

**12. PROGRAM EVALUATION**

**Program Evaluation**

The Permittees regularly assess the component programs to identify improvements that will promote the reduction of pollutants in Urban Runoff to the MEP while also supporting the responsible management and allocation of the public resources available to implement their programs. A qualitative and qualitative assessment of each Permittee's program can be found in the Permittee's individual annual report.

Evaluation of the DAMP includes short term and long term strategies. The long-term strategy for assessing effectiveness will focus on water quality data obtained as part of the CMP. This is by necessity a long-term strategy since the first step will be to develop and understand baseline data. Due to the inherent variability of Urban Runoff, years of monitoring data will be necessary to identify statistically significant trends or draw conclusions on program effectiveness. Additionally, because there are numerous program elements being implemented and revised concurrently because other environmental regulation indirectly impact Urban Runoff and because of the numerous other climatological, man-made, and environmental changes that occur in the watershed, the ability to identify cause-and-effect relationships between a specific program element and/or BMP and improvement in the quality of Urban Runoff is complicated, if not infeasible, in many cases

The short-term strategy for assessing the effectiveness focuses on quantitative, indirect methods (that is, not directly based on the quality of Urban Runoff or receiving water quality) of assessment. Each year the District will collect various metrics defined in the DAMP to assist with program evaluation. As part of the ROWD, the Permittees will evaluate these metrics, including water quality data, in an effort to assess overall DAMP effectiveness. On an annual basis, the District will review the metrics to determine if any course corrections on existing BMPs are required. The following regional metrics have been collected in compliance with the DAMP:

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<b>PERMITTEE</b>	<b>1. The estimated quantity of material removed from the MS4. (Regional and Permittees)</b>
<b>Beaumont</b>	Average 50 tons per year
<b>Calimesa</b>	1,265 pounds of rock, silt and debris
<b>Canyon Lake</b>	Approximately two tons were removed from Salt Creek in the City.
<b>Corona</b>	64 tons removed from catch basins and streets (non-street sweeping)
<b>Hemet</b>	Estimated 6 tons of material was removed from the City of Hemet MS4 in FY 2006-2007
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	1620.5 cu. ft.
<b>Murrieta</b>	
<b>Norco</b>	31,200 pounds
<b>Perris</b>	The City of Perris is implementing a system to track the quantity of materials removed from the MS4, this tracking system is expected to be in place for the 2007-2008 reporting period
<b>Riverside</b>	8,371 tons from street sweeping and Household Hazardous Waste.
<b>San Jacinto County</b>	4 to 5 tons consisting of miscellaneous furniture, appliances, const materials, ect.  Catch basins (total 15.34 tons): [Vegetative Litter (6.66 tons), Anthropogenic Litter (2.93 tons), and Sediment (5.75 tons)]
<b>RCFC&amp;WCD</b>	Riverside County Flood Control and Water Conservation District maintains large storm drains (>36" in diameter) that are often the backbone facilities to local drainage infrastructure. The District maintains storm drains, open channels, dams and basins in incorporated cities as well as the unincorporated portions of the county. The quantity estimates for 2006-2007 are based on the approximation that the District facilities located in Zone 1, 2, 3, 4, and half of 5 are in the Santa Ana Watershed: 73 Tons of Trash; 50,088 CY of Sediment; 517.5 Tons of Debris. The District's database output for the above estimates can be found in <b>Appendix F</b> .

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<b>PERMITTEE</b>	<b>2. The estimated quantity of material collected under litter removal and street sweeping programs. (Co-Permittees)</b>
<b>Beaumont</b>	Average 50 tons per year
<b>Calimesa</b>	5,030 pounds of rock, silt and debris
<b>Canyon Lake</b>	Approximately three tons were removed or collected on Railroad Canyon and Goetz Roads.
<b>Corona</b>	2,845 tons removed with street sweeping program
<b>Hemet</b>	Estimated material collected through litter removal and street sweeping programs in 2006-2007 was 3,500 tons (three street sweepers @ two x month & Caltrans sweeping weekly).
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	2310 Tons
<b>Murrieta</b>	
<b>Norco</b>	294.0 tons
<b>Perris</b>	During the 2006-2007 reporting period, an estimated 1,294 tons of material were removed by the City's contracted street sweepers. Currently there is not a system in place to track the quantity of litter/debris/sediment removed during MS4 cleanings, but this tracking system is expected to be in place for the 2007-2008 reporting period.
<b>Riverside</b>	4,990 tons from street sweeping
<b>San Jacinto</b>	450 tons of street sweepings.
<b>County</b>	<b>Streets (total 1753.22 tons):</b> [Vegetative Litter (350.64 tons), Anthropogenic Litter (87.66 tons), & Sediment (1,314.92 tons)] <b>Litter Removal (total 23.74 tons):</b> [Anthropogenic Litter (23.74 tons)] <b>Code Enforcement Cleanup Program (total 1870 tons):</b> [Anthropogenic Litter (1870 tons)]
<b>RCFC&amp;WCD</b>	N/A

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<b>PERMITTEE</b>	<b>3. The total number of construction sites inspections for stormwater compliance. (Co-Permittees)</b>
<b>Beaumont</b>	60
<b>Calimesa</b>	18
<b>Canyon Lake</b>	318 construction permits inspected 7/06 to 06/07
<b>Corona</b>	153 compliance inspections on 40 facilities
<b>Hemet</b>	City of Hemet Public Works inspectors conducted 26 construction site inspections for storm water compliance in FY 2006-2007.
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	915
<b>Murrieta</b>	
<b>Norco</b>	295
<b>Perris</b>	A total of 20 construction sites were inspected for stormwater compliance during the 2006-2007 reporting period. (See Exhibit F in the City's Individual Annual Report)
<b>Riverside</b>	103 construction site inspections related to stormwater compliance.
<b>San Jacinto</b>	26
<b>County</b>	269 sites were inspect, of which 48 (18%) were sites not in compliance and 221 (82%) were found in compliance. (See County's Individual Annual Report for further details).
<b>RCFC&amp;WCD</b>	N/A

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<b>PERMITTEE</b>	<b>4. The total number of industrial and commercial facility inspections for stormwater compliance (Co-Permittees).</b>
<b>Beaumont</b>	40
<b>Calimesa</b>	15
<b>Canyon Lake</b>	Enforcement conducted through a contract with Riverside County Environmental Health Department
<b>Corona</b>	491 inspections conducted by NPDES, DWP-Source Control, and Fire Dept. staff
<b>Hemet</b>	Riverside County Environmental Health Inspectors conducted 79 inspections of industrial and commercial facilities in the City of Hemet during FY 2006-2007.
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	282
<b>Murrieta</b>	
<b>Norco</b>	1
<b>Perris</b>	A total of 37 commercial and industrial facilities were inspected for stormwater compliance during the 2006-2007 reporting period. (See Exhibit G in the City's Individual Annual Report)
<b>Riverside</b>	1,015 inspections, including 784 Restaurants, 127 Non-Significant Industrial Users and 104 Industrial Permit holders.
<b>San Jacinto</b>	30 & 134 initial evaluations
<b>County</b>	2,451 See countywide Inspection logs in the County's individual annual report
<b>RCFC&amp;WCD</b>	N/A

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<b>PERMITTEE</b>	<b>5. The quantity of household hazardous waste material collected through the HHW Collection and ABOP Programs. (Regional)</b>
<b>Beaumont</b>	
<b>Calimesa</b>	
<b>Canyon Lake</b>	
<b>Corona</b>	76 tons total from four different events held in City of Corona (County-wide date to be included in the County and/or District report)
<b>Hemet</b>	An estimated six tons of waste material was collected through HHW Collection and ABOP programs in the City of Hemet in FY 2006-2007.
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	Not-Applicable
<b>Murrieta</b>	
<b>Norco</b>	
<b>Perris</b>	The City of Perris Annual Clean-up Day collected 163.64 tons of waste and 49 abandoned vehicles were towed. (See Exhibit C in the City's Individual Annual Report)
<b>Riverside</b>	3,381 tons of household hazardous waste and bulky items were collected. The 25 collection events included Free Drop Off Days, Household Hazardous Waste events (HHW), Incredible BULK/FOOT Patrol events and Neighborhood Clean Ups. Additionally, the City also offers curbside pick up of used oil and used oil filters, and bulky items of refrigerators, freezers and air conditioners. As a result, an additional 865 gallons of used oil and 638 bulky items were collected and disposed of properly.
<b>San Jacinto</b>	see attached EXHIBIT B of the City's Individual Annual Report
<b>County</b>	See section for Household Hazardous Waste, and ABOP Collection totals
<b>RCFC&amp;WCD</b>	During FY 2006-2007, approximately 1,163,633 lbs of total HHW material was collected. A detailed breakdown is included as <b>Appendix C</b> .

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<b>PERMITTEE</b>	<b>6. The number of Permittee staff receiving training for activities related to DAMP implementation. (Regional and Permittees)</b>
<b>Beaumont</b>	10
<b>Calimesa</b>	5
<b>Canyon Lake</b>	Five
<b>Corona</b>	72 City of Corona staff attended formal training sessions
<b>Hemet</b>	A total of 27 City of Hemet staff members in various departments received training for activities related to DAMP implementation during FY 2006-2007.
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	19 employees received training
<b>Murrieta</b>	
<b>Norco</b>	11
<b>Perris</b>	A total of 9 employees from the City of Perris received training related to DAMP implementation activities.
<b>Riverside</b>	Approximately 70 staff received formal training. Additional informal training also was provided.
<b>San Jacinto</b>	9
<b>County</b>	317, See training logs
<b>RCFC&amp;WCD</b>	In fiscal year 06-07 there were 642 enrollees in the Fall Training & 371 enrollees in the Spring Training. 565 attendees for Fall and 354 attendees in Spring. The Permittees require annual stormwater training (on a fiscal year basis) for all appropriate staff. When it is not feasible to send all staff to training, individual divisions or sections may opt to send representative staff members (supervisors) to obtain the training, and then have those staff members provide summarized training to the remaining staff at their convenience. Copies of the sign-in sheets for Permittee staff who attend the formal training offered by the District are provided in Appendix B. Additional training conducted by the Permittees may be included in their individual annual report.

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<b>PERMITTEE</b>	<b>7. The number of Urban Runoff complaints received through hotlines. (Regional and Permittees)</b>
<b>Beaumont</b>	
<b>Calimesa</b>	0
<b>Canyon Lake</b>	Average 15 per year
<b>Corona</b>	20 illegal dumping and/or illicit connection complaints received from the public (42 total complaints received, including other agencies and/or City departments)
<b>Hemet</b>	Calls received through the Riverside County Flood Control Hotline 1-800-506-2555 are forwarded to the City of Hemet when appropriate.
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	None
<b>Murrieta</b>	
<b>Norco</b>	2
<b>Perris</b>	City of Perris has an online email complaint form accessible from the City's website. This year, an estimated 50 complaints were submitted regarding stormwater issues (with most submitted during the wet season).
<b>Riverside</b>	Approximately 415 complaints were made through the City's 311 hotline. This number is based on keyword summaries of calls received; upon City response and investigation, not all complaints were substantiated.
<b>San Jacinto</b>	SEE ATTACHED EXHIBIT C in the City's Individual Annual Report - **spills are all under 500 gallons received on the City's Hotline
<b>County</b>	240- Code Enforcement
<b>RCFC&amp;WCD</b>	246 complaints were received by the District's NPDES section to be responded to and addressed (a print out can be found in Appendix E). The number of Toll Free calls reported tracked during this Fiscal Year were 1,648. In addition Riverside County Fire Department HazMat team responded to 117 incidents.



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<b>PERMITTEE</b>	<b>8. The number of illicit connections detected and eliminated. (Permittees)</b>
<b>Beaumont</b>	
<b>Calimesa</b>	0
<b>Canyon Lake</b>	Zero.
<b>Corona</b>	No illicit connections detected
<b>Hemet</b>	No illicit connections were detected in the City of Hemet storm drain system during FY 2006-2007.
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	None
<b>Murrieta</b>	
<b>Norco</b>	1
<b>Perris</b>	There were no illicit connections detected during the 2006-2007 reporting period.
<b>Riverside</b>	
<b>San Jacinto</b>	1
<b>County</b>	See Flood Control and Water Conservation District Report
<b>RCFC&amp;WCD</b>	The District helped to eliminate 2 illicit connections into a MS4 maintained by the District.

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<b>PERMITTEE</b>	<b>9. Construction outreach events conducted. (Regional and Co-Permittees)</b>
<b>Beaumont</b>	
<b>Calimesa</b>	
<b>Canyon Lake</b>	See outreach section
<b>Corona</b>	Wet weather notification letter given to all facilities (approximately 40)
<b>Hemet</b>	No formal construction outreach events were conducted in the City of Hemet, however Public Works inspectors regularly educate contractors on appropriate erosion and sediment controls
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	1- Public Works Day Fair
<b>Murrieta</b>	
<b>Norco</b>	0
<b>Perris</b>	During the Public Works Week community outreach event held on May 17 <sup>th</sup> , 2007 the “ <i>What You Should Know for General Construction &amp; Site Supervision</i> ” brochure was handed out. This brochure included information on the General Construction Activities Stormwater Permit and BMPs for construction sites. Construction Pamphlets are available at all permitting counters.
<b>Riverside</b>	103 construction site inspections related to stormwater compliance.
<b>San Jacinto</b>	13
<b>County</b>	See Flood Control and Water Conservation District Report
<b>RCFC&amp;WCD</b>	See <b>Appendix E</b> for Impressions, attendance and other measures of effectiveness

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<b>PERMITTEE</b>	<b>10. Industrial/Commercial outreach events conducted. (Regional and Co-Permittees)</b>
<b>Beaumont</b>	
<b>Calimesa</b>	
<b>Canyon Lake</b>	See outreach section
<b>Corona</b>	Outreach materials given to all facilities inspected (approximately 490)
<b>Hemet</b>	No formal industrial/commercial outreach events were conducted in the City of Hemet, however, business owners receive educational materials when inspections are completed.
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	1 – Public Works Day Fair
<b>Murrieta</b>	
<b>Norco</b>	0
<b>Perris</b>	During the Public Works Week community outreach event held on May 17 <sup>th</sup> , 2007 the “ <i>Did You Know...Your Facility May Need a Storm Water Permit?</i> ” brochure was handed out. This brochure included information on the NPDES permit program, Industrial Activities Storm Water General Permit, BMPs, and Non-Storm Water Discharges.
<b>Riverside</b>	1015 industrial site inspections related to stormwater compliance.
<b>San Jacinto</b>	6 total venues (see attached listing in City’s Individual Annual Report).
<b>County</b>	See Flood Control and Water Conservation District Report
<b>RCFC&amp;WCD</b>	See <b>Appendix E</b> for Impressions, attendance and other measures of effectiveness

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<b>PERMITTEE</b>	<b>11. Media impressions. (Regional and Co-Permittees)</b>
<b>Beaumont</b>	
<b>Calimesa</b>	
<b>Canyon Lake</b>	See outreach section
<b>Corona</b>	Tracked by the District
<b>Hemet</b>	The City of Hemet distributed nearly 10,000 2006 Drinking Water Quality Report to water system customers during May and June 2007. This publication included information on how to prevent storm water pollution.
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	None
<b>Murrieta</b>	
<b>Norco</b>	15,000 (2 mailers of ~7,500)
<b>Perris</b>	Advertisements promoting the Annual Community Clean-up Day were run on the City of Perris' local television channel (Channel 3).
<b>Riverside</b>	The City participated in coordinated media impressions through the Principal Permittee.
<b>San Jacinto</b>	1 see attached press release
<b>County</b>	See Flood Control and Water Conservation District Report
<b>RCFC&amp;WCD</b>	See <b>Appendix E</b> for Impressions, attendance and other measures of effectiveness

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<b>PERMITTEE</b>	<b>12. Classroom presentations. (Regional)</b>
<b>Beaumont</b>	
<b>Calimesa</b>	
<b>Canyon Lake</b>	This is completed via a contract with Riverside County Flood Control. Contact person Florence Mowrer.
<b>Corona</b>	Reported by the District. In addition, one classroom presentation was conducted by City staff to two 4 <sup>th</sup> grade classes (approximately 50 students) in City of Riverside.
<b>Hemet</b>	Classroom presentations on stormwater pollution prevention were made in 44 classrooms, reaching 944 students, in the Hemet Unified School District during FY 2006-2007.
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	Non-Applicable
<b>Murrieta</b>	
<b>Norco</b>	
<b>Perris</b>	Riverside County Flood Control & Water Conservation District provides all classroom training. See Principal Permittee Report.
<b>Riverside</b>	The City participated in coordinated media impressions through the Principal Permittee.
<b>San Jacinto</b>	City staff conducted 4 sessions with 30 students each at Estudillio Elelmentry School.
<b>County</b>	See Flood Control and Water Conservation District Report
<b>RCFC&amp;WCD</b>	See <b>Appendix E</b> for Impressions, attendance and other measures of effectiveness

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<b>PERMITTEE</b>	<b>13. Public education events conducted. (Regional and Co-Permittees)</b>
<b>Beaumont</b>	
<b>Calimesa</b>	
<b>Canyon Lake</b>	This is completed via a contract with Riverside County Flood Control. Contact person Florence Mowrer.
<b>Corona</b>	2 events conducted this year by City staff. See narrative report for public education outreach summary
<b>Hemet</b>	The City of Hemet sponsored a Stormwater Information booth during the annual Hemet Christmas in the Park on December 2, 2006 and distributed stormwater promotional items to event participants.
<b>Lake Elsinore</b>	
<b>Moreno Valley</b>	1 - Public Works Day Fair
<b>Murrieta</b>	
<b>Norco</b>	2
<b>Perris</b>	Annual Public Works Week Event held on May 17 <sup>th</sup> , 2007
<b>Riverside</b>	Two events were staffed by Public Works with booths emphasizing the importance of keeping harmful items out of storm drains. Five events were staffed by Parks and Recreation. Public education materials have been available and distributed at department front counters by Public Works, by Public Utilities and by Community Development and Planning, as well as at facility front counters by Parks, Recreation and Community Services.
<b>San Jacinto</b>	6 total venues (see attached listing in City's Individual Annual Report).
<b>County</b>	See Flood Control and Water Conservation District Report
<b>RCFC&amp;WCD</b>	See <b>Appendix E</b> for Impressions, attendance and other measures of effectiveness

### **Effectiveness Assessment**

The Permittees have incorporated the Revised DAMP program effectiveness assessment requirements described in Section 12 of the DAMP into their compliance activities. The Permittees Effectiveness Assessment for the Fiscal Year 2006-2007 focused on ensuring that the Permittees had adequate control on nutrient and pathogen sources in the Santa Ana Watershed.

On August 1, 2006 the Permittees submitted recommended revision to the DAMP and WQMP in compliance with Task 7 of the Lake Elsinore and Canyon Lake TMDL to ensure that nutrient sources were adequately addressed. A copy of this letter is included in **Appendix F**.

Based on evaluations made by the Permittees geared toward improving municipal programs, the Permittees have made the following programmatic changes.

1. Ensuring that the CEQA process incorporates questions regarding impacts to 303(d) and TMDL listed waterbodies;
2. Enhancing the New Development BMP handbook to incorporate additional BMPs focused on nutrient (and pathogen) removal, incorporate additional design guidance to ensure function and maintainability, and incorporate Low Impact Design (LID) concepts to reduce runoff volumes and pollutant discharges to the Maximum Extent Practicable (MEP);
3. Revisions to public education programs to further focus on nutrient and pathogen sources;
4. Enhance municipal employee training programs to focus on TMDL impairments and appropriate BMPs;
5. Prioritized Illicit Connections / Illegal Discharge violations related to impairing pollutants to high priority where appropriate;
6. Focus on revisions to the WQMP and the WQMP template to assist developers with developing a WQMP. In addition, the Permittees create a new WQMP FAQ document that will assist in increasing the consistency and quality of WQMP submittals;

7. Continue annual updates to Sanitary Sewer Overflow Procedures to ensure proper contact information for outside agencies;
  
8. The Permittee's ROWD included whole new sections that addressed TDML compliance, which consider the current regulatory environment and applicable EPA rules and regulations to ensure that the updates represented a thoughtful and comprehensive proposal which included good-faith commitments from the Permittees that will lead to protecting water quality in a productive and meaningful way;