

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF SEPTEMBER 4-5, 2008

Prepared on August 5, 2008

ITEM NUMBER: 9

**SUBJECT: Monterey Regional Stormwater Management Program
Implementation Status Report**

SUMMARY

The Central Coast Water Board (Water Board) requested staff provide a status update after the first year of implementation of the Monterey Regional Stormwater Management Program (MRSWMP).¹ The MRSWMP is a cooperative program led by eight "Participating Entities" including the cities of Carmel-by-the-Sea, Del Rey Oaks, Marina, Monterey, Pacific Grove, Sand City, Seaside and the County of Monterey.

Monterey Regional's 2006/2007 Annual Report² stated the Participating Entities implemented most Best Management Practices (BMPs) and Measurable Goals (MGs) per the MRSWMP and General Permit³ as required for the first year, effectively, and in some cases, beyond expectations. However, some of the Participating Entities failed to implement portions of several BMPs or entire BMPs in some cases, did not attend required training, and did not, in many instances, provide adequate information to evaluate the effectiveness of BMPs and MGs as required by the General Permit Section F.1 (Reporting Requirements).

Therefore, staff sent a letter documenting BMPs that were not implemented properly, information that was unclear or missing and violations of the MRSWMP and General Permit. The letter required the Participating Entities to correct violations and submit additional reporting information by August 29, 2009, or by the next annual report.

The Participating Entities also proposed a few minor changes to their Storm Water Management Program and adequately explained these changes in the Annual Report.

DISCUSSION

I. Background

On September 8, 2006, the Water Board approved the MRSWMP, which includes the six Monterey Peninsula area cities of Del Rey Oaks, Marina, Monterey, Seaside, Sand City, and

¹ Access Monterey Regional Storm Water Management Program (24 MB) at:
http://www.waterboards.ca.gov/centralcoast/stormwater/municipal/phase_2/monterey_co/monterey_co_index.htm

² Access the 2007 annual report at: http://www.co.monterey.ca.us/msea/News_Events/news%20events.htm

³ Access Phase II Municipal General Permit at: <http://www.waterboards.ca.gov/centralcoast/stormwater/index.htm>

Pacific Grove, and the County of Monterey. These municipalities formed the Participating Entities of the Monterey Regional Storm Water Management Group (Monterey Regional Group). This group also includes several Coordinating Entities, including Pebble Beach and local school districts. Before adoption of the MRSWMP, Carmel-by-the-Sea (Carmel) withdrew from the Monterey Regional Group and withdrew its application for permit coverage from State Board, based on claims of limited population and types of receiving waters. In July 2005, State Board legal counsel determined Carmel must enroll in the Municipal General Permit. In 2006 and 2007, Carmel prepared and submitted a Storm Water Management Program (SWMP; dated January 12, 2007). Carmel continued to be an active participant in the Monterey Regional Group program and prepared a section of the Annual Report. The Executive Officer approved Carmel's SWMP⁴ on May 2, 2008, so Carmel is now a part of the Monterey Regional Group.

Staff received MRSWMP's Annual Report for the permit term September 8, 2006, through September 7, 2007, on November 16, 2007. Staff sent the Monterey Regional Group a letter on August 4, 2008, explaining staff's evaluation of the Annual Report (See Attachment 1). The letter requires the Participating Entities to correct violations and provide additional reporting information by August 29, 2008, in the case of SWMP or General Permit violations, or by submittal of the next annual report, if information was missing or unclear.

II. Storm Water Management Program Status

To assess compliance, staff evaluated the effectiveness of the MRSWMP by reviewing the tabular information summarizing BMP implementation, comments in the MG table explaining the activities, and supporting documentation (e.g., activity tables, logs, inspection reports, checklists, training attendance and agendas). Staff explained the results of and methods for this review in more detail in the table below and in Attachments 1 and 2.

The number of BMPs and MGs varied among the municipalities because of differing infrastructure. For example:

- BMP 6-4.a – Monterey County indicates no public parks within its MS4 area, hence the County did not require an irrigation monitoring program;
- BMP 6-5.b – Marina and Sand City have no public swimming pools; and
- BMPs 6-8.a and 6-8.b – Del Rey Oaks, Sand City, and Monterey County have no vehicle wash facilities

Also, the number of BMPs and MGs varied due to extra commitments outlined in MRSWMP (e.g., for MCM 2 the City of Monterey and Pacific Grove provide funding for First Flush and Urban Watch monitoring).

Staff found the Participating Entities generally followed and implemented first year BMPs per the MRSWMP, with a few changes (see Table 1 below and Attachment 2, Table 1). The MRSWMP required all entities adopt an ordinance or enforcement tool within the first three months of MRSWMP adoption. Monterey County was required to adopt an ordinance within six months of MRSWMP. No entity met these deadlines. After staff issued Notices of Violation in February 2007, with requirements to adopt the ordinances by March 22, 2007, five of the eight entities adopted ordinances within 5 to 13 months after MRSWMP adoption. However, three Participating Entities have yet to adopt ordinances for their stormwater programs (Carmel, Marina, and Monterey County). Failure to adopt an ordinance affects the success of three

⁴ Access at: http://www.waterboards.ca.gov/centralcoast/stormwater/municipal/phase_2/phase2ms4_index.htm

minimum control measures (MCMs 3, 4, and 5) and diminishes program effectiveness on multiple levels.

All Participating Entities also failed to adequately evaluate the effectiveness of BMPs in the MRSWMP. Staff has required the Participating Entities to evaluate effectiveness of these BMPs and report the results of effectiveness assessment in the next annual report. The effectiveness evaluation must indicate how the Participating Entities meet permit requirements and protect water quality and beneficial uses by implementing the MRSWMP.

The following sections briefly summarize each entity's record of BMP and MG implementation to meet MRSWMP and Municipal General Permit requirements in the first permit year. The August 4, 2008 letter (Attachment 1) explains staff's evaluation of individual Participating Entities compliance and reporting on BMPs and MGs in detail.

Staff evaluated the joint implementation by all eight Participating Entities for MCM 1 and a large portion of MCM 2. For all other MCMs, staff evaluated the independent implementation by each entity for portions of MCM 2 and MCMs 3 through 6.

Table 1. Monterey Regional Participating Entities average, combined implementation of Best Management Practices (BMPs) and Measurable Goals (MGs) associated with the six minimum control measures (MCMs) for Year-1, and compared to the numbers of BMPs and MGs planned for Years 2 through 5 (2008 to 2011).

MONTEREY REGIONAL 2006 - 2007 ANNUAL REPORT					Future BMPs and MGs			
Implementation of BMPs per minimum control measures (MCM) for 2006/2007 permit term.					Number			
Average Percentages in Year-1								
MCM	Total Number	Met	Not Met	Exceeded	Y-2	Y-3	Y-4	Y-5
MCM 1 (Public Education and Outreach)								
BMPs	2	100%	0	0	1	1	1	1
MGs	25	100%	0	5	25	25	25	25
MCM 2 (Public Involvement and Participation)								
BMPs	8	94%	6%	1	9	9	9	9
MGs	19	89%	11%	0	18	18	18	18
MCM 3 (Illicit Discharge Detection and Elimination)								
BMPs	10	74%	26%	0	11	10	10	10
MGs	10	74%	26%	0	11	10	10	10
MCM 4 (Construction Site Stormwater Control)								
BMPs	3	69%	31%	0	6	6	6	6
MGs	3	66%	34%	0	6	6	6	6
MCM 5 (Post-Construction Stormwater Management)								
BMPs	1	38%	63%	0	1	3	4	4
MGs	1	38%	63%	0	1	3	4	4
MCM 6 (Pollution Prevention & Good Housekeeping for Municipal Operations)								
BMPs	19	91%	9%	0	22	24	25	25
MGs	19	89%	11%	0	22	24	25	25
Total Number								
BMPs	43	93.0%	7.0%	0	50	53	55	55
MGs	77	96.1%	3.9%	6	83	86	88	88

*NOTE: New & redevelopment project requirements starts in Year-3 (Sept 8, 2008 -- Sept 7, 2009)

MCM 1 - Public Education and Outreach - All Participating Entities –

The Participating Entities all contributed as a group to comply with MCM 1 - Public Education and Outreach. Of all the MCM, BMP and MG portions required for Year-1, the public education and outreach programs were the most successful. Staff attributes this success to the municipal staff and stormwater program managers who all helped coordinate at least 25 Measurable Goals associated with BMP 1-1.a. In addition, the Participating Entities contributed \$141,000 for:

- School, residential and business outreach and public event presentations;

- Storm drain inlet stenciling, including volunteer recruitment and coordination;
- Adapting more than 13 selected BMP brochures (distributed more than 2,200 at events and over 24,000 mailed to residents);
- TV show titled "Stormwater Watch" aired 20 times between January and July 2007;
- Recycling and Household Hazardous Waste Services in Monterey County;
- Providing "Our Water Our World" (OWOW) flyers, point-of-purchase tags, and displays in hardware and garden stores; and
- Training employees of restaurants and local businesses.

This list highlights only a small portion of the education opportunities offered by the Monterey Regional Group.

A. MCM 2 – Public Involvement and Participation – All Participating Entities

Collectively, the Participating Entities effectively encouraged public involvement and participation to help carry out the objectives of the MRSWMP, through eight BMPs associated with MCM 2. In two annual workshops, the Participating Entities worked with local stakeholders to help develop the program (BMP 2-1.a) and later provide comments on the Annual Report (BMP 2-1.c). However, fewer people attended the workshops than expected.

The Monterey Regional Group sponsored several water quality monitoring events, including First Flush, Urban Watch, and Snap Shot Day. These events were well attended. More than 130 volunteers worked more than 950 total hours in these events. Pacific Grove and the City of Monterey provided much of the funding to collect and analyze the water samples, monitor the health of local water bodies, and identify potential pollutants of concern.

Other BMPs associated with MCM 2 are the individual responsibility of each Participating Entity. Staff's assessment of these, along with MCMs 3 through 6, are discussed in the following briefs for each municipality, and in more detail in staff's August 4, 2008 letter (see Attachment 1).

B. Carmel-by-the-Sea

As described above, Carmel was not a formal Participating Entity until recently. However, Carmel staff remained allied with the Monterey Regional Group by attending meetings, trainings, and public events, and contributing financially to the public education and outreach programs and water quality monitoring throughout the first year. Carmel stenciled more storm drain inlets than expected (92%), fully trained staff for MCMs 3, 4, and 6, and used its existing ordinance (even though a new one is scheduled to be adopted) to satisfy most BMPs and MGs required for the first year.

In the Annual Report, Carmel indicates its BMPs were appropriate and effective. However, staff found only sirrple tabulations of some BMPs and MGs, and no measurements of program effectiveness. Staff directed Carmel to begin quantitatively assessing effectiveness of their BMPs and MGs.

C. Del Rey Oaks

Del Rey Oaks stenciled all 30 storm drain inlets, which exceeded expectations. However, Del Rey Oaks staff did not attend the formal training other than viewing a hazardous material and landscape management video (MCMs 3, 4, and 6).

Del Rey Oaks did not adopt an enforcement tool or ordinance until after the end of the first permit year (on October 23, 2007), which reduced the effectiveness of the Illicit Discharge

Detection and Elimination (IDDE), Construction, and Post-construction program elements. Additionally, Del Rey Oaks did not implement a street sweeping program as required in BMP 6-6.a, due to staffing limitations and budget difficulties. Del Rey Oaks staff indicates they have established a budget for Year-2 and have contracted street sweeping to begin in fall of 2008. Del Rey Oaks staff did a good job cleaning and maintaining all of the City's storm drains and catch basins.

In the Annual Report, Del Rey Oaks indicates its BMPs were appropriate and effective. However, staff's review of the Annual Report found only simple tabulations of some BMPs and MGs, and no measurements of program effectiveness. Staff directed Del Rey Oaks to begin quantitatively assessing effectiveness of their BMPs and MGs.

D. Marina

Marina requested termination from the MRSWMP and General Permit in August 2007. Marina explained it has blocked all ocean outfalls and has no discharges to waters of the U.S. Water Board staff met with a Marina representative to discuss its stormwater runoff into seven vernal pools listed with beneficial uses in the Basin Plan. The City's request has some merit, but Marina must assure staff that they are protecting the beneficial uses of these surface water bodies.

In its August 4, 2008 letter and recent communications, staff directed Marina to work with the United States Environmental Protection Agency (USEPA) and Army Corps of Engineers to determine if Marina's vernal pools are jurisdictional waters (i.e., waters of the U.S.) and subject to Clean Water Act protection. Staff is also working with State Board legal counsel to determine how the Water Board may protect these vernal pools under the Porter-Cologne Water Quality Control Act and the Basin Plan if the vernal pools are not waters of the U.S. and subject to the Clean Water Act protection.

Despite its request for termination, Marina provided funding and recruited volunteers for the Annual Coastal Cleanup Day in Monterey, and, with local Boy Scouts' help, stenciled many of its storm drain inlets. However, Marina did not adopt an enforcement tool or ordinance, which reduced the effectiveness of the IDDE, Construction, and Post-construction program elements.

Marina reports it did a good job sweeping streets (BMP 6-6.a). However, staff did receive a complaint that Marina has not swept some streets in many years. Marina indicates it is expanding its street cleaning program to newly incorporated areas. Staff has encouraged Marina to remove all potential pollutants that may collect in storm runoff that leads to the vernal pools and percolation lots.

In the Annual Report, Marina indicates its BMPs were appropriate and effective. However, staff found only simple tabulations of some BMPs and MGs, and no measurements of program effectiveness. Staff directed Marina to begin quantitatively assessing effectiveness of their BMPs and MGs.

E. City of Monterey

The City of Monterey stormwater program is one of the better organized and functioning among the Monterey Regional Group. In its August 4, 2008 letter, staff commended Monterey for exceeding the funding requirements for Urban Watch and First Flush monitoring programs (BMP 2-2.d). Monterey's IDDE program has started successfully, as evidenced by their accounts of inspections and reporting of 22 illicit discharges (BMP 3-1.c). However, staff

directed Monterey to improve record keeping (3-3.b). Despite Monterey adopting their stormwater ordinance late (May 1, 2007), Monterey successfully implemented the IDDE, Construction, and Post-construction elements (BMPs 3-4.a, 4-1.a, 5-1.a). Staff also directed Monterey to improve reporting and accounting of construction site inspections and enforcement (BMP 4-4.a).

In the Annual Report, the City of Monterey indicates its BMPs were appropriate and effective. However, staff's review found only simple tabulations of some BMPs and MGs and no measurements of program effectiveness. Staff directed Monterey to improve record keeping and begin quantitatively assessing effectiveness of their BMPs and MGs.

F. Pacific Grove

Like Monterey, the City of Pacific Grove exceeded their funding criteria for Urban Watch and First Flush monitoring programs (BMP-2-2.d). Pacific Grove's stormwater ordinance was the first to be adopted among the eight Participating Entities and allowed Pacific Grove to implement their IDDE, Construction and Post-construction program elements (BMPs 3-4.a, 4-1.a, 5-1.a). Pacific Grove successfully implemented their municipal pollution prevention and housekeeping program, cleaned all hot spot storm drains, and trained staff.

In the Annual Report, Pacific Grove indicates its BMPs were appropriate and effective. However, staff's review found only simple tabulations of some BMPs and MGs and no measurements of program effectiveness. Staff directed Pacific Grove to improve record keeping and begin quantitatively assessing effectiveness of their BMPs and MGs.

G. Sand City

Sand City had moderate success implementing its stormwater program in 2006-2007. Although Sand City participated fully in the public programs, it did not adequately recruit volunteers for Coastal Cleanup Day. Sand City staff implemented some of their IDDE BMPs but did not provide any IDDE records or documentation. Water Board staff expected better implementation from Sand City, since Sand City was the second Participating Entity to adopt a stormwater ordinance on February 20, 2007 (BMPs 3-4.a, 4-1.a, 5-1.a). Although Sand City adopted an ordinance and trained staff (BMP 4-3.a) for construction site inspections, Sand City did not provide construction site inspection records as required by BMP 4-4.a.

Sand City's implemented most of their municipal operations and housekeeping BMPs but did not provide adequate information to assess effectiveness. For example, Sand City did not provide records of the amount of material collected from street sweeping.

Sand City indicates its BMPs were appropriate and effective. However, staff's review found only simple tabulations of some BMPs and MGs, and no measurements of program effectiveness. Staff directed Sand City to fulfill commitments to recruit volunteers, attend training opportunities, improve record keeping, and begin quantitatively assessing effectiveness of their BMPs and MGs.

H. Seaside

The City of Seaside did not properly implement many BMPs. Seaside missed several opportunities to implement many aspects of their stormwater program. For example, Seaside made only one attempt to recruit volunteers for Coastal Cleanup Day and did not conduct any business inspections. Additionally, Seaside reported an illicit discharge (a long-standing water softener brine discharge), but did not follow-up with the discharger and ensure resolution of the illicit discharge. Seaside implemented portions of its Construction Site Stormwater Control

program by adopting an ordinance and training staff, but did not provide any records or tracking information, as required for BMP 4-4.a..

Seaside implemented most of its BMPs for the Pollution Prevention and Good Housekeeping for Municipal Operations program (see Appendix A, Table A-8).

Seaside indicates its BMPs were appropriate and effective. However, staff's review found only simple tabulations of some BMPs and MGs and no measurements of program effectiveness. Staff directed Seaside to improve record keeping, improve IDDE BMP implementation, and begin quantitatively assessing the effectiveness of their BMPs and MGs.

I. Monterey County

Monterey County was moderately successful implementing MRSWMP in 2006-2007. Monterey County fully participated in public programs and stenciled 160 storm drains, but only partially implemented BMP 2-2.b, because staff made only one attempt to recruit volunteers for Coastal Cleanup Day.

The County has yet to adopt a stormwater ordinance, 22 months after MRSWMP approval. Absence of an ordinance limited implementation of Monterey County's IDDE program (MCM 3), Construction (MCM 4) and Post-Construction (MCM 5) BMPs.

The County did not adequately implement or report on BMPs for MCM 6 (Municipal Pollution Prevention and Housekeeping). For example, the County did not report any inspections of hazardous waste collection facilities or provide records of any deficiencies (BMP 6-2.a). This is inconsistent with the County's long-standing commitments to reduce pollutants in stormwater runoff. The County has a long history of stormwater program involvement dating back to a least 1998; the County helped develop the State's "Model Urban Runoff Program" guidance to assist other local agencies.

The County of Monterey indicates its BMPs were appropriate and effective. However, staff's review found only simple tabulations of some BMPs and MGs and no measurements of program effectiveness. Staff directed the County to implement and improve BMPs that should have been implemented in the first year, improve record keeping, and begin quantitatively assessing effectiveness of BMPs and MGs.

CONCLUSION

In general, staff found the Monterey Regional Group was generally successful implementing BMPs and MGs identified as first year commitments in the MRSWMP (82%). As a group program, the Participating Entities successfully provided a wide variety of educational materials to the public. However, several Participating Entities did not fully implement some BMPs or, in some cases, did not implement entire BMPs. Delays in adopting stormwater ordinances affected most Participating Entities' abilities to implement Illicit Discharge Detection and Elimination (MCM 3), Construction Site Storm Water Control (MCM 4), and Post-Construction Storm Water Management (MCM 5) elements. Overall, the MRSWMP Annual Report provided few quantitative assessments of program effectiveness. The lack of appropriate effectiveness measures and baseline data restricts the Participating Entities ability to track reduction of pollutants, or document behavioral changes and changes in public awareness. The Participating Entities must improve record keeping and evaluation of their activities in order to demonstrate compliance with the permit and storm water management that improves and protects water quality and beneficial uses.

ATTACHMENTS

1. Water Board letter dated August 4, 2008.
2. Tables Summarizing Implementation for all Best Management Practices (BMPs) and Measurable Goals (MGs) for all six Minimum Control Measures (MCM) during the September 8, 2006 to September 7, 2007 Year-1 annual term.

S:\Stormwater\Stormwater Facilities\Monterey Co\Municipal\Monterey Regional SWMP\Board Meetings\Sept 2008 Board Meeting\Monterey Regional Status Report Final.doc