

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

RESOLUTION NO. R7-2005-0006

**A Resolution Amending the Water Quality Control Plan
Of the Colorado River Basin
To Establish a Sedimentation/Siltation Total Maximum Daily Load for the
Imperial Valley Drains: Niland 2, P, and Pumice Drains and Implementation Plan**

WHEREAS, the California Regional Water Quality Control Board, Colorado River Basin Region (hereinafter Regional Board), finds that:

An updated Water Quality Control Plan for the Colorado River Basin (Basin Plan) was adopted by the Regional Board on November 17, 1993, approved by the State Water Resources Control Board (SWRCB) on February 17, 1994, and approved by the Office of Administrative Law on August 3, 1994.

2. Warm freshwater habitat (WARM), wildlife habitat (WILD), preservation of rare, threatened, or endangered species (RARE), water contact recreation (REC I), non-contact recreation (REC II), and freshwater replenishment (FRSH) are among the beneficial use designations specified in the Basin Plan for Imperial Valley Drains.
3. The Basin Plan includes narrative water quality objectives for total suspended solids, sediment, and turbidity for Imperial Valley Drains to protect the beneficial uses listed in Finding No. 2, above.
4. Water quality objectives are not being met in the Niland 2, P, and Pumice Imperial Valley Drains because direct and indirect discharges of silt-laden agricultural tailwater into the drains, and drain maintenance operations, are adversely impacting the beneficial uses. The silt carries insoluble pesticides such as DDT and its byproducts, which bioaccumulate in fish tissue.
5. Pursuant to Section 303(d) of the Clean Water Act, Imperial Valley Drains are listed as water quality limited because of sediment impairments. Section 303(d) of the Clean Water Act requires the establishment of the Total Maximum Daily Load (TMDL) of sediment/silt that can be discharged while still ensuring compliance with water quality standards. Section 303(d) also requires the allocation of this TMDL among sources of sediment/silt, together with an implementation plan and schedule that will ensure that the TMDL is met and that compliance with water quality standards is achieved.
6. This Basin Plan Amendment includes allocations for the Niland 2, P, and Pumice drains, and a corresponding implementation Plan, to reduce sediment in those drains to protect beneficial uses.
7. This Basin Plan Amendment includes an Implementation Plan that applies to all Imperial Valley Drains that empty directly into the Salton Sea, because all of the drains contribute, albeit in varying degrees, to sediment/silt impacts on water quality standards of the drains and the Salton Sea, and are so listed pursuant to Section 303(d) of the Clean Water Act. This approach ensures Valley-wide consistency in controlling sediment in all drains that empty directly into the Salton Sea, prevents a piecemeal approach in controlling sediment, and enables de-listing of all drains simultaneously upon successful completion of the control measures.
8. This Basin Plan Amendment includes a Prohibition for Discharge of Silt-Laden Tailwater into the Imperial Valley, including the Imperial Valley Drains, New River, Alamo River, and their tributaries. The Prohibition, along with this and previous sediment/silt TMDLs, will help ensure that sediment/silt will no longer violate water quality standards.

9. The Total Maximum Daily Load for Sedimentation/Siltation for the Imperial Valley Drains: Niland 2, P, and Purnice Drains Project Report (hereafter "Project Report") and the proposed Basin Plan Amendment to establish the TMDL, the Implementation Plan, and the Conditional Prohibition are attached to this Resolution, and meet the requirements of Section 303(d) of the Clean Water Act. The amendment requires, in part, that nonpoint sources implement Management Practices (MPs) to control sediment/silt inputs to provide a reasonable assurance that water quality standards will be met.
10. The Regional Board prepared and distributed written reports regarding adoption of the Basin Plan Amendment in compliance with applicable state and federal environmental regulations (Title 23, California Code of Regulations, Section 3775 et seq.; and Title 40, Code of Federal Regulations, Parts 25 and 131).

The basin planning process is certified by the Secretary for Resources as being exempt from the requirements of California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.), and therefore an Environmental Impact Report or Negative Declaration is not required (Pub. Resources Code, 21080.5; Cal. Code Regs., tit. 14, 15251, subd. (g)). In accordance with California Code of Regulations Title 23, §§3777-3781, the Project Report-Basin Plan Amendment package includes a CEQA Environmental Checklist and Determination that assesses the environmental impacts of the Basin Plan Amendment and discusses alternatives, among other analyses. The Basin Plan Amendment, CEQA Environmental Checklist and Determination, TMDL Staff Report, and supporting documentation are functionally equivalent to an Environmental Impact Report.

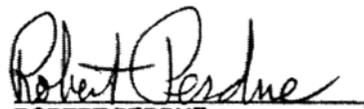
12. The adoption of the Basin Plan Amendment based on the Project Report is a regulatory action subject to the requirements of Public Resources Code section 21159. Consistent with the requirements of that section, the CEQA Environmental Checklist and Determination includes an analysis of environmental impacts, mitigation measures to reduce or avoid those impacts, and alternative means of compliance that would avoid or eliminate environmental impacts (Pub. Resources Code, 21159, subd. (a)(1)-(3); Cal. Code Regs title 14, 15187, subds. (b), (c)(1)-(3).) The analysis in the CEQA Environmental Checklist and Determination takes into account a reasonable range of environmental, economic, and technical factors. CEQA analysis determined that the proposed Basin Plan Amendment would not have a significant adverse effect on the environment. Regional Board staff have presented the CEQA Environmental Checklist and Determination to the Regional Board, which reviewed and considered the analysis before adopting this amendment.
13. The Regional Board has considered federal and state antidegradation policies and other relevant water quality control policies and finds the Basin Plan Amendment consistent with those policies.
14. Since January 1998, Regional Board staff have engaged interested parties in stakeholder involvement through meetings of the Imperial Valley Sedimentation/Siltation TMDL Technical Advisory Committee. On April 29, 2002, a Public CEQA Scoping Meeting was held in El Centro, CA.
15. Consistent with Title 23, California Code of Regulations, Sections 3778 through 3780, Regional Board staff consulted about the proposed action with stakeholders in the Region and with other potentially affected parties, and considered and addressed comments on the matter.
16. On July 1, 2004, the Regional Board held a Public Hearing to consider the Project Report and Basin Plan Amendment. Notice of the Public Hearing was given to all interested persons and published in accordance with Water Code Section 13244 and Title 40, Code of Federal Regulations, Part 25.
17. Additional information about the Economic Impact Assessment was given to the Regional Board by the Imperial County Farm Bureau at the July 1, 2004 Public Hearing. The Regional Board decided to continue the Public Hearing to allow for consideration of the additional information.

18. On January 19, 2005, the Regional Board held a continued Public Hearing to re-consider the Project Report, Basin Plan Amendment, additional information provided at the previous Public Hearing, and a Supplemental Staff Report that provided additional cost estimates for the Economic Impact Assessment that reflected current actual costs.
19. The Basin Plan Amendment must be reviewed and approved by the SWRCB, Office of Administrative Law (OAL), and U.S. Environmental Protection Agency. Once approved by SWRCB, the amendment is submitted to OAL. A Notice of Decision will be filed after the SWRCB and OAL have acted on this matter. The SWRCB will forward the approved amendment to the U.S. Environmental Protection Agency for review and approval.
20. The TMDL establishes a numeric target of 200 mg/L for Total Suspended Solids (annual average). Numeric targets in a TMDL are not water quality objectives. Numeric targets are implementation tools that translate existing objectives, by quantifying the limits those objectives require, considering seasonal variations and a margin of safety. Targets do not create new bases for enforcement apart from the objectives they translate.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Regional Board adopts the amendment to the Water Quality Control Plan for the Colorado River Basin as set forth in the attached Basin Plan Amendment.
2. The Executive Officer is directed to forward copies of the Basin Plan Amendment to the SWRCB in accordance with the requirement of Section 13245 of the California Water Code.
3. The Regional Board requests the SWRCB approve the Basin Plan Amendment in accordance with Sections 13245 and 13246 of the California Water Code and forward the Amendment to the Office of Administrative Law and U.S. Environmental Protection Agency for approval.
4. The Executive Officer is directed to file a Notice of Decision with the California Secretary for Resources after OAL approval of the Basin Plan Amendment, in accordance with Section 21080.5(d) (2)(E) of the Public Resources Code and Title 23, California Code of Regulations, Section 3781.
5. If during the approval process the SWRCB or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.

I, Robert Perdue, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on January 19, 2005.


ROBERT PERDUE
Executive Officer

**An Amendment to the Water Quality Control Plan for the Colorado River Basin Region
To Establish the
Sedimentation/Siltation Total Maximum Daily Load for the Imperial Valley Drains: Niland 2, P, and
Pumice Drains and Implementation Plan**

AMENDMENT

(Proposed changes are in reference to the Basin Plan as amended through 2002. Proposed additions are denoted by underlined text, proposed deletions are denoted by ~~strikethrough text~~)

To TABLE OF CONTENTS, "CHAPTER 4 – IMPLEMENTATION", edit the following and renumber pages accordingly:

CHAPTER 4 – IMPLEMENTATION

- I. INTRODUCTION
 - A. Regional Board Goals and Management Principals
 - B. General Implementation
- II. POINT SOURCE CONTROLS
 - A. Geothermal Discharges
 - B. Sludge Application
 - C. Municipal Wastewater Treatment Plants
 - D. Wastewater Reclamation and Reuse
 - F. Stormwater
 - G. ~~Brine Discharges~~ Discharges
 - H. Septic Systems
- III. NONPOINT SOURCE CONTROLS
 - A. Agriculture
 - B. State Water Quality Certification
- IV. SPECIFIC IMPLEMENTATION ACTIONS
 - A. New River Pollution by Mexico
 - B. Salton Sea
 - C. Toxicity Objective Compliance
 - D. Disposal of Waste to Indian Land
- V. TOTAL MAXIMUM DAILY LOADS (TMDLs) AND IMPLEMENTATION PLANS
 - A. ~~New River Pathogen TMDL Total maximum Daily Load~~
Table 4-1: New River Pathogen TMDL Elements
 - B. Alamo River Sedimentation/Siltation TMDL
~~Table 4-1: Alamo River Sedimentation/Siltation TMDL Elements~~
~~Table 4-1A: Waste Load Allocations for Point Sources in the Alamo River Watershed~~
~~Table 4-2: Interim Numeric Targets for Attainment of the TMDL~~
 - C. New River Sedimentation/Siltation TMDL
~~Table 4-3: New River Sedimentation/Siltation TMDL Elements~~
~~Table 4-3A: Interim Numeric Targets for Attainment of the TMDL~~
 - D. Imperial Valley Drains Sedimentation/Siltation TMDL
 - E. Further Implementation Actions and Regulations for All Imperial Valley Sedimentation/Siltation TMDLs
- VI. ACTIONS OF OTHER AUTHORITIES
- VII. PROHIBITIONS
 - A. Imperial Valley Sedimentation/Siltation

To TABLE OF CONTENTS, add the following to "CHAPTER 6 – SURVEILLANCE, MONITORING AND WATER QUALITY ASSESSMENT"; II. REGIONAL BOARD MONITORING; and renumber pages accordingly:

F. Total Maximum Daily Loads

To "CHAPTER 2 – BENEFICIAL USES", Section "IV. SOURCES OF DRINKING WATER POLICY", Subsection "A. SURFACE AND GROUND WATERS WHERE:", edit the following:

2. There is contamination, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for domestic use using either Best Management Practices or best economically achievable treatment practices, or

To "CHAPTER 3 – WATER QUALITY OBJECTIVES", Section "IV. GROUND WATER OBJECTIVES", edit the following:

Ideally the Regional Board's goal is to maintain the existing water quality of all nondegraded ground water basins. However, ~~from a practical standpoint it must be noted that~~ in most cases ground water that is pumped generally returns to the basin after use with an increase in mineral concentrations such as total dissolved solids (TDS), nitrate, etc., that are picked up by water during its use. Under these circumstances, the Regional Board's objective is to minimize the quantities of contaminants reaching any ground water basin. This could be achieved by establishing best management practices for major discharges to land. Until ~~such time as~~ the Regional Board can complete necessary investigations for the establishment of best management practices, the objective will be to maintain the existing water quality where feasible.

To "CHAPTER 4 – IMPLEMENTATION", Section "III. NONPOINT SOURCE CONTROLS", edit the following:

The Federal Clean Water Act, as amended in 1987, includes Section 319 titled "Nonpoint Source Management Programs". Section 319 requires the States to develop assessment reports and management programs describing the States' nonpoint source problems and setting forth a program to address the problems. The State Water Resources Control Board (State Board) adopted its "Nonpoint Source Management Plan" in November 1988. The Plan was updated in December 1999 with adoption of the "Plan For California's Nonpoint Source Pollution Control Program," (hereafter referred to as "State NPS Program"), including "Volume I: Nonpoint Source Program Strategy and Implementation Plan for 1998-2013 (PROSIP)" and "Volume II: California Management Measures for Polluted Runoff (CAMMPR)" (adopted December 14, 1999, SWRCB Resolution No. 99-114). This Plan has an ~~three-tiered~~ approach to NPS water quality control whereby the following tiers are implemented as needed:

1. Self-determined implementation of Best Management Practices (BMPs);
2. Regulatory-based encouragement of Best Management Practices; and

~~Sequential movement through the tiers (e.g. Tier 1 to Tier 2 to Tier 3) is not required of the Regional Board.~~ Depending on the water quality impacts and severity of the NPS problem, the Regional Board may move directly to the full regulatory and complementary enforcement actions ~~specified in Tier 3~~. It is the preference of the Regional Board to regulate nonpoint sources of pollution using the least stringent tier methods possible, while attaining water quality standards.

There is close cooperation between the State Board's Nonpoint Source Program and this Region's Nonpoint Source Program. Much of the funding for these programs comes from federal grants which are designed to assist in implementation of the federal Clean Water Act provisions on nonpoint source pollution control. Some of the important activities of these nonpoint source programs include development of water quality assessments, development and oversight of NPS pollution control demonstration projects, active cooperation with other affected state, local and federal agencies, identification, development and

implementation of BMPs, program development activities, public participation, and educational outreach activities.

Implementation of the ~~three-tiered approach to~~ NPS Regulation

To "CHAPTER 4 – IMPLEMENTATION", Section "III. NONPOINT SOURCE CONTROLS", Subsection "A. AGRICULTURE", edit the following:

Agricultural discharges, primarily irrigation return flows, constitute the largest volume of pollution entering surface waters in this Region. The eight agricultural drains/drain systems in this Region support significant beneficial uses as identified in Chapter 2 of this Plan. In an effort to protect and enhance these uses, the Regional Board adopted the "Agricultural Drainage Management (ADM) Report for the Colorado River Basin Region" in March 1992. This report established priorities for dealing with the drain systems based on a watershed approach. Drainage entities (e.g. water districts), including Imperial Irrigation District, Coachella Valley Water District, and Palo Verde Irrigation District, were identified in each of the four watersheds, and the Regional Board will work closely with these entities to implement agricultural pollution controls. ~~In 1994, the Imperial Irrigation District (IID) adopted a Drain Water Quality Improvement Program, in which IID committed to monitor water quality, to develop and implement BMPs, and implement an education and outreach program to improve water quality in its drains and Alamo and New Rivers.~~

To "CHAPTER 4 – IMPLEMENTATION", Section "IV. SPECIFIC IMPLEMENTATION ACTIONS", Subsection "B. SALTON SEA", edit the following:

2. Pollution Control

Investigations by the Regional Board, the U.S. Geological Survey, the U.S. Fish and Wildlife Service, the California Department of Fish and Game, and others have identified pollutants from upstream sources which threaten the beneficial uses of the Sea. These pollutants include selenium, nutrients, pesticides, bacteria, and silt. Most of these pollutants are from agricultural runoff from farmlands in the Salton Sea Watershed. The largest contribution is from the Imperial Valley with smaller amounts coming from the Coachella and Mexicali Valleys. Controls on these pollutants are most effectively implemented at their source. The major control activity will be implementation of Best Management Practices (BMPs) on farmlands which will be conducted in accordance with the State's Nonpoint Source Program as discussed in Chapter 4. The Regional Board will also work with the USEPA, the U.S. Bureau of Reclamation, the Colorado River Basin Salinity Control Forum, and upstream states to identify sources of pollutants, especially ~~S~~selenium, entering the Colorado River from locations upstream of California. Pending the availability of funding, the Regional Board will continue to monitor the water quality at the Salton Sea and its tributaries as described in Chapter 6.

Edit Title and Subsequent Sections and renumber pages accordingly: "CHAPTER 4 – IMPLEMENTATION", Section "V. TOTAL MAXIMUM DAILY LOADS (TMDLs) AND IMPLEMENTATION PLANS"

A. ~~New River Pathogen Total Maximum Daily Load TMDL~~

1. TMDL ELEMENTS

~~Table 4-4 A-1~~

2. Implementation Actions for Attainment of TMDL

2.1 Wastewater Treatment Plants

All point source dischargers discharging, potentially discharging, or proposing to discharge waste with bacteria into the New River and/or surface waters tributary to the New River, at concentrations that violate or threaten to violate waste load allocations (WLAs), shall provide adequate disinfection to meet the WLAs specified in ~~Table 4-4 A-1, above.~~

It is essential that the referenced facilities that are not disinfecting provide adequate effluent disinfection at the earliest possible date. Towards this end, the Executive Officer shall direct staff to draft revised NPDES permits for these facilities

incorporating the WLAs prescribed in Table 4-1 A-1 and monitoring requirements for the WLAs.

B. Alamo River Sedimentation/Siltation TMDL

SUMMARY 1. TMDL ELEMENTS

Table 4-1 B-1

Footnotes for Table No. 4-1 B-1

⁵ The sediment load allocation for any particular 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 Executive Officer shall be responsible for determining proportional sediment load allocations amongst the agricultural drains.~~ The sediment load allocation will be reviewed every three years following TMDL implementation. The sediment load allocation will vary depending on drain flow.

Table 4-1A B-1A

Footnotes for Table No. 4-1A B-1A

2. Implementation Actions for Attainment of TMDL

TMDL attainment shall be in accordance with the schedule contained in Table B-24-2, below:

Table 4-2 B-2

Footnotes for Table No. 4-2 B-2

C. New River Sedimentation/Siltation TMDL

SUMMARY

This TMDL was adopted by the California Regional Water Quality Control Board, Colorado River Basin Region in June 2002; approved by the Office of Administrative Law in January 2003; and approved by the U.S. Environmental Protection Agency on March 31, 2003.

1. TMDL ELEMENTS

Table 4-3 C-1

Footnotes for Table No. 4-3 C-1

¹ 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. The sediment load allocation will vary depending on drain flow.

2. Implementation Actions for Attainment of TMDL

TMDL attainment shall be in accordance with the schedule contained in Table C-2 4-3A, below:

Table 4-3A C-2

Footnotes for Table No. 4-3A C-2

Add the following new Subsequent Section immediately after the footnotes for Table No. C-2, and renumber accordingly:

D. Imperial Valley Drains Sedimentation/Siltation TMDL

1. TMDL ELEMENTS

The Imperial Valley Drains Sedimentation/Siltation TMDL contains allocations that apply to three Imperial Valley drains (Niland 2, P, and Pumice) and their tributary drains (Vail 4A, Vail 4, Vail 3A, Vail 3, and Vail 2A feed into Pumice). These drains (among others) empty directly into the Salton Sea. Figure D-1 is a map of the three drains (and their tributary drains) for which allocations have been specified in this TMDL.

Figure D-1: Drains (Niland 2, P, and Pumice and Their Tributary Drains) for Which Allocations Have Been Specified in this TMDL

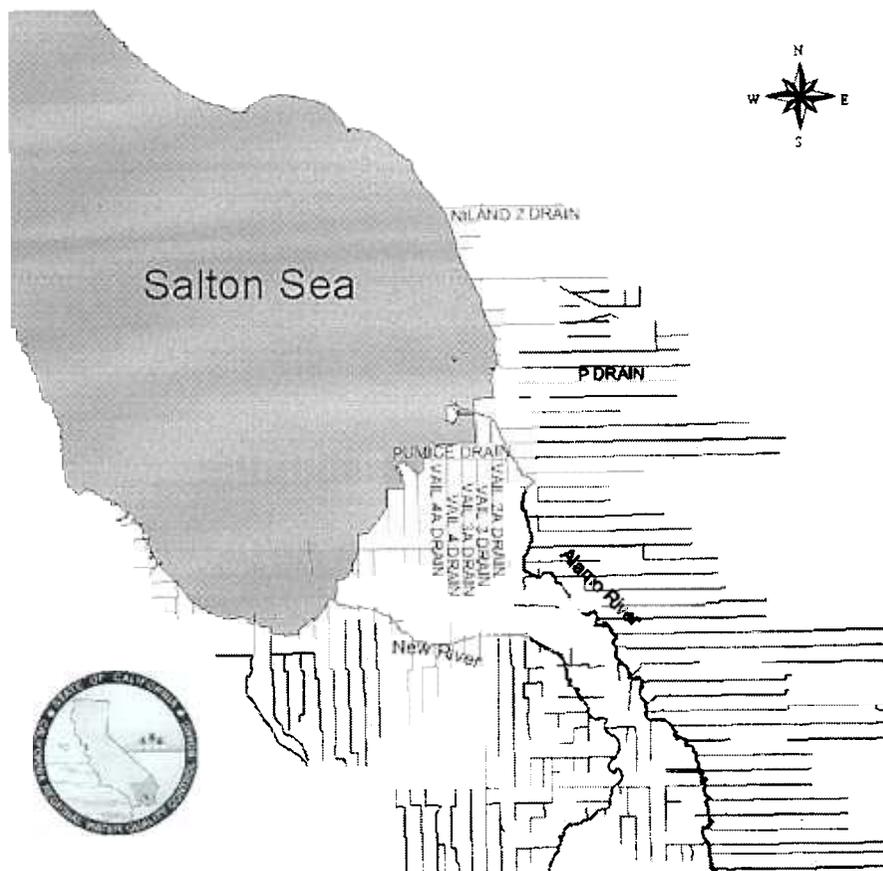


Table D-1: Imperial Valley Drains (Niland 2, P, and Pumice) Sedimentation/Siltation TMDL Elements

ELEMENT	
<p>Problem Statement (impaired water quality standard)</p>	<p>Excess delivery of sediment to Niland 2, P, and Pumice Imperial Valley drains has resulted in degraded conditions that impairs designated beneficial uses: warm freshwater habitat; wildlife habitat; preservation of threatened, rare, or endangered species; water contact and non-contact water recreation; and freshwater replenishment. As the drains discharge 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 drains. Suspended solids concentrations, sediment loads, and turbidity levels are in violation of water quality objectives. These current concentrations, loads, and levels also are forming objectionable bottom deposits, which are adversely affecting the beneficial uses.</p>

(This table is continued on the following page.)

Table D-1: Imperial Valley Drains (Niland 2, P, and Pumice) Sedimentation/Siltation TMDL Elements (continued)

ELEMENT	CURRENT CONDITIONS
Numeric Target	200 mg/L Total Suspended Solids (annual average) ¹
Source Analysis	Source tons/year
	Agricultural Tailwater 11,602.4
	Natural Sources (In-Stream Erosion, Wind Deposition, Wildlife) 277.4
	Storm Event Runoff from Farm Land 50.5
	Total 11,930.3

ELEMENT	LOAD ALLOCATIONS
Margin of Safety	277.4 tons/year (corresponds to TSS of 10 mg/L)
Seasonal Variations and Critical Conditions	<u>Seasonal differences exist regarding local water flow, but not local climate (e.g., rainfall). Sediment becomes suspended in tailwater regardless of the season. However, more flow at certain times of year means that more sediment becomes suspended in drains at certain times of year. To address this seasonal variation, the numeric target is expressed in terms of an annual average. If data for certain months exceeds the load allocation, this may be tempered by low data readings in other months. Therefore, variability is accounted for and addressed by use of an annual average.</u>
Loading Capacity (Total Assimilative Capacity)	5,547.2 tons/year (corresponds to TSS of 200 mg/L)

(This table is continued on the following page.)

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

Table D-1: Imperial Valley Drains (Niland 2, P, and Pumice) Sedimentation/Siltation TMDL Elements (continued)

ELEMENT			
Load Allocations and Wasteload Allocations	Load Allocations:		
	<ul style="list-style-type: none"> Natural sources of sediment to Niland 2, P, and Pumice Imperial Valley Drains are allocated 277.4 tons/year. Waste discharges from nonpoint sources into Niland 2, P, and Pumice Imperial Valley Drains shall not exceed load allocations specified below: 		
	<u>Drain Sources</u>	<u># of Drains Included in Segment</u>	<u>Sediment Load Allocation (tons/year)¹</u>
	Niland 2	1	300.1
	P	1	638.2
	Pumice, including 5 Vail drains (Vail 4A, Vail 4, Vail 3A, Vail 3, and Vail 2A) that drain into it	6	3,904.3
	Future Growth	None	149.8
	Total Load Allocation for drains (corresponds to TSS of 180 mg/L)	8	4,992.4
	<u>Other Sources</u>		
	Natural Sources	Not applicable	277.4
	Margin of Safety	Not applicable	277.4
	Total Load Allocation for other sources (corresponds to TSS of 20 mg/L)	Not applicable	554.8
	Waste Load Allocations:		
	<ul style="list-style-type: none"> 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. 		

Footnotes for Table No. D-1:

¹ The sediment load allocation for any particular drain shall be distributed proportionately amongst the agricultural drains in the project area, based on the relative flow contribution of each drain to the total flow contribution of all drains in the project area. The sediment load allocation will be reviewed every three years following TMDL implementation. The sediment load allocation will vary depending on drain flow.

2. Implementation Actions for Attainment of TMDL

The Implementation Plan for this TMDL applies not just to the three drains (Niland 2, P, and Pumice) for which allocations are specified, but to all Imperial Valley drains that empty directly into the Salton Sea. This is necessary because all of the drains contribute, albeit in varying degrees, to sediment/silt impacts on water quality standards of the drains and the Salton Sea, and are so listed pursuant to Section 303(d) of the Clean Water Act. This approach ensures Valley-wide consistency in controlling sediment in all drains that empty directly into the Salton Sea, prevents a piece-meal approach in controlling sediment, and will enable de-listing of all the drains simultaneously upon successful completion of the control measures.

TMDL attainment shall be in accordance with the schedule contained in Table D-2:

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

<u>Phase</u>	<u>Time Period</u>	<u>Estimated Percent Load Reduction¹</u>	<u>Interim Target (mg/L)²</u>
<u>Phase 1</u>	<u>2005 through 2006</u>	<u>10%</u>	<u>376</u>
<u>Phase 2</u>	<u>2007 through 2009</u>	<u>25%</u>	<u>282</u>
<u>Phase 3</u>	<u>2010 through 2012</u>	<u>20%</u>	<u>226</u>
<u>Phase 4</u>	<u>2013 through 2015</u>	<u>12%</u>	<u>200</u>

Footnotes for Table No. D-2:

1. The reduction required in the average concentration at the end of each phase, beginning with the current (2002) average concentration of 418 mg/L.
2. The interim numeric target is a goal that translates current sediment/silt-related Basin Plan narrative objectives and shall not be used for enforcement purposes.

Edit Subsequent Title (and change all capitals to title case) and Section to the following: “4. E. FURTHER IMPLEMENTATION ACTIONS AND REGULATIONS FOR ATTAINMENT OF ALL IMPERIAL VALLEY SEDIMENTATION/SILTATION TMDLs”

Edit Subsequent Subsection to the following: “4.1 1. DESIGNATED MANAGEMENT ACTIONS”:

Consistent with the State NPS Program, sediment pollution shall be controlled ~~by the Regional Board using a three-tier approach and controlled by~~ responsible parties through implementation of Best Management Practices (BMPs). For the purpose of this Section, responsible parties include:

- Farmers/growers Farm landowners, renters/lessees, and operators/growers discharging waste into Imperial Valley Drains, 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;
- The Imperial Irrigation District;
- The United States Environmental Protection Agency and U.S. Section of the International Boundary and Water Commission, for wastes discharged from Mexico into the Alamo River and New River.

Responsible parties who already have complied with the requirements of previously-adopted Sedimentation/Siltation TMDLs are not required to re-submit reports, workplans, or other information

already submitted to the Regional Board. Responsible parties who are subject to multiple TMDLs are encouraged, but not required, to combine submissions so that a single report or workplan satisfies the requirements of all applicable TMDLs. Early implementation of actions by responsible parties will be welcomed by the Regional Board, to simplify timelines between all Imperial Valley Sedimentation/Siltation TMDLs.

Edit Subsequent Title and Section to the following: “~~4.1.4 1.1 Farmers/growers~~ ~~Water~~ ~~Quality Management Plans Farm Landowners, Renters/Lessees, and/or Operators/Growers~~”:

~~The farmers/growers Farm landowners, renters/lessees, and/or operators/growers shall submit self-determined sediment control programs~~ Sediment Control Programs (Water Quality Management Plans) to the Regional Board by:

Table 4-4 Table E-1 ~~Date that Corresponds to 15 months following the date of USEPA TMDL Approval~~ Sediment Control Program Due Dates

TMDL	Date (15 months after USEPA Approval)
Alamo River	September 28, 2003
	June 30, 2004
	6 months after U.S. Environmental Protection Agency (USEPA) approval

~~and on an annual basis thereafter.~~

A sediment control program The Sediment Control Program may be submitted by an individual farmer/grower farm landowner, renter/lessee, or operator/grower (hereafter "Individual Program") or by a group of farmers/growers farm landowners, renters/lessees, and/or operators/growers (hereafter "Group Program"). Individual and Group Sediment Control Programs (Water Quality Management Plans) are required pursuant to CWC §13267. These programs are necessary to achieve compliance with these TMDLs and applicable water quality objectives, and to monitor/assess MP effectiveness. Regional Board staff strongly recommends that individual farm landowners, renters/lessess, and/or operators/growers work with the Imperial County Farm Bureau (ICFB) to submit a Group Plan through the ICFB's Watershed Program. Group Plans offer landowners the ability to work together to solve their erosion problems, while also affording a measure of privacy to the members of the Group. A Group Program must provide information on a drain- or drainshed basis regarding which responsible parties are enrolled in the program. Additionally, a group may provide a single monitoring and reporting plan as long as results are representative of the efficiency of the group's various control practices, in order to measure overall water quality improvements.

In either case (whether a Group or Individual Plan), the program shall, at a minimum, address the following in their Sediment Control Programs ~~components~~:

1. Name of farm landowner, business address, mailing address, and phone number
2. Name of farm operator/grower, business address, mailing address, and phone number
3. Problem assessment, including (site location by address and township-range coordinates; site conditions(s), crop(s), typically grown in a five-year cycle and typical irrigation method for each crop; and potential or current NPS problems, problem severity, and problem frequency)
4. Statement of ~~sediment control~~ goals (measurable outcomes or products)
5. Existing and/or alternative sediment management practices (technical/economic feasibility, desired outcome, etc.)
6. Timetable for implementation of management practices (measured in either water quality improvement or level of implementation)
7. Monitoring ~~for tailwater quality improvements~~, including progress toward goals, and effectiveness of management decisions
8. Mechanism for reporting planned and completed implementation actions to the Regional Board .

A group program may address Item Nos. 1 through 6, above, for the individuals enrolled in the program as a group. The program shall nevertheless provide sufficient information so that the Regional Board can: (a) determine at a minimum on a drain- or drainshed-basis which responsible parties are enrolled in the program; (b) the types of sediment problems (i.e., severity, magnitude, and frequency) either the group as a whole or the drain/drainshed face; (c) the proposed sediment management practices for the group; and (d) the time table for implementation of the management practices (measured in either water quality improvement and/or level of implementation). Regarding Item Nos. 7 and 8, a single monitoring and reporting plan may also be proposed for a group provided that the monitoring and reporting will provide results that are representative of the efficiency of various control practices within the group and representative enough to measure overall water quality improvements. Reported implementation of BMPs MPs shall be submitted to the Regional Board under the penalty of perjury.

Edit Subsequent Title and Section to the following: "~~1.1.2~~ The 1.2 Imperial Irrigation District"

By

~~Table E-2 Revised DWQIP Due Dates 4-5~~ Date that Corresponds to 15 months following the date of USEPA TMDL Approval

^a TMDL	Date (15 months after USEPA Approval
Alamo River	September 28, 2003
New River	June 30, 2004
Imperial Valley Drains	<u>6 months after USEPA approval</u>

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 and Imperial Valley Drains Watersheds and dredging operations in the Alamo and New Rivers and Imperial Valley Drains. The revised DWQIP shall be subject to the approval of the Executive Officer and shall address, but need not be limited to, items "a" and "b", below:

a. Drain and 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 MPs by the farm landowners, renters/lessees, and operators/growers farmers/growers and the BMP MP effectiveness in reducing silt built up in the drains and the New and Alamo River Deltas and Imperial Valley drains to avoid impacts on sensitive resources.
- Mechanism(s) to assess effectiveness of such reduction

b. Drain Water Quality Monitoring Plan

The revised DWQIP shall consist of a proposed program to monitor the New and Alamo Rivers and Imperial Valley Drains:

- 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 and Imperial Valley drains have on compliance with the rivers' and drains' 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 and those drains emptying directly into the Salton Sea for analyses of flow, TSS, Turbidity, and nutrients. Samples collected from the last drain weir before the drain outfalls to the river shall be considered representative of the water column
- A representative number of source water locations for TSS;
- A representative number of drains at a location sufficiently upstream of the outfalls to the river so as to provide an idea of how much of the silt is being reduced taking care of by field BMPs;
- Sediment impacts from storm events;

c. Information on Agricultural Dischargers

No later than

Table E-3 IID Submission of Data on Agricultural Dischargers Due Dates 4-6 — Date — that Corresponds to 16 months following the date of USEPA TMDL Approval

TMDL	Date (16 months after USEPA Approval)
Alamo River	October 28, 2003
New River	July 31, 2004
Imperial Valley Drains	<u>6 months after USEPA approval</u>

and on a semi-annual basis thereafter, the IID shall submit the following information to the Regional Board on the agricultural dischargers within the District:

The names and mailing addresses for all the owners of properties within the IID service area that are being used for irrigated agriculture, as well as the location of their properties. The names and mailing addresses for all water account holders within the IID service area, ~~their water account number~~ and the location of all fields that they irrigate. For each parcel within the IID service area, the location of the parcel, the irrigation canal and gates serving the parcel, the drop boxes draining the parcel, the drains that these drop boxes empty into, and the fields located within each parcel. For each field within the IID service area, the parcel within which each field is located, the area and location of each field within the parcel, the irrigation canal and gates serving each field, the drop boxes draining each field and the drains to which these drop boxes drain, ~~and the crops being cultivated on each field.~~ The above information should be submitted in an electronic, tabular, and easily geo-referenced format.

No later than 60 days following the Executive Officer’s approval of the revised DWQIP, the IID shall submit to the Executive Officer a Quality Assurance Project Plan (QAPP) prepared in accordance with *Requirements for Quality Assurance Project Plans for Environmental Data Operations*, EPA QA/R-5, 1994 for the revised DWQIP. The ~~QAAP~~QAPP is subject to the approval of the Executive Officer. No later than 30 days following the Executive Officer’s approval of the QAPP, the IID shall implement the QAPP and submit ~~monthly~~, quarterly, and annual monitoring reports to the Executive Officer. ~~The monthly reports shall be due on the 15th day of the month and shall transmit the previous month’s monitoring results, progress towards implementation of control practices, and performance of control practices.~~The quarterly reports shall be due on the 15th day of the month following the calendar’s quarter and shall transmit a quarterly summary of the results for the previous three months. The annual reports shall be due on February 15 and summarize the year’s data, quality control reports, and any trends in the data.

The DWQIP and QAPP are required pursuant to CWC §13225 and 13267. These are necessary to achieve compliance with this TMDL and the applicable water quality objectives and to monitor /assess effectiveness of MPs in a cost-effective manner. IID is required to provide this information because it operates and maintains the subject drains and because it is the only entity with access to some of the information required in the DWQIP.

All plans and reports requested herein are requested pursuant to Section 13267 of the California Water Code and shall be prepared under the direct supervision of a California registered civil engineer and/or agricultural engineer, with experience in the preparation of this type of program.

Edit Subsequent Title to the following: “~~4.1.3. 1.3~~ 1.3 United States Environmental Protection Agency (USEPA) and U.S. Section of the International Boundary and Water Commission (USIBWC)”, and add the following immediately thereafter:

The USEPA and USIBWC are *not* responsible parties for the Imperial Valley Drains Sedimentation/Siltation TMDL. The USEPA and USIBWC are responsible parties for the Alamo River and New River Sedimentation/Siltation TMDLs.

Edit Subsequent table to the following, and delete the bottom line of the table:

By

Table E-4 4-7 Technical Report Due Dates ~~Date that Corresponds to 15 months following the date of USEPA TMDL Approval*~~

TMDL	Date (15 months after USEPA Approval)
Alamo River	September 28, 2003
	June 30, 2004

Edit Subsequent Title and Section "4-2 2. RECOMMENDED MANAGEMENT PRACTICES (MPs) ACTIONS FOR FARMERS/GROWERS AND DRAINAGE MANAGEMENT"

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 Imperial Valley Sedimentation/Siltation TMDL Technical Advisory Committee for the Silt TMDL for the Alamo and New Rivers (Silt TMDL 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 Imperial Valley Drains, Salton Sea, and Alamo and New Rivers basins. These recommendations do not preclude dischargers from implementing other proven sediment management practices in order to be recognized as making a good faith effort to control sediment discharges. Identification of the most appropriate controls to achieve the TMDL for site- and crop-specific conditions is best made by the ~~landowner/operator~~ dischargers relying on technical resource agencies and organizations. The listed practices are recommended because they have been documented to be effective under a variety of circumstances. Under many circumstances, implementation of a combination of BMPs may be necessary to ensure that discharges do not adversely impact water quality. In addition, the effectiveness of many BMPs can be greatly increased when they are used in conjunction with other BMPs.

Edit Subsequent Title and Section (the 2 bullet statements below are being combined) "4-2.4 2.1 ON-FIELD SEDIMENT CONTROL BMPs"

The following practices have been recommended for implementation as on-field sediment-control BMPs (references are in brackets):

• **Imperial Irrigation District Regulation No. 39²**

~~Imperial Irrigation District's Regulation 39 states, in part, "It is the responsibility of each water user to maintain a tailwater structure and approach channel in acceptable condition, in order to qualify for delivery of water. An acceptable structure shall have vertical walls and a permanent, level grade board set a maximum of 42 inches below the natural surface. If the situation warrants, and at the discretion of the district, 18 inches maximum may be allowed." See also: NRCS FOTG Conservation Practice "Structure for Water Control" (Code 587).~~

Tailwater Drop Box with Raised Grade Board (Imperial Irrigation District Regulation No. 39)

This practice involves maintenance of the grade board at an elevation high enough to minimize erosion. In many situations the grade board elevation can be set higher than required by the IID Regulations, especially when anticipated tailwater flows will not reach an elevation that will cause crop damage.

² ~~The Imperial Irrigation District Regulation No. 39 is a required BMP by IID.~~

Imperial Irrigation District's Regulation 39 (required by IID) calls for maintenance of field drainage structures, and states in part, "It is the responsibility of each water user to maintain a tailwater structure and approach channel in acceptable condition, in order to qualify for delivery of water. An acceptable structure shall have vertical walls and a permanent, level grade board set a maximum of 12 inches below the natural surface. If the situation warrants, and at the discretion of the district, 18 inches maximum may be allowed".

See also: Imperial Irrigation District Regulation No. 39, NRCS FOTG Conservation Practice "Structure for Water Control" (Code 587).

Edit Subsequent bullet sections as follows:

- **Pan Ditch (Enlarged Tailwater Ditch Cross Section)**

This practice involves deepening and widening the tailwater ditch and making it very shallow, which will result in decreased tailwater velocity and depth. The water must be checked up downstream of the oversized area to make the cross section of the water as large as practical. The slower the velocity, the more sediment will settle out of the water and stay in the field, and the less will be picked up by the moving water. ~~The effectiveness~~ Effectiveness of this BMP can be further improved by planting grass filter strips in the tailwater ditch and/or installing tailwater ditch checks.

Tailwater Ditch Checks or Check Dams

Tailwater Ditch Checks are temporary or permanent dams that hold the water level well above the ground. They can be placed at intervals in tailwater ditches, especially those with steeper slopes. They increase the cross section of the stream of water, decrease the water velocity and reduce erosion, and may cause sediment already in the water to settle out. Tailwater Ditch Checks can be constructed of plastic, concrete, fiber, metal or other suitable material. If plastic sheets are used, care must be taken not to allow pieces of the plastic to be carried downstream with the water. In order to be effective, this BMP practice must be utilized in condition where water velocities will not wash out the check dams or the sides of the tailwater ditch around the dams. Tailwater ditch checks or check dams are expected to work best in wide "pan ditches" where the width of tailwater stream can be effectively increased.

Edit Subsequent bullet section as follows:

- **Reduced Tillage**

This practice involves limiting the use of heavy farm machinery to only the operations required for crop growing and harvesting. The goal is to eliminate is the elimination of at least one cultivation per crop. Reduced tillage practices include working seed beds only enough to properly plant, avoiding work in wet soil, varying tillage depth from year to year, cultivating only to control weeds, and chiseling when dry to break up plow plan. Such practices ~~It integrates weed control practices in order to maximize the effectiveness of cultivating weed control, but at the same time minimize erosion and sedimentation that may occur in the furrows.~~

Edit Subsequent Title and Section "4.2.2 2.2 OFF-FIELD SEDIMENT CONTROL BMPs"

The following practices have been recommended as off-field sediment-control BMPs (references are in brackets):

Edit Subsequent Section Title and Section "4.2.3 2.3 ESTIMATED COST OF IMPLEMENTATION AND SOURCES OF FINANCING FOR THE IMPERIAL VALLEY DRAINS, AND NEW AND ALAMO RIVERS"

The estimated total cost ~~of~~ of implementing BMPs range from ~~\$5.00~~ just over \$2.00 to \$52.50 per acre per year, which is ~~generally~~ estimated to be less than or about 2% of production cost.

Edit Subsequent Title "4.3. 2.4 RECOMMENDED ACTIONS FOR COOPERATING AGENCIES"

Edit Subsequent Title and Section "4.3.1 2.4.1 IMPERIAL COUNTY FARM BUREAU VOLUNTARY WATERSHED PROGRAM"

The Imperial County Farm Bureau (ICFB) initiated a "Voluntary Watershed Program" in 1999, in which it committed to development of program elements, including "outreach programs and mechanisms to encourage and foster an effective self-determined approach to attainment of TMDL load applications." To implement the program, the ICFB has committed to make contact with every farm landowner, ~~renter/leaseholder/renter/lessee~~, and operator/grower, ~~within one year~~, and to supply material related to the TMDL process, its ramifications, and implementation alternatives. The specific goals of the ~~Voluntary Watershed Program~~ include: (1) coordination of grass roots educational program to make farmers aware of the TMDL process, and educate farmers on how to reduce sediment/silt leaving their fields, (2) maintenance of informational and data website, (3) coordination of workshops with local technical assistance agencies, and (4) cooperation with Regional Board staff to track and report MP effectiveness. ~~(2) development of local subwatershed ("drainshed") groups, (3) identification of leaders, within each of the local subwatershed groups, who will provide demonstration implementation sites for field testing of BMPs, (4) cooperation with Regional Board staff to develop a process for the subwatershed groups to track and report planned and implemented on-the-ground implementation and MP effectiveness, of BMPs, and (5) provide linkage to technical assistance agencies for BMP implementation assistance.~~ The ICFB has designated the geographical areas for ten (10) subwatershed groups, each covering approximately 50,000 acres of irrigated land. These geographical designations are to be utilized in the ICFB ~~Voluntary Watershed Program's~~ approach to education and implementation. Although the Imperial County Farm Bureau is not a regulatory agency, it has committed to develop and implement a "Voluntary Watershed Program" that can play a vital role in achieving TMDL waste load allocations. Therefore, it is appropriate to recommend that the ICFB prepare, submit, and implement the following:

a. ICFB WATERSHED PROGRAM PLAN

The Imperial County Farm Bureau should:

- By:

~~Table 4-8 E-5 Date that Corresponds to 13 months following the date of USEPA TMDL Approval Letter Issue Due Dates~~

TMDL	Date {13 months after USEPA Approval
Alamo River	July 28, 2003
New River	April 30, 2004
Imperial Valley Drains	3 months after USEPA approval

~~issue letters to all potential program participants within the Alamo River watershed project area that are enrolled in describes the ICFB Voluntary Watershed Program, informing them that the TMDL is being implemented and stating what is required of them.~~

- By

~~Table 4-9 E-6 Date that Corresponds to 15 months following the date of USEPA TMDL Approval List of Program Participants Due Dates~~

TMDL	Date {15 months after USEPA Approval
Alamo River	September 28, 2003
	June 30, 2004
Imperial Valley Drains	5 months after USEPA approval

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

- By:

~~Table 4-10 E-7 Date that Corresponds to 15 months following the date of USEPA TMDL Approval ICFB Watershed Program Plan Due Dates~~

TMDL	Date {15 months after USEPA Approval
Alamo River	September 28, 2003
New River	June 30, 2004

Imperial Valley Drains	6 months after USEPA approval
------------------------	-------------------------------

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.

- Submit ~~semi-monthly~~ semi-annual reports to the Regional Board's Executive Officer that describe the progress of each of the subwatershed groups, any technical assistance workshops that are planned or were conducted, and any other pertinent information.

b. ICFB TRACKING AND REPORTING PROCEDURES

The Imperial County Farm Bureau should also:

- By

Table 4-11 E-8 Date that Corresponds to 16 months following the date of USEPA TMDL Approval Tracking Implementation Plan Due Dates

TMDL	Date (16 months after USEPA Approval)
Alamo River	October 28, 2003
New River	July 31, 2004
	7 months after USEPA approval

submit a plan to the Regional Board's Executive Officer describing the ~~process and procedures for~~ tracking and reporting processes for (1) implementation of BMPs (and other proven management practices) and (2) BMP performance to the ~~Regional Board's Executive Officer.~~

- Implement the tracking and reporting procedures in accordance with the Implementation Plan.
- ~~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 Regional Board's Executive Officer by 15th of February of each year.

Edit Subsequent Title and Section "4.3.2 2.4.2 UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION"

The Regional Board supports efforts of the University of California Cooperative Extension to provide interested growers information on sediment control BMPs, implement projects qualitatively assessing BMP performance, and develop farm water quality planning programs.

Edit Subsequent Title "4.3.3 2.4.3 NRCS"

After Section "VI. ACTIONS OF OTHER AUTHORITIES", add the following new Subsequent Section and renumber pages accordingly:

VII. PROHIBITIONS

A. Imperial Valley Sedimentation/Siltation

A prohibition of sediment/silt discharge is hereby established for the Imperial Valley, including the Alamo River, New River, all Imperial Valley Drains, and their tributaries. Specifically, beginning three months after USEPA approval, the direct or indirect discharge of sediment into the Imperial Valley is prohibited, unless:

1. The Discharger is:

- a. In compliance with applicable Sedimentation/Siltation TMDL(s), including implementation provisions (e.g., Discharger is in good standing with the ICFB Watershed Program or has a Drain Water Quality Monitoring Plan (DWQMP) approved by the Executive Officer); or**
- b. Has a monitoring and surveillance program approved by the Executive Officer that demonstrates that discharges of sediment/silt into the aforementioned waters do not violate or**

contribute to a violation of the TMDL(s), the anti-degradation policy (State Board Resolution No. 68-16), or water quality objectives; or
c. Is covered by Waste Discharge Requirements (WDRs) or a Waiver of WDRs that applies to the discharge.

TMDL compliance groups have formed to address issues regarding wastewater discharge from irrigated lands to waters of the state. Individual Dischargers are not required by the Regional Board to join in TMDL compliance groups. Individual Dischargers who choose not to participate in TMDL compliance groups must file a Report of Waste Discharge for general or individual Waste Discharge Requirements. Compliance with the prohibition will be determined with respect to each individual Discharger, whether or not the Discharger is a member of a compliance group. The intent of this prohibition is to control to the degree practicable sediment/silt discharges from irrigated lands in amounts that violate or contribute to a violation of state water quality standards.

To "Chapter 6- SURVEILLANCE, MONITORING, AND WATER QUALITY ASSESSMENT; II. REGIONAL BOARD MONITORING; B. COMPLIANCE MONITORING", delete the following and renumber pages accordingly (because this section is being moved to another location):

~~3. New River Pathogen TMDL~~

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

~~5. New River Sedimentation/Siltation TMDL~~

~~5.1 Compliance Assurance and Enforcement~~

~~As provided in the State Board's Water Quality Enforcement Policy, prompt, consistent, predictable, and fair enforcement are necessary to deter and correct violations of water quality standards, violations of the California Water Code, and to ensure that responsible parties carry out their responsibilities for meeting the TMDL allocations. This is particularly necessary to adequately deal with those responsible parties who fail to implement self-determined or regulatory-encouraged sediment control measures, which are essentially the cornerstone of the State's NPS Program. To this end, the Regional Board may use, as the circumstances of the case may warrant, any combination of the following:~~

- ~~• Implementation and enforcement of Section 13267 of the California Water Code to ensure that all responsible parties submit, in a prompt and complete manner, the Water Quality Management Plan defined in Chapter 4, Section V(B)(1.1.1).~~
- ~~• Consideration of adoption of waste discharge requirements, pursuant to Section 13263 of the California Water Code, as appropriate (i.e., for any responsible party who fails to implement voluntary or regulatory-encouraged sediment controls).~~
- ~~• Consideration of adoption of an enforcement order pursuant to Section 13304 of the California Water Code against any responsible party who violates Regional Board waste discharge requirements and/or fails to implement voluntary or regulatory-encouraged sediment control measures to prevent and mitigate sediment pollution or threatened pollution of surface waters.~~
- ~~• Consideration of adoption of enforcement orders pursuant to Section 13301 of the California Water Code against those who violate Regional Board waste discharge requirements and/or prohibitions.~~
- ~~• Consideration of Administrative Civil Liability Complaints, as provided for by the California Water Code, against any responsible party who fails to comply with Regional Board orders, prohibitions, and requests.~~

- ~~Consideration of adoption of referrals of recalcitrant violators of Regional Board orders and prohibitions to the District Attorney or Attorney General for criminal or civil prosecution, respectively.~~

~~From the standpoint of measuring progress, any cropland discharge with a concentration of suspended solids, measuring more than 375 mg/l (or about 270 NTU for turbidity) and absent reasonable implementation of BMPs would be considered unsatisfactory. Samples will be analyzed for volatile suspended solids at locations where organic loading represent a significant proportion of the total suspended solids or turbidity. The volatile suspended solids component will be subtracted. Further, in assessing the status of compliance with Load Allocations specified in Table No. 4-1 of any responsible party who is in either Tier I or Tier II, the Regional Board shall consider, in addition to water quality results, the degree to which the responsible party has implemented, or is implementing, sediment control measures. In the absence of true progress the Regional Board directs the Executive Officer to draft requirements that will fulfill the sediment control measures. The numeric target is a goal that translates current silt/sediment related Basin Plan narrative objectives and shall not be used for enforcement purposes.~~

5.2. Monitoring and Tracking

~~Tracking TMDL and monitoring water quality progress, and modifying TMDLs and implementation plans as necessary to ensure attainment of water quality standards are important to address uncertainty that may exist in aspects of TMDL development, oversee TMDL implementation to ensure that implementation is being carried out, and to ensure that the TMDL remains effective, given changes that may occur in the watershed after the TMDL is developed. (All monitoring activities are contingent on funding through fund source specific work plans.)~~

To "Chapter 6- SURVEILLANCE, MONITORING, AND WATER QUALITY ASSESSMENT; II. REGIONAL BOARD MONITORING; B. COMPLIANCE MONITORING", delete the following and renumber pages accordingly (because this section is being updated and moved to another location):

- ~~Water Quality Monitoring and Assessment~~

- ~~Alamo River~~

- ~~Regional Board water quality monitoring activities for the Alamo River Sedimentation/Siltation TMDL Monitoring and Tracking Program shall be conducted pursuant to a Quality Assurance Project Plan for the Alamo River (QAPP-AR). The QAPP-AR shall: (1) include a sufficient number of sampling stations along the Alamo River to determine progress towards compliance with the TMDL and overall water quality improvement; (2) provide for monthly monitoring of flow, field turbidity, laboratory turbidity, total suspended solids in the river; and (3) provide for quarterly monitoring of DDT and DDT metabolites in the river's water column.~~

- ~~New River~~

- ~~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:~~

- ~~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).~~

To "Chapter 6- SURVEILLANCE, MONITORING, AND WATER QUALITY ASSESSMENT; II. REGIONAL BOARD MONITORING; B. COMPLIANCE MONITORING", delete the following and renumber pages accordingly (because this section is being moved to another location):

- ~~**TMDL Implementation Tracking**~~
~~Implementation Tracking Plan:~~
 - ~~Implementation of sediment control activities shall be tracked by Regional Board staff and shall be reported to the Regional Board at least yearly.~~
- ~~**Assessment and Reporting**~~
~~On a yearly basis, the Regional Board staff will prepare a report assessing compliance with the TMDL Goals and Milestones. In the report, staff will assess the following:~~
 - ~~Water quality improvement (in terms of total suspended sediments, total sediment loads, DDT and metabolites, total phosphate)~~
 - ~~Trends in BMP implementation~~
 - ~~BMP effectiveness/performance/ and costs~~
 - ~~Whether milestones were met on time or at all. If milestones were not met, provide a discussion of the reasons, and a recommendation~~
 - ~~Level of compliance with measures and timelines agreed to in Program Plans and associated time schedules.~~
 - ~~Level of compliance with measures and timelines agreed to in Drainshed Plans.~~
- ~~**Regular Review**~~

~~The Regional Board shall hold public hearings at least every three years to review the level of implementation of BMPs, effectiveness of the BMPs, and overall progress of the sediment control practices. At these hearings, the following shall be considered:~~

- ~~— Monitoring results to date~~
- ~~— Progress toward attainment of milestones~~
- ~~— Changes or trends in implementation of BMPs~~
- ~~— Modification/addition of management practices for the control of sediment discharges~~
- ~~— Revision of TMDL components and/or development of site specific water quality objectives~~

~~Review of subcategories of water quality standards related to this TMDL and/or attainability of the TMDL may also be appropriate after the parties responsible for TMDL implementation submit appropriate documentation that sediment control practices (e.g., BMPs) are being implemented on a widespread basis in the Alamo River Subwatershed, that the control practices are being properly implemented and maintained, and that additional controls would result in substantial and widespread economic and social impact. The Regional Board 303(d) listing of the silt/sediment impairment for the Alamo River and tributary drains shall also be re-evaluated.~~

- ~~— The first public hearing shall be scheduled by no later than three years after the date following USEPA TMDL approval of this Basin Plan amendment.~~

To "Chapter 6- SURVEILLANCE, MONITORING, AND WATER QUALITY ASSESSMENT; II. REGIONAL BOARD MONITORING; D. INTENSIVE SURVEYS", delete the following and renumber pages accordingly:

~~3. New River Pathogen TMDL~~

~~3.1 Compliance Assurance and Enforcement~~

~~The Executive Officer shall use, as the circumstances of the case may warrant, any combination of the following actions to ensure that the severe threat that current bacterial concentration in the New River pose to public health is promptly and effectively corrected:~~

- ~~• Implement and enforce Section 13267 of the California Water Code to ensure that all dischargers subject to Regional Water Quality Control Board, Colorado River Basin Region, Order No. 01-800, NPDES No. CA0017001, General National Pollutant Discharge Elimination System Permit and General Waste Discharge Requirements for Confined Animal Feeding Operations (Order No. 01-800), submit, in a prompt and complete manner, the Engineered Waste Management Plan required by Order No. 01-800.~~
- ~~• Either issue or prepare for Regional Board consideration of adoption an enforcement order pursuant to Section 13304 of the California Water Code against any responsible party who violates Regional Board waste discharge requirements.~~
- ~~• Prepare for Regional Board consideration of adoption, an enforcement order pursuant to Section 13301 of the California Water Code against those who violate Board waste discharge requirements and the Pathogen TMDL.~~
- ~~• Issue an Administrative Civil Liability Complaint as provided for by the California Water Code against any responsible party who fails to comply with Board orders, prohibitions, and requests.~~
- ~~• Prepare for Regional Board consideration of adoption a referral of recalcitrant violators of Board orders and prohibitions to the District Attorney or Attorney General for criminal or civil prosecution, respectively.~~
- ~~• Prepare for Regional Board consideration of adoption an enforcement order pursuant to Section 13304 against the appropriate responsible parties if measures to prevent wastes from Mexico from causing or contributing to violations of the Pathogen TMDL are not implemented in a timely manner.~~

~~3.2 Water Quality Monitoring~~

~~Monitoring activities are contingent upon adequate programmatic funding. Monitoring activities for the New River Pathogen TMDL will be conducted by the Regional Board 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 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:~~

- ~~• Flow (to be obtained from IID or USGS)~~
- ~~• Dissolved Oxygen~~
- ~~• pH~~
- ~~• Temperature~~
- ~~• Fecal coliform organisms~~
- ~~• E. Coli~~
- ~~• Fecal streptococci~~
- ~~• Enterococci~~

~~Activities implemented by dischargers and responsible parties and surveillance conducted for the New River Pathogen TMDL will be tracked pursuant to a Regional Board implementation tracking plan (ITP). Regional Board staff will develop the ITP within 180 days following USEPA approval of this TMDL. 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).~~

To "Chapter 6-SURVEILLANCE, MONITORING, AND WATER QUALITY ASSESSMENT; II. REGIONAL BOARD MONITORING", add Subsequent Section (these are existing sections being updated and moved to this location) and renumber pages accordingly:

F. Total Maximum Daily Loads

Compliance Assurance and Enforcement

The Executive Officer shall use, as the circumstances of the case may warrant, any combination of the following actions to ensure that the water pollution threats identified in TMDLs are promptly and effectively corrected:

- Implementation and enforcement of Section 13225, 13267, and 13268 of the California Water Code to ensure that all responsible parties submit in a prompt and complete manner, the Water Quality Management Plan defined in Chapter 4, Section V(E)(1.1).
- Require submission of reports of waste discharge pursuant to CWC §13260.

- Adoption of waste discharge requirements, pursuant to Section 13263 of the California Water Code, as appropriate (i.e., for any responsible party who fails to implement voluntary or regulatory-encouraged sediment controls).
- Adoption of enforcement orders pursuant to Section 13304 of the California Water Code against any responsible party who violates Regional Board waste discharge requirements and/or fails to implement voluntary or regulatory-encouraged sediment control measures to prevent and mitigate sediment pollution or threatened pollution of surface waters.
- Adoption of enforcement orders pursuant to Section 13301 of the California Water Code against those who violate Regional Board waste discharge requirements and/or prohibitions.
- Issuance of Administrative Civil Liability Complaints, pursuant to Section 13261, 13264, or 13268 of the California Water Code, against any responsible party who fails to comply with Regional Board orders, prohibitions, and requests.
- Adoption of referrals of recalcitrant violators of Regional Board orders and prohibitions to the District Attorney or Attorney General for criminal prosecution or civil enforcement.

1. PATHOGEN/BACTERIAL INDICATORS

A. New River

1.A.1. Additional Compliance Assurance and Enforcement

Implement and enforce Section 13267 of the California Water Code to ensure that all dischargers subject to Regional Water Quality Control Board, Colorado River Basin Region, Order No. 01-800, NPDES No. CA0017001, General National Pollutant Discharge Elimination System Permit and General Waste Discharge Requirements for Confined Animal feeding Operations (Order No. 01-800), submit, in a prompt and complete manner, the Engineered Waste Management Plan required by Order No. 01-800.

1.A.2. Water Quality Monitoring

Monitoring activities are contingent upon adequate programmatic funding. Monitoring activities for the New River Pathogen TMDL will be conducted by the Regional Board 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 the TMDL. 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:

- Flow (to be obtained from IID or USGS)
- Dissolved Oxygen
- pH
- Temperature
- Fecal coliform organisms
- E. Coli
- Fecal streptococci
- Enterococci

Activities implemented by dischargers and responsible parties and surveillance conducted for the New River Pathogen TMDL will be tracked pursuant to a Regional Board implementation tracking

plan (ITP). Regional Board staff will develop the ITP within 180 days following USEPA approval of the TMDL. 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).

2. SEDIMENTATION/SILTATION

A. Imperial Valley

2.A.1 Additional Compliance Assurance and Enforcement

- As provided in the State Board's Water Quality Enforcement Policy, prompt, consistent, predictable, and fair enforcement are necessary to deter and correct violations of water quality standards, violations of the California Water Code, and to ensure that responsible parties carry out their responsibilities for meeting TMDL allocations. This is particularly necessary to adequately deal with those responsible parties who fail to implement self-determined or regulatory-encouraged sediment control measures, which are the cornerstone of the State's NPS Program.

From the standpoint of measuring progress, any cropland discharge with a concentration of suspended solids, measuring more than 375 mg/L (or about 270 NTU for turbidity) and absent reasonable implementation of MPs would be considered unsatisfactory. Samples will be analyzed for volatile suspended solids at locations where organic loading represents a significant proportion of the total suspended solids or turbidity. The volatile suspended solids component will be subtracted. Further, in assessing the status of compliance with Load Allocations of any responsible party, the Regional Board shall consider, in addition to water quality results, the degree to which the responsible party has implemented, or is implementing, sediment control measures. In the absence of true progress, the Regional Board directs the Executive Officer to draft requirements that will fulfill sediment control measures. The numeric target is a goal that translates current sediment/silt-related Basin Plan narrative objectives and shall not be used for enforcement purposes.

2.A.2. Monitoring and Tracking

Tracking TMDL and monitoring water quality progress, and modifying TMDLs and implementation plans as necessary to ensure attainment of water quality standards, are important to address uncertainty that may exist in aspects of TMDL development, oversee TMDL implementation to ensure that implementation is being carried out, and to ensure that the TMDL remains effective, given changes that may occur in the watershed after the TMDL is developed. (All monitoring activities are contingent on funding through fund-source specific work plans.)

2.A.3. Water Quality Monitoring and Assessment

Monitoring activities are contingent upon adequate programmatic funding. Regional Board staff will conduct monitoring activities for the Alamo River, New River, and Imperial Valley Drains Sedimentation/Siltation TMDLs pursuant to a Regional Board Quality Assurance Project Plan for the Alamo River (QAPP-AR), New River (QAPP-NR), and Imperial Valley Drains (QAPP-IV Sed) Sediment TMDLs. The QAPPs shall be developed by Regional Board staff. The QAPP-AR and QAPP-NR shall be ready for implementation within 180 days following USEPA approval of these TMDLs. The QAPP-IV Sed shall be ready for implementation by one month following USEPA approval of this TMDL. The Regional Board's Executive Officer shall approve the QAPPs and monitoring plans after determining that they satisfy the objectives and requirements of this Section. The objectives of the monitoring program shall include collection of water quality data for:

- Assessment of water quality standards attainment,
- Verification of pollution sources,
- 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 TMDLs as necessary.

The monitoring program shall include a sufficient number of sampling locations and sampling points per location along the Alamo River, New River, Imperial Valley Drains, and major drain tributaries to the rivers and Salton Sea. The following parameters will be sampled and analyzed from the above-mentioned surface waters, contingent on funding. Data sources may be outside of the Regional Board. Frequency is in brackets.

- Flow [Quarterly]
- Field turbidity [Monthly]
- Laboratory turbidity (EPA Method No. 180.1) [Monthly]
- Total Suspended Solids (EPA Method No. 160.2) [Monthly]
- Total DDT and DDT metabolites [Quarterly]

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

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

2.A.4. TMDL Implementation Tracking

Implementation of sediment control activities shall be tracked by Regional Board staff and shall be reported to the Regional Board at least yearly.

2.A.5. TMDL Assessment and Reporting

On a yearly basis, Regional Board staff will prepare a report assessing compliance with the TMDL Goals and Milestones. In the report, staff will assess:

- Water quality improvement (in terms of total suspended sediments, total sediment loads, Total DDT, and DDT metabolites).
- Trends in MP implementation.
- MP effectiveness.
- Whether milestones were met on time or at all. If milestones were not met, provide a discussion of the reasons, and make recommendations.
- Level of compliance with measures and timelines agreed to in Program Plans and Drainshed Plans.

2.A.6 Regular Review

The Regional Board shall hold public hearings at least every three years to review the level of MP implementation, effectiveness of MPs, and overall progress of sediment control practices. At these hearings, the following shall be considered:

- Monitoring results
- Progress toward attainment of milestones
- Trends in implementation of MPs
- Modification/addition of management practices for the control of sediment discharges

- Revision of TMDL components and/or development of site-specific water quality objectives

Review of subcategories of water quality standards related to these TMDLs and/or attainability of the TMDLs also may be appropriate after the parties responsible for TMDL implementation submit appropriate documentation that sediment control practices (e.g., MPs) are being implemented on a widespread-basis in the watersheds, that the control practices are being properly implemented and maintained, and that additional controls would result in substantial and widespread economic and social impact. The Regional Board 303(d) listing of the sediment/silt impairment for the Alamo River, New River, Imperial Valley Drains and/or tributary drains shall also be re-evaluated.