Substitute Environmental Documents for Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon Indicator Bacteria Total Maximum Daily Load

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

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1. EXECUTIVE SUMMARY

The California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board) is the lead agency for evaluating the environmental impacts of the proposed Total Maximum Daily Load (TMDL) for Indicator Bacteria in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon. This Substitute Environmental Document (SED) analyzes environmental impacts that may occur from reasonably foreseeable methods of implementing a TMDL. This SED is based on a proposed TMDL that will be considered by the Los Angeles Water Board. If approved by the Los Angeles Water Board, the TMDL will be implemented through an amendment to the California Water Quality Control Plan, Los Angeles Region (Basin Plan). The TMDL is described in the Staff Report, Tentative Board Resolution, and Tentative Basin Plan Amendment (BPA) available on the Los Angeles Water Board's website. This SED analyzes foreseeable methods of compliance with the TMDL and evaluates the potential environmental impacts, mitigation, and alternatives in accordance with the California Environmental Quality Act (CEQA).

The SED will be considered by the Los Angeles Water Board when the Los Angeles Water Board considers adoption of the indicator bacteria TMDL as a BPA. Approval of the SED is separate from approval of a specific project alternative or a component of an alternative and refers to the process of: (1) addressing comments, (2) confirming that the Los Angeles Water Board considered the information in the SED, and (3) affirming that the SED reflects independent judgment and analysis by the Los Angeles Water Board CEQA Guidelines sections 10590 and 15090, title 14 of California Code of Regulations.

The Los Cerritos Channel subwatershed, the Los Cerritos Channel Estuary subwatershed, the Alamitos Bay subwatershed, and the Colorado Lagoon subwatershed are in the Los Cerritos Channel watershed. For the purpose of this document these subwatersheds will collectively be referred as Upper Los Cerritos Channel watershed. The Los Cerritos Channel Coastal subwatershed is outside the scope of this SED. Water contact recreational uses are impaired in the Upper Los Cerritos Channel watershed due to excess exceedances of indicator bacteria limits as listed on the State of California 303(d) list of impaired waterbodies. The objective of the TMDL is to restore the water contact recreational uses to the Upper Los Cerritos Channel watershed through the attainment of water quality standards for indicator bacteria limits.

2. REGULATORY REQUIREMENTS

This section presents the regulatory requirements for assessing environmental impacts of a TMDL implemented through a BPA at the Los Angeles Water Board. This TMDL for indicator bacteria contamination in the Upper Los Cerritos Channel watershed is evaluated at program-level 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 Natural Resources has certified the State and Regional Water Boards' basin planning process as exempt from certain requirements of the CEQA, including preparation of an initial study, negative declaration, and environmental impact report (Cal. Code Regs., tit. 14, § 15251, subd. (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 Los Angeles Water Board is exempt from certain CEQA requirements, it is subject to the substantive requirements of California Code of Regulations, title 23, section 3777, subdivision (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, subdivision (a) also requires the Los Angeles Water Board to complete an environmental checklist as part of its substitute environmental documents. The checklist is provided in the Settings, Impacts and Mitigation section of this document.

In addition, the Los Angeles Water Board must fulfill substantive obligations when adopting performance standards such as TMDLs, 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 (Public Res. Code, § 21159, subd. (a).)

Section 21159, subdivision (c) requires that the environmental analysis take into account a reasonable range of:

(4) Environmental, economic, and technical factors,

(5) Population and geographic areas, and

(6) Specific sites.

2.3 PROGRAM- AND PROJECT-LEVEL ANALYSIS

Public Resources Code section 21159, subdivision (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 (Public Res. Code, § 21159.2). Notably, ***the* Los Angeles Water Board *is prohibited from specifying the manner of compliance with its orders*** (Wat. Code, § 13360), and accordingly, the actual environmental impacts will necessarily depend upon the compliance strategy selected by the local agencies and other permittees.

The SED identifies the reasonably foreseeable environmental impacts of the ***reasonably foreseeable*** methods of compliance (Public Res. Code, § 21159, subd. (a)(1)), based on information developed before, during, and after the CEQA scoping process that is specified in Public Resources Code section 21083.9. This analysis is a program-level (i.e., macroscopic) analysis. CEQA requires the Los Angeles Water Board to conduct a program-level analysis of environmental impacts (Public Res. Code, § 21159, subd. (d)). Similarly, the CEQA substitute documents do not engage in speculation or conjecture (Public Res. Code, § 21159, subd. (a)). When the CEQA analysis identifies a potentially significant environmental impact, the accompanying analysis identifies reasonably foreseeable feasible mitigation measures (Public Res. Code, § 21159, subd. (a)(2)). Because responsible agencies will most likely use a combination of structural and non-structural BMPs, the SED has identified the reasonably foreseeable alternative means of compliance (Public Res. Code, § 21159, subd. (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, subd. (a)).

To fulfill these functions, a CEQA review "…need only be adequate, complete, and a good faith effort at full disclosure "(Cal. Code Regs., tit. 14, § 15151) (*City of Fremont v. San Francisco Bay Area Rapid Transit Dist.*, supra, 34 Cal.App.4th at p. 1786.) 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).

Nor does 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 Los Angeles 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 bacteria TMDL.

3. TMDL OVERVIEW AND PROGRAM OBJECTIVES

3.1 INTRODUCTION – LEGAL BACKGROUND

The TMDL was prepared pursuant to state and federal requirements to preserve and enhance water quality at the Upper Los Cerritos Channel watershed. The TMDL sets forth an implementation plan to attain the water quality standards for bacteria at these water bodies. The adoption of a TMDL is not discretionary and is compelled by section 303(d) of the federal Clean Water Act (33 U.S.C. § 1313(d)).

The California Water Quality Control Plan, Los Angeles Region, also known as 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, and 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 Control 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 13000 of the California Water Code) and serves as the State Water Quality Control Plan applicable to the Upper Los Cerritos Channel watershed.

Section 305(b) of the federal Clean Water Act (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 sections 303(d)(1)(C) and (d)(1)(D) require that the state establish TMDLs for each water included on the 303(d) List. Those TMDLs, and the 303(d) List itself, must be submitted to United States Environmental Protection Agency (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, however, TMDLs for waters that do not meet the criteria for listing are not subject to approval by U.S. EPA.

TMDLs must be established at a level necessary to attain water quality standards, considering seasonal variations and a margin of safety. The TMDL must also include an allocation to all point sources, nonpoint sources, and natural

background in the form of waste load allocations (WLAs) and load allocations (LAs), respectively. 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 Los Angeles 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.

As part of California's 2014/2016 303(d) list submittals, the Los Angeles Water Board identified Los Cerritos Channel, Alamitos Bay, and Colorado Lagoon as being impaired due to elevated indicator bacteria densities.

The Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon Indicator Bacteria TMDL is subject to the 2001 provision of Public Resources Code section 21083.9 that requires a CEQA Scoping meeting 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 environmental impact report (EIR) or its functionally equivalent document. On December 17, 2019 a CEQA Scoping Meeting was held to present and discuss the potential environmental impacts associated with reasonably foreseeable methods of compliance for the Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon Indicator Bacteria TMDL. A notice of the CEQA Scoping meeting was sent to interested parties including cities and counties within the Upper Los Cerritos Channel watershed. Input from all stakeholders and interested parties were solicited for consideration in the development of the SED.

This SED will be released for public comment, accompanying the TMDL staff report, BPA, and Tentative Resolution. The documents should be considered as a whole when evaluating the environmental impacts of implementing the TMDL. Public comments received on these documents and the subsequent Los Angeles Water Board staff responses will all be considered by the Los Angeles Water Board during the Water Board hearing.

3.2 PROJECT DESCRIPTION, TMDL GOALS, AND WATER QUALITY OBJECTIVES

As further set forth herein, this project is to adopt a regulation that will guide Los Angeles Water Board permitting, enforcement, and other actions that will require responsible parties to take appropriate measures to restore and maintain all applicable Water Quality Standards in the Upper Los Cerritos Channel watershed and to comply with the requirements of section 303(d) of the CWA.

The Basin Plan designates beneficial uses of waterbodies, establishes water quality objectives for the protection of these beneficial uses, and outlines a plan of implementation for maintaining and enhancing water quality. The proposed

amendment would incorporate into the Basin Plan a TMDL for bacteria in the Upper Los Cerritos Channel watershed.

On August 7, 2018, the State Water Board adopted Resolution No. 2018-0038 establishing "Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays and Estuaries of California—Bacteria Provisions and a Water Quality Standards Variance Policy" (Part 3 of the ISWEBE) and amending the "Water Quality Control Plan for Ocean Waters of California—Bacteria Provisions and a Water Quality Standards Variance Policy" (Ocean Plan Amendment). Part 3 of the ISWEBE and the Ocean Plan Amendment are collectively referred to as the Statewide Bacteria Provisions. The goal of Bacteria Provisions is to protect waters used for recreation through the establishment of statewide numeric water quality objectives (WQOs) for bacteria based on the U.S. EPA 2012 Recreational Criteria. The Bacteria Provisions do not contain a specific program of implementation to achieve the Bacteria WQOs, because TMDLs for bacteria have been established for many waterbodies throughout the state prior to the effective date of the Statewide Bacteria Provisions. The revised objectives include geometric mean limits and Statistical Threshold Value (STV) limits for *E. coli* and *enterococcus*. The Office of Administrative Law and U.S. EPA approved the Statewide Bacteria Provisions on February 4, 2019 and March 22, 2019, respectively. The Statewide Bacteria Provisions became effective on March 22, 2019.

The Basin Plan and the California Ocean Plan, the provisions of which are included in the Basin Plan by reference, contain bacteria water quality objectives to protect REC-1 (uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible including, but not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs) and REC-2 (uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, including, but not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities) uses.

On February 13, 2020, the Los Angeles Water Board adopted Resolution R20-001 to update the bacteria objectives for waters designated as REC-1 to be consistent with the Statewide Bacteria Provisions, which sets (i) *E. coli* as the indicator of pathogens in freshwaters, (ii) enterococci as the indicator of pathogens in estuarine waters, and (iii) both enterococci and fecal coliform as indicators of pathogens in ocean waters. The numeric limits for the statewide bacteria objectives correspond with the risk protection level of 32 illnesses per 1,000 recreators (Los Angeles Water Board Resolution R20-001). Protecting REC-1 beneficial uses will result in the protection of REC-2 beneficial uses because REC-1 bacteria objectives are more stringent than REC-2 bacteria objectives. The Bacteria Provisions set WQOs comprising of a magnitude, duration and frequency.

3.3 FRESHWATER OBJECTIVES

The bacteria WQO for all freshwaters where the salinity is equal to or less than 1 part per thousand (ppth) 95 percent or more of the time during the calendar year is: a six-week rolling geometric mean of *Escherichia coli* (*E. coli*) not to exceed 100 colony forming units (cfu) per 100 milliliters (mL), calculated weekly, and a Statistical Threshold Value (STV) of 320 cfu/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

1. Geometric Mean Limits

   E. coli density shall not exceed 100 cfu/100 mL.

2. STV Limits

   E. coli density shall not exceed 320 cfu/100 mL.

3.4 SALINE WATER OBJECTIVES

The bacteria WQO for all saline waters where the salinity is greater than 1 ppth more than 5 percent of the time during the calendar year is: a six-week rolling geometric mean of *Enterococcus* not to exceed 30 cfu/100 mL, calculated weekly, with a STV of 110 cfu/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

1. Geometric Mean Limits: *Enterococcus* density shall not exceed 30 cfu/100 mL.

2. STV Limits: *E. coli* density shall not exceed 110 cfu/100 mL.

4. DESCRIPTION OF ALTERNATIVES

The SED analyze three Program Alternatives that encompass actions within the jurisdiction of the Los Angeles Water Board and implementing municipalities and agencies. The program alternatives include:

1) the TMDL as it is proposed for Los Angeles Water Board adoption,

2) a TMDL established by the U.S. EPA, and

3) a No Program Alternative in which a TMDL is not implemented.

Because a TMDL is required by section 303(d) of the CWA, the No Program Alternative is only 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 the Implementation Alternatives and Site-specific Analysis section and include structural and non-structural Best Management Practices (BMPs) that are reasonably foreseeable to be implemented under the bacteria TMDL program alternatives.

This document does not analyze a “partial” TMDL (e.g., a TMDL which would achieve only a 70% or only an 80% reduction for indicator bacteria densities based on geometric mean limits and STV limits). This sort of alternative was considered and rejected. To the extent that significant adverse environmental impacts would be created by compliance with the proposed TMDL, a “partial” TMDL would have fewer environmental impacts associated with compliance (although, also, less environmental benefits of the TMDL), the specific legal requirements of section 303(d) of the CWA require a level necessary to achieve water quality standards. Thus a “partial” TMDL would not fulfill the requirements set forth in the CWA because a partial reduction in bacteria would not meet water quality standards.

The components assessed at a program-level generally are program elements that would be implemented as part of the bacteria TMDL, 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 municipalities and agencies. The project-level components will be subject to additional future environmental review, including review by cities and municipalities implementing bacteria TMDL projects.

4.1 PROGRAM ALTERNATIVES

4.1.1 ALTERNATIVE 1 – LOS ANGELES WATER BOARD TMDL

This program alternative is based on the TMDL that is presently proposed for Los Angeles Water Board consideration. The TMDL assigns both WLAs and LAs which will be implemented through NPDES and WDR permits. The final WLAs focus on reductions in sources of bacteria from municipal storm drains. The TMDL LAs focus on reductions of diffuse local sources and nonpoint sources which are not easily characterized. The TMDL LAs will be implemented primarily through regulatory mechanisms that implement the State Board’s Nonpoint Source Implementation and Enforcement Policy, including WDRs and waivers.

The Los Angeles Water Board TMDL provides a plan for addressing the adverse impacts of bacteria in the Upper Los Cerritos Channel watershed. The TMDL proposes a 15-year schedule for the Upper Los Cerritos Channel watershed. Once adopted into the Basin Plan, WLAs and LAs specified in the BPA will be considered by the NPDES permit writers when developing permit limits that are adopted in separate actions by the Los Angeles Water Board.

During the development of the TMDL, on December 17, 2019, a CEQA scoping meeting was held during which the manner of compliance was discussed. At this meeting, reasonably foreseeable means of compliance were examined. Non-structural alternatives include education and public outreach, street cleaning, storm drain cleaning, fish waste disposal, and boat sewage and disposal. Structural alternatives include local capture systems, vegetated treatment systems, local and regional infiltration systems, media filtration, regional detention systems, diversion and /or treatment, trash receptacles, pump-out facilities, and circulation increase.

This TMDL program alternative anticipates compliance through installation of structural BMPs, and non-structural BMPs as discussed in the Implementation Alternatives and Site-specific Analysis section. Potential adverse impacts to the environment stem principally from the installation, operation, and maintenance of these structural BMPs. This document analyzes these impacts and concludes that installation of implementation projects is of relatively short duration and typical of "baseline" construction and maintenance projects that occur presently in the TMDL area. It also concludes that significant impacts can be mitigated or there are alternative means of compliance available.

4.1.2 ALTERNATIVE 2 – U.S. EPA TMDL

This program alternative is based on a TMDL to be established by the U.S. EPA, if Los Angeles Water Board fails to adopt a bacteria TMDL. The technical analysis will be similar to the Los Angeles Water Board analysis and the same laws and regulations will be applied. It is assumed the technical portions and WLAs and LAs of this TMDL Program Alternative will be essentially the same as Program Alternative 1. However, such a TMDL is not implemented through a Basin Plan amendment. Therefore, the WLAs will be implemented 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 and municipalities will be required to be in full compliance immediately following the TMDL adoption by U.S. EPA, or within five years.

This TMDL program alternative also anticipates compliance through installation of structural BMPs, and non-structural BMPs as discussed in Implementation Alternatives and Site-specific Analysis section. Potential adverse impacts to the environment principally from the construction and operation of these structural BMPs. This document analyzes these impacts and concludes that installation of implementation projects is of relatively short duration and typical of "baseline" construction and maintenance projects that occur presently in the bacteria TMDL area. It also concludes that significant impacts can be mitigated or there are alternative means of compliance available, and that the benefits of the program outweigh any significant adverse environmental effects.

4.1.3 ALTERNATIVE 3 – NO PROGRAM ALTERNATIVE

This program alternative assumes that neither the U.S. EPA nor the Los Angeles Water Board implements the TMDL. While responsible entities could implement BMPs on a discretionary basis, this CEQA analysis is based on the assumption that no additional BMPs would be implemented in addition to those that are presently in place. However, the No Project TMDL is contrary to state and federal law. Therefore, the failure to implement the TMDL would not fulfill the requirements set forth in the CWA.

In addition, while impact to the environment from construction or maintenance of structural BMPs would be avoided in this No Program alternative, the alternative would not restore water contact recreational uses to the Upper Los Cerritos Channel watershed. A TMDL Program Alternative will restore water contact

recreational uses to the Upper Los Cerritos Channel watershed by attaining water quality standards through the reduction of indicator bacteria densities in excess of allowable numeric targets from these waterbodies. As such, either bacteria TMDL program alternative 1 or 2 represents a benefit to the environment and the No TMDL Program Alternative represents a continued bacteria impairment of the environment.

4.1.4 RECOMMENDED PROGRAM ALTERNATIVE

This environmental analysis finds that Alternative 1 is the most environmentally advantageous alternative.

Alternative 3 is not a feasible alternative. While it avoids potential impacts due to discrete installation projects, waterbody impairment will continue. Both Alternatives 1 and 2 will comply consistent with the CWA and water contact recreational uses to the Upper Los Cerritos Channel watershed.

The key difference between program alternatives 1 and 2 is the establishment of an implementation schedule. While the same WLAs and LAs will need to be met and the same technological choices will be available by both alternatives, Alternative 1 will allow a measured implementation plan, resulting in full compliance of bacteria objectives in 15 years. Alternative 2, in contrast, will require compliance at the time of permit renewal, which in all permit cases, is less than five years. The environmental impacts due to alternative 2 may be of greater severity given the increased intensity of implementation actions with the shorter time frame. The longer compliance schedule of Alternative 1 allows for prioritization and planning, more thoroughly mitigated 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.

Improved water quality is beneficial to the Upper Los Cerritos Channel watershed and is consistent with the Los Angeles Water Board's goals of having swimmable and fishable waters.

4.2 PROJECT-LEVEL ALTERNATIVES

The program alternatives above present many alternatives and options, and do not require any specific projects to achieve compliance. Rather, a project-level analysis must be performed by the local agencies that are required to implement the requirements of the TMDL (Public Res. Code, § 21159.2). Notably, the Water Boards are prohibited from specifying the manner of compliance with its orders (Wat. Code, § 13360), and accordingly, the actual environmental impacts will necessarily depend upon the compliance strategy selected by the local municipalities, agencies, and other permittees.

Although the Los Angeles Water Board cannot mandate the manner of compliance with its orders, foreseeable environmental impacts from methods of compliance are well known, as are feasible mitigation measures. During the development of

the TMDL, a CEQA scoping meeting was held during which the manner of compliance was discussed. At this meeting, the most reasonable means of compliance were discussed and included non-structural alternatives such as education and public outreach, street cleaning, storm drain cleaning, fish waste disposal, and boat sewage and disposal. Structural alternatives include local capture systems, vegetated treatment systems, local and regional infiltration systems, media filtration, regional detention systems, diversion and/or treatment, trash receptacles, pump-out facilities, and circulation increase.

The components assessed at a project level have specific locations which will be determined by implementing municipalities and agencies. The project-level components will be subject to additional future environmental review, including review by cities and municipalities implementing bacteria TMDL projects. Section 5 of this SED includes an extensive discussion of the project alternatives.

5. IMPLEMENTATION ALTERNATIVES AND SITE-SPECIFIC ANALYSIS

This section of the SED gives a description of the structural devices or non-structural BMPs and the type of sites where they might be placed in compliance with the bacteria TMDL.

The Los Angeles Water Board is prohibited from specifying the manner of compliance with its orders (Wat. Code, § 13360), and accordingly, the actual compliance strategies will be selected by the local agencies and other permittees. Although the Los Angeles Water Board does not mandate the manner of compliance, foreseeable methods of compliance are well known. The most likely measures of compliance include but, are not limited to, sub regional and regional BMPs such as local capture systems, vegetated treatment systems, local infiltration systems, media filtration, and diversion system BMPs, as well as non-structural alternatives such as outreach and education, street cleaning, storm drain cleaning, fish waste disposal, and boat sewage and disposal. In addition, restoration of the waterbodies, which may involve circulation, may be a means of compliance.

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 TMDL (Public Res. Code, § 21159.2.)

5.1 STRUCTURAL BMPS

Structural BMPs involve the use of man-made methods to treat or divert water at the point of generation or point of discharge to the storm system or to receiving waters. These controls can require construction and operation activities that create potentially significant environmental impacts. Structural BMPS may be sub-regional or regional in scope.

5.1.1 SUB-REGIONAL STRUCTURAL BMPS

Sub-regional structural BMPs consist of a single or a series of BMPs designed to treat wet weather flows for limited sub-regions within the watershed. Sub-regions can vary in size from small parking lots to several city blocks. These sub-regional implementation strategies typically have multiple pollutant treatment possibilities (Marina del Rey, 2007). Listed below are sub-regional structural BMPs and brief description of each.

5.1.1.1 LOCAL CAPTURE SYSTEMS

Local capture systems contribute to the control of bacteria in the watershed by reducing the volume of runoff and reducing peak flows. BMPs within this category include rain barrels, cisterns, and other containers used to hold rainwater for refuse or recharge. These systems are usually designed to capture runoff from a catchment area, such as roofs, such that the water may be reused without treatment. Rain barrels typically store between 50-200 gallons and cistern containers, with greater storage capacity, may range from 200 gallons to 10,000 gallons (Bay Area Stormwater Management Agencies Association, 2012).

Figure 1: Residential Cistern (SoCal Water$mart Website., 2021)

5.1.1.2 VEGETATED TREATMENT SYSTEMS

Vegetated systems involve the use of soils and vegetation to filter and treat storm water prior to its discharge into surface or sub-surface water. Through a combination of biofiltration, retention, infiltration, and evapotranspiration, BMPs within this category can be applied across the watershed to provide a significant contribution to bacteria control. BMPs in this category include swales, filter strips, bioretention areas, and storm water planters (McCoy et al., 2006). These can be installed as on-site features of developments or in street medians, parking lot islands, or curb extensions.

Biofiltration can remove particulates and the associated bacteria from storm water runoff. Additional bioslopes, infiltration trenches, soil grading alterations, bioretention ponds, and the use of selective vegetation can further increase the efficiency of vegetative biofiltration systems. In areas where biofiltration is not

practical, modification may include the design of bioslopes and infiltration trenches, which utilize amended soil and promote subsurface flow.

Vegetated bioswales are constructed drainages used to convey stormwater runoff and generally have a trapezoidal or parabolic shape with relatively flat side slopes. Individual vegetated bioswales generally treat drainage areas five acres or less. Vegetation in bioswales allows for the filtering of pollutants and infiltration of runoff into groundwater. Broad swales on flat slopes with dense vegetation are the most effective at pollutant removal and reducing the volume of runoff. Bioswales planted with native vegetation offer higher resistance to flow and provide a better environment

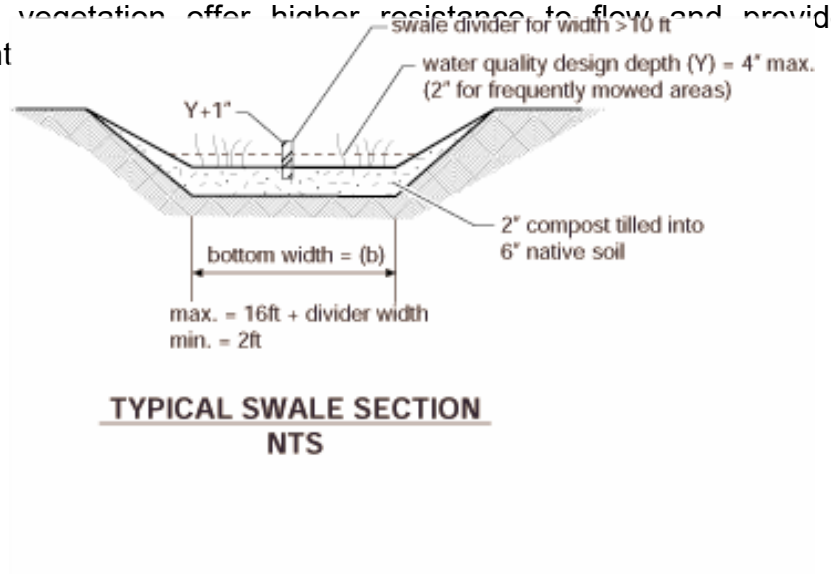

Figure 2: Cross-Section of a Vegetated Swale (Washington State Department of Ecology, 2005)

5.1.1.3 LOCAL INFILTRATION SYSTEMS

Local infiltration systems contribute to bacteria control by reducing the potentially contaminated runoff from houses, streets, parking lots, and agriculture, and mitigating peak flows. Local infiltration systems increase on-site infiltration by including the use of alternative paving materials, retention grading and infiltration pits. The effectiveness of an infiltration system is based primarily on soil characteristics. Specific BMPs in this category include permeable paving, pervious concrete, pervious asphalt, pervious paving blocks, grass pavers, gravel pavers, pervious crushed stone, retention grading, and infiltration pits. Local infiltration systems can be effective for management of stormwater runoff from areas ranging from an individual lot to several city blocks.

Figure 3: Infiltration Trenches (CASQA, 2003b; USEPA, 2006)

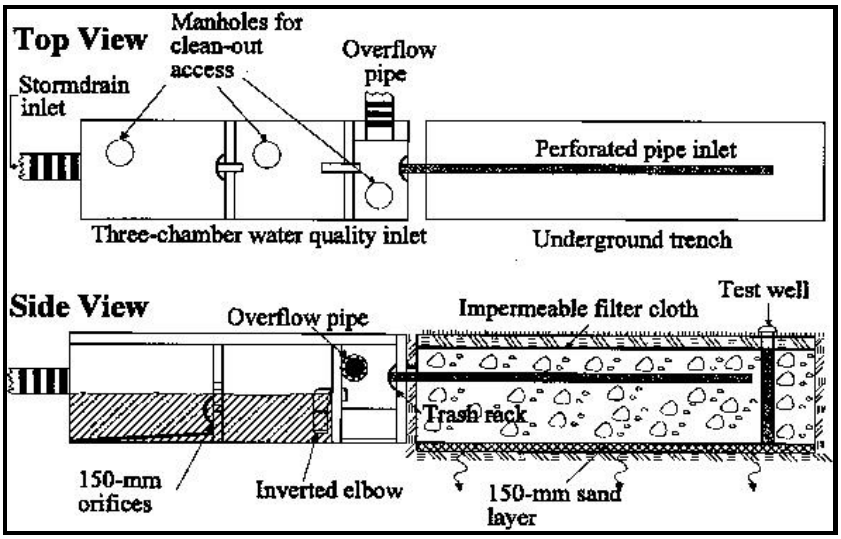

Figure 4: Schematic of an Infiltration Trench (FHWA, 2007)

5.1.1.4 MEDIA FILTRATION

Media filtration in stormwater is primarily used to separate out fine particulates and associated pollutants but might also be used for enhanced treatment to remove bacteria. To maximize bacteria removal benefits, these devices should be strategically placed in locations with high observed or suspected bacteria loadings. During filtration process, storm water is captured and either directed by gravity or pumped through media such as sand, anthracite, compost, zeolite, and combinations of natural and engineered substrates. These systems do not provide volume reduction benefits but may provide flow attenuation for small size storms. Media filters can be integrated directly into existing storm drain systems but are generally off-line facilities requiring a diversion structure.

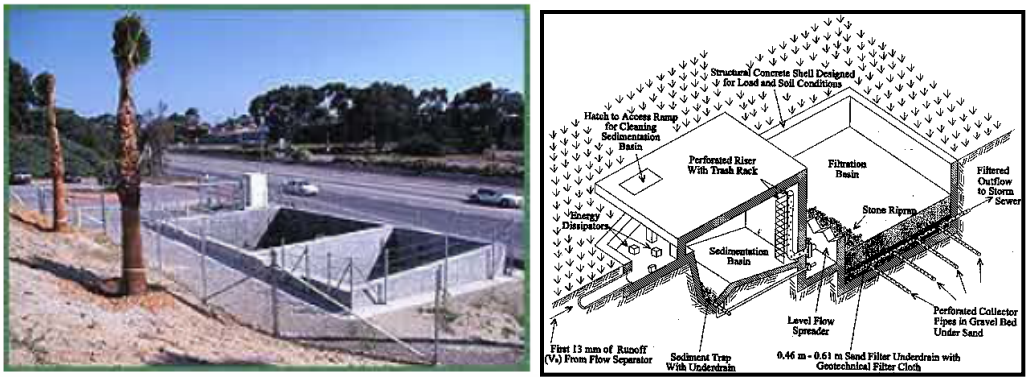

Figure 5: Austin Sand Filter and Schematic (Caltrans, 2002; FHWA 2007)

5.1.1.5 TRASH AND PET WASTE RECEPTACLES

Providing covered trash receptacles in convenient locations along the docks and at boat launch ramps may help reduce trash from entering the water and prevent birds from removing trash from uncovered or open trash receptacles. In addition, plastic bags can be provided for pet owners to collect their pet waste at specific pet walking areas.

5.1.1.6 PUMP-OUT FACILITIES

Marina operators can install pump-out stations at accessible locations, provide pump-out service and provide portable toilet dump stations near launch ramps and docks for smaller boats. Existing pumps can also be upgraded to online-monitoring systems, similar to the ones recently installed at Marina Pacifica, and/or bigger pumps to reduce blockage from bigger items, such as diapers.

5.1.1.7 CIRCULATION INCEASE

Due to the future shutdown of once through cooling (OTC) systems for Applied Energy Services (AES) Alamitos and Haynes generating stations, circulation is expected to decrease in Alamitos Bay. However, the City of Long Beach, has conducted an engineering feasibility study to evaluate the effectiveness of installing environmentally friendly new pumps at different locations within the Bay. The City of Long Beach determined that installation of fish-friendly pumps at AES is a viable option for maintaining current water circulation patterns and meeting biological, environmental, and regulatory requirements. Currently the City endeavors to formalize a partnership with AES and other stakeholders to identify and implement a preferred solution prior to the cessation of OTC operations in 2023. In addition, the City is evaluating the infrastructure needed to support installation of the fish-friendly pumps. The project proposes to replace two existing non-fish friendly vertical-axial-flow pumps at the AES Unit 6 intake well used for cooling during power generation with two new fish-friendly vertical-axial-flow pumps that will be used to circulate water without the effects of cooling (City of Long Beach, 2020).

Circulation may also be increased by constructing a water infusion system to pump water from adjacent basins through a piping or culvert system to enhance the circulation and flushing, and to reduce water retention time.

5.1.2 REGIONAL STRUCTURAL BMPS

Regional structural BMPs contain many similarities to sub-regional structural BMPs but differ in both the scope and scale of implementation strategies. Treatment areas can range from several sub-regions to the entire watershed. Regional structural BMPs retain the multiple treatment potential of sub-regional BMPs. Listed below are regional structural BMPs and a brief description of each:

5.1.2.1 REGIONAL INFILTRATION SYSTEMS

A regional infiltration facility is generally a large basin capable of detaining the entire volume of a design storm (a specific amount of rainfall over a specific duration) and infiltration volume over a specified period. Regional biofiltration systems, including sub-surface flow wetlands, promote hydrolysis, oxidation, and rhizodegradation from soil filtration through the aerobic and anaerobic zones of the soil matrix (Halverson, 2004). These systems can treat a variety of different pollutants and can be utilized for flood mitigation. Water quality benefits are primarily accomplished by impounding water and allowing it to slowly percolate in surface soil and eventually to groundwater. In the event of a large storm, some flow will bypass infiltration and discharge to the receiving water untreated. However, treatment of a large percentage of flow would still be achieved. Application of a regional facility depends on suitability of soils for infiltration and the ability of sufficient open space. These facilities can be applied as a stand-alone treatment feature for bacteria control on a subwatershed scale.

Figure 6: Regional Infiltration Basin (CASQA, 2003a)

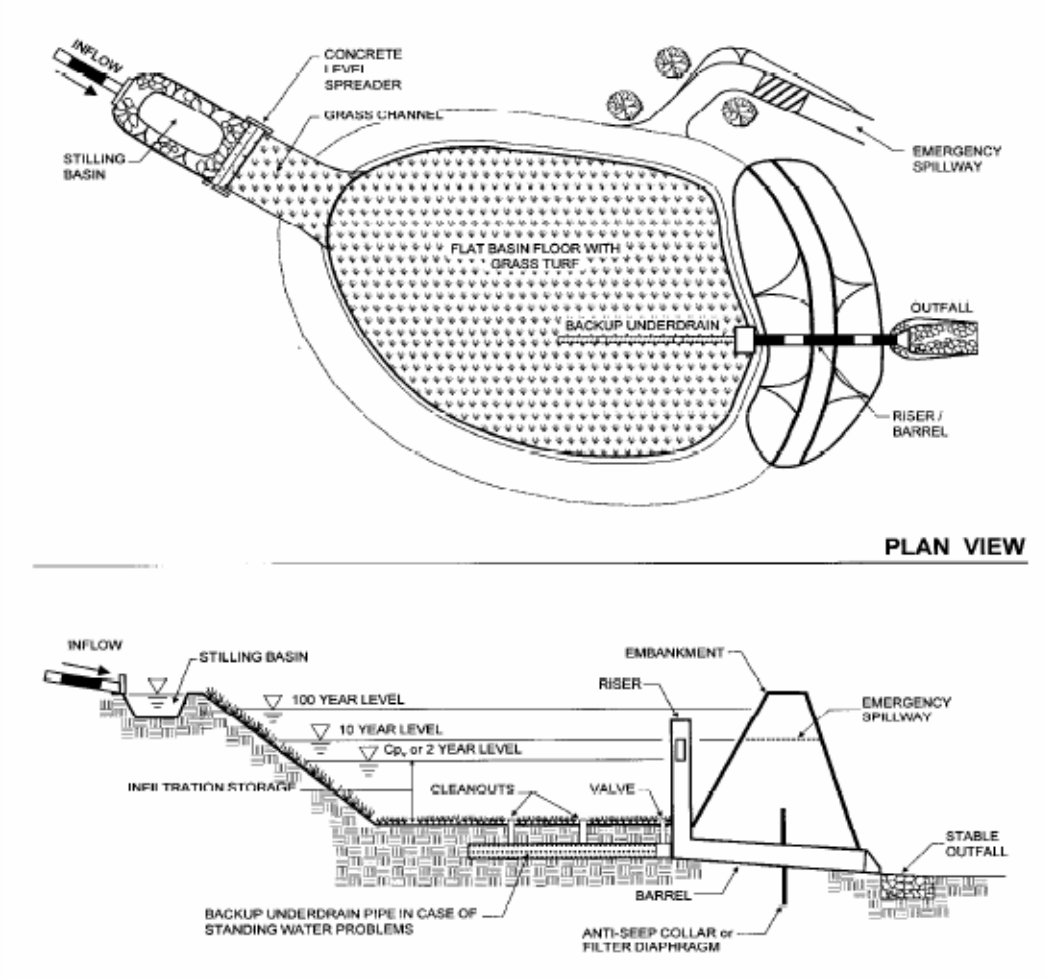

Figure 7: Schematic of Regional Infiltration Basins (CASQA, 2003a)

5.1.2.2 REGIONAL DETENTION SYSTEMS

Regional detention systems consist of a large basin equipped with outlet structures that regulate rates of water release and can help reduce flow volume and promote sedimentation (McCoy et al., 2006). They can be used upstream of an infiltration facility, constructed wetland, or disinfection plant to equalize flows and reduce sediment loading. These basins can be shallow, lined with vegetation, and separated into multiple bays to improve their water quality regulating functions. Unlike infiltration systems, regional detention systems do not require favorable soils and can be deep, steep-wall basins, or underground vaults when open space is limited. However, these systems may not be as effective as a stand-alone treatment option for bacteria.

Figure 8: Detention Basins (CASQA, 2003a)

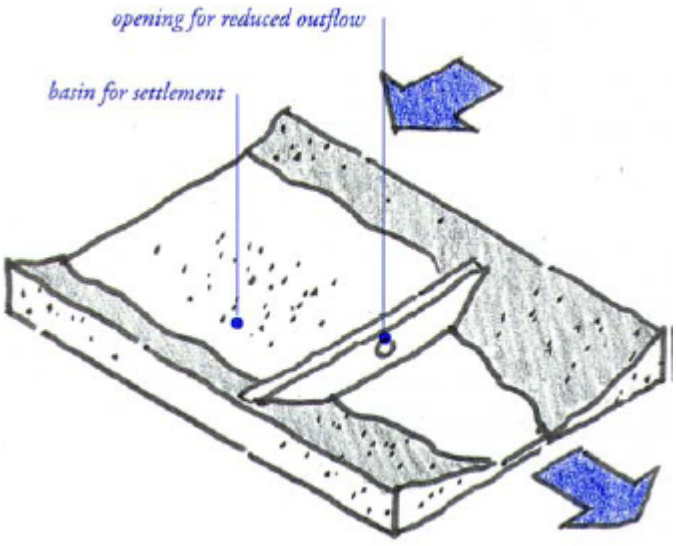

Figure 9: Simple Detention Basin (CASQA, 2003a)

5.1.2.3 DIVERSION AND/OR TREATMENT

A diversion and/or treatment BMP routes urban runoff away from the storm drain system or waterway, and redirects the flow, through a series of tanks and pumps, into the sanitary sewer system or other treatment system, where the contaminated runoff then receives treatment and filtration before being reused or discharged.

This type of diversion would be a sub-regional diversion if it were only responsible for a few streets. Whereas, if the device is placed at the end of a large outfall, it would be regional and drain larger amounts of urban runoff.

Diversions are usually designed to treat low flows and dry-weather urban runoff, but could also treat a portion of wet-weather flow. The unit collects street runoff

and, through a series of tanks and pumps, diverts the liquid flow into the sanitary sewer system. The diversion device may stop the flow of polluted urban runoff from a storm drain from reaching the river.

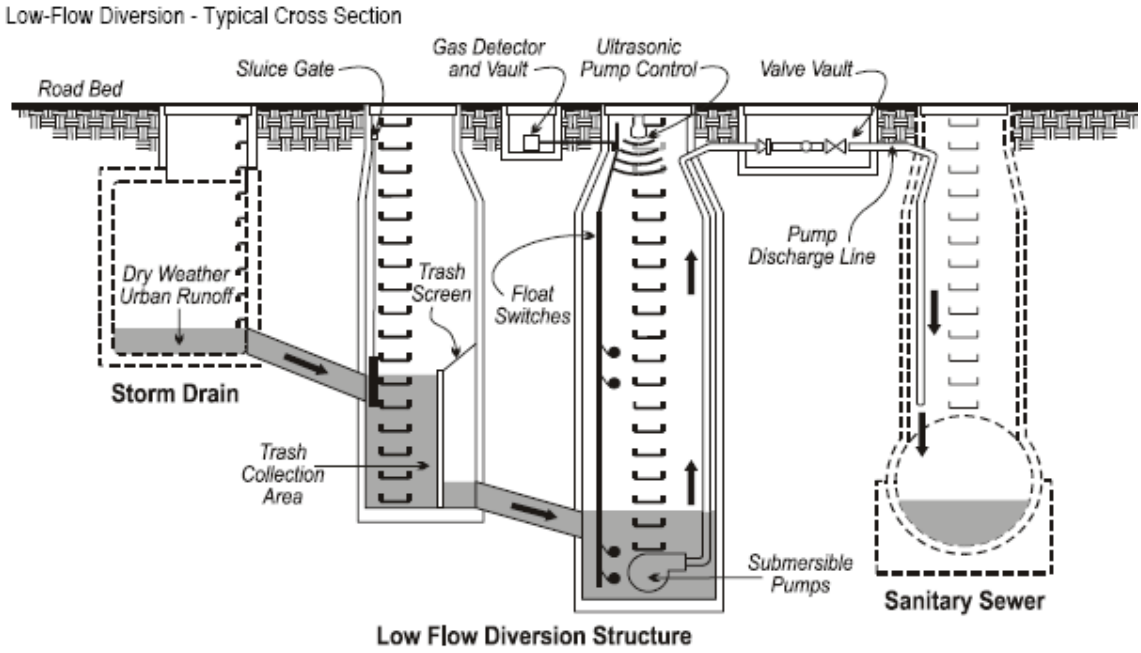

Figure 10: Schematic of Low Flow Diversion Structure (CDM, 2005)

Depending on the water quality of the flow, it may have to be passed through a wastewater treatment facility that uses UV irradiation, chlorination, ozonolysis or biocides and peracetic acids. Chlorination, wherein chlorine being a strong oxidant breaks the cell membranes of bacteria and kills them, is one of the most commonly used methods of disinfection. UV light with a wavelength of 220 to 320 nanometers can be used to inactivate pathogens. Ozone is an extremely reactive oxidant that inactivates pathogens through lysis and can be generated onsite as disinfection tool. After treatment, water can be channeled to receiving waters, to a nearby pond or lake or routed for a secondary usage.

5.2 NON-STRUCTURAL BMPS

Non-structural BMPs include prevention practices designed to improve water quality and reduce bacteria sources. Non-structural BMPs may require minimum construction. In addition, non-structural BMPs provide for the development of bacteria control programs that include, but are not limited to, prevention, education, and regulation. Less significant adverse impacts on the environment are anticipated for these controls. These programs are described below:

5.2.1 EDUCATION AND PUBLIC OUTREACH

Education and outreach may minimize the potential for contamination of stormwater runoff by encouraging local residents to clean up after their pets, pick

up litter, minimize runoff from 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 that pollutant runoff can lead to contamination of receiving waters.

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

Storm drain inlet stenciling is another means of educating the public about the direct discharge of storm water to receiving waters and the effects of polluted runoff on receiving water quality. Storm drain stenciling involves placing a clean water message next to a storm drain to inform the public where the storm drain discharges, and as a result, the public is less likely to use storm drains to dispose of waste.

5.2.2 STREET CLEANING

Street and parking lot cleaning reduce trash and pollutant loading to urban storm drains. This management measure includes employing pavement cleaning practices such as street sweeping on a regular basis to minimize trash, sediment, debris, and other pollutants that might end up in receiving waters.

5.2.3 STORM DRAIN CLEANING

Routine cleaning of the storm drain system reduces the amount of trash, bacteria and other pollutants entering the river, prevents clogging, and ensures the flood control capacity of the system. A successful storm drain cleaning program includes regular inspection and cleaning of catch basins and storm drain inlets, increased inspection and cleaning in areas with high trash accumulation, accurate recordkeeping, cleaning immediately prior to the rainy season to remove accumulated trash and other pollutants, and proper storage and disposal of collected material (CASQA, 2003a).

5.2.4 FISH WASTE DISPOSAL

Fish waste can cause water quality problems at marinas where large quantities of fish are landed, such as places where fishing tournaments are held or during peak fishing seasons. For boaters, fish can be cleaned offshore where the fish was caught, or at designated fish cleaning stations, or boaters can practice catch- and -release or tag- and -release fishing. To reduce fish waste from entering the water, marina operators can install fish cleaning stations at the marina or at boat launch sites, and display posters to remind anglers to properly dispose of fish parts in clearly designated containers.

5.2.5 BOAT SEWAGE AND DISPOSAL

If a recreational boat has a holding tank equipped with a Y-valve and through-hull fitting, the Y-valve should always be kept closed and locked within the 3-mile limit

from shore. Boaters should use the marina's sewage pump-out stations and dump station to empty holding tanks or portable toilets after a day on the water. Clearly marked signs showing the location of pump-out stations and dump stations at the marina and launch ramps can help prevent direct discharge of sewage from boats. To prevent spills, marine operators should inspect and regularly maintain pump-out systems, disinfect all suction connections, and ensure that septic receptacles are emptied when full.

The City of Long Beach Department of Parks, Recreation & Marine regulations allow for marine managers to place dye tablets in holding tanks, or to supply proof as to how the holding tank is expelled, though this regulation has not been routinely enforced (Long Beach Parks, Recreation & Marine, 2017; Hallinan, 2020).

To help prevent bacteria from entering the waters from boats, dye tablets can also be placed in the holding tanks of all boats entering the marinas to ensure that the holding tanks do not leak.

Boat owners may also help reduce bacteria from entering the water by using holding tank additives to help breakdown holding tank contents. Additives increase the rate of breakdown and decrease bacteria and oxygen demand when the contents are legally discharged offshore.

Marina owners/operators and vessel terminal owner/operators can implement marina or vessel terminal regulation to support federal or state regulation. Marina owners/operators, and vessel terminal owner/operators are required to adhere to all existing local, state and federal regulations pertaining to marine sanitation devices and notify the owners/operators of vessels within the marina that it is illegal to discharge the contents of their marine sanitation device into waters of the State. The owners/operators of vessels can be notified by the marina owner/operator that according to Harbors and Navigation Code section 780, no person shall disconnect, bypass or operate a marine sanitation device so as to potentially discharge sewage and that no person shall occupy or operate a vessel in which a marine sanitation device is installed unless the marine sanitation device is properly secured. The marina owners/operators and vessel terminal owner/operators can also provide owners/operators of vessels occupying or visiting their slips a map identifying the location of pump-out stations and dump stations (California Division of Boating and Waterways, 2021).

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 the SED. The implementation alternatives for achieving compliance with the Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon Indicator Bacteria TMDL are described in detail in section 5 Description of Implementation Alternatives and again in the TMDL Staff Report. Each of these implementation alternatives have been independently evaluated in this draft SED. The

environmental setting for the TMDL is discussed in section 6.1.3. Environmental Setting. The installation, operation and maintenance activities associated with the TMDL implementation alternatives are discussed in the section 6.2. Section 6.2 contains the environmental checklist, which includes the potential negative environmental impacts of the implementation alternatives.

6.1.1 APPROACH TO ENVIRONMENTAL SETTING AND IMPACT ANALYSIS

Any potential environmental impacts associated with the Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon Indicator Bacteria TMDL depend upon the specific compliance projects selected by the responsible entities, most of whom are public agencies subject to their own CEQA obligations. (Public Res. Code, § 21159.2.) This CEQA substitute document identifies broad mitigation approaches that could be considered at the program level. Consistent with PRC §21159, the substitute document does not engage in speculation or conjecture, but rather considers the reasonably foreseeable environmental impacts of 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.

Within each of the sections listed above, this draft 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 Upper Los Cerritos Channel watershed. This is the geographic area for assessing impacts of the different implementation alternatives, because the high level of fecal indicator bacteria in the Upper Los Cerritos Channel watershed would be controlled and/or eliminated by any one of or a combination of the implementation alternatives. Also, any potential impacts of implementing the proposed alternatives would be focused in this area.

The implementation alternatives evaluated in this draft 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 once their mode of achieving compliance with the bacteria TMDL has been determined. The analysis in this draft 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. Several handbooks are available and currently used by municipal agencies that provide guidance for the selection and implementation of Best Management Practices (BMPs) (Caltrans, 2002; CASQA, 2003a; CASQA, 2003b; WERF, 2005).

6.1.2 PROGRAM-LEVEL VERSUS PROJECT-LEVEL ANALYSIS

As previously discussed, the Los Angeles Water Board is the lead agency for the TMDL program, while the responsible entities are the lead agencies for any and all projects implemented, within their jurisdiction, to comply with the program. The Los Angeles Water Board does not specify the actual means of compliance by

which responsible entities choose to comply with the TMDL. Therefore, the implementation alternatives are mostly evaluated at a program level in this draft SED. The alternatives assessed at a program level generally are projects that would be implemented as part of TMDL compliance, Public Resources Code section 21159 places the responsibility of project-level analysis on the agencies that will implement the water board's TMDL.

6.1.3 ENVIRONMENTAL SETTING

Los Cerritos Channel watershed is divided into five subwatersheds: Los Cerritos Channel subwatershed, Los Cerritos Channel Estuary subwatershed, Alamitos Bay subwatershed, Colorado Lagoon subwatershed, and Los Cerritos Channel Coastal subwatershed (Figure 11). This SED encompasses the Los Cerritos Channel subwatershed, the Los Cerritos Channel Estuary subwatershed, the Alamitos Bay subwatershed, and the Colorado Lagoon subwatershed. For the purpose of this SED these four subwatersheds will be collectively referred to as Upper Los Cerritos Channel watershed. The Los Cerritos Channel Coastal subwatershed is outside the scope of this SED. The Upper Los Cerritos Channel watershed is located on the west side of San Gabriel River. The cities of Bellflower, Cerritos, Downey, Lakewood, Long Beach, Paramount, and Signal Hill as well as a small portion of unincorporated Los Angeles County are located within Upper Los Cerritos Channel watershed.

Los Cerritos Channel is a concrete-lined freshwater stream, 2.1 miles in length. Los Cerritos Channel is channelized until approximately Atherton Road, where it continues for approximately 0.5 miles as a soft bottom channel to Anaheim Road.. The soft bottom segment of Los Cerritos Channel is where the tidal prism begins and connects to the Los Cerritos Channel Estuary at Anaheim Road. From Estuary it connects with Alamitos Bay through the Marine Stadium. Colorado Lagoon was naturally subject to tidal influence but is now hydraulically connected to Alamitos Bay's Marine Stadium via a 900-foot box culvert that runs under Marina Vista Park. The Los Cerritos Channel wetlands are part of the historic Los Cerritos wetlands complex which exist today in both the Cities of Long Beach and Seal Beach. The Los Cerritos Channel wetlands are within the Los Cerritos Channel Estuary subwatershed and are home a great diversity of birds. Colorado Lagoon is also home to estuarine habitat for sensitive species.

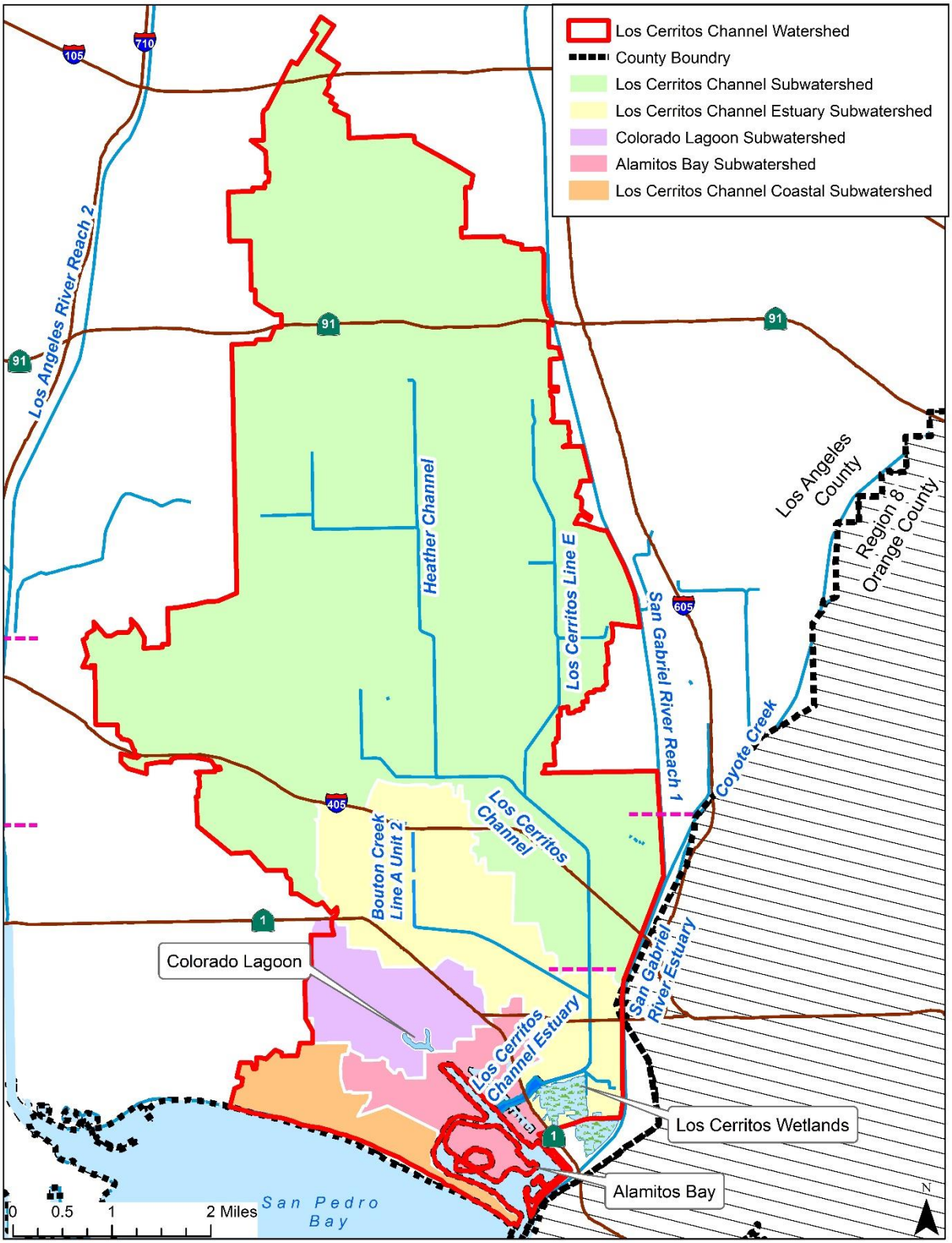

Figure 11: Subwatersheds in Los Cerritos Channel watershed

6.1.3.1 DESCRIPTION OF THE STORM DRAIN SYSTEM

The storm drain system in the Upper Los Cerritos Channel watershed is a vast network of underground pipes and open channels that were designed to prevent flooding. Runoff drains from the streets, into the gutters, and enters the system through an opening in the curb called a catch basin. Catch basins serve as the neighborhood entry point to the journey into the ocean.

The backbone of the flood control system in Los Angeles County, dating back to the 1930's, was designed, constructed, maintained, and monitored by the Los Angeles County Flood Control District, represented by the County of Los Angeles Department of Public Works. Other flood control systems, either in whole or in part, are the jurisdiction of other permittees, Caltrans, or the US Army Corps of Engineers. Stormwater and urban runoff from streets are collected to approximately 100,000 catch basins. These are inlets to a 1,500 mile-long maze of pipes, open channels, and outlets that make up the storm drain system.

The storm drain system receives no treatment or filtering and is completely separate from the sanitary sewer system. The following graphic shows the storm drain system in Los Angeles County (Figure 12). In general, curbside catch basins are the primary points of entry for urban runoff. From there, runoff flows into underground tunnels that empty into flood control channels in the Upper Los Cerritos Channel watershed.

Figure 12: Storm Drain Systems in the Greater Los Angeles Area (Los Angeles Water Board, 2007)

6.1.4 BENEFICIAL USES OF THE WATERSHED

The Basin Plan designates beneficial uses for water bodies in the Los Angeles Region. These uses are recognized as existing, potential, or intermittent uses. The Basin Plan defines one existing beneficial use, two potential beneficial uses, and

two intermittent beneficial uses for Los Cerritos Channel. The Basin Plan defines twelve existing beneficial uses, and no potential or intermittent beneficial uses for Los Cerritos Channel Estuary. There are eleven existing beneficial uses, and no potential or intermittent beneficial uses for Alamitos Bay. There are five existing beneficial uses, one potential beneficial use, and no intermittent beneficial uses for Colorado Lagoon. All beneficial uses must be protected. The two beneficial uses pertinent to bacteria are REC-1 and REC-2.

6.1.4.1 LOS CERRITOS CHANNEL

A. EXISTING BENEFICIAL USE

Wildlife Habitat (WILD): Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

B. POTENTIAL BENEFICIAL USE

- Water Contact Recreation (REC-1): Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.

- Municipal and Domestic Supply (MUN): Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.

C. INTERMITTENT BENEFICIAL USE

- Non-contact Water Recreation (REC-2): Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

- Warm Freshwater Habitat (WARM): Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

6.1.4.2 LOS CERRITOS CHANNEL ESTURARY

A. EXISTING BENEFICIAL USE

- Water Contact Recreation (REC-1)

- Non-contact Water Recreation (REC-2)

- Wildlife Habitat (WILD)

- Industrial Service Supply (IND): Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.

- Navigation (NAV): Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.

- Commercial and Sport Fishing (COMM): Uses of water for commercial or recreational collection of fish, shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.

- Estuarine Habitat (EST): Uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).

- Marine Habitat (MAR): Uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).

- Rare, Threatened, or Endangered Species (RARE): Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

- Migration of Aquatic Organisms (MIGR): Uses of water that support habitats necessary for migration, acclimatization between fresh and saltwater, or other temporary activities by aquatic organisms, such as anadromous fish.

- Spawning, Reproduction, and/or Early Development (SPWN): Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

- Shellfish Harvesting (SHELL): Uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters, and mussels) for human consumption, commercial, or sports purposes.

6.1.4.3 ALAMITOS BAY

A. EXISTING BENEFICIAL USE

- Water Contact Recreation (REC-1)

- Non-contact Water Recreation (REC-2)

- Wildlife Habitat (WILD)
- Industrial Service Supply (IND)
- Navigation (NAV)
- Commercial and Sport Fishing (COMM)
- Estuarine Habitat (EST)
- Marine Habitat (MAR)
- Rare, Threatened, or Endangered Species (RARE)
- Shellfish Harvesting (SHELL)
- Wetland Habitat (WET): Uses of water that support wetland ecosystems, including, but not limited to, preservation or enhancement of wetland habitats, vegetation, fish, shellfish, or wildlife, and other unique wetland functions which enhance water quality, such as providing flood and erosion control, stream bank stabilization, and filtration and purification of naturally occurring contaminants.

6.1.4.4 COLORADO LAGOON

A. EXISTING BENEFICIAL USE

- Water Contact Recreation (REC-1)
- Non-contact Water Recreation (REC-2)
- Wildlife Habitat (WILD)
- Commercial and Sport Fishing (COMM)
- Shellfish Harvesting (SHELL)

B. POTENTIAL BENEFICIAL USE

- Warm Freshwater Habitat (WARM)

6.2 CEQA CHECKLIST AND DETERMINATION

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

6.2.1 ENVIRONMENTAL CHECKLIST

The Environmental Checklist focuses on the implementation activities described in section 5 Implementation Alternatives. Some of the TMDL implementation measures solely involve planning or assessment, public outreach and education, and water quality monitoring. These activities do not cause a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment.

The possible responses to the questions in the Environmental Checklist and the types of discussion required are summarized below:

Potentially Significant Impact. Checked if a discussion of the existing setting (including relevant regulations or policies pertaining to the subject) and project characteristics with regard to the environmental topic demonstrate, based on substantial evidence, supporting information, previously prepared and adopted environmental analysis documents, and specific criteria or thresholds used to assess significance, that the project will have a potentially significant impact of the type described in the question.

Less Than Significant with Mitigation Incorporated. Checked if the discussion of existing setting and specific project characteristics, adequately supported with relevant research or documents, indicate that the project clearly will or is likely to have particular physical impacts that will exceed the given threshold or criteria of significance, and that with the incorporation of clearly defined mitigation measures into the project, such impacts will be avoided or reduced to less-than-significant levels.

Less Than Significant Impact. Checked if a more detailed discussion of existing conditions and specific project features, based on relevant information, reports or studies, demonstrates that, while some effects may be discernible with regard to the individual environmental topic of the question, the effect would not exceed a threshold of significance which has been established by the appropriate agencies. The discussion may note that due to the evidence that a given impact would not occur or would be less than significant, no mitigation measures are required.

No Impact. Checked if brief statements (one or two sentences) or cited reference materials (maps, reports, or studies) clearly show that the type of impact could not be reasonably expected to occur due to the specific characteristics of the project or its location.

6.2.1.1 AESTHETICS

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

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

6.2.1.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire

Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

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

No.	Impact Description	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				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

6.2.1.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. The level of impacts to air quality are evaluated based on the following questions posed under impact description in the matrix below. Would the project:

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

6.2.1.4 BIOLOGICAL RESOURCES

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

No.	Impact Description	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	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 Wildlife or U.S. Fish and Wildlife Service?	x			

No.	Impact Description	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
C	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	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			

6.2.1.5 CULTURAL RESOURCES

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

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

6.2.1.6 ENERGY

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

No.	Impact Description	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy	x			

	resources, during project construction or operation?				
B	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	x			

6.2.1.7 GEOLOGY AND SOILS

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

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

	the risk of loss, injury or death involving seismic-related ground failure, including liquefaction?				
D	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving landslides?		x		
E	Result in substantial soil erosion or the loss of topsoil?	x			
F	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	x			
G	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	x			
H	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?			x	
I	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	x			

6.2.1.8 GREENHOUSE GAS EMISSIONS

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

No.	Impact Description	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	x			
B	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			x	

6.2.1.9 HAZARDS AND HAZARDOUS MATERIALS

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

No.	Impact Description	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	x			
B	Create a significant hazard to the public or the environment through reasonably foreseeable	x			

	upset and accident conditions involving the release of hazardous materials into the environment?				
C	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	x			
D	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				x
E	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?		x		
F	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	x			
G	Expose people or structures, either directly or indirectly, to a significant			x	

	risk of loss, injury or death involving wildland fires?				

6.2.1.10 HYDROLOGY AND WATER QUALITY

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

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

	course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?				
E	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				x
F	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?				x
G	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				x
H	Conflict with or obstruct implementation of a water quality control plan or		x		

	sustainable groundwater management plan?				

6.2.1.11 LAND USE AND PLANNING

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

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

6.2.1.12 MINERAL RESOURCES

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

No.	Impact Description	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				x
B	Result in the loss of availability of a locally				x

	important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

6.2.1.13 NOISE

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

No.	Impact Description	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		x		
B	Generation of excessive groundborne vibration or groundborne noise levels?		x		
C	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?		x		

6.2.1.14 POPULATION AND HOUSING

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

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

6.2.1.15 PUBLIC SERVICES

The level of impacts to public services are evaluated based on the following questions posed under impact description in the matrix below. 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 following public services:

No.	Impact Description	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Fire protection?		x		
B	Police protection?		x		

C	Schools?				x
D	Parks?		x		
E	Other public facilities?		x		

6.2.1.16 RECREATION

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

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

6.2.1.17 TRANSPORTATION

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

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

6.2.1.18 TRIBAL CULTURAL RESOURCES

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

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

6.2.1.19 UTILITIES AND SERVICE SYSTEMS

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

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

	attainment of solid waste reduction goals?				
E	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	x			

6.2.1.20 WILDFIRE

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

No.	Impact Description	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Substantially impair an adopted emergency response plan or emergency evacuation plan?	x			
B	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	x			
C	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water	x			

	sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
D	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	x			

6.2.1.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

No.	Impact Description	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the		x		

	range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
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 ENVIRONMENTAL CHECKLIST DISCUSSION

This section provides detailed discussions on the items listed in the environmental checklist above. The following analysis considers a range of non-structural and structural BMPs that might be used but is by no means an exhaustive list of available BMPs. When BMPs are selected for implementation, a project level and site-specific CEQA analysis must be performed by the responsible entity.

Many of the mitigation measures identified are common practices currently employed by agencies when planning and implementing stormwater BMPs. Agencies such as California Stormwater Quality Association (CASQA) and Water Environment Research Foundation (WERF) publish handbooks containing

guidance on the selection, siting, design, installation, monitoring, and evaluation of stormwater BMPs (CASQA, 2003a, CASQA, 2003b, WERF, 2005). The evaluation considers whether the environmental impact indicated will result a substantial, adverse change in any of the physical conditions within the area affected by the activity. In addition, the evaluation discusses environmental effects in proportion to their severity and probability of occurrence.

6.2.2.1 AESTHETICS DISCUSSION

Aesthetics. a. Have a substantial adverse effect on a scenic vista?

Answer: Less Than Significant with Mitigation Incorporated

Construction of structural BMPs could potentially result in a temporary impairment of a scenic vista 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, 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 should be removed from the site as soon as they are no longer necessary. After construction, the scenic vista may return to the condition it was prior to the construction.

Non-structural BMPs will not result in the obstruction of any scenic vista to the public because none of the BMPs would introduce any physical effects that could impact this characteristic.

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

Answer: No impact

Structural and non-structural BMPs implemented for the TMDL would occur in localized areas throughout the watershed and would not occur within a designated state scenic highway, and therefore do not result in adverse aesthetic impacts to state scenic highways or scenic resources.

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

Answer: Less Than Significant with Mitigation Incorporated

See response to Aesthetics. a.

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

Answer: Less Than Significant with Mitigation Incorporated

The Implementation of the proposed TMDL is not likely to produce new light or glare because none of the reasonably foreseeable means of compliance involve additional lighting. Should nighttime construction activities be proposed or should lighting be used to increase safety around structural BMPs or treatment facilities, potential impacts should be evaluated at the project level. A lighting plan could be prepared to include shielding on all light fixtures and address limiting light trespass and glare using shielding and directional lighting methods, including but not limited to, fixture location and height. Potential mitigation efforts may also include screening and low-impact lighting, performing construction during daylight hours, or designing security measures for installed structural BMPs that do not require night lighting.

Non-structural BMPs will not produce new light or glare because none of the BMPs would introduce any physical effects that could impact light and glare.

6.2.2.2 AGRICULTURE AND FORESTRY RESOURCES DISCUSSION

Agriculture & Forestry Resources. 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?

Answer: No impact

A search of the California Important Farmland Finder

(https://maps.conservation.ca.gov/dlrp/ciff/), hosted by the Department of Conservation, on March 17, 2020, identified no land designated as Prime, Unique, or Farmland of Statewide Importance in the subwatersheds. Therefore, no impacts would result.

Agriculture & Forestry Resources. b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Answer: No impact

See response to Agriculture and Forest Resources. a.

Agriculture & Forestry Resources. 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))?

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 the Upper Los Cerritos Channel watershed.

Agriculture & Forestry Resources. d. Result in the loss of forest land or conversion of forest land to non-forest use?

Answer: No impact

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

Agriculture & Forestry Resources. 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?

Answer: No impact

See response to Agriculture & Forestry Resources. a.

6.2.2.3 AIR QUALITY DISCUSSION

Air Quality. a. Conflict with or obstruct implementation of the applicable air quality plan?

Answer: Potentially Significant Impact

Air quality in the watershed falls under the jurisdiction of the California Air Resources Board (ARB), and the South Coast Air Quality Management District (SCAQMD). The ARB is responsible for controlling mobile emission sources statewide, while the 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. 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 SCAQMD Air Quality Significance thresholds considering the scale of the TMDL program. Detailed analysis should be conducted at project level.

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 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 is within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

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

Answer: Potentially Significant Impact

Upper Los Cerritos Channel watershed is within Los Angeles County. 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 Air Quality a.

Air Quality. c. 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 Los Angeles Water Board cannot

specify the manner of compliance with the TMDL, the Los Angeles 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 TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

Air Quality. d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Answer: Potentially Significant Impact

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.

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 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 is within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

6.2.2.4 BIOLOGICAL RESOURCES DISCUSSION

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

Answer: Potentially Significant Impact

Depending on the structural BMPs selected, direct or indirect impacts to special-status species may possibly occur during and after construction. Special-status species are present in many of the watersheds. 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 a sensitive and/or special-status species could result including the following:

- Direct loss of a sensitive and/or 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

The following mitigation measures should be implemented to reduce or avoid potential project-level impacts to sensitive species. Mitigation measures, however, could be implemented to ensure that special status species are not negatively impacted, nor their habitats diminished. For example, when the specific projects are developed and sites identified, a focus protocol species survey and/or a search of the California Natural Diversity Database should be performed to confirm that any potentially special-status 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 applicable California Department of Fish and Wildlife (CDFW) and/or United State Fish and Wildlife Service (U.S. FWS) 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 in accordance with U.S. FWS and/or CDFW protocols 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 should be developed with the U.S. FWS and CDFW to reduce potential impacts.

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 siting away from this critical habitat. It is not reasonably 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 CDFW and the U.S. FWS, 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.

Non-structural BMPs would involve no change to either directly or through habitat modifications, on any species.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs. tit., 14, § 15091, subd. (a)(3)).

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

Answer: Potentially Significant Impact

See response to Biological Resources. a.

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

Answer: Potentially Significant Impact

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 Biological Resources a**.**

Biological Resources. 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?

Answer: Potentially Significant Impact

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. Construction of reasonably foreseeable structural BMPs likely would not restrict wildlife

movement because the sizes of the BMPs are generally too small to obstruct a corridor. For terrestrial animals, corridors would be maintained regardless of stream flow since reduced flows would not provide physical barriers for these animals. In the event that any structural BMP built would hinder animals from moving throughout the stream corridor, a pathway around the BMP could be constructed.

Compliance measures should be avoided which result in significant barriers to the migration or movement of any native resident or migratory fish or wildlife species, and instead non-structural BMPs and/or structural BMPs other than fences or obstructions that would not change the migration or movement of species should be emphasized. Potential project sites in open space areas that might be used to install structural BMPs should be evaluated in consultation with CDFW to identify potential wildlife travel routes. If a wildlife travel route is identified that could be impacted by the installation of structural BMPs, then the project should be designed to include a new wildlife travel route in the same general location.

Some migratory avian species may use portions of potential project sites, including new 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 U.S. FWS and CDFW. 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 U.S. FWS and/or CDFW guidelines. If no active avian nests are identified on or within the appropriate distance of construction areas, further mitigation may not be necessary.

Alternatively, to avoid impacts, the agencies implementing the TMDL may begin construction after the previous breeding season for covered avian species and before the next breeding season begins. If a protected avian species was to establish an active nest after construction was initiated and outside of the typical breeding season (February – August), the project sponsor, would be required to establish a buffer as required by U.S. FWS between the construction activities and the nest site.

If active nest for protected avian species are found within the construction footprint or within the prescribed 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 U.S. FWS or CDFW. These impacts are highly site specific, and assuming they are foreseeable, they would require a project-level analysis and mitigation plan.

Non-structural BMPs would involve no impact to 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.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

Biological Resources. e. 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 TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit.14, § 15091, subd. (a)(3)).

Biological Resources. 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?

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 TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

6.2.2.5 CULTURAL RESOURCES DISCUSSION

Cultural Resources. a. Cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5?

Answer: Potentially Significant Impact

Stormwater BMPs, and diversion and treatment facilities would be installed in currently urbanized areas where ground disturbance has previously occurred. Because these areas are already fully urbanized it is unlikely that implementation of structural treatment BMPs would cause a substantial adverse change to historical or archeological resources, destroy paleontological resources, or disturb human remains. However, depending on the final location of facilities, potential impacts to cultural resources could occur. The site-specific presence or absence of these resources is unknown because the specific locations for facilities will be determined by responsible agencies at the project level. Installation of these systems could result in minor ground disturbances, which could impact cultural resources if they are sited in locations containing these resources and where disturbances have not previously occurred. 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. If during the project-level environmental analysis, 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 TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

Cultural Resources. b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 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. 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 should 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 TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

Cultural Resources. c. Disturb any human remains, including those interred outside of dedicated 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. In the event that human remains are discovered in project area during construction, all work should 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 TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

6.2.2.6 ENERGY DISCUSSION

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

Answer: Potentially Significant Impact

Potential environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources is best addressed at the project level. Entities will need to identify inefficient, or unnecessary consumption of energy resources as part of a project-level analysis.

Construction of structural BMPs require energy and fuel for heavy equipment, machinery, and vehicles. Energy demand and consumption during construction are temporary. In order to avoid wasteful, inefficient, or unnecessary consumption of energy resources, responsible parties could further mitigate fuel and energy consumption during construction using more energy efficient vehicles and equipment.

Increases education and public outreach may also increase consumption and demand for fuel and energy. Responsible parties may also employ volunteers and choose to employ outreach activities and use non-fuel consuming enforcement vehicles such as electric cars or bicycles.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

Energy. b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Answer: Potentially Significant Impact

See response to Energy. a.

6.2.2.7 GEOLOGY AND SOILS DISCUSSION

Geology and Soils. a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving rupture of known

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

Answer: No impact.

Because of the small size and scope of the reasonably foreseeable projects, is not anticipated that reasonably foreseeable methods of structural and non-structural BMPs will cause potential substantial adverse effects, such as the risk of loss, injury or death involving rupture of known earthquake fault.

Geology and Soils. b. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking?

Answer: No Impact

Because of the small size and scope of the reasonably foreseeable projects, is not anticipated that reasonably foreseeable methods of structural and non-structural BMPs will cause potential substantial adverse effects, such as the risk of loss, injury or death involving strong seismic ground shaking.

Geology and Soils. c. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction?

Answer: Less Than Significant Impact with Mitigation Incorporated

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.

Geology and Soils. d. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving landslides?

Answer: Less Than Significant Impact with Mitigation Incorporated

The implementation of runoff BMPs, by their design would reduce the amount of soil erosion, potentially causing landslides. 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.

Geology and Soils. e. Result in substantial soil erosion or the loss of topsoil?

Answer: Potentially Significant Impact

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.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

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

Answer: Potentially Significant Impact

Construction of structural BMPs may result in minor soil excavation and require relatively shallow earthwork, as they are surface structures, they would not likely be of the size or scale to cause a geologic unit or soil to become unstable. However, the installation of BMPs such as diversion and/or treatment devices may potentially result in unstable soil conditions, if loose or compressible soils are present. Proper sizing and siting are 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.

Non-structural BMPs would involve no change to geologic unit or soil.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

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

Answer: Potentially Significant Impact

The potential for impacts from expansive soil are best evaluated on a project basis. Since the Los Angeles 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.

Structural BMPs 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. 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 TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

Geology and Soils. h. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Answer: Less Than Significant with Mitigation Incorporated

The Bacteria TMDL may require evaluation, inspection, and repair or replacement of existing faulty septic systems, some may require construction of new septic systems. Affected soils will be capable of supporting the use of new septic tanks or alternative wastewater disposal systems. Further, any such project must undergo site specific soil testing to ensure it is capable of supporting the use of septic tanks or alternative wastewater disposal systems.

Geology and Soils. i. 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. In the event that paleontological resources are discovered in project area during construction, all work should 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 TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

6.2.2.8 GREENHOUSE GAS EMISSIONS DISCUSSION

Greenhouse Gas Emissions. a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Answer: Potentially Significant Impact

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

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

Greenhouse Gas Emissions. b. 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 Assembly Bill 32 (AB32), the Global Warming Solutions Act of 2006, which set the 2020 greenhouse gas (GHG) emissions reduction goal to a sustainable, low-carbon future into law. The current 2020 GHG emission limit is 431 million metric tons of CO_2 equivalents ($MMTCO_2e$) (CARB, 2014). The 2020 target of 431 $MMTCO_2e$ requires the reduction of 78 $MMTCO_2e$, or approximately 15 percent, from the State's projected 2020 emissions of 509 $MMTCO_2e$.

In December 2007, the California Air Resources Board (CARB) 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 $MMTCO_2e$, make up 94 percent of the point source CO_2e emissions in California (CARB, 2008).

In June 2008, the CARB published its Climate Change Scoping Plan (CARB, 2008). An update to the Climate Change Scoping Plan was published in May 2014 (CARB, 2014). In November 2017, the CARB's Scoping Plan identifies how the State can reach the 2030 climate target to reduce GHG emissions by 40 percent from 1990 levels, and substantially advance toward our 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels (CARB, 2017). The Scoping Plan proposes a comprehensive set of actions designed to reduce overall carbon emissions in California. Executive Order B-30-15 and Senate Bill 32 extended the goals of AB 32 and set a 2030 goal of reducing emissions 40 percent from 2020 levels. When compared to the estimated GHG reduction goal, 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 (CARB, 2014) and emissions from implementation will not have a significant negative effect on global climate change.

6.2.2.9 HAZARDS AND HAZARDOUS MATERIALS DISCUSSION

Hazards and Hazardous Materials. a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Answer: Potentially Significant Impact

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.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

Hazards and Hazardous Materials. 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?

Answer: Potentially Significant Impact

See Hazards and Hazardous Materials a

Hazards and Hazardous Materials. c. 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 Los Angeles Water Board cannot specify the manner of compliance with the TMDL, the Los Angeles 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 TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

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

Answer: No Impact

No hazardous materials sites compiled pursuant to Government Code section 65962.5 were identified in the subwatersheds during a search of DTSC Hazardous Waste and Substances Site List (https://www.envirostor.dtsc.ca.gov/public/map/?global_id=30490018).

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.

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

Answer: Less Than Significant with Mitigation Incorporated

There is one airport located within the watershed. Therefore, it is foreseeable that implementation of the TMDL would result in an airport-related safety hazard.

Hazards and Hazardous Materials. f. 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 TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

Hazards and Hazardous Materials. g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Answer: Less than Significant Impact

National forests are not located in the subwatersheds. The subwatersheds are mainly urban, however uncontrolled fire in an area of open vegetation may occur, therefore mitigation measures, such as prohibiting smoking in sensitive areas and ensuring vehicles entering the area are properly maintained can minimize the risk of a fire being ignited.

6.2.2.10 HYDROLOGY AND WATER QUALITY DISCUSSION

Hydrology and Water Quality. a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Answer: Less than Significant Impact

The TMDL will improve surface water quality in terms of indicator bacteria. In addition, the structural and non-structural BMPs which reduce storm water runoff may contribute to reductions in other types of pollutants which are also carried by storm water. Hydraulic dredging may occur to finish Colorado Lagoon restoration, therefore disturbed sediments 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.

Hydrology and Water Quality. b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Answer: Less Than Significant with Mitigation Incorporated

Over the long term, infiltration of storm water runoff via infiltration type BMPs such as permeable paving and vegetated swales could alter the direction or rate of flow of groundwater. The potential for adverse impacts may be mitigated through proper design and siting of infiltration devices, and groundwater monitoring. Proper design and siting include providing adequate groundwater separation with soils suitable for infiltration and complying with any applicable groundwater permitting requirements. It is recommended that media filters or other treatment devices be used instead of infiltration where soils or groundwater contamination are a concern (CASQA, 2003b). However, where separation to groundwater is adequate, there is a low probability of groundwater contamination by infiltrated runoff because the soils attenuate pollutants and soil amendments can increase metals removal (CASQA, 2003b). When properly managed, increased groundwater recharge would be considered a positive impact, as it would contribute to replenishing local water supplies and reducing reliance on imported water.

Non-structural BMPs would not result in decrease groundwater supplies or interfere substantially with groundwater recharge.

Hydrology and Water Quality. c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in a substantial erosion or siltation on- or off-site?

Answer: Less Than Significant

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

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

Answer: Less Than Significant with Mitigation Incorporated

Installation of structural BMPs such as local capture systems, vegetated treatment systems, and infiltration systems that are not properly designed and constructed to allow for bypass of excess storm water during storms that exceed design capacity can cause flooding. However, this potential impact can be mitigated through proper design and maintenance of BMPs. Any modifications to the watershed hydrology should be modeled and accounted for in the design of BMPs.

Non-structural BMPs would not result in flooding on- or off-site.

Hydrology and Water Quality. e. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river

or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Answer: No Impact

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

Hydrology and Water Quality. f. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

Answer: No Impact

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

Hydrology and Water Quality. g. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Answer: No Impact

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

Hydrology and Water Quality. h. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Answer: Less Than Significant with Mitigation Incorporated

See response to Hydrology and Water Quality. b**.**

6.2.2.11 LAND USE AND PLANNING DISCUSSION

Land Use and Planning. a. Physically divide an established community?

Answer: No impact

The construction and installation of structural BMPs would be the same as typical construction activities in urbanized areas, such as ordinary road and infrastructure maintenance and building activities. These activities would not result in physical dividing of any established community.

Land Use and Planning. b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Answer: Potentially Significant Impact

To the extent that there could be land use impacts at a specific location, these potential land use conflicts are best addressed at the project level. Since the Los Angeles Water Board cannot specify the manner of compliance with the TMDL, the Los Angeles Water Board can not specify the exact location of structural treatment devices. The various agencies that might install such structural BMPs such as vegetated bioswales and detention basins will need to identify local land use plans as part of a project-level analysis to ensure that projects comply with permitted use regulations and are consistent with land use plans, general plans, specific plans, conditional uses, or subdivisions.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL 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 is within the jurisdiction of the responsible parties listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

6.2.2.12 MINERAL RESOURCES DISCUSSION

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

Answer: No impact

Implementation of non-structural and/or structural BMPs should not require quarrying, mining, dredging, or extraction of locally important mineral resources. However, operation of construction and maintenance vehicles could increase the use of fossil fuels, and some types of structural BMPs may consume electricity to operate pumps.

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

Answer: No impact

See response to Mineral Resources. a.

6.2.2.13 NOISE DISCUSSION

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

Answer: Less Than Significant with Mitigation Incorporated

The construction and installation of structural BMPs would result in temporary increases in existing noise levels, but this would be short term and only exist until construction is completed. The noise associated with the construction and installation of structural BMPs would be the same as typical construction activities in urbanized areas, such as ordinary road and infrastructure maintenance and building activities. Contractors and equipment manufacturers have been addressing noise problems for many years and through design improvements, technological advances, and a better understanding of how to minimize exposures to noise, noise effects can be minimized. An operations plan for the specific construction and/or maintenance activities could be prepared to identify the variety of available measures to limit the impacts from noise to adjacent homes and businesses.

Severe noise levels could be mitigated by implementing commonly used noise abatement procedures, such as sound barriers, mufflers, and limiting construction and maintenance activities to times when these activities have lower impact, such as periods when there are fewer people near the construction area. Applicable and appropriate mitigation measures could be evaluated when specific projects are determined, depending upon proximity of construction activities to receptors.

Contractors and equipment manufacturers have been addressing noise problems for many years, and through design improvements, technological advances, and a better understanding of how to minimize exposures to noise, noise effects can be minimized. 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 installation in a manner to minimize noise and vibration. Use installation 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).

- Idling equipment should be turned off.

- Temporary noise barriers should be used and relocated, as practicable, to protect sensitive receptors against excessive noise from installation activities. Consider mitigation measures such as partial enclosures around continuously operating equipment or temporary barriers along installation boundaries.

- The installation contractor should be required by contract specification to comply with all local noise and vibration ordinances and obtain all necessary permits and variances.

Because Los Angeles 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 result in exposure of persons to, or generation of, noise levels in excess of standards. Increases in ambient noise levels from construction activities are expected to be less than significant once mitigation measures have been properly applied. Implementation may also result

in increased noise levels during operation and maintenance of structural BMPs or treatment facilities, including pumps used for diversion of water and vacuum trucks and pumps for removing liquids. The specific project impacts can be mitigated by standard noise abatement techniques including siting facilities away from receptors, installing sound barriers and insulation to reduce noise from pumps, motors, fans, etc., designing passive BMPs that do not require frequent maintenance, scheduling of maintenance during mid-day hours, and noise monitoring to ensure levels remain below acceptable levels. Stormwater treatment BMPs should be design with sufficient hydraulic head to operate by gravity and eliminate the need for pumps.

Noise. b. Generation of excessive groundborne vibration or groundborne noise levels?

Answer: Less Than Significant with Mitigation Incorporated

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 Noise. a.

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

Answer: Less Than Significant with Mitigation Incorporated

See response to Noise. a.

6.2.2.14 POPULATION AND HOUSING DISCUSSION

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

Answer: No impact

It is not anticipated that reasonably foreseeable methods of compliance will result in an impact to population in the altering the location, distribution, density, or growth rate of human population of an area.

Population and Housing. b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Answer: No impact

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

6.2.2.15 PUBLIC SERVICES DISCUSSION

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 following public services:

Public Services. a. Fire protection?

Answer: Less Than Significant with Mitigation Incorporated

During construction and installation of structural BMPs, temporary delays in response time of fire vehicles due to road closure/traffic congestion during construction activities may occur. However, any construction activities would be subject to applicable building and safety and fire prevention regulations and codes. The responsible agencies could notify local emergency service providers of construction activities and road closures and could coordinate with local providers to establish alternative routes and appropriate signage. In addition, an Emergency Preparedness Plan could be developed for the construction of proposed new facilities in consultation with local emergency providers to ensure that the proposed project's contribution to cumulative demand on emergency response services would not result in a need for new or altered fire protection services. Most jurisdictions have in place established procedures to ensure safe passage of emergency vehicles during periods of road maintenance, construction, or other attention to physical infrastructure. In any case, the installation of structural devices would not create any more significant impediments than such other ordinary activities.

It is not reasonably foreseeable that non-structural BMPs would result in a need for new or altered governmental services in fire protection.

Public Services. b. Police protection?

Answer: Less Than Significant with Mitigation Incorporated

There is potential for temporary delays in response times of police vehicles due to road closure/traffic congestion during installation of structural BMPs. To mitigate potential delays the responsible agencies could notify local emergency and police service providers of construction activities and road closures, if any, and coordinate with the local fire protection to establish alternative routes and traffic control during the installation activities. Most jurisdictions have in place established procedures to ensure safe passage of emergency vehicles during periods of road maintenance, construction, or other attention to physical infrastructure, and there is no evidence to suggest that installation of these structural devices would create any more significant impediments than other such typical activities. Any construction activity would be subject to applicable building and safety codes and

permits. Therefore, the potential delays in response times for police vehicles after mitigation are less than significant.

It is not reasonably foreseeable that non-structural BMPs would result in a need for new or altered governmental services in police protection.

Public Services. c. Schools?

Answer: No impact

Non-structural and structural BMPs will not have an effect upon or result in a need for new or altered schools or school services because none of the BMPs would introduce any physical effects that could impact this public service category.

Public Services. d. Parks?

Answer: Less Than Significant with Mitigation Incorporated

During construction and installation of local infiltration systems, local capture systems or vegetated treatment systems, parks or other recreational facilities could be temporarily affected. Construction activities could potentially be performed near or within a park or recreational facilities. Potential impacts would be limited and short-term and could be avoided through siting, designing, and scheduling of construction activities. In the unlikely event that the municipalities might install facilities on a scale that could alter a park or recreational facility, structural BMP could be designed in such a way as to be incorporated into parks.

It is not foreseeable that non-structural BMPs will have a negative impact upon or result in a need for new or altered governmental services to parks.

Public Services. e. Other public facilities?

Answer: Less Than Significant with Mitigation Incorporated

Structural BMPs and infrastructure improvements could potentially impact public service requiring additional maintenance to ensure proper operation. Certain enhanced circulation devices only require annual maintenance and other structural BMPs and infrastructure improvements do not require frequent maintenance. These devices can be further designed and engineered to lessen the amount of maintenance and servicing required. Structural BMPs may include additional maintenance to ensure proper operation of newly installed structural BMPs. Maintenance events could be scheduled to be performed at the same time as other maintenance activities performed by the municipalities, or at times when these activities have lower impact, such as periods of low traffic activity and parking demand.

It is not foreseeable that non-structural BMPs will have substantial adverse physical impacts or result in a need for new or altered governmental services in public facilities.

6.2.2.16 RECREATION DISCUSSION

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

Answer: Less Than Significant with Mitigation Incorporated

During construction and installation of structural BMPs, recreational areas could be temporarily affected. Construction activities could potentially be performed near or within a recreational area. Potential impacts would be limited and short-term, and could be avoided through proper planning, and scheduling of construction activities.

In the event that the municipalities might install facilities on a scale that could alter a recreational area, the structural BMPs could be designed in such a way as to be incorporated into the recreational area. Additionally, many structural BMPs, if necessary, may be constructed underground to minimize impacts on the quality or quantity of existing recreational opportunities. Mitigation to replace lost areas may include the creation of new open space recreation areas and/or improved access to existing open space recreation areas.

It is foreseeable that restoring beneficial uses in subwatershed through implementation of the TMDL 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.

It is not reasonably foreseeable that non-structural BMPs would impact the quality or quantity of existing recreational opportunities.

Recreation. 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 the watershed. These implementation options would result in the need for further construction or expansion of recreational facilities.

6.2.2.17 TRANSPORTATION DISCUSSION

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

Answer: Potentially Significant Impact

Depending on the structural BMPs selected, temporary alterations to existing circulation systems may be required during construction and installation activities. The potential impacts would be limited and short-term. 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. 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. 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.

It is not reasonably foreseeable that non-structural BMPs would conflict with a program, plan, ordinance or policy addressing the circulation system.

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

Answer: No Impact

The reasonably foreseeable implementation measures are not expected to increase transportation impacts due to the four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology.

Transportation. c. Substantially increase hazards due to a geometric 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.

Transportation. d. Result in inadequate emergency access?

Answer: Potentially Significant Impact

See response to Transportation a

6.2.2.18 TRIBAL CULTURAL RESOURCES DISCUSSION

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

Answer: Less Than Significant with Mitigation Incorporated

Public Resources Code section 5020.1(k) refers to “Local register of historical resources” means a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution. Potential disturbance of historical resources is best addressed at the project level. Entities installing BMPs will need to identify historical resources in the area, such as California’s Historical Landmark No. 1014 Long Beach Marine Stadium, as part of the project-level analysis.

In addition, as part of the project-level analysis, entities should consult with California Native American Tribes, as required by the California Environmental Quality Act (CEQA) as recently amended by Assembly Bill 52 (AB 52) to identify tribal cultural resources that may be impacted by the project.

Public Resources Code section 21074, tribal cultural resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register of Historical Resources (California Register) or included in a local register of historical resources. AB 52 also gives Lead Agencies the discretion to determine whether a resource qualifies as a tribal cultural resource on the basis of criteria for listing in the state register of historical resources. The Lead Agency must support such a determination with substantial evidence. Written notice of a proposed project and a 30-day window to request consultation is to be provided to a California Native American Tribe that has previously requested it and that is traditionally and culturally affiliated with the geographic area of a proposed project. Compliance with the regulatory provisions would ensure such impacts are reduced to a less than significant level.

At a program level, pursuant to Public Resources Code section 21080.3.1, the Los Angeles Water Board contacted California Native American tribes that have requested notice from agencies regarding proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes. The notice to tribes included the regulatory background, and the project location.

Non-structural BMPs would not result in impacts.

Tribal Cultural Resources. b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code section

5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Answer: Less Than Significant with Mitigation Incorporated

See response to Tribal Cultural Resources. a.

6.2.2.19 UTILITIES AND SERVICE SYSTEMS DISCUSSION

Utilities and Service Systems. a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Answer: Less Than Significant with Mitigation Incorporated

Installation of structural BMPs may require or result in the relocation or construction of storm water drainage, electric power, natural gas, or telecommunications facilities. Power and natural gas lines might need to be rerouted to accommodate the addition of structural BMPs.

Structural BMPs may change local wastewater collection and conveyance systems, but the TMDL does not require construction of any new wastewater treatment facilities. Implementation measures could result in improvements to urban storm water runoff systems to reduce bacteria discharges to Los Cerritos Channel watershed.

In order to achieve compliance with the TMDL, the storm water drainage systems may need to be reconfigured and/or retrofitted with structural BMPs to capture and/or treat a portion or all of the storm water runoff. The alterations and/or additions to stormwater drainage systems will depend on the compliance measure selected by each responsible entity at each location where structural BMPs might be installed.

Non-structural BMPs will not result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities because none of the BMPs would introduce any physical effects that could impact this characteristic.

Utilities and Service Systems. b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Answer: Less Than Significant Impact

Installation and construction of the structural BMPs would not increase population or provide employment, it would not require ongoing additional water supplies during normal, dry and multiple dry years.

Non-structural BMPs will not result in the change of the water supplies.

Utilities and Service Systems. c. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Answer: Less Than Significant with Mitigation Incorporated

Reasonably foreseeable methods of compliance may cause a potentially significant impact upon sewer utilities. Low-flow diversions involve the diversion of dry weather flows in storm drains to local Water Reclamation Plants (WRPs). Diversions are retrofitted in existing storm drains discharging into the Upper Los Cerritos Channel watershed. High-flow bypasses are also installed along with the diversions. These bypasses can mitigate and prevent impacts to flooding. High-flow bypasses are designed to bypass the diversion in the event high-flow events, like storm events, to prevent overflow, flooding, and exhaustion of WRP treatment capacity.

Depending on the number of diversions installed and flow potential, low-flow diversion may significantly impact the treatable capacity of local WRPs. In determining whether sewer diversions of dry weather runoff are feasible, the capacity of downstream sewers and treatment plants need to be considered over the life of the TMDL. Acceptance of dry weather diversions could necessitate construction of increased conveyance and treatment capacity earlier than would otherwise have been necessary. Additionally, acceptance of the diversions will cause WRPs to run at a higher fraction of their design capacity, which could result in a higher frequency of sanitary sewer overflows. Responsible parties should determine the optimal amount of diversions necessary and the flow potential associated with those diversions. Responsible parties should also consult with local WRPs to determine the average flow rate and treatable capacity of each WRP.

It is not foreseeable that non-structural BMPs would result in the need for wastewater treatment plant.

Utilities and Service Systems. d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Answer: Less Than Significant with Mitigation Incorporated

The installation of structural BMPs may generate construction debris. Additionally, installed structural BMPs may collect sediment and solid wastes that will require disposal. However, no new solid waste or disposal systems would be needed to handle the relatively small volume generated by these projects. Construction debris may be recycled at aggregate recycling centers or disposed of at landfills.

Sediment and solid wastes that may be collected can be disposed of at appropriate landfill and/or disposal facilities.

Most of the non-structural BMPs would not result in the generation of solid waste.

Utilities and Service Systems. e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Answer: Potentially Significant Impact

Nominal amounts of construction debris may be generated by installation of structural BMPs, or restoration efforts. 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. The implementation of the TMDL is expected to comply with federal, state, and local statutes and regulations related to solid waste. Since the Los Angeles 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.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL 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 is within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

6.2.2.20 WILDFIRE DISCUSSION

Wildfire. a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

Answer: Potentially Significant Impact

National forests are not located in the subwatersheds. The subwatersheds are mainly urban, however uncontrolled fire in an area of open vegetation may occur, Increased presence of personnel and equipment, particularly during construction phases of TMDL implementation, may impact emergency response and evacuation plans, such as the California Fire Code and California Building Code

emergency response plan/evacuation plan, if proper safety protocols are not followed.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL 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 is within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

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

Answer: Potentially Significant Impact

See response to Wildfire a.

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

Answer: Potentially Significant Impact

Potential requirement of installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) is best addressed at the project level. Since the Los Angeles Water Board cannot specify the manner of compliance with the TMDL, the Los Angeles Water Board cannot specify if installation or maintenance of infrastructure will be required.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL 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 is within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

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

Answer: Potentially Significant Impact

See response to Wildfire a. and see response to Geology and Soils d.

6.2.2.21 MANDATORY FINDINGS OF SIGNIFICANCE DISCUSSION

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

Answer: Less Than Significant with Mitigation Incorporated

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.

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.)?

Answer: Potentially Significant Impact

Each compliance measure is expected to have nominal environmental impacts if performed properly. However, this TMDL will require many individual projects to comply region-wide, which may have potential program-level, and project-level cumulative effects upon the region. 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.

This SED impact analysis concludes that there are potentially significant impacts from implementation of the TMDL 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 is within the responsibility and jurisdiction of the responsible agencies listed in this TMDL

(Cal. Code Regs., tit. 14 § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (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 TMDL 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 is within the responsibility and jurisdiction of the responsible agencies listed in this TMDL (Cal. Code Regs., tit. 14, § 15091, subd. (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 (Cal. Code Regs., tit. 14, § 15091, subd. (a)(3)).

7. OTHER ENVIRONMENTAL CONSIDERATION

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

- Cumulative Impacts of the Program Alternatives (as required by CEQA Guidelines Cal. Code Regs., tit. 14, § 15130)

- Potential Growth-Inducing Effects of the Program Alternatives (as required by CEQA Guidelines Cal. Code Regs., tit. 14, § 15126)

- Unavoidable Significant Impacts (as required by CEQA Guidelines Cal. Code Regs., tit. 14, § 15126.2).

7.1 CUMULATIVE IMPACTS

Cumulative impacts, defined in Code of Regulations section 15355 (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 TMDL, 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 are analyzed. On the project-level, while the full environmental analysis of individual projects are the purview of the implementing municipalities of agencies, 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.

7.1.1 PROGRAM CUMULATIVE IMPACTS

Currently, there are two other TMDLs adopted within Los Cerritos watershed: the Colorado Lagoon Organochlorine Pesticides, Polychlorinated Biphenyls, Sediment Toxicity, Polycyclic Aromatic Hydrocarbons, and Metals TMDL and the Los Cerritos Channel Metals TMDL. None of the implementation approaches for the TMDL should disrupt any structural BMPs as applied for bacteria. In fact, potential implementation strategies discussed in this SED for the bacteria TMDL may contribute to the implementation of the Colorado Lagoon Toxicity and Metals TMDL and the Los Cerritos Channel Metals TMDL. Likewise, implementation of the Colorado Lagoon Toxicity and Metals TMDL and the Los Cerritos Channel Metals TMDL in the watershed may contribute to the implementation of this bacteria TMDL.

7.1.2 PROJECT CUMULATIVE IMPACTS

Specific TMDL projects must be environmentally evaluated and cumulative impacts considered as the implementing municipality or agency designs and sites the project. However, as examples, TMDL 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 bacteria 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 bacteria TMDL 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, 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 bacteria TMDL involves installation activities occurring simultaneously at a number of surface sites in the bacteria TMDL area. Installation of BMP measures 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 including are available as discussed in the checklist. In addition, the fact that structural BMPs installation activities are being conducted in the same vicinity as other projects will not make mitigation methods less implementable.

Public Services - The cumulative effects on public services in the bacteria TMDL study area would be limited to traffic inconveniences discussed above. These effects are not considered cumulatively significant as discussed above.

Aesthetics - Construction activities associated with other related projects may be ongoing in the vicinity of one or more bacteria TMDL construction sites. To the extent that combined construction activities do occur, there would be temporary adverse visual effects of less than cumulatively significant proportions as discussed in the checklist.

7.2 GROWTH-INDUCING IMPACTS

This section presents the following:

- An overview of the CEQA Guidelines relevant to evaluating growth inducement,
- A discussion of the types of growth that can occur in the TMDL area,
- A discussion of obstacles to growth in the watershed, and
- 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, Cal. Code Regs., tit. 14, § 15126.2, subd. (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 could indirectly 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 bacteria 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.)

7.2.2.1 GROWTH IN LAND DEVELOPMENT

Growth in land development is the physical development of residential, commercial, and industrial structures in the bacteria 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.

7.2.2.2 POPULATION GROWTH

Population growth is growth in the number of persons that live and work in the bacteria 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 is governed by the County of Los Angeles General Plan, which is intended to direct land use development in an orderly manner. The General Plan is the framework under which development occurs, and, within this framework, other land use entitlements (such as variances and conditional use permits) can be obtained. Because the General Plan guides land use development and allows for entitlements, it does not represent an obstacle to land use growth. The agencies within the bacteria 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 THE COMPLIANCE WITH THE PROPOSED TMDL TO INDUCE GROWTH

7.2.4.1 DIRECT GROWTH INDUCEMENT

Because the reasonably foreseeable methods of compliance with the proposed bacteria TMDL focus on non-structural and structural BMPs which are located throughout the bacteria TMDL area, the bacteria TMDL would not result in the construction of new housing and, therefore, would not directly induce growth.

7.2.4.2 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.

Installation of structural BMPs to comply with the proposed TMDL would occur through a 15-year period. Installation and maintenance spending for compliance would generate jobs throughout the region and elsewhere where goods and services are purchased or used to install structural BMPs. The alternatives would result in direct jobs and indirect jobs. The creation of jobs in the region is considered a benefit.

Although the construction activities associated with the structural BMPs would increase the economic opportunities in the area and region, this construction is not expected to result in or induce substantial or significant population or land use development growth because the majority of the new jobs that would be created by this construction are expected to be filled by persons already residing in the area or region, based on the existing surplus of unemployed persons in the area and region.

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

Code of Regulations, title 14, section 15126.2, subdivision (c) (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 bacteria TMDL 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 municipalities and agencies complying with the TMDL, the necessity of implementing the federally required TMDL and removing the significant environmental effects from bacteria impairment in the Upper Los Cerritos Channel watershed (an action required to achieve the express, national policy of the Clean Water Act) remains.

In addition, implementation of the TMDL will have substantial benefits to water quality and will enhance beneficial uses. Enhancement of the recreational beneficial uses (both water contact recreation and non-contact water recreation) will have positive social and economic effects by decreasing health hazards in the river and other recreation areas.

8. STATEMENT OF OVERRIDING CONSIDERATIONS AND DETERMINATION

The Los Angeles Water Board staff has balanced the economic, legal, social, technological, and other benefits of this proposed bacteria TMDL against the unavoidable environmental risks in determining whether to recommend that the

Los Angeles Water Board approve this project. Upon review of the environmental information generated for this project and in view of the entire record supporting the TMDL, staff has determined that the specific economic, legal, social, technological, and other benefits of this proposed bacteria TMDL outweigh the unavoidable adverse environmental effects, and that such adverse environmental effects are acceptable under the circumstances.

The implementation of this Basin Plan amendment 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 bacteria hazards and increasing the aesthetic experience at beaches. 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, the 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 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 agencies can and should implement the recommended mitigation measures. These mitigation measures in most cases are routine measures to ease the expected and routine impacts attendant with ordinary minor construction projects and infrastructure maintenance in an urbanized environment. Routine construction and maintenance of power lines, sewers, streets, etc. are regular and expected incidents of living in urban environments such as Los Angeles County. Sewer and power line maintenance, street sweeping, traffic alterations, and environmental impacts from them already occur and are expected. This project will foreseeably require many more such projects, but their individual impacts are not expected to be extraordinary in the magnitude or severity of impacts. Specific projects, that may have a significant impact, would therefore be subject to a separate environmental review. The lead agency for subsequent projects would be obligated to mitigate any impacts they identify, for example by mitigating potential flooding impacts by designing the BMPs with adequate margins of safety. Notably, in almost all circumstances, where unavoidable or unmitigable 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.

This TMDL is required by law under section 303(d) of the CWA, and if the Los Angeles Water Board does not establish this TMDL, the U.S. EPA will be required to develop a TMDL. The CWA requires states to establish a priority ranking for waters on the 303(d) list of impaired waters and to develop and implement TMDLs

for these waters (40 C.F.R. § 130.7). The impacts associated with U.S. EPA's establishment of the TMDL would be significantly more severe, as discussed herein, because U.S. EPA will not provide a compliance schedule, and the final waste load allocations, pursuant to federal regulations, would need to be complied with upon incorporation into the relevant stormwater permits. (40 C.F.R. § 122.44, subd. (d)(1)(vii)(B).) Since compliance would not be authorized over a period of years, all of the impacts associated with complying would be truncated into a short time frame, thus exacerbating the magnitude of the cumulative effect of performing all projects relatively simultaneously throughout the region.

The implementation of this TMDL will result in improved water quality within the Upper Los Cerritos Channel 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 at many places throughout the watershed. 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 Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon Indicator Bacteria TMDL and the CEQA checklist provide the necessary information pursuant to Public Resources Code section 21159 to conclude that properly designed and implemented structural or non-structural BMPs of compliance should mitigate and generally avoid significant adverse effects on the environment, and all entities responsible for implementing the TMDL 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 Basin Plan Amendment to implement the TMDL. At this stage, any more particularized conclusions would be speculative. The Los Angeles Water Board does not have legal authority to specify the manner of compliance with its orders (Wat. Code, § 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 agencies that will be responsible for implementing this TMDL, and those agencies can and should employ those alternatives and mitigation measures to reduce any impacts as much as feasible (Cal. Code. Regs., tit. 14, § 15091, subd. (a)(2).)

Implementation of the TMDL 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 those local agencies, the necessity of implementing the federally required TMDL and removing the bacteria impairment from Upper Los Cerritos Channel watershed (an action required to achieve the express, national policy of the CWA) remains.

9. FINDINGS

On the basis of this initial evaluation and staff report for the TMDL, which collectively provide the required information:

☐ I find the proposed Basin Plan amendment could not have a significant effect on the environment.

☑ I find that the proposed Basin Plan amendment could have a significant adverse effect on the environment. However, there are feasible alternatives and/or feasible mitigation measures that would substantially lessen any significant adverse impact. These alternatives are discussed above and in the staff report for the TMDL.

☐ I find the proposed Basin Plan amendment may have a significant effect on the environment. There are no feasible alternatives and/or feasible mitigation measures available which would substantially lessen any significant adverse impacts. See the attached written report for a discussion of this determination.

_____ _____

Renee A. Purdy,
Executive Officer

DATE:

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