

# **California Total Maximum Daily Load (TMDL)**

## **Program Status Summary Report**

**Fiscal Year 2007 – 2008**

July 2008

State Water Resources Control Board  
Regional Water Quality Control Boards



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# TMDL Program Performance at a Glance

## Overall Program Performance

**TMDLs Adopted through June FY 07-08 = 146**

**2002 CWA 303(d) Listings Addressed through June FY 07-08 = 847**

**Percentage of 2002 CWA 303(d) Listings Addressed through June FY 07-08 = 45%**

**Total Number of All Listings Addressed through June FY 07-08 = 1053**

## Current Year Program Performance – FY 07-08 (July– June)

### Region 1

21/26 = 81% Workplan TMDL Commitments Completed  
 3/3<sup>a</sup> = 100% TMDLs Completed/Scheduled  
 14 303d Listings addressed 07-08  
 3 TMDLs Scheduled for FY 07-08  
 14 Number of 303d listings scheduled 07-08

### Region 6

24/28 = 86% Workplan TMDL Commitments Completed  
 2/2 = 100% TMDLs Completed/Scheduled  
 2 303d Listings addressed 07-08  
 2 TMDLs Scheduled for Adoption FY 07-08  
 2 Number of 303d listings scheduled 07-08

### Region 2

21/28 = 75% Workplan TMDL Commitments Completed  
 1/4 = 25% TMDLs Completed/Scheduled  
 15 303d Listings addressed 07-08  
 4 TMDLs Scheduled for Adoption FY 07-08  
 22 Number of 303d listings scheduled 07-08

### Region 7

28/33 = 85% Workplan TMDL Commitments Completed  
 0/1 = 0% TMDLs Completed/Scheduled  
 0 303d Listings addressed 07-08  
 1 TMDLs Scheduled for Adoption FY 07-08  
 1 Number of 303d listings scheduled 07-08

### Region 3

30/43 = 70% Workplan TMDL Commitments Completed  
 3/3 = 100% TMDLs Completed/Scheduled  
 7 303d Listings addressed 07-08  
 3 TMDLs Scheduled for Adoption FY 07-08  
 7 Number of 303d listings scheduled 07-08

### Region 8

41/62 = 66% Workplan TMDL Commitments Completed  
 1/1 = 100% TMDLs Completed/Scheduled  
 4 303d Listings addressed 07-08  
 1 TMDLs Scheduled for Adoption FY 07-08  
 4 Number of 303d listings scheduled 07-08

### Region 4<sup>b</sup>

68/97 = 70% Workplan TMDL Commitments Completed  
 7/8 = 88% TMDLs Completed/Scheduled  
 67 303d Listings addressed 07-08  
 8 TMDLs Scheduled for Adoption FY 07-08  
 74 Number of 303d listings scheduled 07-08

### Region 9

48/68 = 70% Workplan TMDL Commitments Completed  
 2/2 = 100% TMDLs Completed/Scheduled  
 21 303d Listings addressed 07-08  
 2 TMDLs Scheduled for Adoption FY 07-08  
 21 Number of 303d listings scheduled 07-08

### Region 5

56/80 = 70% Workplan TMDL Commitments Completed  
 1/2 = 50% TMDLs Completed/Scheduled  
 8 303d Listings addressed 07-08  
 2 TMDLs Scheduled for Adoption FY 07-08  
 11 Number of 303d listings scheduled 07-08

### State Board<sup>c</sup>

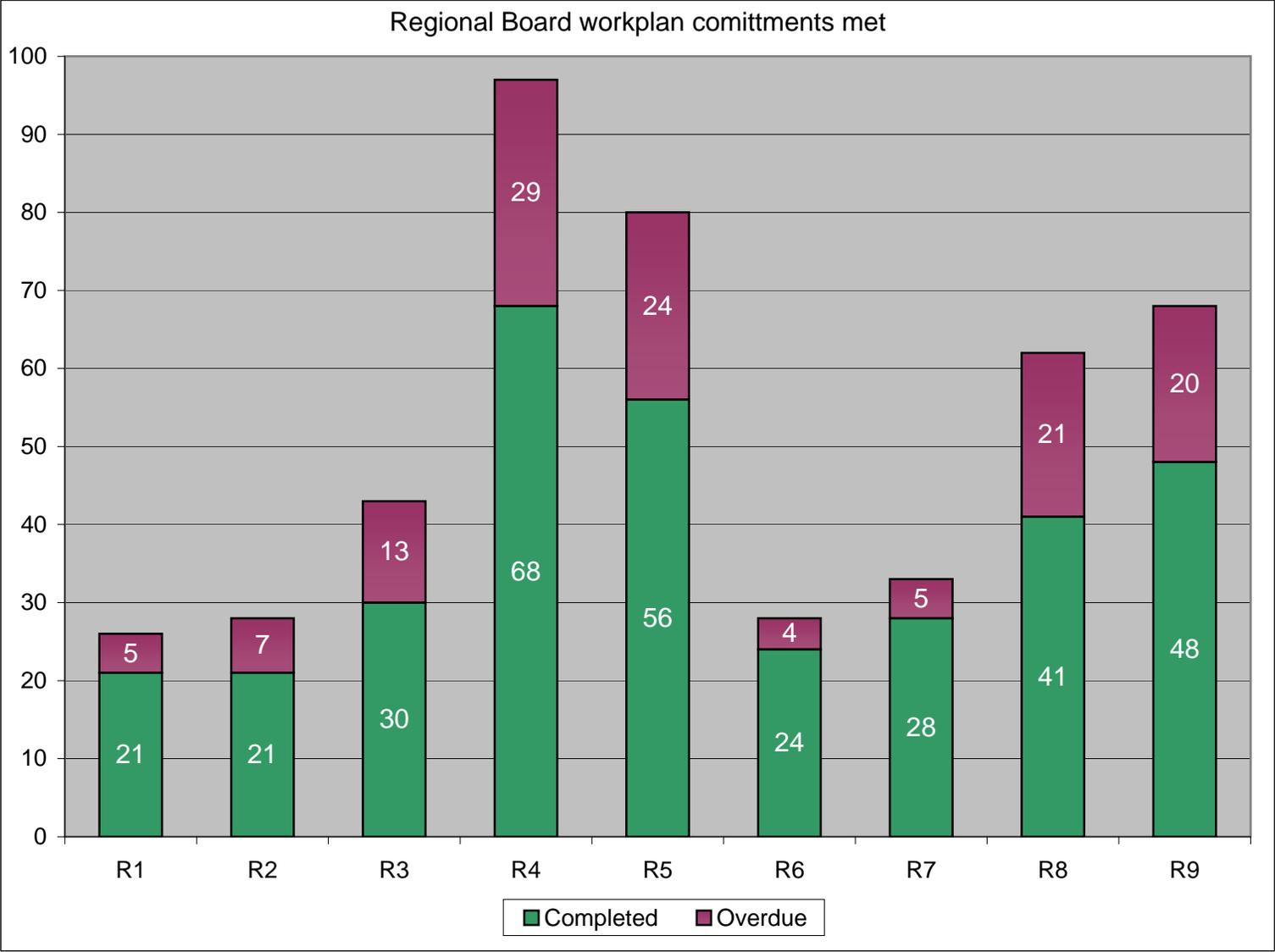
14/21 = 67% TMDLs Approved/Scheduled  
 14/18 Timely submittals to & Approval by OAL  
 16/19 Timely submittals to & Approval by EPA<sup>a</sup>  
 2/5 Workplan Administrative Commitments Completed  
 23/24 #TMDLs Received of # Scheduled for Approval in 07-08

<sup>a</sup> 3 TMDLs established by US EPA with Region 1 technical assistance.

<sup>b</sup> TMDLs scheduled for adoption include 3 re-adoptions in accordance with court decisions

<sup>c</sup> The State Board's consideration for approval normally follows Reg. Bd. submittal of the administrative record by 5 months (to allow for public noticing & comment, and scheduling). TMDLs submitted after 1/08 will be considered for approval in FY08-09.

"TMDL Commitments Completed" is based upon data entered into TMDL Tracking Database as of the 5th of the month following the report period.



FY 07-08 Workplan Commitments for TMDL Adoptions

Region	TMDL	Scheduled Adoption Date	Completed ?	# listings
<b>1</b>	<i>Eel River</i> sediment*	1/08	Yes	6
	<i>Eel River</i> temperature*	1/08	Yes	6
	<i>Mad River</i> sediment*	1/08	Yes	2
<b>2</b>	<i>San Francisco Bay</i> PCBs	4/08	Yes	15
	<i>Guadalupe River watershed</i> mercury	6/08	no	5
	<i>Richardson Bay</i> Pathogens	6/08	no	1
	<i>Sonoma Creek</i> sediment	6/08	no	1
<b>3</b>	<i>Aptos and Valencia Creeks</i> pathogens	2/08	Yes	2
	<i>San Lorenzo River</i> watershed pathogen	2/08	Yes	4
	<i>Soquel Lagoon</i> pathogens	2/08	Yes	1
<b>4</b>	<i>Los Angeles River</i> trash (re-adoption)	8/07	Yes	7
	<i>Los Angeles River</i> metals (re-adoption)	9/07	Yes	13
	<i>Ballona Creek</i> metals (re-adoption)	9/07	Yes	9
	<i>Calleguas Creek</i> boron/sulfate/TDS	10/07	Yes	25
	Harbor Beaches of <i>Ventura County</i>	10/07	Yes	2
	<i>San Gabriel River</i> metals (re-adoption)	12/07	no	7
	<i>Malibu Creek Watershed</i> trash	1/08	Yes	7
	<i>Machado Lake</i> nitrogen	4/08	Yes	4
<b>5</b>	<i>Stockton area sloughs &amp; rivers</i> pathogens	1/08	Yes	8
	<i>Delta methylmercury</i> TMDL	5/08	no	3
<b>6</b>	<i>Blackwood Creek</i> sediment	9/07	Yes	1
	<i>Truckee River</i> sediment	4/08	Yes	1
<b>7</b>	<i>New River</i> dissolved oxygen	6/08	no	1
<b>8</b>	<i>Newport Bay Watershed</i> Organochlorine Compounds	9/07	Yes	4
<b>9</b>	Bacteria impaired waters I ( <i>creeks and beach shorelines</i> )	12/07	Yes	19
	<i>San Diego Bay &amp; Dana Point Harbor shorelines</i> bacteria	5/08	Yes	2

#TMDLs adopted/addressed: 20

# TMDLs Listings addressed\*: 138

**# TMDLs to be adopted 26**

Total number of listings **to be** addressed: 156

# TMDLs not adopted/addressed: 6

% adoption commitments met: 77%

\* EPA established this TMDL with Reg. 1's technical support

### Adopted TMDL's

Region	TMDL Project	Listings	RB Adopted	SB Approved	EPA Approved	Notes
1	Laguna de Santa Rosa ammonia and D.O.	2	5/95			
1	Stemple Creek nutrients and sediment	2	12/97			RB adopted and in implementation no SB approval.
1	Garcia River sediment	1	5/98, 12/98, 6/01	9/00,11/01	3/02	
1	Albion River sediment	1	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Big River sediment	1	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Eel River South Fork sediment	1	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Eel River North Fork sediment	1	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Gualala River sediment	1	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Noyo River sediment	1	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Navarro River sediment	2	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Mattole sediment	1	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Middle Fork Eel River sediment	1	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Redwood Creek sediment [workplan]	1	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Ten Mile sediment	1	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Van Duzen River sediment	1	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Trinity River sediment	5	11/04			RB adopted resolution directing staff to implement EPA established TMDL
1	Salmon River temperature	1	6/05			Single action TMDL: MOU with US Forest Service
1	Scott River sediment and temperature	2	12/05	6/06	9/06	
1	Shasta River D.O. and temperature	2	6/06	11/06	1/07	
1	Eel River sediment	6	--	--	12/07	EPA established TMDL with RB assistance
1	Eel River temperature	6	--	--	12/07	EPA established TMDL with RB assistance
1	Mad River sediment	2	--	--	12/07	EPA established TMDL with RB assistance
<b>Listings Addressed</b>		<b>42</b>				
2	San Francisco Bay copper & nickel	2	5/02	10/02	1/03	SSO
2	San Francisco Bay mercury	16	9/04; 8/06	7/07	2/08	SB remanded TMDL 9/05; R2 readopted TMDL 8/06
2	Tomaes Bay pathogen	2	9/05	5/06	1/07	
2	San Francisco Bay urban creeks diazinon	37	10/05	10/06	5/07	
2	Napa River pathogens	1	6/06	9/07	2/08	
2	Sonoma Creek pathogens	1	6/06	9/07	2/08	
2	Napa River sediment	1	1/07			Withdrawn by Region for CEQA considerations
2	Walker Creek mercury	1	1/07			SB consideration extended to allow E.O. Corrections
2	San Francisco Bay PCBs	15	2/08			
<b>Listings Addressed</b>		<b>76</b>				

### Adopted TMDL's

Region	TMDL Project	Listings	RB Adopted	SB Approved	EPA Approved	Notes
3	Morro Bay siltation	3	5/02			1/20/2004
3	San Lorenzo River nitrate	4	9/02	11/01	8/03	Adopted by RB Resolution/Order
3	Las Tablas Creek - Nacimiento Reservoir mercury	2	11/02			Revisions to implementation plan needed due to no responsible party due to history of recalcitrant discharger-currently proposed for Superfund priority list for mine cleanup.
3	Morro Bay pathogens	10	5/03	9/03	1/04	
3	Morro Bay, Chorro & Los Osos Creeks sediment	3	5/03	9/03	1/04	
3	San Lorenzo River sediment	4	5/03	9/03	1/04	
3	Clear Creek-Hernandez Reservoir mercury	2	3/04	--		Technical TMDL Adopted by RB Resolution/Order.
3	Dairy Creek dissolved oxygen	1	12/04	--		Technical TMDL Adopted by RB Resolution/Order.
3	Los Osos Creek nutrients	1	12/04	--		Technical TMDL Adopted by RB Resolution/Order.
3	San Luis Obispo Creek pathogen	1	12/04	5/05	9/05	
3	San Luis Obispo Creek nutrients	1	9/05	6/06	1/07	
3	Pajaro River siltation/sedimentation	4	12/05	9/06	5/07	
3	Pajaro River nutrients	2	12/05	--	10/07	Technical TMDL Adopted by RB Resolution/Order.
3	Watsonville Slough pathogens	1	3/06	9/06	3/07	Adopted by RB Order and UAA
3	Chorro Creek nutrients and dissolved oxygen	1	7/06	--	7/07	Technical TMDL Adopted by RB Resolution/Order.
3	Aptos and Valencia Creeks pathogens	2	3/08			
3	San Lorenzo River watershed pathogen	4	3/08			
3	Soquel Lagoon pathogens	1	3/08			
<b>Listings Addressed</b>		<b>47</b>				
4	East Fork San Gabriel River Trash	1	10/99	6/00	12/00	
4	Ballona Creek Trash	1	9/01, 3/04	2/02, 9/04	8/02	
4	Calleguas Creek Chloride	6	--	--	3/02	Technical TMDL drafted by RB, established by EPA
4	Los Angeles River Trash	7	9/01	2/02	8/02	
4	Los Angeles River Watershed Lakes Trash	3	9/01			
4	Santa Monica Bay Beaches Coliform dry weather	51	1/02	9/02	unkn	not differentiate between seasons. Only counted once in number of listings addressed
4	Santa Monica Bay Beaches Wet Weather Bacteria	51	12/02	3/03	6/03	see note above
4	Calleguas Creek Nitrogen	29	10/02	3/03	6/03	
4	Santa Clara River Chloride Reach 3	1	10/02,			Remanded by SB, Objective change BPA 11/03
4	Santa Clara River Chloride Reach 7 & 8	2	10/03, 5/04, 8/06	7/04, 5/07	unkn	Remanded by SB, Revised approved by State Board 7/04
4	Los Angeles River Nitrogen	33	7/03, 12/03	11/03, 3/04	3/04	
4	Santa Clara River Nitrogen	6	7/03	11/03	3/04	
4	Marina del Rey Pathogens	3	8/03	11/03	3/04	
4	McGrath Beach Coliform	1	8/03			ACL
4	Los Angeles Harbor Beach Closures	2	7/04	10/04	3/05	
4	Malibu Creek Pathogens	12	12/04	9/05	1/06	
4	Los Angeles River Metals/Toxics	18	6/05	10/05	12/05	
4	Ballona Creek Metals	9	7/05	10/05	12/05	
4	Ballona Creek Toxics	11	7/05	10/05	12/05	

### Adopted TMDL's

Region	TMDL Project	Listings	RB Adopted	SB Approved	EPA Approved	Notes
4	Calleguas Creek Historic pesticides	62	7/05	9/05	3/06	
4	Calleguas Creek Toxicity	10	7/05	9/05	3/06	
4	Calleguas Creek PCBs	5	7/05	9/05	3/06	
4	Marina del Rey Toxics	6	10/05	1/06	3/06	
4	Marina del Rey Harbor-Back Basin Metals (AU #56)	3	10/05	1/06	3/06	
4	Ballona Creek coliform	4	6/06	11/06	3/07	
4	Calleguas Creek metals	6	6/06	10/06	3/07	
4	San Gabriel River metals	7	7/06			Withdrawn by Region
4	Santa Clara River Chloride Reach 7 & 8	2	5/07			RB updated the implementation plan 8/06
4	Calleguas Creek trash	2	6/07	12/07	2/08	
4	Legg Lake trash	1	6/07	12/07	2/08	
4	Machado Lake trash	1	6/07	12/07	2/08	
4	Santa Clara River trash	3	6/07	12/07	2/08	
4	Ventura River Estuary trash	1	6/07	12/07	2/08	
4	Los Angeles River trash (re-adoption)	7	8/07	4/08		Re-adoption in compliance with Court decision
4	Los Angeles River metals (re-adoption)	13	9/07	6/08		Re-adoption in compliance with Court decision
4	Ballona Creek metals (re-adoption)	9	9/07	6/08		Re-adoption in compliance with Court decision
4	Calleguas Creek boron/sulfate/TDS	25	10/07	5/08		
4	Harbor Beaches of Ventura County	2	10/07			
4	Malibu Creek Watershed trash	7	5/08			
4	Machado Lake nitrogen	4	5/08			
	<b>Listings Addressed</b>	<b>345</b>				
5	Grasslands Marsh Selenium	1	96			Implemented using 96 BPA
5	Salt Slough Selenium	1	96			Implemented using 96 BPA
5	San Joaquin River Selenium	1	96			Implemented using 96 BPA
5	Sacramento River Cadmium	1	5/02			Implemented using existing programs
5	Sacramento River Copper	1	5/02			Implemented using existing programs
5	Sacramento River Zinc	1	5/02			Implemented using existing programs
5	Clear Lake Mercury	1	12/02	5/03	9/03, 10/03	
5	Sacramento and Feather River Diazinon	2	10/03	4/04	8/04	
5	Sacramento Area Urban Creeks TMDLs	10	9/04			Adopted by Resolution. Implemented via MS4 permit
5	San Joaquin River Salt and Boron	2	9/04	11/05	2/07	TMDL is complete for the Stanislaus to Vernalis reach only.
5	San Joaquin River Dissolved Oxygen	1	1/05	11/05	2/07	
5	San Joaquin River Diazinon and Chlorpyrifos	8	10/05	5/06	12/06	
5	Cache, Bear and Sulphur Creeks Mercury	4	10/05	7/06	2/07	
5	Clear Lake nutrient	1	6/06	4/07	9/07	
5	Delta Diazinon and Chlorpyrifos	12	6/06	5/07	10/07	TMDL was originally scheduled for adoption in FY 06-07
5	Sulphur Creek mercury	2	3/07	3/08		
5	Sacramento/Feather diazinon WQ obj. revision	2	5/07	2/08		
5	Stockton Area Sloughs and Rivers pathogens	8	3/08			TMDL adopted as a MS4 permit
	<b>Listings Addressed</b>	<b>59</b>				

### Adopted TMDL's

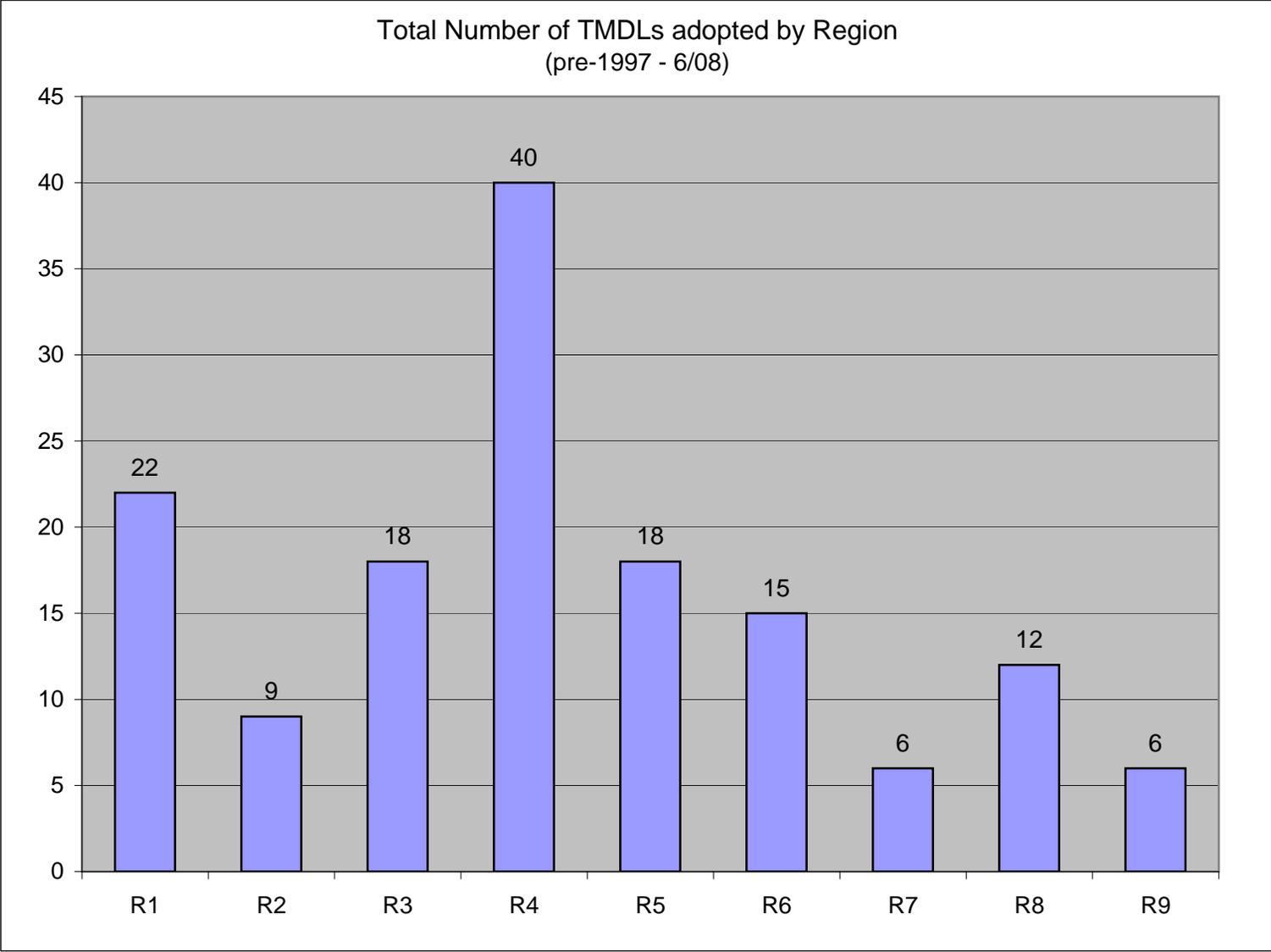
Region	TMDL Project	Listings	RB Adopted	SB Approved	EPA Approved	Notes
6	Wendel Hot Springs metals	1	7/00	9/01	4/02	UAA (resulting in delisting in 2002)
6	Amedee Hot Springs metals	1	7/00	9/01	4/02	UAA (resulting in delisting in 2002)
6	Fale Hot Springs metals	1	7/00	9/01	4/02	UAA (resulting in delisting in 2002)
6	Hot Creek (Walker River watershed) metals	1	7/00	9/01	4/02	UAA (resulting in delisting in 2002)
6	Little Hot Creek (Owens River watershed) arsenic	1	7/00	9/01	4/02	UAA (resulting in delisting in 2002)
6	Little Alkali Lake arsenic	1	7/00	9/01	4/02	UAA (resulting in delisting in 2002)
6	Keough Hot Springs metals	1	7/00	9/01	4/02	UAA (resulting in delisting in 2002)
6	Deep Springs Lake salinity/TDS/chlorides	1	7/00	9/01	4/02	UAA (resulting in delisting in 2002)
6	Amargosa River salinity/TDS/chlorides	1	7/00	9/01	4/02	UAA (resulting in delisting in 2002)
6	Heavenly Valley sediment	1	1/01	9/01	9/02	
6	Indian Creek Reservoir phosphorus	1	7/02	1/03	7/03	
6	Squaw Creek sediment	1	4/06	2/07	7/07	
6	West Fork Carson River sodium objectives	2	12/06			Site-specific objective for two segments of the West Fork.
6	Blackwood Creek sediment	1	10/07	--	7/08	Adopted by RB Resolution/Order submitted directly to EPA
6	Truckee River, and Bronco and Gray Creeks Sediment	3	5/08			
	<b>Listings Addressed</b>	<b>18</b>				
7	Alamo River Sediment	1	6/01	2/02	6/02	
7	New River Pathogen	1	10/01	3/02	8/02	
7	New River Sediment	1	6/02	11/02	3/03	
7	Imperial Valley Drains (Niland 2, P, Pumice) Sediment	1	1/05	7/05	9/05	
7	New River trash	1	6/06	4/07	9/07	
7	Coachella Valley Storm Channel pathogen TMDL	1	5/07			Withdrawn by Region
	<b>Listings Addressed</b>	<b>6</b>				
8	Santa Ana River Reach 3 Nutrients	1	11/91			
8	Newport Bay & San Diego Creek Nitrogen	4	10/98	11/98	4/99	
8	Newport Bay & San Diego Creek Phosphorus	4	10/98	11/98	4/99	
8	Newport Bay & San Diego Creek Sediment	3	10/98	11/98	4/99	
8	Newport Bay & San Diego Creek Fecal Coliform	2	4/99	7/99	2/00	
8	Newport Bay Watershed Chlorpyrifos	4	4/03	10/03	2/04	
8	Newport Bay Watershed Diazinon	4	4/03	10/03	2/04	
8	Lake Elsinore Watershed Nutrient TMDL	3	12/04	5/05	9/05	
8	Prado Area Streams Pathogen (a.k.a Middle Santa Ana R. Watershed)	6	8/05	5/06	5/07	
8	Knickerbocker Creek Bacteria	1	11/05			Reg. Bd. addressed through enforcement action
8	Big Bear watershed nutrient	2	4/06	4/07	9/07	
8	Newport Bay Watershed Organochlorine Compounds	4	9/07			
	<b>Listings Addressed</b>	<b>38</b>				

## Adopted TMDL's

Region	TMDL Project	Listings	RB Adopted	SB Approved	EPA Approved	Notes
9	Chollas Creek Diazinon	1	6/02	7/03	11/03	
9	Rainbow Creek nutrient	2	12/04			
9	Shelter Island Yacht Basin Dissolved Copper	1	2/05	11/05	3/06	
9	Chollas Creek Metals	3	6/05, 6/07			State Board remanded for CEQA on 5/2/06, Re-adopted by Region 6/13/07.
9	Bacteria impaired waters I (creeks and beach shoreline)	19	12/07			
9	San Diego Bay & Dana Point Harbor shorelines bacteria	2	6/08			
<b>Listings Addressed</b>		<b>28</b>				
<b>Total Number of Listings Addressed Statewide</b>		<b>659</b>				

TMDL Adoptions =	146
Listings Address by TMDL Adoption =	659
Listings Addressed by 2006 Delisting =	188
<b>TOTAL of 2002 Listings Addressed =</b>	<b>847</b>
Percentage of All 2002 Listings Addressed =	<b>45%</b>

Listings Addressed by 2002 Delisting =	206
Total of All Listings Addressed =	1053



TMDLs Scheduled for State Board Approval in FY 07-08\*

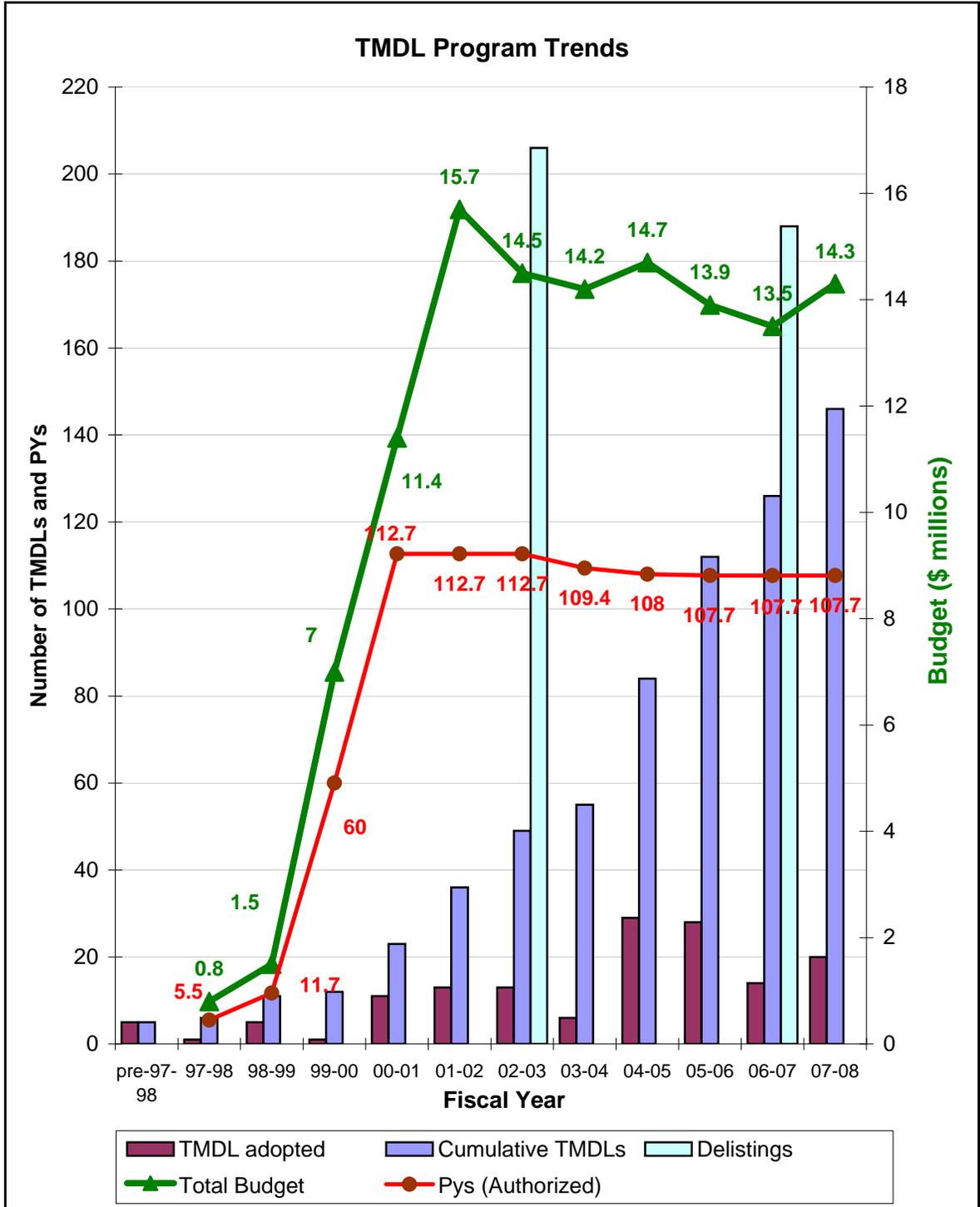
Reg	Title	Sched. RB Adopt	RB Adopt	SB Rec'd	SB Action	OAL Action	EPA Action	Notes
2	Napa River Pathogen TMDL		11/13/06	3/30/07	Approved 9/4/07	Approved 12/7/07	Approved 2/29/08	
2	Sonoma Creek Pathogen TMDL		6/14/06	8/31/06	Approved 9/4/07	Approved 12/7/07	Approved 2/29/08	
2	SF Bay Mercury TMDL		8/9/06	11/30/06	Approved 7/17/07	Approved 11/7/07	Approved 2/12/08	
2	Napa River Sediment TMDL		1/23/07	7/13/07	<del>5/08</del>			Withdrawn by Region for CEQA considerations
2	Walker Creek Mercury TMDL		1/23/07	7/2/07	<del>4/08</del>			Rescheduled to allow E.O. corrections
4	Santa Clara River (Lakes Elizabeth, Munz and Hughes) Trash TMDL		6/7/07	7/26/07	Approved 12/4/07	Approved 2/11/08	Approved 2/27/08	
4	Legg Lake Trash TMDL		6/7/07	7/25/07	Approved 12/4/07	Approved 2/11/08	Approved 2/27/08	
4	Machado Lake Trash TMDL		6/7/07	7/24/07	Approved 12/4/07	Approved 2/11/08	Approved 2/27/08	
4	Ventura River Estuary Trash TMDL		6/7/07	7/24/07	Approved 12/4/07	Approved 2/11/08	Approved 2/27/08	
4	Calleguas Creek (Revolon Slough and Beardsley Wash) Trash TMDL		6/7/07	7/23/07	Approved 12/4/07	Approved 2/11/08	Approved 2/27/08	
4	Los Angeles River Watershed Trash TMDL		8/9/07	9/11/07	Approved 4/15/08			
4	Los Angeles River Watershed Metals TMDL		9/6/07	10/4/07	Approved 6/17/08			
4	Ballona Creek Metals TMDL		9/6/07	10/9/07	Approved 6/17/08			
4	Calleguas Creek Boron and Sulfate TMDL		10/4/07	11/26/07	Approved 5/20/08			
4	Harbor Beaches (Ventura County) Bacteria TMDL		11/1/07	12/24/07	<del>5/08</del>			SB review extended
4	San Gabriel River metals (re-adoption)	12/07						
5	Sacramento/Feather River Diazinon/Chlorpyrifos TMDL and WQOs		5/3/07	7/27/07	Approved 2/19/08			
5	Sulphur Creek Mercury TMDL		3/16/07	8/30/07	Approved 3/18/08			
7	Coachella Valley Storm Water Channel Bacterial Indicators TMDL		5/16/07	7/25/07	Withdrawn <del>4/18/08</del>			Withdrawn by Region
9	TMDL for Dissolved Copper, Lead, & Zinc in Chollas Creek		6/13/07	10/4/07	<del>3/08</del>			Rescheduled to 7/08
9	Bacteria impaired waters I (creeks and beach shorelines)		12/12/07	3/26/08	<del>6/08</del>			Admin. Record not received in time for FY07-08 consideration

\*State Board must receive the complete Administrative Record by January in order to consider the TMDL for approval in the same fiscal year.

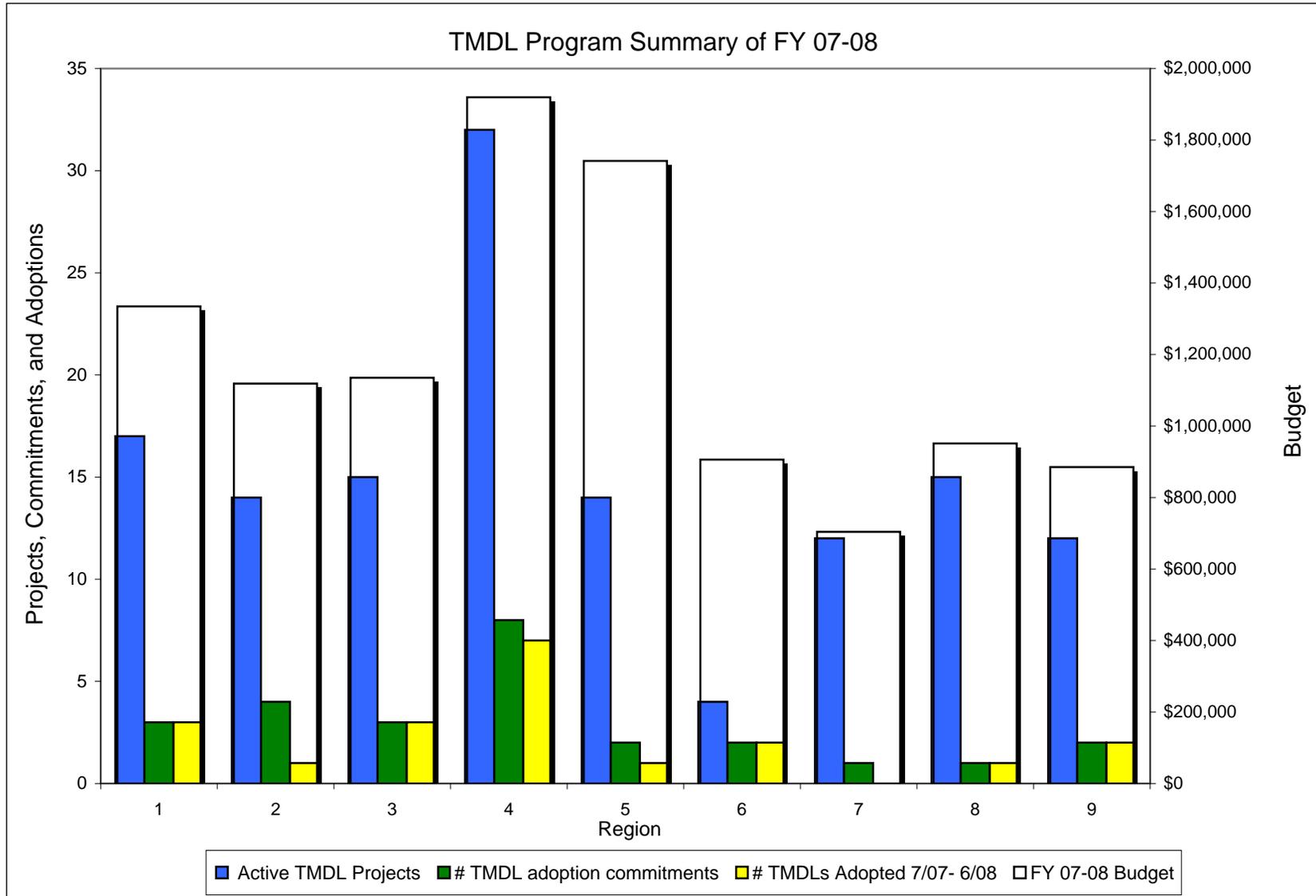
**TMDLs Actions by the State Board – FY 07-08  
(July 2007 - June 2008)**

	State Board Action	Date
<b>Region 1</b>		
<b>Region 2</b>		
San Francisco Bay Mercury TMDL	Approved	7/17/07
Sonoma Creek Pathogen TMDL	Approved	9/4/07
Napa River Pathogen TMDL	Approved	9/4/07
<b>Region 3</b>		
<b>Region 4</b>		
Calleguas Creek trash TMDL (Beardsley Wash, Revolon Slough)	Approved	12/4/07
Legg Lake trash TMDL	Approved	12/4/07
Machado Lake trash TMDL	Approved	12/4/07
Santa Clara River trash TMDL (Lakes Hughes, Elizabeth, and Munz)	Approved	12/4/07
Ventura River Estuary trash TMDL	Approved	12/4/07
Los Angeles River watershed trash TMDL	Approved	4/15/08
Calleguas Creek boron/sulfate/TDS	Approved	5/20/08
Los Angeles River metals TMDL	Approved	6/17/08
Ballona Creek metals TMDL	Approved	6/17/08
<b>Region 5</b>		
Sacramento/Feather River Diazinon/Chlorpyrifos TMDL & WQOs	Approved	2/19/08
Sulphur Creek Mercury TMDL & standards action	Approved	3/18/08
<b>Region 6</b>		
<b>Region 7</b>		
<b>Region 8</b>		
<b>Region 9</b>		
Number of State Bd. Approvals	14	
Number of State Bd. Remands	0	

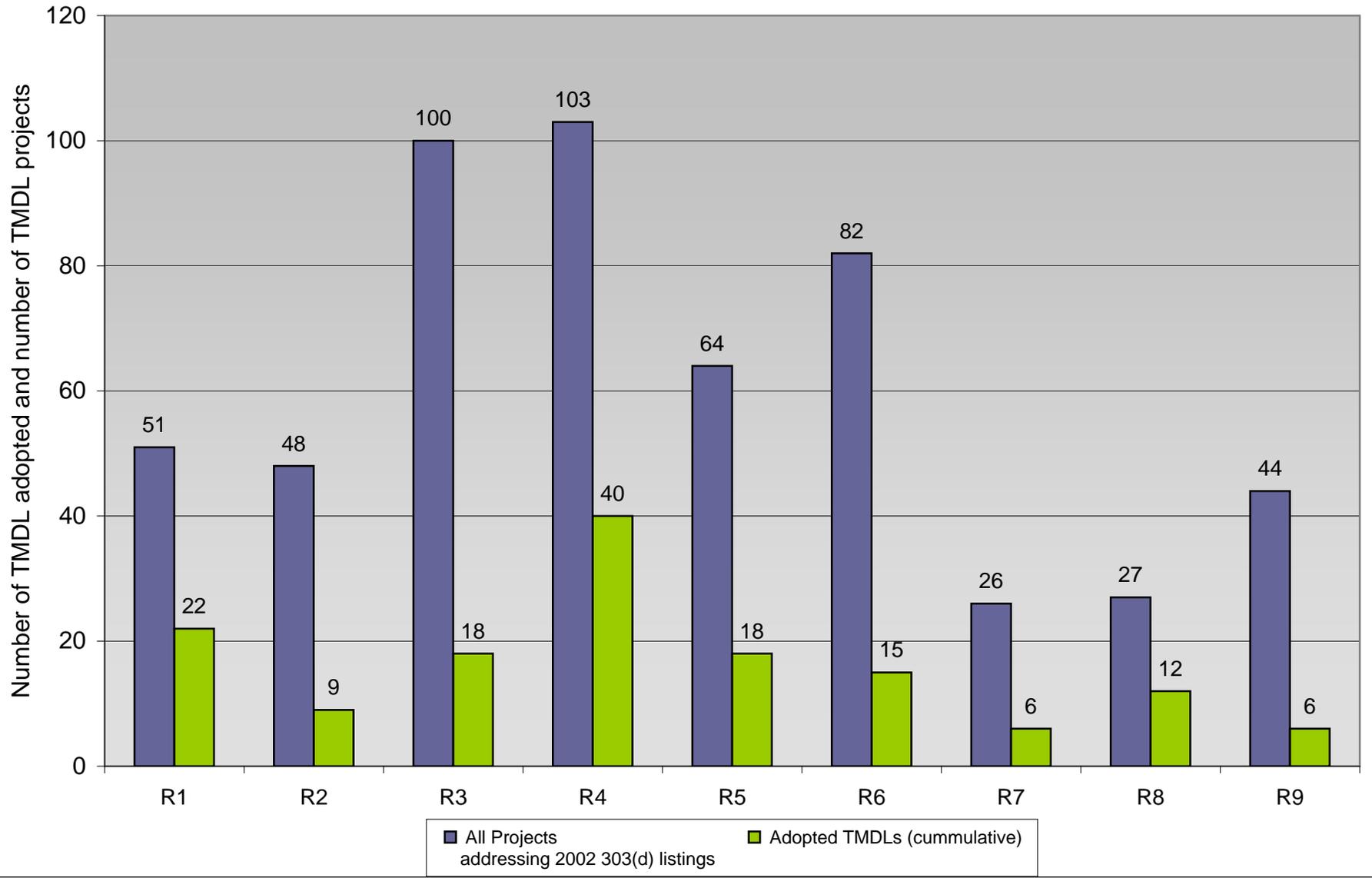
# State-wide TMDL Program Trends Summary



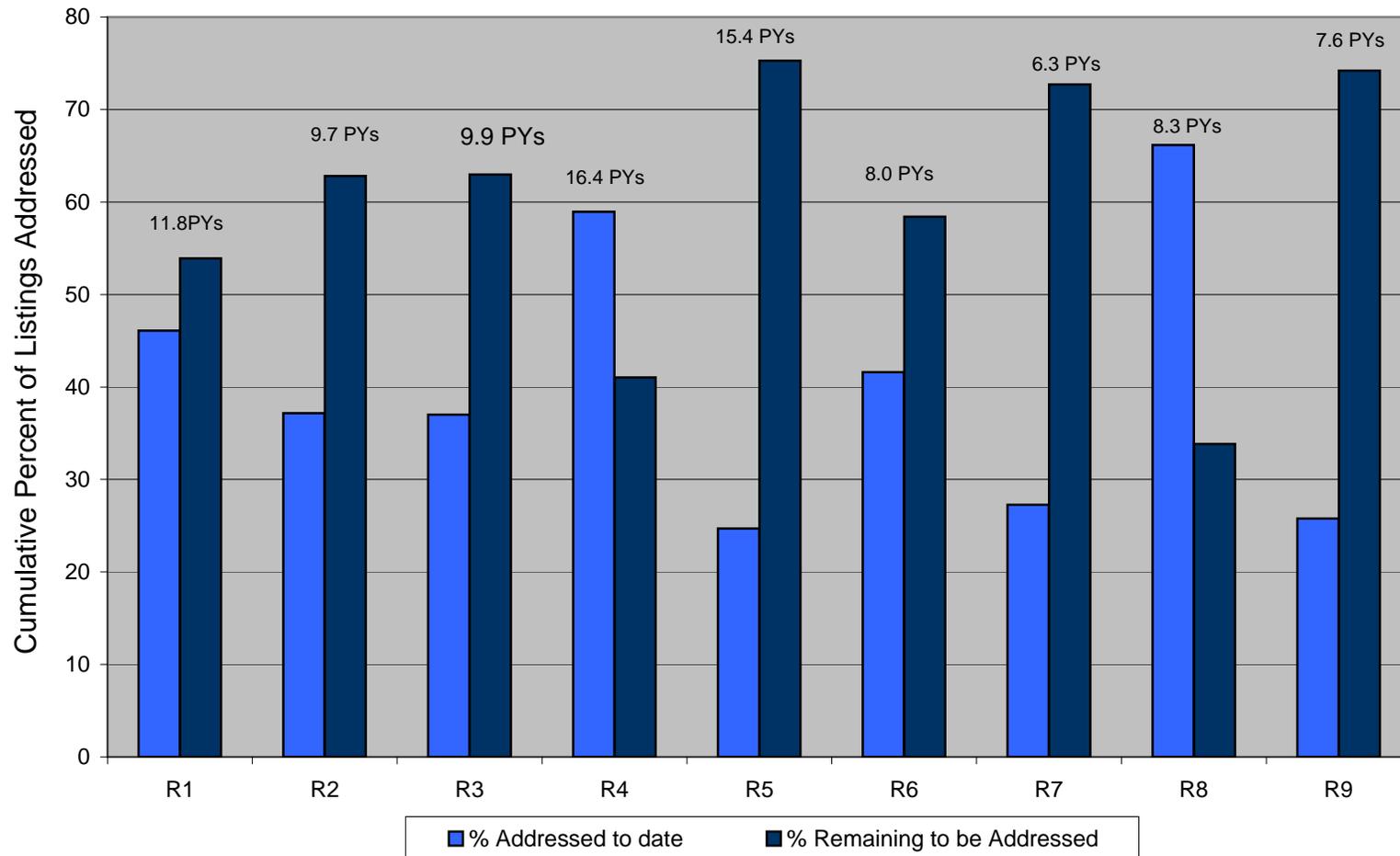
## FY 07-08 TMDL Program Summary By Region



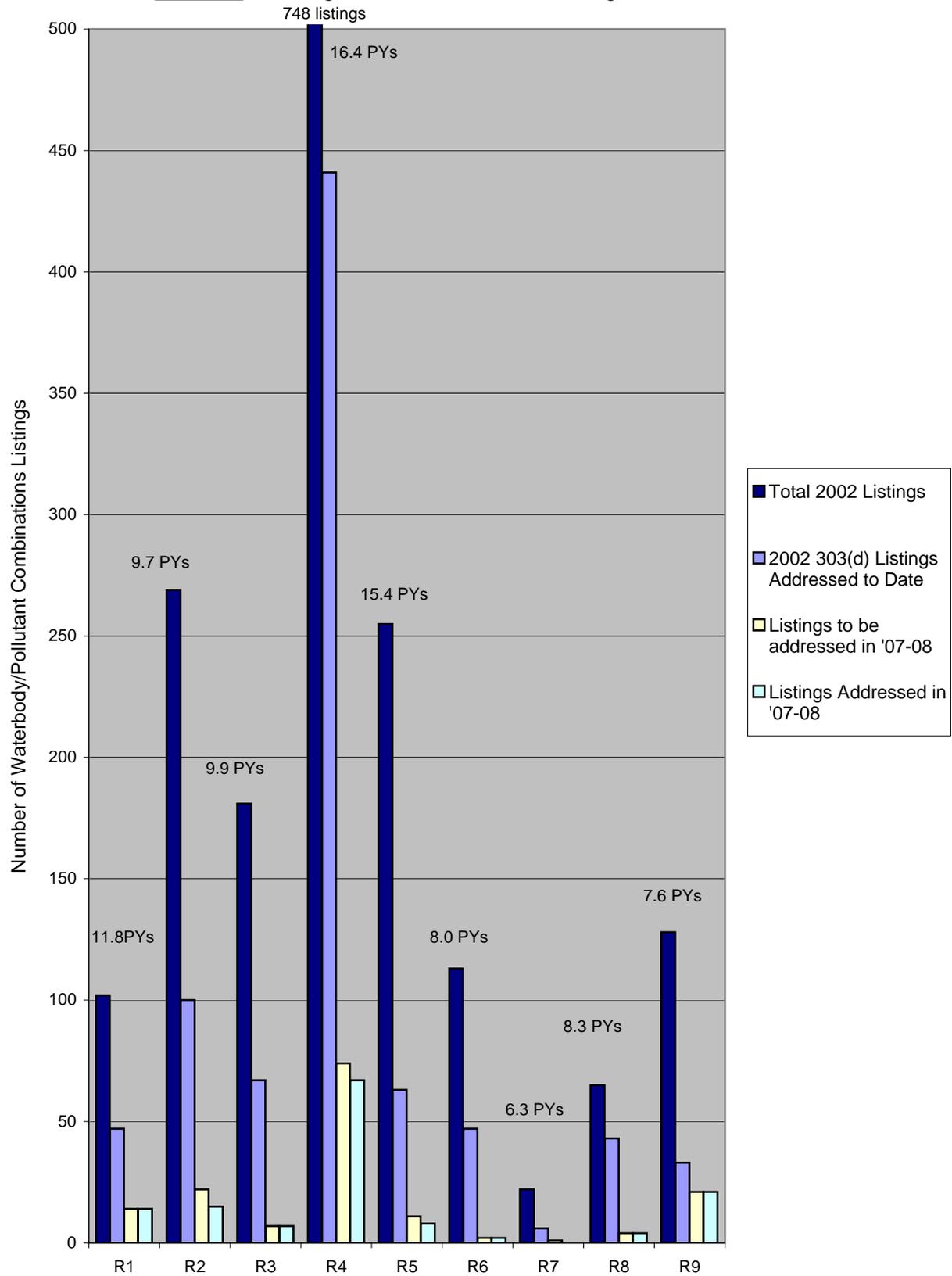
### Progress in Addressing 2002 CWA sect. 303(d) Listings



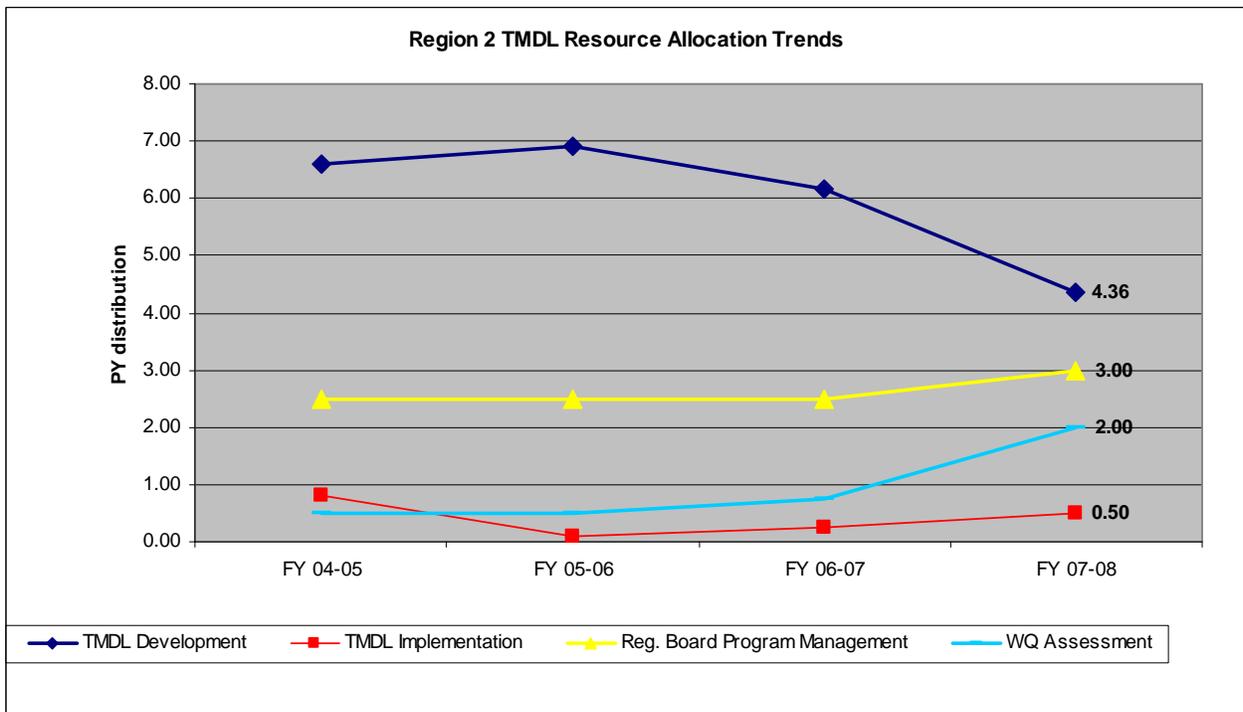
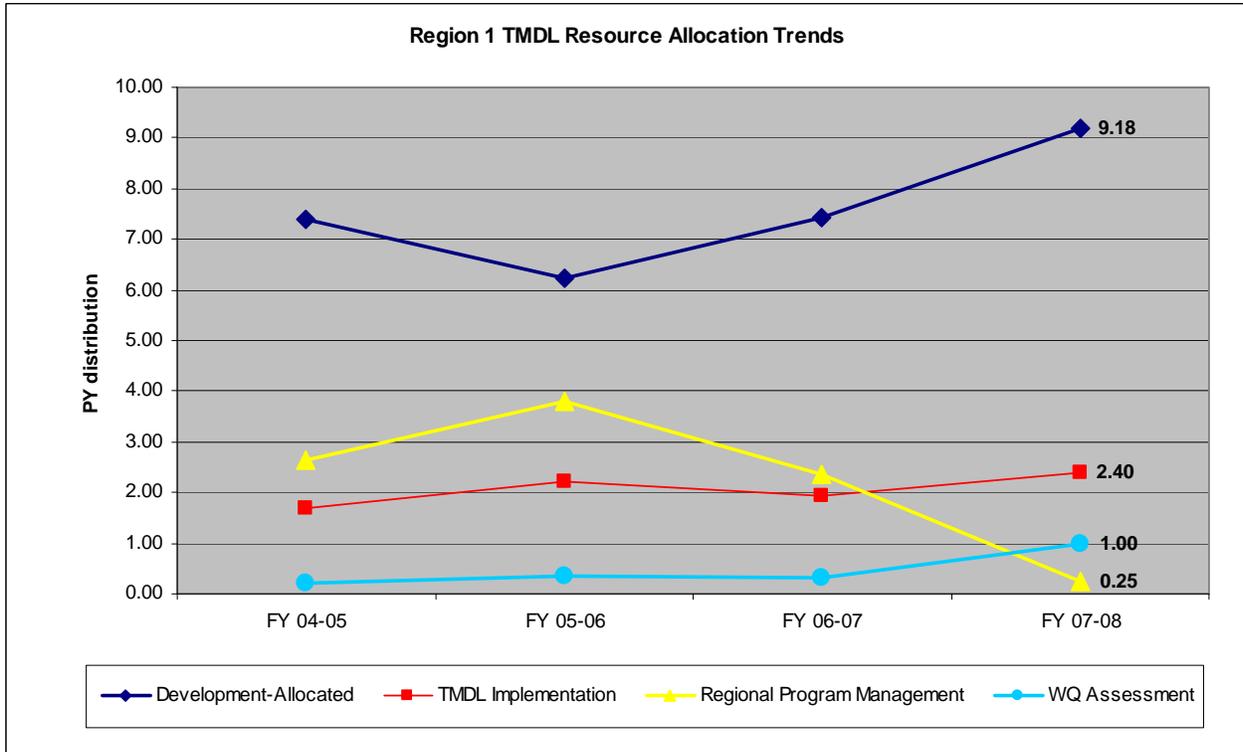
Progress in Addressing 2002 CWA sect. 303(d) Listings  
Percent of listings addressed and remaining



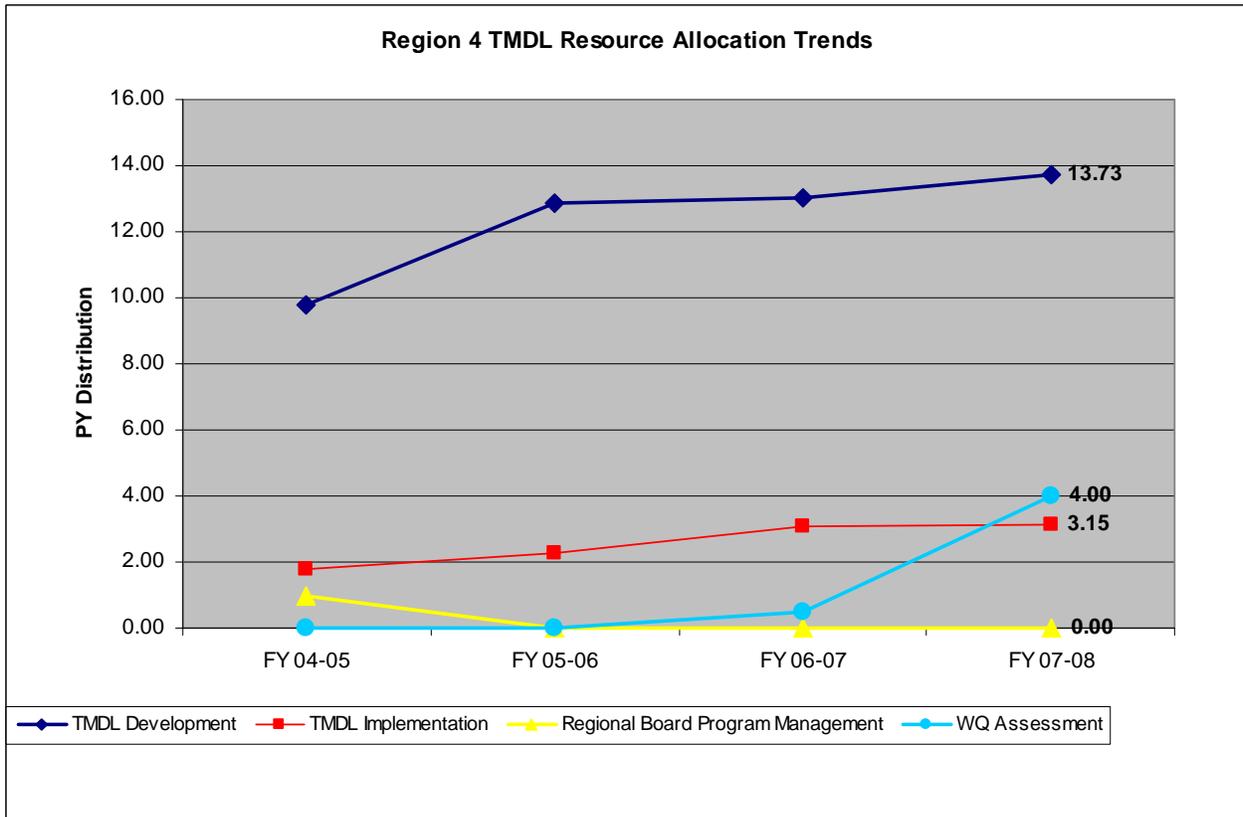
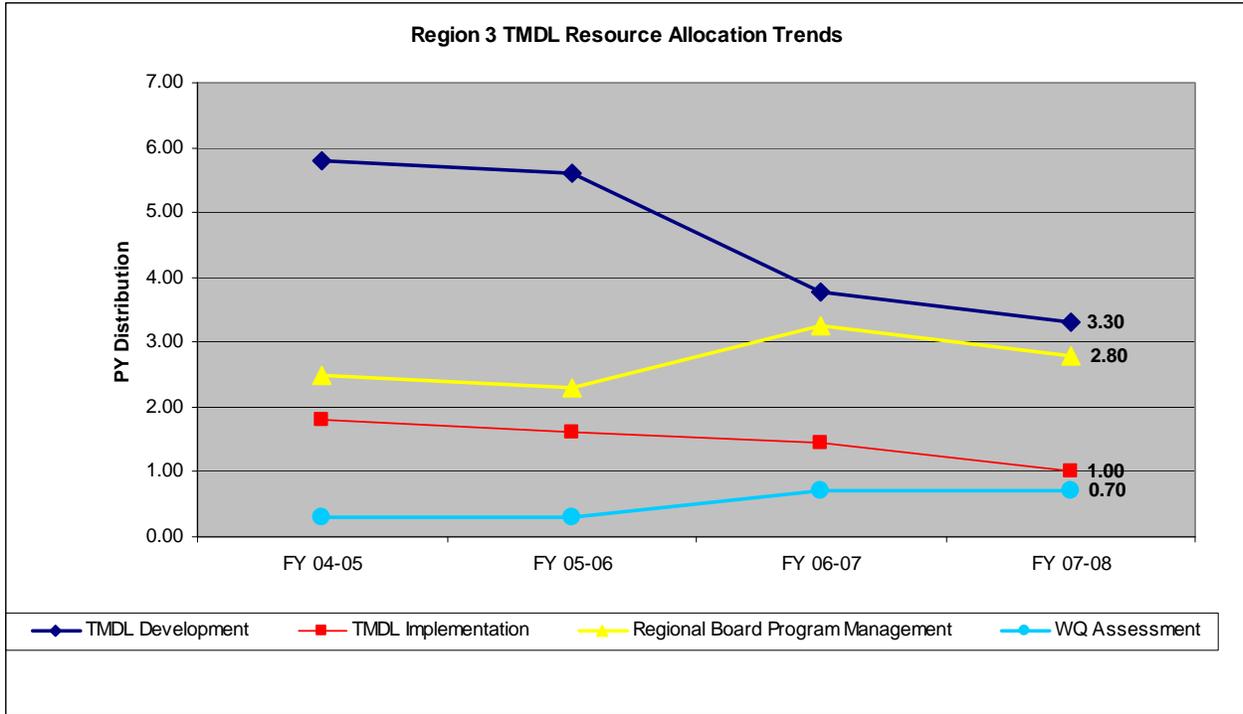
Progress In Addressing 2002 CWA 303(d) Listings  
Number of listings addressed and remaining



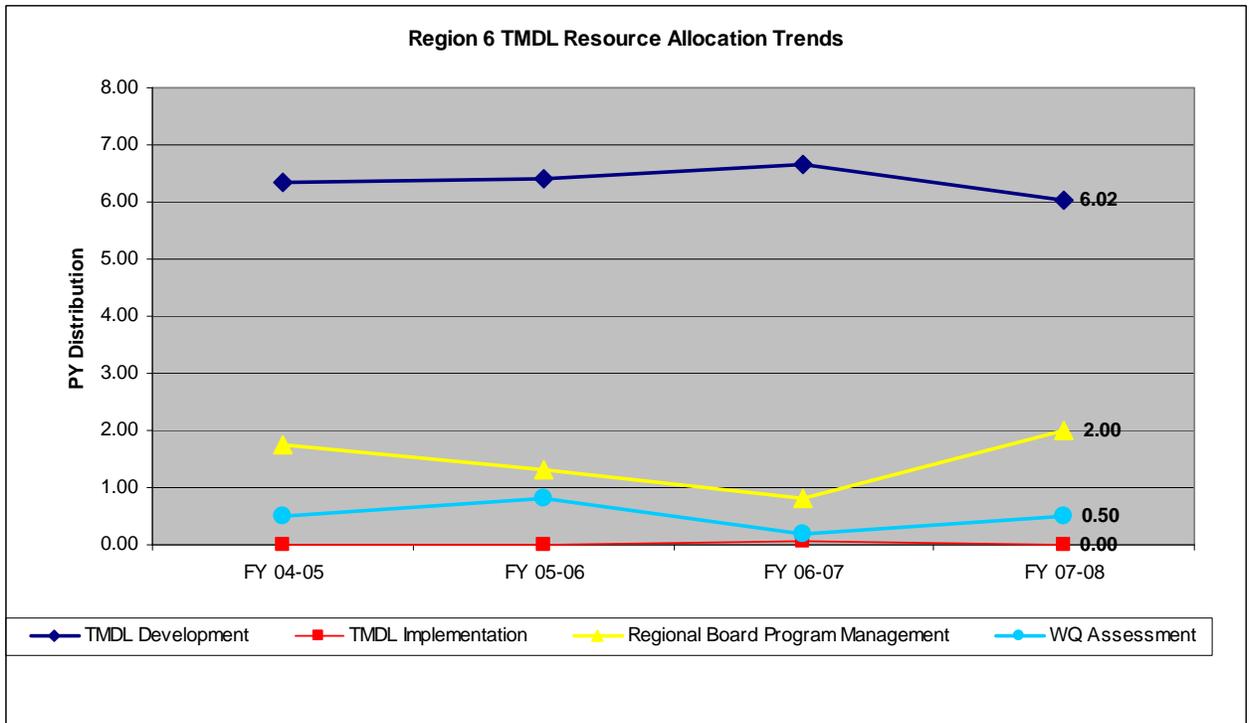
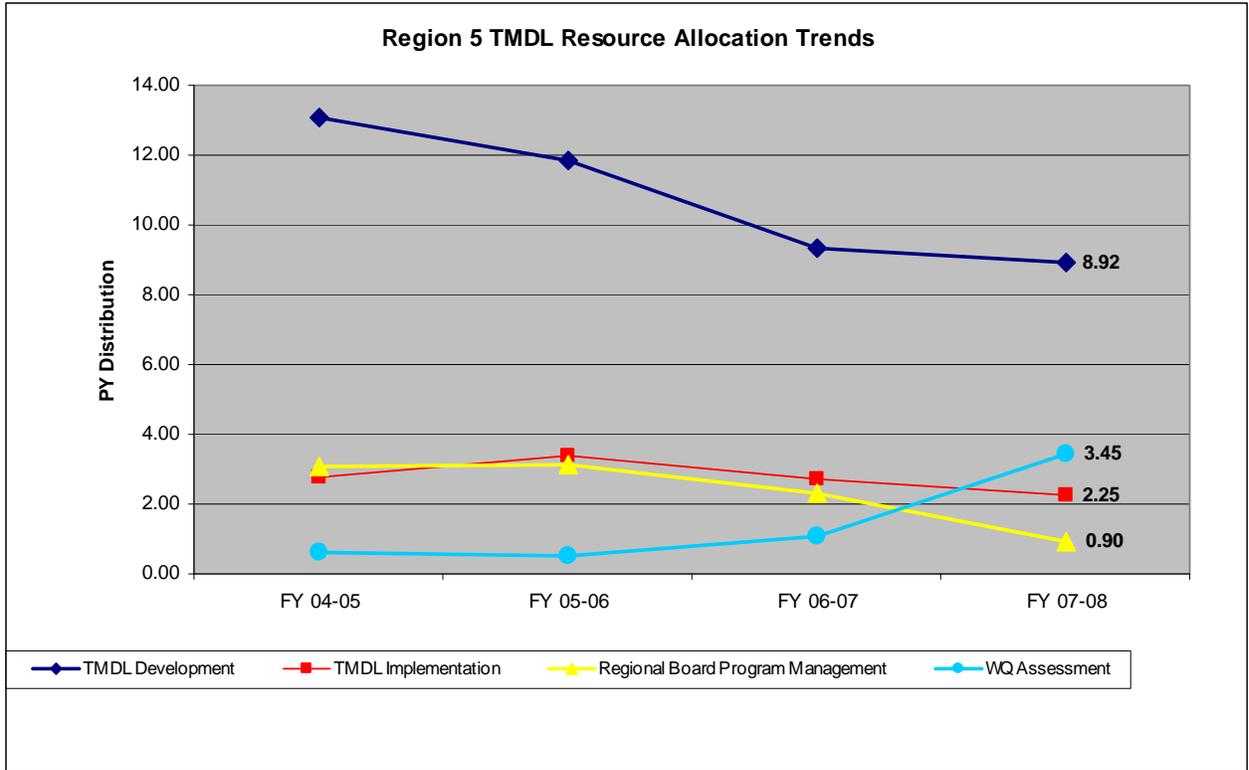
## TMDL Program Elements – Resource Allocation Trends



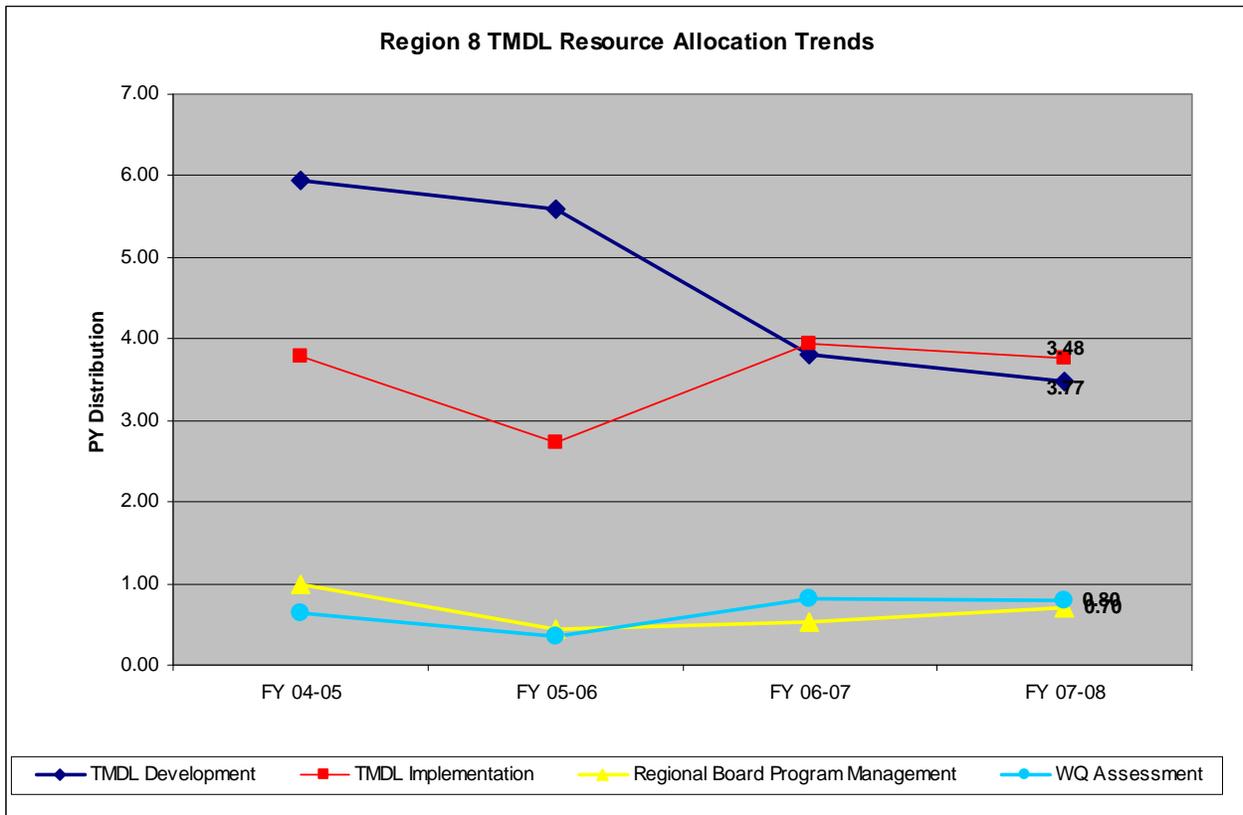
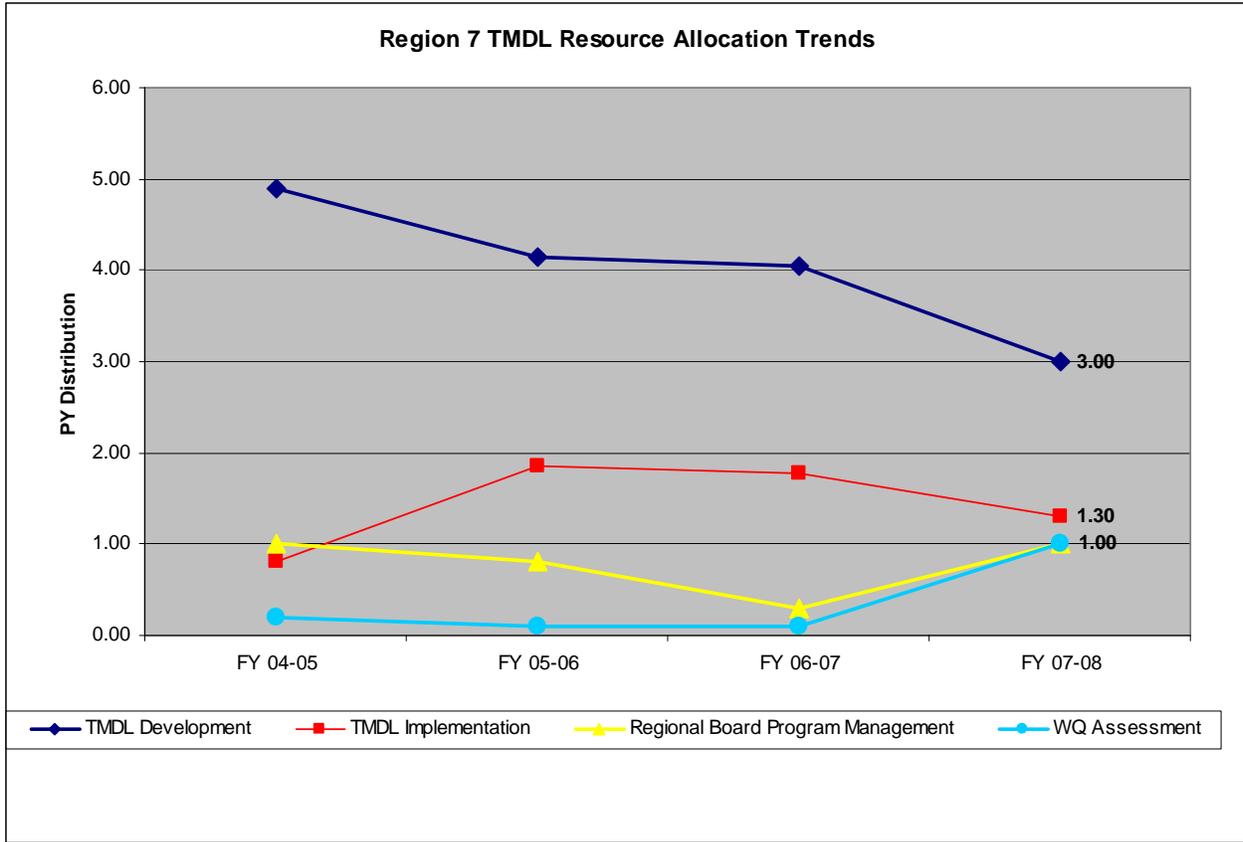
## TMDL Program Elements – Resource Allocation Trends



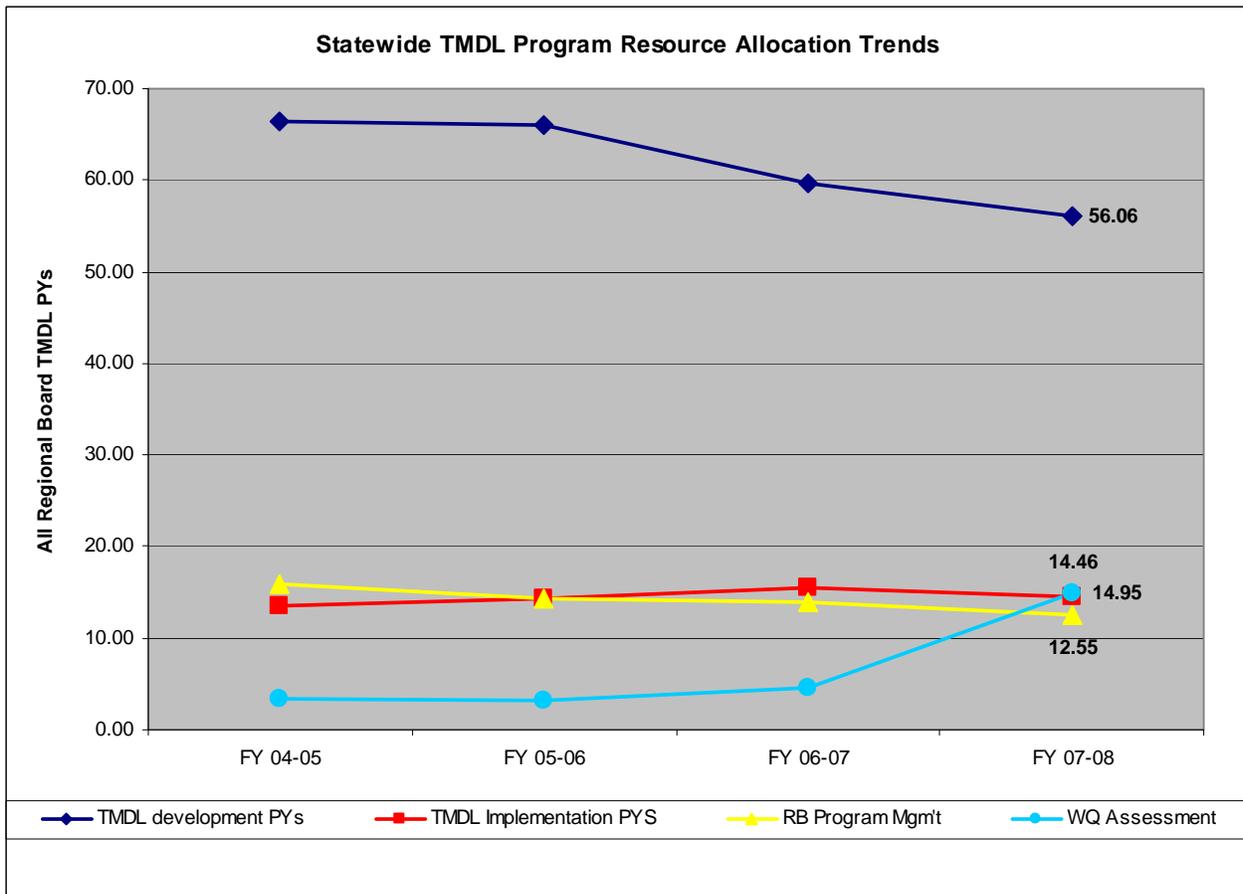
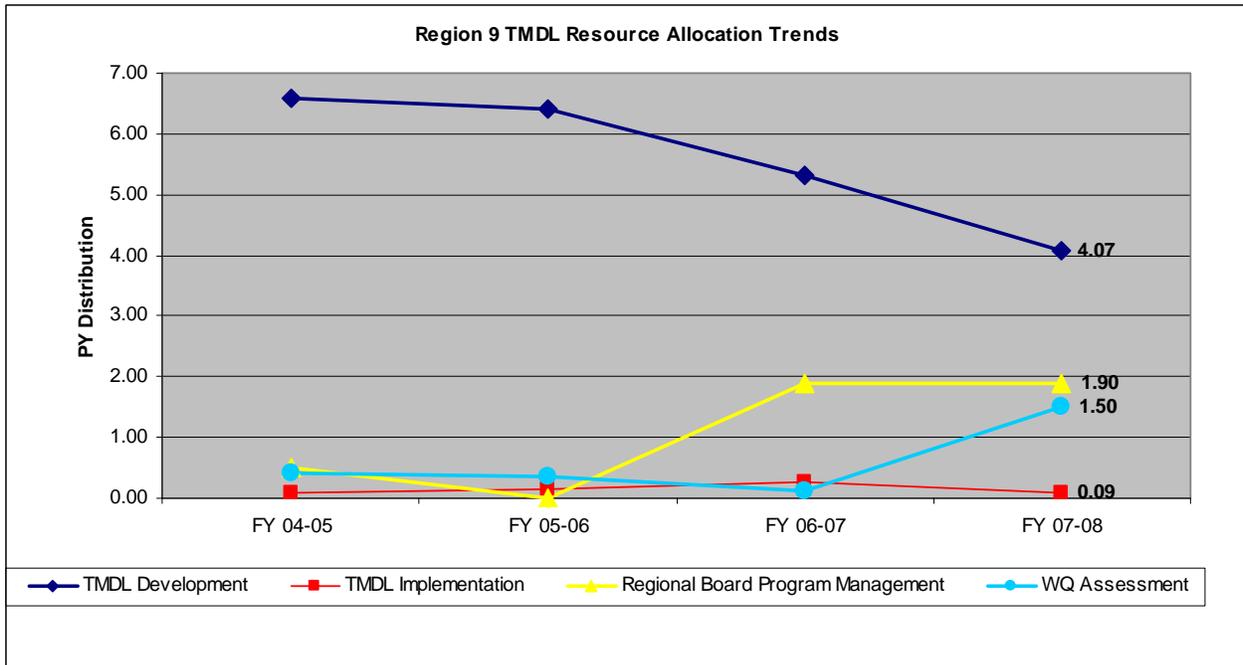
## TMDL Program Elements – Resource Allocation Trends

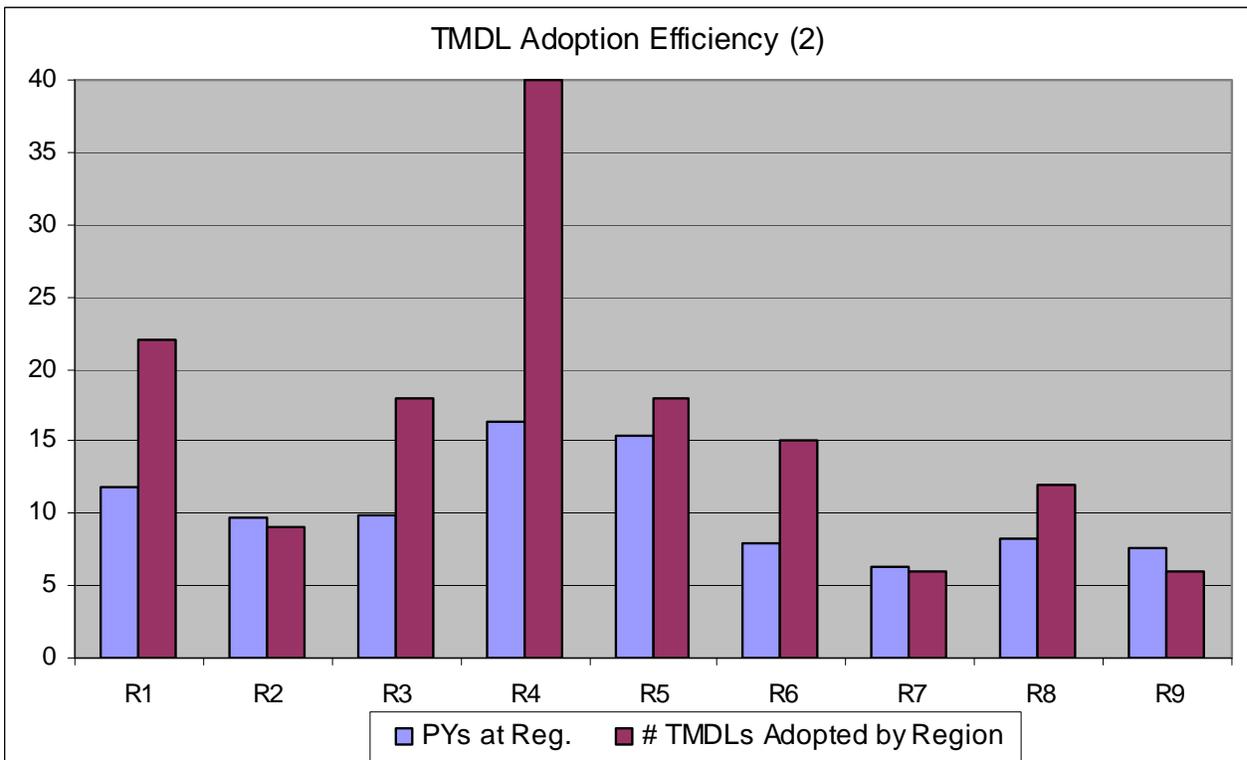
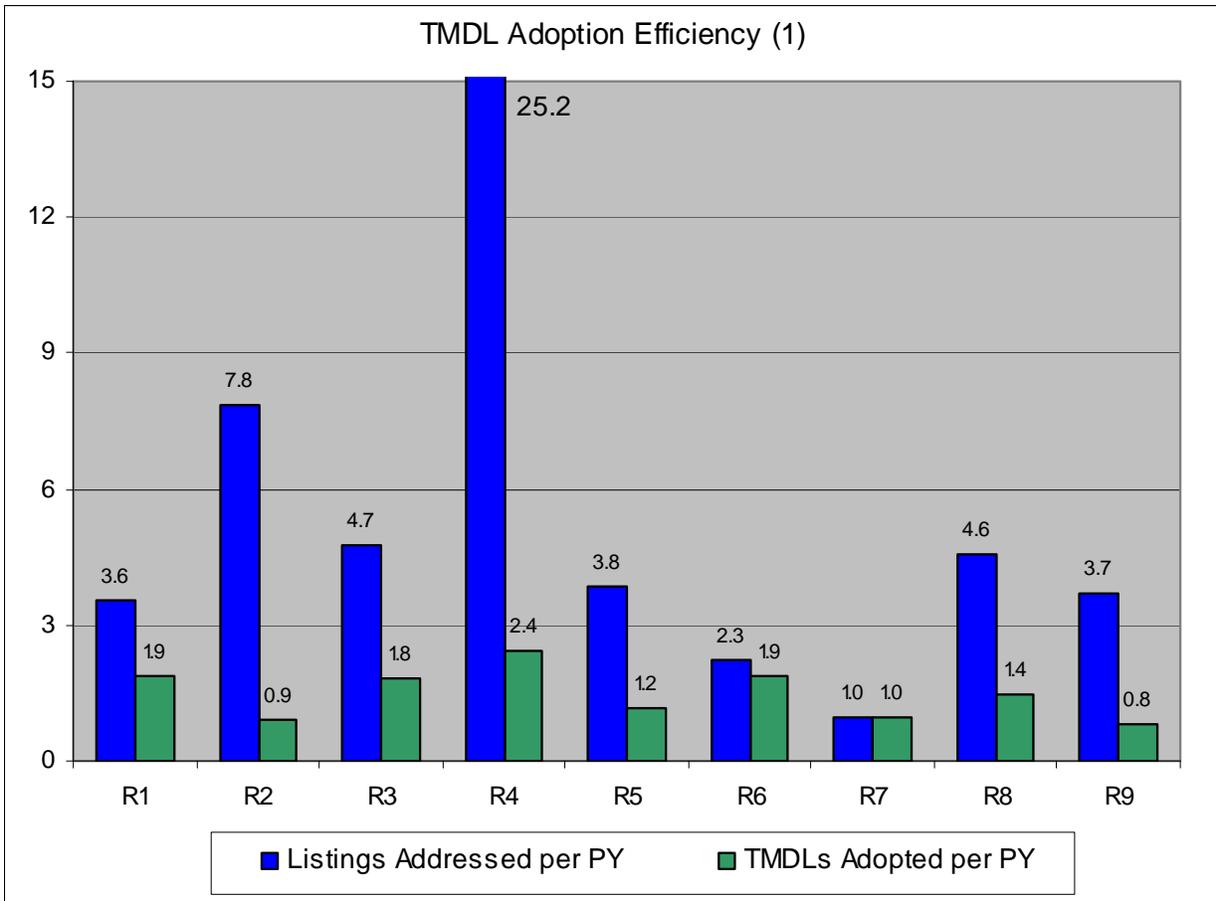


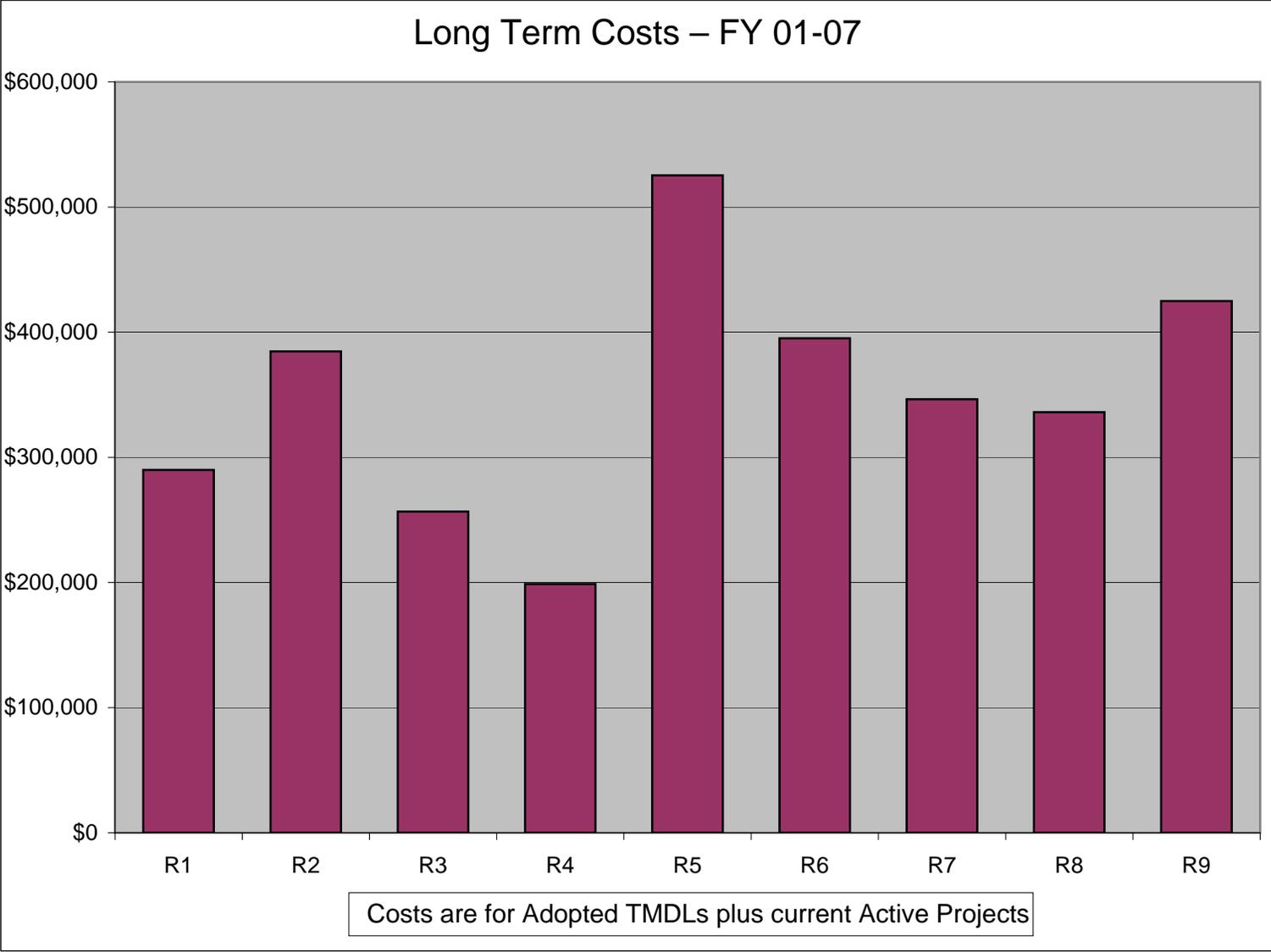
## TMDL Program Elements – Resource Allocation Trends



## TMDL Program Elements – Resource Allocation Trends







## Over Due Task Report

Reg.	Project Name	Deliverable Name	Status	Comment	Plan Start Date	Actual Start Date	Plan End Date
1	Sediment TMDL Resolution Reports	Sediment Control Guidance Document	Overdue	1/7/07: This project has been delayed in large part due to death of Ranjit Gill who was a significant player on this project.	5/1/07	11/1/06	11/30/07
1	Elk River Sediment	Source Analysis	Overdue	Changed enddate from 02/07 to 10/07 due to contracting delays. 7/08: Task overdue due to need for additional field work and data analysis taking longer than anticipated.	3/1/03	5/1/03	10/31/07
1	Freshwater Creek Sediment	Numeric Targets	Overdue	Replaces task 5187. Task overdue due to staff time working on this task has been diverted to defend a lawsuit against RB and SB by Pacific Lumber Co.	11/1/06	11/1/06	9/30/07
3	Salinas River, Salinas River Delta and Elkhorn Slough Pesticides	Draft Project Report	Overdue	Task is carried over from previous FY. Lead staff had been unavailable for significant periods of time, due to medical reasons	1/1/08	4/1/08	6/30/08
3	Corralitos Creek Pathogens	Draft Report	Overdue	This task is carried-over from previous FY. 7July08: will be completed early FY 08-09-waiting for Sci Review comments.	3/1/08	3/1/08	5/31/08
3	Update 303(d) List	Draft Recommendations for updated 303(d) List	Delayed	State-wide delay due to SB contracting for information management database; planning to prepare recommendation by April 2008 present recommendation to Board in June or July 2008. 1May08 update: progress being made, but task likely not finished until Summer-Fall 2008.	7/1/07	7/1/07	9/30/07
3	Pajaro River Fecal Coliform (including San Benito R., Llagas Cr., and Tequesquita Slough)	Draft Report	Overdue	Task carried over from FY 06/07. 7July08: will be completed early FY 08-09-waiting for Sci Review comments.	7/1/07	8/1/07	1/31/08
4	San Gabriel River Metals (39)	State Board Action	Delayed	Project delayed due to updating CEQA document and pending model.	1/1/08	NULL	1/31/08
4	Ventura River Algae/Nitrogen (88)	Project Plan	Delayed	Stakeholder TMDL	10/1/07	10/1/07	1/31/08
5	Delta Methylmercury TMDL Project	Administrative Record	Delayed	Hearing was continued and no Board action was taken.	6/1/07	NULL	9/30/07
5	Delta Methylmercury TMDL Project	Regional Board Action	Delayed	Prepared summary staff report for Board hearing, prepared presentation and hearing materials. Conducted hearing on 24-25 April 2008. Board took no action at the first hearing. Hearing to be continued in fall 2008. Board directed staff to solicit additional information and input from stakeholders.	7/1/07	2/1/08	5/31/08
5	San Joaquin River Salt and Boron Upstream of Vernalis (Stanislaus River to Merced River)	Draft Basin Plan Amendment and Staff Report - Peer Review	Delayed	Staff determined that the partially completed draft product lacked important components including 1) scientific studies to evaluate options for objectives based on the site specific agricultural conditions in SJR upstream of the Stanislaus river, 2) once objective options are selected, evaluation of options using a model (not yet selected) to determine feasibility of meeting objectives under the limited water availability conditions of the SJR, and 3) detailed CEQA analysis and economic analysis	1/1/08	NULL	6/30/08
5	Delta Methylmercury TMDL Project	Regional Board Action	Delayed	Prepared summary staff report for Board hearing, prepared presentation and hearing materials. Conducted hearing on 24-25 April 2008. Board took no action at the first hearing. Hearing to be continued in fall 2008. Board directed staff to solicit additional information and input from stakeholders.	7/1/07	NULL	5/31/08

## Over Due Task Report

Reg.	Project Name	Deliverable Name	Status	Comment	Plan Start Date	Actual Start Date	Plan End Date
5	Sacramento and San Joaquin Pesticides Basin Plan Amendment and TMDLs	Preliminary Water Quality Criteria Reports	Delayed	waiting on UCD criteria methodology results	7/1/07	NULL	6/30/08
5	Sacramento and San Joaquin Pesticides Basin Plan Amendment and TMDLs	Draft Sediment Quality Objectives Section	Delayed	Provided comments to the SWRCB SQO process in hopes of being able to use the SQOs to guide our efforts.	7/1/07	NULL	6/30/08
5	Sacramento and San Joaquin Pesticides Basin Plan Amendment and TMDLs	Final Report	Delayed	Draft was delayed in its release, need to push back final and response to comments	7/1/07	NULL	2/29/08
5	Sacramento and San Joaquin Pesticides Basin Plan Amendment and TMDLs	Draft Source Analysis	Delayed	waiting on targets and source assessment	7/1/07	NULL	1/31/08
5	San Joaquin River Salt and Boron Upstream of Vernalis (Stanislaus River to Merced River)	Draft Basin Plan Amendment and Staff Report - Internal Review	Delayed	Staff determined that the partially completed draft product lacked important components including sufficient modeling, economic analysis, detailed CEQA analysis. These tasks are expected to take several years to complete.	7/1/07	NULL	5/31/08
5	Delta Methylmercury TMDL Project	Administrative Record	Delayed	Hearing was continued and no Board action was taken.	8/1/07	NULL	6/30/08
6	testhannah	money	Not Started	back to work	3/1/08	NULL	4/30/08
7	New River Volatile Organic Compounds TMDL	Administrative Record	Delayed	More data is being collected as a result of an agreement between EPA and RB7 management.	6/1/07	NULL	7/31/07
7	New River Volatile Organic Compounds TMDL	State Board Action	Delayed	More data is being collected as a result of an agreement between EPA and RB7 management.	7/1/07	NULL	11/30/07
7	New River Volatile Organic Compounds TMDL	EPA Approval	Delayed	More data is being collected as a result of an agreement between EPA and RB7 management.	1/1/08	NULL	2/29/08
7	New River Volatile Organic Compounds TMDL	CEQA & DFG Notices filed	Delayed	More data is being collected as a result of an agreement between EPA and RB7 management.	2/1/08	NULL	3/31/08
7	New River Volatile Organic Compounds TMDL	OAL Approval	Delayed	More data is being collected as a result of an agreement between EPA and RB7 management.	11/1/07	NULL	1/31/08
8	2008 303(d) List Update	Preliminary Listing, Delisting and/or Revision Recommendations	Delayed	Task is delayed due to delay in deployment of database. Database deployed 6/11/08 and RB initiated data entry/data evaluation at that time.	3/1/08	6/1/08	4/30/08
8	Canyon Lake Bacteria TMDL	Board approval of Monitoring Program	Overdue	RB staff has been working with stakeholders to finalize monit plan. As of 6/30/08, stakeholders continue to finalize monit plan. Therefore this task will be carried over to FY 08-09.	1/1/08	2/1/08	4/30/08
8	Newport Bay Watershed Rhine Channel TMDLs	Project Plan	Delayed	This task has been started, however, we are too short-staffed to complete at this time. Preparation of Newport OCs TMDLs admin record to State Board is a higher priority.	7/1/07	1/1/08	2/29/08
8	Newport Bay Watershed Organochlorine Compounds TMDL	Admin. Rec. submitted	Delayed	This task has not been completed due to lack of staff and work on other priority TMDLs. Time has been committed to complete and submit admin record to SB.	9/1/07	10/1/07	2/29/08
8	Big Bear Lake Mercury TMDL	CEQA Scoping Meeting	Delayed	Staff determined the need to collect additional Lake water samples in order to evaluate ambient Hg concentrations against CTR. Sampling has been initiated.	7/1/07	NULL	2/29/08
8	Big Bear Lake Mercury TMDL	Final Project Report	Delayed	Staff determined the need to collect additional Lake water samples in order to evaluate ambient Hg concentrations against CTR. Sampling has been initiated.	3/1/08	NULL	6/30/08

## Over Due Task Report

Reg.	Project Name	Deliverable Name	Status	Comment	Plan Start Date	Actual Start Date	Plan End Date
8	Big Bear Lake Mercury TMDL	Document(s) sent to Peer Reviewers	Delayed	Staff determined the need to collect additional Lake water samples in order to evaluate ambient Hg concentrations against CTR. Sampling has been initiated.	2/1/08	NULL	4/30/08
8	Big Bear Lake Mercury TMDL	Preliminary Report	Delayed	Staff determined the need to collect additional Lake water samples in order to evaluate ambient Hg concentrations against CTR. Sampling has been initiated.	7/1/07	NULL	1/31/08
8	Lake Elsinore Watershed Nutrient TMDL	TMDL Task 6 - On Site Disposal Systems Management Plan	Delayed	Task completion is pending SB adoption of septic system regulations.	1/1/08	NULL	5/31/08
8	TMDL Program Management	FY '08-09 TMDL Workplan	Overdue	FY 08-09 workplan will be completed once budget is finalized.	1/1/08	1/1/08	6/30/08
8	Big Bear Lake Watershed Nutrient TMDL	TMDL Task 4 - Monitoring Plan	Overdue	Nov. 30, draft plan submitted. RB staff reviewed draft plan and is awaiting revised plan that will be scheduled for RB approval tentatively in July '08 and Sept. '08.	10/1/07	11/1/07	1/31/08
8	Big Bear Lake Watershed Nutrient TMDL	TMDL Task 2 Review/revise Existing WDRs	Delayed	Stormwater staff have delayed revision of the MS4 Permit. TMDL staff have initiated coordination activities; however, Stormwater staff don't anticipate MS4 Permit adoption 'till FY 08-09.	10/1/07	3/1/08	3/31/08
8	Lake Elsinore Watershed Nutrient TMDL	TMDL Task 7.1, 7.2 - MS4 DAMP and WQMP Revision	Delayed	Stormwater staff have delayed revision of the MS4 Permit. TMDL staff have initiated coordination activities; however, Stormwater staff don't anticipate MS4 Permit adoption 'till FY 08-09.	12/1/07	NULL	6/30/08
8	Prado Area Streams Pathogen TMDL	TMDL Task 1 - Review/revise WDRs	Delayed	Stormwater staff have delayed revision of the MS4 Permit. TMDL staff have initiated coordination activities; however, Stormwater staff don't anticipate MS4 Permit adoption 'till FY 08-09.	8/1/07	1/1/08	2/29/08
8	2008 303(d) List Update	Database	Delayed	Task is delayed due to delay in deployment of database. Database deployed 6/11/08 and RB initiated data entry/data evaluation at that time.	2/1/08	6/1/08	4/30/08
8	2008 303(d) List Update	Regional Board Workshop	Delayed	Task is delayed due to delay in deployment of database. Database deployed 6/11/08 and RB initiated data entry/data evaluation at that time.	4/1/08	NULL	6/30/08
9	NASSCO and Southwest Marine	Response to Public Comments	Delayed	Project in Mediation as of June 9, 2008.	5/1/07	NULL	6/30/08
9	Mouth of Chollas Creek	Peer Review Request Submitted to State Board	Not Started	This task has been delayed until Dec 2008. A new task has been entered for FY 08/09.	5/1/08	NULL	5/31/08
9	Bacteria Impaired Waters I (creeks and beach shorelines)	CEQA & DFG Notices filed	Overdue	Request for No Effect Determination sent in 12/07 and accepted by DFG. Notice of Determination will be sent upon OAL approval.	6/1/08	12/1/07	6/30/08
9	Chollas Creek Metals	CEQA & DFG Notices	Not Started	This task replaced by Task no. 6393.	7/1/07	NULL	6/30/08
9	Mouth of Chollas Creek	Public Workshop	Not Started	This task has been delayed until Summer 2008. A new task was entered for FY 08/09.	4/1/08	NULL	5/31/08
9	Mouth of Chollas Creek	Final Preliminary Project Report	Overdue	This task has been delayed until Dec 2008. A new task was entered for FY 08/09.	7/1/06	2/1/07	4/30/08
9	Bacteria TMDL for Mission Bay	Project Definition	Delayed	Due date 06/06. Direction Change. State Board delisted in 2006. EPA relisted in 2008. It will be reprioritized in a future workplan.	10/1/04	10/1/04	6/30/08

### Over Due Task Report

Reg.	Project Name	Deliverable Name	Status	Comment	Plan Start Date	Actual Start Date	Plan End Date
9	7th Street Channel	Public Workshop	Not Started	This task has been delayed until Summer 2008. A new task 6563 was entered for FY 08/09.	4/1/08	NULL	5/31/08
9	7th Street Channel	Final Preliminary Project Report	Overdue	This task has been delayed until Dec 2008. A new task 6574 was entered for FY 08/09.	11/1/05	2/1/06	4/30/08
SB	2008 Section 303(d) List Development	Staff comments on draft fact sheets	Not Started	Work will be delayed because key staff are on 6 mo leave of absence.	3/1/08	NULL	6/30/08
SB	2008 Section 303(d) List Development	This work in being completed under an EPA contract with Tetra Tech.	Overdue	Tetra-Tech is making final adjustments to the database, all major work is completed.	7/1/07	3/1/07	6/30/08

## **North Coast Regional Water Board TMDL Program Fiscal Year 2007 – 2008 Accomplishments, Initiatives, and Challenges**

This summary identifies those accomplishments, initiatives and challenges of the North Coast Regional Board's TMDL Program for fiscal year 07/08, with an emphasis on the accomplishments and initiatives that are not represented in the End of Year Report generated by Planner Tracker.

### **TMDL Approvals**

In December 2007 US EPA established the Lower Eel River TMDLs for Sediment and Temperature, and the Mad River TMDLs for Sediment and Turbidity. US EPA led the development of these TMDLs; Regional Board staff provided critical technical assistance and review of draft work products.

### **TMDL Implementation**

Region 1 is actively and successfully implementing the approved TMDLs for the Shasta, Scott, Salmon, and Garcia Rivers, devoting nearly 3 PYs to this effort.

**Garcia River:** Important progress continues in the Garcia River, including extensive indicator of biologic integrity (IBI) and effectiveness monitoring, coordinated with land owners and The Nature Conservancy.

**Salmon River:** Productive discussions continue with USFS Klamath National Forest regarding development of a permitting/compliance mechanism for the Salmon and Scott River TMDLs.

**Scott and Shasta Rivers:** Significant progress has been made in implementation of the Shasta and Scott TMDLs, gaining critical buy-in from key stakeholders. Key implementation highlights include:

- Finalization of the Scott River Groundwater Study Plan and initiating monitoring.
- Close coordination with Timber Division staff, CDFG, and CDF/CalFire re implementing TMDL shade allocations through timber harvest plan requirements.
- Establishing Moffett Creek Watershed Workgroup to address sediment controls.
- Establishing an Environmental Task Force in cooperation with Siskiyou County.
- Establishment of working groups: Shasta River Riparian Working Group, Water Trust Work Group, Ranch Plan Development Group, CDFG Coho Recover Plan Capacity Building.
- Managing Water Board grant projects: Yreka Flood Control Project, Araujo Dam reconstruction, Shasta Valley Water Association dam reconstruction, Tailwater reduction project.

In addition, staff completed the final Work Plan to Control Excess Sediment in Sediment-Impaired Watersheds, addressing implementation of all EPA approved sediment TMDLs. Given current funding levels, initiation of implementation activities in these sediment impaired Waterbodies will be limited and on a project-by-project basis.

### **TMDL Development**

#### **Klamath River TMDLs**

Key progress was made on Klamath River water quality modeling tasks this year.

In addition to completing these critical TMDL development tasks, staff worked on:

- Active participation with the Klamath Blue Green Algae (BGA) Work Group, providing input on: 1) scientific studies, funded in part by the State Board, to manage BGA water quality problems; and 2) monitoring for BGA and toxins; 3) developing language for public health advisories; and 4) posting advisories.
- Assisting US EPA staff on assessment for decision whether to add the BGA toxin *Microcystin* to the 303(d) List for the Klamath reservoirs in California.

- Providing information to State Board representatives negotiating with PacifiCorp regarding possible settlement associated with the Klamath dams (though the Regional Water Board is not a party to those negotiations).
- Providing comments to the Federal Energy Regulatory Committee regarding the relicensing of the Klamath River dams; and providing technical support to State Board Division of Water Rights staff in analysis of the impacts of the Klamath dams on water quality, pursuant to consideration of issuing PacifiCorp a 401 Water Quality Certification for a new 50-year license.
- Continued close coordination with Oregon Department of Environmental Quality and US EPA 9 and 10 in developing the TMDLs, and consultation with Klamath Tribes and federal wildlife agencies.

**Laguna de Santa Rosa TMDLs – Key highlights:**

- Benefitting from the modeling expertise of a new TMDL staff, Steve Butkus, initiated development of a water quality model for the Laguna de Santa Rosa watershed.
- Working with Core Regulatory Unit staff, established a nutrient offset program for the City of Santa Rosa, an important early implementation accomplishment.
- Working collaboratively with key stakeholders, including University of California Cooperative Extension, Sotoyome and Gold Ridge Resource Conservation Districts, City of Santa Rosa, Laguna Foundation, and Western United Dairymen Association.

**Humboldt Bay – Dioxin Listing**

Initiated productive conversations with Humboldt Bay Harbor District, Humboldt Bay Keeper, Humboldt State University, and San Francisco Estuary Institute regarding establishment of a coordinated process to understand dioxin conditions and work towards remediation in Humboldt Bay.

**Elk River and Freshwater Creek TMDLs**

Key accomplishments: 1) Coordination of a stakeholder workshop, and participation in the Humboldt Bay Ecosystem Based Management advisory committee; 2) development of WDRs and Cleanup and Abatement Orders for Pacific Lumber Company that serve as early implementation measures to control sediment discharges; and 3) managing a Water Board grant to implement the Humboldt Bay Watershed sediment reduction, monitoring and salmon habitat improvement program.

Key challenges: 1) On-going and new litigation by Pacific Lumber Company against Regional and State Boards, requiring extensive staff time to defend the lawsuit; 2) delays in contractor completion of deliverables.

**Significant Challenge**

The death of our division chief and mentor, Dr. Ranjit Gill, whose position has not been filled, has been a significant challenge to our TMDL Program. In particular, progress on the region wide Basin Plan amendment for sediment has been stalled, as the lead staff person on this project, Holly Lundborg, is serving as acting Watershed Management Division chief.

San Francisco Bay Regional Water Board TMDL Program  
Fiscal Year 2007-2008  
Accomplishments and Challenges

TMDL/standards development and adoption

**Successes and accomplishments:** This year the San Francisco Bay Water Board adopted an extremely complex TMDL for PCBs in San Francisco Bay. State Board approved our Bay-wide mercury TMDL for mercury, TMDLs for pathogens in the Napa River and Sonoma Creek watersheds, site-specific objectives for cyanide in the Bay, and after a long wait, the Long Term Management Strategy for dredging.

At the turn of the fiscal year, a number of TMDLs are in the late development stages: a pathogen TMDL for Richardson Bay, a sediment TMDL and habitat enhancement plan for the Sonoma Creek watershed, a TMDL for mercury in the Guadalupe River watershed (one of the main contributors of mercury to San Francisco Bay). Our Board has held a preliminary “testimony hearing” for each of these TMDLs. In addition, development of a TMDL for selenium in North San Francisco Bay segments is also underway, as is work on a sediment TMDL for two coastal San Mateo County watersheds, Butano and Pescadero creeks. The selenium TMDL has made significant progress in establishing a technical advisory committee and a technical review committee to involve stakeholders in the TMDL development. In addition, two significant technical memoranda were completed, a selenium toxicological assessment, and data summary and source analysis.

A significant level of work was conducted on the development of the 2008 303(d) list and 305(b) integrated report. The work included the evaluation of all SWAMP data, as well as data submitted by the public, and the preparation of fact sheets to support the water body assessments.

**Challenges:** Our commitments for the year included adoption of TMDLs for pathogens in Richardson Bay, mercury in the Guadalupe River watershed, and sediment in Sonoma Creek, as well as PCBs in San Francisco Bay. The June 2008 meeting of the Board was postponed to July, thus postponing consideration of some TMDLs into the next fiscal calendar. The Richardson Bay TMDL is on the Board’s agenda for consideration on July 9, 2008. The Sonoma sediment TMDL and the Guadalupe River mercury TMDLs have also been postponed. The regulatory analysis section of the Sonoma sediment TMDL and habitat enhancement plan is now being revised to be consistent with comments received by the State Board on the sediment TMDL for the Napa River watershed. The Guadalupe River watershed TMDL for mercury received extensive comments from stakeholders and will be considered for adoption at the August 2008 Board meeting.

This Water Board is also facing new challenges from stakeholders on the CEQA analyses that are required for TMDLs. Staff is spending significantly more time preparing our substitute environmental documentation and responding to lengthy comments from stakeholders on CEQA related issues and other technical issues. With finite staff resources, this is likely to impact TMDL adoption schedules in the future.

## Initiatives and TMDL implementation

We are pleased to report that initiatives of several divisions in our agency are advancing implementation, and early implementation, of TMDLs. We continue to work on implementation of the San Francisco Bay mercury TMDL. The Water Board issued a NPDES watershed permit for all wastewater dischargers in the region to implement mercury control and monitoring requirements for these dischargers. We also made significant progress on the development of the Municipal Regional (Phase I) Stormwater Permit to implement mercury and PCBs TMDL requirements for all stormwater dischargers in the region and are working with State Board to include specific TMDL implementation actions in the statewide Caltrans permit.

We also continue to work on a number of special studies required by the mercury TMDL. These include a study completed this year requiring wastewater dischargers to monitor and report concentrations of methylmercury in effluent. We are managing several Proposition 13 grants exploring the role of wetlands in mercury cycling and incorporation into the food web and identifying effective best management practices to control mercury and PCBs in urban runoff. We have also initiated a mercury investigation strategy through the Regional Monitoring Program for Trace Substances to identify where mercury in the Bay is more likely to undergo methylation and become incorporated into the food web. If successful, we would be able to focus regulatory effort on key sources and regions of the Bay impacted by mercury and possibly accelerate achievement of TMDL goals.

This past year, a significant level of effort went into the development of a waiver of waste discharge requirements for grazing operations in the Tomales Bay watershed, including extensive public participation efforts. This waiver will also serve as a template for a region-wide grazing waiver program. The waiver is on the Board's agenda for consideration in July 2008. Meanwhile, work also progresses on a WDR waiver program for vineyards and this work will continue into the next fiscal year.

**Central Coast Regional Water Board TMDL Program**  
Fiscal Year 2007 – 2008  
Accomplishments and Challenges

**Accomplishments**

Staff presented three TMDLs to the Central Coast Water Board for approval. All three TMDLs were adopted by the Central Coast Water Board, representing 100% of the TMDL approval commitments. Staff developed corresponding administrative records and forwarded them to the State Water Resources Control Board (State Board) to begin the process of State Board Approval.

Staff has continued to allocate TMDL resources to the implementation of the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Agricultural Waiver). The Agricultural Waiver program is a success story in the Central Coast Region insofar as there is over 90% enrollment of the nearly 2500 growers operating in the Region. Growers are conducting implementation actions to achieve water quality objectives and are engaged in a cooperative monitoring program to gauge success at achieving these objectives, and therefore TMDLs. TMDL Staff has supported and utilized this regulatory tool to implement several TMDLs, conduct early implementation in many listed water bodies, and will continue to do so in the near and distant future.

TMDL staff in the Central Coast Region conducts watershed assessments in the development of TMDLs; the bulk of this work is done by Central Coast Water Board TMDL staff, not by contractors. The resulting in-house, site-specific, knowledge has been useful to other efforts in the Central Coast Region, e.g. encouraging low-impact-development (LID), which will have far-reaching positive effects on water quality in the Region. We anticipate that implementing LID will not only help reduce the extent of impaired waters, but could also prevent future impairment as the human population in Central Coast Region continues to increase.

Staff developed a plan to locate and engage multiple responsible parties of non-point source discharges identified in approved TMDLs. The responsible parties have been allocated load allocations in approved TMDL implementation plans. Staff will begin implementing the plan in fiscal year 2008-2009. It is likely the plan approach, when refined, will help us better address the multiple sources of non-point sources of pollution in approved and future TMDLs.

TMDL staff worked with other program staff in the Central Coast Region to develop implementation and assessment actions consistent with the Central Coast Water Board's Vision of Healthy Watersheds and corresponding measurable goals. Staff will assess success towards achieving the Vision by tracking measurable goals related to healthy aquatic habitat, sustainable land management and clean groundwater. Many of the actions implemented will address problems associated with impaired waters, whether a TMDL is currently developed or not.

## **Challenges**

Staff has identified urban storm water as a contributor to impairment in many listed water bodies. Storm water in the Central Coast Region is largely regulated through enrollment in the Phase-II General Permit for Storm Water, yet only a few municipalities have been enrolled, to date. Consequently, some TMDL-required implementation actions are pending Phase-II enrollment in the General Permit for Storm Water. Additionally, staff has developed implementation language for responsible parties predicted to be enrolled in the Phase-II General Permit for Storm Water in the future, not knowing when the responsible party will actually be enrolled. Staff and management have addressed this problem by increasing staff resources (a portion originating from TMDL resources) toward the Phase-II enrollment. The increased staff resources will result in an increased enrollment rate. The approach will hasten implementation of approved TMDLs relying on the Phase-II permit, and will also produce early implementation actions in areas where TMDLs are pending or not yet developed.

Staff has been challenged to complete all the tasks identified in the 2007-2008 work plan. Obstacles to completing all the tasks include TMDL staff vacancies, the disparity between staff resources available and those needed to complete the 303(d) list update tasks, miscalculation of the time required to complete some tasks, and time inefficiencies stemming from personnel issues. Staff has addressed these challenges through various means, which are reflected in the 2008-2009 work plan.

## Los Angeles Regional Water Board TMDL Program

Fiscal Year 2007 – 2008

### Accomplishments and Challenges

The Los Angeles Region TMDL section maintained an efficient TMDL development schedule this year which included adoption of TMDLs for trash, nutrients, salts, bacteria and metals. The Regional Board adopted the Los Angeles River Trash TMDL in August, revision of the Los Angeles River and Ballona Metals TMDL in September, the Calleguas Creek Salts TMDL in October, the Harbor Beaches of Ventura County Bacteria TMDL in November, Machado Lake Nutrient TMDL in May and Malibu Creek Trash TMDL in May 2008. Staff has issued public notices and all documentation for the Colorado Lagoon Pesticides TMDL. The Regional Board also addressed Subdividing Reach 4 of the Santa Clara River into two reaches which was adopted by the Regional Board in November.

Additionally, staff is actively developing TMDLs for ocean debris, toxic sediments, historic and current pesticides and algae. Several WQS are in development including WER for Metals in the Inland Surface Waters of LA & Ventura County, Revision of WLAs for Calleguas Creek Nitrogen, and Reconsideration of the Upper Santa Clara River Chloride Implementation Plan and Revision of Chloride WQ objectives.

In addition to the development of new TMDLs, the Regional Programs section has reworked three TMDLs that were previously adopted by the Regional Board to respond to CEQA challenges. The Los Angeles Region has continued to consider approaches for developing TMDL allocations for air deposition. In May 2007, the Regional Board sent 13267 data requests to the top Los Angeles region air emitters of copper, mercury, nickel and for data relating to the fate and transport of metals. Regional Board staff is reviewing submittals and will be evaluating the potential effects of these air emissions on water quality. While a great deal of work remains to be done to properly account for the many sources of air emissions, the Regional Board intends to address metals, with allocations or a schedule to develop allocations, in the upcoming 09/10 Dominguez Channel and Los Angeles and Long Beach Harbors TMDL.

The Malibu Creek trash TMDL continued the approach developed last year which addressed non point sources of trash. The Regional Board developed a “minimum frequency of assessment and collection” (MFAC) program for each of the TMDLs. The MFAC Program includes a proposed suite of structural or nonstructural BMPs and a minimum frequency of trash assessment and collection that includes manual pickup of all the trash found in the water and along the shoreline or channel such that the trash does not accumulate in amounts that impair beneficial uses or cause nuisance.

A significant challenge to the TMDL section is management of the complex implementation schedules included in the adopted TMDLs. TMDL schedules require work plans, implementation plans and compliance reports and consultation between regional board staff and the regulated agencies and municipalities. In addition to this interaction, some implementation actions need to return to the Regional Board for decision. Last year, TMDL staff teamed up with staff of the Municipal Stormwater Unit to bring before the Board two reopeners of the Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit to incorporate summer dry weather waste load allocations (WLAs) for bacteria at beaches along Santa Monica Bay and in Marina del Rey Harbor. Based on these permit reopeners, TMDL staff developed twenty-nine notices of violation (NOVs) that were sent to Los Angeles County and cities who are not yet in compliance with the dry weather bacterial standards at Santa Monica Bay beaches. TMDL staff is currently reviewing responses to the NOVs.

## Central Valley Regional Water Board TMDL Program

### Fiscal Year 2007 – 2008 Accomplishments and Challenges

**TMDL Development: Successes** – The Regional Board adopted and received US EPA approval of non-regulatory TMDLs addressing pathogens in Stockton urban waterbodies, which are implemented through the City of Stockton's stormwater NPDES permit. Staff completed the draft Project Plan for the Central Valley Organochlorines TMDL. Staff completed numerous Central Valley mercury loading studies that will provide the basis for future TMDLs. The Diazinon and Chlorpyrifos TMDL for the Sacramento and Feather Rivers was approved by the State Water Board and Office of Administrative Law. Notable progress was made on four elements which help form the foundation for the Central Valley Pesticide TMDL. Public review drafts of the Pesticide Relative Risk Report and the Streams and Aquatic Life Use report were released for public comment. Considerable progress was also made on finalizing and responding to comments on these reports and the Pesticide Criteria Development Methodology.

**Challenges** – Active litigation by two parties continues on the San Joaquin River Salt and Boron TMDL and the San Joaquin River Dissolved Oxygen TMDL. Progress on the Upstream San Joaquin River Salt and Boron TMDL has been delayed due to staff turnover, complexities of the technical issues, and contracting problems. The Delta mercury Amendment continues to be a major challenge since it is extremely complicated and controversial. The hearing process has started but will not be continued until staff works with the numerous stakeholders through a facilitated stakeholder process to address their concerns. The Pesticide TMDL unit has been without a senior since September, which has caused some delays and reduced available staff resources. Many factors delayed the completion of the Central Valley Pesticide TMDL pesticide criteria derivation methodology, including UCD staff turnover, delays in a statistical consultation, and the amount of stakeholder concern. Given the broad scope of this amendment and number of stakeholders involved, we are also facing the challenge of balancing the need to have what will be considered an adequate stakeholder process with the need to keep moving forward.

**TMDL Implementation: Successes** – The San Joaquin River Dissolved Oxygen Upstream Studies draft Final Study Report was received, providing results on an extensive three year study investigating source and fate of oxygen demanding substances upstream of the deep water ship channel (DWSC). This study, in conjunction with another proposed study in the DWSC, is required by the TMDL and will help develop final load allocations for the DO TMDL. For the San Joaquin River Salt and Boron TMDL (Vernalis), efforts are underway to establish a Management Agency Agreement (MAA) with the US Bureau of Reclamation. A draft MAA is scheduled to be heard by the Board in July 2008. In the Cache Creek watershed, the Abbott and Turkey Run mercury mines were remediated, resulting in the stabilization of an estimated 20,000 pounds of mercury. Staff completed an inventory of mercury sources in the upper Cache Creek watershed and will begin to work with agencies to reducing mercury loading from these areas. At Clear Lake, the responsible agencies are drafting a plan to evaluate nutrient loads from watershed sources. TMDL staff is working with NPDES, storm water, and the Irrigated Lands Regulatory Program to ensure TMDL monitoring and implementation requirements are included in permits and waivers. Pesticide requirements also address additive toxicity and potential effects of replacement products.

Challenges – clarity of roles/responsibilities for implementation of TMDLs/Basin Plan Amendments is still being worked out internally. Amendments/TMDLs often require additional work by non-TMDL staff that has not been planned or budgeted.

**2008 Integrated Report: Successes** – Regional Board staff has implemented a system that organizes the screening of data from numerous sources, fact sheets, and potential changes to the 303(d) list. Using this system over 1000 assessments of potential 303d list changes have been completed this year, out of approximately 1400 needed.

Challenges – The amount of new data, number of potential new listings, and number of waterbodies involved, as well as levels of potential controversy, and lack of clear evaluation guidelines for many constituents continue to make this project challenging and resource intensive.

## **Lahontan Regional Water Board TMDL Program**

Fiscal Year 2007 – 2008

### **Accomplishments and Challenges**

#### **TMDL Development**

##### ***Highlights***

- Lake Tahoe Nutrients and Sediment TMDL – With \$2.3M from federal grants, Board staff continued work on several three-year contracts and have produced several TMDL documents: 1) Draft TMDL Technical Report, 2) Pollutant Load Reduction Opportunity Report, 3) Integrated Water Quality Management Strategy Report, and 4) Charting the Course to Clarity (a short, easy-to-read, and pictorial summary of the technical report and the pollutant reduction opportunities). Contract work commenced on a feasibility level study of Water Quality Trading and the federal grant work also included a half-time TMDL Science Advisor from the University of California at Davis. UC Davis modelers completed additional runs of the Lake Tahoe Clarity Model for predicting the needed source load reduction to achieve the Lake clarity objective and helped Board staff propose a reasonable interim clarity target that could be achieved within the first 15-20 years of TMDL implementation. UC Davis modelers and contracted consultants completed additional runs of the Lake Clarity Model and the Lake Tahoe Watershed Model to help inform development of implementation plan strategies. Board staff hosted three public workshops and numerous meetings with individual stakeholders to inform the public about the TMDL science, while answering technical questions and addressing concerns about possible policy implications.
- Truckee River Sediment TMDL – The Regional Board adopted the Truckee River Sediment TMDL, including sediment listings for two other listed waters in the watershed, Gray Creek and Bronco Creek.
- Blackwood Creek Sediment TMDL – The Regional Board adopted the Blackwood Creek Sediment TMDL, which concluded the US Forest Service's existing restoration plan for the creek will result in achieving the TMDL objectives. As a result, a Basin Plan amendment is not required to implement the TMDL and the TMDL was forwarded directly to USEPA for its acceptance.

##### ***Challenges***

- Lake Tahoe Nutrients and Sediment TMDL – UC Davis researchers determined that fine sediment particles are the dominant stressor to Lake Tahoe's clarity loss. These fine particles, which are much smaller than the diameter of a human hair, primarily come from urban stormwater runoff. Sediment particles this small are a problem unique to Lake Tahoe and there are no state-of-the-art technologies widely available to effectively remove all the fine sediment particles.

#### **TMDL Implementation**

##### ***Highlights***

- Lake Tahoe Clarity Nutrients and Sediment TMDL – Board staff continued to work with CalTrans, and with local county and city building departments on developing and implementing Storm Water Management Plans that will be consistent with the TMDL.

- Squaw Creek and Truckee River Sediment TMDLs – Placer County and the Town of Truckee have been implementing sediment load reduction projects under the Municipal Stormwater Permit Program to comply with the TMDLs.
- Heavenly Valley Creek Sediment TMDL – Heavenly Ski Resort continued retrofit of the ski area runs and its paved parking lot with BMPs to reduce the sediment load to the watershed and to the creek.

### **Challenges**

- Lake Tahoe Clarity Nutrients and Sediment TMDL – The fine sediment particle load, that is the dominant cause of the clarity loss, is primarily coming from urban stormwater, re-entrained dust, and soil erosion. Some advanced technology road sweepers are showing promise in removing fine sediment particles from paved roads. UC Davis researchers modeled that about one-third of the clarity loss could be restored within twenty years if more than one-third of the fine sediment particles in urban stormwater runoff are effectively removed. The contracted consultants estimated that an aggressive and innovative approach removing the fine sediment particles from urban stormwater will cost about \$100 million per year, basin-wide, to restore one-third of Lake Tahoe's clarity within 20 years.

**Colorado River Basin Regional Water Board TMDL Program  
Fiscal Year 2007 – 2008  
Accomplishments and Challenges**

*The Salton Sea Ecosystem Restoration Program Led by the Department of Water Resources and Department of Fish and Game*

Over the past three and half years, Regional Board staff has been participating in several technical and stakeholder meetings to assist the Secretary for Resources and his staff to analyze and select the Preferred Alternative for restoring the Salton Sea. The Preferred Alternative was selected and is being reviewed by the State Legislature. This restoration program will affect all TMDLs for this watershed. However, the longer the State delays the approval of the Preferred Alternative, the longer it takes the Regional Board to develop the Salton Sea TMDLs.

*Implementation of California Water Code Section 13269 for Agricultural Communities in Palo Verde and Coachella Valleys*

There is no longer a waiver of Waste Discharge Requirements for the discharge of agricultural runoff in Region 7. California Water Code (CWC), Section 13269 was enacted into law several years ago to require the Regional Board, in relevant part, to either:

1. Issue Waste Discharge Requirements (WDRs);
2. Adopt a conditional waiver of WDRs; or
3. Prohibit the discharge of agricultural runoff.

The implementation of CWC Section 13269 complements the TMDL efforts. The Imperial Valley farming community is covered with a conditional prohibition for silt that was adopted at the same time as the Imperial Valley Agricultural Drains Silt TMDL. Regional Board staff is working with the Palo Verde Irrigation District on a conditional prohibition for agricultural runoff in the Palo Verde Valley. This prohibition, when finalized, will address, in part, both DDT and Pathogen listings of the Palo Verde Outfall Drain. Also, there was an urgent need to bring both the Regional Board and the farming community in Coachella Valley in compliance with CWC Section 13269. The Coachella Valley farming community was informed by Regional Board staff that it would receive a 13269 credit for implementing monitoring requirements of the Coachella Valley Stormwater Channel Bacteria Indicators TMDL.

*Progress on Coachella Valley Bacteria Indicators TMDL*

On May 15, 2008, the Coachella Valley Agricultural Community submitted to the Regional Board a Quality Assurance Program Plan (QAPP) for early implementation monitoring of the Coachella Bacteria TMDL. The QAPP was reviewed and approved by USEPA R9 Quality Assurance Office. The monitoring will be conducted from July 2008 to June 2009.

### Long Term TMDL Implementation for the Agricultural Community in Imperial County

Regional Board staff has been conducting several meetings with Imperial County Farm Bureau, Imperial Irrigation District, and other impacted stakeholders to address implementation of all TMDLs in the Imperial Valley. Regional Board staff has also been managing grants related to this effort since 2003.

### Monitoring and Assessing the New River at the International Boundary

Regional Board staff has been conducting monthly monitoring activities on the New River at the International Boundary for about 10 years. Regional Board staff and Regional Board members in coordination with the US Section of the International Boundary and Water Commission have been participating in bimonthly tours in Mexicali, Mexico to survey and report water quality activities on the New River inside Mexico. Both monitoring activities and the tours provided the TMDL Program with valuable information in developing and implementing New River Dissolved Oxygen/Pathogens/Sediments/Trash TMDLs.

### New River Dissolved Oxygen TMDL

Regional Board management and USEPA are in negotiation on how to better address load allocations of this TMDL. This is the reason for not adopting the TMDL this year as scheduled in the workplan. Staff plans to present the TMDL for Regional Board consideration for adoption in the 2008-2009 fiscal year.

### Integrated 303(d)/305(b) List

Regional Board staff is entering the information into the California Water Quality Assessment Database in a format that is acceptable to the State Board. Regional Board staff is plans to submit the 303(d) list to the Regional Board in November 2008.

**Santa Ana Regional Water Board TMDL Program**  
**Fiscal Year 2007 – 2008**  
**Accomplishments and Challenges**

**TMDL DEVELOPMENT ACTIVITIES**

**Highlights**

Newport Bay Watershed Organochlorine TMDLs – The Regional Board adopted the highly controversial TMDLs on Sept. 14, 2007, even as additional public comments were submitted into the record. Although the stakeholders raised significant concerns regarding the TMDLs, an implementation approach was identified that provides for considerable stakeholder and expert participation, which might lead to changes to the TMDLs. Consequently, the stakeholders have already initiated many of the Implementation Plan tasks.

Newport Bay/San Diego Creek Selenium TMDLs – Board staff has been working closely with stakeholders on a selenium management plan that is expected to be the foundation of the TMDL implementation plan. Based on investigations conducted by the stakeholder group, recommendations for a site-specific objective for selenium are being developed. In addition, the stakeholder group has also offered to provide technical assistance, based on a scope of work prepared by Board staff, in order to complete certain elements of the TMDLs and requisite supporting documentation.

Big Bear Lake Mercury TMDL – During FY 2007-08, Board staff initiated a monitoring program in Big Bear Lake and its tributaries. The purpose of the monitoring program is to evaluate in-lake mercury levels against the mercury CTR criteria and to determine mercury loads to Big Bear Lake from the surrounding watershed. Tetra-tech, through a contract with USEPA, is also conducting model analysis to assist Board staff in determining appropriate load reductions needed to meet both the OEHHA fish tissue guidelines and the CTR criteria.

**Challenges**

The Newport Bay Organochlorine TMDLs and selenium TMDLs are very complicated and controversial, requiring extensive staff resources to address stakeholder concerns about the targets, allocations and implementation.

Limited staff resources continue to be an issue. Staff losses have caused one staff person to assume the lead on both the Newport organochlorine and selenium TMDLs. In addition, TMDL staff oversees relevant grant projects that, at times, have resulted in staff redirection to work on meeting grant execution deadlines.

Finally, the lack of laboratory/analytical resources to conduct water quality sampling and analysis is an outstanding issue that prevents Board staff from initiating TMDL development activities in additional watersheds.

**TMDL IMPLEMENTATION ACTIVITIES**

**Highlights**

A major focus of the Santa Ana Region's TMDL program is the implementation of TMDLs that have been adopted and approved. The Regional Board continues to place high priority on ensuring that approved TMDLs are implemented and progress is made to restore impaired waterbodies. The majority of the Regional Board TMDL staff resources are currently being expended on TMDL implementation activities and oversight. In all watersheds where TMDLs have been adopted, staff works closely with the affected stakeholders, including attending meetings, providing comments on proposed implementation actions, overseeing monitoring program results and assisting stakeholders in securing funding for various projects.

**Challenges**

As with TMDL development challenges, limited staff resources, including loss of staff and re-direction of staff to other programs or priorities such as grant oversight, is the most significant challenge to tracking and ensuring that TMDLs are implemented.

One major challenge is the management of agricultural (Ag) discharges. Most of the Regional Board's adopted TMDLs require specific actions by the Ag operators/owners including load reductions, monitoring, etc, although there is no Ag regulatory program (e.g., waiver or WDRs) in place. Therefore, no regulatory mechanism is yet available to compel Ag operator compliance with TMDL provisions. An additional implementation challenge is ensuring that other affected Board programs (MS4, CAFOs, permitting, etc.) incorporate TMDL provisions into their regulatory programs.

**SAN DIEGO REGIONAL WATER BOARD TMDL PROGRAM**  
**Fiscal Year 2007-2008**  
**ACCOMPLISHMENTS and CHALLENGES**

**Accomplishments**

- The TMDLs for indicator bacteria for Beaches and Creeks in the San Diego Region were adopted by the San Diego Water Board on December 12, 2007. These TMDLs were adopted contingent upon the San Diego Water Board considering the Reference System/Natural Sources Exclusions Approach Basin Plan Amendment. This amendment was adopted by the San Diego Water Board on May 14, 2008. These actions addressed 21 water body-pollutant combinations.
- The TMDLs for indicator bacteria at Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay were adopted by the San Diego Water Board on June 11, 2008.
- Sediments in and around several shipyards in San Diego Bay are heavily contaminated with PCBs, PAHs, TBT and metals. In lieu of a TMDL, staff prepared a tentative Cleanup and Abatement Order (CAO) for the San Diego Water Board to consider issuing for the Shipyard Sediment Site. Due to considerable stakeholder response and likely litigation by multiple interested parties, the San Diego Water Board agreed to undertake a formal hearing process that including dividing Regional Board staff into two groups: the Advisory Team and the Cleanup Team. The interested parties have agreed to participate with the Regional Board in an intensive, 90 day mediated settlement effort regarding the clean up levels and allocations. The entire TMDL Unit is on the Clean Up Team and heavily engaged in the mediation process. The Cleanup Team successfully released the Revised Tentative CAO, Draft Technical Report, and electronic administrative record on April 4, 2008.
- In June 2007, the Regional Board approved the Monitoring Plan submitted by the San Diego Municipal Storm Water Copermittees in compliance with the CWC §13267 Investigative Order issued in 2006 by the Regional Board. The Investigative Order was issued to the dischargers to collect data to model the nutrients, bacteria, and sediment loads from seven watersheds draining to the Santa Margarita, Loma Alta, Buena Vista, San Elijo, Los Peñasquitos, Aqua Hedionda and Famosa lagoons. The one year monitoring program will cost approximately 7 million dollars, nearly all funded by the dischargers. The models are being developed under US EPA contract for Region 9 by Tetra Tech. It is worth noting, however, that the Tetra Tech contract was severely reduced for FY 08/09, which will significantly lengthen the time required for the Regional Board to prepare the TMDLs for adoption.

**Challenges and Response to Challenges**

- Personnel changes in the San Diego Regional Board TMDL and Water Quality Standards Units occurred as a result of attrition and office reorganization. Two experienced TMDL staff left the San Diego Water Board and two new seniors have been assigned to oversee the TMDL and Water Quality Standards Units. The repeated turnover in staff has delayed progress in ongoing projects to develop

TMDLs. The latest reorganization, however, offers the opportunity to more closely link the storm water and permitting units with the TMDL and Water Quality Standards Units. Both new seniors have extensive experience in the permitting and enforcement side of the Regional Board programs and plan to coordinate more closely with the storm water programs both within the Regional Board and with the municipal storm water permittees to advance and improve the Region 9 TMDL program.

- Inadequate personnel resources were available for the 2008 303(d) update. Staff has been reassigned from TMDL projects to work on the 303(d) update.
- To facilitate implementation of bacteria, nutrient, and sediment TMDLs, the Board adopted Ag Waivers that require enrollment, creation of monitoring coalitions, and the preparation of monitoring program workplans.