



Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Charles R. Hoppin, Chairman
1001 I Street • Sacramento, California 95814 • (916) 341-5603
Mailing Address: P.O. Box 100 • Sacramento, California • 95812-0100
Fax (916) 341-5621 • <http://www.waterboards.ca.gov>



Arnold Schwarzenegger
Governor

NOTICE OF OPPORTUNITY TO COMMENT

PROPOSED APPROVAL OF AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE CENTRAL COAST REGION (BASIN PLAN) TO: (1) REMOVE THE SHELLFISH HARVESTING BENEFICIAL USE FOR SOQUEL LAGOON, (2) ADD THE SOQUEL LAGOON WATERSHED TO THE HUMAN FECAL MATERIAL DISCHARGE PROHIBITION AND THE DOMESTIC ANIMAL WASTE DISCHARGE PROHIBITION, AND (3) ADOPT TOTAL MAXIMUM DAILY LOADS FOR PATHOGENS IN SOQUEL LAGOON, SOQUEL CREEK, AND NOBLE GULCH

NOTICE IS HEREBY GIVEN THAT the State Water Resources Control Board (State Water Board) will accept comments on the proposed approval of an amendment to the Basin Plan that would: (1) remove the Shellfish Harvesting beneficial use for Soquel Lagoon, (2) add the Soquel Lagoon Watershed to the Human Fecal Material Discharge Prohibition and the Domestic Animal Waste Discharge Prohibition, and (3) adopt Total Maximum Daily Loads for pathogens in Soquel Lagoon, Soquel Creek, and Noble Gulch. The amendment, the State Water Board agenda language, and draft resolution are available on the State Water Board's Web site at http://www.waterboards.ca.gov/water_issues/programs/tmdl/index.shtml#rb3 or can be received by mail by contacting Michael Buckman at (916) 341-5479. The amendment was adopted by the Central Coast Regional Water Quality Control Board on May 8, 2009. The State Water Board will separately publish a notice of the meeting at which it will consider the proposed approval of the amendment.

Comment letters to the State Water Board **must be received by 12:00 noon on May 28, 2010**. After the deadline, State Water Board staff will not accept additional written comments unless the State Water Board determines that such comments should be accepted. Please send comments on the proposed State Water Board approval of the amendment to: Jeanine Townsend, Clerk to the Board, by email at (commentletters@waterboards.ca.gov) (If less than 15 megabytes in size or less), (916) 341-5620 (fax), or by mail addressed to State Water Resources Control Board, 1001 I Street, Sacramento, CA 95814. Please also indicate in the subject line, **"Comment Letter – Soquel Lagoon Watershed - Fecal Coliform TMDLs."**

Incorporation of Comments by Reference: Comments must specifically address the version of the amendment that is currently being considered for approval by the State Water Board. If similar or identical comments were submitted to the Central Coast Water Board, the commenter must explain why and in what manner each of the responses provided by the Central Coast Water Board to each comment was inadequate or incorrect. If the comment does not include such an explanation, the State

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Water Board will presume that the Central Coast Water Board's response adequately addressed the commenter's concern.

Please direct questions about this notice to Michael Buckman, Division of Water Quality, at (916) 341-5479 or (mbuckman@waterboards.ca.gov) or Steven H. Blum, Senior Staff Counsel at (916) 341-5177 or (sblum@waterboards.ca.gov).

Date May 4, 2010



Jeanine Townsend
Clerk to the Board

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**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION-DIVISION OF WATER QUALITY
DATE: TO BE DETERMINED**

ITEM

SUBJECT

CONSIDERATION OF A RESOLUTION APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE CENTRAL COAST REGION (BASIN PLAN) TO: (1) REMOVE THE SHELLFISH HARVESTING BENEFICIAL USE FOR SOQUEL LAGOON, (2) ADD THE SOQUEL LAGOON WATERSHED TO THE HUMAN FECAL MATERIAL DISCHARGE PROHIBITION AND THE DOMESTIC ANIMAL WASTE DISCHARGE PROHIBITION, AND (3) ADOPT TOTAL MAXIMUM DAILY LOADS FOR PATHOGENS IN SOQUEL LAGOON, SOQUEL CREEK, AND NOBLE GULCH

DISCUSSION

On May 8, 2009, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) adopted Resolution No. R3-2009-0024 ([Attachment I](#)) amending the Basin Plan to: (1) Remove the Shellfish Harvesting (SHELL) beneficial use for Soquel Lagoon, (2) add the Soquel Lagoon Watershed to the Human Fecal Material Discharge Prohibition and the Domestic Animal Waste Discharge Prohibition, and (3) adopt Total Maximum Daily Loads for pathogens in Soquel Lagoon, Soquel Creek, and Noble Gulch (Soquel Lagoon Watershed).

SHELL Removal

The first part of this amendment removes the SHELL beneficial use from Soquel Lagoon. Central Coast Water Board staff completed a Use Attainability Analysis in which it determined that the SHELL beneficial use designation is not an existing use for Soquel Lagoon and is not attainable. Factors that preclude the attainment of the use include hydrological modifications, seasonal closure of Soquel Lagoon to tidal circulation, lack of suitable physical conditions and lack of evidence of any historic (since 1975) or current shellfish harvesting. Central Coast Water Board staff emphasize that, in addition to the factors that preclude attainment of the SHELL beneficial use, Soquel Lagoon appears to have been originally designated inappropriately without a thorough scientific basis. The SHELL removal was scientifically peer reviewed, and the reviewer in agreed with the Central Coast Water Board staff's assessment.

Impairment

Soquel Lagoon was listed on the 2002 Clean Water Act (CWA) section 303(d) List of Water Quality Limited Segments (List) because it did not meet water quality standards as demonstrated by elevated pathogen indicator levels. Soquel Creek and Noble Gulch are not on the 303(d) List but are also impaired because fecal coliform concentrations exceed water quality objectives. Because Soquel Lagoon is listed, CWA section 303(d) requires the establishment of a Total Maximum Daily Load (TMDL). TMDLs are also authorized under CWA section 303(d)(3) for waters not on the List, and a TMDL can constitute a plan of implementation under Water Code section 13242. As a result, TMDLs were also developed for Soquel Creek and Noble

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Gulch. A TMDL specifies load allocations for nonpoint sources and wasteload allocations for point sources that, when implemented, are expected to result in attainment of applicable water quality standards. Since these TMDLs are being established as a Basin Plan amendment state law requires an implementation plan and schedule to ensure that the TMDLs are achieved.

The amendment addresses the pathogen impairment of the Soquel Lagoon Watershed, by establishing TMDLs and applying two prohibitions to the watershed. The water quality objectives in the Basin Plan are set at established levels of indicator bacteria, in this case fecal coliform, that demonstrate the presence of fecal pollution. Indicator organisms such as these have long been used to protect bathers from illnesses that may be contracted during recreational activities in surface waters contaminated by fecal pollution. These organisms often do not cause illnesses directly, but are good indicators of harmful pathogens. Current fecal coliform concentrations in the Soquel Lagoon Watershed exceed the existing Basin Plan numeric water quality objectives for protecting the Water Contact Recreation beneficial use.

Sources

In decreasing order of contribution, the controllable sources contributing pathogens (indicated by fecal coliform) to Soquel Lagoon Watershed are: (1) storm drain discharges to municipally owned and operated separate storm sewer systems (MS4s) which must be governed by a National Pollutant Discharge Elimination System (NPDES) permit, (2) sanitary sewer collection system spills and leaks (including discharges from private laterals connected to municipal sanitary sewer collection systems), (3) domesticated animal wastes not draining to MS4s, including farm animals, livestock and pets, and (4) human waste discharges from homeless persons/encampments not draining to MS4s.

Targets and TMDL Allocations

The amendment establishes a numeric target equal to the Basin Plan water quality objectives for the protection of the water contact recreation beneficial use. The numeric target used to develop the TMDLs is:

Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 most probable number (MPN) per 100 milliliters (mL), nor shall more than 10 percent of samples collected during any 30-day period exceed 400 MPN per 100 mL.

Responsible parties are assigned one of two possible allocations. Responsible parties are either assigned an allocation equal to the numeric target or an allocation of zero. The allocation of zero or no loading is assigned to responsible parties whose discharge would include untreated human waste and thus pose a greater health risk than most bacteria of other origins.

The responsible parties that were given the allocations equal to the TMDLs' target include the MS4s covered by an NPDES permit, owners/operators of land used for/containing pets, and owners/operators of land used for/containing farm animals and livestock. The responsible party for each of these sources must not discharge or release a load of fecal coliform that will increase the concentration above the assimilative capacity of a water body. All responsible parties for sources of fecal coliform to the Soquel Lagoon Watershed will be accountable to attain these allocations. Under the TMDLs, parties that have been assigned allocations are not responsible for natural (uncontrollable) sources. Responsible parties that must comply with the Human Fecal Material Discharge Prohibition are assigned a waste load allocation of zero; no

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discharge of fecal coliform bacteria load originating from human sources is allowed. These responsible parties include Santa Cruz County Sanitation District (SCCSD) for sources from spills or leaks of the sewer collection system, owners of private laterals responsible for sources from spills or leaks, and owners/operators of land that include homeless persons/encampments. An implicit margin of safety is incorporated in the TMDLs through conservative assumptions.

Prohibitions

The amendment adds the Soquel Lagoon Watershed onto the list of affected areas of two Basin Plan prohibitions. The two Basin Plan prohibitions are the Domestic Animal Waste Discharge Prohibition and the Human Fecal Material Discharge Prohibition. The Domestic Animal Waste Discharge Prohibition is intended to address pet, farm animal, and livestock discharges in areas that do not drain to MS4s. The Human Fecal Material Discharge Prohibition is intended to address spills and leaks from the sanitary sewer collection systems, private sewer lateral leaks, and discharges from land that includes homeless persons/encampments.

Implementation

The purpose of the implementation plan is to describe the steps necessary to reduce fecal coliform loads in order to achieve these TMDLs. The Central Coast Water Board will address fecal indicator bacteria discharged from the County of Santa Cruz and the City of Capitola MS4 entities by regulating them under the provisions of the State Water Board's General Permit for the Discharges of Storm Water from Small MS4s (General Permit) (NPDES No. CAS000004) and any subsequent iteration of the General Permit. As enrollees under the General Permit, the MS4s must develop and implement a Storm Water Management Plan (SWMP) that controls urban runoff discharges into and from their storm water system. To address the MS4 entities' TMDL wasteload allocations, the Central Coast Water Board will require the County of Santa Cruz and the City of Capitola MS4s to specifically target fecal indicator bacteria in urban runoff through incorporation of a Wasteload Allocation Attainment Plan in their SWMPs.

The Central Coast Water Board will use the Domestic Animal Waste Discharge Prohibition to address sources of fecal material from domestic animals that do not drain to the MS4. Owners and/or operators of lands containing domestic animals in the Soquel Lagoon Watershed must comply with the Domestic Animal Waste Discharge Prohibition. Compliance with the prohibition implies compliance with the load allocation for these TMDLs.

The entity with jurisdiction over the sewer collection system in the Soquel Lagoon Watershed is SCCSD. SCCSD must comply with the Human Fecal Material Discharge Prohibition; thus its wasteload allocation for sewer system spills and leaks is zero. To comply with the prohibition, SCCSD must continue to implement its Collection System Management Plan, as required by its Waste Discharge Requirements (WDR). In addition, SCCSD is required by its WDR to improve maintenance of its sewage collection system, including identification, correction, and prevention of sewage leaks in portions of the collection system that run through or adjacent to, impaired surface waters within the Soquel Lagoon Watershed. Compliance with its WDR is intended to demonstrate compliance with its wasteload allocation and the Human Fecal Material Discharge Prohibition.

Individual owners and operators of private laterals to sanitary sewer collection systems are ultimately responsible for maintenance and are, therefore, responsible for complying with the Human Fecal Material Discharge Prohibition; compliance with the prohibition implies compliance with applicable load allocations for these TMDLs. However, because leaks from private laterals

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located in Soquel Lagoon Watershed results in a source of fecal indicator bacteria in the Santa Cruz County and City of Capitola storm water systems, the MS4 entities will address fecal indicator bacteria from private lateral leaks in their Wasteload Allocation Attainment Program as required in their SWMP.

The Central Coast Water Board will address discharges from homeless persons/encampments that do not drain to the MS4s with the Human Fecal Material Discharge Prohibition. Owners of land with homeless persons must demonstrate to the satisfaction of the Executive Officer or the Water Board that they are in compliance with the Human Fecal Material Discharge Prohibition; compliance with the prohibition implies compliance with the load allocation for these TMDLs. The Central Coast Water Board intends to identify properties with homeless encampments. Identified responsible parties are required to submit reports to the Central Coast Water Board. These responsible parties shall submit a report documenting that measures are in place and effectively minimizing discharges or demonstrating that no discharge is occurring from homeless encampments.

Evaluation

The Central Coast Water Board will perform a review of implementation actions and monitoring results every three years beginning three years after the TMDLs are approved by the Office of Administrative Law (OAL). Central Coast Water Board plans to use annual reports, nonpoint source pollution control implementation programs, monitoring programs and other available information, to review implementation progress toward achieving the allocations and the numeric target. Three-year reviews will continue until the TMDLs are achieved. The target date to achieve the TMDLs is 13 years after the date of approval by the OAL.

Cost Estimate

Most of implementation actions, monitoring, and reporting costs are currently required under existing Water Board permits and requirements. However, costs for additional measures that may be required as a result of these TMDLs have been estimated. Additional pathogen-specific management measures for local agencies (City of Capitola and County of Santa Cruz) responsible for stormwater management ranges from an estimated 2 to 15 percent increase to their annual program budget. Additional monitoring costs are estimated to be about \$5,000 per year. Estimated costs associated with repair of a leaking private lateral is estimated to be \$5,000 with the cost to test for leaks in a private lateral at approximately \$1,000. For the control of livestock and domesticated animals the measures could include barriers, bunkers, corrals and professional stabling with upper estimates at \$4,000 per mile, \$15,000 per structure, \$4000 per gate, and \$550 per month respectively. The costs estimated for control of homeless person and encampment discharges include security guards at a wage of \$20-45 per hour, portable waste facilities at \$95 per month, and security fencing at a cost of \$1500-1800 per 100 feet. The costs estimated for control of pet waste discharges include bags that can be used to pick up waste and are available starting at approximately \$2.50 to \$4.50 per box.

When the Central Coast Water Board adopted Resolution No. R3-2009-0008, the amendment to the Water Quality Control Plan for the Central Coast Basin to: (1) add Total Maximum Daily Loads for fecal coliform in the Pajaro River Watershed; (2) add a Domestic Animal Waste Discharge Prohibition; and (3) add a Human Fecal Material Discharge Prohibition, it included in the Basin Plan potential sources of financing for the Domestic Animal Waste Discharge Prohibition. Those potential sources of financing apply equally to the agricultural water quality control program in the Soquel Lagoon Watershed.

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POLICY ISSUE

Should the State Water Board approve the amendment to the Basin Plan to: On May 8, 2009, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) adopted Resolution No. R3-2009-0024 amending the Basin Plan to: (1) Remove the Shellfish Harvesting Beneficial Use for Soquel Lagoon, (2) Add the Soquel Lagoon Watershed to the Human Fecal Material Discharge Prohibition and the Domestic Animal Waste Discharge Prohibition, and (3) adopt Total Maximum Daily Loads for Pathogens in Soquel Lagoon, Soquel Creek, and Noble Gulch?

FISCAL IMPACT

Central Coast Water Board and State Water Board staff work associated with or resulting from this action will be addressed with existing and future budgeted resources.

REGIONAL WATER BOARD IMPACT

Yes, approval of this resolution will amend the Central Coast Water Board's Basin Plan.

STAFF RECOMMENDATION

That the State Water Board:

1. Approves the amendment to the Basin Plan adopted under Central Coast Water Board Resolution No. R3-2009-0024.
2. Authorizes the Executive Director or designee to submit the amendment adopted under Central Coast Water Board Resolution No. R3-2009-0024, as approved, and the administrative record for this action to the OAL and the TMDLs and shellfish harvesting de-designation to the U.S. Environmental Protection Agency for approval.

State Water Board action on this item will assist the Water Boards in reaching Goal 1 of the Strategic Plan Update: 2008-2012 to implement strategies to fully support the beneficial uses for all 2006-listed water bodies by 2030. In particular, approval of this item will assist in fulfilling Action 1 to prepare, adopt, and take steps to carry out Total Maximum Daily Loads (TMDLs), designed to meet water quality standards, for all impaired water bodies on the 2006 list.

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STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2010-

APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE CENTRAL COAST REGION (BASIN PLAN) TO: (1) REMOVE THE SHELLFISH HARVESTING BENEFICIAL USE FOR SOQUEL LAGOON, (2) ADD THE SOQUEL LAGOON WATERSHED TO THE HUMAN FECAL MATERIAL DISCHARGE PROHIBITION AND THE DOMESTIC ANIMAL WASTE DISCHARGE PROHIBITION, AND (3) ADOPT TOTAL MAXIMUM DAILY LOADS FOR PATHOGENS IN SOQUEL LAGOON, SOQUEL CREEK, AND NOBLE GULCH

WHEREAS:

1. On May 8, 2009, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) adopted Resolution No. R3-2009-0024 ([Attachment I](#)) amending the Basin Plan to: (1) Remove the Shellfish Harvesting Beneficial Use for Soquel Lagoon, (2) Add the Soquel Lagoon Watershed to the Human Fecal Material Discharge Prohibition and the Domestic Animal Waste Discharge Prohibition, and (3) adopt Total Maximum Daily Loads (TMDLs) for Pathogens in Soquel Lagoon, Soquel Creek, and Noble Gulch..
2. The federal regulations at 40 Code of Federal Regulations (CFR) section 131.10(g) allow the Central Coast Water Board to remove a designated use, which is not an “existing” use, if the state can demonstrate that achieving the use is not feasible based on the factors set forth in that section. Shellfish harvesting is not an “existing use” as that term is defined in 40 CFR 131.3 because the shellfish harvesting use has not been attained in the water body on or after November 28, 1975. The removal of the SHELL beneficial use is based on the results of a Use Attainability Analysis (UAA) in Soquel Lagoon. Central Coast Water Board staff (staff) developed the UAA in 2004 and 2005 to determine the historic, actual, and potential shellfish harvesting activities in Soquel Lagoon. The UAA is necessary to conform to 40 CFR section 131.10(j), because the action involves a designated use specified in Clean Water Act (CWA) section 101(a) (2). The amendment and the UAA only addresses the fishable goal (“protection and propagation of fish, shellfish, and wildlife”) as it pertains to shellfish harvesting and does not address other fishable goals or the swimmable goal included in the water contact recreation designation contained in section 101(a)(2) of the CWA. The fishable goal of the CWA is also protected under other beneficial uses (including cold fresh water habitat) designated in the Basin Plan for the Soquel Lagoon.
3. Central Coast Water Board found that the removal of the shellfish harvesting beneficial use from the Soquel Lagoon and the adoption of these TMDLs and Basin Plan amendments for the Soquel Lagoon Watershed were consistent with the provisions of State Water Resources Control Board (State Water Board) Resolution No. 68-16, “Statement of Policy with Respect to Maintaining High Quality of Waters in California” and 40 CFR section 131.12.
4. The Central Coast Water Board may, pursuant to California Water Code section 13243, specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted (i.e., prohibitions). The Implementation Plan for the TMDLs for the

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Soquel Lagoon Watershed requires compliance with the Human Fecal Material Discharge Prohibition and the Domestic Animal Waste Discharge Prohibition for discharges in the Soquel Lagoon Watershed. Supporting documentation for adding the Soquel Lagoon Watershed to the above-named prohibitions is provided in the Final Project Report for Total Maximum Daily Loads for Fecal Coliform in Soquel Lagoon, Soquel Creek, and Noble Gulch. Consistent with California Water Code section 13244, the Central Coast Water Board complied with public notice and hearing requirements for adding the Soquel Lagoon Watershed to the Human Fecal Material Discharge and the Domestic Animal Waste Discharge Prohibitions.

5. The elements of a TMDL are described in 40 CFR sections 130.2 and 130.7 and section 303(d) of the CWA, and U.S. Environmental Protection Agency guidance documents. A TMDL is defined as “the sum of individual waste load allocations for point sources and load allocations for nonpoint sources and natural background.” (40 CFR §130.2). The Central Coast Water Board has determined that the TMDLs for pathogens in the Soquel Lagoon Watershed are set at levels necessary to attain and maintain the applicable numeric water quality objectives taking into account seasonal variations and any lack of knowledge concerning the relationship between effluent limitations and water quality. (40 CFR §130.7 (c) (1)). The regulations in 40 CFR section 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading, and water quality parameters. TMDLs are often expressed as a mass load of the pollutant but can be expressed as a unit of concentration if appropriate. (40 CFR §130.2(i)). Expressing these TMDLs as units of concentration is appropriate because in this case an existing concentration-based water quality objective was used as the basis for the TMDLs numeric target.
6. The Central Coast Water Board concurred with the Use Attainability Analysis and the analysis contained in the Final Project Report, the California Environmental Quality Act “Substitute Environmental Document” for the Basin Plan Amendments (including the CEQA Checklist), the staff report, responses to comments, and found that these analyses comply with the requirements of the State Water Board’s certified regulatory CEQA process, as set forth in California Code of Regulations, Title 23, section 3775 et seq. Furthermore, the Central Coast Water Board found that these analyses fulfill the Central Coast Water Board’s obligations attendant with the adoption of regulations “requiring the installation of pollution control equipment, or a performance standard or treatment requirement,” as set forth in section 21159 of the Public Resources Code. The Central Coast Water Board’s environmental analysis has taken into account a reasonable range of environmental, economic, and technical factors.
7. The State Water Board finds that the Basin Plan amendment is in conformance with Water Code section 13240, which specifies that Regional Water Quality Control Boards may revise Basin Plans; section 13242, which requires a program of implementation to achieve water quality objectives; and section 13243 which authorizes Regional Water Quality Control Boards to specify certain conditions or areas where the discharges of certain types of waste will not be permitted. The State Water Board also finds that the three TMDLs, as reflected in the Basin Plan amendment, are consistent with the requirements of federal CWA section 303(d).
8. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subd. (b). The necessity of developing a TMDL is established in the TMDLs staff report, the CWA section 303(d) List of Water Quality

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Limited Segments, and the data contained in the administrative record documenting the pathogen impairments of the Soquel Lagoon Watershed.

9. A Basin Plan amendment does not become effective until approved by the State Water Board and until the regulatory provisions are approved by the Office of Administrative Law (OAL). The TMDLs and SHELL de-designation must also receive approval from the U.S. Environmental Protection Agency.

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Approves the amendment to the Basin Plan adopted under Central Coast Water Board Resolution No. R3-2009-0024.
2. Authorizes the Executive Director or designee to submit the amendment adopted under Central Coast Water Board Resolution No. R3-2009-0024, as approved, and the administrative record for this action to the OAL and the TMDLs and shellfish harvesting de-designation to the U.S. Environmental Protection Agency for approval.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on TBA .

Jeanine Townsend
Clerk to the Board