BMP PILOT STUDIES BI-WEEKLY CONFERENCE CALL
DRAFT AGENDA

DATE:	November 2, 2000 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, Bob Wu, Steve Borroum, Brian Currier, Cathy Beitia, Cid Tesoro, Sayra Ramos, Barbara Ronimus, Pete Van Riper, Richard Gordon, Dean Messer, Brown and Caldwell, Montgomery Watson/Law, KLI, RBF, Dudek
COPIES TO:	RBF File 34123, 34218
SUBJECT:	BMP Pilot Study Status

AGENDA ITEMS

1. Storm Event October 26-27, 2000 Update – Law/KLI
2. Follow-up on Non-stormwater Discharge (D7)
3. CDS Mosquito-proofing Update
4. Vector Issues – Response to R. Horner's October 2, 2000 Comments (see Appendix B of the Biweekly Report)
5. EDBs Residence Time – Data comparison (See Appendix C of the Biweekly Report)
6. Update on Power Problem Fix at Termination and Lakewood BMPs
7. Update on Cerritos Swale Condition

>>Next meeting: Biweekly Conference Call November 16, 2000 Thursday 10am<<

BMP Pilot Studies
Bi-weekly Status Report

BMP Retrofit Pilot Projects in District 7 and District 11

October 27, 2000

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APPENDIX A: Addendum to DHS Nationwide Survey – Addition to List of Survey Recipients.

APPENDIX B: Vector Issues – Response to Comments. (for Biweekly Call Discussion)

APPENDIX C: EDB Residence Time Comparison Table (for Biweekly Call Discussion)

NOTE TO READER: As agreed during the October 5, 2000 Biweekly meeting, biweekly reporting will remain in brief report format to focus primarily on specific issues, and only general reporting of OMM activities will be provided.

UPDATES IN THIS BI-WEEKLY REPORT COVER THE PERIOD OCTOBER 14, 2000 – OCTOBER 27, 2000

Non-stormwater Discharge

A non-stormwater discharge was noted at the Altadena MS Biofiltration Strip/Infiltration Trench on October 18, 2000. No non-stormwater discharge noted at the District 11 BMPs by the O&M team during this period.

Week of	Foothill MS DII	Altadena MS Strip/IT
October 2, 2000	Y	
October 9, 2000	N	
October 16, 2000	N	Y
October 23, 2000	N	N

Y – Non-stormwater runoff was observed
N - No non-stormwater runoff observed during follow-up visit
- Discontinued weekly inspections.

Storm Sampling Events

The teams mobilized for the following storm events during this wet season:

October 10-11, 2000 (District 7 only)

October 26-27, 2000 (Districts 7 and 11) – Will be reported in next Biweekly Report.

Precipitation data for September and October 2000 for gages in Los Angeles and in San Diego is provided below.

Note: The data presented here is for reference only. The actual rainfall at individual BMP sites will vary from the values given in the table. The data presented 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.

September 2000							
Los Angeles – Downtown/USC				**San Diego**			
Day	Precip. (Inches)	Day	Precip. (Inches)	Day	Precip. (Inches)	Day	Precip. (Inches)
1	0.00	16	0.00	1	0.00	16	0.00
2	0.00	17	0.00	2	0.00	17	0.00
3	0.00	18	0.00	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	Trace	22	0.00
8	0.00	23	0.15	8	0.00	23	Trace
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	0.00	30	0.00

October 2000							
Los Angeles – Downtown/USC				**San Diego**			
Day	Precip. (Inches)	Day	Precip. (Inches)	Day	Precip. (Inches)	Day	Precip. (Inches)
1	0.00	16	0.00	1	0.00	16	0.00
2	0.00	17	0.00	2	0.00	17	0.00
3	0.00	18	0.00	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	0.01	20	0.00
6	0.00	21	0.00	6	0.06	21	0.01
7	0.00	22	0.00	7	0.01	22	Trace
8	0.00	23	0.00	8	0.00	23	Trace
9	0.00	24	0.00	9	0.00	24	0.00
10	0.00	25	0.00	10	0.04	25	0.00
11	0.12	26	0.07	11	0.05	26	Trace
12	0.12	27	0.25	12	Trace	27	0.38
13	0.00	28	0.01	13	0.00	28	0.17
14	0.00	29	0.07	14	0.00	29	0.00
15	0.00	30	0.53	15	0.00	30	0.51
		31				31	

Shaded Numbers are days with measurable precipitation.

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
Multi Chambered Treatment Train Lakewood Park & Ride Via Verde Park & Ride	LAW's subcontracted electrician and a Caltrans District 7 electrician met at Lakewood on Monday 16 October 2000 to discuss options to improve power to the pumps. A possible solution is to install another transformer, although a final solution has not yet been reached. The grit chambers at Lakewood and Via Verde were modified on Tuesday 24 October 2000 to allow easier sampling access for Vector Control District personnel. Dimensions of the grit chambers had been measured previously on Wednesday 18 October 2000. The plastic packing balls were removed and containerized in 55-gallon drums. The grated floor was hinged with stainless steel hinges and fasteners, and a 0.22-inch polyethylene mesh screen to catch debris was attached to the floor using nylon zip ties. Additionally, the bottom float in the sand filter sump at Via Verde was secured.
Sand Filter Termination Park & Ride	LAW's subcontracted electrician and a Caltrans District 7 electrician met at Termination on Monday 16 October 2000 to discuss options to improve power to the pumps. It was decided that the best solution is to install a new power pole and add a new line to take power directly from Edison lines located to the east of the site. A quote for this work has been sent to Law Crandall.
Biofiltration Strip/Infiltration Trench Altadena Maintenance Station	The spreader ditch was drained on 20 October 2000, following the non-stormwater runoff observed on 18 October 2000 during routine monthly inspections.

BMP	Activities
Biofiltration Swale Cerritos Maintenance Station	The number of gopher burrows appears to have reduced since the installation of the hardware mesh, but the gopher problem has not been eliminated.
CDS Units I-10 East of Orcas and I-210 East of Filmore	Mosquito screens should arrive at Law Crandall during the week of 30 October 2000, and will be installed upon receipt.

Paxton/Metro Media Filter/MCTT: No updates to report at this time. Latest reported operational date is June 2001. Latest schedule is provided in the last Biweekly report.

District 11 BMP Pilot Sites

OMM activities: Routine inspection and maintenance per the 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 October 13, field crews cut vegetation and removed weeds from the basin.

OMM PLAN ACTIVITIES

The MID Version 14 was released to the team via email on October 20, 2000. Changes to the MID were summarized in the previous Biweekly Report and discussed and approved during the October 19th Biweekly Conference Call.

VECTOR ACTIVITIES

During this period, both DHS and the VCDs continued monitoring their BMPs within their respective districts. In District 7, the sand filter at Eastern Regional MS (site #74202), the MCTT at Lakewood P&R (site #74208), the sump at the I-5/I-605 EDB, and the two CDS units located at East of Orcas and East of Filmore were abated with liquid Altosid on October 12 and 19, 2000. In District 11, breeding was observed at the I-5/SR-56 EDB, the sand filter at La Costa P&R, and the StormFilter at Kearny Mesa Maintenance Station, but abatement actions (with Altosid pellets) were taken only at the La Costa P&R Sand Filter and I-5/SR-56 EDB on October 17, 2000.

DHS has compiled a list of vector control agencies in the nation to supplement the out of state survey report, and is attached in Appendix A.

ENVIRONMENTAL ISSUES

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

APPENDIX A: LIST OF VECTOR CONTROL AGENCIES IN THE NATION TO SUPPLEMENT THE DHS OUT OF STATE SURVEY REPORT

COLORADO

COLORADO MOSQUITO CONTROL
9999 OLD WADSWORTH BLVD.
BROOMFIELD, CO 80021

TRI-COUNTY HEALTH DEPARTMENT
4301 E. 72 AVE.
COMMERCE CITY, CO 80022
(303) 288-6816

DISTRICT OF COLUMBIA

D.C. DEPARTMENT OF HEALTH
825 NORTH CAPITAL ST, NE
WASHINGTON, DC 20002
(202) 442-5900 MAIN
(202) 442-4825 MAIN FAX
(202) 442-9239 VECTOR

MARYLAND

MARYLAND DEPARTMENT OF AGRICULTURE
MOSQUITO CONTROL SECTION
50 HARRY S. TRUMAN PARKWAY
ANNAPOLIS, MD 21401
(410) 841-5870, 5880

MINNESOTA

METROPOLITAN MCD
METRO COUNTIES GOVERNMENT CENTER
DIRECTOR: JOSEPH SANZONE
2099 UNIVERSITY AVENUE W.

ST. PAUL, MN 55104
(651) 645-9149
(651) 645-3246 FAX

NEW JERSEY

BERGEN COUNTY DIVISION OF MOSQ. CONTROL
P.O. BOX 236
PARAMUS, NJ 07653-0236
(201) 599-6141, 6142
(201) 599-6143 FAX

BURLINGTON COUNTY MEC
P.O. BOX 6000
49 RANCOCAS RD.
MT. HOLLY, NJ 08060
(609) 265-5064

CUMBERLAND CO. DEPT. OF MOSQ. CONTROL
800 EAST COMMERCE ST.
BRIDGETON, NJ 08302
(609) 453-2195, 2197
(609) 455-5857 FAX

ESSEX COUNTY MOSQUITO CONTROL
99 WEST BRADFORD AVE.
CEDAR GROVE, NJ 07009
(201) 239-0341 EXT. 31

HUNTERDON COUNTY MVC
P.O. BOX 2900
FLEMINGTON, NJ 08822-2900
(908) 782-1351
(908) 782-7510 FAX

MERCER COUNTY DIVISION OF MOSQ. CONTROL
300 SCOTCH ROAD, BUILDING #1
TRENTON, NJ 08628
(609) 530-7501, 7529
(609) 530-7517 FAX

MIDDLESEX COUNTY MEC
200 PARSONAGE ROAD
EDISON, NJ 08837-2118
(732) 549-0665
(732) 603-0280

MORRIS COUNTY MEC
P.O. BOX 405
MORRIS PLAINS, NJ 07950
(973) 538-3200
(973) 538-3857 FAX

OCEAN COUNTY MEC
P.O. BOX 327
BARNEGAT, NJ 08005-0327
(609) 698-8271
(609) 698-2351 FAX

PASSAIC COUNTY DIVISION OF MOSQ. EXT.
1310 ROUTE 23 NORTH
WAYNE, NJ 07470
(201) 305-5754, 5759
(201) 305-8865 FAX

SALEM COUNTY MEC
LAKEVIEW COMPLEX
900 ROUTE 45, BUILDING 4
WOODSTOWN, NJ 08098
(856) 769-3255
(856) 769-3820 FAX

SOMERSET COUNTY MOSQ. EXT./ DRAINAGE SECT.
SOMERSET COUNTY ROAD DIVISION
410 ROYCEFIELD RD.
P.O. BOX 3000
SOMERVILLE, NJ 08876-1262
(908) 722-0040, 2465

UNION COUNTY BUREAU OF MOSQ. CONT.
2371 SOUTH AVE
WESTFIELD, NJ 07091
(908) 654-9873
(908) 654-9874 FAX

OREGON

MULTNOMAH COUNTY HEALTH DEPARTMENT
VECTOR CONTROL
ATTN: DAVID TURNER
5235 N. COLUMBIA BLVD.
PORTLAND, OR 97212
(503) 248-3464

TEXAS

CITY OF AUSTIN
DEPT OF ENVIRONMENTAL HEALTH
RODENT AND VECTOR CONTROL
15 WALLER STREET
AUSTIN, TX 78702
(512) 469-2015 MAIN
(512) 443-8416 MANAGER: BARRY TURANO

VIRGINIA

YORK COUNTY MOSQUITO CONTROL
P.O. BOX 532
YORKTOWN, VA 23690
(757) 890-3790

VIRGINIA BEACH MOSQUITO CONTROL BUREAU
1848 PLEASANT RIDGE RD.
VIRGINIA BEACH, VA 23457
(757) 426-5420

NPDH DEPT. OF VECTOR CONTROL
2800 TARRANT ST.
NORFOLK, VA 23509
(757) 683-2841, 2840

CITY OF SUFFOLK
P.O. BOX 1858
SUFFOLK, VA
(757) 925-6385
CITY OF NEWPORT NEWS
505 OYSTER PT. RD.
NEWPORT NEWS, VA 23602
(757) 249-5745

CITY OF HAMPTON
419 N. ARMISTEAD AVE.
HAMPTON, VA 23669
(757) 726-2946

WISCONSIN

LACROSSE COUNTY HEALTH DEPARTMENT
VECTOR CONTROL PROGRAM
ATTN: DAVE GESKE
300 N. 4TH STREET
LACROSSE, WI 54601
(608) 785-9727 DIRECT
(608) 785-9872 MAIN

Notes to the above list:

This is the latest information on the DHS-VBDS addendum to the "out-of-state" report. This addresses all of the locations listed by the plaintiffs.

DENVER, COLORADO: The city of Denver does not have its own mosquito abatement district (MAD). The closest agency is the Tri-County Health Dept. in Commerce City. Denver contracts out all of their mosquito control to a private organization named Colorado Mosquito Control.

AUSTIN, TEXAS: The city of Austin does not have its own MAD. Mosquito control in the city is conducted by the Dept. of Environmental Health, Rodent and Vector Control.

NEW JERSEY: Each of New Jersey's 21 counties has a vector control agency that is responsible for mosquito control. This includes the Somerset County Mosquito Extermination/ Drainage Section.

MARYLAND: The Maryland Department of Agriculture, Office of Plant Industries and Pest Management, Mosquito Control Section is responsible for administering and implementing mosquito control throughout the state of Maryland.

MINNEAPOLIS-ST. PAUL, MINNESOTA: Mosquito control for the entire metropolitan area of Minneapolis-St. Paul is conducted by the Metropolitan Mosquito Control District.

PORTLAND AND WASHINGTON COUNTIES, OREGON: Mosquito control in the city of Portland is conducted by Multnomah County Health Department, Vector Control. This agency also occasionally does contract work within some parts of Washington County. Washington County does not have its own MAD.

VIRGINIA (Northern part): The mosquito control agencies in the state of Virginia are concentrated primarily along the coastal areas around the cities of Suffolk, Chesapeake, Norfolk, and Hampton. The northern-most agency is in the city of Yorktown.

DISTRICT OF COLUMBIA: Mosquito control in the Washington D.C. area is conducted by the D.C. Dept. of Health.

PUGET SOUND AREA, WASHINGTON: There are no MAD's in the Puget Sound area. Most are to the east and south.

MADISON AND MILWAUKEE, WISCONSIN: The state of Wisconsin has only one registered vector control district in LaCrosse County where the mosquito-borne encephalitis virus, La Crosse Encephalitis, is prevalent. The City of Madison Environmental Health ([608] 294-5335, Doug - Supervisor) will respond to vector problems on a complaint basis only. The city has no organized mosquito or vector control program. Milwaukee has a vector control program that has yet to be contacted.

APPENDIX B: Bill Waltons' Comments/Response to R. Horner's October 2, 2000 comments (attached for reference – discussion item for Conference Call).

-------- Original Message --------
Subject: Re: [Fwd: Fwd: Retrofit issues]
Date: Tue, 10 Oct 2000 12:27:40 -0700
From: William Walton <walton@mail.ucr.edu>
To: Cathy Beitia <cathy.beitia@owp.csus.edu>
CC: deanm@lwadavis.com

Cathy,

Thank you for forwarding a copy of "Issues for Discussion during Upcoming Retrofit Status Calls." I concur with many of the points summarized in the memorandum; however, I add the following points to the issues under subheading 1 for "Vectors."

Pre- vs. post-construction comparisons were made for periods of the year when precipitation is low and during periods when control activities against the aquatic-dwelling stages of the mosquito life cycle were being carried out. There is an indication that adult mosquito activity increased at sites where control measures were comparatively less frequent (i.e., Jan. through June 2000 at San Diego sites) during the post-construction period.

Because of ongoing control activities, I see little utility in carrying Out additional paired control-treatment comparisons. The impetus for Carrying out the adult monitoring was Caltrans' desire to have pre- and post-construction data for vectors. The control-treatment comparisons were added following Rich Horner's suggestion. Both reasons for adult monitoring made good sense. However, as was discussed on several occasions by Dr. Wakesa and others, instead of censusing adult activity while control measures were being carried out, a better approach for assessing the effects of the stormwater retrofit BMPs on adult vector activity would have been to forego larval control at some, or all of, the sites. Even had control efforts against mosquito larvae not been carried out, adult activity data may be confounded by movement of adults into a trapping area or by production of mosquitoes resulting from activities, sites, etc. other than the stormwater BMPs. Mosquito production caused by the latter factor would be measured as part of the natural background, provided conditions do not change significantly across the study. If a stormwater BMP were to produce a large number of adult mosquitoes, then this production should be indicated by the trap counts; I view it as very unlikely that migration of Culex mosquitoes into a site would outweigh high local production. Therefore, given that larval control was carried out and that the Presence of immature mosquitoes in standing water, not adult mosquito activity, is the basis for abatement and any subsequent actions carried out by the vector control and public health agencies, larval presence/absence, larval abundance, and the number of abatement actions represent a better indication of vector potential than do the adult activity data.
Provided that standing water can be adequately sampled, the larval data provide unambiguous evidence of vector activity at a particular site.

I would add the wet basin to the list of BMPs that are likely to be a vector problem.

A point worth reiterating is that chemical control using insect growth regulators or biological control using mosquito-specific microbials is not likely to be practical and cost-effective for large-scale implementation of problematic stormwater BMP designs.

I feel that we could benefit from a more thorough examination of the relationship between larval mosquito abundance (or presence/absence), control efforts and adult mosquito activity.

William E. Walton, Ph.D.
Department of Entomology
University of California
Riverside, CA 92521

Voice: 909-787-3919

FAX: 909-787-3086
CC: Brian Currier <bkcurrier@ucdavis.edu>

APPENDIX C: EDB Residence Time Comparison Table
(Attached for reference -discussion item for Biweekly Conference Call)

Comparison of EDB Residence Time by Various Methods

Location	Event	Fraction Full	Extended Detention Basin Residence Time (hours:min)						TSS Concentration Reduction
			Centroid Influent/ Centroid Effluent	First In / Last out	Last In / Last Out	First In / First Out	Ratio Inflow / Outflow	Orifice Calc*	
5/56	1/25/00	0.07	8:21	17:00	10:55	2:40	2.52	23:56	86%
	2/16/00	0.03	1:03	4:25	0:40	1:45	0.67		74%
	2/16/00	0.04	1:37	5:40	0:25	3:05	2.22		74%
	2/20/00	1.31	11:16	66:35	0:15	13:45	1.16		87%
	3/5/00	0.95	10:56	51:10	2:40	23:20	1.23		82%
	4/17/00	0.45	11:18	34:55	0:20	13:30	1.00		5%
15/78	1/25/00	0.03	1:03	8:45	1:10	0:05	7.40	21:50	90%
	1/25/00	0.03	0:23	11:15	0:40	(2:05)	4.99		90%
	2/16/00	0.02	0:17	5:35	0:35	(2:25)	2.93		74%
	2/16/00	0.08	1:22	19:35	0:25	2:40	1.59		74%
	2/20/00	0.11	12:28	72:30	0:15	26:40	1.30		78%
	3/5/00	0.03	0:59	6:20	0:25	0:40	2.40		79%
	3/5/00	0.30	8:56	47:20	0:35	23:45	0.99		79%
	4/17/00	0.02	6:39	28:30	1:20	4:05	1.04		77%
5/Manchester	2/16/00	0.03	3:32	7:40	0:35	5:20	1.24	26:34	84%
	2/16/00	0.17	8:05	32:35	0:10	19:40	1.31		84%
	2/20/00	2.21	17:06	76:00	0:00	31:50	2.92		93%
	3/5/00	0.66	26:39	81:40	3:30	69:40	1.03		92%
	4/17/00	0.48	29:47	70:35	0:05	54:15	1.11		72%
605/91	2/27/00	0.12	2:07	4:25	1:35	2:55	8.22	17:13	98%
	4/17/00	3.05	10:05	40:00	1:45	17:35	3.09		93%
5/605	2/20/00	2.49	17:29	75:50	0:15	27:50	1.39	20:38	79%
	2/27/00	0.14	4:15	13:45	0:15	3:55	1.45		-5%
	3/8/00	0.83	22:28	65:40	0:10	58:20	1.12		51%
	4/17/00	2.62	16:16	83:00	0:25	60:50	1.05		-21%

* assumes full basin at t=0