Robert Bein, William Frost & Associates
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS

BI-WEEKLY CONFERENCE CALL
DRAFT AGENDA

DATE:	May 10, 2000 Wednesday
TIME:	10:00 am – 12 noon
PLACE:	RBF, Irvine or via phone (916-657-4102)
ATTENDEES:	Rich Horner/Chris May, Jeremy Johnstone, Rick Graff, Bruce Reznik, Steve Fleischli, Bob Wu, Steve Borroum, Brian Currier, Cid Tesoro, Sayra Ramos, Lanny Chronert, Pete Van Riper, Richard Gordon, Dean Messer, Brown and Caldwell, Montgomery Watson/Law, KLI, RBF
COPIES TO:	File 34123, 34218
SUBJECT:	BMP Pilot Study Status

AGENDA ITEMS

1. Non-stormwater Runoff Inspection: Biweekly Update; D11 Report

2. CDS sites: Equipment Installation Schedule

3. Metro and Paxton sites: Design/Construction Schedule

4. Impact of the Schedule of Remaining Sites on Completion of the Study – District 7

5. Vector Issues
   a. Biweekly Vector Issues Update
   b. MCTT Vector Issues

6. Environmental/Biological Survey
   a. Biweekly Environmental Update
   b. Pocket Gopher Recommendation Letter – Plaintiff Response Letter

7. Methods to Repair Gopher Holes at Cerritos MS Swale

8. Vadose Zone Sampling Methods

9. District 7 Operation/Maintenance (OMM) Status Activities: Law, Brown and Caldwell

10. District 11 Operation/Maintenance (OMM) Status Activities: KLI

11. Cost Workgroup Update

12. Confirmation on Switching from Biweekly Reporting to Monthly Reporting during June, July, and August 2000

>>Next meeting: Summer Quarterly Meeting June 14, 2000, Wednesday 9a-3p at RBF<<

BMP Pilot Studies

Bi-weekly Status Report

BMP Retrofit Pilot Projects in District 7 and District 11

May 3, 2000

Robert Bein, William Frost & Associates

(Contributing Authors: Brown and Caldwell, Montgomery Watson Chaudhary/Law Crandall, Kinnetic Laboratories, Dudek and Associates, Larry Walker and Associates, and UCR)

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- **ATTACHMENT 1: I-5/LA COSTA AVE INFILTRATION BASIN – WATER SURFACE ELEVATION SUMMARY**
- **ATTACHMENT 2: COST SUMMARY UPDATE**
- **ATTACHMENT 3: PRELIMINARY ANALYTICAL DATA**
- **ATTACHMENT 4: ADULT VECTOR MONITORING**

ACTIVITY DESCRIBED IN THIS BI-WEEKLY REPORT COVERS THE PERIOD FROM APRIL 20, 2000 – MAY 3, 2000

Non-Stormwater Runoff Inspections

The following table summarizes if non-stormwater runoff was noted at the sites inspected. Non-stormwater runoff was not noted at other BMP sites.

	KLI Sites – D11		
Week of	**78/15 EDB**	**78/5 P&R MF**	**Carlsbad MS BioStrip + Trench**
April 3	Y	Y	Y
April 10	Y	N	Y
April 17	N	N	N
April 24	N	N	Y
May 1	N	N	Y

Y – Non-stormwater runoff was observed

District 7 BMP Pilot Sites

I-605/SR-91 Interchange Infiltration Basin (Site ID 73101) MW/Law

Monitoring/Sampling Activities

4/21/00 Forecast predicted rain to produce up to 0.10 inch of rainfall with a 40% probability of occurrence. Storm event produced 0.00 inch of rainfall. No teams were mobilized because of the deployment criteria not being met.

4/25/00 Replaced monitoring station batteries.

Operation and Maintenance

4/25/00 Conducted monthly site inspection

4/26-27/00 Removed trash and debris from inlet areas; compacted gopher mounds; and repaired minor erosion problem on north side slope.

Vector Activities

None this period.

Issues/Solutions

None this period.

I-605/SR-91 Infiltration Basin Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.09	N	N	NA	NA	N
12/31/99	0.52	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.55	Y	Y	NA	NA	Y
1/30-31/00	0.25	N	N	NA	NA	N
2/10-11/00	0.26	N	N	NA	NA	N
2/12-14/00	1.14	Y	Y	NA	NA	Y
2/16/00	0.62	Y	Y	NA	NA	Y
2/20-21/00	2.14	Y	Y	NA	NA	Y
2/23/00	0.98	N	N	NA	NA	N
2/27/00	0.16	Y	Y	NA	NA	Y
3/3-4/00	0.40	N	N	NA	NA	N
3/5-6/00	1.01	Y	Y	NA	NA	Y
3/7-8/00	0.83	Y	Y	NA	NA	Y
4/14/00	0.00	Y	N*	NA	NA	N
4/17-18/00	1.58	Y	Y	NA	NA	Y
4/21/00	0.00	N	N	NA	NA	N

*Teams not mobilized because of the unlikelihood of rainfall producing enough runoff to cause water to pool in the infiltration basin.

I-210/East of Orcas Avenue Continuous Deflective Separator (Site ID 73102) MW/Law

Status

First day of construction was Jan. 28, 2000. Final inspection was conducted on April 24. Contractor is completing Change Order work. BMP signs were installed on 4/21/00.

Issues / Solutions

The plans specify the use of Helical Coupling Bands to join the various sections of CMP Pipe. The Contractor installed Universal Coupling Bands, which do not provide a tight seal and therefore leak. The Contractor was directed to provide Helical Bands and was issued a Change Order to provide joint sealant to create a watertight seal. The cost for this change is unknown at this time.

I-210/East of Filmore Street Continuous Deflective Separator (Site ID 73103) MW/Law

Status

First day of construction was Jan. 28, 2000. Final inspection was conducted on April 24. Contractor is completing Change Order work. BMP signs were installed on 4/20/00.

Issues / Solutions

Access to the site is from an existing gate at the end of a cul-de-sac on Filmore Street. However, the gate was removed during construction because there wasn't enough room between the gate and the Toe-of-Slope for the vehicles to enter the site. Following final inspection, the Contractor was issued a Change Order to provide a 3 meter wide Chain Link Gate. Estimated cost of this CCO is $1,100.

The plans specify the use of Helical Coupling Bands to join the various sections of CMP Pipe. The Contractor installed Universal Coupling Bands, which do not provide a tight seal and therefore leak. The Contractor was directed to provide Helical Bands and was issued a Change Order to provide joint sealant to create a watertight seal. The cost for this change is unknown at this time.

Design/Construction Schedule for CDS Units – PS&E Process

Activities	**Scheduled Dates**	**Actual Dates**	**Duration (calendar weeks)**
Obtain EA	06/01/99	06/04/99	
Begin Clearance	06/21/99	06/28/99	
Obtain District Clearances/To Santa Ana	07/26/99	09/14/99	4
End Santa Ana Review, Advertise, and Bid Opening	12/07/99	11/16/99	12
Award Contract	12/14/99	12/14/99	4
Begin Construction	02/01/00	01/28/00	4
Complete Construction	04/13/00	05/04/00	8
Fully Operational	05/04/00	05/18/00	2

District 7 CDS Sites Construction Cost Summary

Location	First Working Day	Scheduled Completion Date	Adjusted Completion Date	Bid Price[1]	Estimated CCOs	State Furnished Material	Total for CCOs and State Furnished Material	Estimated Total Final Cost[2]
I-210 East Orcas Ave.	1/28/99	3/31/00	5/4/00	$47,263	CCO No. 2 = $500 CMP Tee coupler and flange CCO No. 4 = $100 Provide Sealant on CMP Couplers CCO No. 5 = Cost Unknown, Use Anchor Assemblies (Alternative A) instead of Anchor Assemblies (Alternative B) CCO No. 6 = unknown cost, perform water test on CMP Couplers	$13,401 (CDS unit) $3,523 (flume approach) $529 (flume)	$18,053	$83,460

District 7 CDS Sites Construction Cost Summary (continued)

Location	First Working Day	Scheduled Completion Date	Adjusted Completion Date	Bid Price[1]	Estimated CCOs	State Furnished Material	Total for CCOs and State Furnished Material	Estimated Total Final Cost[2]
I-210/East of Filmore Ave.	1/28/99	3/31/00	5/4/00		CCO No. 1 = No Cost for relocation of chain link gate from east to west. CCO No. 2 =$500 CMP Tee coupler and flange CCO No. 3 = $1,100, 3 meter wide Chain Link Gate CCO No. 4 = $100 Provide Sealant on CMP Couplers CCO No. 5 = Cost Unknown, Use Anchor Assemblies (Alternative A) instead of Anchor Assemblies (Alternative B) CCO No. 6 = unknown cost, perform water test on CMP Couplers	$13,401 (CDS unit) $3,750 (flume approach) $593 (flume)	$19,444	
Total CDS Sites				**$47,263**	**$2,300**	**$35,197**	**$37,497**	**$84,760**

I-5/I-605 Extended Detention Basin (Site ID 74101) Brown and Caldwell

Monitoring/Sampling Activities

No monitoring activities for this period.

Operation and Maintenance

April 24: Site inspection was conducted; removed standing water from the effluent riser.

Vector Activities

None this period.

Issues/Solutions

None this period.

I-5/I-605 Extended Detention Basin Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.17	N	N	NA	NA	N
12/31/99	0.21	N	N	NA	NA	N
1/16/00	0.01	N	N	NA	NA	N
1/25/00	0.56	Y	Y	N	N	Y
1/30-31/00	0.35	N	N	NA	NA	N
2/10-11/00	0.51	N	N	NA	NA	N
2/12-14/00	0.98	N	N	NA	NA	N
2/16/00	0.65	N	N	NA	NA	N
2/20-21/00	2.29	Y	Y	Y	Y	Y
2/23/00	1.06	N	N	NA	NA	N
2/27/00	0.21	Y	Y	Y	Y	Y
3/8/00	0.96	Y	Y	Y	Y	Y
4/-18/00	2.57	Y	Y	Y	Y	Y

I-605/SR-91 Extended Detention Basin (Site ID 74102) Brown and Caldwell

Monitoring/Sampling Activities

No monitoring activities for this period.

Operation and Maintenance

April 24: Site inspection was conducted; no maintenance required.

Vector Activities

None this period.

Issues/Solutions

None this period.

I-605/SR 91 Extended Detention Basin Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.08	N	N	NA	NA	N
12/31/99	0.41	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.48	Y	Y	N	N	Y
1/30-31/00	0.18	N	N	NA	NA	N
2/10-11/00	0.46	N	N	NA	NA	N
2/12-14/00	1.07	N	N	NA	NA	N
2/16/00	0.45	N	N	NA	NA	N
2/20-21/00	1.73	Y	Y	Y	Y	Y
2/23/00	0.19	N	N	NA	NA	N
2/27/00	0.04	Y	Y	Y	Y	Y
3/8/00	0.82	Y	Y	Y	Y	Y
4/17-18/00	2.57	Y	Y	Y	Y	Y

Paxton Maintenance Station Media Filter (Site ID 74103) Brown and Caldwell

Metro Maintenance Station Multi-Chamber Treatment Train (Site ID 74104) Brown and Caldwell

Status

Brown and Caldwell is currently addressing comments received from HQ Structures and D7 OE. HQ structures has modified their original comments due to the type of structure involved and the short life of the pilot projects. HQ Structures has requested to review the full package again once comments are incorporated.

Schedule

Action	Duration	Milestone	Estimated Completion Date
Incorporate preliminary Structures and D7OE review comments		Submit entire PS&E package	03/08/00 (actual)
Structures and D7OE Review	4 weeks		
		Receive comments from Structures and D7OE	04/06/00 (actual)
Consultant revise PS&E	6.0 weeks		
			05/17/00
Structures final review	2.5 weeks		
		Receive comments from Caltrans	6/2/00
	1.5 weeks		
		Submit final to D7	6/14/00
D7 process and format PS&E	4 weeks		
		D7 submit to HQ	07/12/00
HQ review and processing; advertise contract	12 – 16 weeks		
		Advertise contract	10/18/00
Bid Period and evaluate bids	5 weeks		
		Notice to Proceed	11/22/00
Construction	16 weeks		
		Construction complete	03/14/01

Alameda Maintenance Station Oil Water Separator (Site ID 74201) Brown and Caldwell

Monitoring/Sampling Activities

No monitoring activities for this period.

Operation and Maintenance

April 24: Site inspection was conducted. On April 27, miscellaneous trash and other debris was removed. Approximately 7 gallons of dry sediment was removed from the trench drain and placed in onsite drum. This is an accumulation since the last removal which occurred on December 3, 1999.

Vector Activities

None this period.

Issues/Solutions

None this period.

Alameda Maintenance Station Oil/Water Separator Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.38	N	N	NA	NA	N
12/31/99	0.11	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.51	Y	Y	NA*	N	Y
1/30-31/00	0.25	N	N	NA	NA	N
2/10-11/00	0.31	N	N	NA	NA	N
2/12-14/00	1.05	N	N	NA	NA	N
2/16/00	0.79	N	N	NA	NA	N
2/20-21/00	1.73	Y	Y	NA*	Y	Y
2/23/00	1.40	N	N	NA	NA	N
2/27/00	0.20	Y	Y	NA*	Y	Y
3/8/00	0.68	Y	Y	NA*	Y	Y
4/17-18/00	1.44	Y	Y	Y	Y	Y

* The Alameda site is an Oil/Water Separator and does not have a composite sampler (as do the other BMPs).

Eastern Region Maintenance Station (Site ID 74202) Brown and Caldwell

Monitoring/Sampling Activities

No monitoring activities for this period.

Operation and Maintenance

April 24: Site inspection was conducted; replaced the mosquito netting covering the sump on April 28.

Vector Activities

None this period.

Issues/Solutions

None this period.

Eastern Region Maintenance Station Media Filter Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.15	N	N	NA	NA	N
12/31/99	0.27	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.71	Y	Y	N	N	Y
1/30-31/00	0.20	N	N	NA	NA	N
2/10-11/00	0.49	N	N	NA	NA	N
2/12-14/00	1.51	N	N	NA	NA	N
2/16/00	0.72	N	N	NA	NA	N
2/20-21/00	2.35	Y	Y	Y	Y	Y
2/23/00	1.44	N	N	NA	NA	N
2/27/00	0.33	Y	Y	Y	Y	Y
3/8/00	1.21	Y	Y	Y	Y	Y
4/17-18/00	2.31	Y	Y	Y	Y	Y

Foothill Maintenance Station Media Filter – Sand (Site ID 74203) Brown and Caldwell

Monitoring/Sampling Activities

No monitoring activities for this period.

Operation and Maintenance

April 24: Site inspection was conducted; replaced the mosquito netting covering the sump on April 28; removed wood chips and small tree branches and other debris that had blown into the BMP.

Vector Activities

None this period.

Issues/Solutions

None this period.

Foothill Maintenance Station Media Filter Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.1	N	N	NA	NA	N
12/31/99	0.28	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.68	Y	Y	N	N	Y
1/30-31/00	0.34	N	N	NA	NA	N
2/10-11/00	0.78	N	N	NA	NA	N
2/12-14/00	1.42	N	N	NA	NA	N
2/16/00	0.91	N	N	NA	NA	N
2/20-21/00	2.95	Y	Y	Y	Y	Y
2/23/00	1.59	N	N	NA	NA	N
2/27/00	0.49	Y	Y	Y	Y	Y
3/8/00	0.80	Y	Y	Y	Y	Y
4/17-18/00	2.92	Y	Y	Y	Y	Y

Termination Park and Ride Media Filter – Sand (Site ID 74204) Brown and Caldwell

Monitoring/Sampling Activities

No monitoring activities for this period.

Operation and Maintenance

April 24: Site inspection was conducted; replaced the mosquito netting covering the sump on May 3.

Vector Activities

Site was found breeding mosquitoes on April 27. Abatement with Altosid liquid was performed on April 28.

Issues/Solutions

None this period.

Termination Park and Ride Media Filter Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.15	N	N	NA	NA	N
12/31/99	0.10	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.61	Y	Y	N	N	Y
1/30-31/00	1.13	N	N	NA	NA	N
2/10-11/00	0.21	N	N	NA	NA	N
2/12-14/00	0.95	N	N	NA	NA	N
2/16/00	0.66	N	N	NA	NA	N
2/20-21/00	2.16	Y	Y	Y	Y	Y
2/23/00	1.01	N	N	NA	NA	N
2/27/00	0.15	Y	Y	Y	Y	Y
3/8/00	0.94	Y	Y	Y	Y	Y
4/17-18/00	1.68	Y	Y	Y	Y	Y

Via Verde Park and Ride MCTT (Site ID 74206) Brown and Caldwell

Monitoring/Sampling Activities

No monitoring activities for this period.

Operation and Maintenance

April 24: Site inspection was conducted; cleaned up trash and debris from the BMP; replaced the mosquito netting covering the sump on April 28.

Vector Activities

The sedimentation vault was found breeding on April 27. Abatement with Altosid liquid was performed on April 28.

Issues/Solutions

None this period.

Via Verde Park and Ride Multi-Chamber Treatment Train Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.14	N	N	NA	NA	N
12/31/99	0.35	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.88	Y	Y	N	N	Y
1/30-31/00	0.34	N	N	NA	NA	N
2/10-11/00	0.90	N	N	NA	NA	N
2/12-14/00	1.02	N	N	NA	NA	N
2/16/00	1.15	N	N	NA	NA	N
2/20-21/00	2.52	Y	Y	Y	Y	Y
2/23/00	1.47	N	N	NA	NA	N
2/27/00	0.40	Y	Y	Y	Y	Y
3/8/00	0.75	Y	Y	Y	Y	Y
4/17-18/00	1.42	Y	Y	Y	Y	Y

Lakewood Park and Ride MCTT (Site ID 74208) Brown and Caldwell

Monitoring/Sampling Activities

No monitoring activities for this period.

Operation and Maintenance

April 24: Site inspection was conducted; replaced the mosquito netting covering the sump on May 3.

Vector Activities

The sediment chamber vault was found breeding mosquitoes on April 27. Abatement with Altosid liquid was performed on April 28.

Issues/Solutions

None this period.

Lakewood Park and Ride MCTT Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.17	N	N	NA	NA	N
12/31/99	0.06	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.53	Y	Y	N	N	Y
1/30-31/00	0.32	N	N	NA	NA	N
2/10-11/00	0.34	N	N	NA	NA	N
2/12-14/00	0.46	N	N	NA	NA	N
2/16/00	0.55	N	N	NA	NA	N
2/20-21/00	1.89	Y	Y	Y	Y	Y
2/23/00	1.06	N	N	NA	NA	N
2/27/00	0.14	Y	Y	Y	Y	Y
3/8/00	0.98	Y	Y	Y	Y	Y
4/17-18/00	1.62	Y	Y	Y	Y	Y

Altadena Maintenance Station Bio Strip and Infiltration Trench (Site ID 73211 a, b) MW/Law

Monitoring/Sampling Activities

4/20/00 – 5/3/00	Data was downloaded from the monitoring equipment.
4/20/00	Downloaded data from Troll 4000 pressure transducer.
4/21/00	Forecast predicted rain to produce up to 0.10 inch of rainfall with a 40% probability of occurrence. Storm event produced 0.00 inch of rainfall. No teams were mobilized because of the deployment criteria not being met.

Operation and Maintenance

4/20/00	Conducted monthly/post-storm inspection. Dewatered the strip's spreader ditch and began pulling weeds greater than 12 inches tall.
4/21/00	Completed pulling weeds greater than 12 inches tall.

Vector Activities

None this period.

Issues/Solutions

None this period.

Altadena Maintenance Station Bio Strip and Infiltration Trench Monitoring Summary

Date	Rainfall Total	Antecedent Dry Period & Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.19	N	N	NA	NA	N
12/31/99	0.25	N	N	NA	NA	N
1/16/00	0.04	N	N	NA	NA	N
1/25/00	0.45	Y	Y	Y	Y	Y
1/30-31/00	0.83	N	N	NA	NA	N
2/10-11/00	0.27	N	N	NA	NA	N
2/12-14/00	0.76	N	N	NA	NA	N
2/16/00	0.90	Y	Y	Y	N	Y
2/20-21/00	3.11	Y	Y	Y	N	Y
2/23/00	1.84	N	N	NA	NA	N
2/27/00	0.77	Y	Y	Y	Y	Y
3/3-4/00	0.43	N	N	NA	NA	N
3/5-6/00	2.21	N	N	NA	NA	Y
3/7-8/00	0.55	Y	Y	Y	NA	Y
4/14/00	0.00	Y	N*	NA	NA	N
4/17-18/00	3.50**	Y	Y	Y	NA	Y
4/21/00	0.00	N	N	NA	NA	N

*Teams not mobilized because of the unlikelihood of rainfall producing enough runoff to discharge through the biofiltration strip.
**Rainfall total estimated using NASA JPL rain gauge and onsite rain gauge.

Foothill Maintenance Station Drain Inlet Insert (StreamGuard and Fossil Filter Inserts) (Site ID 73216 a, b) MW/Law

Monitoring/Sampling Activities

4/20/00 – 5/3/00	Data was downloaded from the monitoring equipment.
4/19/00	Replaced flow meter at StreamGuard DII monitoring location; cleaned both samplers and repaired rubber berm associated with the Fossil Filter DII monitoring vault.
4/21/00	Calibrated StreamGuard DII flow meter and readied monitoring equipment for storm event forecasted to occur in the evening. Forecast predicted rain to produce up to 0.10 inch of rainfall with a 40% probability of occurrence. No teams were mobilized because of the deployment criteria not being met. Storm event produced 0.07 inch of rainfall. Composite samples were collected at both the Fossil Filter and Streamguard DII locations. However, because the storm event did not meet the minimum size (0.10 inch), samples were not sent to the laboratory for analysis.

Operation and Maintenance

4/19/00	Conducted post-storm inspection of Fossil Filter in accordance with MID

Vector Activities

None this period.

Issues/Solutions

None this period.

Foothill Maintenance Station Drain Inlet Insert Monitoring Summary

Date	Rainfall Total	Antecedent Dry Period & Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.10	N	N	NA	NA	N
12/31/99	0.28	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.65	Y	Y	Y	NA	Y
1/30-31/00	0.31	Y	Y	Y	NA	Y
2/10-11/00	0.79	N	N	NA	NA	N
2/12-14/00	1.34	N	N	NA	NA	N
2/16/00	0.92	Y	Y	Y	NA	Y
2/20-21/00	3.05	Y	Y	Y	NA	Y
2/23/00	1.60	N	N	NA	NA	N
2/27/00	0.48	Y	Y	Y	NA	Y
3/3-4/00	0.37	N	N	NA	NA	N
3/5-6/00	1.77	N	Y*	NA	NA	Y
3/7-8/00	0.82	Y	Y	Y	NA	Y
4/14/00	0.07	Y	Y	Y**	NA	Y
4/17-18/00	2.81	Y	Y	Y	NA	Y
4/21/00	0.07	N	N	NA	NA	N

* Deployment criteria met; team mobilized to conduct during-storm inspection.

** Samples were not analyzed because the minimum storm size (i.e., 0.10 inch) was not met.

Las Flores Maintenance Station Drain Inlet Insert (StreamGuard and Fossil Filter Inserts) (Site ID 73217 a, b) MW/Law

Monitoring/Sampling Activities

4/20/00 – 5/3/00	Data was downloaded from the monitoring equipment.
4/21/00	Readied monitoring equipment for storm event forecasted to occur in the evening. Forecast predicted rain to produce up to 0.10 inch of rainfall with a 40% probability of occurrence. No teams were mobilized because of the deployment criteria not being met. Storm event produced 0.00 inch of rainfall.

Operation and Maintenance

4/21/00	Conducted post-storm inspection of Fossil Filter DII in accordance with MID. Sediment was removed from Fossil Filter DII cartridges.

Vector Activities

None this period.

Issues/Solutions

None this period.

Las Flores Maintenance Station Drain Inlet Insert Monitoring Summary

Date	Rainfall Total	Antecedent Dry Period & Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.48	N	N	NA	NA	N
12/31/99	0.03	N	N	NA	NA	N
1/16/00	0.07	N	N	NA	NA	N
1/25/00	0.86	Y	Y	Y*	NA	Y
1/30-31/00	0.42	Y	Y	Y**	NA	Y
2/10-11/00	0.45	Y	Y	Y	NA	Y
2/12-14/00	1.67	N	N	NA	NA	N
2/16/00	0.48	N	Y***	NA	NA	Y
2/20-21/00	2.38	Y	Y	Y	NA	Y
2/23/00	1.80	N	N	NA	NA	N
2/27/00	0.50	Y	Y	Y	NA	Y
3/3-4/00	0.20	N	N	NA	NA	N
3/5-6/00	1.06	N	Y***	NA	NA	Y
3/7-8/00	0.91	N	Y***	NA	NA	Y
4/14/00	0.00	Y	Y	NA	NA	Y
4/17-18/00	3.00****	Y	Y	Y	NA	Y
4/21/00	0.00	N	N	NA	NA	N

* Not enough sample collected from StreamGuard DII for analysis.
** Not enough sample collected from Fossil Filter DII for analysis.
*** Deployment criteria met; team mobilized to conduct during-storm inspection.
**** Rainfall amount based on Department of Forestry rain gauge.

Rosemead Maintenance Station Drain Inlet Insert (StreamGuard and Fossil Filter Inserts) (Site ID 73218 a, b) MW/Law

Monitoring/Sampling Activities

4/19/00	Cleaned both samplers and repaired rubber berm associated with the Fossil Filter DII monitoring vault.
4/20/00 – 5/3/00	Data was downloaded from the monitoring equipment.
4/21/00	Readied monitoring equipment for storm event forecasted to occur in the evening. Forecast predicted rain to produce up to 0.10 inch of rainfall with a 40% probability of occurrence. No teams were mobilized because of the deployment criteria not being met. Storm event produced 0.00 inch of rainfall.

Operation and Maintenance

4/19/00	Conducted post-storm inspection of Fossil Filter DII in accordance with MID. Sediment was removed from Fossil Filter DII cartridges.

Vector Activities

April 27: Breeding noted. Site abated with Altosid liquid on April 28, 2000.

Issues / Solutions

None this period.

Rosemead Maintenance Station Drain Inlet Insert Monitoring Summary

Date	Rainfall Total	Antecedent Dry Period & Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.12	N	N	NA	NA	N
12/31/99	0.34	N	N	NA	NA	N
1/16/00	0.01	N	N	NA	NA	N
1/25/00	0.72	Y	Y	Y	NA	Y
1/30-31/00	0.21	Y	Y	Y	NA	Y
2/10-11/00	0.46	N	N	NA	NA	N
2/12-14/00	1.05	N	N	NA	NA	N
2/16/00	0.90	N	Y*	NA	NA	Y
2/20-21/00	2.65	Y	Y	Y	NA	Y
2/23/00	1.89	N	N	NA	NA	N
2/27/00	0.46	Y	Y	Y	NA	Y
3/3-4/00	0.53	N	N	NA	NA	N
3/5-6/00	1.57	N	Y*	NA	NA	Y
3/7-8/00	0.81	Y	Y	N	NA	Y
4/14/00	0.00	Y	Y	NA	NA	Y
4/17-18/00	2.07**	Y	Y	Y	NA	Y
4/21/00	0.00	N	N	NA	NA	N

* Deployment criteria met; team mobilized to conduct during-storm inspection.

** Rainfall measured through 05:36 a.m. on 4/18/00.

I-605/SR-91 Interchange Bio Strip & Swale (Site ID 73222 a, b) MW/Law

Monitoring/Sampling Activities

Strip:

4/21/00	Forecast predicted rain to produce up to 0.10 inch of rainfall with a 40% probability of occurrence. Storm event produced 0.00 inch of rainfall. No teams were mobilized because of the deployment criteria not being met.
4/25/00	Replaced monitoring station batteries.
4/26/00	Cleaned flumes.

Swale:

4/21/00	Forecast predicted rain to produce up to 0.10 inch of rainfall with a 40% probability of occurrence. Storm event produced 0.00 inch of rainfall. No teams were mobilized because of the deployment criteria not being met.
4/25/00	Replaced monitoring station batteries.
4/26/00	Cleaned flumes.

Operation and Maintenance

Strip:

4/19/00	Conducted gopher inspection. No traps set.
4/20/00	Pulled weeds greater than 12 inches tall and removed trash and debris in anticipation of monthly inspection findings.
4/21/00	Conducted gopher inspection. No traps set.
4/24/00	Conducted gopher inspection. No traps set.
4/25/00	Conducted monthly site inspection
4/26 –27/00	Removed trash and debris and compacted gopher mounds.
5/1/00	Conducted gopher inspection. One trap set but no gophers caught.

Swale:

4/19/00	Conducted gopher inspection and abatement. One trap set but no gophers caught.
4/20/00	Began pulling weeds greater than 12 inches tall in anticipation of monthly inspection findings.
4/21/00	Conducted gopher inspection. One trap set but no gophers caught.
4/24/00	Conducted gopher inspection. One trap set but no gophers caught.
4/25/00	Conducted monthly site inspection
4/26 –27/00	Finished pulling weeds greater than 12 inches tall and compacted gopher mounds.
5/1/00	Conducted gopher inspection and abatement. One trap set but no gophers caught.

Vector Activities

None this period.

Issues/Solutions

None this period.

I-605/SR-91 Interchange Biofiltration Strip Monitoring Summary

Date	Rainfall Total	Antecedent Dry Period & Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.09	N	N	NA	NA	N
12/31/99	0.52	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.55	Y	Y	N	N	Y
1/30-31/00	0.25	N	N	NA	NA	N
2/10-11/00	0.26	N	N	NA	NA	N
2/12-14/00	1.14	N	Y*	NA	NA	Y
2/16/00	0.62	N	N	NA	NA	N
2/20-21/00	2.14	Y	Y	N	Y	Y
2/23/00	0.98	N	N	NA	NA	N
2/27/00	0.16	Y	Y	N	N	Y
3/3-4/00	0.40	N	N	NA	NA	N
3/5-6/00	1.01	N	Y**	NA	NA	Y
3/7-8/00	0.83	Y	Y	Y	Y	Y
4/14/00	0.00	Y	N***	NA	NA	N
4/17-18/00	1.58	Y	Y	Y	Y	Y
4/21/00	0.00	N	N	NA	NA	N

*A team was mobilized to the Cerritos Maintenance Station swale to conduct hydraulic residence time measurements. Empirical observations of the strip were made while the team was in the area.

**A team was mobilized to the I-605/SR-91 swale to conduct hydraulic residence time measurements. Empirical observations of the strip were made while the team was in the area.

*** Teams not mobilized because of the unlikelihood of rainfall producing enough runoff to discharge through the biofiltration strip.

I-605/SR-91 Interchange Biofiltration Swale Monitoring Summary

Date	Rainfall Total	Antecedent Dry Period & Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.09	N	N	NA	NA	N
12/31/99	0.52	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.55	Y	Y	N	N	Y
1/30-31/00	0.25	N	N	NA	NA	N
2/10-11/00	0.26	N	N	NA	NA	N
2/12-14/00	1.14	N	Y*	NA	NA	Y
2/16/00	0.62	N	N	NA	NA	N
2/20-21/00	2.14	Y	Y	N	Y	Y
2/23/00	0.98	N	N	NA	NA	N
2/27/00	0.16	Y	Y	N	N	Y
3/3-4/00	0.40	N	N	NA	NA	N
3/5-6/00	1.01	N	Y**	NA	NA	Y
3/7-8/00	0.83	Y	Y	Y	Y	Y
4/14/00	0.00	Y	N***	NA	NA	N
4/17-18/00	1.58	Y	Y	Y	NA	Y
4/21/00	0.00	N	N	NA	NA	N

*A team was mobilized to the Cerritos Maintenance Station swale to conduct hydraulic residence time measurements. Empirical observations of the swale were made while the team was in the area.

** A team was mobilized to the swale to conduct hydraulic residence timer measurements.

*** Teams not mobilized because of the unlikelihood of rainfall producing enough runoff to discharge through the biofiltration swale.

Cerritos Maintenance Station Bio Swale (Site ID 73223) MW/Law

Monitoring/Sampling Activities

4/21/00	Forecast predicted rain to produce up to 0.10 inch of rainfall with a 40% probability of occurrence. Storm event produced 0.00 inch of rainfall. No teams were mobilized because of the deployment criteria not being met.
4/20/00-5/3/00	Data was downloaded from the monitoring equipment.
4/26/00	Cleaned flumes.

Operation and Maintenance

4/19/00	Conducted gopher inspection and abatement. One trap was set and but no gophers were caught.
4/20/00	Pulled weeds greater than 12 inches tall and removed trash and debris in anticipation of monthly inspection findings.
4/21/00	Conducted gopher inspection and abatement. One trap set and one gopher was caught.
4/24/00	Conducted gopher inspection and abatement. One trap set and one gopher was caught.
4/25/00	Conducted monthly site inspection
4/26 –27/00	Removed trash and debris and compacted gopher mounds.
5/1/00	Conducted gopher inspection and abatement. Two traps set but no gophers caught.

Vector Activities

None this period.

Issues/Solutions

Gophers continue to burrow through the swale.

Cerritos Maintenance Station Bio Swale Monitoring Summary

Date	Rainfall Total	Antecedent Dry Period & Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.09	N	N	NA	NA	N
12/31/99	0.52	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.55	Y	Y	N	N	Y
1/30-31/00	0.25	N	N	NA	NA	N
2/10-11/00	0.26	N	N	NA	NA	N
2/12-14/00	1.14	N*	Y**	NA	NA	Y
2/16/00	0.62	N	N	NA	NA	N
2/20-21/00	2.14	Y	Y	Y	Y	Y
2/23/00	0.98	N	N	NA	NA	N
2/27/00	0.16	Y	Y	N	Y	Y
3/3-4/00	0.40	N	N	NA	NA	N
3/5-6/00	1.01	N	Y***	NA	NA	Y
3/7-8/00	0.83	Y	Y	Y	NA	Y
4/14/00	0.00	Y	N****	NA	NA	N
4/17-18/00	1.58	Y	Y	Y	NA	Y
4/21/00	0.00	N	N	NA	NA	N

*Criteria were not met for sampling.

**Hydraulic residence time measurements were taken.

***A team was mobilized to the I-605/SR-91 swale to conduct hydraulic residence time measurements. Empirical observations of the swale were made while the team was in the area.

****Teams not mobilized because of the unlikelihood of rainfall producing enough runoff to discharge through the biofiltration swale.

I-5/I-605 Bio Swale (Site ID 73224) MW/Law

Monitoring/Sampling Activities

4/21/00	Forecast predicted rain to produce up to 0.10 inch of rainfall with a 40% probability of occurrence. Storm event produced 0.00 inch of rainfall. No teams were mobilized because of the deployment criteria not being met.
4-20-5/03/00	Data was downloaded from the monitoring equipment.
4/25/00	Replaced monitoring station batteries.
4/26/00	Cleaned flumes.

Operation and Maintenance

4/19/00	Conducted gopher inspection and abatement. One trap set but no gophers caught.
4/21/00	Conducted gopher inspection. One trap set but no gophers caught.
4/24/00	Conducted gopher inspection. One trap set but no gophers caught.
4/25/00	Conducted monthly site inspection
4/26-27/00	Pulled weeds greater than 12 inches tall and removed trash and debris, and compacted gopher mounds.
5/1/00	Conducted gopher inspection and abatement. One trap set but no gophers caught.

Vector Activities

None this period.

Issues/Solutions

None this period.

I-5/I-605 Bio Swale Monitoring Summary

Date	Rainfall Total	Antecedent Dry Period & Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.16	N	N	NA	NA	N
12/31/99	0.22	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.55	Y	Y	N	N	Y
1/30-31/00	0.30	N	N	NA	NA	N
2/10-11/00	0.45	N	N	NA	NA	N
2/12-14/00	1.01	N	N	NA	NA	N
2/16/00	0.58	N	N	NA	NA	N
2/20-21/00	2.29	Y	Y	Y	Y	Y
2/23/00	1.23	N	N	NA	NA	N
2/27/00	0.21	Y	Y	Y	Y	Y
3/3-4/00	0.37	N	N	NA	NA	N
3/5-6/00	1.30	N	Y*	NA	NA	Y
3/7-8/00	0.93	Y	Y	Y	NA	Y
4/14/00	0.00	Y	N**	NA	NA	N
4/17-18/00	2.52	Y	Y	Y	NA	Y
4/21/00	0.00	N	N	NA	NA	N

* A team was mobilized to the swale to conduct hydraulic residence timer measurements.

**Teams not mobilized because of the unlikelihood of rainfall producing enough runoff to discharge through the biofiltration swale.

I-605/Carson & Del Amo Bio Swale (Site ID 73225) MW/Law

Monitoring/Sampling Activities

4/21/00	Forecast predicted rain to produce up to 0.10 inch of rainfall with a 40% probability of occurrence. Storm event produced 0.00 inch of rainfall. No teams were mobilized because of the deployment criteria not being met.
4/25/00	Replaced monitoring station batteries.
4/26/00	Cleaned flumes.

Operation and Maintenance

4/25/00	Conducted monthly site inspections.
4/26-27/00	Pulled weeds greater than 12 inches tall and removed trash and debris from the inlet area.

Vector Activities

None this period.

Issues/Solutions

None this period.

I-605/Carson & Del Amo Bio Swale Monitoring Summary

Date	Rainfall Total	Antecedent Dry Period & Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
11/8/99	0.09	N	N	NA	NA	N
12/31/99	0.52	N	N	NA	NA	N
1/16/00	0.00	N	N	NA	NA	N
1/25/00	0.55	Y	Y	N	N	Y
1/30-31/00	0.25	N	N	NA	NA	N
2/10-11/00	0.26	N	N	NA	NA	N
2/12-14/00	1.14	N	N	NA	NA	N
2/16/00	0.62	N	N	NA	NA	N
2/20-21/00	2.14	Y	Y*	N	Y	Y
2/23/00	0.98	N	N	NA	NA	N
2/27/00	0.16	Y	Y	N	N	Y
3/3-4/00	0.40	N	N	NA	NA	N
3/5-6/00	1.01	N	N	NA	NA	N
3/7-8/00	0.83	Y	Y	Y	NA	Y
4/14/00	0.00	Y	N**	NA	NA	N
4/17-18/00	1.58	Y	Y	Y	NA	Y
4/21/00	0.00	N	N	NA	NA	N

*Hydraulic residence time measurements were taken.

**Teams not mobilized because of the unlikelihood of rainfall producing enough runoff to discharge through the biofiltration swale.

District 11 BMP Pilot Sites

Maintenance Activities Applicable to all sites

Monthly site inspections were performed at all sites on May 2 – 3.

I-5/SR-56 Extended Detention Basin (Site ID 111101) KLI

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operations and Maintenance

No maintenance activities to note during this period.

Vector Activities

None this period.

Issues / Solutions

None this period.

I-5/SR-56 EDB Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
1/25/00	0.17	Y	Y	Y	N	Y
2/16/00	0.20	Y	Y	Y	Y	Y
2/20-21/00	1.64	Y	Y	Y	Y	Y
3/5-6/00	1.12	Y	Y	Y	N	Y
3/7-8/00	0.04	Y	Y	N	N	Y
4/17-18/00	0.82	Y	Y	Y	N	Y

SR-78/I-15 Extended Detention Basin (Site ID 111102) KLI

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operations and Maintenance

No maintenance activities to note during this period.

Vector Activities

None this period.

Issues / Solutions

None this period.

SR-78/I-15 EDB Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
1/25/00	0.30	Y	Y	Y	Y	Y
2/16/00	0.38	Y	Y	Y	Y	Y
2/20-21/00	1.99	Y	Y	Y	Y	Y
3/5-6/00	1.12	Y	Y	Y	N	Y
3/7-8/00	0.10	Y	Y	N	N	Y
3/27/00	0.01	N	N	NA	NA	N
4/17-18/00	0.91	Y	Y	Y	N	Y

I-5/La Costa Avenue Infiltration Basin (Site ID 111103) KLI

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operations and Maintenance

A structure to hold the bird deterrent net was constructed at the infiltration basin April 26 – 28 and is awaiting custom Torex netting from the manufacturer.

Vector Activities

The site was found breeding mosquitoes on April 24 and May 2. No abatement was performed.

Issues / Solutions

None this period.

La Costa IB Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
1/25/00	0.17	Y	Y	NA	NA	Y
2/16/00	0.16	Y	Y	NA	NA	Y
2/20-21/00	1.45	Y	Y	NA	NA	Y
3/5-6/00	0.65	Y	Y	NA	NA	Y
3/7-8/00	0.06	Y	Y	NA	NA	Y
4/17-18/00	0.55	Y	Y	NA	NA	Y

I-5/La Costa Wet Basin (Site ID 111104) KLI

Monitoring/Sampling Activities

Monthly 48-hour time weighted composite samples of the 6" inlet pipe from the trapezoidal channel to the wet basin were taken on May 1 – 3.

Operations and Maintenance

No maintenance activities to note during this time period.

Vector Activities

The site was found breeding mosquitoes on April 24 and May 2. No abatement was performed.

Issues / Solutions

None this period.

I-5 La Costa WB Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
1/25/00	0.16	Y	Y	Y	Y	Y
2/16/00	0.16	Y	Y	Y	Y	Y
2/20-21/00	1.45	Y	Y	Y	Y	Y
3/5-6/00	0.63	Y	Y	Y	N	Y
3/7-8/00	0.05	Y	Y	N	N	Y
4/17-18/00	0.60	Y	Y	Y	N	Y

I-5/Manchester Avenue Extended Detention Basin (Site ID 111105) KLI

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operations and Maintenance

No maintenance activities to note during this period.

Vector Activities

None this period.

Issues/Solutions

None this period.

I-5/Manchester EDB Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
1/25/00	0.16	Y	Y	N	N	Y
2/16/00	0.22	Y	Y	Y	Y	Y
2/20-21/00	1.53	Y	Y	Y	Y	Y
3/5-6/00	1.19	Y	Y	Y	N	Y
3/7-8/00	0.10	Y	Y	N	N	Y
4/17-18/00	0.81	Y	Y	Y	N	Y

Kearny Mesa Maintenance Station StormFilter - Perlite/Zeolite (Site ID 112201) KLI

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operations and Maintenance

No maintenance activities to note during this period.

Vector Activities

The site was found breeding mosquitoes on April 24.

Issues / Solutions

None this period.

Kearny Mesa MS MF Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
1/25/00	0.08	Y	Y	Y	N	Y
2/16/00	0.10	Y	Y	Y	Y	Y
2/20-21/00	2.32	Y	Y	Y	Y	Y
3/5-6/00	1.00	Y	Y	Y	N	Y
3/7-8/00	0.29	Y	Y	Y	N	Y
4/17-18/00	0.52	Y	Y	Y	N	Y

Escondido Maintenance Station Media Filter - Sand (Site ID 112202) KLI

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operations and Maintenance

No maintenance activities to note during this period.

Vector Activities

None this period.

Issues / Solutions

None this period.

Escondido MS Media Filter Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
1/25/00	0.29	Y	Y	Y	Y	Y
2/16/00	0.50	Y	Y	Y	Y	Y
2/20-21/00	2.12	Y	Y	Y	Y	Y
3/5-6/00	1.19	Y	Y	Y	N	Y
3/7-8/00	0.19	Y	Y	N	N	Y
3/27/00	0.01	N	N	NA	NA	N
4/17-18/00	0.88	Y	Y	Y	N	Y

La Costa Park and Ride Media Filter - Sand (Site ID 112203) KLI

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operations and Maintenance

No maintenance activities to note during this period.

Vector Activities

None this period.

Issues / Solutions

None this period.

La Costa P&R Sand Filter Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
1/25/00	0.19	Y	Y	Y	Y	Y
2/16/00	0.16	Y	Y	Y	Y	Y
2/20-21/00	1.45	Y	Y	Y	Y	Y
3/5-6/00	0.69	Y	Y	Y	N	Y
3/7-8/00	0.07	Y	Y	N	N	Y
4/17-18/00	0.61	Y	Y	Y	N	Y

SR-78/I-5 Park and Ride Media Filter - Sand (Site ID 112204) KLI

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operations and Maintenance

The bird deterrent net was stolen on April 26. A new net was installed on May 1.

Vector Activities

None this period.

Issues / Solutions

None this period.

SR 78/I-5 P&R Sand Filter Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
1/25/00	0.27	Y	Y	Y	Y	Y
2/16/00	0.14	Y	Y	Y	Y	Y
2/20-21/00	2.16	Y	Y	Y	Y	Y
3/5-6/00	1.15	Y	Y	N	N	Y
3/7-8/00	0.19	Y	Y	Y	N	Y
4/17-18/00	0.49	Y	Y	Y	N	Y

Melrose Ave/SR-78 Biofiltration Swale (Site ID 112205) KLI

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operations and Maintenance

No maintenance activities to note during this period.

Vector Activities

None this period.

Issues / Solutions

None this period.

Melrose Ave./SR-78 Bio Swale Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
1/25/00	0.22	Y	Y	N	N	Y
2/16/00	0.25	Y	Y	N	N	Y
2/20-21/00	2.29	Y	Y	N	N	Y
3/5-6/00	0.58	Y	Y	N	N	Y
3/7-8/00	0.11	Y	Y	N	N	Y
4/17-18/00	0.52	Y	Y	N	N	Y

I-5 Palomar Airport Biofiltration Swale (Site ID 112206) KLI

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operation and Maintenance

No maintenance activities to note during this period.

Vector Activities

None this period.

Issues / Solutions

None this period.

I-5/Palomar Biofiltration Swale Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
1/25/00	0.17	Y	Y	N	N	Y
2/16/00	0.16	Y	Y	N	N	Y
2/20-21/00	0.62	Y	Y	Y	Y	Y
3/5-6/00	0.65	Y	Y	Y	Y	Y
3/7-8/00	0.11	Y	Y	N	N	Y
4/17-18/00	0.48	Y	Y	Y	N	Y

Carlsbad Maintenance Station Bio Strip Infiltration Trench (Site ID 112207) KLI

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operations and Maintenance

No maintenance activities to note during this period.

Vector Activities

None this period.

Issues / Solutions

None this period.

Carlsbad MS Bio Strip/Infiltration Trench Monitoring Summary

Date	Rainfall Total	Deployment Criteria Met	Mobilized	Sampled		Empirical Observations
				Comp	Grab	
1/25/00	0.29	Y	Y	N	N	Y
2/16/00	0.16	Y	Y	N	N	Y
2/20-21/00	0.58	Y	Y	Y	Y	Y
3/5-6/00	0.41	Y	Y	Y	Y	Y
3/7-8/00	0.11	Y	Y	N	N	Y
4/17-18/00	0.49	Y	Y	Y	N	Y

ESTIMATED BMP OPERATION SCHEDULE FOR REMAINING SITES UNDER CONSTRUCTION

Location	BMP Type	Monitoring Consultant	Estimated Date Site "On-line"[2]	Instrument Install[1]		Operational[3] (start empirical and maintain)	Ready for Water Quality Monitoring[4]
				Begin	Complete		
DISTRICT 7							
I-210 East of Orcas	CDS	MW/Law	5/04/00	5/04/00	5/18/00	5/19/00	5/19/00
I-210 East of Filmore	CDS	MW/Law	5/04/00	5/04/00	5/18/00	5/19/00	5/19/00
Paxton Park & Ride	MF	BC	3/14/01	3/14/01	4/3/01	4/3/01	4/3/01
Metro MS	MCTT	BC	3/14/01	3/14/01	4/3/01	4/3/01	4/3/01

[1] Equipment installation schedule is dependent upon construction schedule.

[2] Site on-line means BMP will receive stormwater runoff, not necessarily ready for monitoring or operations.

[3] Site operational means BMP meets completion criteria and BMP is turned over to monitoring/maintenance teams to begin empirical observations and maintenance.

[4] Ready for water quality monitoring means BMP has a full equipment installation and the equipment is ready to draw samples.

SUMMARY OF REQUIRED AND SUCCESSFULLY SAMPLED STORMS PER SITE

Location	BMP Type	Monitoring Consultant	Operational (yes/no)	Operational Date	Maximum Storms Required	Successfully Sampled Storms [1]	
						1998-1999	1999-2000 Preliminary
District 7							
I-605/SR-91	IB	MW/Law	Yes	4/9/99	4	N/A[5]	N/A[5]
I-210 East of Orcas	CDS	MW/Law	No	5/19/00[2]	8	0	
I-210 East of Filmore	CDS	MW/Law	No	5/19/00[2]	8	0	
I-5/I-605	EDB	BC	Yes	2/26/99	10	2	4
I-605/SR-91	EDB	BC	Yes	2/22/99	10	3	3[4]
Paxton P & R	MF	BC	No	4/3/01[2]	8	0	
Metro MS	MCTT	BC	No	4/3/01[2]	8	0	
Alameda MS	OWS	BC	Yes	5/17/99	8	0	4
Eastern MS	MF	BC	Yes	2/15/99	8	1	4
Foothill MS	MF	BC	Yes	3/8/99	8	2	4
Termination P & R	MF	BC	Yes	5/17/99	8	0	4
Via Verde P & R	MCTT	BC	Yes	5/17/99	8	0	4
Lakewood P & R	MCTT	BC	Yes	5/17/99	8	0	4
Altadena	Bio Strip	MW/Law	Yes	10/1/99	8	0	6[3,]
	Infiltration Trench	MW/Law	Yes	10/1/99	8	N/A[5]	N/A[5]
Foothill MS	DII north- SG Insert	MW/Law	Yes	1/22/99	8	4	8
	DII south- FF Insert	MW/Law	Yes	1/22/99	8	3	8[3,6]
Las Flores MS	DII north-SG Insert	MW/Law	Yes	1/22/99	8	5	5
	DII south-FF Insert	MW/Law	Yes	1/22/99	8	2	5[3]
Rosemead MS	DII north-FF Insert	MW/Law	Yes	1/22/99	8	3	5[3]
	DII south-SG Insert	MW/Law	Yes	1/22/99	8	3	5
I-605/SR-91	Bio Strip	MW/Law	Yes	10/1/99	8	0	2
	Bio Swale	MW/Law	Yes	10/1/99	8	0	2
Cerritos MS	BioSwale	MW/Law	Yes	10/1/99	8	0	4[8]
I-5/I-605	BioSwale	MW/Law	Yes	10/1/99	8	0	4
I-605/ Del Amo	BioSwale	MW/Law	Yes	10/1/99	8	0	2
District 11							
I-5/SR-56	EDB	KLI	Yes	1/24/99	4	4	5[3]
I-15/SR-78	EDB	KLI	Yes	1/24/99	10	4	5
I-5/La Costa (West)	IB	KLI	Yes	1/24/99	4	N/A[5]	N/A[5]
I-5/La Costa (East)	WB	KLI	Yes	10/1/99	4	0	5[3]
I-5/Manchester (East)	EDB	KLI	Yes	10/1/99	4	0	5
Kearney Mesa MS	StormFilter (Perlite/Zeolite)	KLI	Yes	10/1/99	8	3	6[3]
Escondido MS	MF	KLI	Yes	2/16/99	8	3	5
La Costa P & R	MF	KLI	Yes	2/16/99	4	3	5[3,7]
SR-78/I-5 P& R	MF	KLI	Yes	2/26/99	8	2	6[7,9]
Melrose Ave/SR-78	Bio Swale	KLI	Yes	3/1/99	8	0	
I-5 Palomar Airport Rd	Bio Swale	KLI	Yes	10/1/99	8	0	3
Carlsbad MS	Bio Strip	KLI	Yes	10/1/99	4	0	3
	Infiltration Trench	KLI	Yes	10/1/99	4	N/A[5]	N/A[5]

[1]All 1998-1999 DII data in question. A criteria for acceptance has been established . 1998-1999 Data will be reviewed at the end of the year (2000).
[2]Subject to Schedule Update
[3]OMM Manual goal of 12 aliquot minimum sample not attained (25 January 2000 event)
[4]Less than 12 aliquots collected (at the influent at Altadena, at the effluent at the 605/91 EDB)
[5]N/A – Groundwater or Vadose Zone Samples
[6]OMM Manual goal of 12 aliquot minimum sample not attained (30 January 2000 event)
[7]OMM Manual goal of 12 aliquot minimum sample not attained (16 February 2000 event)
[8]OMM Manual goal of 12 aliquot minimum sample not attained (27 February 2000 event)
[9]OMM Manual goal of 12 aliquot minimum sample not attained (8 March 2000 event)

OMM PLAN ACTIVITIES

Volumes I and II

No activity this period. Documents have been finalized and adopted.

Maintenance Indicator Document

There were no changes to the MID during this reporting period. A meeting with CT, Plaintiffs, and SDVCD is has been scheduled for May 11 to discuss the changes to the MID regarding vegetation management at the La Costa Wet Basin.

Database

The last update of the database was on April 15, 2000. The next update will occur on May 15, 2000.

O&M Cost

A summary update of the O&M cost is provided as Attachment 2 to this Biweekly Report. Cost summary covers period from October 1999 to March 2000.

Analytical Data Submittal

Preliminary Analytical Data received to date is provided as Attachment 3 to this Biweekly Report.

VECTOR ACTIVITIES

The following is a summary of vector issues from April 21, 2000 to May 3, 2000.

DISTRICT 7

San Gabriel Valley Vector Control District

The sedimentation vault of the MCTT at Via Verde P&R (#74206) and the monitoring vaults of the DIIs at Rosemead MS (#73218 a,b) were found breeding on April 27, 2000.

All sites were abated with Altosid liquid on April 28, 2000.

Greater Los Angeles County Vector Control District

The sedimentation vaults of the MCTT at the Lakewood P&R (#74208) and Media Filter at Termination P&R (#74204) were found breeding on April 27, 2000.

Both sites were abated with Altosid liquid on April 28, 2000.

Los Angeles County West Vector Control District

No sites were found breeding during this period.

No abatement was carried out during this period.

DISTRICT 11

County of San Diego Vector Surveillance and Control

The Infiltration Basin (#111103), the Wet Basin at La Costa (#111104) and the StormFilter at Kearny Mesa MS (# 112201) were found breeding on April 24, 2000.

The Infiltration Basin (#111103) and the Wet Basin at La Costa (#111104) were found breeding on May 2, 2000

No abatement was carried out during this period.

DEPARTMENT OF HEALTH SERVICES

The Department of Health Services (DHS) continues its vector production study and is collecting data on a weekly basis.

In response to Bob Pitt's recommendations for the MCTT sites, DHS, in association with the Greater Los Angeles County Vector Control District, will assist Brown and Caldwell in attempting to mosquito proofing the MCTT at the Lakewood P&R. Several tasks have thus far been outlined:

DHS are preparing a memorandum justifying their position that barriers such as floating pool screens and suspended mosquito netting are infeasible in this application. This memorandum is due May 5, 2000.

Brown and Caldwell are preparing a memorandum outlining those solutions that seem most feasible. This memorandum is scheduled to be presented to DHS on May 18, 2000. DHS will provide comment on Brown and Caldwell's proposed design changes by June 1, 2000.

DHS is preparing a technical memorandum relating the experiences (from a vector control perspective) of other agencies utilizing underground or enclosed water quality structures. The memo will also comment on the monitoring and abatement experiences of agencies dealing with vector breeding in all forms of underground vaults. The final memorandum is due May 5, 2000.

DHS continues to oversee all aspects of vector monitoring and data collection by the local vector control districts and incorporate this information into its database.

DHS continues to search for engineering expertise within its organization to assist in undertaking the general design review and formulating design recommendations with regard to vector production problems associated with the BMPs.

ADULT MONITORING

Adult Mosquito and Midge Activity: April 10 through April 27, 2000

Adult mosquito activity increased markedly at the end of April in both District 7 and District 11. Midge activity was low during April, but increased at five sites (#73102, control for #73102, #73101, #73225 and control for #74204) at the end of the month.

In District 7, mosquito activity was greatest at both Termination P & R sites (#74204 and control) and at the MCTT site at Metro (#74104) on April 13, 2000. Overall, mosquito activity on April 13, 2000 was low (mean = 3.3 individuals per trap) and variable among sites. Gravid mosquito activity increased about 5-fold on April 20 (mean = 15 individuals per trap), but egg-laying females were collected in largest numbers from 3 sites: MCTT at Termination P&R, the IB at I-605/SR-91 and the DII at Rosemead MS (sites #74204, #73101, and #73218, respectively). Increased gravid activity was also noted at the four sites along I-605 in the Cerritos area (sites #73223, #73224, #73225 and #74102) and at all MCTT sites; however, gravid mosquito activity at Via Verde (#74206) was low compared to the two other MCTT sites. Gravid activity was also evident at the CDS sites in Pacoima.

Gravid mosquito activity increased again on April 27, 2000. The per-trap mean for gravid mosquitoes was 19 individuals per night. The variation around the mean decreased slightly reflecting the increased activity across all sites. The among-sites trends for mosquito and midge activity on April 27 were similar to those observed on April 20, 2000.

In District 11, mosquito activity also increased across April. Host-seeking and gravid activity was low on April 10, 2000. Eight gravid individuals were collected at the Media Filter at SR-78/I-5 (#112204). Rain occurred on April 17, 2000 and traps were not deployed. On April 24, 2000 a significant increase in host-seeking activity was observed at the Wet Basin at La Costa (#111104) where 88 host-seeking females were collected. The possible need for management activities and/or vector abatement is indicated by the increase in host-seeking mosquito activity at the wet basin. Increased gravid activity was observed at the Extended Detention Basin at I-5/SR-56 and the StormFilter at Kearny Mesa MS (sites #111101 and #112201, respectively).

The most recent adult monitoring data are included in Attachment 4.

Sites Monitored by Vector Control Districts

Location	BMP Type	Monitor Consultant	Vector Control District	Activities
DISTRICT 7				
I-605/SR-91	IB	MW/Law	GLACVCD	None noted during routine inspection.
I-210 East of Orcas	CDS	MW/Law	GLACVCD	N/A
I-210 East of Filmore	CDS	MW/Law	GLACVCD	N/A
I-5/I-605	EDB	BC	GLACVCD	April 20: Breeding noted. April 21: Site abated with Golden Bear Oil.
I-605/SR-91	EDB	BC	GLACVCD	None noted during routine inspection.
Paxton Park & Ride	MF	BC	GLACVCD	N/A
Metro MS	MCTT	BC	GLACVCD	N/A
Alameda MS	OWS	BC	GLACVCD	None noted during routine inspection.
Eastern MS	MF	BC	GLACVCD	None noted during routine inspection.
Foothill MS	MF	BC	SGVVCD	None noted during routine inspection.
Termination Park & Ride	MF	BC	GLACVCD	April 27: Breeding noted. April 28: Site abated with Altosid liquid.
Via Verde Park & Ride	MCTT	BC	SGVVCD	April 27: Breeding noted within the sedimentation vault. April 28: Site abated with Altosid liquid.
Lakewood Park & Ride	MCTT	BC	GLACVCD	April 27: Breeding noted within the sedimentation vault. April 28: Site abated with Altosid liquid.
Altadena	Bio Strip/IT	MW/Law	GLACVCD	None noted during routine inspection.
Foothill	DII	MW/Law	SGVVCD	None noted during routine inspection.
LasFlores	DII	MW/Law	LA Co West	None noted during routine inspection.
Rosemead	DII	MW/Law	SGVVCD	April 27: Breeding noted within monitoring vault. April 28: Site abated with Altosid liquid.
I-605/SR-91	Bio Strip/Swale	MW/Law	GLACVCD	None noted during routine inspection.
Cerritos MS	BioSwale	MW/Law	GLACVCD	None noted during routine inspection.
I-5/I-605	BioSwale	MW/Law	GLACVCD	None noted during routine inspection.
I-605/ Del Amo	BioSwale	MW/Law	GLACVCD	None noted during routine inspection.

Location	BMP Type	Monitoring Consultant	Vector Control District	Activities
DISTRICT 11				
I-5/SR-56	EDB	KLI	SD Co VC	None noted during routine inspection.
I-15/SR-78	EDB	KLI	SD Co VC	None noted during routine inspection.
I-5/La Costa (West)	IB	KLI	SD Co VC	April 24: Breeding noted; no abatement performed. May 2: Breeding noted; no abatement performed.
I-5/La Costa (East)	WB	KLI	SD Co VC	April 24: Breeding noted; no abatement performed. May 2: Breeding noted; no abatement performed.
I-5/Manchester (East)	EDB	KLI	SD Co VC	None noted during routine inspection.
Kearny Mesa MS	StormFilter (Perlite/Zeolite)	KLI	SD Co VC	April 24: Breeding noted; no abatement performed.
Escondido MS	MF	KLI	SD Co VC	None noted during routine inspection.
La Costa Park & Ride	MF	KLI	SD Co VC	None noted during routine inspection.
SR-78/I-5 Park & Ride	MF	KLI	SD Co VC	None noted during routine inspection.
Melrose Ave/SR-78	Bio Swale	KLI	SD Co VC	None noted during routine inspection.
I-5 Palomar Airport Road	Bio Swale	KLI	SD Co VC	None noted during routine inspection.
Carlsbad MS	Bio Strip/IT	KLI	SD Co VC	None noted during routine inspection.

ENVIRONMENTAL ISSUES

During this period, Dudek conducted a site visit to all BMPs. Dudek found that seven sites had pocket gopher present and four sites had California ground squirrel present. Of the seven sites, only four met the trapping criteria as proposed within the pocket gopher letter (dated March 30, 2000) including: I-5/ Palomar Airport Road swale, SR-78/Melrose Avenue swale, SR-78 / I-15 Interchange infiltration basin, and the Cerritos maintenance station swale.

Of these, the Melrose site was proposed to be left untrapped according to the previously mentioned letter. Trapping should stop at other locations, however compaction of open burrows should continue. California ground squirrel and open burrows were detected at the La Costa park and ride media filter, SR-78/Melrose Avenue swale, SR-78/I-I5 extended detention basin, and the I-605/I-5 swale. Baiting stations are not recommended at this time, but should be watched closely and burrow openings closed and compacted. Lastly, as soon as the MID allows, vegetation should be trimmed at the S-56/ I-5 extended detention basin, I-605/I-5 swale and infiltration basin, and SR-91/ I-605 swale and infiltration basin.

WEATHER

Precipitation data for Los Angeles and San Diego were obtained from NOAA.

The data presented here is as a reference only. The actual rainfall at individual BMP sites will vary from the values given in the table. The data presented above for Los Angeles is as of 4:00 p.m. for the preceding 24 hours on the date indicated. For San Diego, is as of 5:00 p.m. for the preceding 24 hours.

April 2000							
Los Angeles Downtown/USC				**San Diego**			
1	0.00	16	0.00	1	0.00	16	0.00
2	0.00	17	1.03	2	0.00	17	0.02
3	0.00	18	0.46	3	0.00	18	0.46
4	0.00	19	0.00	4	0.00	19	0.01
5	0.00	20	0.00	5	0.00	20	0.00
6	0.00	21	0.00	6	0.00	21	Trace
7	0.00	22	0.00	7	0.00	22	0.01
8	0.00	23	0.00	8	0.00	23	0.00
9	0.00	24	0.00	9	0.00	24	0.00
10	0.00	25	0.00	10	0.00	25	0.00
11	0.00	26	0.00	11	0.00	26	0.00
12	0.00	27	0.00	12	0.00	27	0.00
13	0.00	28	0.00	13	0.00	28	0.00
14	0.00	29	0.00	14	0.00	29	0.00
15	0.00	30	0.00	15	0.04	30	0.00

May 2000							
1	0.00	16		1	0.00	16	
2	0.00	17		2	0.00	17	
3	0.00	18		3	0.00	18	
4		19		4		19	
5		20		5		20	
6		21		6		21	
7		22		7		22	
8		23		8		23	
9		24		9		24	
10		25		10		25	
11		26		11		26	
12		27		12		27	
13		28		13		28	
14		29		14		29	
15		30		15		30	
		31				31	

ATTACHMENTS

Attachment 1: I-5/La Costa Ave Infiltration Basin – Water Surface Elevation Summary

Attachment 2: Cost Summary Update

Attachment 3: Preliminary Analytical Data

Attachment 4: Adult Vector Monitoring

Attachment 1

I-5/La Costa Ave Infiltration Basin – Water Surface Elevation Summary

BMP RETROFIT PILOT PROGRAM
PS&E LOCATION 3
I-5/LA COSTA AVE INFILTRATION BASIN

TABLE 1
WATER SURFACE ELEVATION SUMMARY SHEET

Date	Time	Field Reading		Pond Depth*	Groundwater Elev (FT)*	Delta	By
		Headwall (FT)	Monitoring Well (FT)	(FT)		(FT)	
12/12/1997	---	---	BORING WW-1	---	2.22	4.67	GDC
12/13/1997	---	---	BORING WW-2	---	1.69	5.20	GDC
12/23/1997	---	---	---	---	No groundwater encountered.	---	GDC
2/10/1998	---	---	3.00	---	7.92	-1.03	GDC
4/21/1998	---	---	5.85	---	7.34	-0.45	GDC
6/30/1998	10:00am	---	6.90	---	6.29	0.60	KLI
7/31/1998	4:15pm	---	6.95	---	6.24	0.65	KLI
8/31/1998	11:57am	---	7.17	---	6.02	0.87	KLI
9/28/1998	---	---	---	---	4.38	---	RBF
11/2/1998	4:04pm	---	7.60	---	5.59	1.30	KLI
11/11/1998	4:55pm	---	7.60	---	5.59	1.30	KLI
12/2/1998	---	---	7.61	---	5.58	1.31	KLI
12/17/1998	---	---	---	---	0.00	---	CT RE
1/20/1999	7:05am	---	7.14	---	6.05	0.84	GDC
2/24/1999	10:15am	2.08	---	---	---	---	GC
3/2/1999	2:00pm	1.88	---	---	---	---	AW
3/9/1999	11:00am	1.73	---	---	---	---	GC
3/12/1999	1:00pm	1.86	9.00	1.45	4.19	2.70	AW
3/16/1999	4:55pm	1.98	6.90	1.57	6.29	0.60	AW
3/23/1999	10:00am	1.76	7.08	1.35	6.11	0.78	AW
3/26/1999	10:20am	2.48	9.00	2.07	4.19	2.70	AW
3/30/1999	9:05am	2.28	8.85	1.87	4.34	2.55	AW
4/2/1999	8:15am	2.89	8.35	2.48	4.84	2.05	AW
4/6/1999	2:00pm	2.69	7.00	2.28	6.19	0.70	AW
4/9/1999	10:00am	2.67	7.00	2.26	6.19	0.70	AW
4/13/1999	10:00am	2.89	6.91	2.48	6.28	0.61	AW
4/20/1999	9:50am	2.52	9.30	2.11	3.89	3.00	AW
4/27/1999	2:25pm	2.50	7.10	2.09	6.09	0.80	AW
5/5/1999	1:10pm	2.06	7.00	1.65	6.19	0.70	AW
5/18/1999	5:55pm	1.66	7.15	1.25	6.04	0.85	AW

BMP RETROFIT PILOT PROGRAM
PS&E LOCATION 3
I-5/LA COSTA AVE INFILTRATION BASIN

TABLE 1
WATER SURFACE ELEVATION SUMMARY SHEET

Date	Time	Field Reading		Pond Depth*	Groundwater Elev (FT)*	Delta	By
		Headwall (FT)	Monitoring Well (FT)	(FT)		(FT)	
5/25/1999	5:40pm	1.50	7.10	1.09	6.09	0.80	AW
6/8/1999	5:40pm	1.30	7.25	0.89	5.94	0.95	AW
6/15/1999	1:45pm	1.10	7.20	0.69	5.99	0.90	AW
6/28/1999	1:50pm	0.82	7.30	0.41	5.89	1.00	AW
7/7/1999	12:45pm	0.62	7.50	0.21	5.69	1.20	AW
7/19/1999	10:30am	0.43	7.40	0.02	5.79	1.10	AW
8/3/1999	11:45am	0.22	7.50	-0.19	5.69	1.20	AW
8/17/1999	10:50am	0.12	7.55	-0.29	5.64	1.25	AW
8/31/1999	9:50am	0.12	7.55	-0.29	5.64	1.25	AW
9/15/1999	11:45am	-0.26	7.60	-0.67	5.59	1.30	AW
9/28/1999	11:55am	0.08	7.60	-0.33	5.59	1.30	AW
10/12/1999	10:05am	0.08	7.65	-0.33	5.54	1.35	AW
10/26/1999	3:00pm	0.08	7.70	-0.33	5.49	1.40	AW
11/9/1999	2:35pm	0.08	7.65	-0.33	5.54	1.35	AW
11/23/1999	4:05pm	No standing water.	7.60	No standing water.	5.59	1.30	FP
12/8/1999	10:15am	No standing water.	7.75	No standing water.	5.44	1.45	AW
12/21/1999	3:30pm	No standing water.	7.75	No standing water.	5.44	1.45	AW
1/4/2000	12:20pm	No standing water.	7.65	No standing water.	5.54	1.35	AW

BMP RETROFIT PILOT PROGRAM
PS&E LOCATION 3
I-5/LA COSTA AVE INFILTRATION BASIN

TABLE 1
WATER SURFACE ELEVATION SUMMARY SHEET

Date	Time	Field Reading		Pond Depth*	Groundwater Elev (FT)*	Delta	By
		Headwall (FT)	Monitoring Well (FT)	(FT)		(FT)	
1/18/2000	8:50am	No standing water.	7.85	No standing water.	5.34	1.55	AW
2/1/2000	10:15am	Small Pools.	7.45	No standing water.	5.74	1.15	CW
2/15/2000	4:45pm	1.60	7.50	1.19	5.69	1.20	MZ
2/29/2000	12:30pm	2.90	7.25	2.49	5.94	0.95	MZ
3/15/2000	2:30pm	2.90	7.18	2.49	6.01	0.88	CW
3/28/2000	11:15am	1.51	7.35	1.10	5.84	1.05	CW
4/11/2000	10:00am	1.20	7.50	0.79	5.69	1.20	BJ
4/24/2000	9:30am	1.60	7.45	1.19	5.74	1.15	MZ

*
Temporary Well: Well Cover elevation 10.99 ft (3.35m). Well rim elevation 10.92 ft.

WSE at monitoring well = Well cover elevation (FT) - Monitoring Well Reading (FT)

*
Permanent Well: Monitoring well notch at elevation 13.186 ft (4.02m)

WSE at monitoring well = Notch elevation (FT) - Monitoring Well Reading (FT)
Monitoring Well reading = Distance to groundwater surface

*
Pond Depth = Headwall Field Reading (FT) - Pipe Invert Location on the Headwall Gauge (FT)

Pipe Invert Location on the Headwall Gauge (FT) = 0.41 ft
Note: Negative Pond Depths indicate ponded water is below invert.
This is due to scour and settlement of the invert material.

Delta = Basin Invert - Groundwater elevation
Basin Invert = 6.89 FT (2.1m)

AW- RBF
FP- RBF
GC- RBF
GDC-Group Delta Consultants (Formerly LKR- The LKR Group, Consulting Geotechnical Engineers)
KLI- Kinnetic Laboratories, Inc.
CT RE- Caltrans Resident Engineer

Comment
Existing surface elevation: 10.22 ft (3.117m)
Existing surface elevation: 10.69 ft (3.258m)
SD-7 Initial investigation monitoring well installed. (Bottom at 5 ft bgs.)
Reading after a series of rain storms. Adjacent ground saturated and surface ponding observed.
SDMW-1 Permanent monitoring well installed. (Bottom at 20 ft bgs.)
Exploratory hole excavated by contractor. Ground water elevation 0.54ft below original design invert, 4.92ft (1.5m)
Exploratory holes excavated 10.2 feet below invert elevation. No groundwater observed.
No signs of mosquitoes. Surface has 2"-3" dia algae.
No vector issues.
No vector issues - no algae present from 2/24/99.
No vector issues, < 0.1in rain on 3/11/99, no algae.
No vector issues, < 0.2in rain on 3/15/99, 2mm dia algae scattered on water surface. Dried high-algae-line observed on headwall at 2.84ft mark.
No vector issues, no algae.
No vector issues, < 0.5in rain on 3/25/99, no algae.
No vector issues, 6-sf algae at NW corner. Vector Control District treated basin with Altosid briquettes and stocked basin with mosquito fish.
No vector issues, <0.5in rain on 4/1/99, no algae.
No vector issues, no algae. No vector issues, 1mm dia algae, 8sf at NW corner.
No vector issues, <0.8in rain on 4/11/99, <1mm dia algae approx 8sf.
No vector issues, alga mats at NW corner.
No vector issues, 6-1-2ft dia alga mats.
No vector issues, few scattered 1-5mm dia algae.
Minor vector issues, refer to OMM Vector Issues, collection of small floating algae mats varying 4-8" wide and approx. 10ft long.

Comment
No vector issues, 6-12" wide alga mat at perimeter of the basin.
No vector issues, alga mats at perimeter and interior of the basin. <0.14" Rain rcvd June 1,2,3
No vector issues, alga mats at perimeter and interior of the basin.
No vector issues, alga mats at perimeter and scattered 2/3 length within basin interior.
No vector issues, alga mats 2/3 length of the basin at perimeter and scattered 10inch mats within interior.
No vector issues, alga mats cover 60% of basin.
No vector issues, alga mats cover 90% of basin.
Basin is empty. Residual water is ponded in the scour hole at the outlet (approximately 2ft x 2ft). No vector issues.
Basin is empty. Surface of the southern portion of the basin is dry. Residual water is ponded in the scour hole at the outlet (approximately 2ft x 2ft). No vector issues.
Basin is empty. Surface of the southern portion of the basin is dry. A 1sft, 1in deep puddle of water is located at the scour hole adjacent to the outlet. No vector issues.
Basin is empty. Surface of the southern portion of the basin is dry. Residual water is ponded in the scour hole at the outlet (approximately 2ft x 2ft). No vector issues.
Basin is empty. Surface of the southern portion of the basin is dry. Residual water is ponded in the scour hole at the outlet (approximately 2ft x 2ft). No vector issues.
Basin is empty. Surface of the southern portion of the basin is dry. Residual water is ponded in the scour hole at the outlet (approximately 2ft x 2ft). No vector issues.
Basin is empty. Surface of the southern portion of the basin is dry. Residual water is ponded in the scour hole at the outlet (approximately 2ft x 2ft). No vector issues.
Basin is empty. Surface of the basin is dry. The invert of the scour hole at the outlet is saturated. No ponding was observed. No vector issues.
Basin is empty. Surface of the basin is dry. The invert of the scour hole at the outlet is saturated. No ponding was observed. No vector issues.
Basin is empty. Surface of the basin is dry. The invert of the scour hole at the outlet is saturated. No ponding was observed. No vector issues.
Basin is empty. Surface of the basin is dry. The invert of the scour hole at the outlet is saturated. No ponding was observed. No vector issues.

Comment
Basin is empty. Surface of the basin is damp. The invert of the scour hole at the outlet is saturated. No ponding was observed. No vector issues.
Ponding was observed in several small pools in center of basin. Strong H2S smell from well.
Strong H2S smell from well. Basin has a large pool of water at 1.6ft. No vectors present.
Groundwater was sampled for water quality. Strong H2S smell from well. Basin at capacity with a 2.9 ft stage. No vectors present.
Strong H2S smell from well. Basin at capacity with a 2.9 ft stage. No vectors present.
Strong H2S smell from well. Basin stage has dropped to 1.51 feet. No vectors present.
Strong H2S smell from well. Basin level continues to drop during dry weather. No vectors present.
Strong H2S smell from wel and groundwater very saline. Basin level has risen from last observation because of April 17 storm event. No vectors present.

Attachment 2
O&M Cost Summary Update

Attachment 3
Preliminary Analytical Data

PRELIMINARY DATA
Submitted 3/22/00

BMP Retrofit Pilot Study, Stormwater Lab Data - District 7 (LawCrandall Sites)

Sample Date	Location	Site ID	BMP Type	Sampling Location	% Storm Capture	pH	Specific Conductance (umhos/cm)	Hardness (mg/L)	TSS (mg/L)	Total (ug/L) Cu	Total (ug/L) Pb	Total (ug/L) Zn	Dissolved (ug/L) Cu	Dissolved (ug/L) Pb	Dissolved (ug/L) Zn	Nitrate-Nitrogen[1] (mg/L)	TKN[1] (mg/L)	Total P[1] (mg/L)	Fecal Coliform (MPN/100mL)	TPH - Diesel (ug/L)	TPH - Gasoline (ug/L)	TPH - Oil (ug/L)
Storm Water Matrix																						
January 25, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Effluent	58	6.8	45	13	38	17	12	140	9.8	0.93	95	---	---	---	---	310	560	290
January 25, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Effluent	93	7.1	48	20	38	17	17	160	10	1.2	87	---	---	---	---	250	<50	350
January 25, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Effluent	50	6.8	150	40	50	29	4.9	120	22	<0.50	83	---	---	---	---	760	<50	630
January 25, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - Fossil Filter	Effluent	16	7.3	68	27	90	11	6.6	220	4.8	0.50	78	---	---	---	---	370	<50	240
January 31, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Effluent	99	6.7	140	60	220	30	15	130	10	<0.50	30	---	---	---	---	420	<50	360
January 31, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - Fossil Filter	Effluent	99	6.8	115	36	58	12	4.9	140	7.2	<0.50	85	---	---	---	---	710	<50	370
January 31, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - StreamGuard	Effluent	99	6.9	46	16	50	15	25	150	6.6	1.2	79	---	---	---	---	340	<50	210
January 31, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Effluent	89	7.2	47	15	42	15	16	180	6.8	1.5	110	---	---	---	---	210	<50	120
February 9, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - Fossil Filter	Effluent	99	9.2	155	58	80	11	7	87	5.1	<0.50	<5.0	---	---	---	---	270	<50	250
February 9, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - StreamGuard	Effluent	99	7.4	110	35	100	20	36	165	8.5	0.97	59	---	---	---	---	410	89	200
February 9, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Effluent	35	7.6	64	51	320	59	110	820	4.2	0.72	41	---	---	---	---	140	<50	110
March 25, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Effluent	81	6.9	41	11	4	8.3	2.6	96	6.9	0.50	87	0.67	1.49	0.06	---	290	54	240
March 25, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Effluent	79	7.1	130	33	34	20	16.0	160	12	0.68	86	0.74	1.68	0.10	---	390	240	430
March 25, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Effluent	32	6.7	110	38	60	18	4.8	49	12	<0.50	21	0.45	1.05	0.13	---	340	<50	230
March 25, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - Fossil Filter	Effluent	83	6.9	53	20	80	12	7.0	93	4	<0.50	26	0.38	0.86	0.10	---	270	<50	260
March 25, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - StreamGuard	Effluent	99	6.9	76	29	82	32	50	280	18	2.2	120	0.96	2.67	0.20	---	590	460	480
March 25, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Effluent	80	7.4	74	27	44	18	20	160	11	2.7	89	0.81	1.22	0.09	---	420	240	670
April 6, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Effluent	34	7.1	98	23	36	25	10	275	14	0.61	180	0.98	2.45	0.10	---	460	62	200
April 6, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Effluent	97	7.1	30	17	78	23	43	225	5.3	0.72	54	0.43	1.27	0.15	---	190	66	180
April 6, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Effluent	74	6.7	105	38	72	19	5.9	62	13	<0.50	33	1.1	1.52	0.21	---	380	<50	350
April 6, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - StreamGuard	Effluent	83	7.1	54	23	68	22	37	265	9.8	0.97	130	0.52	1.53	0.14	---	250	77	260
April 6, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Effluent	68	7.5	130	59	130	59	110	460	12	4.7	120	0.71	2.62	0.24	---	330	<50	300
April 12, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Effluent	61	7.0	25	<7.0	6	5.4	4.6	73	3.2	<0.50	54	0.34	2.4	0.181	---	160	<50	98
April 12, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Effluent	99	7.3	34	13	16	7.5	9.5	82	4	<0.50	45	0.39	1.01	0.077	---	240	<50	260
April 12, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Effluent	84	6.8	96	37	24	17	7.8	71	7.7	<0.50	18	0.94	1.49	0.28	---	260	<50	160
April 11, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - Fossil Filter	Effluent	96	7.0	38	13	37	8.6	3.6	66	4.7	<0.50	34	0.27	0.71	0.079	---	270	<50	240
April 12, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - StreamGuard	Effluent	99	7.5	57	18	26	13	12	145	9.1	0.98	100	0.62	1.45	0.105	---	230	<50	190
April 12, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Effluent	94	7.4	58	21	14	14	16	195	8.9	3.9	135	0.58	0.99	0.122	---	160	<50	110
January 25, 2000	Altadena Maintenance Station	073211a	Biofiltration Strip	Influent	86	6.7	10	15	50	1.3	2.0	13.1	<1	<1	5.1	0.27	1.8	<0.002	80	<250	<50	310
January 25, 2000	Altadena Maintenance Station	073211a	Biofiltration Strip	Effluent	95	6.7	20	20	17	<1	<1	4.2	<1	<1	3.2	0.41	2.2	0.51	140	<250	<50	<200
January 25, 2000	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Effluent	100	6.5	12	18	24	1.5	<1	14.8	1.1	<1	13.8	1.2	0.9	<0.002	---	<250	<50	<200
January 25, 2000	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Effluent	100	7.2	9	10	13	1.7	<1	13.5	1.4	<1	10.5	0.41	1.8	<0.002	---	<250	<50	<200
January 25, 2000	Rosemead Maintenance Station	073218	Drain Inlet Insert - StreamGuard	Effluent	100	7.3	11	18	44	3.0	2.4	27.6	1.8	<1	18.7	0.68	18.2	<0.002	---	<250	<50	<200
January 25, 2000	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Effluent	100	7.1	17	26	39	2.4	2.3	34.2	1.9	<1	26.7	1.02	1.4	<0.002	---	<250	<50	<200
January 25, 2000	Las Flores Maintenance Station	073217	Drain Inlet Insert - Fossil Filter	Effluent	100	6.8	18	20	13	1.7	<1	10.8	1.2	<1	9.1	1.37	2.5	<0.002	---	<250	<50	<200
January 30, 2000	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Effluent	95	7.1	91	36	19	1.8	<1	19.8	1.5	<1	18.0	1.52	2.1	0.075	---	<250	<50	<200
January 31, 2000	Rosemead Maintenance Station	073218	Drain Inlet Insert - StreamGuard	Effluent	92	6.3	115	35	18	3.7	<1	24.6	3.3	<1	23.7	1.99	4.7	0.196	---	<250	<50	<200
January 31, 2000	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Effluent	89	6.8	40	18	6	1.3	<1	18.2	1.3	<1	12.3	0.67	3.7	0.096	---	<250	<50	<200
January 31, 2000	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Effluent	98	6.5	50	22	8	1.5	<1	13.4	1.3	<1	11.7	0.70	2.4	0.128	---	<250	<50	<200
January 31, 2000	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Effluent	100	7.5	270	70	11	1.6	<1	11.4	1.4	<1	9.7	6.3	1.8	0.138	---	<250	<50	<200
##############	Las Flores Maintenance Station	073217	Drain Inlet Insert - Fossil Filter	Effluent	77	7.2	99	27	128	22.2	16.4	107	21.1	13.9	98	1.13	3.25	0.07	---	<250	<50	<200
##############	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Effluent	96	7.9	199	54	92	33.4	12.3	453	15.2	8.3	247	0.44	3.38	0.07	---	<250	<50	<200
##############	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Effluent	100	6.9	19	12	13	4.4	1.7	50	4.3	1.5	48	0.40	1.59	<0.002	---	<250	<50	<200
##############	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Effluent	100	7.2	32	12	32	7.7	9.4	69	7.3	8.2	67	0.41	1.73	<0.002	---	<250	<50	<200
##############	Altadena Maintenance Station	073211a	Biofiltration Strip	Influent	78	7.0	21	15	117	11.4	18.9	124	9.4	14.1	116	0.23	1.45	0.032	---	---	---	---
##############	Altadena Maintenance Station	073211a	Biofiltration Strip	Effluent	91	7.4	47	21	24	3.1	2.9	16.9	2.7	2.7	15.8	0.35	1.22	0.31	---	---	---	---
##############	Altadena Maintenance Station	073211a	Biofiltration Strip	Influent	79	7.5	22	15	79	1.1	1.3	13	<1	<1	9.1	0.22	1.43	0.05	---	---	---	---
##############	Altadena Maintenance Station	073211a	Biofiltration Strip	Effluent	90	7.6	24	16	15	<1	<1	9.1	<1	<1	5.6	0.12	0.9	0.18	---	---	---	---
##############	Cerritos Maintenance Station	073223	Biofiltration Swale	Influent	87	7.5	4	41	71	5.1	8.9	34.3	4.1	7.1	30.1	0.45	1.60	0.07	24000	<250	<50	<200
##############	Cerritos Maintenance Station	073223	Biofiltration Swale	Effluent	92	7.4	127	50	62	3.3	5.7	17.2	4.1	4.9	17.6	0.31	1.56	0.18	>160000	<250	<50	<200
##############	I-5/I-605	073224	Biofiltration Swale	Influent	98	7.2	65	21	94	4.6	8.3	50.9	3.1	6.4	26.6	0.27	1.28	0.07	140	<250	<50	<200
##############	I-5/I-605	073224	Biofiltration Swale	Effluent	87	7.5	50	23	10	1.5	2.0	6.2	1.3	1.7	6.2	0.68	1.05	0.17	50	<250	<50	<200
##############	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Effluent	95	7.3	19	13	22	1.2	2.0	9.4	1.2	2.0	9.4	0.18	1.09	0.07	---	<250	<50	<200
##############	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Effluent	81	7.5	23	23	20	1.2	<1	13	1.0	<1	13	0.03	1.08	0.06	---	<250	<50	<200
##############	Las Flores Maintenance Station	073217	Drain Inlet Insert - Fossil Filter	Effluent	98	7.3	36	22	38	1.3	1.3	14.0	1.3	1.1	8.4	0.35	1.08	0.06	---	<250	<50	<200
##############	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Effluent	89	7.8	181	62	167	11.1	1.7	18.7	10.3	1.3	16.6	1.63	0.81	0.08	---	<250	<50	<200
##############	Rosemead Maintenance Station	073218	Drain Inlet Insert - StreamGuard	Effluent	95	7.7	393	136	28	4.8	1.9	13.0	4.7	1.5	12.5	0.44	1.06	0.10	---	<250	<50	<200
##############	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Effluent	81	7.4	41	17	8	2.8	1.2	19.5	2.6	<1	18.2	0.60	1.78	0.10	---	<250	<50	<200
##############	I-605 @ Carson	073225	Biofiltration Swale	Influent	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5000	<250	<50	<200
##############	I-605 @ Carson	073225	Biofiltration Swale	Effluent	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500	<250	<50	<200
##############	I-605/SR-91	073222a	Biofiltration Strip	Influent	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500	<250	<50	<200
##############	I-605/SR-91	073222a	Biofiltration Strip	Effluent	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170	<250	<50	<200
##############	I-605/SR-91	073222b	Biofiltration Swale	Influent	---	---	---	---	---	---	---	---	---	---	---	---	---	---	240	<250	<50	<200
##############	I-605/SR-91	073222b	Biofiltration Swale	Effluent	---	---	---	---	---	---	---	---	---	---	---	---	---	---	500	<250	<50	<200
##############	Altadena Maintenance Station	073211a	Biofiltration Strip	Influent	100	6.5	32	11	45	13.7	18.5	102	4.6	1.3	28	0.73	2.64	0.08	800	<250	<50	222
##############	Altadena Maintenance Station	073211a	Biofiltration Strip	Effluent	100	6.6	28	10	16	3.0	3.4	20.2	1.7	1.0	12	0.56	1.69	0.21	300	<250	<50	<200
##############	I-5/I-605	073224	Biofiltration Swale	Influent	100	6.5	75	23	21	18.8	21.7	90	12.2	5.7	61	0.63	2.32	0.08	30	<250	<50	319
##############	I-5/I-605	073224	Biofiltration Swale	Effluent	100	6.8	78	24	14	10.4	9.6	28.1	9.3	5.1	23.3	0.68	1.95	0.27	220	<250	<50	292
##############	Cerritos Maintenance Station	073223	Biofiltration Swale	Influent	95	7.2	29	80	29	24.3	15.4	96	17.8	4.8	58	0.73	2.64	0.12	5000	<250	<50	457
##############	Cerritos Maintenance Station	073223	Biofiltration Swale	Effluent	99	7.3	98	79	62	20.5	15.0	61	15.6	3.8	35	0.77	3.13	0.27	1600	<250	<50	320
##############	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Effluent	100	6.9	36	11	20	5.8	4.7	60	4.1	<1	42	0.53	2.08	0.07	---	<250	<50	<200
##############	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Effluent	99	7.0	36	11	5	4.2	<1	50	4.3	<1	49	0.40	2.15	0.05	---	<250	<50	<200
##############	Las Flores Maintenance Station	073217	Drain Inlet Insert - Fossil Filter	Effluent	90	6.5	49	14	13	6.1	2.3	31	5.1	<1	20.8	0.31	3.23	0.08	---	<250	<50	<200
##############	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Effluent	100	6.5	50	14	24	12.8	2.5	32	4.6	<1	17.3	0.33	1.71	0.10	---	<250	<50	<200
##############	Rosemead Maintenance Station	073218	Drain Inlet Insert - StreamGuard	Effluent	87	6.5	33	9	27	11.6	12.2	106	5.5	1.3	58	0.58	1.95	0.06	---	<250	<50	<200
##############	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Effluent	100	6.8	49	17	13	10.4	6.5	218	7.1	2.9	115	0.70	1.86	0.13	---	<250	<50	<200

(1) Analysis requested for samples from drain inlet inserts beginning on 3/25/99 by Caltrans but not required as part of OMM Plan. These analyses are required as per the revised OMM Plan (September 1999)

NR - Not Reported. Analysis was performed to comply with holding time requirements. However, paired samples were not successfully collected.

"---" - Not Analyzed

PRELIMINARY DATA

Submitted 3/1/00

BMP Retrofit Pilot Study, Solid Matrix Lab Data - District 7 (Law Crandall Sites)

					Total (mg/kg)					Grain Size Distribution (% Passing)					
Sample Date	**Location**	**Site ID**	**BMP Type**	**Sampling Location**	**Cu**	**Pb**	**Zn**	**TRPH (mg/kg)**	**Mass (grams)**	**No. 4**	**No. 8**	**No. 16**	**No. 30**	**No. 50**	**No. 100**
Solids Matrix (Filter/Adsorbent Material/Sediment)					---	---	---	---	---	---	---	---	---	---	---
February 2, 1999		---	Drain Inlet Insert - StreamGuard	Unused - StreamGuard Fabric	0.22	<0.10	3.8	684	943.9	---	---	---	---	---	---
February 2, 1999		---	Drain Inlet Insert - StreamGuard	Unused - StreamGuard Absorbent	0.24	<0.10	0.6	1970	443.15	---	---	---	---	---	---
February 2, 1999		---	Drain Inlet Insert - Fossil Filter	Unused - Fossil Filter Adsorbent	0.2	1.2	1.2	26.6	380.84	---	---	---	---	---	---
January 29, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Used - StreamGuard Fabric	17.7	46.4	509	1130	1331	---	---	---	---	---	---
January 29, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Used - StreamGuard Absorbent	2.0	2.3	20.1	2620	465.1	---	---	---	---	---	---
January 29, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Used - StreamGuard Sediment	31.9	41.8	377	58000	100	---	---	---	---	---	---
January 29, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Adsorbent	10.5	15.9	135	1910	3065	---	---	---	---	---	---
January 29, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Sediment	22.4	51.5	384	1610	120	---	---	---	---	---	---
March 4, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Sediment	64.8	134	704	632	1827	---	---	---	---	---	---
March 4, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Adsorbent	55.4	106	609	87.7	4767	---	---	---	---	---	---
March 24, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Used - StreamGuard Sediment	18.1	10.1	87	3010	3232	---	---	---	---	---	---
March 24, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Used - StreamGuard Absorbent	11.7	4.5	44.4	340000	1023	---	---	---	---	---	---
March 24, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Used - StreamGuard Fabric	17.3	11.4	132	4350	1765	---	---	---	---	---	---
April 8, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Used - StreamGuard Fabric	24.7	61.6	522	3670	1122	---	---	---	---	---	---
April 8, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Used - StreamGuard Absorbent	1.7	2.7	13.6	17900	493	---	---	---	---	---	---
April 8, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Used - StreamGuard Sediment	36.6	60.2	422	12500	177	---	---	---	---	---	---
April 8, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Adsorbent	5.5	11.9	43.5	11100	3964	---	---	---	---	---	---
April 8, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Sediment	38.4	110	321	12200	472	---	---	---	---	---	---
April 12, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Used - StreamGuard Fabric	9.9	23.5	162	2570	1420	---	---	---	---	---	---
April 12, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Used - StreamGuard Absorbent	0.3	0.25	2.8	2590	459	---	---	---	---	---	---
April 12, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Adsorbent	8.6	17.3	89.5	3300	3680	---	---	---	---	---	---
April 12, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Sediment	20.9	36.3	177	16800	191	---	---	---	---	---	---
June 8, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Used - StreamGuard Fabric	22.4	38.9	240	4730	794	---	---	---	---	---	---
June 8, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Used - StreamGuard Absorbent	4.1	7.0	33.6	2590	452	---	---	---	---	---	---
June 8, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - StreamGuard	Used - StreamGuard Sediment	24.6	40.1	420	5080	1648	---	---	---	---	---	---
June 8, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Adsorbent	18.0	33.7	180.0	3190	1878	---	---	---	---	---	---
June 8, 1999	Foothill Maintenance Station	073216	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Sediment	40.5	88.5	384	15500	493	---	---	---	---	---	---
June 8, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - StreamGuard	Used - StreamGuard Fabric	53.7	143	634	4360	1426	---	---	---	---	---	---
June 8, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - StreamGuard	Used - StreamGuard Absorbent	5.9	18.6	45.1	12100	477	---	---	---	---	---	---
June 8, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - StreamGuard	Used - StreamGuard Sediment	145	121	624	10500	320	---	---	---	---	---	---
June 8, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Adsorbent	46.9	121	341.0	2470	8119	---	---	---	---	---	---
June 8, 1999	Rosemead Maintenance Station	073218	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Sediment	76.3	204	655	4550	31752	---	---	---	---	---	---
June 11, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Used - StreamGuard Fabric	32.2	32.0	258	12100	1468	---	---	---	---	---	---
June 11, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Used - StreamGuard Absorbent	5.7	6.0	58.5	15800	514	---	---	---	---	---	---
June 11, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - StreamGuard	Used - StreamGuard Sediment	15.6	14.3	173	5770	3402	---	---	---	---	---	---
June 11, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Adsorbent	12.1	14.5	76.0	7460	6350.4	---	---	---	---	---	---
June 11, 1999	Las Flores Maintenance Station	073217	Drain Inlet Insert - Fossil Filter	Used - Fossil Filter Sediment	42.8	25.3	268	6720	10392	---	---	---	---	---	---
Solids Matrix (Soil)															
January 28, 1999	I-605/91 Interchange	073101	Infiltration Basin	I-605/91 Baseline Soil; 0.3-0.5 meter depth	19.5	5.1	45.9	<10.0	---	100	100	99	98	92	73
January 28, 1999	I-605/91 Interchange	073101	Infiltration Basin	I-605/91 Baseline Soil; 0.6-0.8 meter depth	15.5	3.8	39.9	<10.0	---	100	99	98	96	84	56

NR - Not Reported. Analysis was performed to comply with holding time requirements. However, paired samples were not successfully collected.

"---" - Not Analyzed

Per Caltrans request, samples taken on March 4 & 24 1999 were not immediately analyzed. They were, however, analyzed on a later date (October 26 1999).

PRELIMINARY DATA

Submitted 4/14/00

BMP Retrofit Pilot Study, Stormwater Lab Data - District 7 (Brown and Caldwell Sites)

Sample Date	BMP Location	Site ID	BMP Type	Sampling Location	% Storm Capture	pH	Specific Conductance (µmhos/cm)	Hardness (mg/L)	TSS (mg/L)	Total Metals (ug/L) Cu	Total Metals (ug/L) Pb	Total Metals (ug/L) Zn	Dissolved Metals (ug/L) Cu	Dissolved Metals (ug/L) Pb	Dissolved Metals (ug/L) Zn	Nitrate Nitrogen (mg/L)	TKN (mg/L)	Total P (mg/L)	Fecal Coliform (MPN/100mL)	TPH Diesel (µg/L)	TPH Gasoline (µg/L)	TPH Oil (µg/L)	Oil & Grease (mg/L)
Storm Water Matrix																							
March 25, 1999	I-5/I-605 Intersection	074101	EDB [1]	Influent	**100**	NR	NR	---	---	---	---	---	---	---	---	NR	---	---	1600	---	---	---	---
March 25, 1999	I-5/I-605 Intersection	074101	EDB [1]	Effluent	**0**	---	---	---	---	---	---	---	---	---	---	---	---	---	900	---	---	---	---
March 25, 1999	I-605/SR-91 Intersection	074102	EDB [2]	Influent	**100**	7.7	110	76	85	56.0	190.0	390.0	15.0	6.2	130.0	1.00	1.8	0.330	900	2900	<50	1300	---
March 25, 1999	I-605/SR-91 Intersection	074102	EDB [2]	Effluent	**100**	7.5	190	62	59	37.0	120.0	260.0	14.0	2.0	130.0	2.10	3.4	0.780	500	2900	<50	1100	---
March 25, 1999	Foothill MS	074203	Media Filter	Influent	**100**	NR	NR	---	---	---	---	---	---	---	---	NR	---	---	>1600[3]	---	---	---	---
March 25, 1999	Foothill MS	074203	Media Filter	Effluent	**0**	---	---	---	---	---	---	---	---	---	---	---	---	---	<2[3]	---	---	---	---
April 6, 1999	I-5/I-605 Intersection	074101	EDB [1]	Influent	**99.6**	7.2	160	48	71	34.0	88.0	200.0	17.0	5.5	72.0	0.84	2.0	0.410	1600	2200	<50	1300	---
April 6, 1999	I-5/I-605 Intersection	074101	EDB [1]	Effluent	**99.3**	7.3	190	44	44	30.0	63.0	140.0	19.0	2.5	68.0	0.81	2.0	0.450	300	3000	<50	1300	---
April 6, 1999	I-605/SR-91 Intersection	074102	EDB [2]	Influent	**100**	7.4	120	38	80	50.0	250.0	310.0	13.0	11.0	73.0	0.88	2.4	0.170	>1600	3900	<50	2000	---
April 6, 1999	I-605/SR-91 Intersection	074102	EDB [2]	Effluent	**100**	7.3	200	62	49	30.0	140.0	220.0	12.0	3.5	88.0	2.00	2.9	0.860	>1600	5200	<50	3800	---
April 6, 1999	Eastern Regional MS	074202	Media Filter	Influent	**95.1**	6.9	85	24	57	19.0	37.0	130.0	10.0	2.1	37.0	0.68	0.9	0.150	900	1200	<50	640	---
April 6, 1999	Eastern Regional MS	074202	Media Filter	Effluent	**79.4**	7.1	82	24	20	11.0	11.0	36.0	7.8	1.4	12.0	0.77	1.0	0.088	110	1100	<50	450	---
April 6, 1999	Foothill MS	074203	Media Filter	Influent	**98.8**	6.6	49	22	120	42.0	45.0	340.0	19.0	1.3	110.0	0.37	1.4	0.320	500	1000	<50	320	---
April 6, 1999	Foothill MS	074203	Media Filter	Effluent	**90.5**	7.0	80	26	21	18.0	6.4	45.0	14.0	<1.0	21.0	0.43	0.6	0.090	<2	500	<50	<200	---
April 11, 1999	I-5/I-605 Intersection	074101	EDB [1]	Influent	**87**	7.2	79	24	48	21.0	60.0	140.0	8.7	3.6	40.0	0.52	1.5	0.210	500	2000	<50	1200	---
April 11, 1999	I-5/I-605 Intersection	074101	EDB [1]	Effluent	**74.7**	7.4	86	24	12	11.0	17.0	41.0	8.1	1.5	53.0	0.56	0.1	0.030	2	1200	<50	510	---
April 11, 1999	I-605/SR-91 Intersection	074102	EDB [2]	Influent	**69.8**	7.5	63	21	61	30.0	99.0	240.0	7.4	3.8	56.0	0.44	0.1	0.029	110	3600	<50	2100	---
April 11, 1999	I-605/SR-91 Intersection	074102	EDB [2]	Effluent	**96.8**	7.5	95	28	94	19.0	47.0	99.0	6.7	2.0	43.0	0.74	1.6	0.340	500	3900	<50	2200	---
April 11, 1999	Eastern Regional MS	074202	Media Filter	Influent	---	---	---	---	---	---	---	---	---	---	---	---	---	---	900	1300	<50	670	---
April 11, 1999	Eastern Regional MS	074202	Media Filter	Effluent	---	---	---	---	---	---	---	---	---	---	---	---	---	---	90	630	<50	210	---
April 11, 1999	Foothill MS	074203	Media Filter	Influent	**100**	7.1	59	16	68	28.0	21.0	220.0	24.0	2.9	120.0	0.37	1.2	0.180	>1600	940	<50	560	---
April 11, 1999	Foothill MS	074203	Media Filter	Effluent	**99.4**	7.2	88	30	11	17.0	3.7	33.0	15.0	<1.0	21.0	0.35	0.7	0.080	>1600	570	<50	<200	---
February 20, 2000	I-5/I-605 Intersection	074101	EDB [1]	Influent	**94**	7.3	77	40	110	15.1	31.7	104.0	4.32	2.80	44.4	0.59	1.4	0.420	28,000	1,300	<50	690	---
February 20, 2000	I-5/I-605 Intersection	074101	EDB [1]	Effluent	**99**	7.5	81	29	32	17.6	49.0	79.8	4.85	2.13	36.1	0.64	1.1	0.310	3,000	800	<50	340	---
February 20, 2000	I-605/SR-91 Intersection	074102	EDB [2]	Influent	**---**	---	---	---	---	---	---	---	---	---	---	---	---	---	500	2,100	<50	1,000	---
February 20, 2000	I-605/SR-91 Intersection	074102	EDB [2]	Effluent	**---**	---	---	---	---	---	---	---	---	---	---	---	---	---	500	1,100	<50	470	---
February 20, 2000	Alameda MS	074201	Oil/Water Sep	Influent	**---**	7.4	88	32	68	---	---	---	---	---	---	---	---	---	---	770	<50	250	<5
February 20, 2000	Alameda MS	074201	Oil/Water Sep	Effluent	**---**	6.8	57	20	13	---	---	---	---	---	---	---	---	---	---	590	<50	260	<5
February 20, 2000	Eastern Regional MS	074202	Media Filter	Influent	**100**	7.3	37	10	23	9.18	11.6	47.8	5.00	1.17	33.7	0.36	0.87	0.085	900	530	<50	210	---
February 20, 2000	Eastern Regional MS	074202	Media Filter	Effluent	**100**	7.2	42	15	5	8.42	18.9	13.3	3.74	<1	15.1	0.45	0.42	0.032	500	340	<50	<200	---
February 20, 2000	Foothill MS	074203	Media Filter	Influent	**75**	7.0	55	20	75	19.6	28.2	252.0	5.36	2.47	151.0	0.20	2.1	0.470	70,000	930	<50	380	---
February 20, 2000	Foothill MS	074203	Media Filter	Effluent	**99**	7.2	51	14	5	8.47	9.65	21.1	4.15	<1	22.6	0.44	1.0	0.180	500	260	<50	<200	---
February 20, 2000	Termination P&R	074204	Media Filter	Influent	**90**	7.4	49	16	44	15.0	12.1	83.0	3.94	<1	27.2	0.20	0.78	0.160	900	1,000	<50	370	---
February 20, 2000	Termination P&R	074204	Media Filter	Effluent	**100**	7.3	69	18	4	6.18	4.43	13.5	3.56	<1	17.1	0.63	0.48	0.077	110	290	<50	200	---
February 20, 2000	Via Verde P&R	074206	MCTT	Influent	**100**	6.9	15	4.8	41	4.89	6.50	52.9	1.02	<1	23.4	0.10	0.90	0.160	6,000	910	<50	410	---
February 20, 2000	Via Verde P&R	074206	MCTT	Effluent	**80**	7.2	36	11.0	3	4.92	4.39	8.74	1.35	<1	10.6	0.37	0.78	0.088	110	110	<50	<200	---
February 20, 2000	Lakewood	074208	MCTT	Influent	**100**	6.9	22	8.0	24	8.42	11.0	58.1	2.84	<1	41.6	0.18	0.95	0.091	500	600	<50	240	---
February 20, 2000	Lakewood	074208	MCTT	Effluent	**100**	7.1	44	18	8.2	8.15	8.18	25.0	3.15	<1	19.0	0.81	0.42	0.091	500	160	<50	<200	---
February 27, 2000	I-5/I-605 Intersection	074101	EDB [1]	Influent	**100**	7.6	110	58	34	19.3	34.2	110.0	8.49	3.99	57.8	0.75	2.1	0.250	500	1,000	<50	460	---
February 27, 2000	I-5/I-605 Intersection	074101	EDB [1]	Effluent	**100**	7.5	120	48	52	18.6	33.4	91.3	9.06	4.01	47.3	0.77	2.6	0.850	500	1,200	<50	510	---
February 27, 2000	I-605/SR-91 Intersection	074102	EDB [2]	Influent	**100**	7.8	160	73	110	39.9	124.0	541	14.5	3.92	263	1.50	2.7	0.50	2,800	2,200	<50	820	---
February 27, 2000	I-605/SR-91 Intersection	074102	EDB [2]	Effluent	**100**	7.8*	270*	---	19*	37*	38.5*	250*	24.3*	3.55*	175*	1.8*	---	0.69*	1,700	1,100	<50	220	---
February 27, 2000	Alameda MS	074201	Oil/Water Sep	Influent	**---**	7.2	94	30	37	---	---	---	---	---	---	---	---	---	---	970	<50	260	<5
February 27, 2000	Alameda MS	074201	Oil/Water Sep	Effluent	**---**	7.1	52	18	170	---	---	---	---	---	---	---	---	---	---	490	<50	250	<5
February 27, 2000	Eastern Regional MS	074202	Media Filter	Influent	**84**	7.2	45	15	31	15.3	24.0	72.7	8.02	1.81	37.1	0.79	1.1	0.130	300	1,100	<50	340	---
February 27, 2000	Eastern Regional MS	074202	Media Filter	Effluent	**98**	7.0	56	24	6.2	8.63	4.71	25.1	7.51	1.30	20.4	1.20	0.84	0.058	500	390	<50	<200	---
February 27, 2000	Foothill MS	074203	Media Filter	Influent	**100**	6.9	30	5.6	38	11.9	17.8	226.0	4.49	1.62	155.0	0.66	1.2	0.036	24,000	1,100	<50	220	---
February 27, 2000	Foothill MS	074203	Media Filter	Effluent	**99**	7.1	60	31	7.4	6.96	2.34	41.3	5.52	<1	34.4	0.93	0.14	0.097	21	100	<50	<200	---
February 27, 2000	Termination P&R	074204	Media Filter	Influent	**100**	7.4	54	18	96	23.8	16.5	156.0	6.90	<1	55.5	0.68	1.8	0.230	220	1,400	<50	410	---
February 27, 2000	Termination P&R	074204	Media Filter	Effluent	**99**	7.3	90	28	<1	6.53	<1	21.5	6.33	<1	20.2	1.00	0.50	0.069	<2	100	<50	<200	---
February 27, 2000	Via Verde P&R	074206	MCTT	Influent	**100**	6.8	25	12	26	5.40	4.89	69.3	1.75	<1	33.3	0.70	1.6	0.160	500	230	<50	<200	---
February 27, 2000	Via Verde P&R	074206	MCTT	Effluent	**65**	7.8	45	17	7.6	2.16	<1	4.92	1.25	<1	4.40	0.70	0.56	0.084	50	160	<50	<200	---
February 27, 2000	Lakewood	074208	MCTT	Influent	**100**	6.9	32	12	8.5	7.87	2.40	83.2	5.37	<1	53.7	0.63	1.4	0.120	30	830	<50	200	---
February 27, 2000	Lakewood	074208	MCTT	Effluent	**100**	7.0	46	17	7.4	3.81	<1	17.7	3.00	<1	17.4	0.98	0.48	0.093	21	210	<50	<200	---
March 8, 2000	I-5/I-605 Intersection	074101	EDB [1]	Influent	**79**	7.4	75	30	91	29.8	94.7	219.0	6.42	6.89	42.9	0.51	1.30	0.380	5,000	450	<50	<200	
March 8, 2000	I-5/I-605 Intersection	074101	EDB [1]	Effluent	**97**	7.3	71	30	50	15.2	41.8	82.9	8.35	2.20	23.9	0.40	0.90	0.320	4,000	830	<50	290	
March 8, 2000	I-605/SR-91 Intersection	074102	EDB [2]	Influent	**87**	7.7	620	190	41	33.7	185.0	288.0	14.5	13.5	176.0	9.50	2.1	0.240	300	470	<50	<200	
March 8, 2000	I-605/SR-91 Intersection	074102	EDB [2]	Effluent	**100**	7.3	97	46	14	16.3	55.2	115.0	10.3	8.10	75.6	0.60	1.5	0.340	300	1800	<50	710	
March 8, 2000	Alameda MS	074201	Oil/Water Sep	Influent	**---**	7.5	41	14	9.3	---	---	---	---	---	---	---	---	---	---	200	<50	<200	<5
March 8, 2000	Alameda MS	074201	Oil/Water Sep	Effluent	**---**	6.7	50	20	130	---	---	---	---	---	---	---	---	---	---	270	<50	<200	<5
March 8, 2000	Eastern Regional MS	074202	Media Filter	Influent	**99**	6.2	27	10	81	15.0	43.2	106.0	3.29	1.55	39.9	1.60	1.1	0.150	500	310	<50	<200	
March 8, 2000	Eastern Regional MS	074202	Media Filter	Effluent	**100**	7.3	32	9.5	13	4.79	7.03	24.3	3.03	<1	<1	0.44	0.45	0.066	500	140	<50	<200	
March 8, 2000	Foothill MS	074203	Media Filter	Influent	**99**	6.9	33	18	51	29.1	19.2	229.0	18.0	2.80	157.0	0.39	0.84	0.210	3,300	390	<50	<200	
March 8, 2000	Foothill MS	074203	Media Filter	Effluent	**100**	7.1	47	15	8.2	9.29	3.72	102.0	7.00	<1	87.4	0.62	0.48	0.092	2,100	200	<50	<200	
March 8, 2000	Termination P&R	074204	Media Filter	Influent	**100**	7.4	36	8.0	25	8.18	5.25	62.9	2.65	<1	16.5	0.65	0.73	0.083	90	420	<50	<200	
March 8, 2000	Termination P&R	074204	Media Filter	Effluent	**99**	7.2	59	6.0	2.5	3.98	<1	20.5	3.68	<1	15.8	0.73	0.39	0.048	11	100	<50	<200	
March 8, 2000	Via Verde P&R	074206	MCTT	Influent	**100**	6.9	14	<2	37	6.14	10.9	87.9	1.20	<1	23.5	0.16	0.95	0.140	80	220	<50	<200	
March 8, 2000	Via Verde P&R	074206	MCTT	Effluent	**100**	3.4	210	<2	6.6	1.56	<1	9.27	1.38	<1	9.28	8.60	0.56	0.075	50	<100	<50	<200	
March 8, 2000	Lakewood	074208	MCTT	Influent	**68**	6.8	21	4.9	18	4.50	3.31	51.5	1.98	<1	32.7	0.38	0.78	0.076	350	390	<50	200	
March 8, 2000	Lakewood	074208	MCTT	Effluent	**100**	7.2	40	10	1.5	1.62	<1	6.66	1.5	<1	<1	0.69	0.45	0.057	170	<100	<50	<200	

* Less than 12 aliquots resulting in insufficient volume to perform all required analyses.
NR - Not Reported. Analysis was performed to comply with holding time requirements. However, paired samples were not successfully collected.
"---" - Not Analyzed

BMP Retrofit Pilot Study, Stormwater Lab Data - District 11 (Kinnetic Laboratories Sites)

PRELIMINARY DATA
Submitted 4/20/00

Sample Date	BMP Location	Site ID	BMP Type	Sampling Location	% Storm Capture	pH	Specific Conductance (umhos/cm)	Hardness (mg/L)	TSS (mg/L)	Total (µg/L) Cu	Total (µg/L) Pb	Total (µg/L) Zn	Dissolved (µg/L) Cu	Dissolved (µg/L) Pb	Dissolved (µg/L) Zn	Nitrate-Nitrogen (mg/L)	TKN (mg/L)	Total P (mg/L)	Fecal Coliform (MPN/100 ml)	TPH Diesel (µg/L)	TPH Gasoline (µg/L)	TPH Oil (µg/L)
Storm Water Matrix																						
January 25, 1999	SR56/I5-IN	111101	Extended Detention Basin	Influent	94	7.9	431	150	96	25	35	100	15	2.7	88	1.0	4.3	0.28	1700	380	<50	2500
January 25, 1999	SR56/I5-EFF	111101	Extended Detention Basin	Effluent	95	7.7	142	51	32	13	13	35	7.2	1.1	30	0.46	3.1	0.23	200	110	<50	1200
January 25, 1999	SR78/I15-IN	111102	Extended Detention Basin	Influent	100	8.2	75	55	120	32	30	150	11	1.5	42	0.78	2.6	0.25	700	440	<50	4300
January 25, 1999	SR78/I15-EFF	111102	Extended Detention Basin	Effluent	99	7.5	208	89	28	20	15	77	12	<1.0	37	1.9	4.3	0.82	400	310	<50	3600
February 5, 1999	SR56/I5-IN	111101	Extended Detention Basin	Influent	100	8.1	94	42	86	20	29	120	6.9	<1.0	110	0.3	1.2	0.2	200	4000	<50	---
February 5, 1999	SR56/I5-EFF	111101	Extended Detention Basin	Effluent	94	7.6	180	45	42	17	24	76	5.8	<1.0	17	0.38	1.4	0.21	400	2300	<50	---
February 5, 1999	SR78/I15-IN	111102	Extended Detention Basin	Influent	84	8.1	83	36	98	31	25	180	13	2.8	130	0.8	2.0	0.29	400	3900	<50	---
February 5, 1999	SR78/I15-EFF	111102	Extended Detention Basin	Effluent	95	7.7	179	58	32	17	13	98	9.3	<1.0	76	0.2	2.0	0.61	2300	2400	<50	---
March 25, 1999	SR56/I5-IN	111101	Extended Detention Basin	Influent	79	7.9	311	76	66	20	17	81	9.1	<1.0	24	0.53	1.1	0.26	400	1800	<500	---
March 25, 1999	SR56/I5-EFF	111101	Extended Detention Basin	Effluent	99.6	7.1	220	37	42	17	10	47	8.7	<1.0	25	0.34	1.1	0.19	400	1700	<500	---
March 25, 1999	SR78/I15-IN	111102	Extended Detention Basin	Influent	100	7.9	166	55	120	47	39	280	17	1.9	96	2.36	3.1	0.39	1100	4200	<500	---
March 25, 1999	SR78/I15-EFF	111102	Extended Detention Basin	Effluent	100	7.9	196	82	36	34	21	150	18	<1.0	81	1.72	2.5	0.3	2700	2800	<500	---
March 25, 1999	KearnyMS-IN	112201	Compost Filter	Influent	100	7.3	70	29	130	59	40	340	25	2.7	170	0.41	1.8	0.36	200	9300	<500	---
March 25, 1999	KearnyMS-EFF	112201	Compost Filter	Effluent	96	7.2	74	22	150	53	34	270	24	3.7	130	0.44	1.7	0.34	200	2600	<500	---
March 25, 1999	EsconMS-IN	112202	Sand Filter	Influent	100	7.1	99	29	86	33	25	500	17	2.2	200	0.77	2.8	0.4	800	3200	<500	---
March 25, 1999	EsconMS-EFF	112202	Sand Filter	Effluent	100	7.7	153	51	120	23	9.4	58	10	<1.0	38	0.95	1.9	0.49	200	1600	<500	---
March 25, 1999	LaCostaP&R-IN	112203	Sand Filter	Influent	100	6.9	83	43	42	14	8.6	110	9.7	1.1	110	0.66	2.6	0.33	<200	1300	<50	---
March 25, 1999	LaCostaP&R-EFF	112203	Sand Filter	Effluent	100	7.7	110	53	6.0	9.0	1.7	8.3	8.6	<1.0	5.2	0.69	1.8	0.28	200	2100	<50	---
March 25, 1999	SR78/I5P&R-IN	112204	Sand Filter	Influent	100	7.4	70	41	78	16	4.6	130	8.2	<1.0	65	0.29	1.8	0.41	400	1200	<500	---
March 25, 1999	SR78/I5P&R-EFF	112204	Sand Filter	Effluent	100	7.3	126	43	<1	8.3	<1	9.8	7.4	<1.0	7.7	0.97	1.3	0.24	<200	800	<500	---
April 7, 1999	SR56/I5-IN	111101	Extended Detention Basin	Influent	10	9.6	163	46	110	32	39	130	7.4	<1.0	32	0.43	1.4	0.3	2300	1200	<50	---
April 7, 1999	SR56/I5-EFF	111101	Extended Detention Basin	Effluent	100	8.0	212	48	48	18	16	69	8.9	<1.0	47	0.31	1.1	0.27	400	800	<50	---
April 7, 1999	SR78/I15-IN	111102	Extended Detention Basin	Influent	100	7.8	100	34	270	51	62	350	5.7	<1.0	24	0.59	2.1	0.65	1700	1000	<50	---
April 7, 1999	SR78/I15-EFF	111102	Extended Detention Basin	Effluent	100	7.7	170	52	38	15	13	81	8.2	<1.0	67	0.55	1.3	0.3	200	500	<50	---
April 7, 1999	KearnyMS-IN	112201	Compost Filter	Influent	100	7.4	185	46	60	51	19	230	32	2.1	150	0.42	1.9	0.18	<200	5000	<50	---
April 7, 1999	KearnyMS-EFF	112201	Compost Filter	Effluent	100	7.3	186	40	64	35	16	190	22	2.3	140	0.4	1.8	0.13	<200	700	<50	---
April 7, 1999	EsconMS-IN	112202	Sand Filter	Influent	100	6.9	62	15	220	21	28	460	5.7	<1.0	170	0.26	1.7	0.32	1300	1000	<50	---
April 7, 1999	EsconMS-EFF	112202	Sand Filter	Effluent	100	7.9	152	42	250	19	10	52	4.9	<1.0	51	0.34	1.1	0.58	200	400	<50	---
April 7, 1999	LaCostaP&R-IN	112203	Sand Filter	Influent	100	6.2	88	14	86	20	25	200	5.7	1.6	50	0.32	1.2	0.3	---	---	---	---
April 7, 1999	LaCostaP&R-EFF	112203	Sand Filter	Effluent	100	8.1	240	68	2.0	4.7	<1.0	2.6	4.0	<1.0	<2.0	0.69	1.0	0.24	---	---	---	---
April 11, 1999	SR56/I5-IN	111101	Extended Detention Basin	Influent	93	8.9	100	36	78	20	38	110	3.7	<1.0	30	0.25	0.9	0.44	---	---	---	---
April 11, 1999	SR56/I5-EFF	111101	Extended Detention Basin	Effluent	100	7.8	133	36	20	6.8	8.7	23	4.7	<1.0	16	0.21	0.8	0.19	---	---	---	---
April 11, 1999	KearnyMS-IN	112201	Compost Filter	Influent	92	7.3	68	42	34	67	26	180	20	<1.0	95	0.28	1.2	0.21	<200	7000	<50	---
April 11, 1999	KearnyMS-EFF	112201	Compost Filter	Effluent	89	7.3	68	19	42	29	11	84	19	<1.0	82	0.26	0.8	0.44	200	2200	<50	---
April 11, 1999	EsconMS-IN	112202	Sand Filter	Influent	87	7.0	30	10	46	18	17	250	4.1	<1.0	140	<0.20	1.2	0.21	<200	1800	<50	---
April 11, 1999	EsconMS-EFF	112202	Sand Filter	Effluent	93	7.8	55	40	76	31	14	51	3.2	<1.0	10	<0.20	0.8	0.21	<200	1900	<50	---
April 11, 1999	LaCostaP&R-IN	112203	Sand Filter	Influent	100	6.8	50	9.3	28	11	8	54	3.5	<1.0	45	0.28	1.5	0.17	<200	4700	<50	---
April 11, 1999	LaCostaP&R-EFF	112203	Sand Filter	Effluent	96	7.4	108	24	6	4.1	1.3	6.4	4.1	<1.0	12	<0.20	0.9	0.17	<200	1000	<50	---
April 11, 1999	SR78/I5P&R-IN	112204	Sand Filter	Influent	100	7.3	43	17	40	11	4.8	77	4	<1.0	31	<0.20	1.2	0.20	<200	5100	<50	---
April 11, 1999	SR78/I5P&R-EFF	112204	Sand Filter	Effluent	100	7.5	69	18	18	18	<1.0	15	3	<1.0	7.3	0.27	1.1	0.21	<200	3600	<50	---
January 25, 2000	SR56/I-5-IN	111101	Extended Detention Basin	Influent	100	7.3	320	69	100	46	15	120	20	<1	21	NA₂	4.1	0.67	3000	5700	<200	8100
January 25, 2000	SR56/I-5-EFF	111101	Extended Detention Basin	Effluent	100	7.5	500	120	34	32	5.5	42	26	1.5	23	NA₂	2.9	0.24	NA	NA	NA	NA
January 25, 2000	SR78/I-15-IN	111102	Extended Detention Basin	Influent	100	7.7	260	83	82	63	41	270	29	<1	38	4.7	4.6	0.66	400	7100	<200	9400
January 25, 2000	SR78/I-15-EFF	111102	Extended Detention Basin	Effluent	100	7.7	300	110	48	50	29	200	27	1.4	105	4.2	8.9	0.5	800	6900	<200	9300
January 25, 2000	LaCostaWB-IN	111104	Wet Basin	Influent	100	7.5	310	98	170	100	170	360	40	39	120	5.7	8.1	0.64	700	12000	<200	16000
January 25, 2000	LaCostaWB-EFF	111104	Wet Basin	Effluent	100	8.4	2700	1000	4	18	1.1	41	16	1	40	1.1	3.1	1.5	8	340	<200	490
January 25, 2000	KearnyMS-IN	112201	Compost Filter	Influent	100	7.3	260	91	86	140	34	580	100	9.5	370	2.5	7.6	0.57	NA	NA	NA	NA
January 25, 2000	KearnyMS-EFF	112201	Compost Filter	Effluent	100	7.6	360	130	70	62	28	310	17	1.4	92	1.9	5.3	0.28	NA	NA	NA	NA
January 25, 2000	EsconMS-IN	112202	Sand Filter	Influent	98.1	6.8	130	38	68	32	12	310	22	2.4	210	1.1	3.5	0.59	3000	4900	<200	6100
January 25, 2000	EsconMS-EFF	112202	Sand Filter	Effluent	100	7.2	180	66	34	20	4.8	47	13	<1	16	1.7	2.4	0.49	80	2900	<200	2900
January 25, 2000	LaCostaP&R-IN	112203	Sand Filter	Influent	100	6.8	150	31	170	75	26	620	NA₁	NA₁	NA₁	1.7	7	1	130	3900	<200	5500
January 25, 2000	LaCostaP&R-EFF	112203	Sand Filter	Effluent	100	7.3	260	68	10	17	2.2	11	17	1.2	4.5	2.4	3.5	0.38	8	3500	<200	4400
January 25, 2000	SR78/I5P&R-IN	112204	Sand Filter	Influent	100	6.2	150	28	30.0	36	14	260	28	5.8	200	2.5	7.9	0.66	13000	2600	<200	3400
January 25, 2000	SR78/I5P&R-EFF	112204	Sand Filter	Effluent	100	7.3	240	55	26.0	39	3.3	86	27	<1	29	2.4	6.2	1.3	24000	3100	<200	3900
January 25, 2000	Melrose - IN	112205	Biofiltration Swale	Influent	100	6.8	310	85	34	110	6.5	720	88	1.3	570	3.4	11	0.35	3400	14000	<200	23000
January 25, 2000	Melrose - EFF	112205	Biofiltration Swale	Effluent	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
January 25, 2000	Palomar - IN	112206	Biofiltration Swale	Influent	100	7.1	480	91	44	64	16	170	53	1.3	110	3.6	7	1	700	8200	<200	13000
January 25, 2000	Palomar - EFF	112206	Biofiltration Swale	Effluent	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
January 25, 2000	Carlsbad MS-IN	112207	Biostrip/Infiltration Trench	Influent	100	6.4	200	45	140	150	44	360	93	5	200	1.5	4.8	0.62	3000	6500	<200	8000
January 25, 2000	Carlsbad MS-EFF	112207	Biostrip/Infiltration Trench	Effluent	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
February 16, 2000	SR56/I-5-IN	111101	Extended Detention Basin	Influent	100	7.9	240	40	82	28	15	130	12	<1	22	1.2	1.7	0.46	900	2000*	<200	3400*
February 16, 2000	SR56/I-5-EFF	111101	Extended Detention Basin	Effluent	100	7.9	330	63	36	15	5.9	40	11	<1	17	0.93	1.2	0.27	300	1400*	<200	2700*
February 16, 2000	SR78/I-15-IN	111102	Extended Detention Basin	Influent	100	8.0	140	47	100	51	83	440	15	3.8	100	1.4	2.6	1.2	300	1000*	<200	1500*
February 16, 2000	SR78/I-15-EFF	111102	Extended Detention Basin	Effluent	99.3	7.5	220	59	46	21	18	120	11	<1	31	0.93	1.7	0.35	1700	1900*	<200	3500*
February 16, 2000	Manchester-IN	111105	Extended Detention Basin	Influent	99.6	7.2	150	35	330	230	440	1600	16	<1	74	1.2	3.5	1.2	17000	3100*	<200	5300*
February 16, 2000	Manchester-EFF	111105	Extended Detention Basin	Effluent	100	7.1	170	38	76	41	43	250	15	<1	76	0.89	4.3	0.62	90000	4100*	<200	8200*
February 16, 2000	LaCostaWB-IN	111104	Wet Basin	Influent	100	8.1	190	63	240	210	660	700	28	37	96	1.6	3.6	1.6	50000	2400*	<200	4100*
February 16, 2000	LaCostaWB-EFF	111104	Wet Basin	Effluent	93.5	9.1	2300	720	28	17	4	41	13	2	34	0.033	3.5	1.1	17	500*	<200	600*
February 16, 2000	KearnyMS-IN	112201	Compost Filter	Influent	100	7.4	110	34	100	140	56	600	40	5.3	220	1.2	2.8	0.52	8	4100*	<200	4800*
February 16, 2000	KearnyMS-EFF	112201	Compost Filter	Effluent	100	7.5	150	43	90	58	28	320	30	4.6	130	1.2	2.3	0.47	50	2100*	<200	3700*
February 16, 2000	EsconMS-IN	112202	Sand Filter	Influent	98.1	6.7	49	11	170	15	24	300	3.5	<1	110	0.38	2.0	0.72	240	1900*	<200	2200*
February 16, 2000	EsconMS-EFF	112202	Sand Filter	Effluent	100	7.1	75	22	12	6	3.5	34	3	<1	9	0.42	0.77	0.34	500	600*	<200	700*
February 16, 2000	LaCostaP&R-IN	112203	Sand Filter	Influent	100	7.1	110	22	30	12	9.0	110	9.3	3.2	64	0.65	3.0	0.45	800	1800*	<200	2600*
February 16, 2000	LaCostaP&R-EFF	112203	Sand Filter	Effluent	100	7.4	140	38	<1	6.7	<1	5.2	6.5	<1	3.2	0.69	1.1	0.18	<2	690*	<200	100*
February 16, 2000	SR78/I5P&R-IN	112204	Sand Filter	Influent	100	7.7	550	130	420	31	23	360	12	<1	49	1.3	13	2.3	13000	1400*	<200	2100*
February 16, 2000	SR78/I5P&R-EFF	112204	Sand Filter	Effluent	100	7.7	490	110	10	14	1.9	54	10	<1	24	1.8	3.6	1.0	30	1100*	<200	1600*
February 16, 2000	Carlsbad MS-IN	112207	Biostrip/Infiltration Trench	Influent	100	7.0	120	23	120	73	29	200	46	1.6	93	0.82	3.0	0.63	50000	1900*	<200	2500*
February 16, 2000	Carlsbad MS-EFF	112207	Biostrip/Infiltration Trench	Effluent	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA₁ not initially analyzed, results will be available at a later date
NA₂ results cancelled, samples exceeded hold time
* Sample contains hydrocarbons that does not match diesel and oil pattern. However, quantitation is based on diesel oil standard

BMP Retrofit Pilot Study, Groundwater Lab Data - District 11, Draft Analytical Data

PRELIMINARY DATA

Submitted 3/14/00

Sample Date	Location	Site ID	BMP Type	pH	Specific Conductance (umhos/cm)	Hardness (mg/L)	TSS (mg/L)	Total (ug/L) Cu	Total (ug/L) Pb	Total (ug/L) Zn	Dissolved (ug/L) Cu	Dissolved (ug/L) Pb	Dissolved (ug/L) Zn	Nitrate-Nitrogen (mg/L)	TKN (mg/L)	Total P (mg/L)	Fecal Coliform (MPN/ 100 ml)	TPH - Diesel (ug/L)	TPH - Oil (ug/L)	TPH - Gasoline (ug/L)
Groundwater Matrix																				
########	Carlsbad MS GW Well (Baseline)	112207	Biofiltration strip/ infiltration trench	6.5	16000	2500	12	29	0.5	18	22	0.5	15	58.0	0.7	0.21	<200	<100	<200	<50
1/18/2000	La Costa Infiltration (Baseline)	111103	Infiltration Basin	7.8	110000	14000	380	55	6	42	49	2.6	28	<0.5	14	1.1	<200	<100	<200	<50

BMP Retrofit Pilot Study, Sediment Lab Data - District 11, Draft Analytical Data

PRELIMINARY DATA

Submitted 3/14/00

Sample Date Sediment Matrix	Location	Site ID	BMP Type	Total (ug/L) Cu	Pb	Zn	TRPH (mg/kg)	Grain Size Distribution

BMP Retrofit Pilot Study, Monthly Wet Basin Baseline Lab Data - District 11, Draft Analytical Data

PRELIMINARY DATA

Submitted 3/14/00

Sample Date	Location	Site ID	BMP Type	% Storm Capture	pH	Specific Conductance (umhos/cm)	Hardness (mg/L)	TSS (mg/L)	Total (ug/L) Cu	Total (ug/L) Pb	Total (ug/L) Zn	Dissolved (ug/L) Cu	Dissolved (ug/L) Pb	Dissolved (ug/L) Zn	Nitrate-Nitrogen (mg/L)	TKN (mg/L)	Total P (mg/L)	Fecal Coliform (MPN/ 100 ml)	TPH - Diesel (ug/L)	TPH - Oil (ug/L)	TPH - Gasoline (ug/L)
Storm Water Matrix																					
9/30/1999	La Costa WET inflow (Baseline)	111105	Wet Basin	NA	7.5	3100	1700	<1	130	3.3	56	130	2.0	52	25	2.2	3.7	<200	1100*	NA	<50
10/28/1999	La Costa WET inflow (Baseline)	111105	Wet Basin	NA	7.5	2900	910	2	120	1.2	72	110	1.2	70	11	0.78	3.6	<200	<100		<50
11/30/1999	La Costa WET inflow (Baseline)	111105	Wet Basin	NA	7.4	2700	1100	9	60	3.8	38	58	1.8	37	12	1.5	3.0	<200	<100		<50
12/28/1999	La Costa WET inflow (Baseline)	111105	Wet Basin	NA	7.5	2800	1100	44	80	8.2	140	53	1.9	100	20	2	4.6	50	<100	<100	<50
2/3/2000	La Costa WET inflow (Baseline)	111105	Wet Basin	NA	7.3	2800	950	50	170	17	190	95	3.2	92	22	2.7	3.4	9000	<200	<200	<200

*Quantified as diesel but chromatographic pattern does not match that of diesel

Attachment 4
Adult Mosquito Monitoring

		Caltrans Retrofit Pilot Program District 7			Host-seeking
Date	WQ Site No.	Bkgrnd. Monitor No.	Site	BMP Type	mosquitoes
4/13/2000		1	I-210/West of Orcas Ave.	Control	0
4/13/2000	73102	2	I-210/East of Orcas Ave.	CDS	0
4/13/2000	73103	3	I-210/East of Filmore St.	CDS	0
4/13/2000		4	I-210/East of Van Nuys Blvd.	Control	2
4/13/2000	73217	5	Las Flores MS	DII	0
4/13/2000	73218	6	Rosemead MS	DII	0
4/13/2000	74203	7	Foothill MS	MF	0
4/13/2000	74102	8	I-605/SR-91 Intersection	EDB	0
4/13/2000	74101	9	I-5/I-605 Intersection	EDB	0
4/13/2000	73101	10	I-605/SR-91 Interchange	IB	0
4/13/2000	73211a,b	11	Altadena MS	Bio. Strip + IT	0
4/13/2000	73223	12	Cerritos MS	Bio. Swale	0
4/13/2000	73222a,b	13	I-605/SR-91 Interchange	Bio.Strip+Swale	0
4/13/2000	73224	14	I-5/I-605	Bio. Swale	0
4/13/2000	73225	15	I-605/Carson & Del Amo Ave.	Bio. Swale	0
4/13/2000	74202	16	Eastern Regional MS	MF	0
4/13/2000	74204	17	Termination P&R	MF	2
4/13/2000	74103	18	Paxton P&R	MF	0
4/13/2000	74201	19	Alameda MS	Oil/Water Sep.	0
4/13/2000	74104	20	Metro MS	MCTT	0
4/13/2000	74206	21	Via Verde P&R	MCTT	0
4/13/2000	74208	22	Lakewood P&R	MCTT	0
4/13/2000		23	Foothill MS	Control	0
4/13/2000		24	Altadena MS	Control	0
4/13/2000		25	Eastern Regional MS	Control	0
4/13/2000		26	Termination P&R	Control	0
4/20/2000		1	I-210/West of Orcas Ave.	Control	0
4/20/2000	73102	2	I-210/East of Orcas Ave.	CDS	1
4/20/2000	73103	3	I-210/East of Filmore St.	CDS	0
4/20/2000		4	I-210/East of Van Nuys Blvd.	Control	0
4/20/2000	73217	5	Las Flores MS	DII	0
4/20/2000	73218	6	Rosemead MS	DII	0
4/20/2000	74203	7	Foothill MS	MF	0
4/20/2000	74102	8	I-605/SR-91 Intersection	EDB	0
4/20/2000	74101	9	I-5/I-605 Intersection	EDB	2
4/20/2000	73101	10	I-605/SR-91 Interchange	IB	23
4/20/2000	73211a,b	11	Altadena MS	Bio. Strip + IT	0
4/20/2000	73223	12	Cerritos MS	Bio. Swale	0
4/20/2000	73222a,b	13	I-605/SR-91 Interchange	Bio.Strip+Swale	1
4/20/2000	73224	14	I-5/I-605	Bio. Swale	2
4/20/2000	73225	15	I-605/Carson & Del Amo Ave.	Bio. Swale	6
4/20/2000	74202	16	Eastern Regional MS	MF	0
4/20/2000	74204	17	Termination P&R	MF	0
4/20/2000	74103	18	Paxton P&R	MF	0
4/20/2000	74201	19	Alameda MS	Oil/Water Sep.	0
4/20/2000	74104	20	Metro MS	MCTT	0
4/20/2000	74206	21	Via Verde P&R	MCTT	0
4/20/2000	74208	22	Lakewood P&R	MCTT	2

4/20/2000		23	Foothill MS	Control	0
4/20/2000		24	Altadena MS	Control	1
4/20/2000		25	Eastern Regional MS	Control	0
4/20/2000		26	Termination P&R	Control	5
4/27/2000		1	I-210/West of Orcas Ave.	Control	0
4/27/2000	73102	2	I-210/East of Orcas Ave.	CDS	1
4/27/2000	73103	3	I-210/East of Filmore St.	CDS	0
4/27/2000		4	I-210/East of Van Nuys Blvd.	Control	0
4/27/2000	73217	5	Las Flores MS	DII	0
4/27/2000	73218	6	Rosemead MS	DII	0
4/27/2000	74203	7	Foothill MS	MF	0
4/27/2000	74102	8	I-605/SR-91 Intersection	EDB	1
4/27/2000	74101	9	I-5/I-605 Intersection	EDB	0
4/27/2000	73101	10	I-605/SR-91 Interchange	IB	3
4/27/2000	73211a,b	11	Altadena MS	Bio. Strip + IT	0
4/27/2000	73223	12	Cerritos MS	Bio. Swale	0
4/27/2000	73222a,b	13	I-605/SR-91 Interchange	Bio.Strip+Swale	0
4/27/2000	73224	14	I-5/I-605	Bio. Swale	0
4/27/2000	73225	15	I-605/Carson & Del Amo Ave.	Bio. Swale	0
4/27/2000	74202	16	Eastern Regional MS	MF	0
4/27/2000	74204	17	Termination P&R	MF	0
4/27/2000	74103	18	Paxton P&R	MF	0
4/27/2000	74201	19	Alameda MS	Oil/Water Sep.	0
4/27/2000	74104	20	Metro MS	MCTT	0
4/27/2000	74206	21	Via Verde P&R	MCTT	0
4/27/2000	74208	22	Lakewood P&R	MCTT	0
4/27/2000		23	Foothill MS	Control	0
4/27/2000		24	Altadena MS	Control	0
4/27/2000		25	Eastern Regional MS	Control	0
4/27/2000		26	Termination P&R	Control	3
		Caltrans Retrofit Pilot Program District 11			
4/10/2000	111102	1	I-15/SR-78	EDB	0
4/10/2000	111105	2	I-5/ Manchester Ave.	EDB	5
4/10/2000	112207a,b	3	Carlsbad MS	Bio. Strip + IT	0
4/10/2000	112206	4	I-5/Palomar Airport Rd.	Bio. Strip	1
4/10/2000	112205	5	SR-78/Melrose Dr.	Bio. Swale	0
4/10/2000	111103	6	I-5/La Costa Ave. (w)	Control	0
4/10/2000	111104	7	I-5/La Costa Ave (se)	Wet Basin	0
4/10/2000	112202	8	Escondido MS	MF/Control	2
4/10/2000	112203	9	I-5/La Costa P&R	MF	1
4/10/2000	112204	10	SR-78/I-5 P&R	MF	4
4/10/2000	111101	11	I-5/SR-56	EDB	0
4/10/2000	112201	12	Kearny Mesa MS	MF	2
4/10/2000		13	Carlsbad MS	Control	4
4/10/2000		14	Kearny Mesa MS	Control	2
		Caltrans Retrofit Pilot Program District 11			
4/24/2000	111102	1	I-15/SR-78	EDB	0
4/24/2000	111105	2	I-5/ Manchester Ave.	EDB	3

4/24/2000	112207a,b	3	Carlsbad MS	Bio. Strip + IT	0
4/24/2000	112206	4	I-5/Palomar Airport Rd.	Bio. Strip	0
4/24/2000	112205	5	SR-78/Melrose Dr.	Bio. Swale	2
4/24/2000	111103	6	I-5/La Costa Ave. (w)	Control	0
4/24/2000	111104	7	I-5/La Costa Ave (se)	Wet Basin	88
4/24/2000	112202	8	Escondido MS	MF/Control	0
4/24/2000	112203	9	I-5/La Costa P&R	MF	1
4/24/2000	112204	10	SR-78/I-5 P&R	MF	0
4/24/2000	111101	11	I-5/SR-56	EDB	1
4/24/2000	112201	12	Kearny Mesa MS	MF	0
4/24/2000		13	Carlsbad MS	Control	0
4/24/2000		14	Kearny Mesa MS	Control	0

Total midges	Gravid mosquitoes
4	1
1	2
0	0
0	2
0	6
0	0
2	6
0	0
0	0
0	0
1	3
0	0
0	0
0	0
0	0
0	0
10	15
0	0
0	2
0	9
0	1
0	0
4	3
2	0
0	0
0	36
21	0
25	13
0	0
0	0
0	0
0	56
0	6
0	11
0	6
14	47
0	4
0	8
0	0
0	19
13	18
0	1
0	31
0	0
0	13
0	33
0	2
0	66

2	13
2	4
0	0
11	51
5	3
0	21
0	20
0	19
2	29
0	64
1	12
2	14
0	8
0	21
0	4
0	49
0	4
0	11
3	19
2	6
1	35
1	11
0	25
0	34
0	4
0	28
1	19
0	14
0	1
1	23
9	0
0	3
4	0
0	0
1	0
0	2
0	2
0	4
0	0
1	8
0	0
0	0
0	0
0	2
0	5
2	3

0	1
0	0
0	2
0	2
0	2
0	2
0	1
4	7
0	13
0	15
0	1
0	2