ADDRESSED

Assessment DATABASE

GA-1

TMDL Projects Adopted by Regional Boards

EPA Approved Implementation Plan

ALL HAVE Impl. Plans Per Kirk R.

Region	TMDL	Number of Listings	FY	Date of RB Adoption	Notes
1	Laguna de Santa Rosa ammonia and dissolved Oxygen	2	1994	5/95	
1	Stemple Creek nutrients and sediment	2	1997	12/97	RB approved and in implementation no SB approval.
1	Garcia River Sediment	1	2001	3/02	EPA Approval date
2	San Francisco Bay Nickel	1	2000	5-01	SSO
2	San Francisco Bay Copper	1	2001	5-02	SSO
3	Morro Bay Siltation	3	2001	5/02	1/20/2004
3	Las Tablas Creek - Nacimiento Reservoir Mercury	2	2002	11/02	SB staff and legal wanted revisions to implementation plan due to no responsible party due to history of recalcitrant discharger-currently proposed for Superfund priority list for mine clean up.
3	Morro Bay Pathogens	3	2002	5/03	1/20/2004
3	San Lorenzo River Nitrate	4	2002	9/02	1/14/2003
3	San Lorenzo River Sediment	4	2002	5/03	2/12/2004
3	Clear Creek-Hernandez Reservoir Mercury	2	2003	3/04	6/21/2004
4	East Fork San Gabriel River Trash	1	1999	10/99	
4	Ballona Creek Trash	1	2001	9/01	
4	Calleguas Creek Chloride	6	2001		RB drafted TMDL, established by EPA March 02
4	Los Angeles River Trash	7	2001	9/01	
4	Los Angeles River Watershed Lakes Trash	3	2001	9/01	
4	Santa Monica Bay Beaches Coliform dry weather	51	2001	1/02	Dry-Weather and Wet-Weather may be considered one TMDL. Listing did not differentiate between seasons.
4	Santa Monica Bay Beaches Wet Weather Bacteria	51	2001	12/02	
4	Calleguas Creek Nutrients	29	2002	10/02	
4	Santa Clara River Chloride Reach 3	1	2002	10/02,	Remanded by SB, Objective change BPA 11/03
4	Santa Clara River Chloride Reach 7 & 8	2	2002	10/02, 5/04	Remanded by SB, Revised approved by State Board 7/04
4	Los Angeles Harbor Beach Closures	2	2003	7/04	
4	Los Angeles River Nitrogen	33	2003	7/03	
4	Malibu Pathogens	12	2003	1/04	
4	Marina del Rey Pathogens	3	2003	8/03	

Check EPA APPROVAL

317

TMDL Projects Adopted by Regional Boards

Region	TMDL	Number of Listings	FY	Date of RB Adoption	Notes
4	McGrath Beach Coliform	1	2003	8/03	ACL
4	Santa Clara River Nitrogen	6	2003	7/03	
5	Grasslands Marsh Selenium	1	1996	96	Implemented using 96 BPA
5	Salt Slough Selenium	1	1996	96	Implemented using 96 BPA
5	San Joaquin River Selenium	1	1996	96	Implemented using 96 BPA
5	Clear Lake Mercury	1	2001	12/02	
5	Sacramento River Cadmium	1	2001	5/02	Implemented using existing programs
5	Sacramento River Copper	1	2001	5/02	Implemented using existing programs
5	Sacramento River Zinc	1	2001	5/02	Implemented using existing programs
5	Sacramento and Feather River Diazinon	2	2003	10/03	
6	Heavenly Valley Sediment	1	2001	9/01	SB approval date
6	Indian Creek Reservoir Phosphorus	1	2002	7/02	
7	Alamo River Sediment	1	2000	6/01	EPA Approval Date 6/02; Implementation Phase
7	New River Pathogen	1	2001	10/01	EPA Approval Date 8/02; Implementation Phase
7	New River Sediment	1	2001	6/02	EPA Approval Date 3/03; Implementation Phase
8	Santa Ana River Reach 3 Nutrients	1	1991	11/91	
8	Newport Bay & San Diego Creek Fecal Coliform	2	1998	4/99	
8	Newport Bay & San Diego Creek Nitrogen	4	1998	10/98	
8	Newport Bay & San Diego Creek Phosphorus	4	1998	10/98	
8	Newport Bay & San Diego Creek Sediment	3	1998	10/98	
8	Newport Bay Watershed Chlorpyrifos	4	2002	4/03	
8	Newport Bay Watershed Diazinon	4	2002	4/03	
9	Chollas Creek Diazinon	1	2001	6/02	
48	**Projects**	**220**	**Total 303(d) listings addressed**		

Reg	Title	Staff	Draft Review	Peer Rev?	RB Adopt	SB Rec'd	SB Action	To OAL	OAL Action	To EPA	EPA Action	Notes
2. Completed/approved amendments												
1	Garcia River Sediment TMDL	JEC		yes	5/98, 12/98 & 6/01	6/1/199 8/31/01	Approved 9/20/00 & 11/15/01	1/3/2001 resubm. 11/30/01	Approved 1/4/02	1/29/02	Approved 3/7/02	CCR sec 3904
2	So. of Dumbarton Cu & Ni WQ obj	JEC	rec. 3/8/02 ret.3/26/02	yes	5/22/02	7/24/02	Approved 10/17/02	11/1/02	Approved 12/17/02	1/9/03	Approved 1/21/03	CCR sec 3913
3	San Lorenzo River Nitrate SSO	LLT		yes	6/2/00	9/7/2000; 5/10/2001	Approved 11/15/01	12/28/01	Approved 2/13/02	3/8/02	Approved 8/28/03	CCR sec 3923
3	Morro Bay Pathogen TMDL	JEC	5/6/03	yes	Readopted 5/16/03	6/17/03	Approved 9/16/03	10/6/03	Approved 11/19/03	12/15/03	unknown 1/30/04	CCR sec 3924
3	Chorro & Los Osos Creeks, Morro Bay Siltation TMDL	LLT	reviewed 10/12/01	yes	5/16/03	6/27/03	Approved 9/16/03	10/17/03	Approved 12/3/03	12/30/03	unknown 1/30/04	CCR sec 3925 Note: need to rename in CCR-- reads as "regulatory provisions"
3	Update Ch.6 Monitoring & Surveillance	LLT	Rec. 8/26/02	no	12/24/02	5/22/03	Approved 9/16/03	11/6/03	Approved 12/22/03	12/30/03	NA	CCR sec 3926
3	San Lorenzo River Sediment TMDL	PZ	4/5/02	yes	Readopted 5/16/03	6/27/03	Approved 9/16/03	11/3/03	Approved 12/18/03	1/29/04	Approved 2/19/2004	CCR sec 3927
4	Santa Clara River Chloride TMDL	JEC	yes	yes	10/24/02	12/24/02	Remanded 2/19/03		11/15/04			
4	Remove MUN from two areas of groundwater basin	JJ	yes	no	11/2/98	unknown	Approved 02/18/99	5/11/99	Approved 02/09/00	NA	unknown	CCR sec 3932
4	San Gabriel Trash TMDL	JJ		no	10/28/99	4/1/00	Approved 6/15/00	7/12/00	Approved 9/8/2000	11/7/00	Approved 12/14/00	CCR sec 3933
4	Septic Tank Prohibition in Oxnard Forebay	GAF		yes	8/12/99	10/1/99	Approved 1/10/01	3/30/01	Approved 5/11/2001	NA	NA	CCR sec 3934
4	Los Angeles River Trash TMDL	JJ	yes	no	9/19/01	11/5/01	Approved 2/19/02	6/3/02	Approved 7/16/02	7/17/02	Approved 8/1/02	CCR sec 3935
4	Ballona Creek Trash TMDL	JJ	yes	no	9/19/01	11/20/01	Approved 2/19/02	6/5/02	Approved 7/18/02	7/18/02	Approved 8/1/02	CCR sec 3936
4	Bacteria Objective for REC-1 Waters	GAF	yes	no	10/25/01	3/22/02	Approved. 7/18/02	8/7/02	Approved 9/19/02	9/20/02	Approved 9/25/02	CCR sec 3937
4	Santa Monica Bay Bacteria Dry Weather TMDL	LLT	11/14/01	yes	1/24/02	6/25/02	Approved 9/19/02	10/28/02	12/9/02	12/19/02	unknown	CCR sec 3938 Note: still need EPA approval letter
4	Santa Monica Bay Bacteria Wet Weather TMDL	LLT	Reviewed 7/3/02	yes	12/12/02	1/10/03	Approved 3/19/03	4/10/03	Approved 5/19/03	6/2/03	6/19/03	CCR sec 3939
4	Update WQOs for ammonia	GAF	2/19/02	no	4/25/02	8/26/02	Approved 4/30/03	5/7/03	6/5/03	6/6/03	6/19/03	CCR sec 3939.1
4	Calleguas Creek Nitrogen TMDL	JJ	yes	yes	10/24/02	12/10/02	Approved 3/19/03 Res. 03-023	4/10/03	Approved 6/5/03	6/4/03	Approved 6/20/2003	CCR sec 3939.2

Reg	Title	Staff	Draft Review	Peer Rev?	RB Adopt	SB Rec'd	SB Action	To OAL	OAL Action	To EPA	EPA Action	Notes
2. Completed/approved amendments												
4	Authorization for compliance Schedules	JJ	7/25/00	no	1/30/03	4/15/03	Approved 06/18/03 as 2003-044	7/17/03	Approved 8/18/03	8/27/03	Approved 02/10/04	CCR sec 3939.3
4	Marina Del Rey bacteria TMDL	GAF	reviewed 7/21/03	no	08/07/03	9/15/03	Approved 11/19/03	12/18/03	Approved 2/2/04	2/10/04	Approved 03/23/04	CCR sec 3939.4
4	Santa Clara River Nitrogen TMDL	JJ	yes	yes	08/07/03	9/19/03	Approved 11/19/03	1/23/04	Approved 2/27/2004	3/5/04	Approved 03/18/2004	CCR sec 3939.6
4	Los Angeles River Nitrogen TMDL	JJ	no	yes	7/10/03	8/19/03	Approved 11/19/03	1/16/04	Approved 2/27/2004	3/5/04	Approved 03/18/2004	CCR sec 3939.7
4	Lower Santa Clara R Chloride	GAF	no	yes	11/6/03	12/17/03	Approved 02/19/04	3/29/04	Approved 05/06/04	5/17/04	Approved 06/09/04	CCR sec 3939.8
5	Clear Lake Mercury TMDL and WQOs	GAF	yes	yes	12/6/02	2/25/03	5/21/03	6/4/03	Approved 7/15/03	7/28/03	09/26/03 10/20/03	CCR sec 3945
5	Deer Creek pH and Turbidity	JJ	yes	yes	7/19/02	9/27/02	Approved 1/22/03	7/21/03	Approved 8/14/03	8/27/03	Approved 10/15/03	CCR sec 3944
5	Update language for SSJ and TL basin plans	PZ/ JEC	no	no	090/6/02 and 10/17/02	4/16/03	Approved 9/16/03	9/30/03	Approved 11/6/03	12/10/03	Approved 1/6/04	CCR sec 3946
5	Diazinon TMDL for Sacramento and Feather Rivers	GAF	yes	yes	10/16/03	1/27/04	Approved 04/22/04	5/4/04	Approved 06/09/04	6/25/04	8/11/04	CCR sec 3947
6	Remove MUN from Nine Saline Water Bodies	GAF	no	no	7/12/00	7/23/01	Approved 9/20/01	10/10/01	Approved 11/27/01	12/5/01	Approved 4/29/02	CCR sec 3952
6	Heavenly Valley Sediment TMDL	GAF	no	no	1/23/01	6/1/01	Approved 9/20/01	11/29/01	Approved 8/8/02	8/16/02	Approved 9/30/02	CCR sec 3953
6	Various Amendments	GAF	no	no	7/12/00	7/23/01	Approved 1/23/02	2/20/02	Approved 4/3/02	5/15/02	NA	CCR sec 3954
6	Indian Creek Phosphorus TMDL	GAF	yes	yes	7/24/02	11/1/02	Approved 1/22/03	2/28/03	Approved 4/14/03	4/23/03	Approved 7/01/03	CCR sec 3955
6	Prohibition Exempt's for Mojave Hus	GAF	yes	no	9/10/03	9/26/03	Approved 1/22/04	2/9/04	Approved 3/24/04	NA	NA	CCR sec 3956
7	Alamo River Sediment TMDL	JEC	public draft only	May '00	6/28/01	9/4/01; rev10/1/01	Approved 2/19/02	3/21/02	Approved 5/3/02	TMDL to EPA 5/17/02	Approved 6/28/02	CCR sec 3961
7	New River Pathogen TMDL	JEC	public draft only		6/28/2001 readopted 10/10/01	12/3/01	Approved 3/21/02	4/11/02	Approved 5/23/02	TMDL to EPA 6/6/02	Approved 8/14/02	CCR sec 3962
7	New River Sediment TMDL	JEC	3/8/02		6/26/02	8/19/02	Approved 11/19/02	11/27/02	Approved 1/13/03	1/23/03	Approved 3/31/2003	CCR sec 3963

Reg	Title	Staff	Draft Review	Peer Rev?	RB Adopt	SB Rec'd	SB Action	To OAL	OAL Action	To EPA	EPA Action	Notes
2. Completed/approved amendments												
7	Cathedral City Cove septic system prohibition	JEC	11/7/02	yes	11/13/02	2/12/03	Approved 5/21/03	6/4/03	Approved 7/15/03	NA	NA	CCR sec 3964
8	Newport Bay/ San Diego Creek Sediment TMDL	JJ			10/9/98		11/19/98	12/16/98	Approved 2/2/99	3/17/99	Approved 4/16/99	CCR sec 3973
8	Newport Bay/ San Diego Creek Nutrient TMDL	JJ			10/9/98		11/19/98	12/16/98	Approved 2/10/99	3/17/99	Approved 4/16/99	CCR sec 3974
8	Newport Bay Pathogen TMDL	JJ			4/9/99		7/15/99	11/12/99	Approved 12/24/99	1/31/00	Approved 2/28/00	CCR sec 3975
8	Compliance Schedule	LCR	no	no	5/19/00	7/19/00	11/16/00	5/18/01	Approved 6/28/2001	10/25/01	Approved 7/15/02	CCR sec 3976
8	Upper Newport Bay/San Diego Creek Diazinon & Chlorpyrifos TMDL	LLT	no	yes	4/4/03	7/30/03	Approved 10/16/03	11/25/03	Approved 1/5/04	1/27/04	Approved 2/13/04	CCR sec 3977
9	Changes to COLD/SPWN beneficial uses	GAF	no	no	3/12/97	5/5/97	9/18/97	12/4/97	Approved 10/9/2001	11/8/01	Approved 4/29/02	CCR sec 3988
9	WDR Waiver Policy	GAF	no	no	9/11/02	11/15/02	Approved 3/19/03	4/3/03 resubmit 7/18/03	Approved 8/19/03	NA	NA	CCR sec 3989
9	Chollas Creek Diazinon TMDL	GAF	10/01	yes	8/14/02	4/18/03	Approved 7/16/03	8/4/03	Approved 9/11/03	10/6/03	Approved 11/03/03	CCR sec 3989.1

Main | Help | Logout

Tuesday, November 09

Project Name: Santa Clara River Chloride
Project Type: TMDL
Board Name: Regional Board 4
Date Created: 03/24/2003
Priority: High
Start Fiscal Year: 2000 - 2001
Listing Year: 2002
Multiple Listings?: Yes
In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Santa Clara River Chloride

Description:

Scheduled Start Date: 06/01
Scheduled End Date: 06/16
Actual Start Date: 01/00
Actual End Date:
Delay **Project Status:** Overdue
Status Comment:

Details **Primary Contact:** Elizabeth Erickson
Project Manager

Pollutant Sources: Save Undo Change

=== Selected Sources Shown Above ===
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Agriculture-animal
Agriculture-grazing
Agriculture-irrigation tailwater

Details **Total Allocated Funding (PYs):** 4.20
(Contract Dollars): $0
Total Estimated Budget (PYs): 3.80
(Contract Dollars): $0

Details **Listing:** (1) Santa Clara Riv
(1) Santa Clara Riv

Sort Listing **Mode:** View

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propo TMD Compl
Regional Board 4	R	Santa Clara River Reach 7 (Blue Cut to West Pier Hwy 99 Bridge)	40351000	Chloride	Nonpoint/Point Source	High	9.4	2002	
Regional Board 4	R	Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Cyn Rd.)	40351000	Chloride	Nonpoint/Point Source	High	5.2	2002	

Not Reach 3.

Main | Help | Logout

Tuesday, November 09

Project Name: Santa Clara River Nitrogen
Project Type: TMDL
Board Name: Regional Board 4
Date Created: 03/24/2003

Priority: High
Start Fiscal Year: 2001 - 2002
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Santa Clara River Nitrogen

Description:

Scheduled Start Date: 09/01
Scheduled End Date: 11/10
Actual Start Date: 09/01
Actual End Date:
Delay **Project Status:** In Progress
Status Comment:

Details **Primary Contact:** Elizabeth Erickson
Project Manager

Details **Total Allocated Funding (PYs):** 3.90
(Contract Dollars): $0
Total Estimated Budget (PYs): 3.60
(Contract Dollars): $0

Details **Listing:**
(1) Brown Barranca
(1) Mint Canyon Cr
(1) Santa Clara Riv
(1) Santa Clara Riv
(1) Torrey Canyon
(1) Wheeler Canyo

Pollutant Sources: Save Undo Change

=== Selected Sources Shown Above ===
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Agriculture-animal
Agriculture-grazing
Agriculture-irrigation tailwater

Approved by USEPA 3/18/04

Sort Listing Mode: View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propo TMI Compl
Regional Board 4	R	Mint Canyon Creek Reach 1 (Confl to Rowler Cyn)	40351000	Nitrate and Nitrite	Nonpoint Source	High	8.1	2002	
Regional Board 4	R	Santa Clara River Reach 3 (Freeman Diversion to A Street)	40321000	Ammonia	Nonpoint/Point Source	High	31	2002	
Regional Board 4	R	Santa Clara River Reach 7 (Blue Cut to West Pier Hwy 99 Bridge)	40351000	Nitrate and Nitrite	Nonpoint/Point Source	Low	9.4	2002	
Regional Board 4	R	Brown Barranca/Long Canyon	40321000	Nitrate and Nitrite	Nonpoint Source	High	2.6	2002	
Regional Board 4	R	Wheeler Canyon/Todd Barranca	40321000	Nitrate and Nitrite	Nonpoint Source	High	10	2002	

Regional Board 1	R	Torrey Canyon Creek	40341000	Nitrate and Nitrite	Nonpoint Source	High	1.7	2002

Main | Help | Logout

Monday, November 15

Project Name: Newport Bay Watershed Diazinon/Chlorpyrifos TMDLs
Project Type: TMDL
Board Name: Regional Board 8
Date Created: 03/07/2003

Priority: High
Start Fiscal Year: 2002 - 2003
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Newport Bay Watershed Diazinon/Chlorpyrifos TMDL

Description:

Scheduled Start Date: 07/03
Scheduled End Date: 12/10
Actual Start Date: 10/03
Actual End Date:
Delay **Project Status:** In Progress
Status Comment: It is under implemer

Details **Primary Contact:** Doug Shibberu, Project Manager

Details **Total Allocated Funding (PYs):** 0.78
(Contract Dollars): $1,026,999
Total Estimated Budget (PYs): 0.50
(Contract Dollars): $1,026,999

Details **Listing:**
(1) Newport Bay, L
(1) Newport Bay, U
(1) San Diego Cree
(1) San Diego Cree

Pollutant Sources: Save Undo Change

=== Selected Sources Shown Above ===
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Agriculture-animal
Agriculture-grazing
Agriculture-irrigation tailwater

Sort Listing Mode: View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propo TMD Compl
Regional Board 8	B	Newport Bay, Lower	80114000	Pesticides	Agriculture, Contaminated Sediments	High	767	2002	
Regional Board 8	E	Newport Bay, Upper (Ecological Reserve)	80111000	Pesticides	Agriculture, Unknown Nonpoint Source	High	653	2002	
Regional Board 8	R	San Diego Creek Reach 2	80111000	Unknown Toxicity	Unknown Nonpoint Source	Low	6.3	2002	
Regional Board 8	R	San Diego Creek Reach 1	80111000	Pesticides	Unknown Nonpoint Source	High	7.8	2002	

Main | Help | Logout

Monday, November 15

Project Name: Newport Bay Watershed Diazinon/Chlorpyrifos TMDLs
Project Type: TMDL
Board Name: Regional Board 8
Date Created: 03/07/2003

Priority: High
Start Fiscal Year: 2002 - 2003
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

Tasks by Project

Select Phase: All Phases

Less Detail | Show History | Mode: View

				Scheduled		Actual		Estimated Budget		Allocated Funding		
ID	Task	Deliverable Type	Status	Start Date	End Date	Start Date	End Date	PYs	Contract Amount	PYs	Contract Amount	Co Pe
738	**Type:** Define Project **Description:**	**Type:** Project Definition **Description:**	**Status:** Cancelled **Comment:**	03/03	05/03			0.00	$0	0.00	$0	Dou Shit
739	**Type:** Other Regulatory Approval **Description:**	**Type:** Office of Administrative Law Review and approval **Description:**	**Status:** Completed **Comment:**	07/03	09/03	12/03	01/04	0.00	$0	0.01	$0	Dou Shit
741	**Type:** Other Regulatory Approval **Description:**	**Type:** USEPA Review and Approval **Description:**	**Status:** Completed **Comment:**	09/03	12/03	01/04	02/04	0.00	$0	0.01	$0	Dou Shit
742	**Type:** Other Regulatory Approval **Description:**	**Type:** CEQA Notice of Decision **Description:**	**Status:** Completed **Comment:**	09/03	12/03	01/04	03/04	0.00	$0	0.01	$0	Dou Shit
748	**Type:** Special Studies **Description:** Studies will be performed to analyze atm. deposition and chlorpyrifos mixing in Newport Bay	**Type:** Report **Description:** RB Staff will analyze: 1) Atmospheric deposition of chlorpyrifos to Upper Newport Bay; and 2) the adequacy of the chlorpyrifos freshwater target in protecting downstream saltwater beneficial uses.	**Status:** In Progress **Comment:**	10/03	12/04	10/03		0.15	$27,000	0.20	$27,000	Dou Shit
745	**Type:** Pesticide runoff management plan development	**Type:** Draft proposed plan **Description:**	**Status:** In Progress **Comment:**	10/03	12/04	10/03		0.15	$999,999	0.15	$999,999	Dou Shit

	Description:	Coordinated effort between Board staff and stakeholders. $1 mil. partial funding from Prop. 13										
744	**Type:** Revise Discharge Permits **Description:**	**Type:** Revised discharge permits with addition of compliance schedules **Description:** Include TMDL-based limits in WDRs. Incorporate compliance schedules if demonstrated to be necessary, and compliance would be required as soon as possible.	**Status:** In Progress **Comment:**	12/03	12/07	12/03		0.10	$0	0.30	$0	Dou Shit
746	**Type:** Pesticide runoff management plan implementation **Description:**	**Type:** Annual report **Description:** Regional Board staff will produce an annual report summarizing pesticide data and evaluating the runoff management plan effectiveness. Plan developed with $295,000 CWA 319.	**Status:** Not Started **Comment:**	12/04	12/10			0.10	$0	0.10	$0	Dou Shit
							Project Total	**0.50**	**$1,026,999**	**0.78**	**$1,026,999**	

Main | Help | Logout

Monday, November 15

Project Name: San Lorenzo River Nitrate TMDL
Project Type: TMDL
Board Name: Regional Board 3
Date Created: 12/02/2003

Priority: Low
Start Fiscal Year: 1999 - 2000
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
San Lorenzo River Nitrate TMDL

Description:
Implementation Only- TMDL Approved by USEPA in Jan 2003

Scheduled Start Date: 07/99
Scheduled End Date: 06/05
Actual Start Date: 07/99
Actual End Date:
Delay **Project Status:** In Progress
Status Comment:

Details **Primary Contact:** Katie McNeill
Lead Staff

Pollutant Sources: Save Undo Change

=== Selected Sources Shown Above ===
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Agriculture-animal
Agriculture-grazing
Agriculture-irrigation tailwater

Details **Total Allocated Funding (PYs):** 0.10
(Contract Dollars): $0
Total Estimated Budget (PYs): 0.10
(Contract Dollars): $0

Details **Listing:**
(1) Carbonera Cree
(1) Lompico Creek
(1) San Lorenzo Ri
(1) Shingle Mill Cre

Sort Listing Mode: View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propos TMD Comple
Regional Board 3	R	Lompico Creek	30412040	Nutrients	Septage Disposal	Low	4.5	2002	
Regional Board 3	R	Carbonera Creek	30412050	Nutrients	Nonpoint Source	Low	10	2002	
Regional Board 3	R	San Lorenzo River	30412022	Nutrients	Nonpoint Source, Septage Disposal	Low	27	2002	
Regional Board 3	R	Shingle Mill Creek	30412022	Nutrients	Septage Disposal	Low	1.6	2002	

Main | Help | Logout

Monday, November 15

Project Name: San Lorenzo River Nitrate TMDL
Project Type: TMDL
Board Name: Regional Board 3
Date Created: 12/02/2003

Priority: Low
Start Fiscal Year: 1999 - 2000
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

Tasks by Project

Select Phase: All Phases

Less Detail | Show History | Mode: View

ID	Task	Deliverable Type	Status	Scheduled Start Date	Scheduled End Date	Actual Start Date	Actual End Date	Estimated Budget PYs	Estimated Budget Contract Amount	Allocated Funding PYs	Allocated Funding Contract Amount	Co Pe
2301	**Type:** Define Project **Description:**	**Type:** Project Definition **Description:**	**Status:** Completed **Comment:**	07/99	08/99	07/99	08/99	0.00	$0	0.00	$0	
2302	**Type:** Evaluate Implementation Progress and TMDL Compliance **Description:** Review SC Co Progress implementing Nitrate Management Plan	**Type:** Progress Report **Description:**	**Status:** In Progress **Comment:**	07/04	06/05	07/04		0.10	$0	0.10	$0	Kat Mc
							Project Total	**0.10**	**$0**	**0.10**	**$0**	

GP-4

Main | Help | Logout

Tuesday, November 0

Project Name: Marina del Rey Pathogens
Project Type: TMDL
Board Name: Regional Board 4
Date Created: 03/24/2003
Priority: High
Start Fiscal Year: 2002 - 2003
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Marina del Rey Pathogens

Description:

Scheduled Start Date: 03/03
Scheduled End Date: 06/05
Actual Start Date: 03/03
Actual End Date:
Delay **Project Status:** In Progress
Status Comment:

Details **Primary Contact:** Rebecca Christmar
Project Manager

Pollutant Sources: Save Undo Change

=== Selected Sources Shown Above ===
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Agriculture-animal
Agriculture-grazing
Agriculture-irrigation tailwater

Details **Total Allocated Funding (PYs):** 0.91
(Contract Dollars): $0
Total Estimated Budget (PYs): 0.83
(Contract Dollars): $0

Details **Listing:** (1) Marina del Rey
(2) Marina del Rey

Sort Listing Mode: View

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propos TMDI Comple
Regional Board 4	B	Marina del Rey Harbor - Back Basins	40517000	High Coliform Count	Nonpoint Source	High	391	2002	
Regional Board 4	C	Marina del Rey Harbor Beach	40517000	Beach Closures	Nonpoint Source	High	.29	2002	
Regional Board 4	C	Marina del Rey Harbor Beach	40517000	High Coliform Count	Nonpoint Source	High	.29	2002	

INI DECISION MODULE

Main | Help | Logout

Monday, November 15

Project Name: Chollas Creek Diazinon
Project Type: TMDL
Board Name: Regional Board 9
Date Created: 02/20/2003
Priority: High
Start Fiscal Year: 2000 - 2001
Listing Year: 2002
Multiple Listings?: No

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Chollas Creek Diazinon

Description:
Diazinon is causing toxicity in Chollas Creek and causing the creek to exceed narrative water quality objectives. The creek was added to the 1996 303(d) list for toxicity. Chollas Creek is on the current 303(d) list for diazinon

Pollutant Sources: Save Undo Change

- Urban Runoff/Storm Sewers
- === Selected Sources Shown Above ===
- Acid Mine Drainage
- Agricultural Return Flows
- Agricultural Water Diversion
- Agriculture
- Agriculture-animal
- Agriculture-grazing

Scheduled Start Date: 08/00
Scheduled End Date: 03/99
Actual Start Date: 08/00
Actual End Date:
Delay **Project Status:** In Progress
Status Comment:

Details **Primary Contact:** James Smith Primary Contact

Details **Total Allocated Funding (PYs):** 0.17
(Contract Dollars): $0
Total Estimated Budget (PYs): 0.17
(Contract Dollars): $0

Details **Listing:** (1) Chollas Creek

Sort Listing Mode: View

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propos TMDI Comple
Regional Board 9	R	Chollas Creek	90822000	Diazinon	Nonpoint/Point Source	High	1.2	2002	

Approved by RWQCB 8/14/02
Approved by USEPA 11/03/03

Main | Help | Logout

Monday, November 15

Project Name: Sacramento and Feather River Diazinon TMDL
Project Type: TMDL
Board Name: Regional Board 5
Date Created: 02/26/2003

Priority: High
Start Fiscal Year: 2002 - 2003
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Sacramento and Feather River Diazinon TMDL

Description:
A proposed Basin Plan Amendment will be prepared with the following components: diazinon water quality objectives, required TMDL elements, a program of implementation, monitoring goals, and cost estimates.

Scheduled Start Date: 05/03
Scheduled End Date: 06/05
Actual Start Date: 07/03
Actual End Date:
Delay **Project Status:** In Progress
Status Comment:

Details **Primary Contact:** Joe Karkoski
Project Manager

Pollutant Sources: Save Undo Change

- Agricultural Return Flows
- Agriculture-storm runoff
- Atmospheric Deposition
- Urban Runoff/Storm Sewers
- === Selected Sources Shown Above ===
- Acid Mine Drainage
- Agricultural Water Diversion
- Agriculture

Details **Total Allocated Funding (PYs):** 2.00
(Contract Dollars): $160,000
Total Estimated Budget (PYs): 0.00
(Contract Dollars): $0

Details **Listing:** (1) Feather River, L
(1) Sacramento Riv

Sort Listing Mode: View

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propo TMI Compl
Regional Board 5	R	Sacramento River (Knights Landing to the Delta)	51000000	Diazinon	Agriculture	High	16	2002	
Regional Board 5	R	Feather River, Lower (Lake Oroville Dam to Confluence with Sacramento River)	51922000	Diazinon	Agriculture, Urban Runoff/Storm Sewers	High	42	2002	

Approved by USEPA 8/11/04
" " RWQCB 10/16/03

Main | Help | Logout

Monday, November 15

Project Name: Indian Creek Reservoir Phosphorus
Project Type: TMDL
Board Name: Regional Board 6
Date Created: 03/18/2003

Priority: High
Start Fiscal Year: 1999 - 2000
Listing Year: 2002
Multiple Listings?: No

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Indian Creek Reservoir Phosphorus

Description:

Scheduled Start Date: 01/00
Scheduled End Date: 06/04
Actual Start Date: 01/00
Actual End Date: 11/03
Delay **Project Status:** Completed
Status Comment:

Details **Primary Contact:**

Pollutant Sources: Save Undo Change

=== Selected Sources Shown Above ===
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Agriculture-animal
Agriculture-grazing
Agriculture-irrigation tailwater

Details **Total Allocated Funding (PYs):** 1.30
(Contract Dollars): $0
Total Estimated Budget (PYs): 0.00
(Contract Dollars): $0

Details **Listing:** (1) Indian Creek Re

Sort Listing **Mode:** View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Prop TMI Compl
Regional Board 6	L	Indian Creek Reservoir	63220010	Phosphorus	Erosion/Siltation, Flow Regulation/Modification, Internal Nutrient Cycling (primarily lakes), Pasture Grazing-Riparian and/or Upland, Wastewater	High	164	2002	

Main | Help | Logout

Monday, November 15

Project Name: Indian Creek Reservoir Phosphorus
Project Type: TMDL
Board Name: Regional Board 6
Date Created: 03/18/2003
Priority: High
Start Fiscal Year: 1999 - 2000
Listing Year: 2002
Multiple Listings?: No

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

Tasks by Project

Select Phase: All Phases

Less Detail | Show History | Mode: View

ID	Task	Deliverable Type	Status	Scheduled Start Date	Scheduled End Date	Actual Start Date	Actual End Date	Estimated Budget PYs	Estimated Budget Contract Amount	Allocated Funding PYs	Allocated Funding Contract Amount	Cc Pe
1554	**Type:** Initial TMDL work **Description:** 1998/99 work	**Type:** Initial TMDL work **Description:**	**Status:** Completed **Comment:**	01/00	01/00	01/00	01/00	0.00	$0	0.20	$0	
1555	**Type:** initial TMDL work 99/00 **Description:** 99/00 wok	**Type:** Initial TMDL work **Description:**	**Status:** Completed **Comment:**	01/00	06/00	01/00	06/00	0.00	$0	0.30	$0	
1189	**Type:** Define Project **Description:**	**Type:** Project Definition **Description:**	**Status:** Completed **Comment:**	01/00	06/00	01/00	06/00	0.00	$0	0.00	$0	
1621	**Type:** Develop Project Plan **Description:**	**Type:** Project Plan **Description:**	**Status:** Completed **Comment:**	01/00	06/00	01/00	06/00	0.00	$0	0.00	$0	
1622	**Type:** Prepare final phase 3 progress report **Description:**	**Type:** Final Progress/Study Report **Description:**	**Status:** Completed **Comment:**	01/00	06/00	01/00	06/00	0.00	$0	0.00	$0	
1631	**Type:** Prepare Final Preliminary Project Report **Description:**	**Type:** Final Preliminary Project Report **Description:**	**Status:** Completed **Comment:**	07/00	06/01	07/00	06/01	0.00	$0	0.30	$0	
1623	**Type:** Prepare Final Project Report **Description:**	**Type:** Final Project Report **Description:**	**Status:** Completed **Comment:**	07/01	05/02	07/01	05/02	0.00	$0	0.40	$0	
1624	**Type:** Present Proposed Regulatory Action to Regional Board for	**Type:** Regional Board Order	**Status:** Completed **Comment:**	07/02	07/02	07/02	07/02	0.00	$0	0.00	$0	

	Action **Description:**	**Description:**									
1625	**Type:** Administrative Record **Description:**	**Type:** Administrative Record **Description:**	**Status:** Completed **Comment:**	07/02	10/02	07/02	10/02	0.00	$0	0.00	$0
1630	**Type:** Respond to State Board comments **Description:**	**Type:** Respond to State Board comments **Description:**	**Status:** Completed **Comment:**	07/02	06/03	07/02	07/03	0.00	$0	0.05	$0
2907	**Type:** State Board Approval **Description:**	**Type:** State Board Action **Description:**	**Status:** Completed **Comment:**	11/02	01/03	11/02	01/03	0.00	$0	0.00	$0
2908	**Type:** OAL Approval **Description:**	**Type:** OAL Approval **Description:**	**Status:** Completed **Comment:**	02/03	04/03	02/03	04/03	0.00	$0	0.00	$0
2909	**Type:** EPA Approval **Description:**	**Type:** EPA Approval **Description:**	**Status:** Completed **Comment:**	04/03	06/03	04/03	07/03	0.00	$0	0.00	$0
1192	**Type:** Implementation **Description:**	**Type:** Negotiated corrective action plan **Description:**	**Status:** Completed **Comment:**	07/03	06/04	07/03	11/03	0.00	$0	0.05	$0
							Project Total	**0.00**	**$0**	**1.30**	**$0**

Main | Help | Logout

Monday, November 15

Project Name: New River Sedimentation/Siltation
Project Type: TMDL
Board Name: Regional Board 7
Date Created: 03/07/2003

Priority: High
Start Fiscal Year: 1999 - 2000
Listing Year: 2002
Multiple Listings?: No

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
New River Sedimentation/Siltation

Description:
The main source of sediment to the New River is agricultural runoff from the Imperial Valley and Mexico. Excess sediment in the water column and in bottom deposits adversely affects aquatic organisms.

Pollutant Sources: Save Undo Change

- Agriculture-irrigation tailwater
- Dredging
- Out-of-state source
- === Selected Sources Shown Above ===
- Acid Mine Drainage
- Agricultural Return Flows
- Agricultural Water Diversion
- Agriculture

Scheduled Start Date: 06/00
Scheduled End Date: 06/06
Actual Start Date: 06/00
Actual End Date:
Delay **Project Status:** In Progress
Status Comment:

Details **Primary Contact:** Doug Wylie
Implementation Lea

Details **Total Allocated Funding (PYs):** 2.40
(Contract Dollars): $0
Total Estimated Budget (PYs): 0.60
(Contract Dollars): $0

Details **Listing:** (1) New River

Sort Listing **Mode:** View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Proposed Complet
Regional Board 7	R	New River	72310000	Silt	Agriculture	High	60	2002	

Approved by RWQCB 6/26/02
" " USEPA 3/31/03

Main | Help | Logout

Monday, November 15

Project Name: Heavenly Valley Creek (source to USFS boundary) Sediment
Project Type: TMDL
Board Name: Regional Board 6
Date Created: 08/11/2004

Priority: High
Start Fiscal Year: 1998 - 1999
Listing Year: 2002
Multiple Listings?: No

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Heavenly Valley Creek (source to USFS boundary) S

Description:

Scheduled Start Date: 01/99
Scheduled End Date: 09/02
Actual Start Date: 01/99
Actual End Date: 09/02
Delay **Project Status:** Completed
Status Comment:

Details **Primary Contact:**

Details **Total Allocated Funding (PYs):** 0.00
(Contract Dollars): $0
Total Estimated Budget (PYs): 0.00
(Contract Dollars): $0

Details **Listing:** (1) Heavenly Valley

Pollutant Sources: Save Undo Change

=== Selected Sources Shown Above ===
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Agriculture-animal
Agriculture-grazing
Agriculture-irrigation tailwater

Sort Listing Mode: View

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Prop TM Compl
Regional Board 6	R	Heavenly Valley Creek (source to USFS boundary)	63410031	Sedimentation/Siltation	Construction/Land Development, Hydromodification, Habitat Modification, Recreational Activities, Nonpoint Source	High	2.01576	2002	

Main | Help | Logout

Monday, November 15

Project Name: Newport Bay Watershed Sediment TMDL
Project Type: TMDL
Board Name: Regional Board 8
Date Created: 03/11/2003

Priority: High
Start Fiscal Year: 1998 - 1999
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Newport Bay Watershed Sediment TMDL

Description:
San Diego Creek was listed for impairment for unknown toxicity, metals, fecal coliform and sedimentation in 1992.

Pollutant Sources: Save Undo Change

- Channel Erosion
- === Selected Sources Shown Above ===
- Acid Mine Drainage
- Agricultural Return Flows
- Agricultural Water Diversion
- Agriculture
- Agriculture-animal
- Agriculture-grazing

Scheduled Start Date: 10/98
Scheduled End Date: 11/08
Actual Start Date: 10/98
Actual End Date:
Project Status: Delayed
Note: This project h
one or more of its pl

Status Comment: Change in Project M

Details **Primary Contact:** Jessie Powell
Project Manager

Details **Total Allocated Funding (PYs):** 1.81
(Contract Dollars): $0
Total Estimated Budget (PYs): 0.00
(Contract Dollars): $5,500,000

Details **Listing:**
(1) Newport Bay, U
(1) San Diego Cree
(1) San Diego Cree

Sort Listing **Mode:** View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propo TMD Comple
Regional Board 8	B	Newport Bay, Upper (Ecological Reserve)	80111000	Sedimentation, Siltation	Agriculture, Urban Runoff	High	752	2002	
Regional Board 8	R	San Diego Creek Reach 1	80111000	Sedimentation, Siltation	Agriculture	High	6	2002	
Regional Board 8	R	San Diego Creek Reach 2	80111000	Sedimentation, Siltation	Agriculture	High	6	2002	

Main | Help | Logout

Monday, November 15

Project Name: Newport Bay Watershed Sediment TMDL
Project Type: TMDL
Board Name: Regional Board 8
Date Created: 03/11/2003

Priority: High
Start Fiscal Year: 1998 - 1999
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

Tasks by Project

Select Phase: All Phases

Less Detail | Show History | Mode: View

ID	Task	Deliverable Type	Status	Scheduled Start Date	Scheduled End Date	Actual Start Date	Actual End Date	Estimated Budget PYs	Estimated Budget Contract Amount	All Fu PYs
2914	**Type:** State Board Approval **Description:**	**Type:** State Board Action **Description:**	**Status:** Completed **Comment:**	10/98	11/98	10/98	11/98	0.00	$0	0.00
2915	**Type:** OAL Approval **Description:**	**Type:** OAL Approval **Description:**	**Status:** Completed **Comment:**	12/98	02/99	12/98	02/99	0.00	$0	0.00
2916	**Type:** EPA Approval **Description:**	**Type:** EPA Approval **Description:**	**Status:** Not Started **Comment:**	03/99	05/99			0.00	$0	0.00
828	**Type:** Phase II:Monitoring & Reporting **Description:** This is a requirement of the TMDL implementation plan.	**Type:** Certification of Basin Cap. **Description:** Submittal from Orange County due 11/15 each year	**Status:** Completed **Comment:** Last received 11/15/02	07/02	11/02	10/02	11/02	0.00	$0	0.00
827	**Type:** Phase II:Monitoring & Reporting **Description:** This is a requirement of the TMDL implementation plan.	**Type:** Annual Report **Description:** Submittal from Orange County due 12/31 every year	**Status:** Completed **Comment:** Report submitted on schedule.	07/02	12/03	07/02	12/03	0.00	$0	0.08
823	**Type:** Phase I Implementation:TMDL Compliance **Description:** This is a requirement of the TMDL implementation plan.	**Type:** WDRs for Production Nurseries **Description:** Renewed nursery permits to reflect sediment load allocations for agriculture. In compliance with the TMDL implementation plan's Item #1.a.4 and 1.a.5	**Status:** Completed **Comment:** Revised Bordiers permit (Waste Discharge Requirements) was adopted 2-21-03. Draft orders have been prepared for the other nurseries.	07/02	12/04	09/02	02/03	0.00	$0	0.35
826	**Type:** Phase I Implementation:SAMP	**Type:** General Permit for certain activities covered under	**Status:** In Progress	07/02	12/05	07/02		0.00	$0	0.78

	Participation **Description:** This is a requirment of the TMDL implementation plan.	the SAMP for the San Diego Creek Watershed **Description:** General permit for a variety of activities for the build-out of the watershed: Flood Control conveyance/maintenance, Urban/Industrial Development, and Habitat/Aquatic resources protection. General permit timeline is dictated by the finalization of ACOE/CDFG's EIS/EIR.	**Comment:** The draft EIR/EIS is anticipated November-2004; General 401 (Conditional Certification) and possible WDRs will be developed upon certification of the Final EIR/EIS.							
822	**Type:** Define Project **Description:**	**Type:** Project Definition **Description:**	**Status:** **Completed** **Comment:**	03/03	05/03	03/03	05/03	0.00	$0	0.00
825	**Type:** Phase I Implementation: Sediment Control **Description:** This is a requirement of the TMDL implementation plan.	**Type:** Prop. 13 Contract oversight- Reconstruction of Sed. Basin & Weir in SD Creek **Description:** Progress Reports, Invoice Projections, and Preliminary Engineering Reports	**Status:** **In Progress** **Comment:** The contractor plans to wait for post nesting season of the Least Bell's Vireo to commence dreding and weir raising. This project is estimated to be completed March-2005.	05/03	03/05	05/03		0.00	$0	0.25
2732	**Type:** Phase II:Monitoring & Reporting **Description:** This is a reqirement of the TMDL implementation plant.	**Type:** Annual Report **Description:** A submittal from Orange County, due 12/31 annually.	**Status:** **Not Started** **Comment:**	07/03	12/03			0.00	$0	0.00
824	**Type:** Phase I Implementation: Sediment Control **Description:** This is a requirement of the TMDL implementation plan.	**Type:** WDRs for dredging of Upper Newport Bay **Description:** In compliance with Item 1.a.6 of the Sediment TMDL	**Status:** **Completed** **Comment:** The ACOE has oversight to the Upper/Lower Bay Restoration Plan. They plan to deepen the in-bay basins and create a Least Tern Island for both rare and endangered plants and avian species. WDRs/401 Certification should be issued by 9/04, if all proper documents are rec'd from the ACOE.	07/03	09/04	06/04	09/04	0.00	$0	0.15

831	**Type:** Review of TMDL **Description:** This is a requirement of the TMDL implementation plan.	**Type:** Staff Report **Description:** Determine TMDL revisions to be considered (some revisions have been recommended by TetraTech)	**Status:** Delayed **Comment:** The toxics TMDL implementation plans are under development, and loading and source analyses will considered for incorporation into sed TMDL IP.	01/04	05/04	03/04		0.00	$0	0.00
830	**Type:** Phase II:Compliance Evaluation **Description:** This is a requirement of the TMDL implementation plan.	**Type:** Compliance Evaluation **Description:** Review previous monitoring reports for trends wrt land use	**Status:** Not Started **Comment:** Draft an annual report to the RB that evaluates compliance with the Sediment TMDL.	01/04	08/04			0.00	$0	0.05
2811	**Type:** Outreach **Description:** Field Visits to San Diego creek and tributaries to the watershed.	**Type:** Meetings **Description:**	**Status:** Not Started **Comment:**	04/04	05/04			0.00	$0	0.00
2812	**Type:** Outreach **Description:** Field Visits to San Diego creek and tributaries to the watershed.	**Type:** Meetings **Description:**	**Status:** Not Started **Comment:**	04/04	05/04			0.00	$0	0.00
832	**Type:** Watershed sediment reductions **Description:** This is a requirement of the TMDL implementation plan.	**Type:** Contract needs **Description:** (1) restoration on Serrano Creek; (2) hydrogeomorphic assessment of Borrego Creek; (3) restoration based on (2) above; (4) sediment transport modeling	**Status:** Not Started **Comment:**	06/04	06/08			0.00	$1,500,000	0.00
833	**Type:** Watershed sediment **Description:**	**Type:** Contract needs **Description:** 2. Restore Bee Canyon and Aqua Chinon channels consistent with El Toro Great Park Plan	**Status:** Not Started **Comment:**	06/04	06/08			0.00	$4,000,000	0.00
2734	**Type:** Phase II:Monitoring & Reporting **Description:** This is a reqirement of the TMDL implementation plant.	**Type:** Annual Report **Description:** A submittal from Orange County, due 12/31 annually.	**Status:** Not Started **Comment:**	07/04	12/04			0.00	$0	0.10

3009	**Type:** Implementation Analysis ***Description:*** Technical assistance from Tetra Tech	**Type:** Water Quality Summary Report ***Description:*** The sediment TMDL IP may need revisions to incorporate specific toxic constituents. 2 tasks needed are reassessment of data collected and review of the 1983 sediment plan.	**Status:** **Not Started** **Comment:** This will leasd to the Triennial Review schduled for 11/12-04	07/04	06/06			0.00	$0	0.00
3076	**Type:** Implementation Analysis (Contract Needs) **Description:** Several tasks identified to update/revise sed TMDL: use new data & revised USLE to recalc erosion rates in watershed; use existing hydrologic & sed transport data to est. required dredging intervals for NB; evaluate options to better control sedimentation. (TetraTech Assistance in addition to task id for toxic TMDLs)	**Type:** Revised sediment TMDL BPA **Description:**	**Status:** **In Progress** **Comment:**	08/04	08/07	08/04		0.00	$0	0.00
3077	**Type:** Implementation Analysis (Contract Needs) **Description:** Several tasks identified to update/revise sed TMDL: use new data & revised USLE to recalc erosion rates in watershed; use existing hydrologic & sed transport data to est. required dredging intervals for NB; evaluate options to better control sedimentation. (TetraTech Assistance in addition to task id for toxic TMDLs)	**Type:** Revised sediment TMDL BPA **Description:**	**Status:** **Not Started** **Comment:**	08/04	08/07			0.00	$0	0.00
2405	**Type:** Phase II:Monitoring & Reporting **Description:** This is a requirement of the TMDL implementation plan.	**Type:** Certification of Basin Cap. **Description:**	**Status:** **Not Started** **Comment:**	10/04	11/04			0.00	$0	0.05
2735	**Type:** Phase II:Monitoring & Reporting **Description:**	**Type:** Annual Report **Description:** A submittal from Orange	**Status:** **Not Started** **Comment:**	07/05	12/05			0.00	$0	0.00

	This is a reqirement of the TMDL implementation plant.	County, due 12/31 annually.								
2406	**Type:** Phase II:Monitoring & Reporting ***Description:*** This is a requirement of the TMDL implementation plan.	**Type:** Certification of Basin Cap. **Description:**	**Status:** **Not Started** **Comment:**	10/05	11/05			0.00	$0	0.00
2736	**Type:** Phase II:Monitoring & Reporting **Description:** This is a reqirement of the TMDL implementation plant.	**Type:** Annual Report **Description:** A submittal from Orange County, due 12/31 annually.	**Status:** **Not Started** **Comment:**	07/06	12/06			0.00	$0	0.00
2407	**Type:** *Phase II:Monitoring* & Reporting **Description:** This is a requirement of the TMDL implementation plan.	**Type:** *Certification of Basin* Cap. **Description:** This is a reqirement of the TMDL implementation plant, due 11/15 annually.	**Status:** **Not Started** **Comment:**	10/06	11/06			0.00	$0	0.00
2472	**Type:** *Phase II:Monitoring* & Reporting **Description:** This is a requirement of the TMDL implementation plan.	**Type:** *Certification of Basin* Cap. **Description:** This is a reqirement of the TMDL implementation plant, due 11/15 annually.	**Status:** **Not Started** **Comment:**	10/07	11/07			0.00	$0	0.00
2473	**Type:** Phase II:Monitoring & Reporting **Description:**	**Type:** Certification of Basin Cap. **Description:** This is a reqirement of the TMDL implementation plant, due 11/15 annually.	**Status:** **Not Started** **Comment:**	10/08	11/08			0.00	$0	0.00
							Project Total	**0.00**	**$5,500,000**	**1.81**

Main | Help | Logout

Monday, November 15

Project Name: Newport Bay Watershed Nutrient TMDL
Project Type: TMDL
Board Name: Regional Board 8
Date Created: 03/10/2003

Priority: High
Start Fiscal Year: 1996 - 1997
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Newport Bay Watershed Nutrient TMDL

Description:

Scheduled Start Date: 03/97
Scheduled End Date: 12/07
Actual Start Date: 03/97
Actual End Date:
Delay **Project Status:** Overdue
Status Comment:

Details **Primary Contact:** Doug Shibberu
Project Manager

Pollutant Sources: Save Undo Change

=== Selected Sources Shown Above ===
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Agriculture-animal
Agriculture-grazing
Agriculture-irrigation tailwater

Details **Total Allocated Funding (PYs):** 1.20
(Contract Dollars): $325,000
Total Estimated Budget (PYs): 0.70
(Contract Dollars): $729,895

Details **Listing:**
(1) Newport Bay, L
(1) Newport Bay, U
(1) San Diego Cree
(1) San Diego Cree

Sort Listing **Mode:** View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propo: TMD Comple
Regional Board 8	B	Newport Bay, Lower	80114000	Nutrients	Agriculture, Urban Runoff	High	700	2002	
Regional Board 8	B	Newport Bay, Upper (Ecological Reserve)	80111000	Nutrients	Agriculture, Urban Runoff	High	752	2002	
Regional Board 8	R	San Diego Creek Reach 1	80111000	Nutrients	Agriculture, Urban Runoff	High	6	2002	
Regional Board 8	R	San Diego Creek Reach 2	80111000	Nutrients	Agriculture	High	6	2002	

Main | Help | Logout

Monday, November 15

Project Name: Newport Bay Watershed Fecal Coliform TMDL
Project Type: TMDL
Board Name: Regional Board 8
Date Created: 03/07/2003

Priority: High
Start Fiscal Year: 1999 - 2000
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Newport Bay Watershed Fecal Coliform TMDL

Description:
multiple suspected sources - urban, natural, agricultural sources; vessel waste; swimmers in Dunes

Pollutant Sources: Save Undo Change

- Urban Runoff/Storm Sewers
- === Selected Sources Shown Above ===
- Acid Mine Drainage
- Agricultural Return Flows
- Agricultural Water Diversion
- Agriculture
- Agriculture-animal
- Agriculture-grazing

Scheduled Start Date: 06/00
Scheduled End Date: 12/07
Actual Start Date: 03/01
Actual End Date:
Delay **Project Status:** In Progress
Status Comment:

Details **Primary Contact:** Linda Candelaria
Project Manager

Details **Total Allocated Funding (PYs):** 1.25
(Contract Dollars): $1,014,000
Total Estimated Budget (PYs): 0.00
(Contract Dollars): $532,000

Details **Listing:** (1) Newport Bay, L
(1) Newport Bay, U

Sort Listing **Mode:** View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propos TMD Comple
Regional Board 8	B	Newport Bay, Lower	80114000	Pathogens	Urban Runoff	High	700	2002	
Regional Board 8	B	Newport Bay, Upper (Ecological Reserve)	80111000	Pathogens	Urban Runoff	High	752	2002	

Main | Help | Logout

Monday, November 15

Project Name: McGrath Beach Coliform
Project Type: TMDL
Board Name: Regional Board 4
Date Created: 03/24/2003

Priority: High
Start Fiscal Year: 2001 - 2002
Listing Year: 2002
Multiple Listings?: No

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
McGrath Beach Coliform

Description:

Pollutant Sources: Save Undo Change

- Point Source
- === Selected Sources Shown Above ===
- Acid Mine Drainage
- Agricultural Return Flows
- Agricultural Water Diversion
- Agriculture
- Agriculture-animal
- Agriculture-grazing

Scheduled Start Date: 11/01
Scheduled End Date: 04/06
Actual Start Date: 11/01
Actual End Date:
Delay **Project Status:** In Progress
Status Comment:

Details **Primary Contact:** Lisa Carlson, Project Manager

Details **Total Allocated Funding (PYs):** 3.70
(Contract Dollars): $0
Total Estimated Budget (PYs): 3.90
(Contract Dollars): $0

Details **Listing:** (1) McGrath Beach

Sort Listing **Mode:** View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Proposed Complet
Regional Board 4	C	McGrath Beach	40311000	High Coliform Count	Nonpoint Source	High	1.5	2002	

Main | Help | Logout

Monday, November 15

Project Name: McGrath Beach Coliform
Project Type: TMDL
Board Name: Regional Board 4
Date Created: 03/24/2003
Priority: High
Start Fiscal Year: 2001 - 2002
Listing Year: 2002
Multiple Listings?: No

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

Tasks by Project

Select Phase: All Phases

Less Detail | Show History | Mode: View

ID	Task	Deliverable Type	Status	Scheduled Start Date	Scheduled End Date	Actual Start Date	Actual End Date	Estimated Budget PYs	Estimated Budget Contract Amount	Allocated Funding PYs	Allocated Funding Contract Amount	Co Pe
1389	**Type:** Define Project **Description:**	**Type:** Project Definition **Description:**	**Status:** Completed **Comment:**	11/01	01/02	11/01	01/02	0.20	$0	0.20	$0	Lis Ca
1408	**Type:** Develop Project Plan **Description:**	**Type:** Project Plan **Description:**	**Status:** Completed **Comment:**	11/01	06/02	11/01	06/02	0.40	$0	0.40	$0	Lis Ca
1409	**Type:** Prepare final phase 3 progress report **Description:** Data Analysis	**Type:** Final Progress/Study Report **Description:**	**Status:** Completed **Comment:**	01/02	06/02	01/02	06/02	1.00	$0	1.00	$0	Lis Ca
1410	**Type:** Prepare Final Preliminary Project Report **Description:** Initial Project Report	**Type:** Final Preliminary Project Report **Description:**	**Status:** Completed **Comment:**	10/02	11/02	10/02	11/02	0.50	$0	0.50	$0	Lis Ca
1411	**Type:** Prepare Final Project Report **Description:**	**Type:** Final Project Report **Description:**	**Status:** Completed **Comment:**	01/03	02/03	10/02	12/02	0.30	$0	0.30	$0	
1412	**Type:** Present Proposed Regulatory Action to Regional Board for Action **Description:**	**Type:** Regional Board Order **Description:** CAO issued no Regional Board Order needed.	**Status:** Completed **Comment:**	02/03	04/03	12/02	07/03	0.30	$0	0.30	$0	
1956	**Type:** Approval Received From Final Approval Entity **Description:**	**Type:** Final Regulatory Approval **Description:** Approval Letter for US EPA on 11/20/03	**Status:** Completed **Comment:** Approval letter from US EPA dated	02/03	09/03	02/03	11/03	0.20	$0	0.20	$0	

			11/20/03								
1413	**Type:** Prepare Final Evaluation Report **Description:** Implementation	**Type:** Final Evaluation Report **Description:**	**Status:** Not Started **Comment:**	05/03	04/06			1.00	$0	0.70	$0
2846	**Type:** Compliance Monitoring **Description:**	**Type:** Water Quality Summary Report **Description:** Review Monitoring Reports	**Status:** Not Started **Comment:**	07/04	06/05			0.00	$0	0.10	$0
							Project Total	3.90	$0	3.70	$0

TOTAL MAXIMUM DAILY LOADS FOR SANTA CLARA RIVER ESTUARY BEACH/SURFERS' KNOLL, MCGRATH STATE BEACH, AND MANDALAY BEACH COLIFORM AND BEACH CLOSURES

STAFF REPORT

California Regional Water Quality Control Board
Los Angeles Region

July 2003

TABLE OF CONTENTS

TABLE OF TABLES

TABLE OF FIGURES

APPENDICES

1.0 INTRODUCTION

The 1998 303(d) list of impaired waterbodies in California identifies Surfers' Knoll/Santa Clara River Estuary Beach (Surfers' Knoll) and McGrath Beach State Park (McGrath Beach) as impaired by coliform bacteria and McGrath and Mandalay Beaches as impaired by beach closures. The impairment listings are based on data showing the presence of high coliform counts from Ventura County Environmental Health Division (VC/EHD) sampling and State Water Resources Control Board (State Board) records of beach closures.

More recent data and records from these sources and the original listing data were reviewed by California Regional Water Quality Control Board, Los Angeles Region (Regional Board) staff for the 2002 water quality assessment (WQA) and this TMDL study. Review of the recent data show that Surfers' Knoll is no longer impaired by coliform bacteria and McGrath and Mandalay Beaches are no longer impaired by beach closures. Closures are required if there are spills on the beach. There have been no spills in the last three years. As part of the 2002 WQA, the Regional Board staff have recommended removal of these impairments from the forthcoming 303(d) list. State Board has approved the 303(d) list, and the United States Environmental Protection Agency (US EPA) is reviewing these recommendations. As described in this report, the remaining impairment is the total coliform impairment of McGrath Beach and the major source causing this impairment is a discharge from McGrath Lake. In light of the sole remaining impairment in this coastal area, the Regional Board staff have prepared this document to establish a Total Maximum Daily Load (TMDL) and Implementation Plan that will result in a decrease in bacterial contamination and the attainment of bacterial water quality standards for McGrath Beach.

1.1 REGULATORY BACKGROUND

The Water Quality Control Plan, Los Angeles Region (*Basin Plan*) contains water quality objectives for waters in the Los Angeles Region. The Basin Plan: (1) designates beneficial uses for surface and ground waters; (2) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy; and (3) describes implementation programs to protect all waters in the Los Angeles Region.

The water quality objectives established in the Basin Plan are mandated under Division 7 of the California Water Code, known as the "Porter-Cologne Water Quality Control Act" (Porter-Cologne). The Basin Plan implements Porter-Cologne and, along with applicable State Board policies (e.g., the California Ocean Plan), serves as the State Water Quality Control Plan applicable to the coastal watershed draining to McGrath Beach, as required pursuant to the federal Clean Water Act (CWA).

Section 303(d) of the CWA requires that each state identify those waters within its boundaries for which existing controls and effluent limitations alone do not ensure attainment of water quality objectives. The resulting list is referred to as the "303(d)

list." The CWA further requires that states establish a priority ranking for waters on the 303(d) list, then, in accordance with the priority ranking, establish TMDLs.

A TMDL is the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background (40 CFR 130.2) such that the capacity of the waterbody to assimilate pollutant loads (loading capacity) is not exceeded. The TMDL shall be established at levels necessary to attain and maintain the applicable narrative and numerical water quality objectives with seasonal variations and a margin of safety (MOS) to address uncertainty in the analysis. Determinations of TMDLs shall take into account critical conditions for stream flow, loading, and water quality parameters (40 CFR 130.7(c)(1)).

The United States Environmental Protection Agency (USEPA) has oversight authority for the 303(d) program and is required to review and either approve or disapprove a state's 303(d) list and each TMDL developed by a state. If a state fails to develop a TMDL in a timely manner or if the USEPA disapproves a TMDL submittal by a state, USEPA is required to establish a TMDL for that waterbody (40 CFR 130.7(d)(2)).

The elements of a TMDL are described in 40 CFR Sections 130.2 and 130.7, and Section 303(d) of the CWA, as well as in USEPA guidance (USEPA, 1991).

1.2 CONSENT DECREE

On March 22, 1999, a 13-year schedule for the development of TMDLs in the Los Angeles Region was established in a consent decree (*Heal the Bay, Inc. et al. v. Browner, et al. C 98-4825 SBA*). Prior to the approval of this decree, Regional Board staff had identified over 700 waterbody-pollutant combinations in the Los Angeles Region where TMDLs would be required (LARWQCB, 1996, 1998).

For the purpose of scheduling TMDL development, the consent decree combined the waterbody-pollutant combinations into 92 TMDL analytical units. Analytical Unit No. 23 consists of Santa Clara River Estuary Beach/Surfers' Knoll, McGrath Beach, and Mandalay Beach. McGrath Beach, Surfers' Knoll and Mandalay Beach are listed with impairments related to pathogens. However, Surfers' Knoll and Mandalay Beach have been recommended for removal from the 2002 303(d) list by Regional Board staff, as described below.

2.0 PROBLEM IDENTIFICATION

This section describes the WQA methodology that led to the listing of Surfers' Knoll, McGrath Beach and Mandalay Beach as impaired for coliform bacteria and *beach closures*. This section reviews data that led to the listing of the sites and further data, reviews the water quality objectives applying to this TMDL, describes the geography and history of the region, describes the affected beneficial uses, and states the water quality objectives of the waterbody.

The data used by Regional Board staff that led to the impairment of McGrath Beach exceedance of the total coliform objective are discussed below. Where available, more recent data were reviewed to confirm the 1998 303(d) listings. As Regional Board staff's listing recommendations are based on impairments to water quality, it is appropriate to begin this section with a review of the applicable water quality objectives.

State water quality standards consist of the following elements: 1) beneficial uses, 2) narrative and numeric objectives to protect beneficial uses and 3) an antidegradation policy. In California, the each of the regional boards define beneficial uses in their respective basin plans.

Table 2.1 in the Basin Plan for the Los Angeles Region (1994) lists 20 beneficial uses for Surfers' Knoll, McGrath Beach and Mandalay Beach. Excerpts from this table are reproduced in Table 2, in section 2.3, below. These uses are specified as existing (E) uses. All existing beneficial uses must be protected.

2.1 Review of Data

As stated above, Surfers' Knoll and McGrath State Beach were listed as impaired for total coliform in the 1998 303(d) list. Additionally, McGrath Beach and Mandalay Beach were listed for beach closures. In each listing, water contact recreation (REC-1) was identified as the beneficial use not supported due to total coliform and beach closures. More recent pathogen and beach closure data were reviewed for the 2002 WQA. The data review shows that the data indicate that Surfers' Knoll is not impaired for coliform bacteria. As such, Surfers' Knoll was recommended for removal from the 303(d) list and will not require load or waste load allocations. This TMDL includes continued monitoring by VC/EHD, which is already required by existing laws and is not a new regulatory requirement of this TMDL.

The recent beach closure data show that both McGrath and Mandalay Beaches have had no beach closures in the past three years. They were also recommended for removal from the 2002 303(d) list. Therefore, McGrath and Mandalay Beaches will not require load or waste load allocations for beach closures. Again, the VC/EHD will continue monitoring and posting beaches as required by other applicable laws.

McGrath Beach remains impaired for total coliform. Therefore, this TMDL staff report will focus on the McGrath Beach impairment for total coliform. All waste load allocations established by this TMDL will be for the purpose of eliminating the total coliform impairment at McGrath Beach.

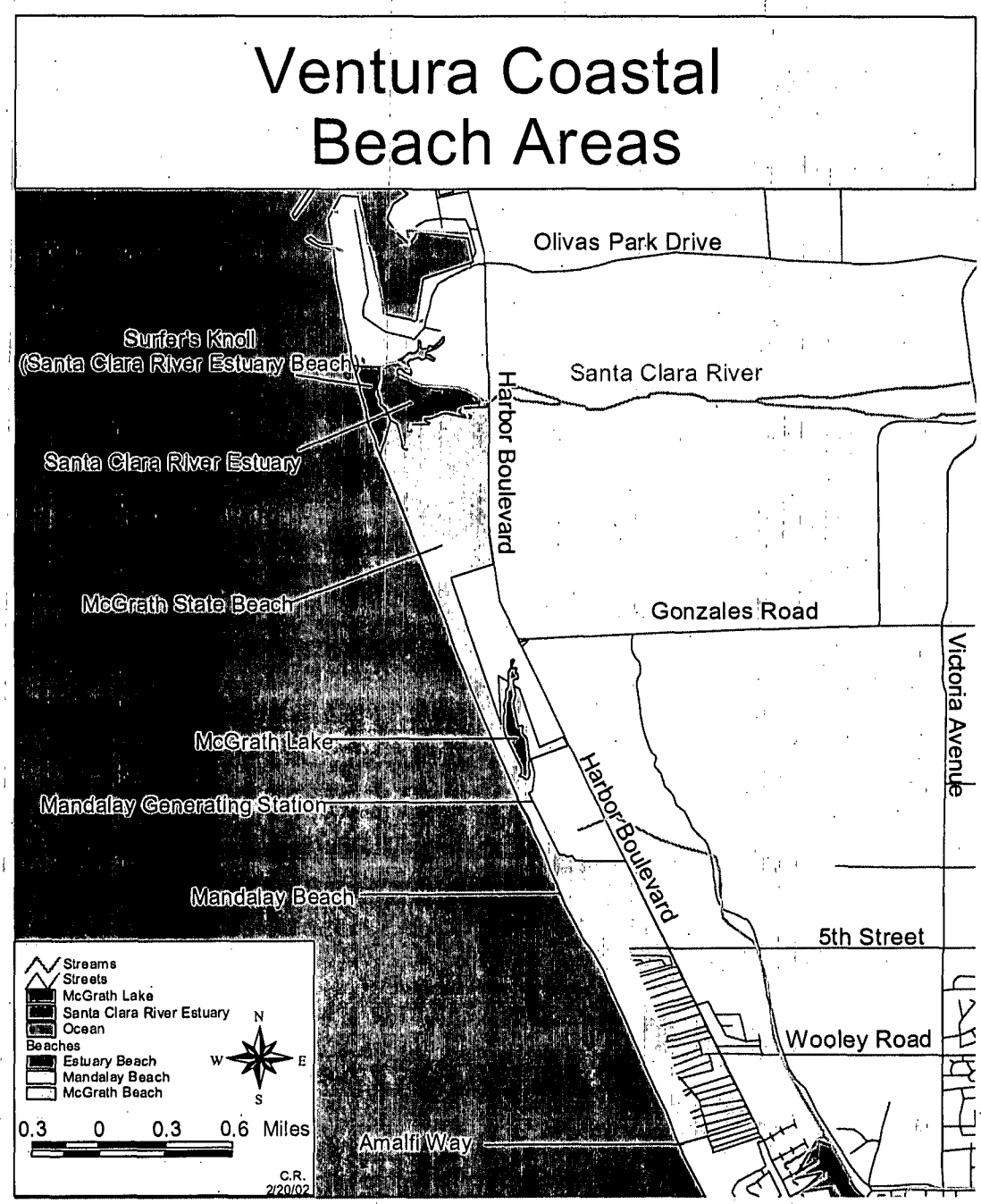
TABLE 1. Santa Clara River Estuary Beach, McGrath State Beach, and Mandalay Beach Total Coliform and *Beach Closures* TMDL Problem Statement

Beach	**1998 303(d) List for Total Coliform**	**1998 303(d)List for *Beach Closures***	**2002 Water Quality Assessment**
Surfers' Knoll	X		New data, recommended for delisting for coliform bacteria
McGrath Beach	X	X	**Continued impairment for total coliform** New data, recommended for delisting for beach closures
Mandalay Beach		X	New data, recommended for delisting for beach closures

2.2 GEOGRAPHY

On the Ventura County coastline, just south of the City of Ventura, there is a series of beaches, shown in Figure 1. Starting from the north is Surfers' Knoll, which is adjacent to the Santa Clara River Estuary, and is also known as Santa Clara River Estuary Beach. Adjacent to this beach, heading southeast down the coast is McGrath Beach. McGrath Beach runs along a northwest to southeast direction, and is 1.7 miles long. For the purposes of the Regional Board and as used by VC/EHD as the major data source, this includes Mandalay State Beach. In the middle of McGrath Beach, between the dunes and Harbor Boulevard to the east is a small back dunes lake, McGrath Lake. McGrath Lake is approximately 10 acres, with a wetlands area on its east side. Continuing south on the beach is the Reliant Energy Mandalay Generating Station (Mandalay Generating Station). This point is the end of McGrath State Beach. The next beach south is Mandalay City Beach (Mandalay Beach). This beach is also 1.7 miles long, and it extends in a northwest to southeast direction from the Mandalay Generating Station to Amalfi Way in the City of Oxnard.

FIGURE 1. MAP OF SURFERS' KNOLL, MCGRATH BEACH, MCGRATH LAKE, AND MANDALAY BEACH



Directly east of the beaches and the lake, Harbor Boulevard runs nominally north and south through much of Ventura County, including along the length of these three beaches. East of Harbor Boulevard through much of this region is agricultural land. There is agricultural land directly east of McGrath Beach and McGrath Lake to the north and south of Gonzales Road. West of Harbor Boulevard at Gonzales Road are petroleum extraction facilities. Additional oil and gas wells are scattered throughout the agricultural lands. Beyond the agricultural land is the Bailard Landfill, and several nurseries. To the south of Gonzales Road is a dog kennel.

2.3 BENEFICIAL USES

Beneficial uses are defined in the Basin Plan for individual water bodies and general statements of beneficial uses for water bodies not covered by individual beneficial uses. While the Basin Plan assigns beneficial uses for Mandalay Beach individually, beneficial uses for Surfers' Knoll and McGrath Beach fall under the general Ventura County Coastal Nearshore beneficial uses. These beneficial uses are shown in Table 1.

TABLE 2. Surfers' Knoll, McGrath Beach and Mandalay Beach Beneficial Uses, and Description. Excerpt from the Basin Plan, Table 2-1.

Reach	Hydro. Unit No.	MUN	IND	PROC	AGR	GWR	FRSH	NAV	REC 1	REC 2	COM M
Surfers' Knoll	403.11		E					E	E	E	E
McGrath Beach	403.11		E					E	E	E	E
Mandalay Beach	403.11							E	E	E	E

Reach	WAR M	COLD	EST	MAR	WILD	BIOL	RARE	MIGR	SPWN	SHELL	WET
Surfers' Knoll				E	E	Ean	Ee	Ef	Ef	E	
McGrath Beach				E	E	Ean	Ee	Ef	Ef	E	
Mandalay Beach				E	E		Ee			E	

E: Existing beneficial use. P: Potential beneficial use. I: Intermittent beneficial use. e: One or more rare species utilize all ocean, bays, estuaries, and coastal wetlands for foraging and/or nesting. f: Aquatic organisms utilize all bays, estuaries, and coastal wetlands, to a certain extent, for spawning and early development. This may include migration into areas that are heavily influenced by freshwater inputs. an: Areas of Special Biological Significance. Some designations may be considered for exemptions at a later date.

Beneficial uses for these coastal areas include industrial service supply (IND); navigation (NAV); water contact and non-contact recreation (REC-1 and REC-2); commercial and sport fishing (COMM); marine habitat (MAR); wildlife habitat (WILD); preservation of biological habitats (BIOL); rare threatened, or endangered species habitat (RARE); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPWN); and shellfish harvesting (SHELL).

2.3.1 Water Contact Recreation

As stated above, Surfers' Knoll and McGrath Beach are currently listed as impaired for total coliform in the 1998 303(d) list. Additionally, McGrath Beach and Mandalay Beach are listed for beach closures. In each listing, REC-1 was identified as the

beneficial use that was not supported due to total coliform and beach closures. REC-1 is described in the Basin Plan as "Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs." The number of visitors to McGrath Beach varies from approximately 1,400 per month in the winter to 16,000 per month in the summer. McGrath Beach also has a campground that contains 146 campsites. These sites are routinely full during the summer season.

2.3.2 Non-contact Water Recreation

Non-contact water recreation, or REC-2, is defined by the Basin Plan as, "Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beach combing, camping, boating, tidepool, and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities." REC-2 objectives for pathogen indicators are much greater than the objectives for protection of REC-1 activities. Therefore, protecting the REC-1 uses will protect the REC-2 uses.

2.4 WATER QUALITY OBJECTIVES

The Regional Board adopted bacteria water quality objectives on October 25, 2001 (Regional Board Resolution 01-018; see Appendix A), which were then approved by the State Water Resources Control Board on July 18, 2002 (State Board Resolution 2002-0142), the Office of Administrative Law approved it on September 19, 2002 (OAL File No. 02-0807-01-S), and the US EPA approved it on September 25, 2002. Resolution 01-018 updated the bacteria objectives for fresh and marine waters designated as REC-1. The revised objectives for marine waters consist of geometric mean objectives and single sample objectives for enterococcus and total and coliform, and are consistent with current USEPA guidance (1986). These revised objectives in the Basin Plan are equivalent to those in the Ocean Plan. Table 3, below, lists the Ocean Plan objectives for marine waters designated for REC-1.

TABLE 3. Ocean Plan Objectives for Ocean Waters Designated for REC-1

Parameter	**Geometric Mean Objective**	**Single Sample Objective**
Fecal coliform	200/100 mL	400/100 mL
Total coliform		1000/100 mL
Total coliform: less than 20% of samples in 30 days exceed		1000/100 mL

3.0 NUMERIC TARGET

3.1 WATER CONTACT RECREATION

This TMDL is based on a multi-part numeric target based on the bacteria objectives for marine waters designated for water contact recreation, REC-1, specified in the Basin Plan amendment adopted by the Regional Board on October 25, 2001 and approved by the State Water Resources Control Board on July 18, 2002. These objectives are consistent with those specified in the California Code of Regulations, title 17, section 7958 "Bacteriological Standards" and "Ambient Water Quality for Bacteria – 1986" (U.S. EPA, 1986). The objectives include four bacterial indicators: total coliform, fecal coliform, enterococcus, and the fecal-to-total coliform ratio.

3.1.1 Bacteria

For this TMDL, the numeric targets will be equivalent to the recently adopted Basin Plan objectives, as measured at point zero (also referred to as the "mixing zone" or "wave wash").[1] This approach recognizes that an effective means of protecting the beneficial use is by requiring compliance with the objectives wherever water contact recreation occurs. These samples will be taken at ankle depth. These targets apply during both dry and wet weather, since there is water contact recreation throughout the year, including during wet weather, at the beaches. The geometric mean targets are based on a rolling 30-day period, and may not be exceeded at any time.

The "point zero" and "ankle depth" approach was used in the Regional Board' Santa Monica Bay Beaches Dry and Wet Weather TMDLs. The State Board and USEPA have already approved this methodology through full approval of the Santa Monica Bay Beaches Dry Weather TMDL. Regional Board staff believe that a comparable strategy for numeric targets is appropriate in for the McGrath Beach bacteria TMDL as well.

The TMDL targets are:

In Marine Waters Designated for Water Contact Recreation (REC-1)

1. Geometric Mean

a. *Total coliform density shall not exceed 1,000/100mL*
b. *Fecal coliform density shall not exceed 200/100mL*
c. *Enterococcus density shall not exceed 35/100mL*

[1] Point zero is the point at which water from the outfall initially mixes with ocean water. Point zero has been selected as the compliance point for the numeric target because access to these outfall is, on the whole, not restricted. People are often observed swimming near storm drains.

2. Single Sample Objectives

a. *Total coliform density shall not exceed 10,000/100mL*
b. *Fecal coliform density shall not exceed 400/100mL*
c. *Enterococcus density shall not exceed 104/100mL*
d. *Total coliform density shall not exceed 1,000/100mL, if the ratio of fecal-to-coliform exceeds 0.1.*

Current objectives for bacteria in marine waters, as listed in the California Ocean Plan (2001) (Ocean Plan) are shown in Table 3, above. The revised Basin Plan objective for total coliform has a higher single sample objective, but there now are geometric means for the pathogen indicators listed in the revised objectives. The numeric target is based on the geometric mean. This is the lowest value for coliform and the most stringent value. It is noted that for compliance purposes the revised objective also provides a single sample limit of 10,000/100 mL.

The numeric target for this TMDL will require samples to meet criteria from both the Ocean Plan and the Basin Plan as measured at point zero (also referred to as the "mixing zone" or "wave wash"). Point zero is the point at which water from the discharge initially mixes with ocean water, and is consistent with the 'point of initial dilution' as defined in the Ocean Plan. Point zero has been selected as the compliance point for the numeric target for two reasons. First, public access to this source is not restricted. Second, in a study conducted for the Santa Monica Bay Pathogen TMDL, researchers found that the dilution zone is specific and highly dependent on prevailing oceanographic and climatic conditions (e.g., wave height, tide height, longshore velocity, wind speed) (SCCWRP 2001). There are inadequate data to accurately define dilution zones, other than point zero, for the freshwater outlets at McGrath Beach under all possible oceanographic and climatic conditions. Section 6.2 describes the waste load allocations, which includes details of the MOS.

3.1.2 Beach Closures

The US EPA criteria for beach closures are:
- Fully Supporting = Zero beach closures in the previous three years
- Partially Supporting = Averaging 1 beach closure per year, lasting less than one week long per closure.

Recent beach closure data show that McGrath and Mandalay Beaches have met water quality objectives for beach closures. Regional Board staff have recommended that they are removed from the 2002 303(d) list. Therefore, McGrath and Mandalay Beaches will not be addressed through load allocations for beach closures, however, they will continue to be monitored.

3.2 ANTIDEGRADATION

The state of California's water quality objective has an Antidegradation Policy. As stated in the Basin Plan, "the Statement of Policy with Respect to Maintaining High Quality Waters in California (State Board Resolution No. 68-16), restricts degradation of

surface or ground waters. In particular, this policy protects waterbodies where existing quality is higher than is necessary for the protection of beneficial uses.

"Under the Antidegradation Policy, any actions that can adversely affect water quality in all surface and ground waters (i) must be consistent with the maximum benefit to the people of the state, (ii) must not result in water quality less than that prescribed in water quality plans and policies. Furthermore, any actions that can adversely affect surface waters are also subject to the federal Antidegradation Policy."

Nothing in this document is meant to, or will allow, a degradation of the current quality of water on any of these waterbodies listed herein.

4.0 SOURCE ASSESSMENT

This section on source assessment describes how the sources of coliform were investigated and the final source determined. It starts with a major source to McGrath Beach, the discharge from McGrath Lake. Following that is a report on the data used to determine the impairments of each beach. These data are detailed for each sampling location, and used to discuss the sources to the beach. Later a discussion of the seasonality of the data is presented. Finally, non-point sources of coliform for the area are described.

4.1 HISTORY

McGrath Lake is approximately 10 acres.[2] It is elongated along a north-south axis, stretching between Harbor Boulevard and the dunes along McGrath Beach. The lake is situated in Ventura County, just south of the Santa Clara River and the City of San Buenaventura. It is as much as 140 meters (m) across, approximately 900 m long, and its depth varies from approximately 0.6 m deep in the north end to 1.5 m deep in the south end.[3] On the west side McGrath Lake is surrounded by sand dunes in the publicly owned area, and a natural incline leading up to a road in the privately held northern end.

The Santa Clara River Estuary and McGrath Lake are habitat to a number of endangered and threatened species including the bird species southwestern willow flycatcher, least bell's vireo, western snowy plover, brown pelican, and California least tern. In addition to requiring this habitat, these birds are also a source of total coliform to McGrath Beach.

According to the McGrath Lake WAC:

> West of Harbor Boulevard and north of McGrath Lake is an area of arroyo willow riparian habitat which transitions to bulrush (tule) wetlands at the north end of the lake. Additional areas of bulrush habitat are found along the lake's eastern shore.

---

[2] Communication from California State Parks, September 30, 2002.

[3] Chemical and Biological Measures of Sediment Quality in McGrath Lake, February 1999, RWQCB-LA. et al.

A United States Coast Guard map of the area, produced in 1855, shows a much larger wetlands complex to the north and east of the current lake. Since the mid-1800's, the majority of these wetlands have been converted to agricultural land and public roads. The construction of Harbor Boulevard in 1958 significantly reduced the acreage of the remaining open water, as well as the remaining wetlands, and impacted the surface hydrology of the lake.

The Water level of McGrath Lake has been mechanically manipulated since the early 1900's. At the time, the agricultural landowner controlled wet-season flooding by breaching the sand dunes near the south end of the lake, allowing the lake to drain to the ocean. This practice was continued through the end of the 20th Century, when coastal regulations precluded this activity.

Additional flood control was provided by the installation of a pump/pipeline system in the mid-1900's. Water from the lake is pumped through a pipeline at the north end of the lake, where it is discharged onto the beach behind sand dunes. The water flows behind the dunes and often enters the surf zone at the Pacific Ocean. Some time before 1953, a 10-inch pipe and pump were installed. During the 1990's, a diesel pump and 15-inch pipe were added to the existing pipeline. The electric pump is normally used several times a week throughout the year, and every day during rain events. The diesel pump is used to augment the electric pump during particularly heavy rains. The capacity of the electric pump is 2,700 gallons per minute (gpm), or 1.3 MGD. The capacity of the diesel pump is 4,750 gpm or 2.28 MGD.

In the absence of pumping, high ground water and surface runoff may cause flooding or damage to crops on agricultural lands east of Harbor Boulevard. Flood waters have also been known to flow across Harbor Boulevard at Gonzales Road, and across lands to the south of McGrath Lake. Regular pumping helps to minimize this flooding and prevent crop damage.[4]

A study was completed in 1999 titled, "Chemical and Biological Measures of Sediment Quality in McGrath Lake," by Regional Board staff, Moss Landing Marine Laboratories, CA DFG, University of California, Santa Cruz, and the Institute of Marine Sciences. This report was completed as part of the Bay Protection and Toxic Cleanup Program (BPTCP or Toxic Hot Spots program. This program studied bays, estuaries, and estuary-like water bodies primarily for sediment quality. Additionally, this study looked at some water quality issues in McGrath Lake.

This study showed that the water in the lake exhibited toxicity. For the Subsurface Water Test, subsurface water samples from the pump house and agriculture drain, the survival rate of a mysid shrimp, the *Neomysis mercedis*, was 12% and 24%, respectively.

[4] Kennedy/Jenks Report, 2002.

4.2 DATA ANALYSIS

This section will describe the data used for the 1996, 1998, and 2002 WQAs that lead to the 303(d) listings which lead to this TMDL.

4.2.1 1996 and 1998 Listings for Beach Closures

The State Board collects data on *beach closures*. Local health departments send this data to the Board, which compiles them. These data are not inclusive of all beach postings, only beach closures.

The 1996 and 1998 beach closure listings appear to be based on the State Board data. For the 1996 and 1998 WQAs, the State Board received data showing one beach closure for McGrath Beach. This closure was caused by an 80,000-gallon oil spill, and lasted from 12-27-93 to 1-11-94. Mandalay Beach was listed in the 1996 WQA for beach closures due to a sewage spill. All documentation shows that this sewage spill actually occurred in Mandalay Bay, not on Mandalay Beach. More recent data show that there have been no *beach closures* within the past three years.

4.2.2 1996 Coliform Listing Data

The EPA's 1996 303(d) list included Surfers' Knoll and McGrath Beach as not supporting the REC-1 beneficial use. Assessment guidelines for this listing were described as, "For entire data set, wet and dry weather fecal coliform objectives are exceeded more than 15% or wet and dry weather total coliform data are exceeded more than 20%."[5]

4.2.3 Beach Closure Data, 1997 to Present

There have been several *beach closures* on these beaches since the 1996 WQA.

- McGrath Beach was closed for a discharge of 20,000 gallons of raw sewage. An unknown amount entered the ocean. This spill closed McGrath Beach for two days, April 6 and 7, 1997.
- McGrath and Mandalay Beaches were closed for 2 weeks, from February 4th to the 18th, 1998 due to flooding.
- McGrath Beach was closed for four days from January 25 to the 29th, 1999, due to a spill from a sewage line.

Neither McGrath Beach nor Mandalay Beach has been closed in the last 3 years. EPA criteria states that for a beach to be fully supporting, it must have no closures in the last 3 years. These data indicate that these beaches meet that criterion. Regional Board staff have recommended these beaches for removal from the 2002 303(d) list.

4.2.4 Coliform Data, 1997 to Present

In 1997 Assembly Bill 411 was passed, requiring local health departments to analyze beaches for bacteria on a regular basis. This monitoring is required from April 1 to

[5] US EPA 305(b) Guidelines.

October 30 of each year. The frequency and location of sampling are determined by local government. In Ventura County, this is overseen by the VC/EHD. VC/EHD routinely collects samples on a weekly basis, all year round. If samples exceed regulatory objectives, they may collect additional samples to show when the objectives are met.

VC/EHD samples are collected at one location on Surfers' Knoll and at three locations on McGrath Beach at the north end, middle, and south end. Samples are collected in the surf zone at ankle depth, approximately 50 yards from any freshwater outlet.

Data were submitted by the Regional Board to State Board for the 2002 WQA by June 15, 2002. That data came from a number of sources, including VC/EHD, Mandalay Generating Station, and Regional Board sampling. Data submitted indicate that Surfers' Knoll is no longer impaired. Regional Board staff have recommended its removal from the 2002 303(d) list.

Due to the AB 411 requirements, indicator bacteria data for beaches in general, and Ventura County Beaches specifically, are now plentiful. For the 2002 WQA, there are nearly 200 data per sampling location on McGrath Beach. Using data submitted by the initial May 2001 deadline, all three sampling locations exceeded water quality objectives for total coliform. Using all the data received by the final June 2002 deadline, only the middle of McGrath Beach exceeds water quality objectives for total coliform. Therefore, McGrath Beach is not recommended for delisting, and this TMDL will focus on that section of the beach and the source of bacterial contamination at McGrath Beach.

4.3 Source Analysis

Data used for this TMDL were collected from four sources: (1) Ventura Wastewater Reclamation Facility (VWRF) and (2) Reliant's Mandalay Generating Station (Mandalay Generating Station) provided data required by their NPDES permits and otherwise collected. (3) Ambient beach data were collected by the VC/EHD for their AB 411 requirements. (4) Samples collected by Regional Board staff for development of this TMDL. The samples collected by VC/EHD were collected approximately 50 yards from any source to the beach. These sources are the Santa Clara River Estuary, which is estuary flow, McGrath Lake discharge, a freshwater outlet, and Mandalay Generating Station, mixed fresh and saline flow from the Edison Canal. They were collected at ankle depth. As they were not collected in the source, or where the source meets the tide water, these samples routinely underestimate the influence of the pathogens on the water in some areas. Regional Board staff also collected samples upstream in the watershed.

Regional Board staff determined that additional sampling was needed to augment the data that the Regional Board had received by January 2002. The sampling plan was designed to investigate the sources to McGrath Beach and their impact on the ocean water quality. Samples were collected from each of the areas where VC/EHD routinely collect samples, at the north end, middle, and south end of the beach. However, Regional Board staff collected the samples from wave wash, when possible, or near where wave

wash was expected. The nearest large and therefore most likely sources to those sites are the Santa Clara River Estuary outfall, the McGrath Lake outfall, and the Mandalay Generating Station outfall, respectively. Samples were collected on the same day, and nearly the same time at several sites and potential sources to show any correlation. Samples were collected weekly for five weeks. The results are discussed below.

Regional Board staff collected samples for two purposes. The first was to characterize the watershed relative to its listing on the 303(d) list. The second purpose was to collect data for the waterbody model, linking sources to the contamination in the tide. For that reason, not all of the data collected by Regional Board staff was used to describe the waterbody, even though it may have been used in the linkage analysis.

Additionally, data were analyzed for dry season (April 1 to October 31) versus wet season (November 1 to March 31). For all sites, wet season data were somewhat more likely to exceed objectives than dry season. This is most pronounced at the McGrath Lake discharge site, site 27000. This data is discussed in detail in sections 4.3.2 and 4.4.

The sites discussed below are shown in detail in Figure 1, above.

4.3.1 Surfers' Knoll/Santa Clara River Estuary Beach Coliform Bacteria

Surfers' Knoll is also known as the Santa Clara River Estuary Beach. This location was listed on the 1998 303(d) list for coliform bacteria. For the 2002 (d) listing, recent data were analyzed by Regional Board staff for both total and fecal coliform bacteria. At this time the data indicate that the beach meets REC-1 objectives for both fecal coliform and total coliform bacteria and has been recommended by the Regional and State Boards for delisting. The data are described in Table 4, below. Because the recent data indicate that Surfers' Knoll complies with the water quality objectives, Regional Board staff did not include sampling of the estuary water quality and the beach water quality or analyze the linkage from the sources to water quality at Surfers' Knoll/Santa Clara River Estuary Beach. This TMDL Implementation Plan recommends continued analysis of the VC/EHD monitoring data at this location, as required by applicable laws, to ensure that this beach remains in compliance with the water quality objectives.

If such monitoring indicates impairment, the TMDL will be re-evaluated.

TABLE 4. Surfers' Knoll, McGrath Beach and Mandalay Beach Total Coliform Data

Sampling Location	Number of Samples	Percent total coliform samples exceeding the 2002 303 (d) listing single sample objective (1,000/100 mL)	Percent fecal coliform samples exceeding the single sample objective (400/100mL)
Surfers' Knoll	102	14.7 %	2%
McGrath Beach North	189	16.4 %	1%
McGrath Beach Center	185	22.7 %	2%
McGrath Beach South	186	17.2 %	0.5%

4.3.2 McGrath Beach Total Coliform

VC/EHD collects weekly samples in compliance with AB 411. This law requires local governments collect weekly samples to document pathogen levels along coastal areas. VC/EHD collects samples weekly both during the AB 411 season (April 1 to October 31) as well as the rest of the year. They also collect samples to confirm contamination when it is found, and show when the water is no longer exceeds regulatory levels. Therefore, VC/EHD collects samples more often than weekly. During the study period, 1997 to 2002, VC/EHD collected additional study samples along the coast in this area, as well as inland samples. Samples are collected at three locations along McGrath State Beach. They are North Gonzales Road, Gonzales Road, and Go Kart sites at the north, middle, and south end of the beach.

4.3.2.1 North Gonzales Road Site

The northern location, VC/EHD site number 26000, north of Gonzales Road, is just south of the Santa Clara River Estuary. The major source to this location appears to be the estuary, when it is open to the tide. The information from the original data for the 2002 303(d) list showed this site as exceeding the Ocean Plan total coliform objective of 1000 MPN/100 mL for 20% of the samples.

Recent data show site 26000 exceeds this objective for 16% of the samples from October 1998 to June 2002.[6] Criteria for listing on the 2002 303(d) list required exceedance for 20% of the samples. However, this site also exceeded the geometric mean[7] of 1000/100 mL for 13 of 157 data sets[8] or 8%. These geometric mean

[6] Note that this data set is a subset of the complete data set, which includes data from VC/EHD, Mandalay Generating Station, and the Regional Board. The complete data set included samples collected contemporaneously in near vicinity. The maximum of these duplicates was used for this table and data discussed in this section. All data was used in the modeling for the linkage analysis.

[7] The information on geometric mean is provided for illustrative use only.

exceedances occurred more frequently during wet than dry seasons. Total coliform data are shown in Table 5, below.

TABLE 5. Total Coliform Summary

Site	Number of Samples	Number of Exceeding Total Coliform Instantaneous	Percent Exceeding 2002 303 (d) Single Sample Limit	Data Sets	Number of Data Sets Exceeding Geometric Mean	Percent Data Sets Exceeding Geometric Mean
North Gonzales Road	189	31	16%	157	13	8%
Gonzales Road	185	42	23%	151	24	16%
Go Kart	186	32	17%	156	17	11%

Fecal coliform data for this site include 3 exceedances of 204 samples, or 1%. Enterococcus data for this site include 11 exceedances of 203 samples, or 5%. This site is not recommended for listing as impaired for fecal coliform or enterococcus on the 2002 303(d) list.

4.3.2.2 Gonzales Road Site

VC/EHD named the second sample location on McGrath State Beach as Gonzales Road. This is site number 27000, and it is near the outfall for the McGrath Lake discharge. Samples were collected in approximately the same location every week. However, the outfall from McGrath Lake meanders and reaches the tide at different locations. Previously, the outfall reached the tide north of the sampling location. Starting earlier this year, the outfall had moved enough that it is now south of the sampling location.[9] This could affect the sample results, if the tide continued moving in a southerly direction. Also, current data show lower total coliform concentrations.

Originally on the 2002 303(d) list, this site exceeded the 1000 MPN/100 mL objective for 40% of the samples. With the new data, it exceeds the objective for 23% of the samples. However, this site also exceeded the geometric mean of 1000/100 mL for 24 of 151 or 16% of data sets. These exceedances occurred only slightly more often during wet than dry seasons. This site is still impaired and is expected to remain on the 2002 303(d) list. Data for total coliform are shown in Table 3, above.

---

[8] The Basin Plan requires five samples in a 30-day period to assess the total coliform geometric mean. A data set is 5 or more samples that were collected during a rolling 30-day period.

[9] VC/EHD, personal communication, 2002.

Fecal coliform data for this site include 4 exceedances of 223 samples, or 2%. Enterococcus data for this site include 14 exceedances of 218 samples, or 6%. This site is not listed as impaired for fecal coliform or enterococcus on the 2002 303(d) list.

4.3.2.3 Go Kart Site

VC/EHD named the third sample location on McGrath State Beach as Go Kart site, named after the business on Harbor Boulevard adjacent to the site. This is site number 28000, and it is at the southern end of the beach, just north of Reliant Energy's Mandalay Generating Station (Generating Station) outfall. In the original data analysis for the 2002 303(d) list, 30% of the samples exceeded the 1000 MPN/mL total coliform objective. With the new data, 17% of the samples exceed the objective. However, this site also exceeded the geometric mean of 1000/100 mL 17 of 156 or 11% of the data sets. These geometric mean exceedances occurred more often during wet than dry seasons. Data for total coliform are shown in Table 3, below.

Fecal coliform data for this site include 1 exceedance of 201 samples, or 0.5%. Enterococcus data for this site include 10 exceedances of 197 samples, or 5%. This site is not listed as impaired for fecal coliform or enterococcus on the 2002 303(d) list.

4.4 SEASONALITY

In this TMDL, summer is defined by the AB 411 sampling requirements, which are April 1 to October 31. Winter is defined as the remaining months, or November 1 to March 31.

While there were significant summer exceedances of the 1000/100mL objective for total coliform, the number of exceedances were fewer than winter exceedences. Overall in winter, there were 61 exceedance of 257 samples, or 24%. The data for the individual sites showed more. The North Gonzales Road site, near the estuary, had 17 exceedances out of 85 winter samples, or 20%. This data is summarized in Table 5, below. This is slightly more than the overall rate of exceedance at that site. The source for that site is the Estuary, and VWRF provides the water in the Estuary at a constant rate all year long.

TABLE 6. Seasonal Total Coliform Data for McGrath Beach

Site	# Winter Samples	# Samples Exceeding	% Exceeding in Winter	# Samples Exceeding	# Summer Samples	% Exceeding in Summer
North Gonzales Road	85	17	20%	14	104	13%
Gonzales Road	85	26	31%	16	100	16%
Go Kart	87	18	21%	14	99	14%

The Gonzales Road site, near the McGrath Lake outfall, exceeds the objective for only 16% of its samples exceeding the objective during the summer, as opposed to 31% during the winter. This is also consistent with its source. The McGrath Lake outfall has

a much greater flow during the winter (10 MGD) than during the summer (0.6 MGD). The outfall water is also less likely to reach to marine water during the summer.

The summer data for the Go Kart site, near the Mandalay Generating Station outfall exceeds more often in the winter.

Appendix B contains the data used for this TMDL assessment.

TABLE 7. 303(d) List Status

Site	1998 303(d) Listing	2002 303(d) Listing (Recommendation)
Surfers' Knoll	Coliform bacteria	Remove from listing
North Gonzales Road	Coliform bacteria, *beach closures*[10]	Watch, remove from listing
Gonzales Road	Coliform bacteria, *beach closures*[10]	Impaired, remove from listing
Go Kart	Coliform bacteria, *beach closures*[10]	Watch, remove from listing
Mandalay Beach	*Beach closures*	Remove from listing

4.5 POINT SOURCES

4.5.1 McGrath Lake

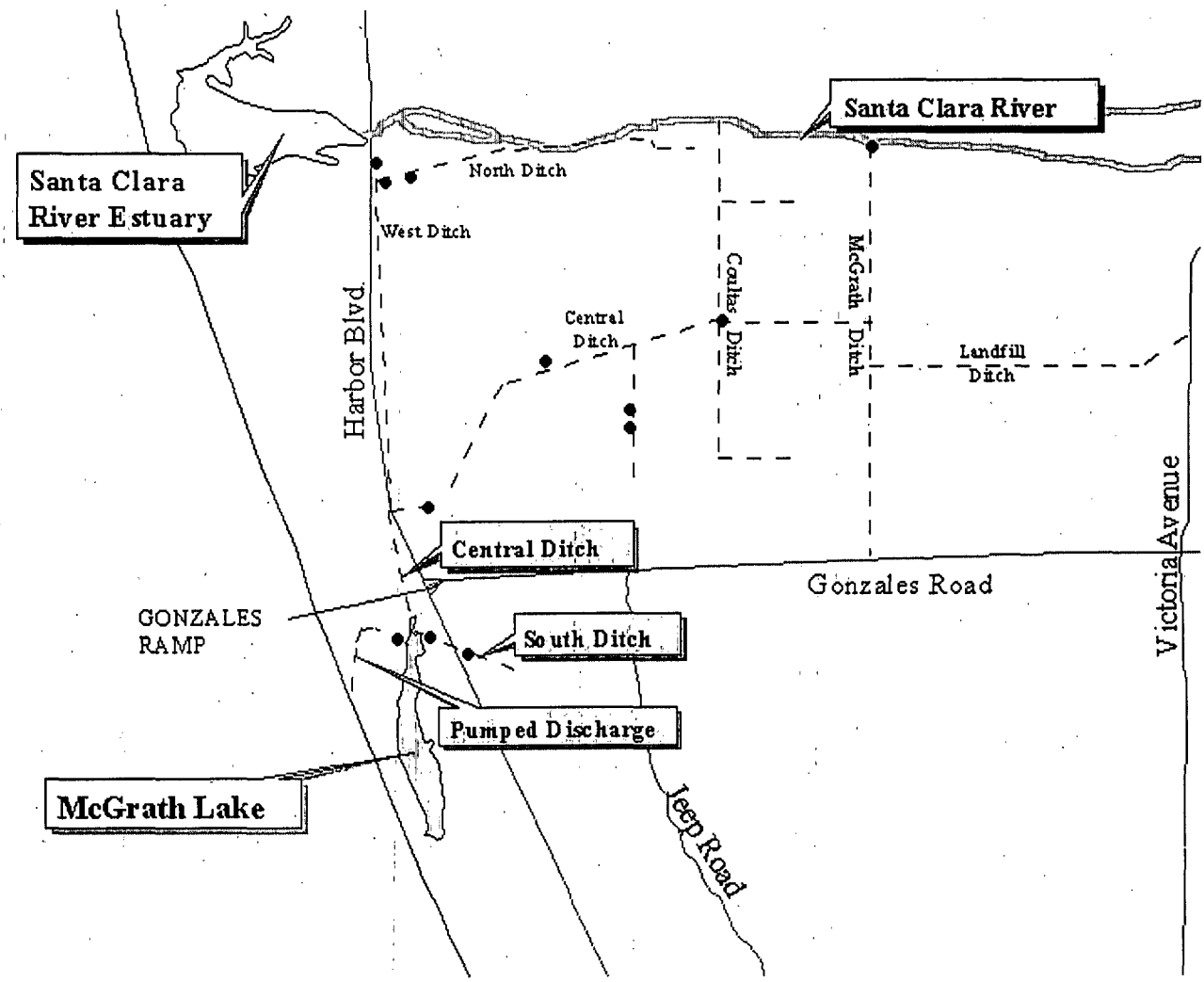
McGrath Beach has two point sources, the McGrath Lake discharge and the Mandalay Generating Station discharge. The location of greatest impairment is at the Gonzales Road sampling site, near the McGrath Lake outfall. As discussed above, this lake constitutes the main source of total coliform bacteria to the beach at this location.

McGrath Lake has several sources of water. Sources of water include irrigation and drainage runoff, groundwater and rainfall.[11] The main source is water from the irrigation ditch, called Central Ditch that comes from agricultural property across Harbor Boulevard from the lake. This ditch starts at the eastern end of the nearest farm property, and goes through the fields westward. When viewed on two occasions, in winter and spring, Central Ditch had water from the start. Central Ditch had the ability to collect runoff from the fields, but was not observed doing so on either occasion. Water was added from tile drains. Water was also added from a pump that removes water from an

[10] This listing is for *beach closures* for all of McGrath Beach, not individual sites.
[11] This is an estimated figure applicable to one set of conditions in the winter of 1992-1993. The data was from Chemical and Biological Measures of Sediment Quality in McGrath Lake, February 1999, RWQCB-LA. et al.

artesian-like well, water that would be used to water crops when needed.[12] Birds were along the sides of the ditch and in the water in the ditch. On a spring visit, there were over 15 birds in the entire length of the ditch, which staff estimated as less than ½-mile long. This water crosses under Harbor Boulevard, north of Gonzales Road, and travels through an undeveloped, wooded area before it contacts McGrath Lake. The ditches are detailed in Figure 2, below.

FIGURE 2. SOURCES TO AND DISCHARGE FROM MCGRATH LAKE



[12] Personal communication from David Murray of Coastal Berry during a tour of the site on April 9, 2002.

South of Gonzales Road there is a second ditch with a pump, called South Ditch. It leads from another farm and other property and flows under Harbor Boulevard to McGrath Lake. This ditch is rarely filled, flowing only during wet weather.[13] This ditch goes near a dog kennel. According to the McGrath Lake WAC, a diversion of this water is planned.

McGrath lake elevation rises in wet weather approximately 3 inches per day, or 2.8 MGD. This is from groundwater percolating into the lake and increased flows of surface water.[14] Therefore, the lake has a number of sources of water in addition to return flows from irrigated agriculture. Additionally, the water from the lake is pumped through a pipe onto the beach. Therefore, Regional Board staff find that this water does not meet the exemption for return flows from irrigated agriculture as stated in the Clean Water Act Section 502(14); 33 U.S.C. Section 1362(14).

> The term "point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

Therefore, Regional Board Staff conclude that this discharge is a point source.

This water pumped onto the beach typically reaches the tide. Stakeholders state that "the lake water that is pumped to the beach flows through the sand dunes until it either reaches the ocean or percolates into the sand. During winter months, sand buildup on the beach often creates a barrier that causes the outfall water to accumulate behind the dunes. Winter high tides often overtop the sand barrier, adding to the volume of accumulated outflow until the sand barrier is naturally breached."[15] The water as pumped out of the lake and the water in the "creek" on the beach contain coliform that exceed the ocean objective of 1,000/100 mL of total coliform bacteria. 17 million gallons were pumped from the lake onto the beach during the month of June 2002. Winter flow has been estimated at an average 10.1 MGD.

4.5.2 Mandalay Generating Station

The second point source to McGrath Beach is Mandalay Generating Station. The water supplied to Mandalay Generating Station comes from the Edison Canal. This canal originates in Channel Islands Harbor, which has a number of pathogen exceedances, but not enough to be put on the 303(d) list. Additional freshwater drains into the canal from

---

[13] Communication from State Parks on June 24, 2002.
[14] Chemical and Biological Measures of Sediment Quality in McGrath Lake, February 1999, RWQCB-LA. et al.
[15] Response to comments letter from McGrath Lake Watershed Action Committee, January 31, 2003.

various farms and stormdrains. These flows can also be high in coliform bacteria.[16] All of this water constitutes the cooling water for the generating station. After use as cooling water, it is discharged to McGrath Beach. The generating station has occasional high coliform counts, but routinely has very high flows. The Generating Station flows vary from approximately 50 MGD to 280 MGD[17], or approximately 88 to 500 times the flow from McGrath Lake to the beach. This outfall flows directly to the beach as well. The high flows make the occasional high coliform counts a significant impact even compared to the routinely high coliform counts from McGrath Lake.

4.6 NONPOINT SOURCES

The northern most sampling site on McGrath Beach is near the opening, or breach, to the Santa Clara River Estuary. The estuary, when it breaches, is a significant source of coliform to the beach. The major water source is VWRF, which has a total coliform objective of 2/100mL. Therefore, VWRF is not a source of total coliform.[18] The estuary is home to a large number of birds and other wildlife. The wildlife is likely to the major source of total coliform from the estuary to the beach. However, the estuary also is the source for the least impaired part of the beach, i.e. the sampling site with the lowest coliform levels. This location is expected to be removed from the 2002 303(d) list.

5.0 LINKAGE ANALYSIS

Linkage analysis for this TMDL is done using water quality modeling. The model used was based on the Water Quality Model, first developed by Lee et al. (1985). Water quality modeling is used to: (1) determine the contributions of different sources to bacteria loads (source assessment), (2) relate these loadings to water quality responses in the receiving water, (tide), and (3) estimate the necessary load reductions necessary to meet the numeric targets.

The linkage analysis for this TMDL was performed using a far field diffusion and buildup model. The mixing and dispersion of the wastewater discharge from a discharge point or structure like an outfall or a diffuser can be conceptually divided into two phases: (i) near field mixing, (ii) far field diffusion and buildup. The near field phenomenon occurs in a matter of minutes and within a region measured out to several hundred meters. The buildup in the far field occurs over days and weeks over distances beyond a few kilometers. The far field diffusion is in between these two scales, i.e., a time scale of hours to a few days and a distance scale of a few hundred meters to a few kilometers. For the near field, the mixing is dominated by discharge jet momentum.

Data utilized were obtained from VWRF, VC/EHD, and Mandalay Generating Station, and collected by Regional Board staff. Data for this model include 628 samples

---

[16] Communication from Mandalay Generating Station on September 30, 2002.
[17] Communication from Mandalay Generating Station on June 7, 2002.
[18] Exceedances of this objective are uncommon. Any exceedance of this objective would constitute an upset and be handled as a spill. Therefore these exceedances will not be considered as part of this TMDL.

in 3 locations off McGrath Beach. For calibration purposes, 15 samples were used for model validation. For this model, coliform die-off is assumed at $0.8d^{-1}$.[19]

The resulting contributions, or loads, from the main sources and their required reductions are discussed in detail in Section 6, Allocations.

The report for this model is shown in Appendix C.

6.0 ALLOCATIONS

6.1 LOAD ALLOCATIONS (SANTA CLARA RIVER ESTUARY)

The waste load allocations (WLAs) and load allocations (LAs) have been devised from the modeling of the sources and the linkage analysis. The sole non-point source is the Santa Clara River Estuary. Water from the estuary reaches the beach at site 26000, the North Gonzales Road site, which is recommended for removal from the 2002 303(d) list. The total coliform sources in this estuary are mainly birds, which live in or use the estuary as migratory habitat. The total coliform load in summer is 1.02*10 exp.12 MPN/day. The LA to meet the numeric target based on the linkage analysis is 4.87*10 exp.12. Therefore, this source needs no source reduction during the summer. In the winter the total coliform load is 9.24*10 exp.12. Therefore, this load will need further study.

6.2 WASTE LOAD ALLOCATIONS

For McGrath Beach there are only two point sources contributing to total coliform exceedances. Those sources, McGrath Lake and the Mandalay Generating Station have waste load allocations required for this TMDL.

The WLA is expressed as a concentration to allow for seasonal or operational flow variations. Mass based WLAs are provided for illustrative purposes and include an explicit MOS for the McGrath Lake discharge. The WLA is 1000/100 mL, and the mass based WLA includes a 20% MOS. The existing Mandalay Generating Station NPDES permit requires that they meet the 1000/100 mL for receiving water, which is consistent with the concentration based WLA in this TMDL.

[19] This rate was used in the Santa Monica Bay Beaches Dry Weather Bacteria TMDL and is in the range of acceptable die-off rates. It is considered a conservative value. Section 6.3 provides additional discussion on this value.

TABLE 8. Concentration Waste Load Allocations for McGrath Lake and Mandalay Generating Station

Location	Total Coliform WLA, /100 mL
McGrath Lake Discharge	1,000
Mandalay Generating Station	1,000

Both sources were modeled as discussed in Section 5.0, Linkage Analysis. Based on a monthly flow for June 2002 of 17 million gallons, McGrath Lake for dry weather was modeled to have total daily loads on average of 2.37*10 exp. 11 MPN/day. In order to meet the WLA of 800 MPN/100mL, the Total Maximum Daily Load, or TMDL will be 1.92 * 10 exp.11.[20] The reduction in total daily load would be 19%. If the amount of water discharged from McGrath Lake remains the same, the average total coliform count would also require a 19% reduction.

For winter, the average daily flow is as much as 10.1 million gallons per day. The average winter total coliform density is 23083 MPN/100 mL. This results in a coliform load of 8.82*10 exp.12. To meet the TMDL of 1.92 * 10 exp.11, the McGrath Lake discharge will need a 97% reduction.

Using the geometric mean of the data for the Mandalay Generating Station, the current total load is 1.03*10 exp.12. To meet the numeric target, it would be allocated a TMDL of 5.7*10 exp.12. Consequently, Regional Board staff assesses that the existing load is consistent with the TMDL.

TABLE 9. Load Reductions

Site	**Current Summer Daily Load (* 10 exp. 12)**	**Current Winter Daily Load (* 10 exp. 12)**	**Mass TMDL (* 10 exp. 12)**	**Percent Reduction**
Santa Clara River Estuary	1.02	9.24	4.87	Load reduction pending studies for the Santa Clara River Coliform TMDL
McGrath Lake Discharge	0.237	8.82	0.192	19% summer 97% winter
Mandalay Generating Station	(Geometric mean) 1.03		5.7	None

[20] 1.92 * 10 exp.11 is equal to 1.92×10^{11}, or $1.92 * 10^{11}$.

6.3 MARGIN OF SAFETY

A margin of safety (MOS) is applied to the available load to account for uncertainties in the TMDL analysis and can be implicit or explicit. An implicit MOS occurs when the linkage data follow conservative assumptions. An explicit MOS is stated separately from the data. For this TMDL, the MOS is added both implicitly and explicitly. The explicit MOS is the difference between the numeric target and the objective used in the model. The implicit MOSs are dilution between the outflow and wave wash, degradation of coliform bacteria, and selection of bacteria models.

6.3.1 Explicit Margin of Safety

For this TMDL an explicit MOS of 20% is proposed for the WLA on a mass basis. That is, when considering the WLA on a mass basis, the model was chosen with an objective for total coliform of 800/100 mL to account for the limited data set available the model. Also, the model data used were chosen with the geometric mean representing the concentrations in the tide, not a higher percentile range of the data, as the geometric mean seems to most accurately reflect the ongoing situation in the area.

6.3.2 Dilution Between Sources and Wave Wash

This model uses a quasi-steady-state condition for when the source water reaches the tide. Therefore, there is dilution between these sources. This is not a conservative assumption.

6.3.3 Bacterial Degradation

The die-off rate for total coliform in seawater is 0.7 to 3.0 per day according to the *Protocol for Developing Pathogen TMDLs* (2000). This model uses a 0.8 d(-1) degradation rate. This is the same bacterial degradation rate used in the Santa Monica Bay Pathogen TMDL. Based on three experiments, two in fresh water and one in marine water, bacterial degradation was shown to range from hours to days. Transport time from most subwatersheds during wet weather is short. Therefore, the conclusion is that bacteria degradation is not fast enough to greatly affect bacteria densities in the wave wash. Based on the results of the fresh water experiments, the model assumes a bacteria die-off rate of 0.8 d-1. Degradation rates were shown to be as high as 1.0 d-1. (See Appendix D for a discussion of the experimental design and results of the bacteria degradation study.) (See Appendix C for details on the model.)

7.0 IMPLEMENTATION

The data show that for Surfers' Knoll, McGrath Beach and Mandalay Beach there are two sources that need to be addressed by WLAs. These are the McGrath Lake Outfall and the Mandalay Generating Station outfall.

California Water Code section 13360 precludes the Regional Board from specifying the method of compliance with orders issued by the Regional Board; however California Water Code section 13242 requires that the Basin Plan include an implementation plan to describe the nature of actions to be taken and a time schedule for action. This implementation plan contains additional studies to be conducted by Coastal Berry

Company, LLC (Coastal Berry) and Mandalay Generating Station to refine estimates of waste load allocations and assimilative capacity and options to attain compliance with the WQO for total coliform on McGrath Beach. The implementation plan includes additional studies and a time schedule to determine the best method to meet WLAs for McGrath Beach.

In accordance with the Clean Water Act, point sources, which include sources of discharged wastewater pumped through a pipe, are also required to have an NPDES permit. The Mandalay Generating Station has an NPDES permit. The McGrath Lake discharge does not currently have an NPDES permit.

7.1 SANTA CLARA RIVER ESTUARY

The discharge from the Santa Clara River Estuary does not cause impairment due to exceedance of the single sample total coliform objective, but appears to cause or contribute to exceedences of the total coliform geometric mean objective. The discharge from the estuary is not well defined. Because the primary source of wastewater discharged into the estuary is effluent from the Ventura Wastewater Reclamation Facility which is disinfected, and the estuary supports a large bird population, Regional Board staff concludes that the coliform source into and from the Santa Clara River Estuary is primarily natural, i.e. birds in the estuary. These sources of coliform will be addressed in an upcoming pathogen TMDL for the Santa Clara River Estuary. This site will be monitored as described in the Implementation Plan for this TMDL and further investigated as part of the upcoming Santa Clara River Estuary TMDL. Regional Board staff will study AB 411 data to monitor the estuary discharge. Further information may be used in upcoming TMDLs.

7.2 MCGRATH LAKE OUTFALL

In 1961, the coastal area now called McGrath Beach, and most of McGrath Lake was deeded to the State of California by the McGrath family. At that time, the McGrath family retained the right to discharge water from that lake, and, as stated in the grant[21], to "maintain the level of (the) lake ... through whatever means seem desirable to" the McGrath family or anyone they authorize. That currently is Coastal Berry. The grant continues, "...however, that any installations necessary for the control and/or maintenance of the lake between the above specified levels shall be located on grantors' land or that portion of said lake situate on grantors' land, and further provided that any exercise of such rights shall in no way interfere with the use of the land herein conveyed or in any way disturb the improvements placed thereon in pursuit of its use for State purposes."

McGrath Lake receives flow from an agricultural ditch year round. It also receives flow from a second agricultural ditch south of Gonzales Road during wet weather.[22] It receives runoff from agriculture and the surrounding area. Additionally, the lake receives shallow groundwater that discharges into the lake, again in greater quantities during wet weather.

---

[21] Grant deed recorded on May 3, 1961, Book 2004, Page 224, Ventura County.
[22] Communication from State Parks, June 24, 2002.

The McGrath Lake WAC was formed as an adjunct to the McGrath Lake Trustee Council, which was formed in connection with a spill in McGrath Lake in 1993. The WAC consists of members of the McGrath family, who own the north end of the lake and some nearby land used for agriculture and other uses, State Parks, California Fish and Game, United States Fish and Wildlife, Coastal Berry, and Bailard landfill, which is near Coastal Berry property. The WAC is currently working to develop a watershed management plan that will address a broad spectrum of water quality issues affecting the watershed, including coliforms. It is also investigating the feasibility of ceasing discharge to and from the lake. The outcome of these studies may influence the implementation strategies for the McGrath Lake Discharge.

As shown in Load Allocations, Section 6.2, the TMDL is 1.92 * 10 exp.11. This location needs to reduce the dry weather coliform by approximately 19% to reach this total coliform bacteria TMDL. This discharge will be addressed through a Clean-up and Abatement Order (CAO) with a time schedule that will require the levels of coliform to be reduced such that they do not impair the beneficial uses of McGrath Beach. Additionally, other objectives must be met. Therefore, the solution to the coliform problems at McGrath Beach cannot impact the other beneficial uses for McGrath Beach of the beneficial uses of McGrath Lake. The impact of any treatment system or other method of removing the impairment must be analyzed to ensure that these uses do not become impaired. The WLA for total coliform will become effective upon order of the CAO by the Regional Board's Executive Officer. The CAO with time schedule will allow the Discharger to implement interim measures to reduce coliform loading and complete technical reports to determine the best option for meeting Ocean Plan and Basin Plan requirements for discharge. At the end of the three-year time schedule, the CAO requires that the discharge from McGrath Lake will meet all applicable requirements or be terminated. The CAO will also require this site to be studied further for a permanent reduction in total coliform load and ensure the McGrath Lake discharge meets Basin Plan and Ocean Plan requirements.

7.2.1 Implementation Strategies for McGrath Lake Discharge

Staff have investigated several possible methods for reducing the pathogen output from McGrath Lake. Those strategies are reduced to diversion of the flow to the lake, treatment, or diversion of the outfall. Each of these systems is discussed below.

7.2.1.1 Treatment

Treatment of wastewater can be broken into two major categories: onsite above-ground treatment facilities and below ground treatment.

Above ground treatment of the water would require having the water from the lake, not just the agricultural fields, treated for pathogens. That is because the lake has sources of pathogens, i.e. birds, which may not be disturbed. Therefore, simply removing pathogens from the source water to the lake may sufficiently reduce the load of pathogens from the lake outfall.

Treatment facilities would need to be sized to address flows from less than 1 MGD of water in the summer, to over 10 MGD of wastewater in the winter. This is quite variable, and may require disinfection on the same scale as VWRF. Therefore, packaged pretreatment plants would not be adequate to address wet weather loads, but may be suitable for dry weather discharges.

However, treatment might be broken into seasonal treatment: summer and winter. In that scenario, onsite treatment during summer months would treat approximately 0.6 MGD. A small, prefabricated treatment plant could be used to treat the discharge in the summer. As a reduction of 19% of the total coliform is required to meet the TMDL, as little as 19% of the water might need to be treated. Therefore, a treatment plant could cost from approximately $0.43 to $1.3 million in initial capital costs, and about $100,000 to $250,000 in operating costs per year. Treatment would require a land footprint approximately 0.15 to 0.45 acres.[23]

Below ground treatment could be a leach field either with or without a septic system. A leach field would require a minimum distance between the leaching and the groundwater table. As there is shallow groundwater that discharges into the lake, exhibiting water contact between surface and lake waters and groundwater, it is unlikely that there would be sufficient distance between the water table and a leach field.

7.2.1.2 Diversion

VWRF has a sewer line pipeline which extends southward next to Harbor Boulevard. VWRF is located approximately one mile from Gonzales Road, and has a capacity of 11 MGD, currently processing 9.5 MGD. It might be possible to divert the flow from the agricultural land to VWRF. In the summer this flow is about 0.6 MGD.

However, this quantity of flow might require a connection to the City of San Buenaventura's main trunk line terminus approximately 1 mile north of the entrance to the campground, or approximately 2 miles north of McGrath Lake. VWRF staff estimate connection fees at $5,800,000, and treatment costs at $300,000 to $400,000 per year.

Additionally, City of San Buenaventura policy "prohibits properties located outside its boundaries to connect to its sewer system....The Ventura City Council must approve such agreements."[24]

During wet weather, however, the flow from the lake averages 10 MGD, which would exceed the capacity of VWRF. Total coliform levels in the winter in this area of the beach are slightly lower than summer levels, but not enough that the dilution would eliminate the need to reduce total coliform levels. This water would also need to be diverted. The cost for treating one million gallons is approximately $1,170 per day. Therefore, the cost to treat this water during the 5 month wet season for 10 MGD would be $1.8 million.

---

[23] Communication with Pollution Control Systems, November 13, 2002.
[24] Comment letter from VWRF, January 24, 2003.

There is another potential issue with treating the wet weather discharge at VWRF. The salinity at the lake is not known, but thought to be brackish, due to salt water intrusion during storms. VWRF has maximum salt levels for influent as follows: total dissolved solids (TDS): 4270 mg/L, sulfate: 3660 mg/L, chloride: 880 mg/L. If the McGrath Lake discharge exceeds these levels, it could not be treated at VWRF.[25]

Another form of diversion would be to change the location of the inlet to the McGrath Lake pump. Currently, the lake is pumped from the north end, very near the location where the agricultural ditch flows into the lake. According to recently collected RWQCB data, the south end of the lake has significantly lower levels of pathogens, possibly because it is deeper than the north end of the Lake and has greater assimilative capacity.[26] Therefore, if the flow from the lake to the ocean were to come from the south end of the lake, pathogens would be reduced significantly.

Finally, the outfall currently discharges water onto the beach. The outfall could be moved to discharge into the ocean. The length and diameter of the pipe would need to be determined, but for a simple 15-inch pipe of 500 feet the cost would be approximately $40,000.[27] Studies and possibly treatment may be required for this alternative. Additional costs for permits, and other technical requirements would be necessary.

7.2.1.3 Ceasing Ocean Discharge

Another option for the discharge from McGrath Lake to McGrath Beach is to cease discharge to the ocean. One method of ceasing discharge was covered briefly in section 7.2.1.2, above, where the discharge from Coastal Berry property was recommended to be diverted to VWRF. There are other possible methods of ceasing discharge. They include: 1) letting the water enter the lake, but not discharging to the ocean and 2) not discharging agricultural and other water to the lake by disposing of it using other means. These methods have the flaw that not all of the water in the lake comes from agricultural discharge and miscellaneous flows from Coastal Berry. There is a second drainage ditch flowing into McGrath Lake. It comes from the south side of Gonzales Road, and it passes by a kennel in addition to agricultural lands. According to the McGrath family[28] this ditch has water flowing in it only during wet weather. Additional water seems to enter the lake from ground water.

---

[25] Communication with VWRF, November 7, 2002.

[26] This data does not necessarily agree with the data collected on May 19, 1999. However, all of that data exceeded the method's top concentration level, so a difference in concentrations is not shown. This data is shown in Appendix B.

[27] The cost estimate is based on standard factors from RS Means Environmental Remediation Cost Data, 6th annual edition (2000), including engineering and construction.

[28] Communication during WAC meeting (January 2002).

The first method would increase the size of the lake. If the lake did not breach, either naturally or anthropomorphically, it would flood eastward, as described in section 4.1.

The next possible method is to discharge this water to the Santa Clara River. This would be just upstream of the estuary, and therefore the flows would need to meet estuary water quality objectives. While the water from agriculture might meet coliform objectives for the river and estuary, the water might not meet other water quality objectives for the receiving waters.

The final method suggested above would require additional methods for disposal of the water. Methods could include use for agriculture if the water is of appropriate quality, or paid disposal.

All of these methods require additional study. The implementation plan requires that Coastal Berry submit a technical report that evaluates and proposes measures to meet requirements for waste discharged to coastal waters. This report will include complete characterization of the waste discharge for conventional, toxic and priority pollutants. The technical report will also include an analysis of measures that meet the requirements in wet and dry weather. The report will be certified by a registered civil engineer and submitted to the Regional Board within 365 days of the date of issuance of the CAO.

7.2.2 Implementation Plan

In addition to studying and reporting on possible implementation strategies, the CAO requires Coastal Berry to complete several other measures. After the Regional Board's Executive Officer approves Coastal Berry must implement the measures to meet the requirements for waste discharge to the coastal waters within three years of CAO issuance.

The CAO also requires Coastal Berry to implement a monthly monitoring program to include coliform characterization of the discharge using AB 411 guidelines. Samples will be collected both at wave wash and at the discharge point, where the pump(s) discharges the water from McGrath Lake to the beach. This is necessary as there may be a change in the quality of the water before it reaches the ocean. As much of this water is absorbed into the sand, it may affect groundwater or other surface water despite not reaching the tide. Coastal Berry will submit monitoring reports on a quarterly basis.

Three years after the CAO is issued, Coastal berry will either cease discharge of water from McGrath Lake or submit a Report of Waste Discharge. At that time Coastal Berry will meet bacteria water quality standards as stated in the Basin Plan and the Ocean Plan. However, if the Discharger encounters delays beyond their control, the Executive Officer may provide an extension of up to six months to complete implementation.

7.3 MONITORING STRATEGY FOR MANDALAY GENERATING STATION

Listing data for the 2002 303(d) list show this site as exceeding the total coliform objectives for 28% of the samples. Current data show that this site exceeds the objective for 19% of the samples collected. To be listed on the 303(d) list, it must exceed 20%. Mandalay Generating Station, the major source at this site, currently has an NPDES permit to discharge with objectives for total and fecal coliform. Monitoring results from Mandalay Generating Station will be reviewed to ensure that the discharge meets the objectives for total coliform in ocean water.

TABLE 10. Implementation Schedule

Implementation Act	Responsible Party	Implementation Date
WLA for coliform bacteria apply to the McGrath Lake discharge.	Coastal Berry	Effective Date of Clean-up and Abatement Order (CAO)
Submit quarterly monitoring reports on the monthly monitoring of coliform in the discharge and at wave wash.	Coastal Berry	Monthly monitoring shall be implemented upon effective date of the CAO. Quarterly reports are due by the 15th of the month following the end of each calendar quarter.
Begin monitoring in wave wash at McGrath Lake Outfall, when possible, and Mandalay Generating Station Outfall.	Coastal Berry, Mandalay Generating Station, and VC/EHD to coordinate.	One year after effective date of CAO.
Report on interim methods for reducing coliform load from discharge.	Coastal Berry	120 days after effective date of CAO.
Complete study of ceasing discharge and associated methods.	Coastal Berry, McGrath WAC	Three years after effective date of CAO.
Obtain Permit for McGrath Lake Discharge, if necessary.	Regional Board/Coastal Berry	Three years after effective date of CAO.
Water from McGrath Lake Outfall Meets WLA of 800/100 mL, and all requirements of the Basin Plan.	Coastal Berry	Three years after effective date of CAO.

8.0 MONITORING PROGRAMS

Currently, McGrath Beach is monitored by VC/EHD weekly at three locations. Each of these locations is purposefully located at least 50 feet from the location where the

outflow from the beach reaches the water. This is how most sampling is done throughout Ventura County by VC/EHD and Los Angeles County by a number of entities, as well as by others throughout the state.[29] This method of sampling is used to show the levels of coliform in the surf zone. However, this location of sample sites is inadequate for purposes of this TMDL. This TMDL requires samples reflecting the amount of total coliform that may be contacted during REC-1 use of the sites. For the purposes of meeting this TMDL, monitoring samples will be collected at ankle depth where the discharge meets the tide.

The monitoring sites will otherwise remain virtually unchanged. Three sites along McGrath Beach will be monitored at the northern end, middle, and southern end of the beach. All samples will be collected in wave wash, as discussed in Section 3.1 and at ankle depth (3 inches). The northern end sample will be collected at the Santa Clara River Estuary outflow, when flowing, or near to the expected flow when it is not. The mid-beach sample will likewise be collected in the McGrath Lake outfall flow, when flowing, or as near to the expected flow when it is not. According to their permit, Mandalay Generating Station collects samples at the southern end of the beach in its outflow. Currently, this sample is collected quarterly. Samples will be collected monthly. The Mandalay Generating Station has continuous flow, so it will always be collected in this location.

[29] Santa Monica Bay Dry Weather Pathogen TMDL (2002).

9.0 REFERENCES

Assembly Bill Number 411 (AB 411), Wayne 1997.

California Environmental Protection Agency State Water Resources Control Board, Water Quality Control Plan, Ocean Waters of California, *California Ocean Plan*, 1997, and 2001.

California Regional Water Quality Control Board, Los Angeles Region, Moss Landing Marine Laboratories, California Department of Fish and Game Marine Pollution Studies Laboratory, University of California, Santa Cruz, and the Institute of Marine Sciences, *Chemical and Biological Measures of Sediment Quality in McGrath Lake*, 1999.

California Regional Water Quality Control Board Region 4, *Basin Plan*, 1994.

California Regional Water Quality Control Board Los Angeles Region, Regional Board Resolution No. 01-018: *Amendment to the California Regional Water Quality Control Plan for the Los Angeles Region*, 2001.

California Regional Water Quality Control Board Los Angeles Region, *1996 California Water Quality Assessment - 305 (b) Report: Supporting Documentation for Los Angeles Region.*

California Regional Water Quality Control Board Los Angeles Region, *1998 California Water Quality Assessment - 305 (b) Report: Supporting Documentation for Los Angeles Region.*

California Regional Water Quality Control Board Los Angeles Region, *1998 California Water Quality Assessment - 305 (b) Report:*

California Regional Water Quality Control Board Los Angeles Region, *Proposed 1998 List of Impaired Surface (the 305 (b) list). March 24, 1998.*

California Regional Water Quality Control Board Los Angeles Region, *Total Maximum Daily Load to Reduce Bacterial Indicator Densities during Dry Weather at Santa Monica Bay Beaches*, 2002.

California State Water Resources Control Board, *Porter-Cologne Water Quality Control Act*, Chapter 3, 2002

California State Water Resources Control Board, *Statement of Policy with Respect to Maintaining High Quality Waters in California* (State Board Resolution No. 68-16)

The Clean Water Act

Grant deed recorded on May 3, 1961, Book 2004, Page 224, Ventura County.

Kennedy/Jenks Consultants, *Final Report, McGrath Lake Preliminary Watershed Study*, 2002

Lee, K.K. and Chen, C.L., *A Dynamic Water Quality Simulation Model for a Freshwater Estuary and Riverine System*, International Conference on Water Quality Modeling in the Inland Natural Environment, Bournemouth, England, June, 1986.

Letter from US Fish and Wildlife Service, April 3, 2002.

Letter from California Department of Parks and Recreation, Lifeguard Service, April 4, 2002.

Schiff, Kenneth C., Jeffrey S. Brown, Stephen B. Weisberg. 2002, *Model Monitoring Program for Large Ocean Discharges in Southern California, Technical Report #357,* Southern California Coastal Water Research Project.

Schiff, Kenneth C., Jessica Morton, Stephen B. Weisberg. 2001, *Retrospective Evaluation of Shoreline Water Quality Along Santa Monica Bay Beaches,* Southern California Coastal Water Research Project. 1999-2000.

United States Code of Federal Regulations (CFR) 40 CFR 130.2

United States District Court, Northern District of California 1999, *Consent Decree*, Heal the Bay, Inc., Santa Monica Baykeeper, Inc. v. United States Environmental Protection Agency, Case No. C 98-4825 SBA, Oakland, California

US EPA *Ambient Water Quality Criteria for Bacteria - 1986.* EPA 440/5-84-002, Office of Water, Washington, D.C.

US EPA, *Guidelines for Preparation for the Comprehensive State Water Quality Assessments (305 (b) Reports)* and electronic updates: Supplement. EPA 841-B-97-002B.

US EPA, *Protocol for Developing Pathogen TMDLs.* EPA 841-R-00-002. Office of Water (403F), US EPA, Washington, D.C.

US EPA, *California 303(d) List and TMDL Priority Schedule*, Washington, D. C. 1998.

2006

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

CLEAN-UP AND ABATEMENT ORDER NO. R4-2003-0065 REQUIRING COASTAL BERRY COMPANY, LLC TO UNDERTAKE ACTIONS TO REDUCE COLIFORM LOADING TO McGRATH STATE BEACH (File No. 03-045)

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

Discharger

1. The Coastal Berry Company, LLC (Discharger) operates a 470-acre farm at 5701 Gonzales Road, Ventura, California. This farm uses approximately 80% of its acreage for strawberry production and the remaining area for vegetable production, and is located east of and in close proximity to McGrath Lake, a 10-acre coastal lake located between Harbor Boulevard to the east and the dunes of McGrath Beach to the west approximately 200-feet from the shoreline. McGrath Lake is located both on McGrath State Beach (McGrath Beach) and on property owned by the McGrath Family.

Nature of Condition of Pollution or Nuisance

2. The Discharger discharges wastewaters from McGrath Lake in order to maintain the lake level within a specified range thereby preventing flooding of land adjacent to the Lake. The wastewater is discharged by a pump system operated by the Discharger from McGrath Lake through two parallel pipelines onto McGrath Beach approximately one mile south of the Santa Clara River where it flows to the Pacific Ocean, a water of the United States.

3. McGrath Lake is fed by agricultural wastewater from the Discharger's farm and other farms in the McGrath Lake subwatershed, stormwater, dry-weather runoff and groundwater. The wastewater discharged from McGrath Lake contains a high level of coliform bacteria and is known to exhibit toxicity. The Discharger has provided Regional Board staff data on discharge water quality and pump volume. Up to 10.1 million gallons per day (MGD) of wastewater is discharged from McGrath Lake onto McGrath Beach during wet weather and an average of 0.6 MGD during dry weather.

Description of Affected Waters

4. The following beneficial uses are established for McGrath Beach in the Water Quality Control Plan, Los Angeles Region (Basin Plan): water contact recreation (REC-1), non-contact water recreational (REC-2), industrial service supply, navigation, commercial and sport fishing, marine habitat, wildlife habitat, biological habitat preserve, rare and endangered species habitat support, migration of aquatic organisms, spawning and reproduction of aquatic organisms, and shell fish harvesting.

5. The number of visitors to McGrath Beach varies from approximately 1,400 per month in the winter to 16,000 per month in the summer. McGrath Beach also has a campground, approximately one-mile north of the lake discharge location that contains 146 campsites. These sites are routinely fully occupied during the summer.

6. Ventura County Environmental Health Division (VC/EHD) samples McGrath Beach approximately 50 yards from the location where the Discharger's discharge meets the tide. This sampling has provided data evidencing that McGrath Beach does not meet total coliform objectives.

Description of Coliform Impairment at McGrath Beach

7. McGrath Beach is listed on the EPA's 1998 Water Quality Assessment 303 (d) list and the 2002 303 (d) list as impaired for total coliform for REC-1. It does not meet total coliform single sample or geomean objectives for REC-1. For total coliform at this site, 23% of the single samples exceeded the existing objective of 1,000/100 milliliter (mL). Also for total coliform at this site, 12% of samples exceeded the proposed single sample objective of 10,000/100 mL and 16% of the geomean data sets exceeded the proposed geomean objective of 1,000/100 mL. Regional Board staff have sampled and analyzed the Discharger's discharge. The discharge typically exceeds Basin Plan and Ocean Plan water quality objectives for total coliforms.

8. Regional Board staff prepared an analysis of coliform impairments of McGrath Beach, including source and linkage analyses. These analyses show the discharge from McGrath Lake causes the impairment of McGrath Beach by coliforms. Local and national epidemiological studies compel the conclusion that there is a causal relationship between adverse health effects, such as gastroenteritis and upper respiratory illness, and recreational water quality, as measured by bacteria indicator densities. An improvement in the quality or method of disposal of the discharge is required in order to abate the effects of bacterial pollution emanating from the pump and to attain existing water quality standards for coliforms at McGrath Beach.

9. A further description of the Discharger's operation, existing water quality conditions, the pollution to be abated, and the nature of the waste can be located in the "Total Maximum Daily Loads For Santa Clara River Estuary Beach/Surfers' Knoll, McGrath State Beach, And Mandalay Beach Coliform and Beach Closures" (TMDL) which is attached to this Cleanup and Abatement Order and incorporated herein by reference.

10. The Discharger is an active participant in the McGrath Lake Watershed Action Committee (WAC). The WAC includes stakeholders in the McGrath Lake Subwatershed and is undertaking studies to develop a watershed action plan for the McGrath Lake subwatershed. One option that the WAC is evaluating to address beneficial use impairments in the McGrath Lake subwatershed is to eliminate discharge of wastes into McGrath Lake and the discharge of wastewater from McGrath Lake to McGrath Beach. The Watershed Action Committee is scheduled to complete its evaluation by the end of 2004.

Applicable Laws and Regulations

11. California Water Code section 13304(a) provides in pertinent part that: "Any person ... who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant."

12. The California Ocean Plan (2001) Section III.A.2.d states, "Location of waste discharges must be determined after a detailed assessment of the oceanographic characteristics and current patterns to assure that:

    (1) Pathogenic organisms and viruses are not present in areas... used for swimming or other body-contact sports."

13. The California Ocean Plan (2001) Section III.A.2.e states, "Waste that contains pathogenic organisms or viruses should be discharged a sufficient distance from... water-contact sports areas to maintain applicable bacterial standards without disinfection. Where conditions are such that an adequate distance cannot be attained, reliable disinfection in conjunction with a reasonable separation of the discharge point from the area of use must be provided. Disinfection procedures that do not increase effluent toxicity and that constitute the least environmental and human hazard should be used."

14. The Basin Plan establishes water quality objectives in marine waters for the protection of the water contact recreation (REC-1) use. The State Board approved the Regional Board's Basin Plan amendment on July 18, 2002 (State Board Resolution 2002-0142), the Office of Administrative Law approved it on September 19, 2002 (OAL File No. 02-0807-01-S), and the US EPA approved it on September 25, 2002. Basin Plan objectives for marine waters serve as numeric targets for bacteria at McGrath Beach in the accompanying TMDL. The Basin Plan objectives for bacteria in marine waters designated for water contact recreation are:

    1. Geometric Mean
        a. Total coliform density shall not exceed 1,000/100mL
        b. Fecal coliform density shall not exceed 200/100mL
        c. Enterococcus density shall not exceed 35/100mL

    2. Single Sample Objectives
        a. Total coliform density shall not exceed 10,000/100mL
        b. Fecal coliform density shall not exceed 400/100mL
        c. Enterococcus density shall not exceed 104/100mL
        d. Total coliform density shall not exceed 1,000/100mL, if the ratio of fecal-to-total coliform exceeds 0.1.

15. The discharge does not currently meet the water quality objective for total coliforms. Therefore, this Order includes an implementation schedule to allow the Discharger to evaluate and implement interim measures to meet the water quality objective for total coliform.

16. VC/EHD collects weekly samples in compliance with AB 411. This law which went into effect in 1997, requires local governments collect weekly samples to document pathogen levels along coastal areas. VC/EHD collects samples weekly both during the AB 411 season (April 1 to October 31) as well as the rest of the year.

17. This action is being taken for the protection of the environment to enforce general rules, standards, or objectives, and as such is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000 et. seq.) in accordance with the California Code of Regulations, title 14, section 15321.

IT IS HEREBY ORDERED that, pursuant to California Water Code sections 13267 and 13304, the Coastal Berry Company, LLC, as operator of the McGrath Lake wastewater discharge system, shall undertake the following activities to investigate and to abate the discharge and threatened discharge of waste to coastal waters:

1. Submit a technical report that evaluates and proposes interim measures to meet the coliform objectives for McGrath Beach for Regional Board Executive Officer (Executive Officer) approval. The interim measures to be evaluated include, but are not limited to: relocating the intake to the discharge pump, relocating the outfall offshore, diverting the discharge to a Publicly Owned Treatment Works (POTW) during dry weather, disinfecting the discharge, and ceasing the discharge. This technical report must be certified by a registered Civil engineer and submitted to the Regional Board within 120 days of the date of issuance of this Cleanup and Abatement Order (CAO).

2. Upon receipt and approval of the aforementioned technical report by the Executive Officer, the Executive Officer will revise this CAO to set a schedule of implementation of the interim method approved by the Executive Officer.

3. Submit a technical report that evaluates and proposes measures to meet final requirements for waste discharge to coastal waters for Executive Officer approval. The technical report shall include at a minimum a complete characterization of the waste discharge for conventional, toxic and priority pollutants. This technical report shall also include an analysis of measures that meet requirements in wet and dry weather. This technical report must be certified by a registered Civil engineer and submitted to the Regional Board within 365 days of the date of issuance of this CAO.

4. In accordance with the aforementioned technical report and approval by the Executive Officer, implement the measures to meet requirements for waste discharge to coastal waters within 3 years of the date of the approval.

5. Implement a monitoring program to include, but not be limited to, coliform characterization of the discharge and receiving waters using Assembly Bill 411 guidelines with samples collected at wave wash and at the discharge point on the same day. An alternate method approved may by the Executive Officer. Monitoring reports shall be submitted on a quarterly basis according to the following schedule and shall be certified by a registered Civil engineer. The first report shall be due October 15, 2003.

Reporting Period	**Report Due**
January - March	April 15
April - June	July 15
July - September	October 15
October - December	January 15

6. Cease discharge of water from McGrath Lake by three years after this CAO is issued or, if the Discharger chooses to continue discharging, submit a Report of Waste Discharge on or before three years after the date this CAO is issued. The Discharger shall meet the Waste Load Allocation (WLA) for McGrath Lake discharge of 1.92 * 10 exp.11 as stated in the Staff Report as well as all water quality standards as stated in the Basin Plan and the Ocean Plan. The Load Allocation (LA) for the Santa Clara River Estuary of 4.87*10 exp.12 and the WLA for the Reliant Mandalay Generation Plant of 5.7*10 exp.12 are not required to be met by the Discharger.

7. (Or) Meet the Waste Load Allocation (WLA) for McGrath Lake discharge of 1.92 * 10 exp.11 as stated in the Staff Report. The Load Allocation (LA) for the Santa Clara River Estuary of 4.87*10 exp.12 and the WLA for the Reliant Mandalay Generation Plant of 5.7*10 exp.12 are not required to be met by the Discharger.

~~7.~~8. If, in the course of implementing interim or final measures, the Discharger encounters delays beyond the Discharger's control, the Executive Officer, at his discretion, may provide an extension not to exceed a period of 6 months, to complete implementation of the measures.

~~8.~~9. The Regional Board's authorized representative(s) shall be allowed:

- Entry upon premises where a regulated facility or activity is located or conducted, or where records are stored, under the conditions of this CAO;
- Access to copy any records that are stored under the conditions of this CAO;
- Access to inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this CAO; and
- The right to photograph, sample, and monitor the site for the purpose of ensuring compliance with this CAO, or as otherwise authorized by the California Water Code.

~~9.~~10. This CAO is not intended to permit or allow the Discharger to cease any work required by any other order issued by the Regional Board; nor shall it be used as a reason to stop or

redirect any investigation or cleanup or remediation programs ordered by the Regional Board or any other agency. Furthermore, this CAO does not exempt the Discharger from compliance with any other laws, regulations, or ordinances which may be applicable, nor does it legalize these waste treatment and disposal facilities, and it leaves unaffected any further restrictions on those facilities which may be contained in other statutes or required by other agencies.

~~10.~~11. The Discharger shall submit 30-day advance notice to the Regional Board of any planned changes in name, ownership, or control of the facility; and shall provide 30-day advance notice of any planned physical changes to the site that may affect compliance with this CAO. In the event of a change in ownership or operator, the Discharger also shall provide 30-day advance notice, by letter, to the succeeding owner/operator of the existence of this CAO, and shall submit a copy of this advance notice to the Regional Board.

~~11.~~12. The Regional Board, through its Executive Officer, may revise this CAO as additional information becomes available. Upon request by the Discharger, and for good cause shown, the Executive Officer may defer, delete or extend the date of compliance for any action required of the Discharger under this CAO. The authority of the Regional Board, as contained in the California Water Code, to order investigation and cleanup, in addition to that described herein, is in no way limited by this CAO.

~~12.~~13. Pursuant to California Water Code section 13320, the Discharger may seek review of this CAO by filing a petition with the State Water Resources Control Board (State Board). Such a petition must be received by the State Board, located at P.O. Box 100, 1001 I Street, Sacramento, California, 95814, within 30 days of the date of this Order.

~~13.~~14. Failure to comply with the terms or conditions of this CAO may result in imposition of civil liabilities, imposed either administratively by the Regional Board or judicially by the Superior Court in accordance with sections 13308 or 13350 et seq. of the California Water Code, and/or referral to the Attorney General of the State of California for injunctive relief pursuant to section 13304. Penalties may be assessed up to $10,000 per day that the violation occurs.

~~14.~~15. None of the obligations imposed by this CAO on the Discharger are intended to constitute a debt, damage claim, penalty or other civil action which should be limited or discharged in a bankruptcy proceeding. All obligations are imposed pursuant to the police powers of the State of California intended to protect the public health, safety, welfare and environment.

Ordered by: _____ Date: July 1~~4~~, 2003

Dennis A. Dickerson
Executive Officer

Main | Help | Logout

Tuesday, November 0

Project Name: Santa Monica Bay Beach Closures/Coliform/Bacteria Indicators (48)
Project Type: TMDL
Board Name: Regional Board 4
Date Created: 10/28/2003

Priority: High
Start Fiscal Year: 2003 - 2004
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Santa Monica Bay Beach Closures/Coliform/Bacteria

Description:

Scheduled Start Date: 10/03
Scheduled End Date: 06/05
Actual Start Date:
Actual End Date:
Delay **Project Status:** Not Started
Status Comment:

Details **Primary Contact:**

Details **Total Allocated Funding (PYs):** 0.30
(Contract Dollars): $75,000
Total Estimated Budget (PYs): 0.00
(Contract Dollars): $0

Pollutant Sources: Save Undo Change

=== Selected Sources Shown Above ===
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Agriculture-animal
Agriculture-grazing
Agriculture-irrigation tailwater

Details **Listing:**

(1) Abalone Cove E
(1) Ashland Avenue
(2) Big Rock Beach
(1) Bluff Cove Beac
(2) Cabrillo Beach (
(1) Carbon Beach
(2) Castlerock Beac
(1) Dan Blocker Me
(2) Dockweiler Bea
(1) Escondido Beac
(1) Flat Rock Point
(1) Hermosa Beach
(1) Inspiration Poin
(1) La Costa Beach
(1) Las Flores Beac
(1) Las Tunas Beac
(2) Leo Carrillo Bea
(1) Long Point Beac
(1) Lunada Bay Bea
(1) Malaga Cove B
(1) Malibu Beach
(2) Malibu Lagoon I
(1) Manhattan Beac
(1) Nicholas Canyo
(1) Palo Verde Sho
(2) Paradise Cove I
(1) Peninsula Beac
(2) Pico Kenter Dra
(1) Point Dume Bea
(1) Point Fermin Pa
(1) Point Vicente B
(1) Portugese Banc
(1) Promenade Par
(1) Puerco Beach
(2) Redondo Beach
(1) Resort Point Be

The Santa Monica Bay Bacteria Dry Weather ~~Wet weather~~ TMDL was approved by RWQCB on Jan 24, 2002 + subsequently approved by USEPA. The Santa Mon

(1) Rincon Beach
(1) Rocky Point Bea
(1) Royal Palms Be
(2) Santa Monica B
(1) Santa Monica C
(1) Sea Level Beac
(1) Sepulveda Can
(1) Surfers Point at
(2) Topanga Beach
(2) Torrance Beach
(2) Trancas Beach
(2) Venice Beach
(1) Whites Point Be
(2) Will Rogers Bea
(1) Zuma Beach (W

Sort Listing Mode: View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propo TMD Compl
Regional Board 4	C	Redondo Beach	40512000	Beach Closures	Nonpoint Source	High	1.5	2002	
Regional Board 4	C	Redondo Beach	40512000	High Coliform Count	Nonpoint Source	High	1.5	2002	
Regional Board 4	C	Torrance Beach	40512000	Beach Closures	Nonpoint Source	High	1.1	2002	
Regional Board 4	C	Torrance Beach	40512000	High Coliform Count	Nonpoint Source	High	1.1	2002	
Regional Board 4	C	Santa Monica Beach	40513000	Beach Closures	Nonpoint Source	High	3	2002	
Regional Board 4	C	Santa Monica Beach	40513000	High Coliform Count	Nonpoint Source	High	3	2002	
Regional Board 4	C	Venice Beach	40513000	Beach Closures	Nonpoint Source	High	2.5	2002	
Regional Board 4	C	Venice Beach	40513000	High Coliform Count	Nonpoint Source	High	2.5	2002	
Regional Board 4	C	Will Rogers Beach	40513000	Beach Closures	Nonpoint Source	High	3	2002	
Regional Board 4	C	Will Rogers Beach	40513000	High Coliform Count	Nonpoint Source	High	3	2002	
Regional Board 4	C	Castlerock Beach	40513000	Bacteria Indicators	Nonpoint/Point Source	Low	.21	2002	
Regional Board 4	C	Castlerock Beach	40513000	Beach Closures	Nonpoint Source	High	.21	2002	
Regional Board 4	C	Sea Level Beach	40441000	Beach Closures	Nonpoint Source	High	.21	2002	
Regional Board 4	C	Leo Carillo Beach (South of County Line)	40444000	Beach Closures	Nonpoint Source	High	1.8	2002	
Regional Board 4	C	Leo Carillo Beach (South of County Line)	40444000	High Coliform Count	Nonpoint Source	High	1.8	2002	
Regional Board 4	C	Nicholas Canyon Beach	40444000	Beach Closures	Nonpoint Source	High	1.7	2002	
Regional Board 4	C	Bluff Cove Beach	40511000	Beach Closures	Nonpoint Source	High	.55	2002	
Regional Board 4	C	Flat Rock Point Beach Area	40511000	Beach Closures	Nonpoint Source	High	.11	2002	
Regional Board 4	C	Inspiration Point Beach	40511000	Beach Closures	Nonpoint Source	High	.14	2002	

Santa Mon. Canyon

Regional Board 4	C	Long Point Beach	40511000	High Coliform Count	Nonpoint Source	High	.7	2002	
Regional Board 4	C	Lunada Bay Beach	40511000	Beach Closures	Nonpoint Source	Low	.63	2002	
Regional Board 4	C	Malaga Cove Beach	40511000	Beach Closures	Nonpoint Source	High	.39	2002	
Regional Board 4	C	Rocky Point Beach	40511000	Beach Closures	Nonpoint Source	High	.49	2002	
Regional Board 4	C	Point Vicente Beach	40511000	Beach Closures	Nonpoint Source	High	.63	2002	
Regional Board 4	C	Portuguese Bend Beach	40511000	Beach Closures	Nonpoint Source	High	1.4	2002	
Regional Board 4	C	Palo Verde Shoreline Park Beach	40511000	Pathogens	Source Unknown	High	.24	2002	
Regional Board 4	C	Resort Point Beach	40511000	Beach Closures	Nonpoint Source	High	.15	2002	
Regional Board 4	C	Royal Palms Beach	40511000	Beach Closures	Nonpoint Source	High	1.1	2002	
Regional Board 4	C	Whites Point Beach	40511000	Beach Closures	Nonpoint Source	High	1.1	2002	
Regional Board 4	C	Abalone Cove Beach	40511000	Beach Closures	Nonpoint Source	High	1.1	2002	
Regional Board 4	C	Cabrillo Beach (Outer)	40512000	Beach Closures	Nonpoint Source	High	.58	2002	
Regional Board 4	C	Cabrillo Beach (Outer)	40512000	High Coliform Count	Nonpoint Source	High	.58	2002	
Regional Board 4	C	Dockweiler Beach	40512000	Beach Closures	Nonpoint Source	High	4.6	2002	
Regional Board 4	C	Dockweiler Beach	40512000	High Coliform Count	Nonpoint Source	High	4.6	2002	
Regional Board 4	C	Hermosa Beach	40512000	Beach Closures	Nonpoint Source	High	2	2002	
Regional Board 4	C	Manhattan Beach	40512000	Beach Closures	Nonpoint Source	High	2	2002	
Regional Board 4	C	Point Fermin Park Beach	40512000	Beach Closures	Nonpoint Source	High	1.6	2002	
Regional Board 4	C	Promenade Park Beach	40210000	Bacteria Indicators	Nonpoint/Point Source	Low	.37	2002	
Regional Board 4	C	Peninsula Beach	40311000	Bacteria Indicators	Nonpoint/Point Source	Low	.2	2002	
Regional Board 4	C	Las Tunas Beach	40412000	Beach Closures	Nonpoint Source	High	1.2	2002	
Regional Board 4	C	Topanga Beach	40413000	Beach Closures	Nonpoint Source	High	2.5	2002	
Regional Board 4	C	Topanga Beach	40413000	High Coliform Count	Nonpoint Source	High	2.5	2002	
Regional Board 4	C	Las Flores Beach	40415000	High Coliform Count	Nonpoint Source	High	1.1	2002	
Regional Board 4	C	Carbon Beach	40416000	Beach Closures	Nonpoint Source	High	1.5	2002	
Regional Board 4	C	La Costa Beach	40416000	Beach Closures	Nonpoint Source	High	.74	2002	
Regional Board 4	C	Malibu Lagoon Beach (Surfrider)	40421000	Beach Closures	Nonpoint Source	High	1	2002	
Regional Board 4	C	Malibu Lagoon Beach (Surfrider)	40421000	High Coliform Count	Nonpoint Source	High	1	2002	
Regional Board 4	C	Malibu Beach	40421000	Beach Closures	Nonpoint Source	High	.77	2002	
Regional Board 4	C	Big Rock Beach	40431000	Beach Closures	Nonpoint Source	High	.74	2002	

Regional Board 4	C	Big Rock Beach	40431000	High Coliform Count	Nonpoint Source	High	.74	2002	
Regional Board 4	C	Dan Blocker Memorial (Coral) Beach	40431000	High Coliform Count	Nonpoint Source	High	2.1	2002	
Regional Board 4	C	Puerco Beach	40431000	Beach Closures	Nonpoint Source	High	.5	2002	
Regional Board 4	C	Escondido Beach	40434000	Beach Closures	Nonpoint Source	High	1.2	2002	
Regional Board 4	C	Paradise Cove Beach	40435000	Beach Closures	Nonpoint Source	High	1.7	2002	
Regional Board 4	C	Paradise Cove Beach	40435000	High Coliform Count	Nonpoint Source	High	1.7	2002	
Regional Board 4	C	Point Dume Beach	40435000	Beach Closures	Nonpoint Source	High	2.5	2002	
Regional Board 4	C	Zuma Beach (Westward Beach)	40436000	Beach Closures	Nonpoint Source	High	1.6	2002	
Regional Board 4	C	Trancas Beach (Broad Beach)	40437000	Beach Closures	Nonpoint Source	High	1.7	2002	
Regional Board 4	C	Trancas Beach (Broad Beach)	40437000	High Coliform Count	Nonpoint Source	High	1.7	2002	
Regional Board 4	C	Rincon Beach	40100010	Bacteria Indicators	Nonpoint/Point Source	Low	.09	2002	
Regional Board 4	C	Surfers Point at Seaside	40210000	Bacteria Indicators	Nonpoint/Point Source	Low	.53	2002	
Regional Board 4	R	Sepulveda Canyon	405.13	High Coliform Count	Nonpoint Source	High	.83	2002	
Regional Board 4	R	Santa Monica Canyon	40513000	High Coliform Count	Nonpoint Source	High	2.7	2002	
Regional Board 4	R	Pico Kenter Drain	40513000	Enteric Viruses	Nonpoint Source	High	8	2002	
Regional Board 4	R	Pico Kenter Drain	40513000	High Coliform Count	Nonpoint Source	High	8	2002	
Regional Board 4	R	Ashland Avenue Drain	40513000	High Coliform Count	Nonpoint Source	High	2.3	2002	

66

Main Help Logout Tuesday, November 09

Project Name: Los Angeles River Nitrogen **Priority:** High
Project Type: TMDL **Start Fiscal Year:** 2000 - 2001
Board Name: Regional Board 4 **Listing Year:** 2002
Date Created: 03/24/2003 **Multiple Listings?:** Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Los Angeles River Nitrogen

Description:

Scheduled Start Date: 06/01
Scheduled End Date: 09/07
Actual Start Date: 06/01
Actual End Date:
Delay **Project Status:** In Progress
Status Comment:

Details **Primary Contact:** Thanhloan Nguyen
Project Manager

Pollutant Sources: Save Undo Change

=== Selected Sources Shown Above ===
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Agriculture-animal
Agriculture-grazing
Agriculture-irrigation tailwater

Details **Total Allocated Funding (PYs):** 3.90
(Contract Dollars): $0
Total Estimated Budget (PYs): 3.70
(Contract Dollars): $0

Details **Listing:**
(1) Arroyo Seco Re
(1) Arroyo Seco Re
(4) Burbank Weste
(1) Compton Creek
(4) Los Angeles Riv
(4) Los Angeles Riv
(4) Los Angeles Riv
(4) Los Angeles Riv
(4) Los Angeles Riv
(1) Rio Hondo Rea
(3) Tujunga Wash (
(1) Verdugo Wash
(1) Verdugo Wash

Sort Listing Mode: View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propo TMI Compl
Regional Board 4	R	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	40515010	Algae	Nonpoint Source	High	5.2	2002	
Regional Board 4	R	Arroyo Seco Reach 2 (Figueroa St. to Riverside DR)	40515010	Algae	Nonpoint Source	High	4.4	2002	
Regional Board 4	R	Burbank Western Channel	40521000	Algae	Nonpoint/Point Source	High	13	2002	
Regional	R	Burbank Western	40521000	Scum/Foam-	Nonpoint/Point	High	13	2002	

Board 4		Channel		unnatural	Source			
Regional Board 4	R	Burbank Western Channel	40521000	Odors	Nonpoint/Point Source	High	13	2002
Regional Board 4	R	Burbank Western Channel	40521000	Ammonia	Nonpoint/Point Source	High	13	2002
Regional Board 4	R	Los Angeles River Reach 1 (Estuary to Carson Street)	40512000	Ammonia	Nonpoint/Point Source	High	3.4	2002
Regional Board 4	R	Los Angeles River Reach 1 (Estuary to Carson Street)	40512000	Nutrients (Algae)	Nonpoint/Point Source	High	3.4	2002
Regional Board 4	R	Los Angeles River Reach 2 (Carson to Figueroa Street)	40515010	Ammonia	Nonpoint/Point Source	High	19	2002
Regional Board 4	R	Los Angeles River Reach 2 (Carson to Figueroa Street)	40515010	Nutrients (Algae)	Nonpoint/Point Source	High	19	2002
Regional Board 4	R	Los Angeles River Reach 2 (Carson to Figueroa Street)	40515010	Scum/Foam-unnatural	Nonpoint/Point Source	High	19	2002
Regional Board 4	R	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	40521000	Nutrients (Algae)	Nonpoint/Point Source	High	7.9	2002
Regional Board 4	R	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	40521000	Odors	Nonpoint/Point Source	High	7.9	2002
Regional Board 4	R	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	40521000	Scum/Foam-unnatural	Nonpoint/Point Source	High	7.9	2002
Regional Board 4	R	Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	40521000	Ammonia	Nonpoint/Point Source	High	11	2002
Regional Board 4	R	Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	40521000	Nutrients (Algae)	Nonpoint/Point Source	High	11	2002
Regional Board 4	R	Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	40521000	Odors	Nonpoint/Point Source	High	11	2002
Regional Board 4	R	Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	40521000	Scum/Foam-unnatural	Nonpoint/Point Source	High	11	2002
Regional Board 4	R	Los Angeles River Reach 5 (within Sepulveda Basin)	40521000	Ammonia	Nonpoint/Point Source	High	5.4	2002
Regional Board 4	R	Los Angeles River Reach 5 (within Sepulveda Basin)	40521000	Nutrients (Algae)	Nonpoint/Point Source	High	5.4	2002
Regional Board 4	R	Los Angeles River Reach 5 (within Sepulveda Basin)	40521000	Odors	Nonpoint/Point Source	High	5.4	2002
Regional Board 4	R	Los Angeles River Reach 5 (within Sepulveda Basin)	40521000	Scum/Foam-unnatural	Nonpoint/Point Source	High	5.4	2002
Regional Board 4	R	Tujunga Wash (LA River to Hansen Dam)	40521000	Ammonia	Nonpoint Source	High	9.7	2002
Regional	R	Tujunga Wash	40521000	Scum/Foam-	Nonpoint	High	9.7	2002

Board 4		(LA River to Hansen Dam)		unnatural	Source			
Regional Board 4	R	Tujunga Wash (LA River to Hansen Dam)	40521000	Odors	Nonpoint Source	High	9.7	2002
Regional Board 4	R	Verdugo Wash Reach 1 (LA River to Verdugo Rd.)	40521000	Algae	Nonpoint Source	High	2	2002
Regional Board 4	R	Verdugo Wash Reach 2 (Above Verdugo Road)	40524000	Algae	Nonpoint Source	High	7.6	2002
Regional Board 4	R	Los Angeles River Reach 2 (Carson to Figueroa Street)	40515010	Odors	Nonpoint/Point Source	High	19	2002
Regional Board 4	R	Compton Creek	40515010	pH	Nonpoint/Point Source	High	8.5	2002
Regional Board 4	R	Rio Hondo Reach 1 (Confl. LA River to Snt Ana Fwy)	40515010	pH	Nonpoint/Point Source	High	4.6	2002
Regional Board 4	R	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr)	40521000	Ammonia	Nonpoint/Point Source	High	7.9	2002
Regional Board 4	R	Los Angeles River Reach 1 (Estuary to Carson Street)	40512000	Scum/Foam-unnatural	Nonpoint/Point Source	High	3.4	2002
Regional Board 4	R	Los Angeles River Reach 1 (Estuary to Carson Street)	40512000	pH	Nonpoint/Point Source	High	3.4	2002

Main | Help | Logout

Monday, November 15

Project Name: Malibu Pathogens **Priority:** High
Project Type: TMDL **Start Fiscal Year:** 1999 - 2000
Board Name: Regional Board 4 **Listing Year:** 2002
Date Created: 03/25/2003 **Multiple Listings?:** Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Malibu Pathogens

Description:

Pollutant Sources: Save Undo Change

- Septage Disposal
- === Selected Sources Shown Above ===
- Acid Mine Drainage
- Agricultural Return Flows
- Agricultural Water Diversion
- Agriculture
- Agriculture-animal
- Agriculture-grazing

Scheduled Start Date: 03/00
Scheduled End Date: 06/05
Actual Start Date: 03/00
Actual End Date:
Delay **Project Status:** In Progress
Status Comment: EPA established on

Details **Primary Contact:** Rod Collins, Project Manager

Details **Total Allocated Funding (PYs):** 0.80
(Contract Dollars): $40,000
Total Estimated Budget (PYs): 0.00
(Contract Dollars): $0

Details **Listing:**
(1) Las Virgenes C
(1) Lindero Creek F
(1) Lindero Creek F
(1) Malibu Creek
(4) Malibu Lagoon
(1) Medea Creek R
(1) Medea Creek R
(1) Palo Comado C
(1) Stokes Creek

Sort Listing Mode: View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propo TMD Compl
Regional Board 4	E	Malibu Lagoon	40421000	Enteric Viruses	Nonpoint/Point Source	High	15	2002	
Regional Board 4	E	Malibu Lagoon	40421000	High Coliform Count	Nonpoint/Point Source	High	15	2002	
Regional Board 4	R	Lindero Creek Reach 2 (Above Lake)	40425000	High Coliform Count	Nonpoint Source	High	4.5	2002	
Regional Board 4	R	Malibu Creek	40421000	High Coliform Count	Nonpoint/Point Source	High	11	2002	
Regional Board 4	R	Las Virgenes Creek	40422010	High Coliform Count	Nonpoint Source	High	12	2002	
Regional Board 4	R	Stokes Creek	40422020	High Coliform Count	Nonpoint Source	High	4.7	2002	
Regional	R	Medea Creek	40423000	High Coliform Count	Nonpoint	High	5.4	2002	

Board 4		Reach 2 (Abv Confl. with Lindero)			Source				
Regional Board 4	R	Lindero Creek Reach 1	40423000	High Coliform Count	Nonpoint Source	High	3	2002	
Regional Board 4	R	Palo Comado Creek	40423000	High Coliform Count	Nonpoint Source	High	6.8	2002	
Regional Board 4	R	Medea Creek Reach 1 (Lake to Confl. with Lindero)	40424000	High Coliform Count	Nonpoint Source	High	2.6	2002	
Regional Board 4	E	Malibu Lagoon	40421000	Shellfish Harvesting Advisory	Nonpoint/Point Source	High	15	2002	
Regional Board 4	E	Malibu Lagoon	40421000	Swimming Restrictions	Nonpoint/Point Source	High	15	2002	

Main | Help | Logout

Monday, November 15

Project Name: Los Angeles Harbor Beaches - Beach Closures
Project Type: TMDL
Board Name: Regional Board 4
Date Created: 03/24/2003

Priority: High
Start Fiscal Year: 2002 - 2003
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

Tasks by Project

Select Phase: All Phases

More Detail | Show History | Mode: View

ID	Task	Deliverable Type	Status	Scheduled Start Date	Scheduled End Date	Actual Start Date	Actual End Date	Estimated Budget PYs	Estimated Budget Contract Amount	Allocated Funding PYs	Allocated Funding Contract Amount	Cc Pe
1394	Type: Define Project	Type: Project Definition	Status: Completed	04/03	07/03	04/03	11/03	0.20	$0	0.20	$0	
1503	Type: Develop Project Plan	Type: Project Plan	Status: Completed	05/03	06/03	11/03	01/04	0.40	$0	0.40	$0	
1505	Type: Prepare final phase 3 progress report	Type: Final Progress/Study Report	Status: Completed	06/03	04/04	11/03	04/04	0.70	$0	0.70	$76,250	
1506	Type: Prepare Final Preliminary Project Report	Type: Final Preliminary Project Report	Status: Completed	09/03	04/04	01/04	05/04	0.30	$0	0.30	$0	
1507	Type: Prepare Final Project Report	Type: Final Project Report	Status: Completed	04/04	05/04	05/04	05/04	0.30	$0	0.30	$0	
1508	Type: Present Proposed Regulatory Action to Regional Board for Action	Type: Regional Board Order	Status: Completed	04/04	06/04	07/04	07/04	0.30	$0	0.30	$0	
1742	Type: Approval Received From Final Approval Entity	Type: Final Regulatory Approval	Status: Not Started	06/04	03/05			0.20	$0	0.20	$0	
1509	Type: Prepare Final Evaluation Report	Type: Final Evaluation Report	Status: Not Started	06/04	06/07			0.30	$0	0.10	$0	
2855	Type: Submit Administrative Record	Type: Administrative Record	Status: Completed	07/04	09/04	07/04	07/04	0.00	$0	0.20	$0	
2856	Type: State Board Approval	Type: State Board Action	Status: Not Started	09/04	10/04			0.00	$0	0.10	$0	

Project Total	2.70	$0	2.80	$76,250

Main | Help | Logout

Monday, November 15

Project Name: Los Angeles Harbor Beaches - Beach Closures
Project Type: TMDL
Board Name: Regional Board 4
Date Created: 03/24/2003

Priority: High
Start Fiscal Year: 2002 - 2003
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Los Angeles Harbor Beaches - Beach Closures

Description:

Scheduled Start Date: 04/03
Scheduled End Date: 06/07
Actual Start Date: 04/03
Actual End Date:
Delay **Project Status:** In Progress
Status Comment:

Details **Primary Contact:** Lisa Carlson
Project Manager

Details **Total Allocated Funding (PYs):** 2.80
(Contract Dollars): $76,250
Total Estimated Budget (PYs): 2.70
(Contract Dollars): $0

Details **Listing:** (1) Cabrillo Beach (
(1) Los Angeles Ha

Pollutant Sources: Save Undo Change

- Nonpoint Source
- === Selected Sources Shown Above ===
- Acid Mine Drainage
- Agricultural Return Flows
- Agricultural Water Diversion
- Agriculture
- Agriculture-animal
- Agriculture-grazing

Sort Listing Mode: View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propo TMD Comple
Regional Board 4	C	Cabrillo Beach (Inner) LA Harbor Area	40512000	Beach Closures (Coliform)	Nonpoint Source	High	.56	2002	
Regional Board 4	B	Los Angeles Harbor Main Channel	40518000	Beach Closures	Nonpoint/Point Source	High	279	2002	

Main | Help | Logout

Monday, November 15

Project Name: Santa Clara River Chloride (31)
Project Type: TMDL
Board Name: Regional Board 4
Date Created: 10/28/2003

Priority: High
Start Fiscal Year: 2003 - 2004
Listing Year: 2002
Multiple Listings?: No

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Santa Clara River Chloride (31)

Description:

Scheduled Start Date: 10/03
Scheduled End Date: 11/03
Actual Start Date:
Actual End Date:
Delay **Project Status:** Not Started
Status Comment:

Details **Primary Contact:**

Details **Total Allocated Funding (PYs):** 0.00
(Contract Dollars): $0
Total Estimated Budget (PYs): 0.00
(Contract Dollars): $0

Details **Listing:** (1) Santa Clara Riv

Pollutant Sources: Save Undo Change

=== Selected Sources Shown Above ===
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Agriculture-animal
Agriculture-grazing
Agriculture-irrigation tailwater

Sort Listing **Mode:** View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propo TMD Compl
Regional Board 4	R	Santa Clara River Reach 3 (Freeman Diversion to A Street)	40321000	Chloride	Nonpoint/Point Source	High	31	2002	

Main | Help | Logout

Monday, November 15

Project Name: Calleguas Creek Chloride (3)
Project Type: TMDL
Board Name: Regional Board 4
Date Created: 10/23/2003

Priority: High
Start Fiscal Year: 2003 - 2004
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Calleguas Creek Chloride (3)

Description:

Scheduled Start Date: 10/03
Scheduled End Date: 05/05
Actual Start Date:
Actual End Date:
Delay **Project Status:** Not Started
Status Comment:

Details **Primary Contact:** Elizabeth Erickson
Project Manager

Pollutant Sources: Save Undo Change

=== Selected Sources Shown Above ===
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Agriculture-animal
Agriculture-grazing
Agriculture-irrigation tailwater

Details **Total Allocated Funding (PYs):** 0.70
(Contract Dollars): $0
Total Estimated Budget (PYs): 0.30
(Contract Dollars): $0

Details **Listing:**
(1) Calleguas Creel
(1) Calleguas Creel
(1) Calleguas Creel
(1) Calleguas Creel
(1) Calleguas Creel
(1) Calleguas Creel

Sort Listing Mode: View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propc TMI Compl
Regional Board 4	R	Calleguas Creek Reach 8 (was Tapo Canyon Reach 1)	40366000	Chloride	Nonpoint/Point Source	High	7.2	2002	
Regional Board 4	R	Calleguas Creek Reach 13 (Conejo Creek South Fork, was Conejo Cr Reach 4 and part of Reach 3 on 1998 303d list)	40368000	Chloride	Nonpoint/Point Source	Medium	17	2002	
Regional Board 4	R	Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on 1998 303d list)	40362000	Chloride	Nonpoint/Point Source	Medium	15	2002	
Regional Board 4	R	Calleguas Creek Reach 7 (was Arroyo	40367000	Chloride	Nonpoint Source	Medium	14	2002	

		Simi Reaches 1 and 2 on 1998 303d list)							
Regional Board 4	R	Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on 1998 303d list)	40363000	Chloride	Nonpoint/Point Source	Medium	6.2	2002	
Regional Board 4	R	Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek on 1998 303d list)	40312000	Chloride	Nonpoint/Point Source	Medium	3.5	2002	

Main | Help | Logout

Monday, November 15

Project Name: Clear Creek -Hernandez Reservoir - Mercury
Project Type: TMDL
Board Name: Regional Board 3
Date Created: 02/28/2003

Priority: Medium
Start Fiscal Year: 2002 - 2003
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Clear Creek -Hernandez Reservoir - Mercury

Description:
Mercury impairment of Fishing (COMM) and MUN/ domestic supply beneficial uses in Hernandez Res., linked to mercury influx from old mines in Clear Creek. Listing includes exceedence of CTR health objective in Clear

Pollutant Sources: Save Undo Change

- Inactive Mining
- === Selected Sources Shown Above ===
- Acid Mine Drainage
- Agricultural Return Flows
- Agricultural Water Diversion
- Agriculture
- Agriculture-animal
- Agriculture-grazing

Scheduled Start Date: 02/03
Scheduled End Date: 06/05
Actual Start Date: 07/03
Actual End Date:
Delay **Project Status:** In Progress
Status Comment:

Details **Primary Contact:** Doug Gouzie, Lead Staff

Details **Total Allocated Funding (PYs):** 0.40
(Contract Dollars): $0
Total Estimated Budget (PYs): 0.50
(Contract Dollars): $0

Details **Listing:** (1) Clear Creek (Sa
(1) Hernandez Res

Sort Listing Mode: View

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Propos TMD Comple
Regional Board 3	L	Hernandez Reservoir	30550016	Mercury	Surface Mining	Medium	626	2002	
Regional Board 3	R	Clear Creek (San Benito County)	30550013	Mercury	Resource Extraction	Medium	9.6	2002	

Main | Help | Logout

Monday, November 15

Project Name: Clear Creek -Hernandez Reservoir - Mercury
Project Type: TMDL
Board Name: Regional Board 3
Date Created: 02/28/2003

Priority: Medium
Start Fiscal Year: 2002 - 2003
Listing Year: 2002
Multiple Listings?: Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

Tasks by Project

Select Phase: All Phases

Less Detail | Show History | Mode: View

ID	Task	Deliverable Type	Status	Scheduled Start Date	Scheduled End Date	Actual Start Date	Actual End Date	Estimated Budget PYs	Estimated Budget Contract Amount	Allocated Funding PYs	Allocated Funding Contract Amount	C P
451	**Type:** Define Project **Description:**	**Type:** Project Definition **Description:**	**Status:** Not Started **Comment:**	02/03	04/03			0.00	$0	0.00	$0	
453	**Type:** Draft Preliminary Project Report **Description:** prep draft Basin Plan Amendment package for Scientific peer Review	**Type:** Preliminary Project Report **Description:**	**Status:** Completed **Comment:**	07/03	08/03	07/03	09/03	0.00	$0	0.00	$0	D G
454	**Type:** Prepare Final Project Report **Description:** prep project report w/ Recommendation; revise respond to Sci., Legal, SB-BPU review comments	**Type:** Final Project Report **Description:** review/revised Proj. Report Recommendation based on SB-BPUnit, Legal, Sci. Peer Review comments	**Status:** Completed **Comment:**	09/03	12/03	09/03	12/03	0.10	$0	0.10	$0	D G
455	**Type:** Present Proposed Regulatory Action to Regional Board for Action **Description:** Prep RB Agenda Item & response to Public Review comments/process	**Type:** Regional Board Order **Description:** prep RB agenda item & respond to public review process	**Status:** Completed **Comment:**	01/04	04/04	01/04	03/04	0.10	$0	0.10	$0	D G
456	**Type:** Prepare Administrative Record **Description:**	**Type:** Administrative Record of RB Action **Description:** submit administrative record to State Board	**Status:** Completed **Comment:**	04/04	06/04	04/04	04/04	0.10	$0	0.10	$0	D G
2594	**Type:**	**Type:**	**Status:**	07/04	12/04	04/04	04/04	0.10	$0	0.00	$0	D

	EPA Approval **Description:** Submit RB Action (findings without Basin Plan Amendment) from March 2004 RB Meeting to USEPA-9 for regulatory approval	Transmit Record to USEPA for Approval **Description:**	**Completed** **Comment:**									G
3081	**Type:** Compliance Monitoring **Description:** Review Quartlerly Monitoring Report data submitted by US BLM for Clear Creek	**Type:** Progress Report **Description:**	**Status:** In Progress **Comment:**	07/04	06/05	07/04		0.10	$0	0.10	$0	D G
							Project Total	**0.50**	**$0**	**0.40**	**$0**	

Main | Help | Logout

Monday, November 15

Project Name: Malibu Pathogens **Priority:** High
Project Type: TMDL **Start Fiscal Year:** 1999 - 2000
Board Name: Regional Board 4 **Listing Year:** 2002
Date Created: 03/25/2003 **Multiple Listings?:** Yes

In Phase: 1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

Tasks by Project

Select Phase: All Phases

Less Detail | Show History | Mode: View

ID	Task	Deliverable Type	Status	Scheduled Start Date	Scheduled End Date	Actual Start Date	Actual End Date	Estimated Budget PYs	Estimated Budget Contract Amount	Allocated Funding PYs	Allocated Funding Contract Amount	Co Pe
1407	**Type:** Define Project **Description:**	**Type:** Project Definition **Description:**	**Status:** Completed **Comment:**	03/00	06/03	03/00	06/03	0.00	$0	0.00	$0	
1441	**Type:** Develop Project Plan **Description:**	**Type:** Project Plan **Description:**	**Status:** Completed **Comment:**	03/01	06/03	03/01	06/03	0.00	$0	0.00	$0	
1444	**Type:** Prepare Final *Preliminary* Project Report **Description:**	**Type:** Final *Preliminary* Project Report **Description:**	**Status:** Completed **Comment:** Prelimimary Report prepared on 8/30/03.	07/03	08/03	07/03	08/03	0.00	$0	0.10	$0	
1445	**Type:** Prepare Final Project Report **Description:**	**Type:** Final Project Report **Description:**	**Status:** Completed **Comment:** Final Report *released* on 10/10/03.	08/03	09/03	08/03	10/03	0.00	$0	0.10	$0	
1446	**Type:** Present Proposed Regulatory Action to Regional Board for Action **Description:**	**Type:** Regional Board Order **Description:**	**Status:** Completed **Comment:** Workshop Nov, 03. Regional Board Adoption 1/29/04.	11/03	11/03	11/03	01/04	0.00	$0	0.30	$0	
1447	**Type:** Approval Received From Final Approval Entity **Description:**	**Type:** Final Regulatory Approval **Description:**	**Status:** Not Started **Comment:**	11/03	06/05			0.00	$0	0.30	$0	
2830	**Type:** Manage Contract **Description:**	**Type:** Reference Site Study **Description:**	**Status:** Not Started **Comment:**	01/05	06/05			0.00	$0	0.00	$40,000	

									Project Total	0.00		$0	0.80	$40,000

Main | Help | Logout

Monday, November 15

Project Name: Alamo River Sedimentation/Siltation
Project Type: TMDL
Board Name: Regional Board 7
Date Created: 03/07/2003

Priority: High
Start Fiscal Year: 1999 - 2000
Listing Year: 2002
Multiple Listings?: No

In Phase:1 2 3 4 5

>> Quick R

HTML

General | Phases | Tasks by Project | Tasks by FY | Partners | Comments

General Project Information

Save Undo Change

Project Name:
Alamo River Sedimentation/Siltation

Description:

Scheduled Start Date: 06/00
Scheduled End Date: 06/05
Actual Start Date: 06/00
Actual End Date:
Delay **Project Status:** In Progress
Status Comment:

Details **Primary Contact:** Doug Wylie
Implementation Lea

Details **Total Allocated Funding (PYs):** 3.40
(Contract Dollars): $0
Total Estimated Budget (PYs): 0.00
(Contract Dollars): $0

Details **Listing:** (1) Alamo River

Pollutant Sources: Save Undo Change

- Dredging
- === Selected Sources Shown Above ===
- Acid Mine Drainage
- Agricultural Return Flows
- Agricultural Water Diversion
- Agriculture
- Agriculture-animal
- Agriculture-grazing

Sort Listing Mode: View E

Region	Type	Name	Calwater Watershed	Pollutant/Stressor	Potential Source	TMDL Priority	Estimated Size Affected (miles or acres)	Listing Year	Proposed Complet
Regional Board 7	R	Alamo River	72310000	Silt	Agriculture	High	52	2002	

317