State of California
California Regional Water Quality Control Board, Los Angeles Region

Environmental Staff Report

Containing substitute environmental documentation in accordance with the California Environmental Quality Act in support of an Amendment to the *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*

to Prohibit Onsite Wastewater Disposal Systems in the Malibu Civic Center Area

DRAFT

Draft dated July 31, 2009

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Environmental Staff Report

in support of an Amendment to
Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties

to Prohibit Onsite Wastewater Disposal Systems in the Malibu Civic Center Area

Introduction

Proposed Action

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) proposes to amend the *Water Quality Control Plan for the Coastal Watersheds of Ventura and Los Angeles Counties (Basin Plan)* to prohibit discharges from on-site wastewater disposal systems (OWDSs) in the Civic Center area of the City of Malibu. This proposed regulatory action is referred to as the prohibition, or project, throughout this report.

The area that would be affected by the proposed prohibition is referred to as the Malibu Civic Center area (Figure 1), which includes Malibu Valley, Winter Canyon, and the adjacent coastal strips of land and beaches. Types of subsurface disposal systems, or OWDSs, that would be prohibited by the amendment to the *Basin Plan* range from passive systems with conventional septic tanks to active systems that have equipment to more aggressively remove pollutant loads from sewage before subsurface disposal. The prohibition would cover an OWDS that serves an individual property (residential, commercial, industrial, and public properties) as well as a group of properties.

Existing residents, businesses, and public facilities that discharge wastewaters through OWDSs in the Malibu Civic Center area would be affected by the proposed prohibition as well as future dischargers who may plan to discharge in this area. The proposed regulatory action would immediately prohibit all new discharges from OWDSs in the Malibu Civic Center area.[1] For an existing discharger, the proposed regulatory action would establish a five-year schedule to cease discharge.

Lead Agency

The Regional Board is the lead agency for evaluating environmental impacts from the proposed prohibition on OWDSs in the Malibu Civic Center area.

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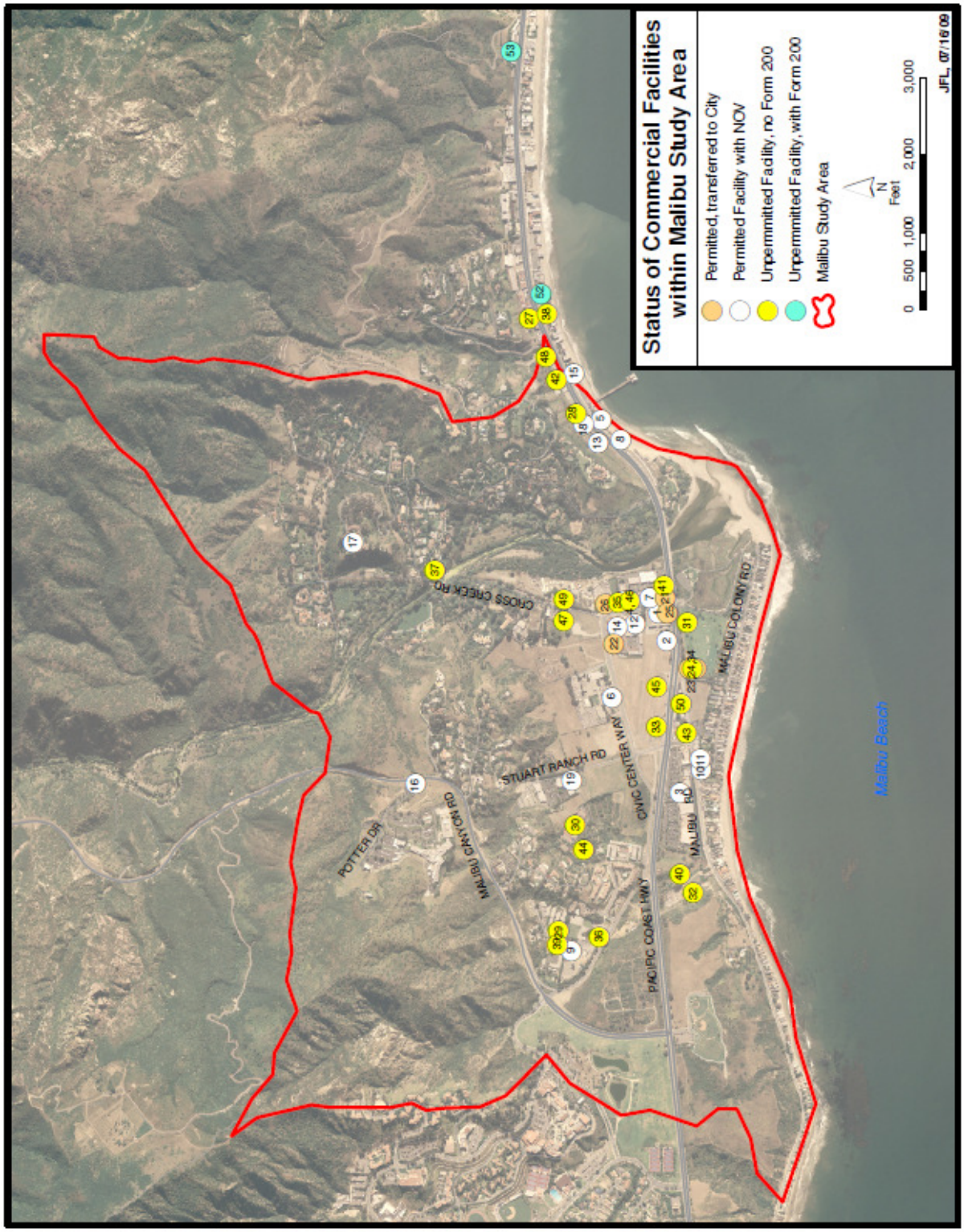
[1] An exemption would allow for "zero-discharge" projects if a discharger can demonstrate, to the satisfaction of the Executive Officer, that reuse, evaporation, and/or transpiration will use 100% of the wastewater generated by activities on a site, will not contribute to a rise in the water table, and will contain and properly handle any brines and/or off-specification wastewaters that cannot be reused/discharged in a manner that meets water quality objectives established in the *Basin Plan.*

Figure 1: Malibu Civic Center Area



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Scope of Environmental Staff Report

The Regional Board's basin planning process is exempt from certain requirements of CEQA, including preparation of an initial study, negative declaration, and environmental impact report (California Code of Regulations, title 14, section 15251(g)). As the proposed amendment to the *Basin Plan* is part of the basin planning process, the Regional Board prepares environmental information and analyses that are the functional equivalent of an environmental impact report. The Regional Board describes it as "substitute environmental documentation," which complies with Public Resources Code section 21080.5. In this substitute environmental documentation, alternatives to the proposed project, reasonably foreseeable environmental impacts arising from those alternatives and from methods of complying with the proposed prohibition are disclosed in accordance with the California Environmental Quality Act (CEQA) and CEQA regulations.

This information is also presented to meet a requirement of section 13283 of the California Water Code (CWC), which requires a preliminary review of possible alternatives to achieve protection of water quality and present and future beneficial uses of water, and prevention of nuisance, pollution, and contamination.

Consideration of the factors in section 13241 of the CWC is required by section 13281. Staff has presented preliminary cost information for conceptual options, or projects, that the community and stakeholders could select and implement to comply with the prohibition. These projects are analyzed on a conceptual basis only, as a local government will need to select and implement a specific wastewater management strategy and project. As this occurs, it will be the responsibility of a local government to perform a specific project-level analysis and disclose environmental impacts (Pub. Res. Code, section 21159.2).

The Regional Board has analyzed environmental impacts. This substitute environmental documentation is based on the proposed prohibition that will be considered by the Regional Board and, if adopted, implemented through an amendment to the *Basin Plan*. Evidence in support of the proposed prohibition is presented in a technical staff report that, together with this environmental staff report and a tentative resolution, are part of the substitute environmental documentation which will be considered on October 1, 2009. Approval of the substitute environmental documentation is separate from approval of a specific project alternative or a component of an alternative. Approval of the substitute environmental documentation refers to the process of: (1) addressing comments, (2) confirming that the Regional Board considered the information in the substitute environmental documentation, and (3) affirming that the documentaion reflects independent judgment and analysis by the Regional Board (Cal. Code Regs., tit. 14, section 15090).

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California Environmental Quality Act

This prohibition is evaluated at a program level of detail under a Certified Regulatory Program and the information and analyses are presented in this substitute environmental documentation as discussed in this section.

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, section 15002(a).)

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

> "As we have stated previously, "[our limited function is consistent with the principle that ""[t]he purpose of CEQA is not to generate paper, but to compel government at all levels to make decisions with environmental consequences in mind. . . .""" (*City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1448 [263 Cal.Rptr. 340]; quoting *Laurel Heights I*, supra, 47 Cal.3d at p. 393.) "We look 'not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.' (Guidelines, section 15151.)" (*City of Fremont v. San Francisco Bay Area Rapid Transit Dist.,* supra, 34 Cal.App.4th at p. 1786.)"

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, section 15151.)

In this document, the Regional Board staff has strived to perform a good faith effort at full disclosure of the reasonably foreseeable environmental impacts that could be attendant with the prohibition. Our analysis and conclusions follow.

Public Resources and Water Code Requirements

While the "certified regulatory program" of the Regional Board is exempt from certain CEQA requirements, it is subject to the substantive requirements of California Code of Regulations, title 23, section 3777(a), which requires a written report that includes a description of the proposed activity, an analysis of reasonable alternatives, and an identification of mitigation measures to minimize any significant adverse environmental impacts. Section 3777(a) also requires the Regional Board to complete an environmental checklist as part of its substitute environmental documents. This checklist is provided within this document.

In addition, pursuant to the California Water Code, section 13281(a), the Regional Board must consider all relevant evidence related to the discharge, including, but not limited to, those factors

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set forth in Section 13241 information provided pursuant to Section 117435 of the Health and Safety Code, possible adverse impacts if the discharge is permitted, failure rates of any existing individual disposal systems, whether due to inadequate design, construction, maintenance, or unsuitable hydrogeologic conditions, evidence of any existing, prior or potential contamination, existing and planned land use, dwelling density, historical population growth, and any other criteria as maybe established pursuant to guidelines, regulations, or policies adopted by the state board. This evidence is presented in the technical and environmental staff reports.

Pursuant to the California Water Code, section 13241, the Regional Board may establish water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance; however, it is recognized that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. In so doing, the Regional Board is to consider factors, including but not necessarily limited to, all of the following:

(a) Past, present, and probable future beneficial uses of water.
(b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
(c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
(d) Economic considerations.
(e) The need for developing housing within the region.
(f) The need to develop and use recycled water.

Although the proposed regulatory action does not establish a new water quality objective, staff has nonetheless presented such information in the technical and environmental staff reports.

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

This substitute environmental documentation identifies the reasonably foreseeable environmental impacts of the ***reasonably foreseeable*** methods of compliance (Pub. Res. Code, section 21159(a)(1)), based on information developed before, during, and after the CEQA scoping process that is specified in California Public Resources Code section 21083.9. This analysis is a program-level (i.e., macroscopic) analysis. CEQA requires the Regional Board to conduct a program-level analysis of environmental impacts. (Pub. Res. Code, section 21159(d).) Similarly, the CEQA substitute documents do not engage in speculation or conjecture (Pub. Res. Code, section 21159(a).) When the CEQA analysis identifies a potentially significant environmental impact, the accompanying analysis identifies reasonably foreseeable feasible mitigation measures. (Pub. Res. Code, section 21159(a)(2).) The substitute environmental documentation has identified the reasonably foreseeable alternative means of compliance. (Pub. Res. Code, section 21159(a)(3).)

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Proposed Action

Description of Proposed Action

The proposed regulatory action by the Regional Board would prohibit discharge of wastewater through an OWDS in the Civic Center area of the City of Malibu. The prohibition would be effected through an amendment, set forth in the tentative resolution, to the *Water Quality Control Plan for the Coastal Watersheds of Ventura and Los Angeles Counties (Basin Plan).*

The area that would be affected by the proposed prohibition is referred to as the Malibu Civic Center area (Figure 1), which includes Malibu Valley, Winter Canyon, and the adjacent coastal strips of land and beaches. Existing residents, businesses, and public facilities that discharge wastes through an OWDS in the Malibu Civic Center area would be affected by the proposed prohibition as well as future dischargers who may plan to discharge in this area. The regulatory action would immediately prohibit all new discharges from OWDS in the Malibu Civic Center area, and establish a five-year schedule to cease discharges from existing systems.[2]

Types of subsurface disposal systems, or OWDSs, that would be prohibited range from passive systems with conventional septic tanks to active systems with equipment that more aggressively removes pollutant loads from sewage before subsurface disposal. The prohibition would cover an OWDSs that serves an individual property (residential, commercial, industrial, and public properties) as well as a group of properties.

Goal of the Proposed Action

The goal of the proposed prohibition on OWDSs is to remedy pollution of water resources, including beaches, Malibu Lagoon and Creek, and groundwater, that are affected by discharges from OWDSs. The prohibition, together with other efforts, is expected to restore beneficial uses of these water resources.

Environmental Setting

Background

The Malibu Civic Center area supports a population of about 1,000 residents and is the core of the City's business, cultural, and commercial activities. The area, which includes the renowned Surfrider Beach, attracts a high volume of visitors.

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[2] An exemption would allow for "zero-discharge" projects if a discharger can demonstrate, to the satisfaction of the Executive Officer, that reuse, evaporation, and/or transpiration will use 100% of the wastewater generated by activities on a site, will not contribute to a rise in the water table, and will contain and properly handle any brines and/or off-specification wastewaters that cannot be reused/discharged in a manner that meets water quality objectives established in the *Basin Plan.*

Without community sewers and wastewater treatment infrastructure, residents, businesses, and public facilities in the area discharge wastewaters totaling about 255,000 gallons per day (gpd) through OWDSs to the subsurface and underlying groundwater. These high flows of wastewater, coupled with unfavorable hydrogeologic conditions, have raised concerns about reliance on this wastewater disposal strategy.

Water Resources

Surface waters in the Malibu Civic Center area include Malibu Creek, Malibu Lagoon, a critical fresh/saltwater habitat for rare, threatened, and endangered species, and the ocean beaches that are heavily used by the resident population as well as visitors. Also, groundwater in the area is a historic and potential source of drinking water. In the *Basin Plan*, the Regional Board has formally designated these plus other beneficial uses for water resources as follows:

> **Malibu Lagoon:** Navigation; Water Contact Recreation; Non-contact Water Recreation; Estuarine Habitat; Marine Habitat; Wildlife Habitat; Rare, Threatened, or Endangered Species Habitat; Migration of Aquatic Organisms; Spawning, Reproduction, and/or Early Development; Wetland Habitat.
>
> **Malibu Creek:** Water Contact Recreation; Non-contact Water Recreation; Warm Freshwater Habitat; Cold Freshwater Habitat; Wildlife Habitat; Rare, Threatened, or Endangered Species Habitat; Migration of Aquatic Organisms; Spawning, Reproduction, and/or Early Development; Wetland Habitat.
>
> **Malibu Beach and Malibu Lagoon Beach (Surfrider Beach), Amarillo Beach, and Carbon Beach:** Navigation; Water Contact Recreation; Non-contact Water Recreation; Commercial and Sport Fishing; Marine Habitat; Wildlife Habitat; Spawning, Reproduction, and/or Early Development; and Shellfish Harvesting.
>
> **Groundwater:** Municipal and Domestic Supply (Potential), Industrial Process and Service Supply, and Agricultural Supply.

Also in the *Basin Plan,* the Regional Board has established water quality objectives to protect the beneficial uses identified above.

Impairments to Beneficial Uses of Water Resources

In a 2006 Clean Water Act Section 303(d) list, approved by the United States Environmental Protection Agency (US EPA) on June 28, 2007, impairments to beneficial uses are formally identified for the following water resources:

> Malibu Lagoon: impaired by Coliform Bacteria, Eutrophication.
> Malibu Creek: impaired by Coliform Bacteria, Nutrients (Algae).
> Malibu Beach: impaired by Indicator Bacteria.
> Malibu Lagoon Beach (Surfrider Beach): impaired by Coliform Bacteria.
> Carbon Beach: impaired by Indicator Bacteria.

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To restore water quality and impaired beneficial uses, the US EPA and/or Regional Board have adopted the following Total Maximum Daily Loads (TMDLs):

a. **Malibu Creek Watershed Nutrient TMDL:** The US EPA, on March 21, 2003, specified a numeric target of 1.0 mg/l for total nitrogen during summer months (April 15 to November 15) and a numeric target of 8.0 mg/L for total nitrogen during winter months (November 16 to April 14). Significant sources of the nutrient pollutants include discharges of wastewaters from commercial, public, and residential landuse activities. The TMDL specifies a load allocation for onsite wastewater disposal systems of 6 lbs/day during the summer months and 8 mg/L during winter months.

b. **Malibu Creek and Lagoon Bacteria TMDL:** The Regional Board specified numeric targets, effective January 24, 2006, based on single sample and geometric mean bacteria water quality objectives in the *Basin Plan* to protect the water contact recreation use. Sources of bacteria loading include storm water runoff, dry-weather runoff, onsite wastewater disposal systems, and animal wastes. The TMDL specifies load allocations for onsite wastewater disposal systems equal to the allowable number of exceedance days of the numeric targets. There are no allowable exceedance days of the geometric mean numeric targets. For the single sample numeric targets, based on daily sampling, in summer (April 1 to October 31), there are no allowable exceedance days, in winter dry weather (November 1 to March 31), there are three allowable exceedances days, and in wet weather (defined as days with >=0.1 and the three days following the rain event), there are 17 allowable exceedance days.

c. **Santa Monica Bay Beaches Wet and Dry Bacteria TMDL:** For beaches along the Santa Monica Bay impaired by bacteria in dry and wet weather, the Regional Board specified numeric targets, effective July 15, 2003, based on the single sample and geometric mean bacteria water quality objectives in the *Basin Plan* to protect the water contact recreation use. The dry weather TMDL identified the sources of bacteria loading as dry-weather urban runoff, natural source runoff and groundwater. The wet weather TMDL identified stormwater runoff as a major source. The TMDLs did not provide load allocations for onsite wastewater disposal systems, meaning that no exceedances of the numeric targets are permissible as a result of discharges from non-point sources, including onsite wastewater disposal systems. There are no allowable exceedance days of the geometric mean numeric targets. For the single sample numeric targets, based on daily sampling, in summer (April 1 to October 31), there are no allowable exceedance days, in winter dry weather (November 1 to March 31), there are three allowable exceedances days, and in wet weather (defined as days with >=0.1 and the three days following the rain event), there are 17 allowable exceedance days.

Technical Evidence in Support of the Proposed Prohibition

In the technical staff report, staff presents evidence in support of the proposed prohibition, in accordance with the requirements of the California Water Code, sections 13280 and 13281, for a

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determination that discharges of OWDSs in the Malibu Civic Center area result in violation of water quality objectives, will impair present or future beneficial uses of water, will cause pollution, nuisance, or contamination, or will unreasonably degrade the quality of any water of the state. The conclusions, based on the evidence in the technical staff report, are as follows:

i. Dischargers subject to Orders from the Regional Board that specify waste discharge requirements (WDRs) for OWDSs have poor records of compliance. (See Technical Memoranda #1 appended to the technical staff report.)

ii. Discharges of wastewaters released from OWDSs to groundwater contain elevated levels of pathogens and nitrogen that impair underlying groundwater as a potential source of drinking water. (See Technical Memoranda #2 appended to the technical staff report.)

iii. Discharges of wastewaters released from OWDSs to groundwater that is in hydraulic connection with beaches along the mouths of unsewered watersheds transport pathogens that elevate risks of infectious disease from water contact recreation. (See Technical Memoranda #3 appended to the technical staff report.)

iv. Discharges of wastewaters released from OWDSs to groundwater that is in hydraulic connection with Malibu Lagoon transport a nitrogen load significantly in excess of the wasteload allocation in the TMDL established to restore water quality to a level sufficient to protect aquatic life and prevent nuisance resulting from eutrophication. (See Technical Memoranda #4 appended to the technical staff report.)

v. Wastewater flows in the Civic Center area have been increasing. On many sites, hydrogeologic conditions are unsuitable for high flows of wastewater, and many dischargers generate wastewater flows at rates that exceed their capacity to discharge on-site. These dischargers rely on pumping significant flows into tanker trucks that haul liquid sewage and sludge via public roadways to communities that have sewer and wastewater treatment facilities. (See Technical Memoranda #5 appended to the technical staff report.)

Based on these conclusions, the technical staff report presents a recommendation for Regional Board action to prohibit OWDSs in order to protect the quality of water resources and to restore beneficial uses of water resources in the Malibu Civic Center area. This recommendation is set forth in a tentative resolution for the proposed amendment to the *Basin Plan*, which the Regional Board will consider for adoption on October 1, 2009.

Schedule for Compliance with the Proposed Prohibition

Although the Regional Board is not specifying the *manner* of compliance with the prohibition, staff has reviewed options for conceptual projects that could provide the community with wastewater services in compliance with federal and state regulations, water quality objectives, and the proposed prohibition. These compliance projects include construction, operation, and maintenance of:

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A. Integrated water resources management facilities that would collect and treat wastewaters in, and distribute recycled water from, a centralized plant within the community.

B. A community sewer collection system and interceptor sewer to export sewage for treatment at a facility in another community.

C. Decentralized wastewater management facilities that would collect and treat and wastewaters in, and distribute recycled water from, small plants within the community.

The proposed prohibition anticipates that the community would select, design, and construct one of the above projects, or a similar project, and cease discharges from OWDSs within five years, in accordance with the following schedule:

April 1, 2010:	Completion of 25% of a master facilities plan for possible projects to comply with the prohibition, including initiation of a strong public participation program.
October 1, 2010:	Completion of 50% of a master facilities plan and initiation of environmental review, with strong, on-going public participation. Concurrently, initiation of preliminary engineering and a feasibility study for possible projects to comply with the prohibition.
April 1, 2011:	Substantial completion of a master facilities plan, preliminary engineering and a feasibility study, and engagement of the public in selection of a project to comply with the prohibition.
October 1, 2011:	Completion of a master facilities plan, preliminary engineering and a feasibility study, and selection of a project to comply with the prohibition.
October 1, 2012:	Completion of a final design for selected project.
October 1, 2013:	Completion of 50% of construction of selected project.
October 1, 2014:	Completion of project selected to comply with prohibition, including successful startup of the project and termination of discharge from all OWDSs.

Depending on the community response – or lack of a response, the Regional Board could enforce the prohibition through issuance of Cease and Desist Orders to dischargers operating under Regional Board Orders that specify waste discharge requirements (WDRs). There are currently 21 dischargers subject to WDRs in the Malibu Civic Center area.

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Program Alternatives

In this section, staff analyzed two alternatives, or actions, to the proposed project within the jurisdiction of the Regional Board, municipalities, and other local agencies. These alternatives include:

1. An initiative by a municipality, utility, or other local authority (local government) to cease discharge through OWDSs by providing community services to collect and dispose/reuse wastewater in a manner that will restore water quality and beneficial uses of impaired waters.

2. A 'no action' alternative, in which dischargers continue to rely on existing OWDSs.

Staff did not analyze an alternative that assumes that dischargers would elect to haul large quantities of sewage off-site, by tanker truck, to other communities with wastewater disposal facilities and capacity to accept liquid wastes from dischargers in the Malibu Civic Center area. As discussed in the technical staff report (Technical Memoranda #5), a subset of ten commercial dischargers haul about 7% of their sewage (almost 2 million gallons) from the Malibu Civic Center area to communities that have wastewater treatment facilities. This need results from on-site hydrogeologic limitations and/or facility limitations. The hauling practice already has impacts to traffic, odor, and aesthetics, and staff did not deem this to be a practical alternative on a larger scale (capable of handling flows of about 250,000 gpd to 300,000 gpd) and on a long-term basis, for reasons among which include:

- Tanker truck capacities are small, ranging from 2,500 gallons to 7,000 gallons.
- Public nuisances, including noise and odor, have been observed during the pumping of raw sewage at various commercial facilities for transfer into the tanker trucks.
- Round trips for the tanker trucks are between 60 miles and 180 miles (including routes through other communities), and are expected to have adverse impacts on roads and transportation flows.
- Staff estimates that this practice of managing raw sewage contributes to climate change, at a rate of 250 tons of carbon dioxide per year.

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Program Alternative 1– Local Government Initiative

Under program alternative 1, a municipality, utility or other local authority would provide community services to collect and dispose/reuse wastewater in the Malibu Civic Center area in a manner that will restore water quality and beneficial uses of impaired waters.

While a local government may be an existing entity, such as the City of Malibu or and existing utility or other government authority, it also may be a newly formed utility or government authority. California law provides for a number of institutional options for providing community services. For example, the City can contract for services from a nearby government entity that already has wastewater management capabilities and capacity. Alternatively, an existing utility, such as the Los Angeles County Waterworks District No. 29, Malibu, or a regional water

authority, such as the West Basin Municipal Water District, could expand their scope of services and provide wastewater management services, integrated with potable water services already offered to the Malibu Civic Center area. Such an option also offers the potential to manage wastewater as a resource for recycling. Finally, a private organization – while not a government entity – could nevertheless be formed by community members and stakeholders to provide wastewater management services.

Program alternative 1 – for a local government initiative – anticipates achieving water quality objectives and TMDL targets through compliance projects that would provide the community with wastewater services in compliance with federal and state regulations, water quality objectives, and the proposed prohibition. These compliance projects include construction, operation, and maintenance of:

A. Integrated water resources management facilities that would collect and treat wastewaters in, and distribute recycled water from, a centralized plant within the community.

B. A community sewer collection system and interceptor sewer line to export sewage for treatment at a facility in another community.

C. Decentralized wastewater management facilities that would collect and treat and wastewaters in, and distribute recycled water from, small plants within the community.

An overview and analysis of conceptual projects, or options, that the community and stakeholders could implement to comply with these program alternatives is provided in the next section (Options for Compliance Projects). These compliance projects are expected to have positive environmental impacts, in that they are expected to reduce water quality impairments and help restore beneficial uses. However, these projects also have potential significant adverse impacts to the environment that would occur from the construction, operation, and maintenance these community facilities. These impacts, which are of relatively short duration, can either be mitigated or alternative projects to achieve water quality objectives may be available.

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Program Alternative 2 – No Action

This 'no action' program alternative assumes that neither the Regional Board nor a local government takes action to prohibit discharges from OWDSs. Although dischargers could voluntarily implement projects to achieve water quality objectives and TMDL targets, staff believes that this is unlikely. Accordingly, under this program alternative, it is assumed that the cumulative rate of pollutant loading does not decline. As a result, this program alternative would result in continuing or worsening impairments to beneficial uses of the water resources in and around the Malibu Civic Center area, including:

- Malibu Valley groundwater, as a potential source of drinking water.
- beaches, for body contact recreation, and

– Malibu Creek and Lagoon, as support for aquatic and wildlife habitat, including rare, threatened, and endangered species.

Recommendation

Staff concludes that the proposed project (Regional Board prohibition) is the most environmentally advantageous program. Program alternative 2 (no action) is not a preferred alternative because, while it avoids impacts due to construction and operation of wastewater management projects, it allows continued impairment of beaches, Malibu Lagoon and Creek, and underlying groundwater.

Both the proposed project (Regional Board prohibition) and program alternative 1 (local government initiative) have potential to achieve water quality objectives and to restore beneficial uses. However, program alternative 1 relies on an existing or newly formed government entity to voluntarily plan, design, construct, and operate a project that would provide dischargers in the Malibu Civic Center area with community wastewater collection, treatment, and disposal services. Such a voluntary, or discretionary, effort is not currently available. Or, if such an initiative does form, it may not be able to act in a timely manner to complete projects to achieve water quality goals and restore beneficial uses. Therefore, program alternative 1 is not a preferred alternative.

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Options for Compliance Projects

Introduction

The program alternatives in the previous section do not specify a particular project to achieve compliance,[3] and it will be the responsibility of the community and stakeholders to select a strategy for compliance. Project-level impacts to the environment will depend on the selected strategy and it will be the responsibility of a local government (local agency) to perform a specific project-level analysis and disclose those environmental impacts (Pub. Res. Code § 21159.2).

Nevertheless, the Regional Board can analyze and disclose, on a conceptual basis, foreseeable environmental impacts from possible projects that may be selected for compliance. Accordingly, in this section, staff provides an overview and analysis of three conceptual options, or projects, that the community and stakeholders could implement to comply with the proposed prohibition and program alternative 1 – the local government initiative. These possible compliance projects include:

A. "Integrated Facilities," including the construction and operation of a central wastewater treatment plant in the community, a local sewer collection system, and recycled water distribution system. The community may also elect to broaden the scope of such a project, in order to integrate these services with delivery of potable water supplies; however, for purposes of this analysis, a more limited scope was assumed.

B. "Interceptor Sewer," including construction and operation of a local sewer collection system and an interceptor sewer to export sewage for treatment at a facility in another community.

C. "Decentralized Facilities," including the construction and operation of small plants in the community, small sewer collection systems, and limited recycled water distribution systems.

These projects are expected to have positive environmental impacts, in that they are expected to reduce water quality impairments to:

- Groundwater – which has pollutants from OWDSs at levels that would impact human health should the community need groundwater as part of its potable water supply in the future.

- Malibu Lagoon – which has a nitrogen load from OWDSs at levels that contribute to eutrophication and impair habitat for aquatic life and wildlife.

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[3] The Regional Board is prohibited from specifying the manner of compliance with its regulations (Water Code § 13360).

– Nearby beaches – which consistently fail to meet standards set to protect swimmers and surfers from infectious disease resulting from incidental ingestion of or direct exposure to polluted water.

However, these projects also have potential significant adverse impacts to the environment, which would occur from the construction, operation, and maintenance these facilities. These impacts, which are generally of relatively short duration, can either be mitigated or alternative means of compliance with the Regional Board prohibition may be available.

Summary of Economics

Wastewater costs for systems currently operating in the Malibu Civic Center area vary widely. Many residents have passive septic systems installed decades ago which, if replaced today, would roughly cost between $8,000 to $21,000. Maintenance costs for such systems are not significant; assuming a homeowner pumped sludge on a three-year schedule, operating and maintenance costs would be $600 (or $200 annually spread over three years). At the other extreme are capital costs for the wastewater management systems for larger commercial properties that generate high flows of wastewater relative to land available plant and equipment and for subsurface disposal. For example, capital costs for the treatment system at Malibu Lumber – the most recent system to come on line (in April 2009) – totaled millions of dollars.

To estimate costs for the three compliance projects considered in this analysis, staff assumed that the projects would be sized to replace the total existing OWDS capacity in the community, and that the projects would not be designed to accommodate increases in wastewater flows. Accordingly, all three compliance projects were sized to handle a flow of approximately 300,000 gpd.

Based on preliminary estimates for the three compliance projects considered in this analysis, capital costs, in today's dollars, would range from $17 million to $80 million, as follows:

Summary of Capital Costs for Compliance Projects

Capitol Costs	Integrated Facilities	Interceptor Sewer to a:		Decentralized Facilities
		Hyperion Connection	Tapia Connection	
Local Sewer System	$7,800,000	$7,800,000	$7,800,000	$7,800,000
Interceptor Sewer	--	$49,000,000	$72,500,000	--
Treatment Plant(s)	$5,900,000	--	--	$5,800,000
Recycled Distribution System	$3,000,000	0	0	$3,000,000
total	***$16,700,000***	***$56,800,000***	***$80,300,000***	***$16,600,000***

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Also, in switching from OWDSs to one of the above projects, all dischargers would incur costs for abandonment of their systems. For a residential property, these costs are estimated to range from $1,700 to $2,700.

Compliance Project A – Integrated Water Resources Management Facilities

Under the "Integrated Facilities" method of compliance, the City of Malibu, an existing utility or local authority, or a newly formed utility or local authority would construct and operate a centrally located wastewater treatment plant, with a local sewer collection system and a local recycled water distribution system. Capital cost estimates for this compliance project total $16,700,000 and include the following major components and key assumptions:

Integrated Water Resources Management Facilities

Component	Capital Cost	Key Assumptions
Local Sewer System	$7,800,000	22,000 ft of 8-inch diameter pipe, to collect 300,000 gpd by gravity flow to 3 wet wells.
		Construction Technique: Open Cut Trenching
Treatment Plant	$5,900,000	300,000 gpd capacity using activated sludge, filtration, and disinfection to produce a Title 22 recycled water for direct reuse.
		Cost of land not included.
Recycled Water Distribution System	$3,000,000	15,000 ft of 8-inch diameter pipe, to distribute 150,000 gallons of recycled water
		Construction Technique: Open Cut Trenching
		50% of flow recycled; 50% disposed to subsurface.
total	***$16,700,000***	

For purposes of this preliminary analysis, staff assumed that there would be demand to directly reuse only half of the treated effluent (and a market analysis would need to be conducted to determine the community's capacity for recycling). Community planners may consider the promotion of additional uses for recycled water by requiring dual plumbing for any new development or retrofits.

Staff also assumed that the portion of treated effluent not recycled is discharged through subsurface methods, which will require a larger project footprint, unless the discharge can be integrated into management with other water projects such as stormwater treatment. As an alternative to subsurface disposal, the community may elect to consider an ocean outfall. Costs for construction of this outfall, additional treatment capabilities such as temperature controls for the treated effluent, and diffusers at the outfall, have not been included in this analysis.

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Compliance Project B – Interceptor Sewer

Under the "Interceptor Sewer" method of compliance with the proposed prohibition, the community would design and construct a wastewater collection system in the Malibu Civic Center area that would feed into an interceptor sewer that exports the sewage out of the area to another community with wastewater treatment facilities. The nearest connections are sewers that are part of the Hyperion Wastewater Treatment Plant in El Segundo and the Tapia Water Reclamation Facility in Calabasas.

Hyperion Interceptor Sewer: An interceptor sewer designed to export sewage to the Hyperion system is expected to require tunneling under the Pacific Coast Highway to the nearest connection point in Castellammare, which is 7-1/2 miles from the Civic Center area. Cost estimates for this compliance project total $56,800,000 and include the following major components and key assumptions:

Hyperion Interceptor Sewer

Component	Capital Cost	Key Assumptions
Local Sewer System	$7,800,000	22,000 ft of 8-inch diameter pipe, to collect 300,000 gpd by gravity flow to 3 wet wells.
		Construction Technique: Open Cut Trenching
Interceptor Sewer Line	$49,000,000	40,000 ft of 24-inch diameter pipe, to export 300,000 gpd by gravity flow to a connection point in Castellammare.
		Connection fee of $1,700,000 included
		Construction Technique: Trenchless Tunneling
		California Department of Transportation permitting fees not included.
total	***$56,800,000***	

The interceptor sewer line costs include the capital costs of a local collection system, the interceptor line, and four wet well lift stations that would be needed for gravity flow transport of sewage with a vertical lift of 300 feet over 7-1/2 miles to a connection in Castellamarre.

Tapia Interceptor Sewer: An interceptor sewer designed to export sewage to the Tapia Water Reclamation Facility is expected to require tunneling under Las Virgenes Road and installation of pumps to lift the sewage to a connection point with the Tapia plant in Calabasas. Cost estimates for this compliance project total $80,300,000 and include the following major components and key assumptions:

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Tapia Interceptor Sewer

Component	Capital Cost	Key Assumptions
Local Sewer System	$7,800,000	22,000 ft of 8-inch diameter pipe, to collect 300,000 gpd by gravity flow to 3 wet wells.
		Construction Technique: Open Cut Trenching
Interceptor Sewer Line	$72,500,000	58,000 ft of 24-inch diameter pipe, to export and lift 300,000 gpd by pressurized flow Tapia.
		Connection fee of $1,700,000 included
		Construction Technique: Trenchless Tunneling
		Permitting fees not included.
total	***$80,300,000***	

The interceptor sewer scenario includes capital costs for the local collection system, the interceptor line, and ten wet well lift stations needed to lift and transport the sewage 800 vertical feet over a distance of 11 miles to the Tapia connection.

Compliance Project C – Decentralized Wastewater Management Facilities

Under the "Decentralized Facilities" method of compliance, the City of Malibu, an existing utility or local authority, or a newly formed utility or local authority would construct and operate small plants in the community, small sewer collection systems, and limited recycled water distribution systems. Or, alternatively, such projects could be led by private sector developers. Cost estimates for this compliance project total $16,600,000 and include the following major components and key assumptions:

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Decentralized Wastewater Management Facilities

Component	Cost	Key Assumptions
Local Sewer System	$7,800,000	22,000 ft of 8-inch diameter pipe, to collect 300,000 gpd by gravity flow to 3 wet wells.
		Construction Technique: Open Cut Trenching
Treatment Plant 1	$1,200,000	67,000 gpd capacity using activated sludge, filtration, and disinfection to produce a Title 22 recycled water for direct reuse.
		Cost of land not included.
Recycled Water Distribution System Treatment Plant 1	$600,000	3,000 ft of 8-inch diameter pipe, to distribute Construction Technique: Open Cut Trenching
		50% of flow recycled; 50% disposed to subsurface.
Treatment Plant 2	$4,600,000	233,000 gpd capacity using activated sludge, filtration, and disinfection to produce a Title 22 recycled water for direct reuse.
		Cost of land not included.
Recycled Water Distribution System Treatment Plant 2	$2,400,000	12,000 ft of 8-inch diameter pipe, to distribute Construction Technique: Open Cut Trenching
		50% of flow recycled; 50% disposed to subsurface.
Total	***$16,600,000***	

For purposes of this preliminary analysis, staff assumed that there would be demand to directly reuse only half of the treated effluent, and a market analysis would need to be conducted to determine the capacity for recycling within each sector served by the treatment plants. Community planners may consider the promotion of additional uses for recycled water by requiring dual plumbing for any new development or retrofits. Staff assumed that effluent that could not be recycled is discharged via subsurface mechanisms, which would require more land. Staff did not expect that an ocean outfall for the non-recycled portion of the treated effluent would be practical for these smaller scale plants.

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Other Environmental Considerations

Analyses of other environmental impacts resulting from reasonably foreseeable options of complying with the proposed prohibition include:

- Cumulative Impacts of the Program Alternatives (as required by CEQA Guidelines Section 15130): Cumulative impacts, defined in Section 15355 of the CEQA Guidelines, refer to two or more individual effects, that when considered together, are considerable or that increase other environmental impacts. A cumulative impact assessment must consider not only impacts of the proposed prohibition, but also impacts from other municipal and private projects that would occur in the area during the period of implementation.

- Potential Growth-Inducing Effects of the Program Alternatives (as required by CEQA Guidelines Section 15126).
- Unavoidable Significant Impacts (as required by CEQA Guidelines Section 15126.2).

Cumulative Impacts

On a programmatic level, the Regional Board expects a net environmental benefit to water quality and beneficial uses from the proposed prohibition, TMDLs, and other future regulatory actions. The Regional Board's proposed prohibition is a regulatory action that is related to TMDLs that have been developed by the Regional Board and US Environmental Protection Agency, including:

a. The Malibu Creek Watershed Nutrient TMDL: The US EPA, on March 21, 2003, specified a numeric target of 1.0 mg/l for total nitrogen during summer months (April 15 to November 15) and a numeric target of 8.0 mg/L for total nitrogen during winter months (November 16 to April 14). Significant sources of the nutrient pollutants include discharges of wastewaters from commercial, public, and residential landuse activities. The TMDL specifies a load allocation for onsite wastewater disposal systems of 6 lbs/day during the summer months and 8 mg/L during winter months.
b. The Malibu Creek and Lagoon Bacteria TMDL: The Regional Board specified numeric targets, effective January 24, 2006, based on single sample and geometric mean bacteria water quality objectives in the *Basin Plan,* to protect the water contact recreation use. Sources of bacteria loading include storm water runoff, dry-weather runoff, onsite wastewater treatment systems, and animal wastes. The TMDL specifies load allocations for onsite wastewater treatment systems equal to the allowable number of exceedance days of the numeric targets. There are no allowable exceedance days of the geometric mean numeric targets. For the single sample numeric targets, based on daily sampling, in summer (April 1 – October 31), there are no allowable exceedance days, in winter dry weather (November 1 - March 31), there are three allowable exceedances days, and in wet weather (November 1 - October 31), there are 17 allowable exceedance days.
c. The Santa Monica Bay Beaches Wet and Dry Bacteria TMDL: For beaches along the Santa Monica Bay impaired by bacteria in dry and wet weather, the Regional Board specified numeric targets, effective July 15, 2003, based on the single sample and geometric mean bacteria water quality objectives in the *Basin Plan* to protect the water contact recreation use. The dry weather TMDL identified the sources of bacteria loading as dry-weather urban runoff, natural source runoff and groundwater. The wet weather TMDL identified stormwater runoff as the major source. The TMDLs did not specify load allocations for onsite wastewater treatment systems. This effectively means that no loading is permissible from discharges from on-site wastewater disposal systems.

The proposed prohibition, in that it is a remedy to water quality impairments, is closely related to the Malibu Creek Watershed Nutrient TMDL, Malibu Creek and Lagoon Bacteria TMDL, and Santa Monica Bay Beaches Wet and Dry Bacteria TMDL. Additionally, the Regional Board has issued other TMDLs that affect the area, such as a trash TMDL in the Malibu Creek watershed. The Regional Board and other agencies may issue future regulations that affect the area. When

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future regulatory actions are taken, such as adoption of additional TMDLs, programmatic impacts, including cumulative impacts, would be analyzed.

On a project level, the Regional Board expects a net environmental benefit over the long term from projects undertaken to comply with the prohibition, TMDLs, and other regulatory actions, in that water quality will be improved and beneficial uses will be restored. Specific projects to comply with the prohibition must be environmentally evaluated and cumulative impacts considered as the implementing municipality or agency considers such projects.

Growth-Inducing Impacts

Staff's analyses of other environmental impacts resulting from reasonably foreseeable options of complying with the proposed prohibition also includes growth-inducing impacts, including:

- an overview of the CEQA Guidelines relevant to evaluating growth inducement,
- a discussion of the types of growth that can occur in the Malibu Civic Center area,
- a discussion of obstacles to growth in the area, and
- an evaluation of the potential for the Program Alternatives to induce growth.

Growth-inducing impacts are defined by the State CEQA Guidelines as:

> 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.
>
> (CEQA Guidelines, Section 15126.2(d)).

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

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

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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.

Types of Growth: The primary types of growth that occur within the area affected by the proposed prohibition are:

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

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

Population growth is growth in the number of persons that live and work in the Malibu Civic Center 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 unincorporated areas of the County of Los Angeles and County of Ventura and in incorporated municipalities is governed by general plans, which are intended to direct land use development in an orderly manner. The framework for general plans 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 plans guide land use development and allow for entitlements, they do not represent an obstacle to land use growth. The Malibu Civic Center area that would be affected by the proposed prohibition is within the City of Malibu, which has plans that guide land use development.

Existing Obstacles to Growth: Obstacles to growth could include inadequate infrastructure (e.g. 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.

Potential for Compliance with the Proposed Prohibition to Induce Growth

The prohibition on OWDSs in the Malibu Civic Center area is not expected to directly induce growth, in that it would not result in the construction of new housing.

Furthermore, the prohibition on OWDSs in the Malibu Civic Center area is not expected to indirectly induce growth, in that it would not result generate long-term economic opportunities

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that could lead to additional immigration, and would not remove an obstacle to land use or population growth. However, and although construction activities associated compliance projects for the prohibition would increase the economic opportunities in the area and region, this construction activity 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.

Unavoidable Significant Adverse Impacts

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

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 potential trash hazards and increasing the aesthetic experience at beaches, parks around the lake, and other recreation areas. In addition, habitat carries a significant non-market economic value. Enhancement of habitat beneficial uses will also have positive indirect economic and social benefits. Section 6 of this SED identifies the anticipated environmental effects for each resource area, identifies mitigation measures for potentially significant impacts, and determines that impacts after implementation of mitigation are insignificant.

Statement of Overriding Considerations and Determination

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

The implementation of this amendment to the *Basin Plan* will result in improved water quality in the waters of the Region and will have significant positive impacts to the environment (including restoration and enhancement of beneficial uses) and the economy over the long term. Enhancement of recreational uses of beaches, aquatic habitat in Malibu Lagoon, and drinking water potential in groundwater will have positive social and economic effects. Specific projects implemented to comply with the prohibition 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.

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This environmental staff report, together with the technical staff report and tentative resolution provide the necessary information pursuant to Public Resources Code section 21159 to conclude that properly designed and implemented compliance projects 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 local governments can and should implement the recommended mitigation measures.

Specific projects to comply with this prohibition that may have a significant impact will be implemented by local agencies and jurisdictions and would therefore be subject to a separate environmental review. A lead agency for the compliance projects would have the ability to mitigate project impacts, can and should mitigate project impacts, and are required under CEQA to mitigate any environmental impacts it identifies, unless it has reason not to do so. Notably, in almost all circumstances, where unavoidable or unmitigable impacts would present unacceptable hardship upon nearby receptors or venues, a local agency has a variety of alternative implementation measures available instead.

The implementation of this prohibition is expected to result in improved water quality in the Malibu Civic Center area and reduction of public nuisance, but it may result in short-term localized significant adverse impacts to the environment as a large construction projects may be undertaken in the vicinity of the area. These impacts are generally expected to be limited, short-term or may be mitigated through careful design and scheduling. The technical and environmental staff reports for this proposed prohibition in the Malibu Civic Center area, including the CEQA checklist, provide the necessary information pursuant to Public Resources Code section 21159 to conclude that properly designed and implemented compliance project should mitigate and generally avoid significant adverse effects on the environment, and the agency responsible for implementing the prohibition should ensure that its 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 prohibition. At this stage, any more particularized conclusions would be speculative. The Regional Board does not have legal authority to specify the manner of compliance with its orders or regulations (CWC, section 13360), and thus cannot dictate that an appropriate location be selected for any particular project, that it be designed consistent with standard industry practices, or that routine and ordinary mitigation measures be employed. These measures are all within the jurisdiction and authority of an agency, or local government, that would be responsible for implementing this prohibition, and that agency can and should employ those alternatives and mitigation measures to reduce any impacts as much as feasible. (14 Cal. Code Regs., section 15091(a)(2).)

Implementation of the proposed prohibition 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 prohibition and restoring beneficial uses (an action required to achieve the express, national policy of the Clean Water Act) remains.

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CEQA Analysis

Environmental Checklist and Discussion

The Regional Board has endeavored to analyze and disclose impacts to the environment that are expected to result from possible projects that would achieve compliance with the proposed Regional Board prohibition. These compliance projects, described in the previous section, include construction, operation, and maintenance of:

D. "Integrated Facilities," including the construction and operation of a central wastewater treatment plant in the community, a local sewer collection system, and recycled water distribution system. The community may also elect to broaden the scope of such a project, in order to integrate these services with delivery of potable water supplies; however, for purposes of this analysis, a more limited scope was assumed.

E. "Interceptor Sewer," including construction and operation of a local sewer collection system and an interceptor sewer to export sewage for treatment at a facility in another community.

F. "Decentralized Facilities," including the construction and operation of small plants in the community, small sewer collection systems, and limited recycled water distribution systems.

These compliance projects are expected to have positive environmental impacts, in that discharges through OWDSs should cease, resulting in improvement to water quality and restoration of beneficial uses. However, these projects also have potential significant adverse impacts to the environment that would occur from the construction, operation, and maintenance of these community facilities, and from abandonment of OWDSs currently in use. These impacts, which are generally of relatively short duration, can either be mitigated or alternative means of compliance with the Regional Board prohibition may be available.

The impacts from the possible compliance projects are analyzed below on a conceptual basis. A review of possible projects[4] and a more detailed, project specific analysis should be led by community leaders with robust participation among stakeholders. It will be the responsibility of the community and stakeholders to select a strategy for compliance. And as a strategy and compliance project are selected, it will be the responsibility of a local government (local agency) to perform a specific project-level analysis and disclose environmental impacts in accordance with CEQA (Pub. Res. Code § 21159.2).

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[4] The Regional Board is prohibited from specifying the manner of compliance with its regulations (Water Code § 13360).

ENVIRONMENTAL CHECKLIST		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
1.	**Earth. Will the proposal result in:**				
	a. Unstable earth conditions or in changes in geologic substructures?		X		
	b. Disruptions, displacements, compaction or overcoming of the soil?		X		
	c. Change in topography or ground surface relief features?				X
	d. The destruction, covering or modification of any unique geologic or physical features?				X
	e. Any increase in wind or water erosion of soils, either on or off the site?		X		
	f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?			X	
	g. Exposure of people or property to geologic hazards, such as earthquakes, landslides, mudslides, ground failure, or similar hazards?		X		

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Discussion:

a. Many of the areas where the compliance projects would be located are already developed and significantly altered, and the projects would not subject people or structures to seismic risk or unstable soils. However, portions of the Interceptor Sewer and portions of the collection system for all compliance projects might be constructed through zones of slope instability. During this construction period, compliance with standard design and construction specifications and implementation recommendations to mitigate geologic hazards, prepared at a project level, would reduce the risk of geologic hazards.

b. Implementation of any of the compliance projects would disturb soils during excavations and trenching for sewers, pump stations, and/or recycled water distribution lines, and also during foundation work for treatment plant facilities for the Integrated Facilities and Decentralized Facilities. To the extent that any soil is disturbed during construction, standard construction techniques, including but not limited to, shoring, piling and soil stabilization would mitigate any potential impacts. Prior to earthwork, geotechnical studies would be conducted to evaluate geology and soil conditions.

   Upon completion of any of the compliance projects, trenching for lateral sewer lines and proper abandonment of existing OWDSs may disturb soils. Standard practices and techniques for stabilizing soils and minimizing erosion and sedimentation during trenching and installation activities should mitigate these impacts, and would be further evaluated on a project basis.

c. No impact, as infrastructure for the compliance projects could be of a size or scale that minimizes impact to topography and relief.

d. No impact.

e. For all compliance projects, construction activities would require soil displacement and could result in the loss of topsoil. Trenching equipment would be required to install sewer lines, interceptor line, and recycled water delivery lines. Construction activities would include the use of machinery for rough and final grading. To mitigate these impacts, topsoil could be stockpiled and standard best management practices (BMPs) could be identified and implemented to prevent/control erosion from water and wind.

f. Portions of all compliance projects would occur in loosely consolidated beach sands. As documented in 1(e) above, construction activities would require soil displacement. Trenching equipment would be required to install sewer lines, an interceptor line, and recycled water delivery lines. Construction activities would include the use of machinery for rough and final grading. To mitigate these impacts, standard BMPs would be identified and implemented to prevent/control erosion from water and wind.

g. Portions of the Interceptor Sewer and portions of the the collection system for all compliance projects might be sited and constructed in zones of slope instability. As documented in 1(a) above, compliance with standard design and construction specifications and implementation recommendations to mitigate geologic hazards, prepared at a project level, would reduce the risk of geologic hazards.

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	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
2.	**Air. Will the proposal result in:**				
	a. Substantial air emissions or deterioration of ambient air quality?		X		
	b. The creation of objectionable odors?		X		
	c. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?				X

Discussion:

a. All compliance projects would be located in the South Coast Air Basin, which is classified as an extreme non-attainment area for ozone and serious non-attainment area for PM_{10} and CO. Due to a coastal influence in the area, air quality is generally considered better than much of the South Coast Air Basin.

During construction of all compliance projects, short-term increases in traffic and short-term use of construction equipment would increase air emissions and generate minor amounts of NOX, CO, SO_2, ROG, and PM_{10}; these emissions would be quantified during planning and design at the project level. With mitigation measures, these emissions should be within the South Coast Air Quality Management District's construction significance thresholds. Measures to mitigate these impacts might include use of construction and maintenance vehicles with lower-emission engines, use of soot reduction traps or diesel particulate filters, and use of emulsified diesel fuel.

During operation of treatment facilities associated with the Integrated Facilities, Decentralized Facilities, and pump stations for local sewers associated with all compliance projects,

maintenance activities and solid waste removal are not expected to significantly increase air emissions. Furthermore, solid waste removal schedules could be synchronized with general trash removal schedules.

b. All compliance projects have the potential to eliminate existing odors from problematic OWDSs and from pumping excess sewage into tanker trucks for off-site hauling. However, the projects may also create odors in the treatment facilities such as the Integrated Facilities and Decentralized Facilities. The potential for such odors would be evaluated during planning and design at the project level. Mitigation measures, such as siting, design, and buffer zones, would be identified and considered at a project level.

c. No impact.

	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
3.	**Water. Will the proposal result in:**				
	a. Changes in currents, or the course of direction or water movements, in either marine or fresh waters?				X
	b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff?			X	
	c. Alterations to the course of flow of flood waters?				X
	d. Change in the amount of surface water in any water body?				X
	e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen, or turbidity?		X		
	f. Alteration of the direction or rate of flow of ground waters?	X			
	g. Change in the quantity or quality of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	X			
	h. Substantial reduction in the amount of water otherwise available for public water supplies?				X
	i. Exposure of people or property to water related hazards such as flooding or tidal waves?				X

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Discussion:

a. No changes in currents or surface water flow are expected.

b. Decreases in absorption rates resulting and changes in surface water runoff from hardscape at the plant(s) for the Integrated Facilities and Decentralized Facilities are expected to be minimal. These impacts would be evaluated at the project level, and minimized through siting and design of the facilities during the planning stages.

c. No alterations to the course of flow of flood waters is expected.

d. No change in the amount of flow of surface water is expected.

e. Water quality problems, including eutrophication in Malibu Lagoon and pathogen levels at beaches that necessary beach advisories, are well known in the area. Implementation of compliance projects is expected to improve, over the long-term, the quality of surface waters in the area and to restore beneficial uses.

   However, during construction of all of the compliance projects, possible short-term impacts may result. The potential for such impacts, such as increased turbidity and sediment in runoff from construction sites, would be evaluated during planning and design at the project level. Mitigation measures, such as construction BMPs to control pollution in stormwater, would be identified and considered at a project level.

   Furthermore, for compliance projects such as the Integrated Facilities, there may not be sufficient demand for recycling of all of the wastewaters, and a portion of the 300,000 gpd flow may need to be discharged. Should areas with favorable hydrogeologic conditions for subsurface disposal not be identified, such projects may require export of the treated wastewater through an ocean outfall. With proper design and operation of treatment facilities and outfall equipment such as diffusers and temperature controls, an ocean outfall discharge should meet water quality objectives, including temperature and turbidity. These impacts, together with mitigation measures, would be considered at a project level.

f. Upon operation of all compliance projects, termination of discharges from OWDSs would alter, on a local scale, groundwater flow patterns. Should subsurface disposal mechanisms be used for all or a portion of the discharge from the Integrated Facilities and Decentralized Facilities, groundwater flow patterns would be altered on a larger scale.

   In anticipation of restoration of groundwater quality, integrated planning and design for disposal field sites should consider potential sites for future production wells to meet a portion of the community's potable water needs or as a short-term water supply in the event of disrupted delivery from the Los Angeles County Waterworks District No. 29 – Malibu. Future groundwater production would significantly alter the direction and rate of flow of groundwater. These and other impacts would be evaluated during planning and design at the project level, and monitored during operation of disposal mechanisms.

g. One of the goals of the Regional Board's proposed prohibition is to improve the quality of groundwater and restore this resource as a potential source of drinking water. See also 3(f) above.

h. No reduction to public water supplies is expected. One of the goals of the Regional Board's proposed prohibition is to improve the quality of groundwater and restore this resource as a potential source of drinking water. See also 3(f) above.

i. No impact is expected from exposure of people or property to water-related hazards during either construction or operation of the compliance projects.

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	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
4.	**Plant Life. Will the proposal result in:**				
	a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, microflora and aquatic plants)?		X		
	b. Reduction of the numbers of any unique, rare or endangered species of plants?		X		
	c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?				X
	d. Reduction in acreage of any agricultural crop?				X

Discussion:

a. As much of the Malibu Civic Center area is urbanized, construction and operation of facilities associated with all compliance projects would not disturb or change plant diversity or change or reduce the number of unique, rare, or endangered species of plants. However, portions of the area are environmentally sensitive and, depending on the location selected for the facilities, impacts could potentially occur to biological resources including special-status species and habitats, wetlands, and trees protected under local ordinances or policies. Important plant communities include the coastal salt marsh and coastal stand. The diversity of species, or number of any species of plants, could be maintained by siting and/or by preserving plants prior, during, and after the construction of facilities by re-establishing and maintaining the plant communities after construction**.**

b. As documented in 4(a) above, portions of the area are environmentally sensitive and, depending on the location selected for the facilities, impacts could potentially occur to biological resources including 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 or biological habitats in the site area are properly identified and protected as necessary. Focused protocol plant surveys for special-status-plant species could be conducted. 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. If sensitive plant species occur on a project site, a local agency should require mitigation in accordance with the Endangered Species Act. These mitigation measures would be developed in consultation with the California Department of Fish and Game (CDFG) and the United States Fish and Wildlife Service (USFWS).

c. No impact.

d. No impact.

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	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
5.	**Animal Life. Will the proposal result in:**				
	a. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects or microfauna)?		X		
	b. Reduction of the numbers of any unique, rare or endangered species of animals?		X		
	c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?				X
	d. Deterioration to existing fish or wildlife habitat?		X		

Discussion:

a. As much of the Malibu Civic Center area is urbanized, construction and operation of facilities associated with all compliance projects would not disturb or change the diversity of animal species or change or reduce the numbers of any of species. However, portions of the area are environmentally sensitive and, depending on the location selected for the facilities, impacts could potentially occur to biological resources including the wetlands and riparian habitat. Malibu Lagoon is a refuge for migrating birds. When specific projects are developed and sites identified, measures should also be identified to avoid and mitigate impacts to habitat and direct impacts to animals and wildlife during construction and operation.

b. As documented in 5(a) above, portions of the area are environmentally sensitive and, depending on the location selected for the facilities, impacts could potentially occur to biological resources including unique, rare or endangered species of animals. Construction activities may be proposed within and/or adjacent to areas potentially supporting these species and may result in the temporary and/or permanent modification of their habitat. 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 special-status animal species in the site area be properly identified and protected as necessary. When specific projects are developed and sites identified, measures should be identified that will avoid or mitigate impacts to the habitats and also direct impacts to animals during construction and operation. If a project site is located in a habitat for a sensitive animal species, a local agency should require mitigation in accordance with the Endangered Species Act. These mitigation measures would be developed in consultation with the California Department of Fish and Game (CDFG) and the United States Fish and Wildlife Service (USFWS).

c. No impact.

d. As documented in 5(a) above, portions of the area are environmentally sensitive and, should facilities be located in a habitat supporting fish or wildlife habitat, some short-term deterioration to this habitat might occur during construction. When specific projects are developed and sites identified, measures should be identified that will avoid or mitigate impacts to habitat and also direct impacts to animals during construction and operation.

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However, it is expected that all the compliance projects will, over the long-term, considerably improve habitat for aquatic life and wildlife.

	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
6.	**Noise. Will the proposal result in:**				
	a. Increases in existing noise levels?		X		
	b. Exposure of people to severe noise levels?		X		

Discussion:

a. During construction, all compliance projects would be expected to result in noise and/or vibration. When specific projects are developed, measures should be identified to ensure that noise is kept to levels that comply with any noise standard or ordinance.

During operation, no significant increase in noise is anticipated from any of the possible compliance projects. There may be a reduction in noise on commercial sites that on tanker trucks to regularly pump raw sewage for off-site hauling once these sites are connected to one of the compliance projects.

b. As noted in 6(a) above, all compliance projects would be expected to result in noise and/or vibration during construction. Machinery used for construction would likely include standard equipment such as graders, dozers, backhoes, and other similar equipment. It is unknown at this time if pile driving equipment would be required to construct any facilities. Noise impacts from vehicles, machines, and equipment, would be short-term and of a temporary duration. When specific projects are developed, measures should be identified to ensure that noise is kept to levels that comply with any noise standard or ordinance.

During operation, no significant increase in noise is anticipated from any of the possible compliance projects.

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	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
7.	**Light and Glare. Will the proposal:**				
	a. Produce new light or glare?			X	

Discussion:

a. Construction of the compliance projects is not likely to produce new light or glare, assuming none of the reasonably foreseeable mitigation measures involve additional lighting. For the Interceptor

Sewer, however, should construction night-time schedules be used to mitigate traffic impacts during construction, additional lighting will be needed. Such impacts, which would be short-term, should be evaluated at the project level.

During operation of all compliance projects, no need for significant lighting is expected. For lighting that may needed, light and glare to passing vehicles, neighborhood homes, and businesses during operation, can be minimized by a lighting plan specifying hoods or shields on all light fixtures and limiting light trespass and glare through the use of shielding and directional lighting methods.

	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
8.	**Land Use. Will the proposal result in:**				
	a. Substantial alteration of the present or planned land use of an area?	X			

Discussion:

a. Sewer lines for all three compliance projects will not have impacts on land use, zoning, or the physical arrangement of the community. After installation of the sewer lines, pre-project conditions would be restored.

Land for treatment plant facilities for the Integrated Facilities and Decentralized Facilities might require changes in land use. The Integrated Facilities' wastewater/recycled water plant would require land for construction and operation of this facility. Should disposal of treated wastewater that cannot be recycled be discharged to the subsurface, additional land for infiltration would be required. The Decentralized Facilities also would require land for plant(s) and subsurface disposal, although such land requirements may be on a smaller scale and require a smaller footprint. Impacts would be considered at a project level.

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	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
9.	**Natural Resources. Will the proposal result in:**				
	a. Increase in the rate of use of any natural resources?				X
	b. Substantial depletion of any nonrenewable natural resource?				X

Discussion:

a. No impact. The compliance projects would not use or deplete any mineral resources in the area. The use of electrical power and fuel is discussed in the Energy portion of the checklist.

During operations, no impact to natural resources is anticipated, other than land. See the discussion under Land – 8(a).

b. No Impact. See Natural Resources – 9(a) above.

	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
10.	**Risk of Upset. Will the proposal involve:**				
	a. A risk of an explosion or the release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?			X	

Discussion:

a. For all compliance projects, it is reasonably foreseeable that hazards or hazardous materials would be used during construction, operation, and maintenance of the facilities. However, the use of these materials is not expected to create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials. The hazardous materials that might be used are controlled substances regulated at the state and local levels. Materials would be delivered by contractors licensed to handle and transport these materials in accordance with applicable laws and regulations. The storage and use of materials would be strictly regulated and a hazardous materials management program would be developed for use by construction contractors and plant operators. This information would also be filed with the fire department. See also the discussion under 14(a).

Due to the nature (wastewater management) of all compliance projects, the risk of exposure to raw sewage and partially treated wastewater should be lowered, as the projects are intended to better control and manage wastewaters generated within the community.

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	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
11.	**Population. Will the proposal:**				
	a. Alter the location, distribution, density, or growth rate of the human population of an area?			X	

Discussion:

a. All compliance projects would replace existing on-site wastewater disposal systems, and should not affect population and growth. However, during construction of all compliance projects, there may be brief, temporary periods during which construction workers are employed in the area. These workers are not expected to substantially add to new employment and population density.

The compliance projects are expected to be sized to replace existing OWDS flows only, and no population increases stemming from increased housing stock are expected. See the discussion under Housing – 12(a).

	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
12.	**Housing. Will the proposal:**				
	a. Affect existing housing, or create a demand for additional housing?			X	

Discussion:

a. All compliance projects would replace existing on-site wastewater disposal systems, and should not increase or stimulate demand for housing. However, during construction of all compliance projects, there may be brief, temporary periods during which construction workers are employed in the area. These temporary workers are expected to be present for one shift per work day, and should not add to housing demands.

The compliance projects are not expected to be sized to provide capacity for existing wastewater flow rates only, and do not anticipate new connections. During operation of all compliance projects, no increased demand for housing stemming from job creation at the compliance projects is anticipated.

	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
13.	**Transportation/Circulation. Will the proposal result in:**				
	a. Generation of substantial additional vehicular movement?		X		

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	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
	b. Effects on existing parking facilities, or demand for new parking?		X		
	c. Substantial impact upon existing transportation systems?			X	
	d. Alterations to present patterns of circulation or movement of people and/or goods?				X
	e. Alterations to waterborne, rail or air traffic?				X
	f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?		X		

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Discussion:

a. Construction of all three compliance projects would require construction crews and earthmoving equipment, and may require soil transport, resulting in some traffic congestion of a short-term, temporary duration. Measures to mitigate these impacts, which would be examined more closely on a project level, could include development of a traffic mitigation plan. For the Interceptor Sewer, a project level analysis should consider night-time schedules for construction along the Pacific Coast Highway, which is the most heavily traveled highway in the area and which is an important regional link.

   During operation of the compliance projects, no impacts are expected to traffic. Traffic conditions may improve upon completion of the compliance projects, as the need for frequent pumping from many commercial facilities will be eliminated.

b. During construction, all compliance projects may cause some loss of parking capacity. However, this impact is temporary. Measures to mitigate such impacts would be examined more closely on a project level, could include development of a traffic mitigation plan which addresses parking issues.

   During operation, no significant impacts are expected.

c. During construction, all compliance projects may impact existing roadways and parking capacity. The Interceptor Sewer project would have significant impacts on vehicle traffic on the Pacific Coast Highway; however, this impact will be temporary and limited to the construction phase and for intermittent maintenance activity. Impacts would be examined more closely on a project level, and measures to facilitate traffic movement, such as minimizing construction traffic in peak traffic times and providing temporary traffic signals/flagging could be developed in a traffic mitigation plan.

   During operation, no significant impacts are expected

d. No impact.

e. No impact. No waterborne, air, or rail traffic is expected to be generated from any of the compliance projects during construction or operation.

f. No permanent road or design hazards are associated with operation of any of the possible compliance projects. However, during construction, all three compliance projects would require construction crews, earthmoving equipment, and – for Interceptor Sewer – possible night-time construction activity. These activities would result in some traffic congestion of a short-term, temporary duration. Hazards arising from such conditions would be considered at a project level, and measures to lower risk to vehicles, bicyclists, and pedestrians might include signage and markings, barricades, and traffic flow controls (signals or traffic control personnel), and coordination with local police and the California Highway Patrol. These methods would be selected and implemented by responsible local agencies considering project level concerns.

	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
14.	**Public Service. Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:**				
	a. Fire protection?		X		
	b. Police protection?			X	
	c. Schools?				X
	d. Parks or other recreational facilities?	X			
	e. Maintenance of public facilities, including roads?				X
	f. Other governmental services?				X

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Discussion:

a. Construction of all three compliance projects, and operation of the treatment facilities for the Integrated Facilities and Decentralized Facilities would use hazardous materials, and incidents of upset, such as spills, could result in the need for emergency and/or fire suppression response. Traffic impacts during construction of all compliance projects could result in delays in emergency responses; however, 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. Impacts to fire protection and response capabilities, and measures to mitigate these impacts, would be considered at a project level.

b. Mitigation of traffic impacts during construction of all compliance projects would require coordination with local police and the California Highway Patrol. See the discussion under 13(f).

These impacts could result in delays in police emergency responses; however, 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. Impacts to police protection and response capabilities, and measures to mitigate these impacts, would be considered at a project level.

No impact during operation of any of the compliance projects.

c. No impact is expected to schools.

d. See the discussion of land use impacts under 8(a) above and recreational impacts under 14(a) below. The Integrated Facilities – a centralized integrated wastewater/recycled water plant – would require land for construction and operation of this facility. A possible site for this is Legacy Park. Impacts to parks and measures to mitigate these impacts would be considered at a project level.

Implementation of one of the possible projects to comply with the proposed prohibition is a remedy to restore beneficial uses, including beach closures that currently impair swimming along beaches in the Malibu Civic Center area.

e. No impact to maintenance of public roads is expected. During sewer installation of all three compliance projects, the City of Malibu and other entities with utilities along the public roads may have opportunities to coordinate maintenance and repair activities.

Positive impacts (lower road maintenance) might result from a reduction in tanker truck traffic that will no longer be needed to haul a portion of the community's sewage to facilities in other areas (e.g. Carson).

f. No impact.

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	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
15.	**Energy. Will the proposal result in:**				
	a. Use of substantial amounts of fuel or energy?			X	
	b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?			X	

Discussion:

a. During the construction phase of all compliance projects, construction vehicles, equipment, and machinery would require fossil fuel and/or power. These energy demands are not expected to significantly affect the power grid or deplete resources of fossil fuels; nor are the energy demands expected to conflict with energy conservation plans or use non-renewable resources in a wasteful

manner. Such impacts, and mitigation measures to promote energy efficiency, would be evaluated on a project basis.

During operation of treatment plant facilities for Integrated Facilities, Decentralized Facilities and pumping stations to lift wastewater in sewers for all compliance projects, incremental amounts of energy would be required. Demand on the power grid is expected to be minimal. Such impacts, and mitigation measures to promote energy efficiency, would be evaluated on a project basis.

b. See discussion under 15(a).

	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
16.	**Utilities and Service Systems. Will the proposal result in a need for new systems, or substantial alterations to the following utilities:**				
	a. Power or natural gas?			X	
	b. Communications systems?				X
	c. Water?			X	
	d. Sewer or septic tanks?	X			
	e. Storm water drainage?		X		
	f. Solid waste and disposal?			X	

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Discussion:

a. Refer to discussion under Energy, 15(a) and 15(b) above.

b. No impact.

c. Operation of the Integrated Facilities, if undertaken in conjunction with capital improvements to the community's water supply system, could improve the reliability of water service.

Furthermore, and by their nature, operation of all the possible projects to comply with the prohibition is expected to result in substantial improvements to water quality, including the quality of groundwater (which is a potential source of drinking water for the community, especially in the event of a disruption to deliveries of imported water supplies).

See also the discussion under Water, 3(g) above.

d. The purpose of the prohibition and possible compliance projects is to eliminate reliance on OWDSs, which have severe constraints, including hydrogeological, siting, capacity, and

operational constraints. By the nature of the prohibition, elimination of the on-site systems will result in a need for sewers and treatment facilities.

e. Refer to discussion under Water, 3(b), 3(c), 3(d), 3(e) above.

f. During construction of all compliance projects, excavated soils should be re-used as fill material to the extent feasible. However, a minimal amount of soils and other construction materials may be wasted. For example, soils and aggregate wastes could be transported to aggregate recycling centers and prepared for reuse, and/or applied as daily cover at landfills. These impacts, which are expected to be less than significant, would be evaluated on a project level.

	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
17.	**Human Health. Will the proposal result in:**				
	a. Creation of any health hazard or potential health hazard (excluding mental health)?			X	
	b. Exposure of people to potential health hazards?			X	

Discussion:

a. During construction of all three possible compliance projects, there may be an increased risk to the health of construction workers who may be handling hazardous materials. This would be evaluated on a project basis, and appropriate measures – such as Health and Safety Plans and compliance with Cal OSHA regulations – to mitigate these risks should be identified. For a discussion on the risk of Upset, refer to discussion under 10(a).

During operation of the wastewater treatment plants for the Integrated Facilities and Decentralized Facilities and during maintenance of sewers and pump stations for all compliance projects, operating personnel may be exposed to raw sewage and partially treated wastewaters. These possible impacts would be evaluated on a project basis and appropriate measures – such as Health and Safety Plans and compliance with Cal OSHA regulations – to mitigate these risks should be identified.

Due to the nature of the proposed prohibition and possible projects to comply with the prohibition, wastewaters from domestic, commercial, and industrial activities will be better controlled, treated, and discharged (or recycled).

b. See discussion under 17(a) above.

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	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
18.	**Aesthetics. Will the proposal result in:**				
	a. The obstruction of any scenic vista or view open to the public?			X	
	b. The creation of an aesthetically offensive site open to public view?			X	

Discussion:

a. During construction of all three possible compliance projects, the aesthetics of residents and visitors may be offended by construction equipment and activities. These impacts, which would be temporary, together with appropriate mitigation measures, would be considered at a project level.

After installation of sewers for all three compliance projects, pre-project conditions would be restored, and the sewers would not permanently impact aesthetics.

Facilities such as a treatment plant and reservoir for storing recycled water could impact scenic vistas or views open to the public. These impacts would be evaluated on a project level, and designs could be required that are acceptable to the community.

b. See discussion under 18(a) above.

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	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
19.	**Recreation. Will the proposal result in:**				
	a. Impact upon the quality or quantity of existing recreational opportunities?	X			

Discussion:

a. The Integrated Facilities – a centralized integrated wastewater/recycled water plant – would require land for construction and operation of this facility. A possible site for this is Legacy Park. During construction of the Integrated Facilities, the park may be temporarily unavailable for recreation. Such impacts, together with mitigation measures, would be considered at a project level.

Implementation of one of the possible projects to comply with the proposed prohibition is a remedy to restore beneficial uses, including beach closures that currently impair swimming along beaches in the Malibu Civic Center area. This long-term impact and restoration of water quality in Malibu Lagoon and along beaches will enhance recreational opportunities.

See also the discussions for Land use under 8(a) above and for Public Services—Parks under 14(d) above.

	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
20.	**Archeological/Historical. Will the proposal:**				
	a. Result in the alteration of a significant archeological or historical site structure, object or building?				X

Discussion:

a. With the exception of a possible site for the treatment plant in Integrated Facilities, sewers and facilities for the possible compliance projects would generally be located in public streets and on public property that has already undergone significant disturbance. Should a relatively undisturbed site such as a portion of Legacy Park be selected for a treatment plant under compliance Integrated Facilites, impacts and mitigation measures for possible archeological resources would be evaluated on a project level.

It is not expected that any of the compliance projects would affect historic structures.

	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
21.	**Mandatory Findings of Significance**				
	Potential to degrade: Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X			

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	ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
	Short-term: Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.)			X	
	Cumulative: Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant.)			X	
	Substantial adverse: Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

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Other Environmental Considerations

Analyses of other environmental impacts resulting from reasonably foreseeable options of complying with the proposed prohibition include:

- Cumulative Impacts of the Program Alternatives (as required by CEQA Guidelines Section 15130): Cumulative impacts, defined in Section 15355 of the CEQA Guidelines, refer to two or more individual effects, that when considered together, are considerable or that increase other environmental impacts. A cumulative impact assessment must consider not only impacts of the proposed prohibition, but also impacts from other municipal and private projects that would occur in the area during the period of implementation.
- Potential Growth-Inducing Effects of the Program Alternatives (as required by CEQA Guidelines Section 15126).
- Unavoidable Significant Impacts (as required by CEQA Guidelines Section 15126.2).

Cumulative Impacts

On a programmatic level, the Regional Board expects a net environmental benefit to water quality and beneficial uses from the proposed prohibition, TMDLs, and other future regulatory actions. The Regional Board's proposed prohibition is a regulatory action that is related to TMDLs that have been developed by the Regional Board and US Environmental Protection Agency, including:

d. The Malibu Creek Watershed Nutrient TMDL: The US EPA, on March 21, 2003, specified a numeric target of 1.0 mg/l for total nitrogen during summer months (April 15 to November 15) and a numeric target of 8.0 mg/L for total nitrogen during winter months (November 16 to April 14). Significant sources of the nutrient pollutants include discharges of wastewaters from commercial, public, and residential landuse activities. The TMDL specifies a load allocation for onsite wastewater disposal systems of 6 lbs/day during the summer months and 8 mg/L during winter months.
e. The Malibu Creek and Lagoon Bacteria TMDL: The Regional Board specified numeric targets, effective January 24, 2006, based on single sample and geometric mean bacteria water quality objectives in the *Basin Plan,* to protect the water contact recreation use. Sources of bacteria loading include storm water runoff, dry-weather runoff, onsite wastewater treatment systems, and animal wastes. The TMDL specifies load allocations for onsite wastewater treatment systems equal to the allowable number of exceedance days of the numeric targets. There are no allowable exceedance days of the geometric mean numeric targets. For the single sample numeric targets, based on daily sampling, in summer (April 1 – October 31), there are no allowable exceedance days, in winter dry weather (November 1 - March 31), there are three allowable exceedances days, and in wet weather (November 1 - October 31), there are 17 allowable exceedance days.
f. The Santa Monica Bay Beaches Wet and Dry Bacteria TMDL: For beaches along the Santa Monica Bay impaired by bacteria in dry and wet weather, the Regional Board specified numeric targets, effective July 15, 2003, based on the single sample and geometric mean bacteria water quality objectives in the *Basin Plan* to protect the water contact recreation use. The dry weather TMDL identified the sources of bacteria loading as dry-weather urban runoff, natural source runoff and groundwater. The wet weather TMDL identified stormwater runoff as the major source. The TMDLs did not specify load allocations for onsite wastewater treatment systems. This effectively means that no loading is permissible from discharges from on-site wastewater disposal systems.

The proposed prohibition, in that it is a remedy to water quality impairments, is closely related to the Malibu Creek Watershed Nutrient TMDL, Malibu Creek and Lagoon Bacteria TMDL, and Santa Monica Bay Beaches Wet and Dry Bacteria TMDL. Additionally, the Regional Board has issued other TMDLs that affect the area, such as a trash TMDL in the Malibu Creek watershed. The Regional Board and other agencies may issue future regulations that affect the area. When future regulatory actions are taken, such as adoption of additional TMDLs, programmatic impacts, including cumulative impacts, would be analyzed.

On a project level, the Regional Board expects a net environmental benefit over the long term from projects undertaken to comply with the prohibition, TMDLs, and other regulatory actions, in that water quality will be improved and beneficial uses will be restored. Specific projects to comply with the prohibition must be environmentally evaluated and cumulative impacts considered as the implementing municipality or agency considers such projects.

Growth-Inducing Impacts

Staff's analyses of other environmental impacts resulting from reasonably foreseeable options of complying with the proposed prohibition also includes growth-inducing impacts, including:

– an overview of the CEQA Guidelines relevant to evaluating growth inducement,

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- a discussion of the types of growth that can occur in the Malibu Civic Center area,
- a discussion of obstacles to growth in the area, and
- an evaluation of the potential for the Program Alternatives to induce growth.

Growth-inducing impacts are defined by the State CEQA Guidelines as:

> 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.
>
> (CEQA Guidelines, Section 15126.2(d)).

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

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

Types of Growth: The primary types of growth that occur within the area affected by the proposed prohibition are:

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

Growth in land development is the physical development of residential, commercial, and industrial structures in the Malibu Civic Center area. Land use growth is subject to general

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plans, community plans, parcel zoning, and applicable entitlements and is dependent on adequate infrastructure to support development.

Population growth is growth in the number of persons that live and work in the Malibu Civic Center 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 unincorporated areas of the County of Los Angeles and County of Ventura and in incorporated municipalities is governed by general plans, which are intended to direct land use development in an orderly manner. The framework for general plans 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 plans guide land use development and allow for entitlements, they do not represent an obstacle to land use growth. The Malibu Civic Center area that would be affected by the proposed prohibition is within the City of Malibu, which has plans that guide land use development.

Existing Obstacles to Growth: Obstacles to growth could include inadequate infrastructure (e.g. 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.

Potential for Compliance with the Proposed Prohibition to Induce Growth

The prohibition on OWDSs in the Malibu Civic Center area is not expected to directly induce growth, in that it would not result in the construction of new housing.

Furthermore, the prohibition on OWDSs in the Malibu Civic Center area is not expected to indirectly induce growth, in that it would not result generate long-term economic opportunities that could lead to additional immigration, and would not remove an obstacle to land use or population growth. However, and although construction activities associated compliance projects for the prohibition would increase the economic opportunities in the area and region, this construction activity 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.

Unavoidable Significant Adverse Impacts

Section 15126.2(c) of the CEQA Guidelines requires a discussion of potential significant, irreversible environmental changes that could result from a proposed project. Examples of such changes include commitment of future generations to similar uses, irreversible damage that may result from accidents associated with a project, or irretrievable commitments of resources.

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Although the proposed TMDL would require resources (materials, labor, and energy) they do not represent a substantial irreversible commitment of resources.

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 potential trash hazards and increasing the aesthetic experience at beaches, parks around the lake, and other recreation areas. In addition, habitat carries a significant non-market economic value. Enhancement of habitat beneficial uses will also have positive indirect economic and social benefits. Section 6 of this SED identifies the anticipated environmental effects for each resource area, identifies mitigation measures for potentially significant impacts, and determines that impacts after implementation of mitigation are insignificant.

Statement of Overriding Considerations and Determination

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

The implementation of this amendment to the *Basin Plan* will result in improved water quality in the waters of the Region and will have significant positive impacts to the environment (including restoration and enhancement of beneficial uses) and the economy over the long term. Enhancement of recreational uses of beaches, aquatic habitat in Malibu Lagoon, and drinking water potential in groundwater will have positive social and economic effects. Specific projects implemented to comply with the prohibition 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.

This environmental staff report, together with the technical staff report and tentative resolution provide the necessary information pursuant to Public Resources Code section 21159 to conclude that properly designed and implemented compliance projects 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 local governments can and should implement the recommended mitigation measures.

Specific projects to comply with this prohibition that may have a significant impact will be implemented by local agencies and jurisdictions and would therefore be subject to a separate environmental review. A lead agency for the compliance projects would have the ability to mitigate project impacts, can and should mitigate project impacts, and are required under CEQA to mitigate any environmental impacts it identifies, unless it has reason not to do so. Notably, in almost all circumstances, where unavoidable or unmitigable impacts would present unacceptable

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hardship upon nearby receptors or venues, a local agency has a variety of alternative implementation measures available instead.

The implementation of this prohibition is expected to result in improved water quality in the Malibu Civic Center area and reduction of public nuisance, but it may result in short-term localized significant adverse impacts to the environment as a large construction projects may be undertaken in the vicinity of the area. These impacts are generally expected to be limited, short-term or may be mitigated through careful design and scheduling. The technical and environmental staff reports for this proposed prohibition in the Malibu Civic Center area, including the CEQA checklist, provide the necessary information pursuant to Public Resources Code section 21159 to conclude that properly designed and implemented compliance project should mitigate and generally avoid significant adverse effects on the environment, and the agency responsible for implementing the prohibition should ensure that its 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 prohibition. At this stage, any more particularized conclusions would be speculative. The Regional Board does not have legal authority to specify the manner of compliance with its orders or regulations (CWC, section 13360), and thus cannot dictate that an appropriate location be selected for any particular project, that it be designed consistent with standard industry practices, or that routine and ordinary mitigation measures be employed. These measures are all within the jurisdiction and authority of an agency, or local government, that would be responsible for implementing this prohibition, and that agency can and should employ those alternatives and mitigation measures to reduce any impacts as much as feasible. (14 Cal. Code Regs., section 15091(a)(2).)

Implementation of the proposed prohibition 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 prohibition and restoring beneficial uses (an action required to achieve the express, national policy of the Clean Water Act) remains.

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DISCUSSION OF ENVIRONMENTAL EVALUATION (Based on information in the technical staff report and environmental staff report for the proposed prohibition on OWDSs in the Malibu Civic Center area)

This environmental analysis concludes that there are potentially significant impacts from implementation projects to comply with the proposed prohibition on OWDSs, but notes that there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. However, implementation of these mitigation measures are within the responsible and jurisdiction of responsible agencies. These agencies have the ability to implement these mitigation measures, can and should implement these mitigation measures, and are required under CEQA to implement mitigation measures unless mitigation measures are deemed infeasible through specific considerations (Title 14, California Code of Regulations, section 15091(a)(3)).

The environmental analysis also concludes that the possible projects to comply with the prohibition are expected to result, over the long term, in positive environmental improvements to the environment, including water quality and restoration of beneficial uses of water resources.

PRELIMINARY STAFF DETERMINATION

☐ The proposed project COULD NOT have a significant effect on the environment, and, therefore, no alternatives or mitigation measures are proposed.

☑ The proposed project MAY have a significant or potentially significant effect on the environment, and therefore alternatives and mitigation measures have been evaluated.

signature	date
Wendy Phillips	July 31, 2009
printed name	Date

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

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