

**ATTACHMENT 2**

**An Amendment to the Water Quality Control Plan for the Colorado River Basin Region to Establish the New River Sedimentation/Siltation Total Maximum Daily Load**

**AMENDMENT**

(Proposed changes are in reference to the May 23, 2002 version of the Basin Plan. Proposed additions are denoted by underlined text, proposed deletions are denoted by ~~strikethrough text~~)

Page 4-19, change "~~VI. TOTAL MAXIMUM DAILY LOADS~~" TO "V. TOTAL MAXIMUM DAILY LOADS" and add the following new subsequent Section and renumber accordingly:

**C. New River Sedimentation/Siltation TMDL**

**1. TMDL ELEMENTS**

**Table 4-3: New River Sedimentation/Siltation TMDL Elements**

<b><u>ELEMENT</u></b>	
<b><u>Problem Statement</u></b> <b><u>(impaired water quality standard)</u></b>	Excess delivery of sediment to the New River has resulted in degraded conditions that impairs designated beneficial uses: warm freshwater habitat; wildlife habitat; preservation of threatened, rare, and endangered species habitat; contact- and non-contact recreation; freshwater replenishment. As the New River discharges into the Salton Sea, sediment also threatens the same beneficial uses of the Salton Sea. Sediment serves as a carrier for DDT, DDT metabolites, and other insoluble pesticides including toxaphene, which pose a threat to aquatic and avian communities and people feeding on fish from the New River; and suspended solids concentrations, sediment loads, and turbidity levels are in violation of water quality objectives. These current concentrations, loads, and levels are also forming objectionable bottom deposits, which are also adversely affecting the beneficial uses of New River.

(This table is continued on the following page.)

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**Table C-1: New River Sedimentation/Siltation TMDL Elements (continued)**

<b>ELEMENT</b>	<b>CURRENT CONDITIONS</b>												
<b><u>Numeric Target</u></b>	<u>200 mg/L Total Suspended Solids (annual average)<sup>1</sup></u>												
<b><u>Source Analysis</u></b>	<table border="0"> <tr> <td><b><u>Source</u></b></td> <td align="right"><b><u>tons/year</u></b></td> </tr> <tr> <td>Agricultural Drain Discharges:</td> <td align="right">137,715</td> </tr> <tr> <td>In-Stream Erosion &amp; Wind Deposition:</td> <td align="right">6,409</td> </tr> <tr> <td>NPDES Permitted Facilities:</td> <td align="right">356</td> </tr> <tr> <td>International Boundary</td> <td align="right">11,265</td> </tr> <tr> <td>Total:</td> <td align="right">155,745</td> </tr> </table>	<b><u>Source</u></b>	<b><u>tons/year</u></b>	Agricultural Drain Discharges:	137,715	In-Stream Erosion & Wind Deposition:	6,409	NPDES Permitted Facilities:	356	International Boundary	11,265	Total:	155,745
	<b><u>Source</u></b>	<b><u>tons/year</u></b>											
	Agricultural Drain Discharges:	137,715											
	In-Stream Erosion & Wind Deposition:	6,409											
	NPDES Permitted Facilities:	356											
International Boundary	11,265												
Total:	155,745												
<b><u>Margin of Safety</u></b>	<u>6,409 tons/year</u> <u>(corresponds to 10 mg/L)</u>												
<b><u>Seasonal Variations and Critical Conditions</u></b>	<p><u>Both the flow and sedimentation regimes within the New River watershed are relatively stable, and the sediment and water sources within the watershed are relatively uniform and widespread; therefore, this TMDL does not include provisions other than the established load allocations and implementation plan for seasonal variations or critical conditions. Staff's analysis of potential water transfers out of the watershed indicate that the transfers are not likely to affect compliance with this TMDL, but could cause other water quality problems that will need to be addressed by the parties responsible for the transfers.</u></p>												
<b><u>Loading Capacity</u></b>	<u>127,881 tons/year</u>												

(This table is continued on the following page.)

<sup>1</sup> The numeric target is a goal that translates current silt/sediment-related Basin Plan narrative objectives and shall not be used for enforcement purposes.

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**Table C-1: New River Sedimentation/Siltation TMDL Elements (continued)**

<b>ELEMENT</b>			
<b><u>Load Allocations and Wasteload Allocations</u></b>	<p><b><u>Load Allocations:</u></b></p> <ul style="list-style-type: none"> <li><u>Natural sources of sediment to the New River, including erosion and wind deposition, are allocated 6,409 tons/year.</u></li> <li><u>Waste discharges from nonpoint sources into the New River shall not exceed the load allocations specified below:</u></li> </ul>		
	<u>River Reach</u>	<u># of IID Drains Identified within Reach</u>	<u>Sediment Load Allocation (tons/year)<sup>1,2</sup></u>
	<u>New River immediately downstream of the International Boundary, at the USGS gauging station, a point identified hereafter at "NR-0"</u>	None	11,265
	<u>Reach 1: Downstream from the International Boundary to the intersection of the Evan Hewes Road Bridge and the New River Channel, a point identified hereafter as "NR-1"</u>	14	20,730
	<u>Reach 2: This reach encompasses the river from NR-1 to Drop Structure 2, a point upstream of the Rutheford Road Bridge hereafter referred to as "NR-2".</u>	17	32,350

(This table is continued on the following page.)

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**Table C-1: New River Sedimentation/Siltation TMDL Elements (continued)**

ELEMENT			
<b>Load Allocations and Wasteload Allocations</b>	<u>Reach 3: This reach covers the river from NR-2 to the point where it intersects the Lack Road Bridge, a point hereafter referred to as "NR-Outlet."</u>	23	35,835
	<u>Direct Outfalls to River</u>	<u># of IID Drains Identified</u>	<u>Sediment Load Allocation (tons/year)<sup>1,2</sup></u>
	<u>Tailwater outfalls discharging directly to the New River.</u>	a	14,884
	<u>Natural Sources</u>		
	<u>Natural Sources</u>		6,409
	<b>Waste Load Allocations:</b>		
<ul style="list-style-type: none"> <li><u>The discharge from point sources (NPDES permits) shall not exceed the total suspended solids limits specified under 40 CFR 122 et seq., and the corresponding mass loading rates.</u></li> </ul>			

**Footnotes for Table No. C-1:**

<sup>1</sup> The sediment load allocation for any particular applicable reach shall be distributed proportionately amongst the agricultural drains within that particular reach based on the relative flow contribution of each drain to the total flow contribution to the reach from the drains within the reach. The Regional Board's Executive Officer shall determine the proportional load amongst the agricultural drains within that particular reach. The sediment load allocation will be reviewed by the Regional Board's Executive Officer every three years following TMDL implementation.

<sup>2</sup> The sediment load allocations have been calculated based on the estimated individual average drain flows within the reach for the 1995-2000 period. At lower or higher drain flows, the average annual load allocation for a particular reach shall not exceed the load given by:

$$LA_R = (180) * (Q_R) * (0.0013597), \text{ where:}$$

$LA_R$  = Load Allocation for any of the New River reaches identified above (tons/yr).

$Q_R$  = Reach Flow (ac-ft) = Total flow contribution to the reach from the drains within the reach (ac-ft).  
The sediment load allocation will be reviewed by the Executive Officer every three years following TMDL implementation.

<sup>a</sup> The number of outfalls has not been determined.

TMDL attainment shall be in accordance with the schedule contained in Table C-2, below:

**Table C-2: Interim Numeric Targets for Attainment of the TMDL**

<u>Phase</u>	<u>Time Period<sup>1</sup></u>	<u>Estimated Percent Load Reduction<sup>2</sup></u>	<u>Interim Target (mg/L)<sup>3</sup></u>
<u>Phase 1</u>	<u>Years 1 – 3</u>	<u>5%</u>	<u>229</u>
<u>Phase 2</u>	<u>Years 4 – 6</u>	<u>7%</u>	<u>213</u>
<u>Phase 3</u>	<u>Years 7 – 9</u>	<u>4%</u>	<u>204</u>
<u>Phase 4</u>	<u>Years 10 – 12</u>	<u>2%</u>	<u>200</u>

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### **Footnotes for Table No. C-2:**

- <sup>1</sup> Year 1 refers to the effective date to start TMDL implementation, which shall be one year after USEPA approves the TMDL. For example, if USEPA approves the TMDL on November 15, 2002, Year 1 is November 15, 2003, which makes Year 3 November 15, 2005, which makes Year 4 November 15, 2006, and so on.
- <sup>2</sup> Percent reductions indicate the reduction required in total suspended sediment load from the average concentration of the New River at the beginning of each phase, beginning with the 1980-2001 average concentration of 306 mg/L.
- <sup>3</sup> These interim targets are goals which translate current silt/sediment related Basin Plan narrative objectives and are not intended to specifically be used for enforcement purposes.

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**Page 4-25, Edit subsequent Section 1. IMPLEMENTATION ACTIONS AND REGULATIONS FOR ATTAINMENT OF ALAMO RIVER SEDIMENTATION/SILTATION TMDL change to "1. IMPLEMENTATION ACTIONS AND REGULATIONS FOR ATTAINMENT OF SEDIMENTATION/SILTATION TMDLs"**

**Page 4-25, Edit Subsequent Section "1.1 DESIGNATED MANAGEMENT ACTIONS" and change to:**

- Farmers/growers discharging waste into the New River and Alamo River in a manner that causes or could cause violation of load allocations and/or exceedance of the Sediment/Silt numeric target;

**Page 4-25, Edit Subsequent Section "1.1.1 Farmers/growers Water Quality Management Plans" and change to:**

The farmers/growers shall submit self-determined sediment control programs to the Regional Board by: (insert the date that corresponds to 15 months following the date of USEPA TMDL approval).

**Table 4-4 Date that Corresponds to 15 months following the date of USEPA TMDL Approval \***

<u>TMDL</u>	<u>Date (15 months after USEPA Approval)</u>
Alamo River	
New River	

**Edit Subsequent Section "1.1.2 The Imperial Irrigation District" and change to:**

**By: (insert the date that corresponds to 15 months following the date of USEPA TMDL approval)**

**Table 4-5 Date that Corresponds to 15 months following the date of USEPA TMDL Approval \***

<u>TMDL</u>	<u>Date (15 months after USEPA Approval)</u>
Alamo River	
New River	

the Imperial Irrigation District shall submit to the Regional Board a revised Drain Water Quality Improvement Plan (DWQIP) with a proposed program to control and monitor water quality impacts caused by drain maintenance operations within the Alamo and New River Watershed and dredging operations in the Alamo and New Rivers.

\* Note: Upon USEPA TMDL approval, this parenthetical "formula" will be replaced by the date certain, based on the date of approval.

\* Note: Upon USEPA TMDL approval, this parenthetical "formula" will be replaced by the date certain, based on the date of approval. The Executive Officer shall be responsible for determining proportional sediment load allocations amongst the agricultural drains.

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a. Drain and New River Deltas Maintenance

- Reduction in drain cleaning and dredging activities to the practical extent allowed by the implementation of on- and off-field sediment control BMPs by the farmers/growers and the BMP effectiveness in reducing silt built up in the drains and the New and Alamo River Deltas to avoid impacts on sensitive resources.

b. Drain Water Quality Monitoring Plan

The revised DWQIP shall consist of a proposed program to monitor:

- Water quality impacts caused by dredging operations in the drains and to monitor the effects that dredging operations in the New and Alamo River Deltas have on the river's water quality standards;
- Representative samples from the water column of all major drains and a representative number of the small drains tributary to the New and Alamo Rivers for analyses of flow, TSS, Turbidity, and nutrients.

c. Information on Agricultural Dischargers

**No later than ~~insert date that corresponds to 16 months following the date of USEPA TMDL approval~~\***

**Table 4-6 Date that Corresponds to 16 months following the date of USEPA TMDL Approval**

<u>TMDL</u>	<u>Date (16 months after USEPA Approval)</u>
<u>Alamo River</u>	
<u>New River</u>	

Page 4-27, Edit Subsequent Section "1.1.3. United States Environmental Protection Agency (USEPA) and U.S. Section of the International Boundary and Water Commission (IBWC)" and change to:

**By: ~~insert the date that corresponds to 15 months following the date of USEPA TMDL approval~~\***

**Table 4-7 Date that Corresponds to 15 months following the date of USEPA TMDL Approval \***

<u>TMDL</u>	<u>Date (15 months after USEPA Approval)</u>
<u>Alamo River</u>	
<u>New River</u>	

the USEPA and/or the U.S. Section of the IBWC shall submit to the Regional Board a technical report pursuant to Section 13225 of the California Water Code describing the proposed control

\* Note: Upon USEPA approval, this parenthetical "formula" will be replaced by the date certain, based on the date of approval.

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measures, monitoring plan and reporting procedures, and quality assurance procedures the U.S. Government proposes to take to ensure that discharges of wastes from Mexico do not violate or contribute to a violation of ~~this~~ these TMDL TMDLs, particularly a violation of the Load Allocation immediately downstream of the International Boundary, at the ~~point~~ points identified as "AR-0-" and "NR-0."

**Edit Subsequent Section "1.2 RECOMMENDED MANAGEMENT ACTIONS FOR FARMERS/GROWERS AND DRAINAGE MANAGEMENT" and change to:**

Implementation of BMPs should normally include: (1) consideration of specific site conditions; (2) monitoring to assure that practices are properly applied and are effective; (3) improvement of a BMP or implementation of additional BMPs or other management practices when needed to resolve a deficiency and; (4) mitigation of a problem where the practices are not effective. The practices listed herein are a compilation of BMPs recommended by the Technical Advisory Committee for the Silt TMDL for the Alamo and New Rivers (Silt TAC), the Natural Resources Conservation Services Field Office Technical Guide (NRCS FOTG), the IID, and the University of California Cooperative Extension (Holtville Field Station). Inclusion of practices herein is not meant to imply or establish a prescriptive list of 'one size fits all' preferred practices for the drainage basins tributary to the Alamo and New River Rivers.

**Edit Subsequent Section Title "1.2.3 ESTIMATED COST OF IMPLEMENTATION AND SOURCES OF FINANCING" and change to "1.2.3 ESTIMATED COST OF IMPLEMENTATION AND SOURCES OF FINANCING FOR THE NEW AND ALAMO RIVERS"**

**Edit Subsequent Section 1.3.1 IMPERIAL COUNTY FARM BUREAU VOLUNTARY WATERSHED PROGRAM and change to:**

a. ICFB WATERSHED PROGRAM PLAN  
The Imperial County Farm Bureau should:

- ~~By: insert the date that corresponds to 13 months following the date of USEPA TMDL approval~~;

**Table 4-8 Date that Corresponds to 13 months following the date of USEPA TMDL Approval \***

<u>TMDL</u>	<u>Date (13 months after USEPA Approval</u>
<u>Alamo River</u>	
<u>New River</u>	

~~Issue~~ issue letters to all potential program participants within the Alamo and New Rivers watersheds that describes the ICFB Voluntary Watershed Program.

- ~~By: insert the date that corresponds to 15 months following the date of USEPA TMDL approval~~;

**Table 4-9 Date that Corresponds to 15 months following the date of USEPA TMDL Approval \***

\* Note: Upon USEPA TMDL approval, this parenthetical "formula" will be replaced by the date certain, based on the date of approval.

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<u>TMDL</u>	<u>Date (15 months after USEPA Approval)</u>
Alamo River	
New River	

provide the Regional Board with a list of program participants, organized by subwatershed ("drainshed").

- ~~By: {insert the date that corresponds to 15 months following the date of USEPA TMDL approval}\*.~~

**Table 4-10 Date that Corresponds to 15 months following the date of USEPA TMDL Approval \***

<u>TMDL</u>	<u>Date (15 months after USEPA Approval)</u>
Alamo River	
New River	

submit the ICFB Watershed Program Plan to the Regional Board. The Plan should (1) identify measurable environmental and programmatic goals; (2) describe aggressive, reasonable milestones and timelines for the development and implementation of TMDL outreach plans; (3) describe aggressive, reasonable milestones and timelines for the development of sub-watershed ("drainshed") plans; (4) describe a commitment to develop and implement a tracking and reporting program.

**b. ICFB TRACKING AND REPORTING PROCEDURES**

The Imperial County Farm Bureau should also:

- ~~By: {insert the date that corresponds to 16 months following the date of USEPA TMDL approval}\*.~~

**Table 4-11 Date that Corresponds to 16 months following the date of USEPA TMDL Approval \***

<u>TMDL</u>	<u>Date (16 months after USEPA Approval)</u>
Alamo River	
New River	

submit a plan describing the process and procedures for tracking and reporting implementation of BMPs (and other proven management practices) and BMP performance to the Regional Board's Executive Officer.

- Implement the tracking and reporting procedures.
- Submit semi-monthly written reports assessing trends in the data and level of adoption of the process and procedures throughout each of the sub-watersheds ("drainsheds") to the Executive Officer.
- Submit a yearly summary report to the Executive Officer by 15<sup>th</sup> of February of each year.

Page 4-32, Edit “ VI. ACTIONS OF OTHER AUTHORITIES” change to “VII. ACTIONS OF OTHER AUTHORITIES”

Page 6-3, Edit “II. REGIONAL BOARD MONITORING”, SUBSECTION “B. COMPLIANCE MONITORING”, SUBSEQUENT SECTION “~~1. Recommended Biomonitoring (Toxicity Monitoring) Programs~~” change to “2. Recommended Biomonitoring (Toxicity Monitoring) Programs”

Page 6-4, Edit under subsequent Sections the following:

~~2-3.~~ New River Pathogen TMDL

~~3-4.~~ Alamo River Sedimentation/Siltation TMDL

5. New River Sedimentation/Siltation TMDL

~~3-1-5.1~~ Compliance Assurance and Enforcement

~~3-2-5.2~~ Monitoring and Tracking

Page 6-5, Edit Section

- **Water Quality Monitoring and Assessment** and add the Subsection “Alamo River” directly beneath the Section title. Add the subsequent Subsection “New River” with the following text:

Monitoring activities are contingent upon adequate programmatic funding. The Regional Board will conduct monitoring activities for the New River Sedimentation/Siltation TMDL pursuant to a Regional Board Quality Assurance Project Plan for the New River (QAPP-NR). The QAPP-NR shall be developed by Regional Board staff and be ready for implementation within 180 days following USEPA approval of this TMDL. The Regional Board's Executive Officer shall approve the QAPP-NR and monitoring plan after determining that the QAPP-NR and monitoring plan satisfy the objectives and requirements of this Section 5.2. The objectives of the monitoring program shall include collection of water quality data for:

- Assessment of water quality standards attainment,
- Verification of pollution source allocations,
- Calibration or modification of selected models (if any),
- Evaluation of point and nonpoint source control implementation and effectiveness,
- Evaluation of in-stream water quality,
- Evaluation of temporal and spatial trends in water quality, and
- Modification of the TMDL as necessary.

The monitoring program shall include a sufficient number of sampling locations and sampling points per location along the New River and major drain tributaries to the river. Monthly grab samples from the above-mentioned surface waters shall be collected and analyzed for the following parameters:

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- Flow (to be obtained from IID or USGS)
- Dissolved Oxygen
- pH
- Temperature
- Field turbidity
- Laboratory turbidity
- Total suspended solids
- Quarterly monitoring of DDT and DDT metabolites
- Fecal coliform organisms
- E. Coli
- Fecal streptococci
- Enterococci

The Regional Board will track activities implemented by dischargers and responsible parties and surveillance conducted for the New River Sedimentation/Siltation TMDL pursuant to an implementation tracking plan (ITP). Regional Board staff will develop the ITP within 180 days following USEPA approval of this TMDL. The Regional Board's Executive Officer shall approve the ITP after determining that the ITP satisfies the objectives and requirements of this Section 5.2. The objectives of Regional Board Surveillance and implementation tracking are:

- Assess/track/account for practices already in place;
- Measure the attainment of Milestones;
- Determine compliance with NPDES permits, WLAs, and LAs; and
- Report progress toward implementation of NPS water quality control, in accordance with the SWRCB NPS Program Plan (PROSIP).