



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

***BI-WEEKLY CONFERENCE CALL
AGENDA***

DATE: February 17, 2000 Thursday
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
SUBJECT: BMP Pilot Study Status

AGENDA ITEMS

1. Non-Storm Water Discharge Report - District 7 and 11 Report
2. D7 Design/Construction Status: Metro MS, Paxton MS, CDS design
3. Vector Issues
4. Environmental/Biological Survey
5. Mobilization Threshold Criteria – Past storm event
6. District 7 Operation/Maintenance (OMM) Status Activities
7. District 11 Operation/Maintenance (OMM) Status Activities
8. Stormwater Management's comments on the First Year Report
9. MCTT Memo from Bob Pitt
10. Cost Workgroup Update

>>Next meeting: Quarterly Status Meeting No. 8 on March 15, 2000, Wednesday 9am-2pm<<



BMP Pilot Studies

Bi-weekly Status Report

BMP Pilot Projects in District 7 and District 11

February 11, 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)

TABLE OF CONTENTS

NON-STORMWATER RUNOFF INSPECTIONS 1

DISTRICT 7 BMP SITES 3

- 1-605/SR-91 Interchange Infiltration Basin (Site ID 73101) MW/Law..... 3
- I-210/East Orcas Avenue Continuous Deflection Separators (Site ID 73102) MW/Law 3
- I-210/East of Filmore Street Continuous Deflection Separators (Site ID 73103) MW/Law 3
- I-5/I-605 Extended Detention Basin (Site ID 74101) Brown and Caldwell..... 4
- I-605/SR-91 Extended Detention Basin (Site ID 74102) Brown and Caldwell..... 4
- Paxton Maintenance Station Media Filter (Site ID 74103) BC 5
- Metro Maintenance Station Multi-Chamber Treatment Train (Site ID 74104) BC..... 5
- Alameda Maintenance Station (Site ID 74201) Brown and Caldwell..... 5
- Eastern Regional Maintenance Station (Site ID 74202) Brown and Caldwell 6
- Foothill Maintenance Station (Site ID 74203) Brown and Caldwell 6
- Termination Park and Ride (Site ID 74204) Brown and Caldwell 6
- Via Verde Park and Ride (Site ID 74206) Brown and Caldwell 7
- Lakewood Park and Ride (Site ID 74206) Brown and Caldwell 7
- Altadena Maintenance Station Bio Strip and Infiltration Trench (Site ID 73211 a, b) MW/Law 8
- Foothill Maintenance Station Drain Inlet Insert (StreamGuard and Fossil Filter Inserts) (Site ID 73216 a, b) MW/Law 8
- Las Flores Maintenance Station Drain Inlet Insert (StreamGuard and Fossil Filter Inserts) Site ID 73217 a, b) MW/Law..... 9
- Rosemead Maintenance Station Drain Inlet Insert (StreamGuard and Fossil Filter Inserts) (Site ID 73218 a, b) MW/Law 10
- I-605/SR-91 Interchange Bio Strip & Swale (Site ID 73222 a, b) MW/Law 11
- Cerritos Maintenance Station Bio Swale (Site ID 73223) MW/Law..... 12
- 1-51/I-605 Bio Swale (Site ID 73224) MW/Law 13
- I-605/Carson & Del Amo Bio Swale (Site ID 73225) MW/Law..... 13

DISTRICT 11 BMP PILOT SITES	14
I-5/SR-56 Extended Detention Basin (Site ID 111101) KLI	14
SR-78/I-15 Extended Detention Basin (Site ID 111102) KLI	14
I-5/La Costa Avenue Infiltration Basin (Site ID 111103) KLI.....	15
I-5/La Costa Wet Basin (Site ID 111104) KLI.....	15
I-5/Manchester Avenue Extended Detention Basin (Site ID 111105) KLI	16
Kearny Mesa Maintenance Station StormFilter - Perlite/Zeolite (Site ID 112201) KLI	16
Escondido Maintenance Station Media Filter - Sand (Site ID 112202) KLI.....	17
La Costa Park and Ride Media Filter - Sand (Site ID 112203) KLI	17
SR-78/I-5 Park and Ride Media Filter - Sand (Site ID 112204) KLI	18
Melrose Ave/SR-78 Bio Swale (Site ID 112205) KLI.....	18
I-5 Palomar Airport Biofiltration Swale (Site ID 112206) KLI.....	18
Carlsbad Maintenance Station Bio Strip Infiltration Trench (Site ID 112207) KLI.....	19
 BMP OPERATIONS STATUS OF REMAINING SITES TO BE CONSTRUCTED..	20
 OMM PLAN ACTIVITIES	22
Volumes I and II	22
Maintenance Indicator Document.....	22
Database.....	22
O&M Cost	22
 VECTOR ACTIVITIES.....	22
DISTRICT 7.....	22
San Gabriel Valley Vector Control District.....	22
Greater Los Angeles County Vector Control District.....	22
Los Angeles County West Vector Control District.....	22
DISTRICT 11	23
County of San Diego Vector Surveillance and Control.....	23

DEPARTMENT OF HEALTH SERVICES	23
ADULT MONITORING.....	23
Sites Monitored by Vector Control District	24
ENVIRONMENTAL ISSUES	26
WEATHER.....	26

NON-STORMWATER RUNOFF INSPECTIONS

Weekly inspections have been performed at the sites where non-stormwater runoff was previously noted. The following table summarizes when non-stormwater runoff was noted at the sites inspected.

Week of	Brown and Caldwell Sites – D7				Law Crandall Sites – D7					KLI Sites – D11						
	Foothill MS: SF	Alameda MS: OWS	5/605 EDB	Via Verde: MCTT	Foothill MS: DIIs	Las Flores MS: DIIs	Rosemead MS: DIIs	605/91: IB	Altadena MS: Strip/IT	15/78 EDB	Escondido MS: SF II	5/78 P&R: MF	5/56 EDB	Kearny Mesa MF	Palomar Bioswale	Carlsbad MS
July 12	N	-	-	-	N	N	N	N	Y	-	-	-	-	-	-	-
July 19	N	-	-	-	N	N	N	Y	Y	-	-	-	-	-	-	-
July 26	N	-	-	-	N	N	N	Y	Y	-	-	-	-	-	-	-
Aug 2	Y	-	-	-	Y	N	N	N	N	N	N	Y	Y	N	-	-
Aug 9	N	Y	Y	Y	N	N	N	N	Y	Y	N	Y	Y	N	-	-
Aug 16	N	N	Y	N	N	D	D	Y	Y	Y	N	N	Y	N	Y	-
Aug 23	Y	N	Y	N	Y	D	D	N	N	N	N	N	Y	N	Y	-
Aug 30	Y	N	N	N	N	D	D	N	Y	N	-	N	Y	N	Y	N
Sept 6	Y	N	Y	N	N	D	D	N	Y	N	Y	N	Y	-	Y	N
Sept 13	N	N	N	N	N	D	D	N	N	N	N	N	Y	-	Y	N
Sept 20	N	N	N	Y	N	D	D	N	N	N	N	N	Y	-	Y	N
Sept 27	N	N	N	Y	N	D	D	N	N	N	N	N	Y	-	Y	N
Oct 4	N	N	N	N	N	D	D	N	N	N	N	N	Y	N	Y	N
Oct 11	D	D	D	N	D	D	D	D	D	D	D	D	Y	N	N	D

Week of	Brown and Caldwell Sites – D7				Law Crandall Sites – D7					KLI Sites – D11						
	Foothill MS: SF	Alameda MS: OWS	5/605 EDB	Via Verde: MCTT	Foothill MS: DIIs	Las Flores MS: DIIs	Rosemead MS: DIIs	605/91: IB	Altadena MS: Strip/IT	15/78 EDB	Escondido MS: SF II	5/78 P&R: MF	5/56 EDB	Kearny Mesa MF	Palomar Bioswale	Carlsbad MS
Oct 18	D	D	D	N	D	D	D	D	D	D	D	D	Y	N	N	D
Oct 25	D	D	D	D	D	D	D	D	D	D	D	D	Y	N	Y	D
Nov 1	D	D	D	D	D	D	D	D	D	D	D	D	Y	D	Y	D
Nov 8	D	D	D	D	D	D	D	D	D	D	D	D	Y	D	Y	D
Nov 15	D	D	D	D	D	D	D	D	D	D	D	D	Y	D	Y	D
Nov 22	D	D	D	D	D	D	D	D	D	D	D	D	Y	D	Y	D
Nov 29	D	D	D	D	D	D	D	D	D	D	D	D	Y	D	Y	D
Dec 6	D	D	D	Y	D	D	D	D	D	D	D	D	Y	D	Y	D
Dec 13	D	D	D	N	D	D	D	D	D	D	D	D	Y	D	N	D
Dec 20	D	D	D	N	D	D	D	D	D	D	D	D	N	N	N	D
Dec 30	D	D	D	N	D	D	D	D	D	D	D	D	N	N	N	D
Jan 4/00	D	D	D	N	D	D	D	D	D	D	D	D	N	N	N	D
Jan 10/00	D	D	D	D	D	D	D	D	D	D	D	D	Y	N	N	D
Jan. 17,00	D	D	D	D	D	D	D	D	D	D	D	D	N	D	D	D
Jan. 24, 00	D	D	D	D	D	D	D	D	D	D	D	D	N	D	D	D
Jan, 31,00	D	D	D	D	D	D	D	D	D	D	D	D	N	D	D	D
Feb. 7, 00	D	D	D	D	D	D	D	D	D	D	D	D	N	D	D	D

N – No evidence of non-stormwater runoff discharged into BMP

Y – Non-stormwater runoff was observed

- - No Inspection was held during the week.

D – Discontinued Inspections (no- non-stormwater discharge observed previous 4 weeks)

o – Has not been conducted at the time of preparation of this report.

**ACTIVITY DESCRIBED IN THIS BI-WEEKLY REPORT COVERS THE PERIOD FROM
 JANUARY 29, 2000 – FEBRUARY 11, 2000**

District 7 BMP Sites

1-605/SR-91 Interchange Infiltration Basin (Site ID 73101) MW/Law

Monitoring/Sampling Activities

1/30/00: Forecast predicted rain to produce between 0.05 and 0.25 inch of rainfall with a 70% probability of occurrence. Storm event produced 0.25 inch of rainfall. No teams were mobilized because of the unlikelihood of rainfall producing enough runoff to cause water to pool in the infiltration basin.

Operations and Maintenance

2/2/00: Repaired erosion on the north side slope. Sandbags were placed at the end of the asphalt depression above the eroded area to prevent future erosion.

2/9/00: Conducted monthly site inspections. Hydroseed is growing on approximately 35 percent of the floor and 20 percent of the slopes. Some trash was removed from the site.

Vector Activities

None this period.

Issues / Solutions

None this period.

I-210/East Orcas Avenue Continuous Deflection Separators (Site ID 73102) MW/Law

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

Status

The Water Pollution Control Plan (WPCP) was submitted to the RE first week of February and was approved the following week of Feb. 7. Start of construction is anticipated Feb. 14.

Preliminary 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	02/14/00	4
Complete Construction	03/31/00		6
Fully Operational	04/14/00		2

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

Monitoring/Sampling Activities

None this period.

Operation and Maintenance

January 28: Monthly inspection was performed for the month of February. Vegetation growth is exceeding 18 inches in some areas and will be trimmed per MID.

February 2: Standing water in the effluent riser pumped out. Trash and debris were removed. Barrier tape replaced where necessary.

Vector Activities

None this period.

Issues/Solutions

None this period.

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

Monitoring/Sampling Activities

None this period.

Operation and Maintenance

January 28: Monthly inspection was performed for the month of February. Evidence of gopher holes were found.

February 2: Trash and debris were removed.

Vector Activities

None this period.

Issues/Solutions

None this period.

Paxton Maintenance Station Media Filter (Site ID 74103) BC

Metro Maintenance Station Multi-Chamber Treatment Train (Site ID 74104) BC

Status

Both Paxton and Metro plans and specifications are moving forward to District clearance. Submittal of revised PS&E packages from Brown and Caldwell to D7OE and HQ are anticipated Feb 16, 2000.

Schedule

Design/Construction Schedule for Paxton PR Media Filter and Metro MS MCTT

Activities	Schedule	Actual	Duration
Obtain EA	06/01/99	07/15/99	
Begin Clearance Process	06/28/99	07/16/99	
Obtain District Clearances/to Dist OE	02/25/00		
Obtain District OE Approval/to HQ	04/07/00		
End HQ Review, Advertise & Bid	05/28/00		12
Award Contract	06/19/00		4
Begin Construction	07/03/00		4
Complete Construction	10/30/00		16
Fully Operational	11/24/00		2

Alameda Maintenance Station (Site ID 74201) Brown and Caldwell

Monitoring/Sampling Activities

None this period.

Operation and Maintenance

January 28: Monthly inspection was performed for the month of February.

February 4: Sediment in the trench drain was removed and placed in the onsite containment drum. Trash and debris were removed.

Vector Activities

None this period.

Issues/Solutions

None this period.

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

Monitoring/Sampling Activities

None this period.

Operation and Maintenance

January 31: Monthly inspection was performed for the month of February.

February 2: Stand pipe in the sediment chamber was cleared of material that slowed the flow of water into the media filter.

Vector Activities

None this period.

Issues/Solutions

None this period.

Foothill Maintenance Station (Site ID 74203) Brown and Caldwell

Monitoring/Sampling Activities

None this period.

Operation and Maintenance

February 1: Monthly inspection was performed for the month of February.

February 1: Weeds were pulled; trash and debris were removed.

Vector Activities.

None this period

Issues/Solutions

None this period.

Termination Park and Ride (Site ID 74204) Brown and Caldwell

Monitoring/Sampling Activities

None this period.

Operation and Maintenance

January 28: Monthly inspection was performed for the month of February.

January 31: Weeds, trash, and debris were picked up from the facility.

Issues/Solutions

None this period.

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

Monitoring/Sampling Activities

None this period.

Operation and Maintenance

January 28: Monthly inspection was performed for the month of February.

February 1: Trash and debris were removed.

Vector Activities

None this period.

Issues/Solutions

None this period.

Lakewood Park and Ride (Site ID 74206) Brown and Caldwell

Monitoring/Sampling Activities

None this period.

Operation and Maintenance

January 28: Monthly inspection was performed for the month of February. The transfer pump from the sediment chamber failed and was removed and replaced with a spare, after the standing water was pumped out.

January 31: Trash and debris were removed.

Vector Activities

The MCTT was found breeding during this period. The site was abated with Altosid liquid on February 3 and 10, 2000.

Issues/Solutions

None this period.

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

Monitoring/Sampling Activities

1/29/00 through 2/11/00: Data was downloaded from the monitoring equipment.

1/30/00: Forecast predicted rain to produce between 0.05 and 0.25 inch of rainfall with a 70% probability of occurrence. Storm event produced 0.83 inch of rainfall. No teams were mobilized because of the unlikelihood of rainfall producing enough runoff to discharge through the biofiltration strip.

2/4/00: While attempting to download the Troll 4000 pressure transducer, it was observed not to be functioning properly. According to the manufacturer, there is a software problem with this loaner unit. The loaner unit was replaced on 7 February 2000.

2/7/00: Installed, programmed, and calibrated repaired pressure transducer. Unit is functioning properly.

Operations and Maintenance

2/2/00: Drained spreader ditch; runoff was produced during 30 January storm event.

2/11/00: Monthly site inspection scheduled.

Vector Activities

None this period

Issues / Solutions

None this period.

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

Monitoring/Sampling Activities

1/29/00 through 2/11/00: Data was downloaded from the monitoring equipment.

1/30/00: Samplers were programmed for forecasted storm and flumes were cleaned. Storm produced 0.31 inch of rainfall. Composite samples were collected at both the Fossil Filter and StreamGuard DII locations. Fossil Filter and StreamGuard DII samples represented 98% and 89% storm capture, respectively, and enough volume was collected to run the entire analytical suite. Empirical observations were made.

1/31/00: Samples sent to laboratory for analysis and monitoring stations readied for next storm event.

Operations and Maintenance

1/30/00: Conducted pre-storm inspection of DIIs. Some debris was removed from the Fossil Filter DII. No maintenance was required of the StreamGuard DII.

1/30/00: Some debris accumulated in the Fossil Filter DII partially blocking the filter cartridge but did not cause flow bypass. DII was subsequently cleaned once during the storm

event in accordance with the MID.

Some leaves and sediment accumulated in the StreamGuard DII. No bypass occurred and no maintenance was required.

2/11/00: Monthly site inspection scheduled, which also addresses pre-storm inspection for the 11/12 February 2000 forecasted event.

Vector Activities

None this period.

Issues / Solutions

None this period.

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

Monitoring/Sampling Activities

1/29/00 through 2/11/00: Data was downloaded from the monitoring equipment.

1/30/00: Samplers were programmed for forecasted storm and flumes were cleaned. Storm produced 0.42 inch of rainfall. A composite sample was collected at the StreamGuard DII location. A composite sample was also collected at the Fossil Filter DII location but not enough sample volume was obtained for laboratory analysis. The StreamGuard DII sample represented 100% storm capture and enough volume was collected to run the entire analytical suite. Empirical observations were made.

1/31/00: Samples sent to laboratory for analysis and monitoring stations readied for next storm event.

2/4/00: Forecast predicted rain to produce 0.30 inch of rainfall with a 70% probability of occurrence in the Malibu area only. Samplers were programmed for forecasted storm and flumes were cleaned. Storm event produced 0.01 inch of rainfall. No team was mobilized

2/10/00: Forecast predicted rain to produce 0.10 inch of rainfall with a 40% probability of occurrence in the Malibu area only. Samplers were programmed for forecasted storm and flumes were cleaned. At the time this report was written, 0.12 inch of rainfall occurred at the site. A team was mobilized, samplers were collecting samples, and empirical observations were made.

2/11/00: Samples will be evaluated to determine if they should be sent to the laboratory for analysis.

Operations and Maintenance

1/30/00: Conducted pre-storm inspection of DIIs. Some leaves were removed from the Fossil Filter DII. No maintenance was required of the StreamGuard DII.

1/30/00: Sediment and leaves accumulated in the Fossil Filter DII partially blocking the filter cartridge but did not cause flow bypass. DII was subsequently cleaned once during the storm

event in accordance with the MID.

Some leaves and sediment accumulated in the StreamGuard DII. The weight of the collected material caused the StreamGuard DII to fall into the drain inlet. Fortunately, there was no rain at the time the DII fell into the drain inlet and the monitoring team was able to remove the sediment and leaves from the DII and re-install it. No bypass was observed during the event.

2/4/00: Conducted pre-storm inspection of DIIs. Some leaves were removed from the Fossil Filter DII. No maintenance was required of the StreamGuard DII.

2/10/00: Some leaves accumulated in the Fossil Filter DII partially blocking the filter cartridge but did not cause flow bypass. DII was subsequently cleaned once during the storm event in accordance with the MID.

Some leaves and sediment accumulated in the StreamGuard DII. No bypass occurred and no maintenance was required.

2/11/00: Monthly site inspection scheduled, which also addresses pre-storm inspection for the 11/12 February 2000 forecasted event.

Vector Activities

None this period.

Issues / Solutions

None this period.

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

Monitoring/Sampling Activities

1/29/00 through 2/11/00: Data was downloaded from the monitoring equipment.

1/30/00: Samplers were programmed for forecasted storm and flumes were cleaned. Storm produced 0.21 inch of rainfall. Composite samples were collected at both the Fossil Filter and StreamGuard DII locations. Fossil Filter and StreamGuard DII samples represented 95% and 92% storm capture, respectively, and enough volume was collected to run the entire analytical suite. Empirical observations were made.

1/31/00: Samples sent to laboratory for analysis and monitoring stations readied for next storm event.

Operations and Maintenance

1/30/00: Conducted pre-storm inspection of DIIs. Leaves, sediment, and trash were removed from the Fossil Filter DII. No maintenance was required of the StreamGuard DII.

1/30/00: Leaves and debris accumulated in the Fossil Filter DII partially blocking the filter cartridge but did not cause flow bypass. DII was subsequently cleaned once during the storm event in accordance with the MID.

Some leaves and sediment accumulated in the StreamGuard DII. No bypass occurred and no maintenance was required.

2/11/00: Monthly site inspection scheduled, which also addresses pre-storm inspection for

the 11/12 February 2000 forecasted event.

Vector Activities

None this period.

Issues / Solutions

None this period.

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

Monitoring/Sampling Activities

Strip:

1/30/00: Forecast predicted rain to produce between 0.05 and 0.25 inch of rainfall with a 70% probability of occurrence. Storm event produced 0.25 inch of rainfall. No teams were mobilized because of the unlikelihood of rainfall producing enough runoff to discharge through the biofiltration strip.

1/30/00: A vehicle drove off the I-605/SR-91 westbound connector and crashed into the effluent monitoring station. The enclosure and monitoring equipment were torn from the concrete pad. The concrete pad was also pushed approximately 6 inches and the tubing stub-out was damaged. The vehicle did not crash into the biofiltration strip.

1/31/00: Monitoring equipment was taken back to the office for diagnostic checks.

2/3/00: Diagnostic checks were run on monitoring equipment. Sampler was operational but the flow meter was damaged. Consequently, the flow meter was sent to American Sigma for repair. Began reinstalling monitoring station; 80% complete.

2/7/00: Arrived at the site to complete the monitoring station installation but found that another accident occurred at the site between 3 February 2000 p.m. and 7 February a.m. This time the vehicle barely missed the recently installed monitoring station and drove across the biofiltration strip. Tire tracks were observed in the biofiltration strip but no maintenance was required as none of the MID thresholds were met. The monitoring station installation was completed.

Swale:

1/30/00: Forecast predicted rain to produce between 0.05 and 0.25 inch of rainfall with a 70% probability of occurrence. Storm event produced 0.25 inch of rainfall. No teams were mobilized because of the unlikelihood of rainfall producing enough runoff to discharge through the biofiltration swale.

Operations and Maintenance

Strip:

2/7/00: Arrived at the site and found that another accident occurred at the site between 3 February 2000 p.m. and 7 February a.m. The vehicle drove across the biofiltration strip leaving tire tracks. No maintenance was required as none of the MID thresholds were met.

2/9/00: Conducted monthly site inspections and removed trash. The coverage of the

transplanted area has reduced to approximately 50 percent. Coverage of the main salt grass area is approximately 100 percent. Coverage of hydroseeded area outside of the strip is approximately 10 percent.

2/10/00: Weeds that are greater than 12 inches will be removed. Gopher inspection and abatement is scheduled.

Swale:

2/9/00: Conducted monthly site inspections and removed some trash from the concrete spreader/biofilter interface. Erosion of the freeway embankment near the outfall headwall caused soil to fall into the energy dissipator. Coverage of the salt grass is approximately 95 percent and the coverage of the swale slopes is approximately 40 percent.

2/10/00: Weeds that are greater than 12 inches will be removed; gopher inspection and abatement is scheduled; and soil in the energy dissipator will be removed.

Issues / Solutions

None this period.

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

Monitoring/Sampling Activities

1/29/00 through 2/11/00: Data was downloaded from the monitoring equipment.

1/30/00: Forecast predicted rain to produce between 0.05 and 0.25 inch of rainfall with a 70% probability of occurrence. Storm event produced 0.25 inch of rainfall. Volume obtained at the effluent was not sufficient for sampling. No teams were mobilized.

Operations and Maintenance

2/2/00: Backfilled 14 gopher holes with clay material leaving room for a 3-inch layer of topsoil. Stabilized east side slope.

2/9/00: Conducted monthly site inspections. Repaired small cracks on the east slope and removed trash at the concrete spreader/biofilter interface. Coverage of the salt grass reduced to approximately 85 percent because of gopher activity. Coverage of the slopes is approximately 30 percent. In accordance with the MID, barren areas of the swale invert will be transplanted with salt grass in October/November.

2/10/00: Weeds that are greater than 12 inches will be removed and gopher inspection and abatement is scheduled.

Vector Activities

None this period.

Issues / Solutions

None this period.

1-51/I-605 Bio Swale (Site ID 73224) MW/Law

Monitoring/Sampling Activities

1/29/00 through 2/11/00: Data was downloaded from the monitoring equipment.

1/30/00: Forecast predicted rain to produce between 0.05 and 0.25 inch of rainfall with a 70% probability of occurrence. Storm event produced 0.30 inch of rainfall. Volume obtained at the effluent was not sufficient for sampling. No teams were mobilized.

Operations and Maintenance

2/9/00: Conducted monthly site inspections and removed some trash. Coverage of the salt grass is approximately 95 percent and the coverage of the swale slopes is approximately 70 percent.

2/10/00: Weeds that are greater than 12 inches will be removed and gopher inspection and abatement is scheduled.

Vector Activities

None this period.

Issues / Solutions

None this period.

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

Monitoring/Sampling Activities

1/30/00: Forecast predicted rain to produce between 0.05 and 0.25 inch of rainfall with a 70% probability of occurrence. Storm event produced 0.25 inch of rainfall. No teams were mobilized because of the unlikelihood of rainfall producing enough runoff to discharge through the biofiltration swale.

Operations and Maintenance

2/9/00: Conducted monthly site inspections and removed trash. Coverage of the salt grass is approximately 98 percent and the coverage of the swale slopes is approximately 15 percent.

2/10/00: Weeds that are greater than 12 inches will be removed and organic material that collected in the first quarter of the swale will be removed.

Vector Activities

None this period.

Issues / Solutions

None this period.

District 11 BMP Pilot Sites

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

On January 31, the inlet rip rap and the rip rap berm had standing water. Mosquito breeding was noted in the rip rap berm only. No treatment was deemed necessary.

On February 7, the inlet rip rap had standing water, but no mosquito breeding was noted there. The rip rap berm had standing water at the north end which was breeding mosquito larvae and pupae. No treatment was deemed necessary.

Issues / Solutions

No non-stormwater discharges were noted during this period.

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

On January 31, small amounts of standing water were present at the inlet and outlet. No mosquito breeding was noted. On February 7, the site was dry.

Issues / Solutions

None this period.

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

Monitoring/Sampling Activities

Baseline sediment sampling was accomplished with a vibracore on February 8, 2000. Four sampling points were chosen from a research randomizer and sampled within the basin invert. Three layers, a surface layer (0-0.98 ft), a midlayer (0.98- 1.64ft), and a bottom layer (1.97-2.62 ft), were composited from each core and sent to the laboratory for analysis.

Bi-weekly well depth measurements were taken February 1.

Operations and Maintenance

Woody wetland vegetation was pulled from the basin on February 4.

Vector Activities

On January 31, the La Costa infiltration basin had approximately 200 square feet of standing water from 2-5" deep. No mosquito breeding was noted. On February 7, there was about 25-30 square feet of shallow standing water near the center of the basin. No mosquito breeding was noted.

Issues / Solutions

None this period.

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

Monitoring/Sampling Activities

Baseline monthly 48-hour time weighted composite samples from the 6" pipe that leads from the trapazoidal channel to the wet basin were taken on February 1 and 2.

Operations and Maintenance

No maintenance activities to note during this period.

Vector Activities

On January 31 and February 7 inspections were held. In the shallow areas there were accumulations of plant debris. Mosquito breeding was found in the areas of accumulated plant debris, even though *Gambusia* were plentiful. No additional control measures were taken

Issues / Solutions

None this period.

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

On January 31, the site had about ten square feet of 1" deep standing water. No mosquito breeding was noted. On February 7, the site was dry.

Issues/Solutions

None this period.

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

On January 31 and February 7, the pre-sedimentation chamber held about two feet of water. The first media chamber had water in the spreader trough and shallow water throughout. The second media chamber has standing water in the spreader trough. The third media chamber also had some standing water in the spreader trough. No mosquito breeding was noted.

Issues / Solutions

None this period.

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

On January 31, there was standing water up to the spillways in the pre-sedimentation basin. No mosquito breeding was noted. On February 7, There was about 14" of standing water throughout the pre-sedimentation basin. No mosquito breeding was noted.

Issues / Solutions

None this period.

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

Approximately 3" of standing water was present in the pre-sedimentation basin on February 3. Maintenance crews unplugged the weep holes to allow the basin to drain on February 3. The pre-sedimentation basin completely drained within 24 hours.

Vector Activities

On January 31, there was standing water about 2-3" deep throughout the pre-sedimentation basin. There was standing water in the spreader trough of the second basin. No mosquito breeding was noted. On February 7 there was standing water in the three small depressions in the spreader trough of the second basin. No mosquito breeding was noted.

Issues / Solutions

None this period.

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

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operations and Maintenance

No maintenance activities to note during this period.

Vector Activities

On January 31, standing water 1-2" deep was covering the bottom of the pre-sedimentation basin. Standing water was present in the spreader of the the second basin. No mosquito breeding was noted. On February 7, there was standing water about 1/4" deep covering 30% of the pre-sedimentation basin. There was also standing water in two of the three small depressions in the spreader trough of the second basin. No mosquito breeding was noted.

Issues / Solutions

None this period.

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

Monitoring/Sampling Activities

No monitoring activities to note during this period.

Operations and Maintenance

Maintenance crews collapsed gopher holes at Melrose on February 9.

Vector Activities

On January 31 and February 7, the site was dry. Active signs of gophers were noted.

Issues / Solutions

None this period.

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

Monitoring/Sampling Activities

No monitoring activities to note for this period.

Operation and Maintenance

Maintenance crews collapsed gopher holes at Palomar on February 9.

Vector Activities

On January 31 and February 7, the site was dry. Active signs of gophers were noted.

Issues / Solutions

None this period.

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

Monitoring/Sampling Activities

Field crews attempted to obtain vadose zone samples from the January 25-26 event on January 27. However, the lysimeter did not produce sufficient volumes to retrieve a sample.

Operations and Maintenance

No maintenance activities to note during this period.

Vector Activities

On January 31 and February 7, the site was dry.

Issues / Solutions

None this period.

BMP OPERATIONS STATUS OF REMAINING SITES TO BE CONSTRUCTED

Location	BMP Type	Monitor Consultant	Estimated Date Site "On-line" ²	Begin Instrument Install ¹	Complete Instrument Install	Operational ³ (start empirical and maintain)	Ready for Water Quality Monitoring ⁴
DISTRICT 7							
I-210 East of Orcas	CDS	MW/Law	3/31/00	3/31/00	4/14/00	4/14/00	4/14/00
I-210 East of Filmore	CDS	MW/Law	3/31/00	3/31/00	4/14/00	4/14/00	4/14/00
Paxton Park & Ride	MF	BC	11/10/00	11/10/00	11/24/00	11/24/00	11/24/00
Metro MS	MCTT	BC	11/10/00	11/10/00	11/24/00	11/24/00	11/24/00

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	1998-1999 Successfully Sampled Storms ¹	1999-2000 Successfully Sampled Storms ¹
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		4/14/00 ²	8		
I-210 East of Filmore	CDS	MW/Law		4/14/00 ²	8		
I-5/I-605	EDB	BC	Yes	2/26/99	10	2	
I-605/SR-91	EDB	BC	Yes	2/22/99	10	3	
Paxton Park & Ride	MF	BC		11/24/00 ²	8		
Metro MS	MCTT	BC		11/24/00 ²	8		
Alameda MS	OWS	BC	Yes	5/17/99	8		
Eastern MS	MF	BC	Yes	2/15/99	8	1	
Foothill MS	MF	BC	Yes	3/8/99	8	2	
Termination Park & Ride	MF	BC	Yes	5/17/99	8		
Via Verde Park & Ride	MCTT	BC	Yes	5/17/99	8		
Lakewood Park & Ride	MCTT	BC	Yes	5/17/99	8		
Altadena	Bio Strip	MW/Law	Yes	10/1/99	8		1 ^{3,4}
	Infiltration Trench	MW/Law	Yes	10/1/99	8	N/A ⁵	N/A ⁵
Foothill MS	DII north- StreamGuard Insert	MW/Law	Yes	1/22/99	8	4	1
	DII south- Fossil Filter Insert	MW/Law	Yes	1/22/99	8	3	1 ³
LasFlores MS	DII north-StreamGuard Insert	MW/Law	Yes	1/22/99	8	5	
	DII south-Fossil Filter Insert	MW/Law	Yes	1/22/99	8	2	1 ³
Rosemead MS	DII north-Fossil Filter Insert	MW/Law	Yes	1/22/99	8	3	1 ³
	DII south-StreamGuard Insert	MW/Law	Yes	1/22/99	8	3	1
I-605/SR-91	Bio Strip	MW/Law	Yes	1/22/99	8		
	Bio Swale	MW/Law	Yes	10/1/99	8		
Cerritos MS	BioSwale	MW/Law	Yes	10/1/99	8		
I-5/I-605	BioSwale	MW/Law	Yes	10/1/99	8		
I-605/ Del Amo	BioSwale	MW/Law	Yes	10/1/99	8		
District 11							
I-5/SR-56	EDB	KLI	Yes	1/24/99	4	5	1 ³
I-15/SR-78	EDB	KLI	Yes	1/24/99	10	4	1 ³
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		1 ³
I-5/Manchester (East)	EDB	KLI	Yes	10/1/99	4		
Kearney Mesa MS	StormFilter (Perlite/Zeolite)	KLI	Yes	10/1/99	8	3	1 ³
Escondido MS	MF	KLI	Yes	2/16/99	8	3	1
La Costa Park & Ride	MF	KLI	Yes	2/16/99	4	3	1 ³
SR-78/I-5 Park & Ride	MF	KLI	Yes	2/26/99	8	2	1
Melrose Ave/SR-78	Bio Swale	KLI	Yes	3/1/99	8		
I-5 Palomar Airport Road	Bio Swale	KLI	Yes	10/1/99	8		
Carlsbad MS	Bio Strip	KLI	Yes	10/1/99	4		
	Infiltration Trench	KLI	Yes	10/1/99	4	N/A ⁵	N/A ⁵

1. All DII data in question. A criteria for acceptance has been established . Data will be reviewed at the end of the year.
2. Subject to Schedule Update
3. OMM Manual goal of 12 aliquot minimum sample not attained.
4. Less than 12 aliquots collected at the influent (First event of 1999-2000)
5. N/A – Groundwater or Vadose Zone Samples

OMM PLAN ACTIVITIES

Volumes I and II

The documents have been finalized and adopted.

Maintenance Indicator Document

Minor revisions to several BMPs are being made. A draft revised MID will be included in the upcoming Quarterly Report.

Database

Reports (January 2000) are currently posted on the website www.rbf.com/caltrans. A site-by-site reporting is currently being incorporated to the web site. No February update will be posted. Next posting will be on March 10, 2000.

O&M Cost

OMM Costs are provided through the month of January 2000 (see attachment to the Biweekly).

VECTOR ACTIVITIES

Summary of vector issues from 1/28/00 to 2/15/00. Site-specific details on vector activities are provided in the OMM section.

DISTRICT 7

San Gabriel Valley Vector Control District

No sites were found breeding during this period.

No abatement was carried out during this period.

Greater Los Angeles County Vector Control District

The MCTT at the Lakewood P&R (Site #74208) was found breeding during this period. The site was abated with Altosid liquid on February 3 and 10, 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 Extended Detention Basin at I-5/SR-56 (Site #111101) and the Wet Basin at La Costa (Site #111104) was found breeding on January 31 and February 7, 2000.

No abatement was carried out during this period.

DEPARTMENT OF HEALTH SERVICES

The Department of Health Services (DHS) continues soliciting vector production information from other states and municipalities with structural BMPs. DHS has mailed surveys to over 300 mosquito abatement and public health offices across the country. At this time, 43 surveys from out-of-state and 17 surveys from within California have been returned.

DHS continues its vector production study and will be collecting data on a biweekly basis through the winter months. In response to recent monitoring problems at the MCTT sites, DHS has been asked to facilitate the development of new monitoring protocols for these sites. They will host a meeting of vector field technicians and consultants later this month.

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. The database is scheduled to be delivered to the pilot project team for inclusion in the overall pilot project database by the end of this month.

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

The adult monitoring data has been fully analyzed by UC Riverside. Dr. Walton's general conclusions are included in this biweekly report. A full report will be included in the quarterly report.

The sites monitored by each VCD are summarized in the following table:

Sites Monitored by Vector Control District

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	None noted during routine inspection.
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	None noted during routine inspection.
Via Verde Park & Ride	MCTT	BC	SGVVCD	None noted during routine inspection.
Lakewood Park & Ride	MCTT	BC	GLACVCD	The MCTT was found breeding during this period. The site was abated with Altosid liquid on February 3 and 10, 2000.
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	None noted during routine inspection.
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.

DISTRICT 11				
I-5/SR-56	EDB	KLI	SD Co VC	The Extended Detention Basin was found breeding on January 31 and February 7, 2000. No abatement was carried out during this period.
I-15/SR-78	EDB	KLI	SD Co VC	None noted during routine inspection.
I-5/La Costa (West)	IB	KLI	SD Co VC	None noted during routine inspection.
I-5/La Costa (East)	WB	KLI	SD Co VC	The Wet Basin was found breeding on January 31 and February 7, 2000. No abatement was carried out during this period.
I-5/Manchester (East)	EDB	KLI	SD Co VC	None noted during routine inspection.
Kearny Mesa MS	StormFilter (Perlite/Zeolite)	KLI	SD Co VC	None noted during routine inspection.
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

No surveys were conducted this period.

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.

January 2000

Los Angeles – Downtown/USC				San Diego			
Day	Precip. (Inches)	Day	Precip. (Inches)	Day	Precip. (Inches)	Day	Precip. (Inches)
1	0.12	16	0.00	1	0.28	16	0.03
2	0.00	17	0.02	2	0.04	17	Trace
3	0.00	18	0.01	3	0.00	18	0.00
4	0.00	19	0.00	4	0.00	19	0.00
5	0.00	20	0.00	5	0.00	20	0.00
6	0.00	21	0.00	6	0.00	21	0.00
7	0.00	22	0.00	7	0.00	22	0.00
8	0.00	23	0.02	8	0.00	23	0.00
9	0.00	24	0.00	9	0.00	24	0.00
10	0.00	25	0.42	10	0.00	25	Trace
11	0.00	26	0.14	11	0.00	26	0.03
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	0.03	15	0.00	30	Trace
		31	0.21			31	0.08

February 2000

Los Angeles – Downtown/USC				San Diego			
Day	Precip. (Inches)	Day	Precip. (Inches)	Day	Precip. (Inches)	Day	Precip. (Inches)
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	0.00	19		4	0.00	19	
5	0.00	20		5	0.02	20	
6	0.00	21		6	0.00	21	
7	0.00	22		7	0.00	22	
8	0.00	23		8	Trace	23	
9	0.00	24		9	0.00	24	
10	0.41	25		10	0.03	25	
11	0.12	26		11	0.09	26	
12	0.62	27		12	0.39	27	
13	0.26	28		13	0.06	28	
14		29		14		29	
15		30		15		30	
		31				31	