BMP PILOT STUDIES BI-WEEKLY CONFERENCE CALL
DRAFT AGENDA

DATE:	February 1, 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, Cid Tesoro, Sayra Ramos, Barbara Ronimus, Pete Van Riper, Richard Gordon, Paul Thakur, Dean Messer, Brown and Caldwell, Montgomery Watson/Law, KLI, RBF, Mike Barrett, Dudek
COPIES TO:	RBF File 34123, 34218
SUBJECT:	BMP Pilot Study Status

AGENDA ITEMS

1. Dewatering BMPs – Maintenance Requirement/Potential MID Change
2. Via Verde MCTT Leak Fix
3. D7 Sand Filters – Clogging, Operation and Maintenance
4. Escondido MS Sand Filter – Maintenance
5. Wet Basin Regrowth – Discussion with SD Vector Agency
6. Storm Event Jan 24 and Jan 26, 2001 – LawCrandall/KLI
7. Hydraulic Residence Time- Swales
8. Final Report Discussion (Limit discussion to key report developers- Caltrans/Plaintiffs)

>>Next meeting: Biweekly Conference Call February 15, 2001 Thursday 10am <<

BMP Pilot Studies
Bi-weekly Status Report

BMP Retrofit Pilot Projects in District 7 and District 11

January 26, 2001

UPDATES IN THIS BI-WEEKLY REPORT COVER THE PERIOD JANUARY 12 – JANUARY 26, 2001

Storm Sampling Events

During this reporting period, the teams mobilized for the following two storm events: January 24 (District 11 only) and January 26, 2001 (District 11 only). Details of these two events will be provided in the next Biweekly Report.

Results of the January 10-12, 2001 sampling event are provided below.

January 10-12, 2001

The January 10-12, 2001 storm event forecasted a 100% chance of 1-3 inches of precipitation. The antecedent dry period was not quite met – it was approximately 30 minutes short of 48 hours - but samples were sent to the laboratory due to the relatively dry season thus far. Mobilization occurred to all sites, but the Termination Sand Filter was offline due to pump failure during the January 8, 2001 event. Empirical observations were made at all sites, however.

Observations of note include the following:

Swales:

- Cerritos Maintenance Station Swale: Flow bypass occurred through gopher holes.
- I-605/Del Amo Avenue Swale: Water depth was observed to be 3 to 4 inches across the swale.
- I-5/I-605 Swale: Scouring occurred down the middle of the swale and especially at the influent end, due to excessive flow.
- I-605/SR-91 Swale: Flow bypass occurred due to gopher holes at the effluent end of the swale. Water emerged from gopher holes downstream of the effluent flume, causing ponding. Efforts were made to prevent flow backing up into the effluent flume.

Strips:

- Altadena Maintenance Station Strip: No significant observations noted.
- I-605/SR-91 Strip: Flow into the strip was uneven and channelized through the middle of the strip. The majority of flow went through the central and southern parts of the strip.

Infiltration Basin:

- Flow bypass occurred during periods of heavy rainfall. An attempt was made to collect a vadose zone sample. The lysimeter was turned on during the storm event and a vacuum was applied for at least 24 hours. However, the attempt to collect a sample was unsuccessful.

Infiltration Trench:

- Altadena Maintenance Station Infiltration Trench: Flow bypass (overflow) occurred at 01:30 on January 11, 2001. An attempt was made to collect a vadose zone sample. The lysimeter was turned on during the storm event and a vacuum was applied for at least 24 hours. However, the attempt to collect a sample was unsuccessful.

Drain Inlet Inserts:

Fossil Filter DIIs:

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

StreamGuard DIIs:

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

Oil/Water Separator:

- No significant observations noted.

Sand Filters:

- Termination P&R Sand Filter: The Sand Filter was offline due to pump failure during the last storm. Attempts had been made to install a replacement pump, prior to this event, but it only worked intermittently. Empirical observations were made.
- Foothill Maintenance Station Sand Filter: The pump failed during the storm because of vapor lock. Subsequently, the sedimentation chamber filled with runoff and flow bypass occurred. An influent sample was collected and sent to the laboratory, but no sample was collected at the effluent due to pump failure during the storm. The pump was subsequently fixed.
- Eastern Maintenance Station Sand Filter: The volume capacity of the sedimentation chamber was reached and subsequent flow bypass occurred.

MCTTs:

- Via Verde P&R MCTT: The sedimentation basin filled to within 18 inches from the top, but did not bypass. Most of the water drained out of the basin by January 14, 2001, due to the leak.
- Lakewood P&R MCTT: The sedimentation basin reached flow volume capacity and bypass occurred.

EDBs:

- I-5/I-605 EDB: Minor erosion occurred in several spots along the east slope. Flow bypass occurred at 2330 on January 10, 2001
- I-605/SR-91 EDB: Flow bypass occurred at 1630 on January 10, 2001. Influent sample was collected and sent to the laboratory, but the effluent sample was not submitted to the laboratory due to flow meter failure, thus compromising the sample.

CDS Units:

- Filmore CDS: Flow bypass occurred through the weir box. Debris in the mosquito proofing/bypass bag impeded flow out of the CDS unit.
- Orcas CDS: Flow bypass occurred through the weir box. Debris in the mosquito proofing/bypass bag impeded flow out of the CDS unit.

Table 1. District 7 January 10-12, 2001 Event

Site	BMP Type	Date of Sample Event	Rainfall Total	Mobilized	Sampled		% Storm Capture	Number of Aliquots	Empirical Observations
					Comp	Grab			
District 7									
I-605/SR-91	IB	1/10-12/01	3.47	Y	NA	NA	NA	NA	Y
I-210 East of Orcas	CDS	1/10-12/01	4.33	Y	Y[1]	Y	>75,>75	>12,>12	Y
I-210 East of Filmore	CDS	1/10-12/01	~4[2]	Y	Y	Y	>75,>75	>12,>12	Y
I-5/I-605	EDB	1/10-12/01	4.10	Y	Y	Y	>75,>75	>12,>12	Y
I-605/SR-91	EDB	1/10-12/01	3.47	Y	Y[3]	NA	>75,NA	>12,NA	Y
Alameda MS	OWS	1/10-12/01	3.91	Y	NA	Y	NA	NA	Y
Eastern MS	MF	1/10-12/01	3.56	Y	Y	Y	>75,>75	>12,>12	Y
Foothill MS	MF	1/10-12/01	4.07	Y	Y[4]	Y	>75,NA	>12,NA	Y
Termination P & R	MF	1/10-12/01	3.96	Y[5]	NA	NA	NA	NA	Y
Via Verde P & R	MCTT	1/10-12/01	3.41	Y	Y	Y	>75,>75	>12,>12	Y
Lakewood P & R	MCTT	1/10-12/01	3.79	Y	Y	NA	>75,>75	>12,>12	Y
Altadena	Bio Strip	1/10-12/01	4.19	Y	Y	Y	>75,>75	>12,>12	Y
	Infiltration Trench	1/10-12/01	4.19	Y	NA	NA	NA	NA	Y
Foothill MS	DII north- SG Insert	1/10-12/01	4.07	Y	Y	NA	>75	>12	Y
	DII south- FF Insert	1/10-12/01	4.07	Y	Y	NA	>75	>12	Y
Las Flores MS	DII north-SG Insert	1/10-12/01	5.92	Y	Y	NA	>75	>12	Y
	DII south-FF Insert	1/10-12/01	5.92	Y	Y	NA	>75	>12	Y
Rosemead MS	DII north-FF Insert	1/10-12/01	3.92	Y	Y	NA	>75	>12	Y
	DII south-SG Insert	1/10-12/01	3.92	Y	Y	NA	>75	>12	Y
I-605/SR-91	Bio Strip	1/10-12/01	3.47	Y	Y	Y	>75,>75	>12,>12	Y
	Bio Swale	1/10-12/01	3.47	Y	Y	Y	>75,>75	>12,>12	Y
Cerritos MS	Bio Swale	1/10-12/01	3.47	Y	Y	NA	>75,>75	>12,>12	Y
I-5/I-605	Bioswale	1/10-12/01	4.10	Y	Y	Y	>75,>75	>12,>12	Y
I-605/ Del Amo[A]	Bioswale	1/10-12/01	3.47	Y	Y	N	>75,>75	>12,>12	Y

[1] Samples were successfully collected and sent to the laboratory, but the flow meter failed thus compromising the sample.
[2] Rain gauge failed during the storm.
[3] Influent sample collected and submitted to laboratory. Effluent sample was not submitted to the laboratory due to flow meter failure, thus compromising the sample.
[4] Influent sample was collected and submitted to the laboratory, but effluent sample could not be collected due to pump failure.
[5] Pump failure of both the original pump and replacement pump during and after the January 8, 2001 storm rendered the site offline for this event.

District 11 BMP sites:

Details of the January 10-12th event were provided in the previous Biweekly Report.

On January 24, crews were mobilized for an incoming storm. NWS had forecast a 70% chance of 0.25-inches of rain. Rainfall totals varied from 0.03-inches to 0.12-inches. By noon it was apparent the storm was diminishing and monitoring efforts were terminated. No samples were sent to the lab.

On January 25, crews were mobilized for an incoming storm. At the time of this writing the forecast is 80% chance of 0.5-inches to 1.0 inches of rain to fall on January 26. Details of this event will be provided in the next Biweekly Report.

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 [1, 4] (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[3]	4[3]	**12[3]**
I-210 East of Orcas	CDS	MW/Law	Yes	8/10/00	**8**	0	0	0	**0**
I-210 East of Filmore	CDS	MW/Law	Yes	8/10/00	**8**	0	0	2	**2**
I-5/I-605	EDB	MW/Law	Yes	2/26/99	**10**	2	4	3	**9**
I-605/SR-91	EDB	MW/Law	Yes	2/22/99	**10**	3	3	2[6]	**8**
Paxton P & R	MF	MW/Law	No	5/21/01[2]	**8**	0	0	0	**0**
Metro MS	MCTT	MW/Law	No	5/21/01[2]	**8**	0	0	0	**0**
Alameda MS	OWS	MW/Law	Yes	5/17/99	**8**	0	4	3	**7**
Eastern MS	MF	MW/Law	Yes	2/15/99	**8**	1	4	1	**6**
Foothill MS	MF	MW/Law	Yes	3/8/99	**8**	2	4	1	**7**
Termination P & R	MF	MW/Law	Yes	5/17/99	**8**	0	4	1	**5**
Via Verde P & R	MCTT	MW/Law	Yes	5/17/99	**8**	0	4	2	**6**
Lakewood P & R	MCTT	MW/Law	Yes	5/17/99	**8**	0	4	4	**8**
Altadena	Bio Strip	MW/Law	Yes	10/1/99	**8**	0	6[8]	2	**8**
	Infiltration Trench	MW/Law	Yes	10/1/99	**8**	0	6[3]	2[3]	**8[3]**
Foothill MS	DII north- SG Insert	MW/Law	Yes	1/22/99	**8**	0[7]	7	2	**9**
	DII south- FF Insert	MW/Law	Yes	1/22/99	**8**	0[7]	7	2	**9**
Las Flores MS	DII north-SG Insert	MW/Law	Yes	1/22/99	**8**	0[7]	5	2	**7**
	DII south-FF Insert	MW/Law	Yes	1/22/99	**8**	0[7]	5	3	**8**
Rosemead MS	DII north-FF Insert	MW/Law	Yes	1/22/99	**8**	0[7]	5	3[5]	**8**
	DII south-SG Insert	MW/Law	Yes	1/22/99	**8**	0[7]	5	3	**8**
I-605/SR-91	Bio Strip	MW/Law	Yes	10/1/99	**8**	0	3[6]	3[6]	**6**
	Bio Swale	MW/Law	Yes	10/1/99	**8**	0	3[6]	4[10]	**7**
Cerritos MS	Bio Swale	MW/Law	Yes	10/1/99	**8**	0	4	4[6]	**8**
I-5/I-605	Bio Swale	MW/Law	Yes	10/1/99	**8**	0	4	3	**7**
I-605/ Del Amo	Bio Swale	MW/Law	Yes	10/1/99	**8**	0	2	4[6]	**6**
District 11									
I-5/SR-56	EDB	KLI	Yes	1/24/99	**12**	5	5	2	**12**
I-15/SR-78	EDB	KLI	Yes	1/24/99	**12**	4	5	3	**12**
I-5/La Costa (West)	IB	KLI	Yes	1/24/99	**12**	8[3]	13[3]	4[3]	**25[3]**
I-5/La Costa (East)	WB	KLI	Yes	10/1/99	**8**	0	5	2	**7**
I-5/Manchester (East)	EDB	KLI	Yes	10/1/99	**8**	0	4	4	**8**
Kearney Mesa MS	StormFilter	KLI	Yes	10/1/99	**12**	3	6	3	**12**
Escondido MS	MF	KLI	Yes	2/16/99	**12**	3	5	1	**9**
La Costa P & R	MF	KLI	Yes	2/16/99	**12**	3	5	3	**11**
SR-78/I-5 P& R	MF	KLI	Yes	2/26/99	**12**	2	6	4	**12**
Melrose Ave/SR-78	Bio Swale	KLI	Yes	3/1/99	**12**	0	2[9]	3[10]	**5**
I-5 Palomar Airport Rd	Bio Swale	KLI	Yes	10/1/99	**12**	0	3[6]	0	**3**
Carlsbad MS	Bio Strip	KLI	Yes	10/1/99	**12**	0	3	2	**5**
	Infiltration Trench	KLI	Yes	10/1/99	**12**	8[3]	11[3]	4[3]	**23[3]**

[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] Empirical Observations and runoff testing from influent only. No runoff effluent; groundwater or vadose zone samples only.
[4] All Stormwater sampling will terminate at the end of the defined monitoring season – Spring 2001
[5] Subject to review: first sample of the season did not meet minimum number of aliquots but did meet percent storm capture
[6] During one storm, influent sample collected; no effluent flow, thus no effluent sampled.
[7] 1998/1999 DII data was disqualified
[8] Subject to review: did not meet minimum number of aliquots but did meet percent storm capture
[9] Influent samples collected; no effluent flow, thus no effluent sampled.
[10] During two storms, influent samples collected; no effluent flow, thus no effluent sampled.

Storm Sampling Totals do not include results of the January 24 and January 26th events. Updates will be provided in the next Biweekly Report.

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
Via Verde Park & Ride Multi Chambered Treatment Trains	• Ace Restoration & Waterproofing, Inc. began work to repair the leak at Via Verde MCTT on January 17, 2001, and work is still ongoing. The site was offline for the January 24, 2001 storm event, and will continue to be offline until the work is completed.
Las Flores Maintenance Station StreamGuard	• During a routine monthly inspection on January 19, 2001, a rip in the StreamGuard fabric was observed. The manufacturer recommended replacing the StreamGuard rather than repairing it. The used DII and associated materials were bagged and labeled, and will be sent to the laboratory for analysis. A new StreamGuard was installed on January 23, 2001.

Paxton/Metro Maintenance Station Sites

Paxton project is scheduled to be advertised January 29 with a tentative bid opening of March 1. The Metro project is tentatively scheduled for advertisement on February 20, 2001. The updated schedule is as follows:

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	17.4 weeks		
		Submit to D7	08/07/00 (actual)
Structures final review and Final Revisions	2 weeks		
		Submit final to D7	08/21/00 (actual)
D7 process and format PS&E	12.3 weeks		
		D7 submit to HQ	11/15/00 (actual)
HQ review and processing; advertise contract	13 weeks		
		Advertise contract	**01/29/01(P), 02/20/01(M)**
Bid Period, evaluate bids, Award and Approval of Contract	12 weeks		
		Notice to Proceed	03/23/01 (P), 5/15/01 (M)
Construction	17 weeks		
		Construction complete	08/20/01 (P), 9/11/01 (M)
Install Instrumentation	2 weeks		
		Operational	09/3/01 (P), 9/25/01 (M)

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 Infiltration Basin	• On January 16, field crews conducted groundwater well monitoring.
Carlsbad Maintenance Station	• On January 14, vadose zone sampling was conducted. A vacuum was applied for 24-hours but no sample was produced. • On January 17, field crews conducted groundwater well monitoring..
Escondido Maintenance Station Media Filter	• During the January 11, storm event the filter was not draining. • On January 22, core samples were taken from the sand filter as requested during the previous biweekly conference call. • On January 23, the top 2-inches of sand were removed from the filter. The sand was then stockpiled on site in accordance with OMM procedures. Two-inches of washed sand were put back into the filter.

VECTOR ACTIVITIES

During this period, both DHS and the VCDs continued monitoring BMPs within their respective districts. In District 7, the sedimentation chamber of the Termination P&R media filter (Site #74204) and the settling chamber of the MCTT at Lakewood P&R (Site #74208) were abated with liquid Altosid on Thursday, January 18, 2001. In District 11, breeding was observed at Kearney Mesa MS (Site #112201), La Costa P&R Media Filter (Site #112203), and the SR-78/I-5 P&R Media Filter on Monday, January 8, 2001. Additionally, breeding was observed at the SR-78/I-5 P&R Media Filter on Tuesday, January 16, 2001.

DHS continues work on the out of state survey supplemental report and the vector breeding design review.

ENVIRONMENTAL ISSUES

No surveys were conducted during this reporting period. Results of the next survey will be provided in the next Biweekly Report.