Alternatives

Grazing Management

Grazing management protects stream banks, riparian zones, and minimizes nutrient contributions to the river and tributaries. Grazing management includes using fencing, stream crossings, and providing alternative drinking locations in order to exclude livestock from sensitive areas. Grazing management can also reduce upland erosion through prescribed grazing, seeding, and gully erosion control that utilizes grade stabilization and ponds. Federal land managers (i.e. Bureau of Land Management, Forest Service) have plans with recommendations for grazing management practices (USEPA, 2003).

Preventing horses and cattle access to waterways requires the installation of fences along portions of streams susceptible to damage and installation of watering facilities to provide an alternative water source for the animals (Figure 5-1). Artificial watering systems can be designed and built to supply water without animals having direct access to the waterbody. Alternative water supplies should be provided by diverting or pumping water to animals, such as using watering tanks. Clean water sources benefit animal health and rate-of-gain as well as water quality. Fencing will prevent horses and livestock from entering waterways and eliminate any nutrient contamination threat through direct waste discharge into a waterbody.

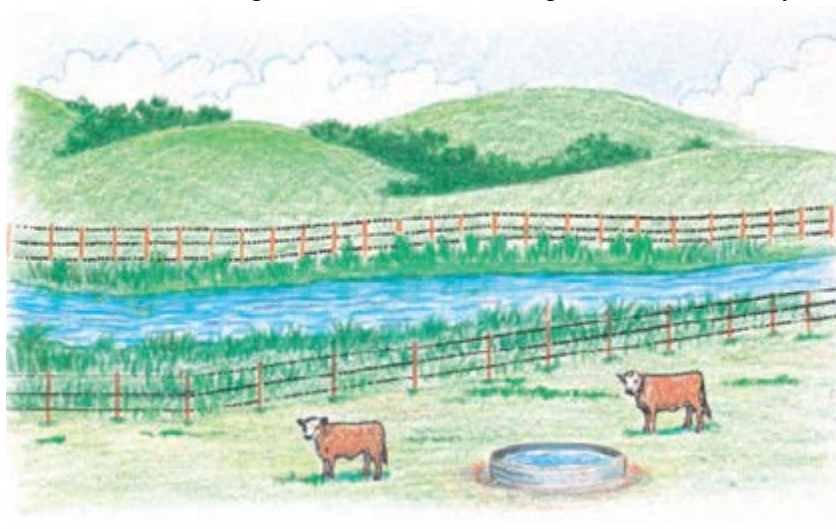


Figure 5-1: Excluding livestock from riparian areas and providing alternative watering sources (Source: OCES, 1998).

Manure Management

Manure management requires horses and/or livestock owners to collect, store, and dispose of manure in a manner that minimizes nutrient contributions to the river. One method to properly store manure is to construct manure bunkers that prevent stormwater and dry-weather runoff from carrying nutrients to the river.

5.4) MS4 Implementation Alternatives

Structural Controls

Biofilters

Biofilters, also known as vegetated swales and filter strips, are vegetated slopes and channels designed and maintained to transport runoff slowly over vegetation. Vegetated swales are constructed drainage ways used to slowly convey runoff Figure 5-2. Filter strips are densely vegetated, uniformly graded areas that treat sheet flow from adjacent areas. Swales convey flows to a vegetation-lined channel and grass filter strips intercept sheet runoff to a uniformly graded buffer zone. The vegetation reduces runoff velocities and provides an opportunity for sediments and particulates to be filtered and degraded through biological activity and trap sediment and other pollutants as they settle out. In most soils, the biofilter also provides an opportunity for infiltration of dry-weather runoff and storm water, which further removes nutrients and reduces runoff volumes. Grass strips and vegetated swales can function as pretreatment systems for water entering bioretention systems or other BMPs. These can be installed as on-site features of developments or in street medians, parking lot islands, or curb extensions (CASQA, 2003a). Vegetated swales or filter strips, based on case studies, are capable of managing runoff from small drainage areas with approximate sizes of 10 acres. The vegetated swale and grass strip-planting palette can comprise a wide range of possibilities from dense vegetation to turf grass (CASQA, 2003a).

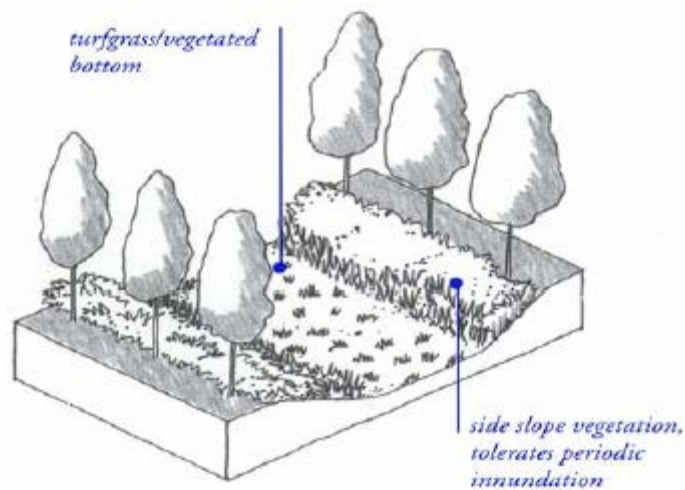


Figure 5-2: Vegetated Swale (Source: CASQA, 2003a)

Bioretention

Bioretention uses a combination of soils and woody and herbaceous plants to remove pollutants from runoff through physical and biological processes. Runoff is conveyed to the treatment area, which consists of a grass buffer strip, sand bed, ponding area, organic or mulch layer, planting soil, and plants. The buffer strip and sand bed slow the runoff's velocity and distribute it evenly along the length of the ponding area. The ponding area has a surface organic layer and/or ground cover and the underlying planting soil. The ponding area is graded, and the center is depressed. (CASQA, 2003).

Infiltration: Trenches and Basins

Infiltration trenches are long, narrow, and filled with rock or other media to allow for storage and slow percolation of runoff to the bottom of the trench and into the soil below. Infiltration trenches have high nutrient removal efficiencies for fine sediment and associated pollutants. Pretreatment using buffer strips, swales, or detention basins is necessary for limiting coarse sediment entering the trench, which can clog and render the trench ineffective (CASQA, 2003). Maintenance efforts associated with infiltration trenches should include frequent inspections to ensure that water infiltrates into the subsurface completely at a recommended infiltration rate of 72 hours or less to prevent creating mosquito and other vector habitats (CASQA, 2003).

An infiltration basin is an impoundment that captures runoff and allows it to infiltrate into the ground over a period of days. The basin temporarily stores runoff for a storm of a specific design size. The applicability of an infiltration basin is dependent on soil type, slope, depth to the water table, depth to the bedrock or impermeable layer, contributing watershed area, land use, and proximity to wells and surface waters. Infiltration basins are effective at removing sediment and nutrients. Maintenance includes inspections for standing water, removal of accumulated debris to ensure successful long-term operation (CASQA, 2003).

Constructed Wetlands

Constructed treatment wetlands (Figure 5-3) are designed to maximize the removal of pollutants from storm water and dry-weather urban runoff through settling and uptake and filtering by vegetation. Constructed wetlands temporarily store runoff in a shallow marsh that support conditions suitable for the growth of wetland plants. These excess nutrients are absorbed by wetland soils and taken up by plants and microorganisms.

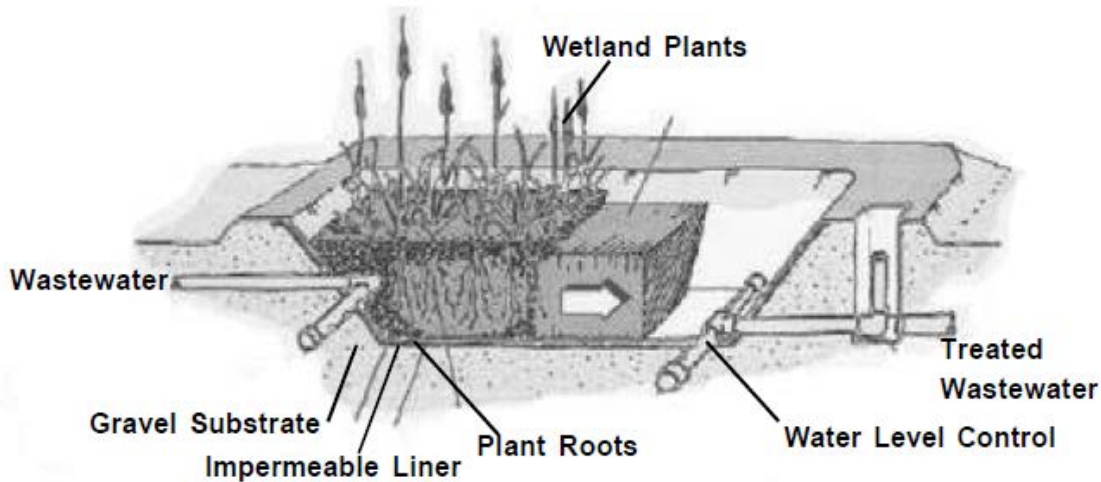


Figure 5-3: Constructed Treatment Wetland (Source: USEPA, 2004)

Non-Structural Controls

Street Sweeping

Street and parking lot cleaning involves employing pavement cleaning practices, such as street sweeping on a regular basis, to minimize trash, sediment, debris, and other pollutants from entering catch basins and the storm drain system. There are three types of street sweepers: mechanical, vacuum filter, and regenerative air sweepers (USEPA, 2007). It is recommended that local agencies use a combination of street sweeper types to maximize efficiency (CASQA, 2003a).

Storm drain and Catch Basin Cleaning

Routine cleaning of the storm drain system prevents clogging, and ensures that the flood control capacity of the system is operational. Cleanings may occur manually or with eductors, vacuums, or bucket loaders. A successful storm drain cleaning program includes regular inspection and cleaning of catch basins and storm drain inlets, increased inspection and cleaning, accurate recordkeeping, cleaning immediately prior to the rainy season, and proper storage and disposal of collected material. (CASQA, 2003a)

Public Outreach

Education and outreach to residents may minimize the potential for contamination of storm water and dry-weather runoff by encouraging residents to clean up after their pets, pick up litter, minimize runoff from agricultural, residential, and commercial facilities, and control excessive irrigation. The public is often unaware of the fact that excess water discharged on streets and lawns ends up in receiving waters and the extent of contamination caused by the polluted runoff. Residents can reduce the nutrient pollutants coming from their lawns and septic systems if they

are made aware of, and understand the impacts of their actions and respond with appropriate management measures.

Local agencies can provide educational materials to the public via television, radio, online, and print media, distribute brochures, flyers, and community newsletters, create information hotlines to outreach to educators and schools, develop community events, and support volunteer monitoring and cleanup programs.

5.5) OWTS Implementation Alternatives

TMDL implementation may require a reduction in the nutrient loading from OWTS. Implementation to achieve this load reduction may include actions ranging from inspection or regular monitoring of OWTS to installation of supplemental treatment. Before any individual OWTS are required to be upgraded to meet the load allocations, a special study to investigate which, if any, OWTS are contributing to nutrient loading in the Malibu Creek watershed will be conducted.

OWTS construction procedures typically involve excavations for placement of septic tanks, supplemental treatment systems, dispersal systems, and electric lines (power and phone), seepage pits, shallow dispersal trenches, and groundwater monitoring wells. They also may involve soil disturbance for sites prepared for sand and gravel filled beds. In general, most OWTS installation, replacement, repair, or upgrade projects would disturb less than 1 acre, and are regulated by the local land use agency with a building permit that includes implementation of appropriate grading plans, siting, and erosion control measures.

5.6) Lake Management Implementation Alternatives

Aeration System

Aeration systems work by destratifying the lake through artificial circulation that mixes the water column and prevents the lake from becoming stratified (due to temperature), particularly during the summer months. Aeration systems at various locations in the lake would help prevent an anoxic environment that can be especially stressful for fish and even lead to fish kills.

Floating Island

Floating islands are constructed islands that provide terrestrial and aquatic habitat while at the same time reducing nutrient concentrations in the lake. The island provides nesting and resting habitat for bird species and the roots below the water provide fish habitat. Floating islands are beneficial in removing nutrients from the water column through the roots of plants that are exposed in the water column rather than rooted in the sediments of the lake. Plants on the

floating island should be harvested occasionally in order to maintain actively growing vegetation and maximum nutrient uptake.

Hydrologic Dredging

Dredging is a process for removing or displacing gravel, mud, sand, and/or silt along with various materials (i.e. sediment, debris, etc.) from water bodies such as rivers, lakes, streams and their corresponding shorelines and wetlands. A method of sediment removal from lakes is hydraulic dredging. A hydraulic dredge floats on the water and is approximately the size of boat. It has a flexible pipe that siphons a mix of water and sediment from the bottom of the lake. The flexible pipe is attached to a stationary pipe that extends to an offsite location. The sediment that is removed from the lake bottom is pumped to a settling pond to dry prior to disposal.

5.7) Watershed Wide Implementation Alternative

Riparian Buffers and Stream Bank Stabilization

Riparian buffers consist of an area of trees, usually accompanied by grasses, shrubs, and other vegetation that are adjacent to a waterbody (Figure 5-4). They reduce the impact of nonpoint source pollution by trapping and filtering sediments, nutrients, and other chemicals from surface runoff and shallow groundwater. The leaf canopy provides shade that keeps the water cool, discouraging algae growth, and thus retaining more dissolved oxygen. Trees and shrubs near the waterway stabilize the bank, improve and protect the aquatic environment, and protect stream banks from flood erosion and debris damage. Riparian enhancements may include a wide variety of practices intended to restore the natural condition and function of the river and its riparian area. These practices may include stream bank stabilization and outfall protection, planting of stream bank vegetation and establishment of sufficient stream buffers, removal of invasive plant species, improvement of floodplain connections, removal of fish barriers, and enhancement of wetlands (OCES, 1998).

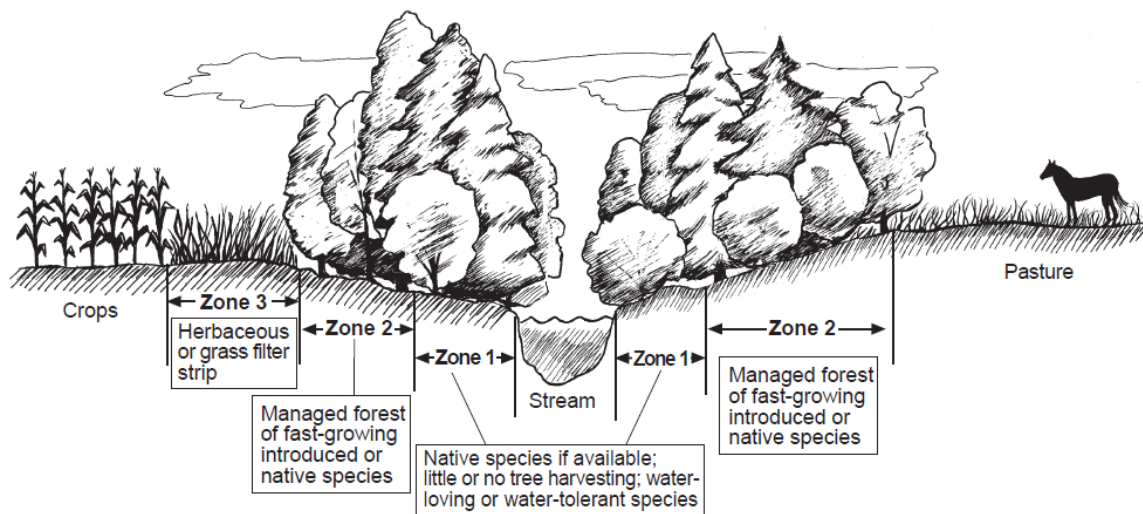


Figure 5-4: Riparian Forest Buffer Strip (Source: USDA, 1997)

Stream channel restoration opportunities focus on in-stream measures that maintain stable streambanks and riparian areas to improve hydraulic conditions (reduce in shear stress and velocities) and limit the delivery of excess sediment that is a result of increased storm event flow and mass wasting of unstable streambanks. Bioengineered solutions rather than hard structures such as concrete or riprap should be used for streambank stabilization.

Opportunities can be selected where evidence of significant channel erosion and instability is found and where restoration is likely to have the greatest success at restoring functionality. Once opportunities are identified, additional field reconnaissance can be conducted to determine the specific restoration needs of the stream reaches. Conceptual plans for each stream reach can be developed that describe the measures necessary to address channel erosion and instability.

6) Setting, Impacts, and Mitigation

6.1) Introduction

This section presents the environmental setting, impacts, and mitigation, where applicable, for the proposed implementation alternatives evaluated in this SED. The implementation alternatives for achieving compliance with the Implementation Plan are described in detail in Section 5 of this document and in the TMDL Staff Report. Each of these implementation alternatives has been independently evaluated in this SED. The environmental setting for the TMDL is discussed in Section 6.1.3. The environmental checklist, which includes the potential negative environmental impacts of the implementation alternatives (see Section 5 for a detailed description of the TMDL implementation alternatives), is included in Section 6.2.

6.1.1) Approach to Environmental Setting and Impact Analysis

Any potential environmental impacts associated with the waterbodies of concern in the TMDLs depend upon the specific compliance projects selected by the responsible parties, who will be subject to their own CEQA obligations (see Pub. Res. Code § 21159.2). This CEQA substitute environmental document identifies broad mitigation approaches that could be considered at a program level. Consistent with PRC§21159, the SED does not engage in speculation or conjecture, but rather considers the reasonably foreseeable environmental impacts of the foreseeable methods of compliance, the reasonably foreseeable feasible mitigation measures, and the reasonably foreseeable alternative means of compliance, which would avoid or reduce the identified impacts.

This SED evaluates the impacts of each implementation alternative relative to the subject resource area. The physical scope of the environmental setting and the analysis in this SED is the entire Malibu Creek watershed area for nutrients and the eastern portion of Malibu Creek watershed, containing Las Virgenes Creek, Malibu Creek, Stokes Creek, and Cold Creek for sediments. Malibu Creek watershed area is estimated at 109 square miles, and eastern portion of Malibu Creek watershed is estimated at 45 square miles. These areas are the geographic areas for assessing impacts of the different implementation alternatives, because the excessive nutrient loading and sediment loading would be controlled and/or eliminated by any one of or a combination of the implementation alternatives. In addition, any potential impacts of implementing the proposed alternatives would be focused in these areas.

The implementation alternatives in this SED are evaluated at a program level for impacts for each resource area. An assumption is made that a more detailed project level analysis will be conducted by all responsible entities and cooperative parties once their mode of achieving compliance with the TMDL has been determined. The analysis in this SED assumes that, project proponents will design, install, and maintain implementation measures following all applicable laws, regulations, ordinances, and formally adopted municipal and/or agency codes, standards, and practices.

6.1.2) Program Level versus Project Level Analysis

As previously discussed, the Regional Board is the lead agency for the TMDL program, while the responsible parties are the lead agencies for any and all projects implemented, within their jurisdiction, to comply with the program. The Regional Board does not specify the actual means of compliance by which responsible parties choose to comply with the Implementation Plan. Therefore, the implementation alternatives are mostly evaluated at a program level in this SED. The alternatives assessed at a program level generally are projects that would be implemented as part of the TMDL compliance. PRC §21159 places the responsibility of project level analysis on the responsible parties that will implement the Regional Board's TMDL.

6.1.3) Environmental Setting

The Malibu Creek watershed is located in western Los Angeles County and southeastern Ventura County. At 109 square miles, it extends from the Santa Monica Mountains and Simi Hills to the Santa Monica Bay at Malibu State Beach (also known as Surfrider Beach). The MCW contains the cities of Agoura Hills, Westlake Village, Calabasas, Thousand Oaks, Hidden Hills, Malibu, and Simi Valley; and the counties of Los Angeles and Ventura.

The Malibu Creek watershed is comprised of numerous tributaries and lakes. The tributaries include streams draining to Lake Sherwood, which then discharges to Potrero Creek. Potrero Creek then reaches flows to Westlake Lake and flows down to Triunfo Creek to its confluence with Medea Creek to form Malibou Lake. Lindero Lake is located along Lindero Creek, which, along with Palo Comado Creek, is a tributary of Medea Creek. Malibou Lake drains into Malibu Creek. Farther downstream Las Virgenes Creek enters Malibu Creek at Malibu Creek State Park. Stokes Creek and Cold Creek are also major tributaries of Malibu Creek. Eventually, Malibu Creek empties into Malibu Lagoon and then the Pacific Ocean. Figure 6-1 gives a visual representation of the relationships between lakes, tributaries, and streams.

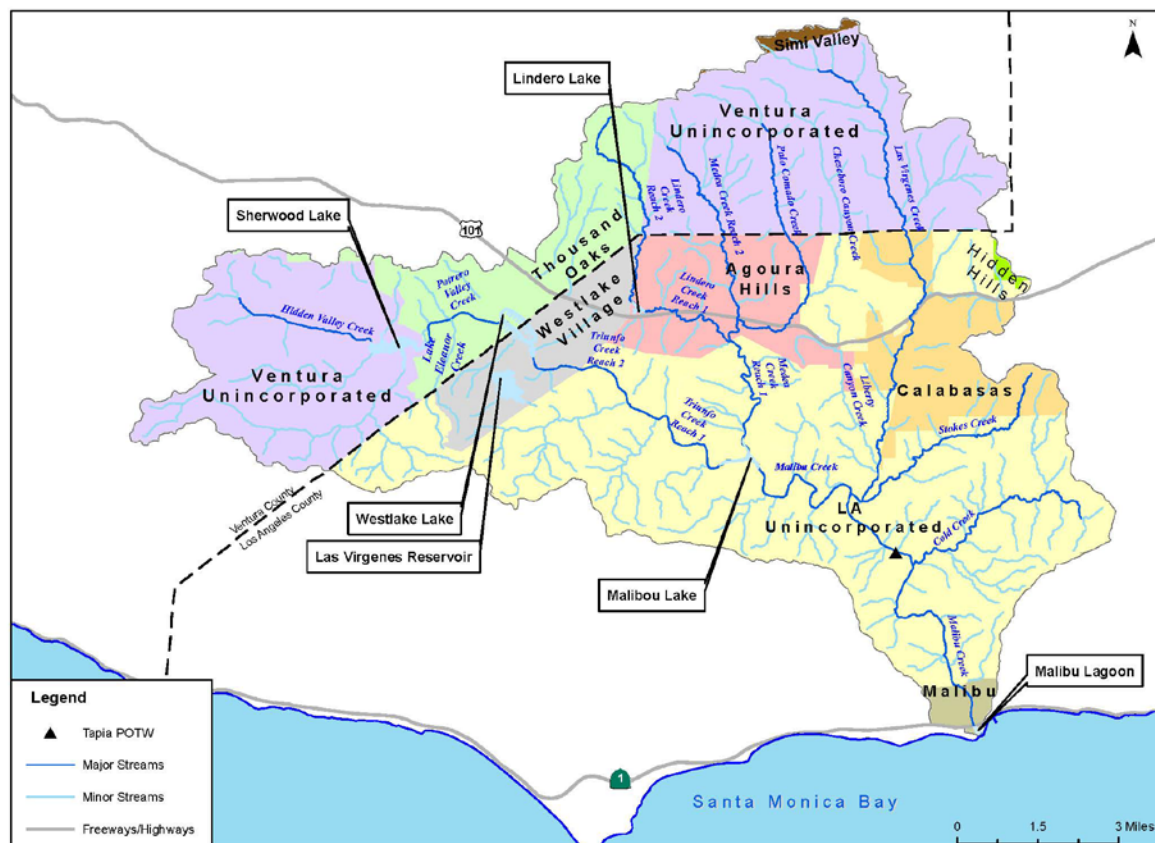


Figure 6-1: Malibu Creek watershed

6.1.4) Beneficial Uses

The various uses of waters in the Los Angeles Region, referred as beneficial uses, are designated in the Basin Plan (LARWQCB, 1994). These beneficial uses are the cornerstone of the State and Los Angeles Regional Water Quality Control Board's effort to protect water quality, as water quality objectives are set at levels that will protect the most sensitive beneficial use of a waterbody. Brief descriptions of the beneficial uses most likely to be impaired due to sedimentation and/or nutrients related pollutants in the Malibu Creek watershed are provided in this section.

The Basin Plan defines beneficial uses for Malibu Creek watershed (Table 6-1). These uses are recognized as existing (E), potential (P), or Intermittent (I) uses. Excessive nutrient related pollutants and sediment loading to the Malibu Creek watershed may result in impairments of beneficial uses associated with recreation (REC1 and REC2), aquatic life (WARM, COLD, EST, MAR, WILD, RARE, MIGR, SPWN, and WET), and water supply (MUN). The designated beneficial uses identified as impaired due to elevated levels of algae and nutrients in the Malibu Creek watershed are briefly described below.

- **Recreational Uses (REC-1 and REC-2)**

Water Contact Recreation (REC-1) and Non-Contact Water Recreation (REC-2) are defined as uses of water for recreational activities involving body contact and proximity to water. Some of these activities include swimming and fishing, and where the ingestion of water is reasonably possible.

- **Aquatic Life Uses (WARM, COLD, EST, MAR, WILD, RARE, MIGR, SPWN, and WET)**

Several aquatic life beneficial uses are designated for Malibu Creek watershed. These uses include: the warm freshwater habitat (WARM); cold freshwater habitat (COLD); estuarine habitat (EST); marine ecosystems (MAR); wildlife habitat (WILD); rare, threatened, or endangered species habitat (RARE); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPWN); and wetland land habitat (WET).

- **Water Supply Use (MUN)**

Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.

	MUN	GWR	NAV	WARM	COLD	EST	MAR	WILD	RARE	MIGR	SPWN	WET	REC1	REC2
Malibu Lagoon			E			E	E	E	Ee	Ef	Ef	E	E	E
Malibu Creek	P*			E	E			E	E	E	E	E		
Cold Creek	P*				P			E	E		P	E		
Las Virgenes Creek	P*			E	P			E	E	P	P	E		
Malibou Lake	P*		E	E				E	E			E		
Medea Creek Reach1	P*	I		I	P			E	E			E		
Medea Creek Reach2	I*	I		E				E				E		
Lindero Creek Reach1	P*			I				E					I	I
Lindero Creek Reach2	P*			I				E					I	I
Triunfo Creek Reach1	P*			I				E						
Triunfo Creek Reach2	P*	I		I				E	E					
Westlake Lake	P*		E	E				E						
Potrero Valley Creek	P*	I		P				E						
Lake Sherwood	P*	E	E	E				E				E		
Lake Lindero	P*			I				E						

Table 6-1: Beneficial Uses. Beneficial use designations apply to all tributaries to the indicated water body, if not listed separately.

E: Existing beneficial use

P: Potential beneficial use

I: Intermittent beneficial use

*: Beneficial use designated under SB 88-63 and RB 89-03.

Some designations may be considered for exemptions at a later date.

Footnotes:

e: One or more rare species utilize all ocean, bays, estuaries, and coastal wetlands for foraging and/or nesting.

f: Aquatic organisms utilize all bays, estuaries, lagoons and coastal wetlands, to a certain extent, for spawning and early development. This may include migration into areas, which are heavily influenced by freshwater inputs.

6.2) Environmental Checklist and Discussion

6.2.1) CEQA Checklist

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS Would the project:				
a. Have a substantial adverse effect on a scenic vista?	X			
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	X			
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	
II. AGRICULTURE AND FOREST 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 Dept. 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; and forest				

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Boards. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	X			
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	X			
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X
III. AIR QUALITY Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	X			
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	X			
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	X			
d. Expose sensitive receptors to substantial pollutant concentrations?	X			
e. Create objectionable odors affecting a substantial number of people?	X			
IV. BIOLOGICAL RESOURCES Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	X			
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	X			

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal, pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	X			
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	X			
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	X			
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	X			
V. CULTURAL RESOURCES Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	X			
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	X			
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	X			
d. Disturb any human remains, including	X			

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
those interred outside of formal cemeteries?				
VI. GEOLOGY AND SOILS Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii. Strong seismic ground shaking?				X
iii. Seismic-related ground failure, including liquefaction?			X	
iv. Landslides?			X	
b. Result in substantial soil erosion or the loss of topsoil?	X			
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	X			
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or	X			

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
property?				
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
VII. GREENHOUSE GAS EMISSIONS Would the project:				
a. Generate Greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	X			
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	
VIII. HAZARDS AND HAZARDOUS MATERIALS Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	X			
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	X			
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	X			
d. Be located on a site which is included				X

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
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?				
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	X			
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	
IX. HYDROLOGY AND WATER QUALITY Would the project:				
a. Violate any water quality standards or waste discharge requirements?			X	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there			X	

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				X
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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				X
e. 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?				X
f. Otherwise substantially degrade water quality?				X
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j. Inundation by seiche, tsunami, or mudflow?				X
X. LAND USE AND PLANNING - Would the project:				
a. Physically divide an established community?				X
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	X			
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	X			
XI. MINERAL RESOURCES - Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other				X

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
land use plan?				
XII. NOISE - Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	X			
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
XIII. POPULATION AND HOUSING - Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and				X

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
XIV. PUBLIC SERVICES				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? Police protection? Schools? Parks? Other public facilities?				X
XV. RECREATION				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b. Does the project include recreational			X	

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				
XVI. TRANSPORTATION/TRAFFIC Would the project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	X			
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	X			
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e. Result in inadequate emergency access?	X			

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	X			
XVII. UTILITIES AND SERVICE SYSTEMS - Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X			
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X			
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	X			
e. 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?	X			
f. Be served by a landfill with sufficient permitted capacity to accommodate	X			

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
the project's solid waste disposal needs?				
g. Comply with federal, state, and local statutes and regulations related to solid waste?	X			
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X			
b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	X			
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X			

6.2.2) Discussion of Environmental Evaluation

Aesthetics

- a. Would the project have a substantial adverse effect on a scenic vista?

Answer: Potentially Significant Impact

The alternatives listed below are not expected to be of the size or scale to result in the obstruction of any scenic vista:

- Floating Islands
- Street Sweeping
- Public Outreach

Tapia WRF Summer and Winter Alternatives/ OWTS Inspections and Upgrades/Horse and Livestock Alternatives/MS4 Structural Controls/ Storm drain and Catchment Cleaning/ Watershed-wide Implementation

Construction and installation of these implementation alternatives could potentially result in a temporary impairment of a scenic vista or view open to the public and create an aesthetically offensive site open to the public view. Project construction would require site grading, construction materials, stockpiling and storage, pipe installation, and the use of construction equipment. This construction impact would be localized and short-term, lasting during the normal working hours at specific locations. Construction BMPs like screening and landscaping can help mitigate aesthetic impacts. Construction materials and equipment shall be removed from the site as soon as they are no longer necessary.

Once constructed, stormwater BMPs could be aesthetically offensive if not properly designed, sited, and maintained. Many structural BMPs can be designed to provide habitat, recreational areas, and green spaces in addition to improving stormwater quality. Standard architectural and landscape architectural practices can be implemented to reduce impacts. The Tapia WRF is currently in operation and the industrial aesthetic of the plant is not anticipated to be significantly altered as a result of TMDL implementation. In general, additional riparian habitat and densely vegetated systems serve improve the overall aesthetic appeal of the surrounding areas.

Dredging

Hydraulic dredging will require that a dredge be floating on the lake in order to remove sediment materials. In addition, there may be visual impacts associated with open space areas that are used for the staging of dredging activities and for the temporary piling of material removed from the lake bottom. This will temporarily impact the scenic view of the lake and surrounding area. The obstruction of the scenic view will only be impacted during dredging activities. This is not a permanent view obstruction; therefore, this impact is not considered potentially significant.

Aeration System

Depending on the type of aeration system selected there may be metal structures and/or solar panels exposed above the surface of the lake. This would be an adverse impact to the scenic view of the Lakes within Malibu Creek watershed. This impact can be mitigated by creative design and paint to help the structures blend into the background and reduce the contrast with the surrounding environment.

- b.** Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Answer: Less than Significant Impact

State Route 23(SR23) is on the eligibility list to be a scenic highway. SR23 runs mainly through undeveloped areas within the Malibu Creek watershed and it is unlikely that implementation alternatives will affect SR23.

- c.** Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Answer: Less than Significant Impact

Tapia WRF may build a small package plant to treat the wastewater during the summer period. Building a small package plant may change the existing visual character of the site if the package plant is installed in a previous open landscape area. However, the package plant may also be installed at Tapia WRF, or near Tapia WRF's composting facility and therefore not change the visual character of the surrounding area.

See response to I. Aesthetics. a. for other alternatives. Overall, these alternatives are expected to be temporary and not significant.

- d.** Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Answer: Less than Significant Impact

Certain BMPs may employ solar panels for electricity to operate. The potential glare from these solar panels can be mitigated by siting them away from receptors, using shielding, or using alternative photovoltaic panels, which absorb light and do not produce glare.

Agriculture and Forest Resources

- a.** Would the project 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?

Answer: Potentially Significant Impact

A search of the California Important Farmland Finder

(<http://maps.conservation.ca.gov/ciff/ciff.html>), hosted by the Department of Conservation, on July 13, 2016 identified prime farmland is located near Sherwood Lake, and unique farmland southeast of Malibu Lake.

The Implementation Plan does not require any person to take agricultural lands out of production. The agriculture alternatives should be implemented in a way that does not result in reduction in acreage of any agricultural crop. To mitigate the potential reduction in crop acreage, dischargers could plant ground cover that would serve as both agricultural land and reduce sediment runoff and infiltrate stormwater.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- b.** Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Answer: Potentially Significant Impact

A search of the Land Conservation Act Maps, (<http://www.conservation.ca.gov/dlrp/lca>) hosted by the department of Conservation, on July 13, 2016 identified agricultural land enrolled under the Williams act near Sherwood Lake.

See response to II. Agriculture and Forest Resources. a.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- c. Would the project 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))?

Answer: No Impact

The California Department of Forestry and Fire Protection (CAL FIRE) tracks data on timberland in California and has identified no timberland, defined by CAL FIRE as productive forest sites, in Malibu Creek watershed.

- d. Would the project result in the loss of forestland or conversion of forestland to non-forest use?

Answer: No Impact

- e. Would the project 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 forestland to non-forest use?

Answer: No Impact

See responses to II. Agriculture and Forest Resources a and II. Agriculture and Forest Resources b.

Air Quality

- a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

Answer: Potentially Significant Impact

Air quality in the Malibu Creek watershed falls under the jurisdiction of the California Air Resources Board (ARB), the South Coast Air Quality Management District (SCAQMD), and the Ventura Air Quality Management District (VAQMD). The ARB is responsible for controlling mobile emission sources statewide, while the VAQMD and SCAQMD are responsible for controlling emissions primarily from stationary sources of air pollution.

Some of the implementation alternatives for the TMDL may result in air quality impacts from short-term emissions due to construction-related equipment and vehicles, as well as ongoing

operation. The following analysis focuses on air quality impacts associated with the construction and operation of the potential implementation alternatives.

Tapia Summer/Winter Alternatives

Adverse impacts to air quality from Tapia's alternatives may result from the construction and installation of the pipes connecting Tapia WRF to the storage reservoir, construction and operation of a new potable water treatment system, and the construction and installation of a side stream treatment facility. Short-term increases in traffic during the construction and installation of the pipes may also occur, creating increased air pollutant emissions, including greenhouse gas emissions. However, emission levels for potentially emitted pollutants are expected to be below the Air Quality Significance thresholds considering the scale of the Implementation Plan. In the unlikely event that daily emissions exceed significance thresholds, construction and maintenance for different devices can be conducted on different days to reduce emissions rates. The 10-year phased implementation schedule allows for construction projects to be spread out over time. Detailed analysis should be conducted at project level. Any potential air emissions resulting from construction or maintenance activities would be subject to regulation by SCAQMD, VAQMD, or the California Air Resources Board.

Aeration System

The installation of the aeration system will require workers and vehicles to transport aerators to the lake. These impacts are temporary and can be mitigated by the use of low emission vehicles as well as other ARB recommended mitigation measures.

Dredging

Dredging will require the use of a hydrologic dredge and trucks to transport dredged material. Adverse impacts to ambient air quality may result from short-term dredging operations and increased truck traffic for dredge material transportation. These impacts are temporary and can be mitigated by the use of low emission vehicles as well as other ARB recommended mitigation measures.

MS4 Structural Alternatives/ Watershed-wide Implementation/

Short term increases in traffic may occur during the construction and installation of MS4 structural devices and stream restoration projects, creating increased air pollutant emissions. There may be long-term intermittent increases in traffic caused by ongoing maintenance of these projects. Construction activities could also potentially cause re-suspension of dry sediments. However, emission levels for potentially emitted pollutants are expected to be below the VAQMD and the SCAQMD Air Quality Significance thresholds considering the scale of the TMDL program. Detailed analysis should be conducted at project level.

Non-structural BMPs/Manure Management /Grazing Management

These implementation measures are not expected to have significant impact on air quality.

OWTS Alternative

Adverse impacts to air quality from septic system upgrades may result from short-term increases in traffic during the construction and operational activities. These impacts of increased air pollutant emissions from vehicles and equipment will be temporary, localized to project sites, and can be mitigated by the use of low emission vehicles as well as other ARB recommended mitigation measures.

Mitigation measures for increased air emissions due to increased vehicle trips or increased use of construction and earth moving equipment include: (1) use of construction and maintenance vehicles with lower-emission engines, (2) use of soot reduction traps or diesel particulate filters, (3) use of emulsified diesel fuel, (4) design of treatment devices to minimize the frequency of maintenance trips, and (5) proper maintenance of construction vehicles. Mitigation measures for re-suspension of sediments caused by construction and dredging activities include the use of vapor barriers and moisture controls to reduce transfer of small sediments to air. Exposed areas can be revegetated or covered to reduce fugitive dust.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL, but notes that the projected emitted pollutants are expected to be below the VAQMD and the SCAQMD Air Quality Significance thresholds; and that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the responsibility and jurisdiction of the responsible agencies listed in this Implementation Plan (Title 14, California Code of Regulations, Section 15091(a)(2)). These agencies 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- b.** Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Answer: Potentially Significant Impact

See response to III. Air Quality a.

- c.** Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or

state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

Answer: Potentially Significant Impact

Malibu Creek watershed is within both Los Angeles County and Ventura County.

Ventura County is currently designated as nonattainment for the State Ambient Air Quality Standards for ozone, and suspended particulate matter (PM10). Under the National Area Air Quality Standards Ventura County is currently designated as nonattainment for 8-hour ozone.

Los Angeles County is currently designated as nonattainment for the State Ambient Air Quality Standards for ozone, fine suspended particulate matter (PM2.5), and suspended particulate matter (PM10). Under the National Area Air Quality Standards Los Angeles County is currently designated as nonattainment for 8-hour ozone, fine suspended particulate matter (PM2.5), and Lead.

See response to III. Air Quality a.

d. Would the project expose sensitive receptors to substantial pollutant concentrations?

Answer: Potentially Significant Impact

According to U.S. EPA, sensitive receptors include, but are not limited to, hospitals, schools, daycare facilities, elderly housing and convalescent facilities. These are areas where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants. Extra care must be taken when dealing with contaminants and pollutants in close proximity to areas recognized as sensitive receptors.

Potential exposure of sensitive receptors to substantial pollutant concentrations are best addressed at the project level. Since the Regional Water Board cannot specify the manner of compliance with the Implementation Plan, the Regional Water Board cannot specify the exact location of structural treatment devices. The various entities that might install these devices will need to identify local sensitive receptors as part of a project-level analysis to ensure that projects minimize pollutant exposure.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- e. Would the project create objectionable odors affecting a substantial number of people?
 - i. Answer: Potentially Significant Impact

MS4 Structural Alternatives/Agriculture Alternatives

Construction and installation of these implementation alternatives may result in objectionable odors in the short-term due to exhaust from construction equipment and vehicles. Implementation BMPs may also be a source of objectionable odors if they allow for water stagnation or collection of water with sulfur-containing compounds. For example, improper design or maintenance of Vegetated Swales may lead to clogging and stagnation of water creating objectionable odors. Vegetated systems require inspection and maintenance, replacing diseased and dead or dying plants to prevent build-up of detritus, and replacement of existing plants to increase efficiency. Mitigation measures to eliminate odors caused by stagnation could include proper BMP design to eliminate standing water with covers, aeration, filters, barriers, and/or odor suppressing chemical additives. BMPs should be inspected regularly to ensure that systems are not clogged, pooling water, or odorous.

Tapia WRF Alternatives

Construction and installation of these implementation alternatives may result in objectionable odors in the short-term due to exhaust from construction equipment and vehicles. Mitigation measures could include the use of vehicles with lower-emission engines and use of soot reduction traps or diesel particulate filters. Operation of the side stream treatment facility is not expected to cause worse odors than already existing at the treatment plant.

Livestock Alternatives

Grazing management would not result in creation of objectionable odors. No impact is expected to occur. Manure Management may cause objectionable odors during the collection, transportation, and storage of manure. However, improved manure management such as proper composting would reduce odors. Manure management facilities such as manure bunkers should be designed to minimize odor and installed in such a way so as to increase the distance to sensitive receptors.

OWTS Upgrades

Maintenance and replacement of septic systems could create objectionable odors. During maintenance, odorous sources should be uncovered for as short of a time period as possible. The discharge of wastewater to land has the potential to create objectionable odors due to surfacing or overflow of sewage. Inspection and upgrades to OWTS would lessen this potentially existing impact.

MS4 Non-structural Alternatives

These implementation measures are not expected to have significant impact

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

Biological Resources

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

Answer: Potentially Significant Impact

Data from California Fish and Wildlife's California Natural Diversity Database indicates the presence of 59 species within Malibu Creek watershed that are classified as Endangered, Threatened or Rare by the California Fish and Game Commission (state listed) and/or classified as Endangered or Threatened by the U.S. Fish and Wildlife Service (federally listed) or classified as sensitive under Bureau of Land Management or California Department of Forestry and Fire Protection.

Depending on the implementation alternative selected, direct or indirect impacts to special-status animal species may possibly occur during and after construction. If special-status species are present during activities such as ground disturbance, construction, operation, and maintenance activities associated with the potential projects, direct impacts to special-status species could result, including the following:

- Direct loss of a special-status species
- Increased human disturbance in previously undisturbed habitats
- Mortality by construction or other human-related activity
- Impairing essential behavioral activities, such as breeding, feeding or shelter/refugia
- Destruction or abandonment of active nest(s)/den sites
- Direct loss of occupied habitat

In addition, potential indirect impacts may include but are not limited to, the following:

- Displacement of wildlife by construction activities
- Disturbance in essential behavioral activities due to an increase in ambient noise levels and/or artificial light from outdoor lighting around facilities

Mitigation measures should be implemented to ensure that special-status plants and animals are not negatively impacted, nor their habitats diminished. For example, when the specific projects are developed and sites identified, a biological survey and/or a search of the California Natural Diversity Database (CNDDDB) should be performed to confirm that any potentially special-status plant and animal species in the site area are properly identified and protected as necessary.

If special-status species are potentially near the project site area, as required by the Endangered Species Act (ESA), two weeks prior to grading or the construction of facilities and per USFWS and/or CDFG protocols, pre-construction surveys to determine the presence or absence of special-status species would be conducted. The surveys should extend an appropriate distance (buffer area) off site to determine the presence or absence of any special-status species adjacent to the project site. If special-status species are present on the project site or within the buffer area, mitigation would be required under the ESA. To this extent, mitigation measures shall be developed with the USFWS and CDFG to reduce potential impacts.

The following is an analysis of potential implementation actions that may be utilized to minimize impacts on biological resources while implementing the TMDL:

Dredging

Sensitive species could potentially be impacted by a dredging operation. This operation would create noise in the lake area and require the removal of some of the shallow water vegetation that is often used as habitat. Transportation of equipment could also damage area surrounding the lakes. Mitigation measures will be required to ensure the least disturbance possible. These measures could include a biological and habitat survey to identify sensitive species and suitable habitat areas. Nesting surveys could also be conducted to ensure that disturbing activities do not take place during the nesting season.

Aeration System

The installation of aerators is not expected to cause a reduction in unique, rare or endangered animal species. The lake aeration system will be installed in the lake itself and should not impact terrestrial species. The installation process may cause temporary and short term disturbance to species in the lake. However, these impacts can be mitigated by conducting appropriate biological surveys and selecting appropriate times for the work to be conducted, such as conducting aerator installation outside of nesting season as even minor disturbance can cause a nest to be abandoned.

Floating Islands/Hydroponic Nesting Islands

The floating hydroponic islands would be placed in open water portions of the Lakes within Malibu Creek watershed. It is not expected that floating hydroponic islands would cause a reduction in the rare or endangered animals in or near the lakes. In fact, the nesting islands would be designed and vegetated to provide additional high quality habitat for special status bird species at the lake, thereby potentially having a positive affection on sensitive species. Habitats on floating hydroponic islands can be designed to mimic the surrounding riparian community.

MS4 Structural Alternatives

If biofiltration and infiltration BMPs are used to achieve the TMDL, impact to plant life in terms of diversity of species, number of species, or reduction in the number unique, rare or endangered species would most likely occur if facilities are located in critical habitat. As a mitigation measure, BMPs may be sited away from critical habitat.

Vegetated swales and wetlands will use a variety of vegetation types. Vegetation is required to cover the whole width of the swale, be capable of withstanding design flows and be of sufficient density to prevent preferred flow paths and scour of deposited sediments. Vegetated swales and wetlands may introduce new species of plants into the area. This could result in a change of the diversity of species, or number of any species of plants. This impact can be avoided by planting swales and wetlands with native plants.

BMPs could pose an impact to plant life in terms of diversity of species, number of species, or reduce the number unique, rare or endangered species if facilities are located in critical habitat. BMPs may be sited away from this critical habitat. It is not reasonable foreseeable for responsible jurisdictions to construct and site devices in such a manner as to adversely impact species diversity. Proper timing may need to be exercised to avoid construction during critical periods of plant and animal development. Consultation with agencies including the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS), having jurisdiction over identified resources would occur to identify specific mitigation measures such as restoration efforts designed to re-vegetate unique, rare or endangered species of plants. When the specific projects are developed and sites identified, a search of the California Natural Diversity Database could be employed to confirm that any potentially sensitive plant species in the site area are properly identified and protected as necessary. Plant surveys for special-status-plant species could be conducted at each site location, if appropriate.

Responsible agencies should endeavor to avoid compliance measures that could result in reduction of the numbers of any unique, rare or endangered species of plants and instead opt for such measures as enforcing litter ordinances in sensitive habitat areas. Plant number and species

diversity could be maintained by either preserving them prior to, during, and after installation of facilities or by re-establishing and maintaining the plant communities post construction.

Septic System Upgrades

Septic system upgrades may require construction and disturbance of land, temporarily during construction and potentially permanently depending on placement of upgrade systems. Surveys and mitigation measures discussed earlier in this section of the environmental analysis can be applied to minimize any impact to candidate, sensitive, or special status species.

Tapia Alternatives

Construction could occur in areas that may affect sensitive species. Proper timing may need to be exercised to avoid construction during critical periods of plant and animal development. Consultation with agencies including the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS). To avoid disturbance of sensitive species plant, nesting, and animal surveys could be conducted at each site location

Watershed-wide Implementation

Planting trees and vegetation as part of riparian buffers and stabilization activities may introduce new species of plants into the area. This could result in a change of the diversity of species, or the number of species of plants. This impact could be avoided by using native plant species.

Manure Management/Grazing Management/Nonstructural BMPs

Installation of these BMPs would not result in change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, microflora and aquatic plants). No mitigation measures are required.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- b.** Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?

Answer: Potentially Significant Impact

See response to IV. Biological Resources a.

- c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal, pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Answer: Potentially Significant Impact

Implementation of the TMDL may impact wetlands in Malibu Creek watershed. Potential adverse effects on wetlands are best addressed at the project level. Specific impacts of potential TMDL implementation options on wetlands will be similar to those impacts on biological resources. These potential impacts and potential mitigation measures are discussed in IV. Biological Resources a.

- d. Would the project 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?

Answer: Potentially Significant Impact

Dredging

Dredging may potentially impact the movement, migration and nurseries of fish or wildlife. If dredging activities take place during migrations, during breeding season, or near active nurseries, the noise and associated activities may adversely impact the some of the animals, including birds. This impact can be mitigated by conducting dredging activities outside of critical seasons and by transporting equipment such as not to disturb potential nurseries or migratory routes.

Septic System Upgrades

Septic system upgrades will require construction and disturbance of land and habitat, temporarily during construction and potentially permanently depending on placement of upgrade systems. The scale of individual septic system upgrades is anticipated to be of a small size such that impacts to migration corridors are unlikely. Surveys and mitigation measures discussed earlier in this section of the environmental analysis can be applied to minimize any impact to migration corridors or nursery sites.

MS4 Structural Alternatives

Construction activities associated with the implementation of runoff BMPs may impact the movement, migration and nurseries of fish or wildlife.

Runoff BMPs may potentially impact wildlife crossings or migration routes. If structural treatment devices are implemented at locations where they would cause foreseeable adverse impacts on species migration or movement patterns, mitigation measures could be implemented to ensure that impacts which may result in a barrier to the migration or movement of animal is less than significant. Any site-specific wildlife crossings should be evaluated in consultation with CDFW. If a wildlife crossing could be significantly impacted in an adverse manner, the design of the project should include a new wildlife crossing in the same general location.

Avian species may use portions of potential project sites, including ornamental vegetation, during breeding season and may be protected under the Migratory Bird Treaty Act (MBTA) while nesting. The MBTA includes provisions for protection of migratory birds under the authority of the CDFW and USFWS. The MBTA protects over 800 species including, geese, ducks, shorebirds, raptors, songbirds, and many other relatively common species. If construction occurs during the avian breeding season for special status species and/or MBTA-covered species, generally February through August, then prior (within 2 weeks) to the onset of construction activities, surveys for nesting migratory avian species should be conducted on the project site following CDFG and/or USFWS guidelines. If no active avian nests are identified on or within 200 feet of construction areas, no further mitigation would be necessary. If active nests for protected avian species are found within the construction footprint or within the 200-foot buffer zone, construction would be required to be delayed within the construction footprint and buffer zone until the young have fledged or appropriate mitigation measures responding to the specific situation are developed in consultation with CDFG or USFWS. These impacts are highly site specific, and would require a project-level analysis and mitigation plan.

Tapia Alternatives

Tapia WRF implementation alternatives will require construction and disturbance of land and habitat, temporarily during construction and potentially permanently depending on placement of upgrade systems. Surveys and mitigation measures discussed earlier in this section of the environmental analysis can be applied to minimize any impact to migration corridors or nursery sites.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Answer: Potentially Significant Impact

Potential conflicts with local policies or ordinances protecting biological resources are best addressed at the project level. The various entities implementing the TMDL will need to identify local policies as part of a project-level analysis to ensure that projects comply with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Answer: Potentially Significant Impact

Potential conflicts with any habitat conservation plans are best addressed at the project level. The various entities implementing the TMDLs will need to identify potential local habitat conservation plans and consider them during evaluation of individual projects.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

Cultural Resources

- a.** Would the project cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

Answer: Potentially Significant Impact

Potential disturbance of a historical resource is best addressed at the project level. The various entities that might install these devices will need to identify potential historical resources as part of a project-level analysis to ensure that projects comply with any plans and ordinances. During the project-level environmental analysis, the South Central Coastal Information Center at CSU Fullerton, the California Native American Heritage Commission, and the U.S. Forest Service should be consulted regarding potential cultural resources in the Malibu Creek watershed. If historical resources are identified on or near project locations, mitigation measures, including placement of structural BMPs to minimize impact on the historical resource, should be implemented.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDLs, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the responsibility and jurisdiction of the responsible agencies listed in these TMDLs (Title 14, California Code of Regulations, Section 15091(a)(2)). These agencies 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- b.** Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Answer: Potentially Significant Impact

Potential disturbance of an archaeological resource is best addressed at the project level. The various entities that might install these devices will need to identify potential archaeological resources as part of a project-level analysis. During the project-level environmental analysis, the South Central Coastal Information Center at CSU Fullerton, the California Native American Heritage Commission, and the U.S. Forest Service should be consulted regarding potential cultural resources in the Malibu Creek watershed. A field survey may need to be conducted to determine if archaeological resources are present at the project site. In the event that archaeological resources are discovered in project area during construction, all work shall be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery and assess the significance of the archaeological discovery.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDLs, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the responsibility and jurisdiction of the responsible agencies listed in these TMDLs (Title 14, California Code of Regulations, Section 15091(a)(2)). These agencies 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Answer: Potentially Significant Impact

Potential disturbance of a paleontological resource is best addressed at the project level. The various entities that might install these devices will need to identify potential paleontological resources as part of a project-level analysis. During the project-level environmental analysis, the South Central Coastal Information Center at CSU Fullerton, the California Native American Heritage Commission, and the U.S. Forest Service should be consulted regarding potential cultural resources in the Malibu Creek watershed. In the event that paleontological resources are discovered in project area during construction, all work shall be halted in the vicinity of the archaeological discovery until a qualified scientist can visit the site of discovery and assess the significance of the paleontological discovery.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDLs, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Title 14, California Code of Regulations, Section 15091(a)(2)). These agencies 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- d. Would the project disturb any human remains, including those interred outside of formal cemeteries?

Answer: Potentially Significant Impact

Potential disturbance of human remains is best addressed at the project level. The various entities that might install these devices will need to identify potential human remains as part of a project-level analysis. During the project-level environmental analysis, the South Central Coastal Information Center at CSU Fullerton, the California Native American Heritage Commission, and the U.S. Forest Service should be consulted regarding potential cultural resources in the Malibu Creek watershed. In the event that human remains are discovered in project area during construction, all work shall be halted in the vicinity of the discovery until a qualified expert can visit the site of discovery and assess the significance of the discovery.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDLs, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Title 14, California Code of Regulations, Section 15091(a)(2)). These agencies 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

Geology and Soils

- a.** Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

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

Answer: No Impact

It is not anticipated that any of the reasonably foreseeable methods of compliance will expose people or structures to any seismic-related hazards.

- a.ii.** Strong seismic ground shaking?

Answer: No Impact

It is not anticipated that any of the reasonably foreseeable methods of compliance will expose people or structures to any seismic-related hazards.

- a.iii.** Seismic-related ground failure, including liquefaction?

Answer: Less Than Significant Impact

Agriculture Alternatives/ Horse and Livestock Alternatives/ MS4 Non-Structural Alternatives/ OWTs Alternatives/Lake Management/Watershed Wide Alternatives/Tapia Alternatives

None of the above management strategies or runoff BMPs would expose people or structures to any seismic-related ground failure.

MS4 Structural Controls

Liquefaction could occur due the potential of infiltration basin creating a very shallow water table in poorly consolidated geologic materials that is subsequently shaken by an earthquake. Potential liquefaction can be mitigated with appropriate BMPs, and sufficient understanding of the surrounding hydrogeologic conditions.

a.iv. Landslides?

Answer: Less than Significant Impact

Agriculture Alternatives/Horse and Livestock Alternatives/MS4 Alternatives/OWTS Alternatives/Lake Management/Watershed Wide Alternatives

None of the above management strategies or runoff BMPs would expose people or structures to any landslides.

Tapia Implementation Alternatives

Shallow landslides could potentially occur during construction and installation of Tapia WRF pipelines if the pipelines cross steep slopes or mountain terrain. Landslides can be mitigated by relying on the expertise of a geologist, engineer or technician to interpret them and give a probability of whether a landslide will happen in a specific location.

b. Would the project result in substantial soil erosion or the loss of topsoil?

Answer: Potentially Significant Impact

MS4 Structural Alternatives/Agriculture Alternatives

Runoff BMPs, such as filter strips reduces sediment runoff and reduces the loss of topsoil or improving soil quality. Topsoil may be disturbed during construction; however, standard construction techniques, including but not limited to, shoring, piling, and soil stabilization can mitigate these potential short-term impacts. The implementation of runoff BMPs, by their design would reduce the amount of soil erosion.

Tapia Alternatives/ OWTS Alternatives

Disruption of the soil may occur during construction activities associated with upgrades to the septic systems, and during construction of Tapia's pipelines and side stream facility. To the extent that any soil is disturbed during construction, standard construction BMPs can mitigate these potential short-term impacts.

MS4 Non-Structural Alternatives/ Lake Management/Horse and Livestock Alternatives

These strategies will not result in substantial soil erosion or the loss of topsoil

- c. Would the project 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?

Answer: Potentially Significant Impact

MS4 Structural Alternatives/ Watershed Wide Alternatives/Agriculture Alternatives

BMPs like biofiltration, vegetated swales, filter strips, bioretention, and infiltration trenches would not likely be of the size or scale to cause a geologic unit or soil to become unstable. Runoff BMPs would likely be located in areas away from structures. Proper sizing and siting is necessary to ensure that BMPs are installed away from areas with loose or compressible soils, areas with slopes that could destabilize from increased groundwater flow. Geological surveys can be conducted prior to installation to aid in siting the devices.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

Horse and Livestock Alternatives/MS4 Non-Structural Alternatives/OWTS Alternatives/Lake Management

None of the above management strategies would be of the size or scale to cause unstable soils or geologic units.

- d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Answer: Potentially Significant Impact

The potential for impacts from expansive soil are best evaluated on a project basis. Since the Regional Water Board cannot specify the manner of compliance with the TMDL, the various entities that might install these devices will need to identify local soil characteristics, as part of a project-level analysis to ensure that implementation of the TMDL will not create substantial risks to life or property.

MS4 Alternatives/Tapia Alternatives/OWTS Alternatives/Watershed wide Alternative

These alternatives require construction on land and have the opportunity to be placed on multiple soil types. The foreseeable structural BMP options that might be used to comply with the TMDL are relatively small in size. Soil surveys conducted during the project development will assist in project-level planning to minimize any risk to life or property that might result from construction on expansive soil. A geotechnical engineer may be required as part of the project team to evaluate soil types at the project site.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- e. Would the project 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?

Answer: No Impact

Septic system upgrades are a reasonably foreseeable implementation measure for the TMDL. Implementation of upgrades would be for existing systems and would not result in the introduction of septic systems to locations where they are not currently located. No new impact is expected on soils from introduction of wastewater as a result of TMDL implementation.

Greenhouse Gas Emissions

- a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Answer: Potentially Significant Impact

Several of the reasonably foreseeable methods of compliance will require the production of energy. The production of the energy will create greenhouse gases.

MS4 Structural Alternatives/ Tapia Alternatives/ Watershed Wide Alternatives/ Agriculture Alternatives /Lake Management-Floating Islands/ Horse and Livestock Alternatives

For a limited time during construction and/or short-duration implementation any of the implementation Alternatives may generate greenhouse gases; however, any greenhouse gas emissions generated by these alternatives will be of a limited quantity and duration.

Aeration System

An aeration system will require energy input to drive the system. Depending on the source of this energy, greenhouse gases may be generated on an ongoing basis. Mitigation measures, such as the use of solar energy to drive the aeration system, can reduce or eliminate the generation of greenhouse gas emissions to a less than significant impact.

OWTS Alternatives

Septic system upgrades will require intermittent energy input during construction and maintenance. Once operational, the upgraded systems require ongoing energy input to drive components of the septic system; however, these upgrades will be on systems that are currently in use and it is not anticipated that upgrades will result in a significant net increase in greenhouse gases due to energy requirements to drive the systems. Mitigation measures, such as the use of solar energy can reduce or eliminate the generation of greenhouse gas emissions to a less than significant impact.

Tapia WRF side stream treatment facility

Once the construction of the 1MGD side stream treatment facility is built, it will require energy input to drive new components of the water treatment system. The plant is expected to use roughly 6,000 kWh per day. Depending on the source of this energy, greenhouse gases may be generated on an ongoing basis. Mitigation measures, such as the use of solar energy can reduce or eliminate the generation of greenhouse gas emissions to a less than significant impact.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- b.** Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Answer: Less than Significant Impact

In 2006, California passed AB 32, the Global Warming Solutions Act of 2006, which set the 2020 greenhouse gas emissions reduction goal into law. The current 2020 GHG emission limit is

431 million metric tons of CO₂ equivalents (MMTCO₂e) (ARB, 2014). The 2020 target of 431 MMTCO₂e requires the reduction of 78 MMTCO₂e, or approximately 15 percent, from the State's projected 2020 emissions of 509 MMTCO₂e.

In December 2007, the ARB adopted regulations which require mandatory reporting for certain types of facilities. Facilities for which reporting is required include cement plants, oil refineries, fossil-fueled electric-generating facilities/providers, cogeneration facilities, hydrogen plants and other stationary combustion sources that emit more than 25,000 MMTCO₂e, make up 94 percent of the point source CO₂e emissions in California (ARB, 2008).

In June 2008, the ARB published its Climate Change Scoping Plan (ARB, 2008). An update to the Climate Change Scoping Plan was published in May 2014 (ARB, 2014). The Scoping Plan proposes a comprehensive set of actions designed to reduce overall carbon emissions in California. When compared to the estimated greenhouse gas reduction goal of 78 million tons CO₂e by 2020, and the benchmark of 25,000 MMTCO₂e used to determine greenhouse gas emission reporting requirements for major facilities, the relative contributions of the TMDL implementation program to greenhouse gas emissions are small and would not conflict with the state's ability to meet AB 32 goals.

In addition, the implementation of this TMDL will not conflict with implementation of State's recommended greenhouse gas reduction measures (ARB, 2014) and emissions from implementation will not have a significant negative effect on global climate change.

See response to VII. Greenhouse Gas Emissions a.

Hazards and Hazardous Materials

- a.** Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Answer: Potentially Significant Impact

Lake Management/MS4 Alternatives/Tapia Alternatives/OWTS Alternatives/Agriculture Alternatives

There is a possibility that oil and gasoline may be present during implementation and/or operation of these alternatives. Potential risk of hazard due to transportation of oil and gasoline can be mitigated with proper handling and storage procedures. Compliance with the requirement of California Occupational Health and Safety Administration (Cal OSHA) and local safety regulations during installation, operations, and maintenance of these alternatives would help to prevent any worksite accidents or accidents involving the release of hazardous materials into the environment, which could harm the environment, the public, nearby residents and sensitive receptors such as schools. Mitigation may include properly storing hazardous materials in protected areas with fencing and signs to prevent health hazards.

Lake Management-Dredging

Malibu Creek watershed is not listed on the 303(d) list of impaired water bodies for toxic substances in the sediment. Implementing parties will need to conduct analyses to confirm that toxic compounds are not present in the sediment prior to commencing dredging. If analytical data which characterizes the lake sediment demonstrates that toxic compounds are concern are present, personnel conducting the dredging activities may be exposed to this sediment and this may be a potential health hazard. This potential hazard can be mitigated by all personnel wearing appropriate protective clothing and have received health and safety/hazardous materials training.

MS4 Structural Alternatives/ Watershed Wide Alternatives/ Agriculture Alternatives-filterstrips

Implementation of runoff BMPs may also create a potential health hazard if facilities are not properly maintained to include vector (mosquito) control. This potential adverse impact can be mitigated by designing systems that minimize stagnant water conditions and/or by requiring oversight and treatment of those systems by vector control agencies. Stagnant water is minimized by allowing for rapid infiltration. Oversight and treatment by vector control agencies may also be considered for individual projects. BMPs should be covered to seal vectors out, but contain access doors to facilitate inspection and mosquito suppression by vector control agencies. Basic housekeeping practices such as removal of debris and upkeep of vegetative pretreatment devices to prevent clogging and stagnation will prevent vector breeding (CASQA, 2003a).

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- b.** Would the project 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?

Answer: Potentially Significant Impact

See VII. Hazards and Hazardous Materials a

- c.** Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Answer: Potentially Significant Impact

Potential conflicts that may arise near schools are best addressed at the project level. Since the Regional Water Board cannot specify the manner of compliance with the TMDL, the Regional Water Board cannot specify the exact location of the implementation alternatives. The various entities will need to identify schools as part of a project-level analysis to ensure that projects minimize pollutant exposure. Mitigation measures should be utilized such that if hazardous emissions are emitted due to TMDL implementation they have a less than significant impact on the school's students and personnel.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- d.** Would the project 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?

Answer: No Impact

No hazardous materials sites compiled pursuant to Government Code Section 65962.5 were identified in the Malibu Creek watershed during a search of DTSC Hazardous Waste and Substances Site List. Therefore, it is not foreseeable that implementation of the TMDL would result in a significant hazard to the public or the environment by causing disturbance at such a site.

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

Answer: No Impact

There are no airports located within the Malibu Creek watershed. Therefore, it is not foreseeable that implementation of the TMDL would result in an airport-related safety hazard.

- f. Would the project for a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Answer: No Impact

There are no airports located within the Malibu Cree watershed. Therefore, it is not foreseeable that implementation of the TMDL would result in an airport-related safety hazard.

- g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Answer: Potentially Significant Impact

Increased presence of personnel and equipment, particularly during construction phases of TMDL implementation, may impact emergency response and evacuation plans if proper safety protocols are not followed. Use of proper safety protocols, including emergency safety and evacuation training, can mitigate these risks to a less than significant impact.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- h. Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Answer: Less than Significant Impact

Risk of wildfire in the area may increase due to the increased presence of personnel entering the area in order to implement the TMDL. Mitigation measures, such as prohibiting smoking in sensitive areas and ensuring vehicles entering the area are properly maintained can minimize the risk of a wildfire being ignited.

Hydrology and Water Quality

- a. Would the project violate any water quality standards or waste discharge requirements?

Answer: Less than Significant Impact

The TMDL implementation options listed below are not expected to violate water quality standards or waste discharge requirements:

- Aeration system
- Floating hydroponic nesting islands
- Stormwater Implementation Alternatives
- Tapia WRF Implementation Alternatives
- Horse and Livestock Implementation Alternatives
- Agriculture Implementation Alternatives
- Septic system upgrades
- Watershed wide Alternative

The implementation options listed above would all directly improve water quality and it is not reasonably foreseeable that they would violate any water quality standards or waste discharge requirements.

Dredging

Hydraulic dredging would disturb the sediments and can cause increased turbidity during dredging activities. However, it is reported that this is generally a localized effect and turbidity is rarely above the ambient background for the lake outside of 10-20 feet from the dredge head. Dredging will not create permanent increased turbidity conditions.

The purpose of the TMDL implementation is to attain water quality standards as such, implementation efforts should have a cumulatively positive effect on water quality.

- b.** Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Answer: Less than Significant Impact

MS4 Structural Alternatives

A change in the rate of flow of ground waters may occur if compliance with the TMDL is achieved through significant infiltration of storm water. However, when properly managed groundwater recharge would and have a positive impact by the proposal, as it would contribute to replenishing local water supplies and reducing reliance on imported water

The reasonably foreseeable implementation methods listed below act upon the surface water and will not include direct additions or withdrawals of groundwater or interception of an aquifer by cuts or excavations.

- Hydraulic dredging
- Aeration system
- Floating hydroponic nesting islands

Tapia WRF Water Storage

It is not reasonably foreseeable that Water storage and repurpose would decrease groundwater recharge. Recycled water may be mixed with surface water and be repurposed for irrigation; therefore, water used for irrigation may increase groundwater recharge, not decline recharge.

- c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Answer: No Impact

Implementation of the TMDL is not expected to change the drainage pattern of Malibu Creek watershed in a manner which would result in substantial erosion or siltation. Many of the runoff BMPs would reduce erosion.

- d. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Answer: No Impact

It is not reasonably foreseeable that the TMDL would alter the drainage area in a manner that would result in flooding.

- e. Would the project 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?

Answer: No Impact

It is not reasonably foreseeable that implementation of the TMDL would create or contribute runoff.

- f. Would the project otherwise substantially degrade water quality?

Answer: No Impact

The purpose of the TMDL implementation is to attain water quality standards in Malibu Creek watershed; as such, implementation efforts should have a cumulatively positive effect on water quality.

- g.** Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Answer: No Impact

It is not reasonably foreseeable that any new housing will be developed as a means of implementing the TMDL.

- h.** Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Answer: No Impact

It is not reasonably foreseeable that implementation of the TMDL will impede or redirect flood flows.

- i.** Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Answer: No Impact

Reasonably foreseeable implementation strategies should be developed to improve water quality and should not expose people or structures to a significant risk of loss, injury or death involving flooding.

- j.** Would the project inundation by seiche, tsunami, or mudflow?

Answer: No Impact

Reasonably foreseeable implementation strategies should be developed to improve water quality and should not substantially increase the chance of inundation by seiche, tsunami, or mudflow.

Land Use and Planning

- a.** Would the project physically divide an established community?

Answer: No Impact

The scale of reasonably foreseeable structural implementation options to comply with the TMDL is not large enough to result in division of an established community

- b.** Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Answer: Potentially Significant Impact

Potential conflicts with land use plans, policies, or regulations are best addressed at the project level. The various entities that might install these devices will need to identify local land use plans as part of a project-level analysis to ensure that projects comply with permitted use regulations. Regulation of land use plans, policy, or regulation will need to be considered during evaluation of individual projects.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- c.** Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

Answer: Potentially Significant Impact

Potential conflicts with conservation plans are best addressed at the project level. The various entities that might install these devices will need to identify local conservation plans as part of a project-level analysis to ensure that projects comply with permitted use regulations and are consistent any applicable habitat conservation plan or natural community conservation plan. Habitat Conservation or Natural Community Conservation plans will need to be considered during evaluation of individual projects.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the Implementation Plan, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the jurisdiction of the responsible parties listed in this TMDL (Title 14, California Code of Regulations, 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

Mineral Resources

- a.** Would the project 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?

Answer: No Impact

Foreseeable implementation options should not result in the loss of availability of a known mineral resource. Consultation with the Bureau of Land Management's Mineral Management GIS layer did not indicate the presence of any known valuable mineral resources in the region.

- b.** Would the project 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?

Answer: No Impact

Loss of availability of a mineral resource recovery site is not anticipated as a result of TMDL implementation. Consultation with the Bureau of Land Management's Mineral Management GIS layer did not indicate the presence of any known valuable mineral resources in the region.

Noise

- a.** Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Answer: Less Than Significant Impact

Potential conflicts with local general plans or noise ordinances are best addressed at the project level. Because Regional Water Board cannot specify the manner of compliance with the TMDL, the various entities that might install these devices will need to identify local plans as part of a project-level analysis to ensure that projects are consistent any applicable local general plan, noise ordinance, or applicable standards of other agencies. It is not likely that noise levels from the reasonably foreseeable methods of complying with the implementation plan would pose a significantly result in exposure of persons to or generation of noise levels in excess of standards.

- b.** Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Answer: Less Than Significant Impact

Groundborne vibration and/or groundborne noise levels, if any, resulting from implementation of the TMDL should be temporary. These potential impacts and mitigation measures are discussed in XII. Noise d.

- c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Answer: No Impact

Answer: No Impact

The reasonably foreseeable implementation alternatives are not expected to result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

- d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Answer: Potentially Significant Impact

Dredging

There will be noise associated with a dredging operation. It is expected that the noise levels will be greater than ambient noise. The increased noise will be temporary and can be mitigated. Noise mitigation measures should be implemented and may include the selection of quieter running equipment and/or providing supplemental noise shielding around engines and pumps. Mitigation measures should be carefully considered and implemented if sensitive receptors such as educational or health care facilities are in the project area. Likewise, local or county noise ordinances should be reviewed to ensure compliance prior the initiation of the project.

MS4 Structural Alternatives/Watershed wide Alternatives

Increases in ambient noise levels from construction activities are expected to be less than significant once mitigation measures have been properly applied. It is anticipated that construction activities would occur in limited, discrete, and discontinuous areas over a short duration

An operations plan for the specific construction and/or maintenance activities could be developed to address the variety of available measures to limit the impacts from noise to adjacent homes and businesses. To minimize noise and vibration impacts at nearby sensitive sites, installation activities should be conducted during daytime hours to the extent feasible. There are a number of measures that can be taken to reduce intrusion without placing unreasonable constraints on the installation process or substantially increasing costs. These include noise and vibration monitoring to ensure that contractors take all reasonable steps to minimize impacts when near sensitive areas; noise testing and inspections of equipment to ensure that all equipment on the site is in good condition and effectively muffled; and an active community liaison program. A community liaison program should keep residents informed about installation

plans so they can plan around noise or vibration impacts; it should also provide a conduit for residents to express any concerns or complaints.

The following measures would minimize noise and vibration disturbances at sensitive areas during installation:

- Use newer equipment with improved noise muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators, intact and operational. Newer equipment will generally be quieter in operation than older equipment. All installation equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding).
- Perform all construction in a manner to minimize noise and vibration. Use construction methods or equipment that will provide the lowest level of noise and ground vibration impact near residences and consider alternative methods that are also suitable for the soil condition. The contractor should select installation processes and techniques that create the lowest noise levels.
- Perform noise and vibration monitoring to demonstrate compliance with the noise limits. Independent monitoring should be performed to check compliance in particularly sensitive areas. Require contractors to modify and/or reschedule their installation activities if monitoring determines that maximum limits are exceeded at residential land uses.
- Conduct truck loading, unloading and hauling operations so that noise and vibration are kept to a minimum by carefully selecting routes to avoid going through residential neighborhoods to the greatest possible extent. Ingress and egress to and from the staging area should be on collector streets or higher street designations (preferred).
- Turn off idling equipment.
- Temporary noise barriers should be used and relocated, as practicable, to protect sensitive receptors against excessive noise from installation activities. Implementing parties should consider mitigation measures such as partial enclosures around continuously operating equipment or temporary barriers along installation boundaries.
- The contractor should be required by contract specification to comply with all local noise and vibration ordinances and obtain all necessary permits and variances.

Septic System Upgrades

Construction during installation of septic system upgrades could result in a temporary increase in noise levels. See the MS4 Structural Alternatives section earlier in this section for an analysis of the potential for construction related noise and potential mitigation measures.

Horse and Livestock Implementation Alternatives.

Construction during installation of fencing or manure storage structures may cause a temporary increase in noise levels. See the MS4 Structural Alternatives section earlier in this section for an analysis of the potential for construction related noise and potential mitigation measures.

Tapia WRF Implementation Alternatives

Construction during installation of pipes, potable water treatment facilities, or side stream facility may cause in a temporary increase in noise levels. See the MS4 Structural Alternatives section earlier in this section for an analysis of the potential for construction related noise and potential mitigation measures.

This SED impact analysis concludes that there are potentially significant impacts from implementation, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Title 14, California Code of Regulations, Section 15091(a)(2)). These agencies 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- e. Would the project result in 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 expose people residing or working in the project area to excessive noise levels?

Answer: No Impact

There are no airports located within the Malibu Creek watershed. Therefore, it is not foreseeable that implementation of the TMDL would result in alterations to ambient airport-related noise levels.

- f. Would the project result in for a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Answer: No Impact

There are no private airstrips located within the Malibu Creek watershed. Therefore, it is not foreseeable that implementation of the TMDL would result in alterations to ambient airstrip-related noise levels.

Population and Housing

- a.** Would the project 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)?

Answer: No Impact

It is not foreseeable that implementation of the TMDL would induce substantial population growth either directly or indirectly.

- b.** Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Answer: No Impact

It is not foreseeable that implementation of the TMDL would displace existing housing.

- c.** Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Answer: No Impact

It is not foreseeable that implementation of the TMDL would displace people.

Public Services

- a.** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?

Answer: No Impact

None of the reasonably foreseeable implementation measures would require the provision of or need for new or physically altered governmental facilities.

Recreation

- a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Answer: Less than Significant Impact

It is foreseeable that restoring beneficial uses in Malibu Creek watershed through implementation of the TMDLs may increase recreational usage. For example, MS4 structural BMPs are encouraged to be multi use and multi benefit. These BMPs may include vegetation, walking/bike paths, increased opportunities for jogging, biking, bird watching, and increased aesthetic character. It is not expected that this increased use would result in a substantial deterioration of facilities.

- 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?

Answer: Potentially Significant Impact

The TMDL implementation options would potentially improve the quality of existing recreation opportunities in Malibu Creek watershed. These implementation options would not result in the need for further construction or expansion of recreational facilities

Transportation/Traffic

- a. Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Answer: Potentially Significant Impact

Potential conflicts with local plans, policies or ordinances establishing measures of effectiveness for the performance of the circulation system are best addressed at the project level. The various entities that might implement the TMDL will need to identify local policies as part of a project-level analysis to ensure that projects comply with effectiveness measures.

The foreseeable methods of TMDL implementation may entail short-term disturbances to transportation/traffic during construction of any of the implementation alternatives. Potential impacts could be reduced by limiting or restricting hours of construction so as to avoid peak traffic times and by providing temporary traffic signals and flagging to facilitate traffic movement. The increased traffic may also create wear and tear on local roads. Responsible entities will need to work with the County of Los Angeles Department of Public Works and Ventura County Department of Public Works to repair any road damage caused by implementing

the TMDL. It is not foreseeable that TMDL implementation will conflict with an applicable plan, ordinance, or policy for the performance of the circulation system in the long term. Once completed, implementation projects would not result in lasting impacts on nearby intersections, streets, highways, freeways, pedestrian or bicycle paths, or mass transit.

- b.** Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Answer: Potentially Significant Impact

Potential conflicts with an applicable congestion management program are best addressed at the project level. The various entities that might implement the TMDL will need to conform to the County of Los Angeles Congestion Management Program, including a Transportation Impact Analysis required by the Land Use Analysis Program.

- c.** Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Answer: No Impact

Implementation of the TMDL is not anticipated to have any impact on air traffic patterns. Foreseeable implementation options would not be tall enough to have an effect on the flight of an airplane, nor should they include the addition of lighting that would increase navigation risk for airplanes.

- d.** Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Answer: No Impact

The reasonably foreseeable implementation measures are not expected to increase traffic hazards due to a design feature or incompatible uses in the Malibu Creek watershed.

- e.** Would the project result in inadequate emergency access?

Answer: Potentially Significant Impact

See response to XVI. Transportation/Traffic a., XVI. Transportation/Traffic b. and VIII. Hazards and Hazardous Materials g.

- f.** Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Answer: Potentially Significant Impact

See response to XVI. Transportation/Traffic a., XVI. Transportation/Traffic b. and VIII. Hazards and Hazardous Materials g.

Utilities and Service Systems

- a.** Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Answer: Less than Significant Impact

The purpose of the TMDL is to improve water quality; consequently, implementation efforts to achieve the TMDL should have a positive impact on water quality. Reasonably foreseeable implementation measures would meet all wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board because any compliance measure involving a treatment facility would be permitted by the Regional Water Board.

- b.** Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Answer: Potentially Significant Impact

Upgrades to the Tapia WRF or septic systems are two of the reasonably foreseeable implementation options for the TMDL. Implementation of the TMDLs may require new water and wastewater treatment facilities as part of the potential winter seasonal storage approach and summer side stream treatment facility approach. Septic systems may also have to be upgraded. The environmental effects of to the construction of water and wastewater treatment facilities and septic system upgrades, such as impacts to air, traffic, biological resources, and noise, are analyzed throughout this document.

This SED impact analysis concludes that there are potentially significant impacts from implementation, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Title 14, California Code of Regulations, Section 15091(a)(2)). These agencies 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- c. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Answer: Potentially Significant Impact

The following implementation options would have minimal or no ongoing interaction with the stormwater drainage system:

- Lake Alternatives
- OWTS Alternatives
- Tapia Alternatives
- MS4 nonstructural Alternatives
- Watershedwide Alternatives
- Agriculture Alternatives
- Horse and Livestock Alternatives

MS4 Structural Alternatives

Implementation of runoff BMPs to address discharges from storm drains is a reasonably foreseeable implementation option for the TMDL. Vegetated swales, filter strips, bioretention, infiltration trenches or other structural BMPs could result in alterations to stormwater drainage utilities. These types of devices may result in a potentially significant impact due to changes in drainage patterns or flooding hazards if devices became blocked by trash and debris. Any device installed in a storm drain, especially an older, under-capacity drain could have a negative effect on the drain's ability to convey runoff. These negative impacts can be mitigated by performing regular maintenance of these devices, through design of devices with overflow/bypass structures, and, if necessary, enlargement of the storm drain upstream of devices. Stormwater infiltrations BMPs would have a positive impact on water quality as the result of improved stormwater treatment capabilities. Environmental effects of these upgrades to wastewater treatment facilities are analyzed throughout this document.

- d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Answer: Potentially Significant Impact

The TMDL implementation options listed below are not expected to require new or substantial alterations to the water supply system:

- Lake Alternatives
- OWTS Alternatives
- MS4 Alternatives
- Watershed wide Alternatives
- Agriculture Alternatives
- Horse and Livestock Alternatives

Tapia Dilution Alternatives

Sufficient available water supply is best addressed at the project level. To meet the summer allocations of the TMDLs, it is reasonably foreseeable that the Tapia WRF may dilute its recycled with imported potable water. Tapia WRF will need to identify imported water sources as part of a project-level analysis to ensure sufficient water is available to serve the project.

- e. Would the project 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?

Answer: Potentially Significant Impact

It is reasonably foreseeable that in order to comply with the OWTS allocations, certain OWTS may connect to the sewer system. Should connection to an existing wastewater treatment plant be necessary, consultation with the local treatment plant will determine if capacity is adequate. If capacity is not adequate, the implementing parties will need to develop an alternate plan for treatment of their wastewater.

- f. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

i. Answer: Potentially Significant Impact

The following implementation options are not expected to generate significant amounts of solid wastes.

- Aeration System
- Agriculture Alternatives
- Horse and Livestock Alternatives
- Floating hydroponic nesting islands
- Watershed wide Alternatives

Dredging

The purpose of dredging is to remove sediments from the lake bottoms. Dredged material requires disposal. One option for disposal of dredged materials is a landfill site, which would need to have sufficient permitted capacity to accommodate the waste. The project specific

planning of a dredging operation will decide the depth to which the lake will be dredged and the potential impact to solid waste disposal will be fully analyzed at that time. This potential project will generate solid waste requiring disposal, but it is not expected to be to the scale that would significantly impact landfill capacity.

Stormwater Infiltration/ OWTS Alternatives

Nominal amounts of construction debris may be generated by installation of structural BMPs and upgrades to OWTS. Construction debris can be recycled at aggregate recycling centers or disposed of in landfills. Improved sorting and recycling methods can reduce the total amount of disposable wastes. Existing landfills in the area should have adequate capacity to accommodate this limited amount of construction debris. It is not foreseeable that this proposal will result in a need for new systems, or substantial alterations to solid waste and disposal utilities.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDLs, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Title 14, California Code of Regulations, Section 15091(a)(2)). These agencies 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- g.** Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Answer: Potentially Significant Impact

The implementation of the TMDL is expected to comply with federal, state, and local statutes and regulations related to solid waste. As discussed in XVII. Utilities and Services f., implementation of the TMDL has the potential to generate solid waste. Since, the Regional Water Board cannot specify the manner of compliance with the TMDL, these potential impacts are best addressed at the project level. The various entities that might generate the solid waste will need to identify any statutes and regulations related to solid waste as part of a project-level analysis to ensure that projects comply with such plans.

Mandatory Findings of Significance

- a.** Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or

animal or eliminate important examples of the major periods of California history or prehistory?

Answer: Potentially Significant Impact

The potential impacts of the project should not cause a significant degradation to the environment with appropriate implementation of available mitigation measures. The implementation of this TMDL may cause temporary impacts to fish and wildlife, but will result in improved water quality in the waters of the region and will have significant beneficial impacts to the environment over the long term.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDLs, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Title 14, California Code of Regulations, Section 15091(a)(2)). These agencies 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

- b.** Does the project have impacts that 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)?

Answer: Potentially Significant Impact

Each compliance measure is expected to have nominal environmental impacts if performed properly. Mitigation measures are available for these impacts. It is not expected that implementation of the TMDL will cause cumulatively considerable negative impacts if available mitigation measures are properly implemented. The implementation of this TMDL will result in improved water quality in the waters of the region and will have significant beneficial impacts to the environment over the long term.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDLs, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Title 14, California Code of Regulations, Section 15091(a)(2)). These agencies 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

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

Answer: Potentially Significant Impact

Without implementation of recommended mitigation measures, potentially significant environmental impacts, such as impacts to air, noise, and transportation, can result from implementation projects. In some cases, mitigation measures, even if performed, may not reduce the impacts to less than significant levels. The significance of these impacts is discussed in detail above, as well as elsewhere in this document. The project will not cause substantial adverse effects on human beings. The implementation of this TMDL will result in improved water quality in the waters of the region and will have significant beneficial impacts to the environment over the long term.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDLs, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Title 14, California Code of Regulations, Section 15091(a)(2)). These agencies 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 (Title 14, California Code of Regulations, Section 15091(a)(3)).

7) Other Environmental Considerations

This section evaluates several other environmental considerations of reasonably foreseeable methods of complying with the TMDL, specifically:

- 7.1. Cumulative Impacts of the Program Alternatives (as required by CEQA Guidelines Section 15130);
- 7.2. Potential Growth-Inducing Effects of the Program Alternatives (as required by CEQA Guidelines Section 15126); and
- 7.3. Unavoidable Significant Impacts (as required by CEQA Guidelines Section 15126.2).

7.1) Cumulative Impacts

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 increase other environmental impacts. Cumulative impact assessment must consider not only the impacts of the proposed Implementation Plan, but also the impacts from other municipal and private projects, which would occur in the watershed during the period of implementation.

The areas of cumulative impacts analyzed in this section include: 1) the program level cumulative impacts and 2) the project level cumulative impacts. On the program level, the impacts from multiple TMDLs, if they exist, are analyzed. On the project level, while the full environmental analysis of individual projects are the purview of the responsible parties, the cumulative impact analysis included here entails consideration of construction activities occurring in the vicinity of one another as a result of other projects being built in the same general time frame and location. The Implementation Plan projects, if occurring with other construction projects, could contribute to temporary cumulative noise and vibration effects that would not occur with only one project.

7.1.1) Program Cumulative Impacts

Compliance with the Implementation Plan will include multiple alternatives that may remove other pollutants besides nutrients and sediment. For example runoff BMPs such as vegetated swales and filter strips, may reduce metals residing in the sediment, and bacteria not just nutrients and sediment. For another example, OWTS implementation alternatives may remove bacteria by upgrading OWTS. Thus, the implementation alternatives described in section 5.0 Description of Implementation Alternatives will potentially contribute to the implementation of other TMDLs and reduce overall pollutant loading to Malibu Creek watershed. Currently there are two other TMDLs in effect within Malibu Creek watershed: the Malibu Creek Trash TMDL and the Malibu Creek Bacteria TMDL. When other TMDLs are developed in the future, the programmatic cumulative impacts will be analyzed in the SED documents for those TMDLs. None of the implementation approaches for other TMDLs should disrupt implementation alternatives as applied for this Implementation Plan for the Malibu Nutrient TMDL and the Malibu Creek and Lagoon Nutrient and Sediment TMDL.

7.1.2) Project Cumulative Impacts

Specific TMDL projects must be environmentally evaluated and cumulative impacts considered as the responsible parties design and site the projects. However, as examples, TMDL implementation plan projects and other construction activities may result in cumulative effects of the following nature:

Noise and Vibration - Local residents in the near vicinity of installation and maintenance activities may be exposed to noise and possible vibration. The cumulative effects, both in terms of added noise and vibration at multiple TMDL installation sites, and in the context of other related projects, are not considered cumulatively significant due to the temporary nature of noise increases. Noise mitigation methods including scheduling of construction or implementation device installation are available as discussed in the checklist. In addition, the fact that implementation BMP installation activities are being conducted in the same vicinity as other projects will not make mitigation methods less implementable.

Air Quality - Implementation of the TMDL Program may cause additional emissions of criteria pollutants and slightly elevated levels of carbon monoxide during construction or BMP device installation activities. The TMDL, in conjunction with all other construction activity, may contribute to the region's non-attainment status during the installation period. Because these installations-related emissions are temporary, and because the VCAQMD and the SCAQMD addresses cumulative air pollution, compliance with the TMDL would not result in long-term significant cumulative air quality impacts. In the short term, cumulative impacts could be significant if the combined emissions from the individual TMDL projects exceed the threshold criteria for the individual pollutants.

Transportation and Circulation - Compliance with the TMDL involves installation activities occurring simultaneously at a number of surface sites in this TMDL area. Installation of BMP devices may be occurring in the same general time and space as other related or unrelated projects. In these instances, surface construction activities from all projects could produce cumulative traffic effects which may be significant, depending upon a range of factors including the specific location involved and the precise nature of the conditions created by the dual construction activity. Special coordination efforts may be necessary to reduce the combined effects to an acceptable level. Overall, significant cumulative impacts are not anticipated because coordination can occur and because transportation mitigation methods are available as discussed in the checklist. In addition, the fact that BMP device installation activities are being conducted in the same vicinity as other projects will not make mitigation methods less implementable.

7.2) Growth-Inducing Impacts

This section presents the following:

- 7.2.1. An overview of the CEQA Guidelines relevant to evaluating growth inducement,
- 7.2.2. A discussion of the types of growth that can occur in the Malibu Creek watershed,
- 7.2.3. A discussion of obstacles to growth in the watershed, and
- 7.2.4. An evaluation of the potential for the TMDL Program Alternatives to induce growth.

7.2.1) CEQA Growth-Inducing Guidelines

Growth-inducing impacts are defined by the State CEQA Guidelines as (CEQA Guidelines, Section 15126.2(d)):

The ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are impacts which would remove obstacles to population growth. Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects... [In addition,] the characteristics of some projects... may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It is not assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Growth inducement indirectly could result in adverse environmental effects if the induced growth is not consistent with or accommodated by the land use plans and growth management plans and policies. Local land use plans provide for land use development patterns and growth policies that encourage orderly urban development supported by adequate public services, such as water supply, roadway infrastructure, sewer services, and solid waste disposal services.

Public works projects that are developed to address future unplanned needs (i.e., that would not accommodate planned growth) could result in removing obstacles to population growth. Direct growth inducement would result if, for example, a project involved the construction of new wastewater treatment facilities to accommodate populations in excess of those projected by local or regional planning agencies. Indirect growth inducement would result if a project accommodated unplanned growth and indirectly established substantial new permanent employment opportunities (for example, new commercial, industrial, or governmental enterprises) or if a project involved a construction effort with substantial short-term employment opportunities that indirectly would stimulate the need for additional housing and services. Growth inducement also could occur if the project would affect the timing or location of either population or land use growth, or create a surplus in infrastructure capacity.

7.2.2) Types of Growth

The primary types of growth that occur within the TMDL area are:

- 1) Development of land, and
- 2) Population growth (Economic growth, such as the creation of additional job opportunities, also could occur; however, such growth generally would lead to population growth and, therefore, is included indirectly in population growth.)

Growth in land development

Growth in land development is the physical development of residential, commercial, and industrial structures in the TMDL area. Land use growth is subject to general plans, community plans, parcel zoning, and applicable entitlements and is dependent on adequate infrastructure to support development.

Population Growth

Population growth is growth in the number of persons that live and work in the TMDL area and other jurisdictions within the boundaries of the area. Population growth occurs from natural causes (births minus deaths) and net emigration to or immigration from other geographical areas. Emigration or immigration can occur in response to economic opportunities, life style choices, or for personal reasons.

Although land use growth and population growth are interrelated, land use and population growth could occur independently from each other. This has occurred in the past where the housing growth is minimal, but population within the area continues to increase. Such a situation results in increasing population densities with a corresponding demand for services, despite minimal land use growth.

Overall development in the County of Los Angeles and the County of Ventura is governed by their General Plans, which are intended to direct land use development in an orderly manner. The General Plans are the frameworks under which development occurs, and, within these frameworks, other land use entitlements (such as variances and conditional use permits) can be obtained. Because the General Plans guide land use development and allow for entitlements, they do not represent obstacles to land use growth. The cities within the TMDL area also have plans which direct land use development.

7.2.3) Existing Obstacles to Growth

Obstacles to growth could include such things as inadequate infrastructure, such as an inadequate water supply that results in rationing, or inadequate wastewater treatment capacity that results in restrictions in land use development. Policies that discourage either natural population growth or immigration also are considered to be obstacles to growth.

7.2.4) Potential for Compliance with the Proposed TMDL to Induce Growth

Direct Growth Inducement

Because the reasonably foreseeable methods of compliance with the proposed TMDL focus on lake management strategies, runoff BMPs, water storage, and treatment upgrades at existing

facilities, this TMDL would not result in the construction of new housing and, therefore, would not directly induce growth.

Indirect Growth Inducement

Two areas of potential indirect growth inducement are relevant to a discussion of the proposed TMDL: (1) the potential for compliance with the TMDL to generate economic opportunities that could lead to additional immigration, and (2) the potential for the proposed TMDL to remove an obstacle to land use or population growth.

The minor construction activities associated with the TMDL would not increase the economic opportunities in the area and region, and is not expected to result in or induce substantial or significant population or land use development growth.

The second area of potential indirect growth inducement is through the removal of obstacles to growth. As discussed above, no obstacles exist to land use or to population growth in the watershed.

7.3) Unavoidable Significant Adverse Impacts

Section 15126.2(c) of the CEQA Guidelines requires a discussion of potential significant, irreversible environmental changes that could result from a proposed project. Examples of such changes include commitment of future generations to similar uses, irreversible damage that may result from accidents associated with a project, or irretrievable commitments of resources. Although the proposed TMDL would require resources (materials, labor, and energy) they do not represent a substantial irreversible commitment of resources.

Furthermore, implementation of the TMDLs is both necessary and beneficial. To the extent that the alternatives, mitigation measures, or both, that are examined in this SED are not deemed feasible by the responsible parties complying with the TMDLs, the necessity of implementing the federally required TMDLs and removing the significant environmental effects from nutrient-related impairments and sediment impairments in the Malibu Creek watershed (an action required to achieve the express, national policy of the Clean Water Act) remains. In addition, implementation of the TMDLs will have substantial benefits to water quality and will enhance beneficial uses. Enhancement of beneficial uses will have positive social and economic effects. These substantial benefits outweigh any unavoidable adverse environmental effects, as set forth herein in and in the Statement of Overriding Considerations. Section 6 of this SED identifies the anticipated environmental effects for each resource area, identifies mitigation measures for potentially significant impacts, and determines if impacts after implementation of mitigation are significant.

8) Statement of Overriding Considerations

The Regional Water Board staff has balanced the economic, legal, social, technological, and other benefits of this proposed Implementation Plan against the unavoidable environmental risks in determining whether to recommend that the Regional Water Board approves this project. Upon review of the environmental information generated for this project and in view of the entire record supporting the Implementation Plan, staff has determined that the specific economic, legal, social, technological, and other benefits of this proposed Implementation Plan outweigh the unavoidable adverse environmental effects, and that such adverse environmental effects are acceptable under the circumstances.

The Implementation Plan will result in improved water quality in the waters of the Region and will have significant positive impacts to the environment (including restoration and enhancement of beneficial uses) and the economy over the long term. Enhancement of the recreational beneficial uses (both water contact recreation and non-contact water recreation) will have positive social and economic effects by decreasing potential hazards and increasing the aesthetic experience at the waterbodies of concern. Enhancement of habitat beneficial uses (including the warm freshwater habitat, cold freshwater habitat, wildlife habitat, wetland habitat and rare, threatened or endangered species) will also have positive indirect economic and social benefits. Specific projects employed to implement the Basin Plan amendment may have adverse significant impacts to the environment, but these impacts are generally expected to be limited, short-term or may be mitigated through design and scheduling.

The Staff Report, Basin Plan amendment, and this SED provide the necessary information pursuant to Public Resources Code section 21159 to conclude that properly designed and implemented BMPs and properly executed remediation activities generally should not foreseeably have a significant adverse effect on the environment. Any potential impacts can be mitigated at the subsequent project level when specific sites and methods have been identified, and responsible parties can and should implement the recommended mitigation measures.

For this Implementation Plan, mitigation measures are available to reduce environmental impacts to less than significant levels and in most cases are routine measures that are typically used in construction projects, infrastructure maintenance and lake management. Routine construction and maintenance of storm sewer systems are regular and expected activities carried out by municipalities and agencies throughout Los Angeles and Ventura Counties. Sewer maintenance, traffic alterations, and environmental impacts from them already occur and are expected. This project will foreseeably require these types of projects and their individual impacts are not expected to be extraordinary in the magnitude or severity of impacts. In addition to runoff BMPs, agriculture and livestock management, and wastewater treatment projects, the implementation plan may require projects typical of lake management activities, such as dredging and aeration to improve water quality. For these activities, there are mitigation measures available to reduce

environmental impacts, and these measures are routine and already carried within Los Angeles County and Ventura County.

Specific projects to comply with the implementation plan that may have a significant impact will be implemented by responsible parties and would therefore be subject to a separate environmental review. The lead agencies for the Implementation Plan projects have the ability to mitigate project impacts, can and should mitigate project impacts, and are required under CEQA to mitigate any environmental impacts they identify, unless they have reason not to do so. Notably, in almost all circumstances, where unavoidable or inmitigable impacts would present unacceptable hardship upon nearby receptors or venues, the local agencies have a variety of alternative implementation measures available instead. Cumulatively, the many, small individual projects may have a significant effect upon life and the environment throughout the region.

The Implementation Plan will result in improved water quality in Malibu Creek watershed, but it may result in short-term localized significant adverse impacts to the environment as a variety of small construction projects may be undertaken in the vicinity of the waterbodies of concern. Individually, these impacts are generally expected to be limited, short-term or may be mitigated through careful design and scheduling. The Staff Report for the Implementation Plan and this checklist provide the necessary information pursuant to Public Resources Code section 21159 to conclude that properly designed and implemented structural or non-structural BMPs should mitigate and generally avoid significant adverse effects on the environment, and all parties responsible for implementing the TMDLs should ensure that their projects are properly designed and implemented.

All of the potential impacts must, however, be mitigated at the subsequent, project level because they involve specific sites and designs not specified or specifically required by the Implementation Plan. At this stage, any more particularized conclusions would be speculative. The Regional Water Board does not have legal authority to specify the manner of compliance with its WDRs or other orders (California Water Code section § 13360), and thus cannot dictate that an appropriate location be selected for any particular project, that it be designed consistent with standard industry practices, or that routine and ordinary mitigation measures be employed. These measures are all within the jurisdiction and authority of the parties that will be responsible for implementing this Implementation Plan, and those parties can and should employ those alternatives and mitigation measures to reduce any impacts as much as feasible. (Title 14, California Code of Regulations, Section 15091(a)(2).)

Implementation of the TMDLs is both necessary and beneficial. To the extent that the alternatives, mitigation measures, or both, that are examined in this analysis are not deemed feasible by responsible parties, the necessity of implementing the TMDLs and removing the nutrients impairments and sediment impairments from the Malibu Creek watershed remains.

9) Determination

- ☐ The proposed project COULD NOT have a significant effect on the environment, and, therefore, no alternatives or mitigation measures are proposed.
- ☒ The proposed project MAY have a significant or potentially significant effect on the environment, and therefore alternatives and mitigation measures have been evaluated.

Signature

Date

Printed Name

For

Note: Authority cited: Sections 21083 and 21087, Public Resources Code. Reference: Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.3, 21093, 21094, 21151, Public Resources Code; Sundstrom v. County of Mendocino, 202 Cal.App.3d 296 (1988); Leonoff v. Monterey Board of Supervisors, 222 Cal.App.3d 1337 (1990).

References

California Air Resources Board (ARB). May 2014. First Update to the Climate Change Scoping Plan.

California Department of Conservation, California Geological Survey. 2002. Guidelines for Evaluating the Hazard of Surface Fault Rupture – Note 49.

California Department of Transportation (Caltrans). July 2010. Storm Water Quality Handbooks: Project Planning and Design Guide. CTSW-RT-10-254.03.

California Department of Transportation (Caltrans). September 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol.

California Stormwater Quality Association (CASQA). 2003a. California Stormwater BMP Handbook: Municipal. Available at <http://www.cabmphandbooks.com>. July 6, 2016.

Federal Highway Administration (FHWA). 2007. Storm Water Best Management Practices in an Ultra-Urban Setting: Selection and Monitoring. <http://www.fhwa.dot.gov/environment/ultraurb/>.

Los Angeles Regional Water Quality Control Board (LARWQCB). 1994. Water Quality Control Plan for the Los Angeles Region (Basin Plan).

NRCS, 2000. USDA-NRCS Field Office Technical Guide. Downloaded from: <http://efotg.nrcs.usda.gov/treemenuFS.aspx>. July 11, 2016.

OCES, 1998. Oklahoma Cooperative Extension Service, Oklahoma State University. Riparian Area Management Handbook. E-952.

United States Environmental Protection Agency (U.S. EPA. 2003). National Management Measures to Control Nonpoint Pollution from Agriculture. EPA 841-B-03-004, July 2003

United States Environmental Protection Agency (U.S. EPA. 2007). National Menu of Stormwater Best Management Practices. <http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm>. July 8, 2016.

United States Environmental Protection Agency (U.S. EPA. 2004). The Use of Best Management Practices (BMPs) in Urban Watersheds. Office of Research and Development. EPA/600/R-04/184.

United States Environmental Protection Agency. 1999. Storm Water Technology Fact Sheet Vegetated Swales. 832-F-99-006.

United States Environmental Protection Agency. 2007. Biological Nutrient Removal Processes and Costs. EPA-823-R-07-002.

Water Environment Research Foundation (WERF). 2010. Final Report: Evaluation of Greenhouse Gas Emissions from Septic Systems. WERF Stock No. DEC1R09.