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STATE WATER RESOURCES CONTROL BOARD BOARD MEETING SESSION-DIVISION OF WATER QUALITY [DATE - TBD]

ITEM

SUBJECT

CONSIDERATION OF RESOLUTION APPROVING AMENDMENTS TO THE WATER QUALITY CONTROL PLAN FOR THE COLORADO RIVER BASIN REGION (BASIN PLAN) ESTABLISHING A TOTAL MAXIMUM DAILY LOAD AND IMPLEMENTATION PLAN FOR BACTERIAL INDICATORS IN THE COACHELLA VALLEY STORM WATER CHANNEL.

DISCUSSION

On May 16, 2007, the Colorado River Basin Regional Water Quality Control Board adopted Resolution No. R7-2007-0039 ([Attachment I](#)) amending The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) to establish a Total Maximum Daily Load (TMDL) and implementation plan for bacterial indicators in the Coachella Valley Storm Water Channel. On January 18, 2008, the Colorado River Basin Water Board's Executive Officer requested that the Coachella Valley Storm Water Channel bacterial indicators TMDL be withdrawn from State Water Resources Control Board (State Water Board) consideration for approval based on comments received from affected stakeholders and to allow Coachella Valley agricultural stakeholders to conduct an early implementation monitoring program. The overall results of this early implementation monitoring program indicated that bacterial indicators entering the Coachella Valley Storm Water Channel in flows from subsurface drain collectors serving agricultural lands have only de minimis effect on the bacterial indicator impairment in the Coachella Valley Storm Water Channel. The amendment was revised to be consistent with the monitoring results and was adopted by the Colorado River Basin Water Board on June 17, 2010, by Resolution No. R7-2010-0028 (See Attachment I).

Impairment

The 17-mile reach of the Coachella Valley Storm Water Channel from Dillion Road to the Salton Sea was listed on the 2010 Clean Water Act (CWA) section 303(d) List of Water Quality Limited Segments (List) because it did not meet water quality standards for pathogens. Because the Coachella Valley Storm Water Channel is listed for pathogens, CWA section 303(d) requires the establishment of a TMDL. 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 this TMDL is being established as a Basin Plan amendment, state law requires an implementation plan and schedule to ensure that the TMDL is achieved.

The TMDL addresses the pathogen impairment and is designed to ensure that water quality standards will be achieved, and that beneficial uses in the watershed will be protected. The water quality objectives in the Basin Plan are set at established levels of indicator bacteria, in this case fecal coliform, E. coli and enterococci 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 illness directly, but are good indicators of the

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existence of harmful pathogens. Current E. coli concentrations in the Coachella Valley Storm Water Channel exceed the existing Basin Plan numeric water quality objectives for protecting the Water Contact Recreation beneficial use. Data indicate that the pathogen sources are urban and storm water discharges as well as natural background sources.

Targets and TMDL Allocations

The amendment establishes a numeric target equal to the Basin Plan water quality objectives expressed as the indicator organism E. coli for the protection of the water contact recreation beneficial use (REC 1). Because the REC 1 beneficial use is the most sensitive to pathogen impairment in the Coachella Valley Storm Water Channel, it has the most stringent water quality objectives of bacterial indicators. These objectives were developed based on the U.S. Environmental Protection Agency (U.S. EPA) recommended water quality criteria for bathing in fresh water, and are based on a risk of eight gastrointestinal illnesses per 1,000 swimmers in fresh water. The numeric targets used to develop the TMDL are equal to the Basin Plan's water quality objectives for E. coli which is a geometric mean of 126 most probable number (MPN) per 100 milliliters (ml) (based on a minimum of not less than five samples during a 30-day period), and 400 MPN per 100 ml for a single sample.

The TMDL sets the allocations equal to the numeric targets, with the exception of septic systems as described below. The load and waste load allocations for E. coli in the Coachella Valley Storm Water Channel for both point and nonpoint sources (including National Pollutant Discharge Elimination System (NPDES) permitted facilities, Municipal Separate Storm Sewer Systems (MS4) storm water permittees, agricultural dischargers, and discharges from tribal lands) are based on the log mean of samples collected which shall not exceed 126 MPN per 100 ml (based on a minimum of not less than five samples and 400 MPN per 100 ml for a single sample). Septic system discharges from failed septic systems where the discharge would include untreated human waste, and thus pose a greater health risk than most bacteria of other origins, is assigned an allocation of zero.

Implementation

The implementation plan is divided into two phases with Phase I beginning 90 days following approval of the TMDL by U.S. EPA. Phase I actions are required to be completed in three years and focus on monitoring and addressing bacterial indicators associated with wastewater discharges from NPDES facilities, and urban, and storm water runoff. Phase I requires:

- Kent Seatech Corporation Fish Farm, the California Department of Transportation (Cal-Trans), and the City of Coachella to submit for approval and implement a Quality Assurance Project Plan as part their water quality monitoring programs;
- The Colorado River Basin Water Board to identify significant federal and tribal dischargers to the Coachella Valley Storm Water Channel and notify them of their role in TMDL implementation;
- The Colorado River Basin Water Board to request a technical report from each tribal entity, in coordination with U.S. EPA, describing measures to ensure waste discharges from tribal land do not violate or contribute to a violation of this TMDL;

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- The Colorado River Basin Water Board to prepare an amendment to the Basin Plan that rectifies current limitations of having three bacteria indicator organisms, clarifies which indicators apply to which surface waters of the Region, and as necessary, develops site-specific objectives; and
- Monitor, track, and survey the Coachella Valley Storm Water Channel to determine if Phase I activities achieve bacteria water quality objectives.

If monitoring and assessment in Phase I indicate that waste discharges to the Coachella Valley Storm Water Channel from anthropogenic activities continue to cause exceedances of the water quality objectives and that these exceedances persist despite recommended operation and maintenance procedures and control measures in their existing permits, the implementation actions for attainment of the TMDL requires additional actions to control pathogenic sources in Phase II. The implementation actions for attainment of the TMDL also requires responsible parties to select and implement new or additional management practices (MPs) for Phase II following characterization of sources and whether those sources can be controlled based on reasons such as background conditions.

Monitoring and Evaluation

Submittal of monitoring data to the Colorado River Basin Water Board staff is required on a quarterly basis, to be used to assess contributions of bacteria to the Coachella Valley Storm Water Channel from anthropogenic or municipal sources (stormwater, urban runoff, and others). The first review of this TMDL is scheduled for completion three years after U.S. EPA approves the TMDL, to provide adequate time for implementation and data collection. Subsequent reviews are planned to be conducted concurrently with the Triennial Review of the Basin Plan. If TMDL progress is insufficient, Colorado River Basin Water Board staff plan to recommend to the Colorado River Basin Water Board additional MPs in existing permits to control pollutant sources, enforcement action, TMDL revision, or other means to achieve water quality objectives.

POLICY ISSUE

Should the State Water Board approve the amendments to the Basin Plan to establish a TMDL and implementation plan for bacterial indicators in the Coachella Valley Storm Water Channel?

FISCAL IMPACT

Colorado River Basin 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 Colorado River Basin Water Board's Basin Plan.

STAFF RECOMMENDATION

That the State Water Board:

1. Approves the amendments to the Basin Plan adopted under Colorado River Basin Water Board Resolution Nos. R7-2007-0039 and R7-2010-0028.

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2. Authorizes the Executive Director or designee to submit the amendments adopted under Colorado River Basin Water Board Resolution Nos. R7-2007-0039 and R7-2010-0028, as approved, and the administrative record for this action to the OAL and the TMDL 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. 2011-

APPROVING AMENDMENTS TO THE WATER QUALITY CONTROL PLAN FOR THE COLORADO RIVER BASIN REGION (BASIN PLAN) ESTABLISHING A TOTAL MAXIMUM DAILY LOAD AND IMPLEMENTATION PLAN FOR BACTERIAL INDICATORS IN THE COACHELLA VALLEY STORM WATER CHANNEL.

WHEREAS:

1. On May 16, 2007, the Colorado River Basin Regional Water Quality Control Board (Colorado River Basin Water Board) adopted Resolution No. R7-2007-0039 ([Attachment I](#)) amending the Basin Plan to establish a Total Maximum Daily Load (TMDL) and implementation plan for bacterial indicators in the Coachella Valley Storm Water Channel (Coachella Valley Storm Water Channel). On January 18, 2008, the Colorado River Basin Water Board's Executive Officer requested that the Coachella Valley Storm Water Channel bacterial indicators TMDL be withdrawn from State Water Resources Control Board (State Water Board) consideration. The TMDL Basin Plan amendment was revised and was adopted by the Colorado River Basin Water Board on June 17, 2010, by Resolution No. R7-2010-0028 (See Attachment I).
2. The Colorado River Basin Water Board found that the Basin Plan amendments 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.
3. The Colorado River Basin Water Board found that the analysis contained in the Final Project Report, the California Environmental Quality Act (CEQA) "Substitute Documentation" for the proposed Basin Plan amendment, including the CEQA Checklist, the staff report, and the responses to comments complies with the requirements of the State Water Board's certified regulatory CEQA process, as set forth in the California Code of Regulations, Title 23, section 3775 et seq.
4. The State Water Board finds that the Basin Plan amendments are in conformance with Water Code section 13240, which specifies that Regional Water Quality Control Boards may revise Basin Plans; and section 13242, which requires a program of implementation to achieve water quality objectives.
5. 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 Limited Segments, and the data contained in the administrative record documenting the impairments of the Coachella Valley Storm Water Channel.
6. 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 TMDL must also receive approval from the U.S. Environmental Protection Agency.

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THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Approves the amendments to the Basin Plan adopted under Colorado River Basin Water Board Resolution Nos. R7-2007-0039 and R7-2010-0028.
2. Authorizes the Executive Director or designee to submit the amendments adopted under Colorado River Basin Water Board Resolution Nos. R7-2007-0039 and R7-2010-0028, as approved, and the administrative record for this action to the OAL and the TMDL 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 .

Date

Jeanine Townsend
Clerk to the Board