BMP PILOT STUDIES BI-WEEKLY CONFERENCE CALL
DRAFT AGENDA

DATE:	May 10, 2001 Thursday
TIME:	10:00 am – 11:00 am
PLACE:	Via phone (916-657-4102)
ATTENDEES:	Rich Horner/Chris May, Jeremy Johnstone, Rick Graff, Bruce Reznik, Steve Fleischli, Steve Borroum, Brian Currier, Cathy Beitia, Ken Smarkel, Cid Tesoro, Sayra Ramos, Barbara Ronimus, Pete Van Riper, Richard Gordon, Paul Thakur, Dean Messer, Brown and Caldwell, Montgomery Watson, LawCrandall, KLI, RBF, Mike Barrett, Dudek
COPIES TO:	RBF File 34123, 34218
SUBJECT:	BMP Pilot Study Status

AGENDA ITEMS

1. Maintenance Cost Update
2. Final Report Update
3. Quarterly Meeting – agenda items

>>Next meeting: Quarterly Status Meeting No. 13, June 13, Wednesday 9:30-2:30 am<<

BMP Pilot Studies
Bi-weekly Status Report

BMP Retrofit Pilot Projects in District 7 and District 11

May 4, 2001

UPDATES IN THIS BI-WEEKLY REPORT COVER THE PERIOD APRIL 20-MAY 4, 2001

Storm Sampling Events

District 7 BMP Pilot Sites

During this reporting period, the teams mobilized for a storm event on April 20, 2001. The April 20, 2001, storm event forecasted a 70% chance of up to 0.5 inch of precipitation. Teams were mobilized to the two CDS sites, Foothill Maintenance Station Sand Filter, Via Verde Park and Ride MCTT, Altadena Maintenance Station Biofiltration Strip/Infiltration Trench, and the Drain Inlet Insert sites. Empirical observations only were conducted at the Drain Inlet Insert sites.

April 20, 2001

Results of the April 20, 2001 sampling event are provided in Table 1.

Observations of note include the following:

Sand Filters:

Foothill Maintenance Station Sand Filter:

One inch depth of standing water was observed on top of approximately one quarter of the sand filter area. Drainage from the sedimentation chamber was observed to be slow, but was improved by clearing the orifices in the standpipes.

Drain Inlet Inserts:

Fossil Filter DIIs:

- Foothill Maintenance Station: Flow bypass occurred.
- Las Flores Maintenance Station: Flow bypass occurred.

StreamGuard DIIs:

- Foothill Maintenance Station: Flow bypass occurred.
- Las Flores Maintenance Station: Flow bypass occurred.
- Rosemead Maintenance Station: Flow bypass occurred.

Table 1. District 7 April 20, 2001, Event

Site	BMP Type	Date of Sample Event	Rainfall Total	Mobilized	Sampled		% Storm Capture	Number of Aliquots	Empirical Observations
					Comp	Grab			
I-605/SR-91	IB	4/20/01	0.41	N	NA	NA	NA	NA	NA
I-210 East of Orcas	CDS	4/20/01	0.75	Y	N[1]	Y	NA	NA	Y
I-210 East of Filmore	CDS	4/20/01	0.60	Y	Y	Y	>75,>75	>12,>12	Y
I-5/I-605	EDB	4/20/01	0.25	N	NA	NA	NA	NA	NA
I-605/SR-91	EDB	4/20/01	0.41	N	NA	NA	NA	NA	NA
Alameda MS	OWS	4/20/01	0.32	N	NA	NA	NA	NA	NA
Eastern MS	MF	4/20/01	0.53	N	NA	NA	NA	NA	NA
Foothill MS	MF	4/20/01	0.78	Y	Y	NA	>75,>75	>12,>12	Y
Termination P & R	MF	4/20/01	0.40	N	NA	NA	NA	NA	NA
Via Verde P & R	MCTT	4/20/01	0.84	Y	Y	NA	>75,>75	>12,>12	Y
Lakewood P & R	MCTT	4/20/01	0.26	N	NA	NA	NA	NA	NA
Altadena	Bio Strip	4/20/01	0.80	Y	Y	NA	>75,>75	>12,>12	Y
	Infiltration Trench	4/20/01	0.80	Y	NA	NA	NA	NA	Y
Foothill MS	DII north- SG Insert	4/20/01	0.78	Y	NA	NA	NA	NA	Y
	DII south- FF Insert	4/20/01	0.78	Y	NA	NA	NA	NA	Y
Las Flores MS	DII north-SG Insert	4/20/01	0.43	Y	NA	NA	NA	NA	Y
	DII south-FF Insert	4/20/01	0.43	Y	NA	NA	NA	NA	Y
Rosemead MS	DII north-FF Insert	4/20/01	0.80	Y	NA	NA	NA	NA	Y
	DII south-SG Insert	4/20/01	0.80	Y	NA	NA	NA	NA	Y
I-605/SR-91	Bio Strip	4/20/01	0.41	N	NA	NA	NA	NA	NA
	Bio Swale	4/20/01	0.41	N	NA	NA	NA	NA	NA
Cerritos MS	Bio Swale	4/20/01	0.41	N	NA	NA	NA	NA	NA
I-5/I-605	Bioswale	4/20/01	0.25	N	NA	NA	NA	NA	NA
I-605/ Del Amo	Bioswale	4/20/01	0.41	N	NA	NA	NA	NA	NA

[1]There was insufficient flow to collect a composite sample.

District 11 BMP Pilot Sites

One rain event occurred during this reporting period on Saturday, April 21st. The 3:00 p.m. forecast on Friday was for a 70 percent chance of rain with amounts of from 0.2 to 0.5 inches. All stations were readied. Rain started falling at some sites at about 10:00 p.m. on Friday evening, April 20th. Most of the rain occurred in 4 waves of showers. The last wave occurred at noon on Saturday, April 21st. Rainfall ranged from 0.19 inches at the Carlsbad Maintenance Station to 0.83 inches at I-15/SR78. Rainfall at most stations was in the range of 0.20 to 0.40 inches. Samples were obtained at all influents. The Melrose effluent did not flow, and the bio-strip at Carlsbad Maintenance station took only 1 sample. Samples from all other effluents were submitted for analysis, although the Extended Detention Basin at I-5/SR-56 had only 8 samples, the influent had 28 samples.

Table 2. District 11 April 21, 2001, Event

Site	BMP Type	Date of Sample Event	Rainfall Total	Mobilized	Sampled		% Storm Capture	Number of Aliquots	Empirical Observations
					Comp	Grab			
District 11									
I-5/SR-56	EDB	4/21	0.22	Y	Y	NA	>75	(1)	Y
I-15/SR-78	EDB	4/21	0.83	Y	Y	NA	>75	>12	Y
I-5/La Costa (West)	IB	4/21	0.23	Y	NA	NA	NA	NA	Y
I-5/La Costa (East)	WB	4/21	0.23	Y	Y	NA	>75	>12	Y
I-5/Manchester	EDB	4/21	0.25	Y	Y	NA	>75	>12	Y
Kearny Mesa MS	StormFilter	4/21	0.28	Y	Y	NA	>75	>12	Y
Escondido MS	MF	4/21	0.60	Y	Y	NA	>75	>12	Y
La Costa P & R	MF	4/21	0.28	Y	Y	NA	>75	(2)	Y
SR-78/I-5 P& R	MF	4/21	0.31	Y	Y	NA	>75	>12	Y
Melrose Ave/SR-78	Bio Swale	4/21	0.39	Y	(3)	NA	>75	(3)	Y
I-5 Palomar Airport Rd	Bio Swale	4/21	0.33	Y	Y	NA	>75	>12	Y
Carlsbad MS	Bio Strip	4/21	0.19	Y	(4)	NA	>75	(4)	Y
	Infiltration Trench	4/21	0.19	Y	Y	NA	>75	>12	Y

(1) At I-5/SR56 only 8 samples were collected at the effluent. They were submitted for analysis.
(2) 11 samples were collected at both the influent and effluent at La Costa Park & Ride. Samples were submitted for analysis.
(3) The effluent did not flow at Melrose. The influent took more than 12 samples.
(4) The bio-strip at the Carlsbad Maintenance Station took only one sample.

Summary of Target and Successfully Sampled Storms Per Site

Location	BMP Type	Monitoring Consultant	Operational (yes/no)	Operational Date	Target Number of Storms	Successfully Sampled Storms (PRELIMINARY)			
						1998-1999	1999-2000	2000-2001	Total to Date
District 7									
I-605/SR-91	IB	MW/Law	Yes	4/9/99	**4**	0	8[2]	7[2]	**15[2]**
I-210 East of Orcas	CDS	MW/Law	Yes	8/10/00	**8**	0	0	4	**4**
I-210 East of Filmore	CDS	MW/Law	Yes	8/10/00	**8**	0	0	7	**7**
I-5/I-605	EDB	MW/Law	Yes	2/26/99	**10**	2	4	7	**13**
I-605/SR-91	EDB	MW/Law	Yes	2/22/99	**10**	3	3	6[4]	**12**
Paxton P & R	MF	MW/Law	No	Fall 2001	**0**	0	0	0	**0**
Metro MS	MCTT	MW/Law	No	Fall 2001	**0**	0	0	0	**0**
Alameda MS	OWS	MW/Law	Yes	5/17/99	**8**	0	4	5	**9**
Eastern MS	MF	MW/Law	Yes	2/15/99	**8**	1	4	5	**10**
Foothill MS	MF	MW/Law	Yes	3/8/99	**8**	2	4	6	**12**
Termination P & R	MF	MW/Law	Yes	5/17/99	**8**	0	4	4	**8**
Via Verde P & R	MCTT	MW/Law	Yes	5/17/99	**8**	0	4	4	**8**
Lakewood P & R	MCTT	MW/Law	Yes	5/17/99	**8**	0	4	6	**10**
Altadena	Bio Strip	MW/Law	Yes	10/1/99	**8**	0	6[6]	6	**12**
	Infiltration Trench	MW/Law	Yes	10/1/99	**8**	0	6[2]	7[2]	**13[2]**
Foothill MS	DII north- SG Insert	MW/Law	Yes	1/22/99	**8**	0[7]	7	4	**11**
	DII south- FF Insert	MW/Law	Yes	1/22/99	**8**	0[7]	7	4	**11**
Las Flores MS	DII north-SG Insert	MW/Law	Yes	1/22/99	**8**	0[7]	5	4	**9**
	DII south-FF Insert	MW/Law	Yes	1/22/99	**8**	0[7]	5	5	**10**
Rosemead MS	DII north-FF Insert	MW/Law	Yes	1/22/99	**8**	0[7]	5	5[3]	**10**
	DII south-SG Insert	MW/Law	Yes	1/22/99	**8**	0[7]	5	5	**10**
I-605/SR-91	Bio Strip	MW/Law	Yes	10/1/99	**8**	0	3[4]	5[3,4]	**8**
	Bio Swale	MW/Law	Yes	10/1/99	**8**	0	3[4]	6[9]	**9**
Cerritos MS	Bio Swale	MW/Law	Yes	10/1/99	**8**	0	4	6[4]	**10**
I-5/I-605	Bio Swale	MW/Law	Yes	10/1/99	**8**	0	4	5[3]	**9**
I-605/ Del Amo	Bio Swale	MW/Law	Yes	10/1/99	**8**	0	2	6[3,4,10]	**8**
District 11									
I-5/SR-56	EDB	KLI	Yes	1/24/99	**12**	4	5	7[6]	**16**
I-15/SR-78	EDB	KLI	Yes	1/24/99	**12**	4	5	10	**19**
I-5/La Costa (West)	IB	KLI	Yes	1/24/99	**12**	8[2]	13[2]	9[2]	**30[2]**
I-5/La Costa (East)	WB	KLI	Yes	10/1/99	**8**	0	5	8	**13**
I-5/Manchester (East)	EDB	KLI	Yes	10/1/99	**8**	0	4	10	**14**
Kearney Mesa MS	StormFilter	KLI	Yes	10/1/99	**12**	3	6	9	**18**
Escondido MS	MF	KLI	Yes	2/16/99	**12**	3	5	8	**16**
La Costa P & R	MF	KLI	Yes	2/16/99	**12**	3	5	8[6]	**16**
SR-78/I-5 P& R	MF	KLI	Yes	2/26/99	**12**	2	6	11	**19**
Melrose Ave/SR-78	Bio Swale	KLI	Yes	3/1/99	**12**	0	2[7]	8[6]	**10**
I-5 Palomar Airport Rd	Bio Swale	KLI	Yes	10/1/99	**12**	0	3[4]	6[8]	**9**
Carlsbad MS	Bio Strip	KLI	Yes	10/1/99	**12**	0	3	7	**10**
	Infiltration Trench	KLI	Yes	10/1/99	**12**	8[2]	11[2]	10[2]	**29[2]**

[1] Subject to schedule update
[2] Empirical Observations and runoff testing from influent only. No runoff effluent; groundwater or vadose zone samples only.
[3] Subject to review: one sample did not meet minimum number of aliquots but did meet percent storm capture
[4] During one storm, influent sample collected; no effluent flow, thus no effluent sampled.
[5] 1998/1999 DII data was disqualified
[6] Subject to review: did not meet minimum number of aliquots but did meet percent storm capture
[7] Influent samples collected; no effluent flow, thus no effluent sampled.
[8] During two storms, influent samples collected; no effluent flow, thus no effluent sampled.
[9] During four storms, influent samples collected; no or insufficient effluent flow, thus no effluent sampled.
[10] During one storm, effluent sampler failed, hence no effluent sample collected.

District 7 BMP Pilot Sites

OMM Activities: Routine inspection and maintenance per MID have been conducted during this reporting period. Additional site-specific inspection and maintenance activities are listed in the table below.

Additional Site-Specific O&M Activities

BMP	Activities
Foothill Maintenance Station, Las Flores Maintenance Station and Rosemead Maintenance Station Drain Inlet Inserts	On May 1, 2001, all drain inlet insert materials were removed and sent to the laboratory for TRPH and total metals analyses, following the end of the 2000/2001 wet season.
I-605/SR-91 Infiltration Basin	On May 1, 2001, core soil samples of the I-605/SR-91 Infiltration Basin were collected, following the end of the 2000/2001 wet season. Nine cores were collected from locations on an equilateral basin grid (superimposed over the basin). Each of the nine cores was collected using a hand-held, stainless steel soil probe. The probe was driven 1 meter [3.28 ft] below the ground surface and the core was recovered. Each core was then subdivided into three sections as follows: Section 1 from the ground surface to 0.2 m [0.66 ft] below the ground surface. Section 2 was from 0.3 m [0.98 ft] to 0.5 m [1.64 ft] below the ground surface. Section 3 was from 0.6 m [1.97 ft] to 0.8 m [2.62 ft] below the ground surface. Similar depth intervals of each core were combined to prepare three samples: one from the 0.0 m to 0.2m [0.66 ft] below ground surface interval, one from 0.3 m [0.98 ft] to 0.5 m [1.64 ft] below ground surface interval and one from the 0.6 m [1.97 ft] to 0.8 m [2.62 ft] below the ground surface. Samples were sent to the laboratory for total metals and TRPH analyses and also to LawCrandall's materials testing laboratory for grain size distribution testing.
I-210/East of Filmore Street and I-210/East of Orcas Avenue Continuous Deflective Separation Units	On May 2-3, 2001, the gross pollutants were removed from both CDS units and sent to the laboratory for characterization, in accordance with the MID. The sump water was sampled and sent to the laboratory for analysis. The water was then pumped out of the units, and they were inspected for structural integrity.
I-5/I-605 and I-605/SR-91 Extended Detention Basins	On May 1, 2001, the two Extended Detention Basins in District 7 were inspected for sediment accumulation in the basin, as per the MID, and the sampling protocols. The area of deposited sediments in the BMP was determined by superimposing a square meter grid over the basin floor. Using a x-y origin, the floor was separated into square meter cells and the sampling area was determined. No square meter cell at any site required sampling, however, as none contained 50% or more of deposited sediments with an average depth of at least 1 inch.

BMP	Activities
Eastern Regional Maintenance Station, Foothill Maintenance Station and Termination Park & Ride Sand Filters	The pump at Termination Sand Filter was observed not to be functioning properly following the April 20, 2001 storm event. On April 26, 2001, the pump was inspected and the breaker was found to be tripped. The breaker was reset and the pump started functioning properly again. On May 1, 2001, all three Sand Filters in District 7 were inspected for sediment accumulation in the sedimentation chamber, as per the MID, and the sampling protocols. The area of deposited sediments in the BMP was determined by superimposing a square meter grid over the floor of the sedimentation chamber. Using a x-y origin, the floor was separated into square meter cells and the sampling area was determined. No square meter cell at any site required sampling, however, as none contained 50% or more of deposited sediments with an average depth of at least 1 inch.

Paxton/Metro Maintenance Station Sites

Paxton: A pre-construction meeting was held on May 3, 2001. Construction is scheduled to begin the week of May 14, 2001.

Metro: A pre-construction meeting is scheduled for Wednesday May 9, 2001. Construction is scheduled to begin week of May 14, 2001.

The construction schedules are as follows:

Action	Duration (weeks	Milestone	Estimated Completion Date	
			Paxton	Metro
Incorporate preliminary Structures and D7OE review comments		Submit entire PS&E package	03/08/00 (actual)	03/08/00 (actual)
Structures and D7OE Review	4			
		Receive comments from Structures and D7OE	04/06/00 (actual)	04/06/00 (actual)
Consultant revise PS&E	17.4			
		Submit to D7	08/07/00 (actual)	08/07/00 (actual)
Structures final review and Final Revisions	2			
		Submit final to D7	08/21/00 (actual)	08/21/00 (actual)
D7 process and format PS&E	12.3			
		D7 submit to HQ	11/15/00 (actual)	11/15/00 (actual)
HQ review and processing; advertise contract	13			
		Advertise contract	01/29/01(actual)	03/05/01 (actual)
Bid Period, evaluate bids, Award and Approval of Contract	12			
		Notice to Proceed	05/7/01	05/14/01
Construction	16 to 21			
		Construction complete	09/03/01	10/22/01

District 11 BMP Pilot Sites

OMM activities: Routine inspection and maintenance per MID has been conducted during this reporting period. Site specific activities are summarized below.

Additional Site-Specific OMM Activities

BMP	Activities
La Costa Park & Ride Sand Filter	• During a recent routine inspection by a Dept of Fish and Game representative a rabbit was found trapped in the pre-sedimentation chamber. The rabbit was not in the chamber when crews made a site visit.
La Costa Wet Basin	• On May 1st Martha Blane performed an inspection/assessment of the vegetation.
Kearny Mesa Maintenance Station	• On May 2nd an annual major inspection of the facility was performed. This inspection is specified by the manufacturer and is mostly to determine sediment depths.
Carlsbad Maintenance Station	• On May 1st Martha Blane performed an inspection/assessment of vegetation.
Palomar Swale	• On April 27th areas of erosion along the slopes were filled with top soil. The soil was compacted. The sand bags that had been placed along the shoulder of the highway were left in place. • On May 1st Martha Blane performed an inspection/assessment of vegetation.
Melrose Swale	• On May 1st Martha Blane performed an inspection/assessment of vegetation .
Escondido Maintenance Station	• On April 26th the barrels of sand that had been stock piled were sampled in preparation for disposal.

VECTOR ACTIVITIES

During this period, both DHS and the VCDs continued monitoring BMPs within their respective districts. In District 7, no breeding was observed during this reporting period; therefore, no treatment was applied to any of the sites. In District 11, breeding was observed at I-5/SR-56 EDB (Site #111101), La Costa P&R Sand Filter (Site #112203), and SR-78 / I-5 P&R Sand Filter (Site #112204) on April 16, 2001. Additionally, breeding was observed at the I-5 / SR-56 EDB (Site #111101), the La Cost P&R Sand Filter (Site #112203), the La Costa Wet Basin (Site #111104) and the La Costa Infiltration Basin (Site #111103) on April 23, 2001; however, treatment was not applied at any of the sites for any of these dates.

DHS has submitted two draft reports: the Engineering Design Review and Recommendations Report and the Out of State Survey addendum report. The Out of State Survey addendum report will be provided with the Quarterly Report due June 1.

ENVIRONMENTAL SURVEYS

Dudek and Associates Inc. surveyed the BMPs on April 24 and 25, 2001. There were no findings of significant concern. A survey report will be included in the next Quarterly report.