

**An Amendment to the Water Quality Control Plan for the Colorado River Basin Region
To Establish the Total Maximum Daily Load and Implementation Plan for Trash in the New River at
the International Boundary, Imperial County, California**

AMENDMENT

(Proposed changes are in reference to the Basin Plan as amended through October 2005. Proposed additions are denoted by underlined text, proposed deletions are denoted by ~~striketrough~~ text)

To FRONT COVER, edit the following: *Includes Amendments Adopted by the Regional Board through ~~October 2005~~ June 2006*

To FOREWARD section after the FRONT COVER, edit the following:

This Basin Plan includes amendments adopted by the Regional Board through ~~November 2002~~ June 2006.

To TABLE OF CONTENTS, "CHAPTER 4 – IMPLEMENTATION", Section "V.", add the following and renumber pages accordingly:

F. NEW RIVER TRASH TMDL

To footer section starting on page 1-1 and through end of document, edit the following:
~~2002~~

To "CHAPTER 5 – PLANS, POLICIES, AND ISSUES", edit page numbers in footer section as follows:

~~5-42~~ 5-1; ~~5-43~~ 5-2

To "CHAPTER 4 – IMPLEMENTATION", Section "V.", Subsection "D. Imperial Valley Drains Sedimentation/Siltation TMDL", edit the following:

**D. IMPERIAL VALLEY DRAINS SEDIMENTATION/SILTATION TMDL
SUMMARY**

This TMDL was adopted by the California Regional Water Quality Control Board, Colorado River Basin Region in January 2005.

To "CHAPTER 4 – IMPLEMENTATION", Section "V.", add the following and renumber pages accordingly:

F. NEW RIVER AT THE INTERNATIONAL BOUNDARY TRASH TMDL

1. TMDL ELEMENTS

For the purpose of this TMDL, trash is defined as human-caused litter. "Litter" is defined in California Government Code §68055.1(g) as follows:

"Litter means all improperly discarded waste material, including, but not limited to, convenience food, beverage, and other product packages or containers constructed of steel, aluminum, glass, paper, plastic, and other natural and synthetic materials, thrown or deposited on the lands and waters of the state, but not including the properly discarded waste of the primary processing of agriculture, mining, logging, sawmilling or manufacturing [...]."

Table F-1: New River at the International Boundary Trash TMDL Elements

<u>ELEMENT</u>	<u>DESCRIPTION</u>								
<p><u>Problem Statement</u> (impaired water quality standard)</p>	<p>Trash deposited in the New River and its tributaries in Mexico has degraded U.S. water quality and impaired the following designated beneficial uses of the U.S. section of the New River: warm freshwater habitat; wildlife habitat; preservation of threatened, rare, or endangered species; water contact recreation; non-contact water recreation; and freshwater replenishment. Trash adversely affects fish and wildlife communities. Trash also causes secondary water quality impacts to the River's terminus at the Salton Sea because trash serves as a carrier for pathogens, dissolved organic matter, and volatile organic compounds that pose a public health threat to people and fish and wildlife communities. Trash in the New River violates Basin Plan water quality objectives, including: (a) general surface water objectives (Aesthetic Qualities, Tainting Substances, Dissolved Oxygen, Suspended Solids and Settleable Solids, Biostimulatory Substances, and Turbidity), and (b) specific surface water objectives for the New River at the International Boundary (qualitative standards 1 through 5 of Minute No. 264 of the Mexican-American Water Treaty).</p>								
<p><u>Numeric Target¹</u></p>	<p>The numeric target established by this TMDL is zero pounds/day of trash.</p>								
<p><u>Source Analysis</u></p>	<table border="1"> <thead> <tr> <th><u>Source</u></th> <th><u>pounds/year</u></th> </tr> </thead> <tbody> <tr> <td>Mexican wastewater drains/reaches</td> <td>240,000</td> </tr> <tr> <td>Natural Sources</td> <td>0</td> </tr> <tr> <td>Total</td> <td>240,000 pounds/year (or 658 pounds/day)</td> </tr> </tbody> </table>	<u>Source</u>	<u>pounds/year</u>	Mexican wastewater drains/reaches	240,000	Natural Sources	0	Total	240,000 pounds/year (or 658 pounds/day)
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Mexican wastewater drains/reaches	240,000								
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<p><u>Margin of Safety</u></p>	<p>There is an implicit margin of safety for this TMDL, meaning that the margin of safety is incorporated into the conservative processes used to develop the TMDL (i.e., numeric target is zero), and is not quantified.</p>								
<p><u>Seasonal Variations and Critical Conditions</u></p>	<p>Strong seasonal differences do not exist regarding rainfall. Mexicali Valley irrigation practices differ between summer and winter. More irrigation water flow in summer months means that more trash may be carried by the New River in summer. Less irrigation water flow in winter means that concentrations of some pollutants (e.g., pathogens, dissolved organic matter, volatile organic compounds) may increase in winter.</p>								

¹ The numeric target is a goal that translates current Basin Plan narrative objectives into quantitative values.

Table F-1: New River at the International Boundary Trash TMDL Elements	
<u>Loading Capacity</u> (Total Assimilative Capacity)	<u>Zero pounds/day of trash.</u>
<u>Load Allocations and Wasteload Allocations</u>	As stated in 40 CFR 130.2, a TMDL is the sum of load allocations for nonpoint sources, individual wasteload allocations for point sources, and natural sources. In the New River, load allocations (e.g., wastewater drains) and wasteload allocations (e.g., wastewater treatment plants) are zero pounds of trash per day because the numeric target and loading capacity are zero. Load allocations apply to discharges at the Mexican border as well as to all nonpoint sources of trash along the New River in the United States. Each NPDES facility discharging to the New River in the United States has an individual wasteload allocation of zero pounds of trash per day.

2. IMPLEMENTATION ACTIONS FOR ATTAINMENT OF TMDL

TMDL attainment for interim and final numeric targets shall be in accordance with the schedule in Table F-2.

Table F-2: Time Schedule for Implementation Plan Phases and Numeric Targets for Trash in the New River at the International Boundary

<u>Phase</u>	<u>Time Period</u>	<u>Reduction from Existing Conditions</u>	<u>Allowable Load* (pounds/day)</u>
<u>Phase I</u>	<u>Within 2 years of USEPA approval of TMDL</u>	<u>75%</u>	<u>165</u> <u>(Interim Numeric Target)</u>
<u>Phase II</u>	<u>Within 3 years of USEPA approval of TMDL</u>	<u>100%</u>	<u>0</u> <u>(Final Numeric Target)</u>

* Percent reduction required at the end of each phase, starting with the current (2005) average of 240,000 pounds/year, or 658 pounds/day.

Implementation Plan measures should be sufficient to achieve the TMDL so long as the third parties mentioned above are willing to complete the requested tasks below within the timeframes specified.

2.1 ACTIONS TO BE TAKEN BY THIRD PARTY COOPERATING AGENCIES AND ORGANIZATIONS

Consistent with the California Porter-Cologne Water Quality Control Act, the Basin Plan may identify requested implementation actions for agencies other than the Regional Water Quality Control Board (CWC §13242(a)). Accordingly, the Regional Board requests that the following cooperating agencies sign a Memorandum of Understanding (MOU) to ensure coordination of International Boundary projects: U.S. members of the New River/ Mexicali Sanitation Program Binational Technical Advisory Committee (BTAC), North American Development Bank (NADBank), Border Environment Cooperation Commission (BECC), California Border Environment Cooperation Commission (CalBECC), City of Calexico New River Committee (CCNRC), and Citizens Congressional Task Force on the New River (CCTFNR). The MOU should address:

1. Establishment of a coordination committee consisting of one representative from each agency and the Regional Board;
2. Establishment of a coordination committee charter to ensure cooperation and communication between all agencies;
3. Compilation of a list of potential/ongoing projects and funding sources to address pollution in the New River/ International Boundary area; and
4. Submission of semi-annual progress reports to the Regional Board.

The MOU should be signed, and progress reports submitted, in accordance with the schedule in Table F-3.

Table F-3: Requested Actions for Third Party Cooperating Agencies and Organizations

<u>Task</u>	<u>Due Date</u>
<u>1. Submit signed MOU to the Regional Board.</u>	<u>Six (6) months after USEPA approval of TMDL</u>
<u>2. Submit progress reports (through coordination committee) to the Regional Board describing status of projects and recommended actions to address pollution in the New River at the International Boundary.</u>	<u>Semiannually, with the first report due 12 months after USEPA approval of TMDL</u>

2.2 ACTIONS REQUESTED TO BE TAKEN BY THE U.S. GOVERNMENT

The Regional Board does not have the authority to require Mexico or the U.S. Government to reduce trash that crosses the International Boundary. Accordingly, this TMDL requests that the USIBWC and the USEPA:

1. specify and implement measures to ensure that trash discharges from Mexico do not violate or contribute to a violation of this TMDL;
2. remove trash from Mexico that has accumulated at Imperial County Calexico Landfill culverts; and
3. conducts water quality and trash monitoring in the New River at the International Boundary to evaluate for water quality impacts from trash.

It is critical that the U.S. Government coordinates activities with the other third party coordinating agencies and organizations:

1. to implement reasonable, timely measures to mitigate trash impacts on U.S. water quality in the New River/ International Boundary area;
2. to ensure bi-national standards of Minute No. 264 are met, and
3. to persuade Mexico to prevent littering of Mexican surface waters that impact water quality in the New River/ International Boundary area².

The Regional Board requests that the USIBWC and USEPA complete the trash reduction actions listed in Table F-4.

Table F-4: Requested Trash Reduction Actions for the USIBWC and USEPA

² Removing trash from the New River at or immediately downstream of the International Boundary does not eliminate all water quality impacts because pollutants leached from trash in Mexico may contaminate the New River in the U.S. Pollutants dissolved from trash will be addressed if it is determined that water quality objectives at the International Boundary are still being exceeded after implementation of this TMDL and the New River TMDLs for VOCs, DO, and pathogens.

<u>Task</u>	<u>Requested Target Date</u>
<u>1. Describe in a report* current and/or proposed measures to ensure Mexico complies with this TMDL. The report should specify parties responsible for implementation, financial options, and implementation time schedule.</u>	<u>Three (3) months after USEPA approval of TMDL</u>
<u>2. Describe in a report* the current and/or proposed measures to remove trash from Mexico that has accumulated at Imperial County Calexico Landfill culverts. The report should specify the parties responsible for implementation, financial options, and implementation time schedule.</u>	<u>Three (3) months after USEPA approval of TMDL</u>
<u>3. Begin implementation measures identified in Tasks 1 and 2.</u>	<u>Six (6) months after USEPA approval of TMDL</u>
<u>4. Describe in a report* the progress achieved towards completion of implementation measures identified in Tasks 1 and 2.</u>	<u>Semiannually, beginning 12 months after USEPA approval of TMDL</u>
<u>5. Complete implementation measures identified in Tasks 1 and 2.</u>	<u>Three (3) years after USEPA approval of TMDL</u>
<u>* The report should be prepared under the direct supervision of a California registered civil engineer, with experience in the preparation of these types of reports.</u>	

The Regional Board also requests that the USIBWC and the USEPA implement the water quality and trash monitoring in the New River at the International Boundary that is summarized in Table F-5 below, and submit monitoring reports to the Regional Board according to the schedule specified in the table. The Regional Board requests that monitoring be conducted in accordance with a Quality Assurance Project Plan (QAPP). Water Quality samples from the New River shall be collected at the closest practical site on the U.S. side of the International Boundary.³

³ It may be impractical to take water quality samples immediately at the International Boundary because wastewater infrastructure (e.g., treatment lagoons, raw sewage bypasses, and drains) empties into the New River at this location, causing mixing/aeration of water that could yield misleading monitoring results. The closest water quality monitoring site currently in use (for International Boundary Line and the State Water Board's Surface Water Ambient Monitoring Program, SWAMP) is located in the New River at the Imperial Irrigation District Bridge, near the U.S. Geological Survey water quality gage, about 0.5 miles from the International Boundary. The party that conducts monitoring for this TMDL should explore using locations closer than the currently used water quality monitoring site.

Table F-5: Requested Monitoring Actions for the USIBWC and USEPA

<u>Task</u>	<u>Requested Target Date</u>
<u>1. Prepare a monitoring plan and QAPP to monitor water quality and trash in the New River at the International Boundary.</u>	<u>Three (3) months after USEPA approval of TMDL</u>
<u>2. Implement water quality and trash monitoring in the New River at the International Boundary, pursuant to the QAPP.</u>	<u>Six (6) months after USEPA approval of TMDL</u>
<u>3. Submit monitoring data and reports to the Regional Board.</u>	<u>Semiannually, beginning 12 months after USEPA approval of TMDL</u>

3. REGIONAL BOARD MONITORING AND TRACKING PROGRAM

Regional Board staff will coordinate the TMDL Monitoring and Tracking Program. It is important to track TMDL implementation, monitor water quality progress, and modify TMDLs and Implementation Plans as necessary to:

1. Address uncertainty that may have existed during TMDL development;
2. Ensure that implementation is occurring; and
3. Ensure TMDL effectiveness, given watershed changes that may have occurred after TMDL development.

Water Quality and Trash Monitoring

The Implementation Plan calls for water quality and trash monitoring to determine TMDL progress, and to revise the TMDL as needed. Monitoring program objectives include evaluation of:

1. water quality objectives attainment;
2. implementation effectiveness;
3. in-stream water quality; and
4. water quality temporal and spatial trends.

Regional Board staff requests that USIBWC and USEPA conduct water quality and trash monitoring of the New River at or immediately downstream of the International Boundary, and submit monitoring data and reports to the Regional Board.

Implementation Tracking Program

The Implementation Plan calls for a tracking program to assess implementation. Objectives include assessment and tracking of measures already in place, and evaluation of TMDL progress. Regional Board staff will evaluate data to determine when numeric targets are attained, and will present annual reports to the Regional Board describing progress.

Measures of Success, and Failure Scenarios

The primary measure of success for TMDL implementation is attainment of zero trash in the New River at the International Boundary within three years of USEPA approval of the TMDL. Another measure of success may be a substantially lower level of trash than currently exists, such as meeting the interim numeric target (i.e., 75% trash reduction within two years of USEPA approval of the TMDL).

The primary failure scenario for TMDL implementation is the failure to achieve zero trash in the New River at the International Boundary, or the failure to substantially reduce trash if zero trash is not achieved. If either of these failure scenarios occurs, the Regional Board will consider taking further actions to achieve TMDL compliance.

4. TMDL REVIEW SCHEDULE

Annual Reports

Regional Board staff shall present annual reports to the Regional Board describing progress toward milestone attainment. The reports will assess:

1. Water quality improvement, in terms of trash reduction at the International Boundary; Monitoring results;
2. Control measures implemented to deal with pollution originating in Mexico;
3. Whether milestones were met on time or at all. If milestones were not met, the reports will discuss the reasons; and
4. Recommendations for further actions.

Triennial Review

The State must hold public hearings for reviewing applicable water quality standards (WQS), and modifying/adopting the standards as appropriate pursuant to Section 303 of the Clean Water Act and 40 CFR Part 130. The State also must formulate and periodically review (and update as necessary) regional water quality control plans pursuant to Section 13240 of the California Water Code. Following adoption by the Regional Board, Basin Plan amendments and supporting documents are submitted to the State Water Resources Control Board for review and approval, the State Office of Administrative Law for its concurrence that the amendments meet State Administrative Procedures Act requirements, and finally the USEPA.

The first TMDL review is scheduled to conclude three years after TMDL adoption to provide adequate time for implementation and data collection. At this time, TMDL compliance should be achieved. If the TMDL is not achieved, the Regional Board will consider taking further actions to achieve TMDL compliance. Subsequent reviews (if needed) will be conducted concurrently with the Triennial Review of the Basin Plan. The TMDL Review will include the same components assessed in annual reports, and will conform to the schedule in Table F-6.

Table F-6: TMDL Review Schedule

<u>Activity</u>	<u>Date</u>
<u>USEPA Approval of TMDL</u>	<u>December 2006</u>
<u>Terminate First TMDL Review, Conduct Regional Board Public Hearing, and Begin Second TMDL Review</u>	<u>December 2009</u>
<u>Terminate Second TMDL Review, Conduct Regional Board Public Hearing, and Begin Third TMDL Review</u>	<u>December 2012</u>
<u>Etc.</u>	

* Dates are contingent upon USEPA approval

Public hearings will be held at least every three years to review this TMDL. At these hearings, the Regional Board will:

- review monitoring results;
- review progress toward milestone attainment;
- consider approval of proposed management practices for the control of pathogens from human-made nonpoint sources of pollution;
- consider enforcement action; and
- consider revision of TMDL components.

This proposed review schedule indicates the Regional Board’s commitment to periodic review and refinement of this TMDL via the Basin Plan amendment process.