

ANNUAL REPORT

General Permit for the Discharger of Storm Water from Small Municipal Separate Storm Sewer Systems (General Permit)

(See Small MS4 Annual Report Guidance for additional guidance on completing this Annual Report Form)

Check box if this is a new name, address, etc.

A. Permittee Information

- 1. Permittee (Agency Name): County of Santa Cruz
- 2. Contact Person: Rachel Fatoohi
- 3. Mailing Address: 701 Ocean Street, Room 410
- 4. City, State and Zip Code: Santa Cruz, CA 95060
- 5. Contact Phone Number: (831) 454-2160
- 6. WDID # 344MS03016
- 7. Have any areas been added to the MS4 due to annexation or other legal means? YES NO
If YES

Outfall	Has map been updated?		Has SWMP been updated?		Receiving Water Name
	YES	NO	YES	NO	

- 8. Are you subject to the Design Standards contained in Attachment 4 of the General Permit? YES NO
See the reports on BMPs 7-1-1 and 1-1-4 regarding implementation of design standards

- B. Reporting Period** (check one): July 1, 2011 to June 30, 2012
 July 1, 2004 to June 30, 2005
(Report is due by September 13) July 1, 2005 to June 30, 2006
 July 1, 2006 to June 30, 2007
 July 1, 2007 to June 30, 2008

C. Executive Summary

The County's Stormwater Management Program (SWMP) is a comprehensive program to establish and implement Best Management Practices (BMPs) to reduce the discharge of stormwater pollutants into water bodies and to protect and improve water quality within the urbanized but unincorporated areas of Santa Cruz County. The County's SWMP was approved by the Central Coast Regional Water Quality Control Board (CCRWQCB) on March 19, 2009, at which time the County was granted permit coverage under the statewide NPDES Phase II Municipal Separate Storm Sewer System Permit Water Quality Order No. 2003-0005-DWQ.

This annual report for the third year of SWMP implementation provides documentation of SWMP activities, consistent with the program effectiveness assessment laid out in section IV of Chapter 2 of the SWMP.

The Year Three BMP Implementation Status Table below gives a summary of the status of the third year of program implementation.

The table on page five summarizes the County's proposed modifications to the SWMP for Year Four. These modifications are in addition to modifications proposed in years one and two. If the CCRWQCB does not object to the proposed modifications prior to November 1, 2012, the County will update our SWMP accordingly by the end of 2012.

On March 21, 2011, CCRWQCB staff conducted a partial audit of the County of Santa Cruz's SWMP focusing on Chapters 5 and 8 (Minimum Control Measures 3 and 6). The audit resulted in findings in the following three categories: positive program attributes, program violations and program deficiencies. Please see Section D.2 at the end of this Report for a detailed discussion on how the County has addressed the violations and deficiencies noted in the audit

**County of Santa Cruz - Stormwater Management Program
 YEAR THREE BMP IMPLEMENTATION STATUS**

July 2011 - June 2012

BMPs Due in Year Three	Responsible County Departments See Legend	Status/ Schedule See Legend	Update/ Changes See Legend
Public Education and Outreach Coordinator: Ana Maria Rebelo - DPW			
3-1-1: Brochures	DPW, SAN	C/A	N
3-1-2: Website	DPW	C/O	N
3-1-3: Community Events	DPW, EHS, SAN	C/O	N
3-1-4: Dog Waste Program	PARKS	C/O	Y
3-1-6: Riparian Restoration and Protection	EHS, PLN	C/A	N
3-1-7: Septic System Maintenance	EHS	C/O	N
3-1-8: Public Opinion Survey	DPW	I/B	Y
3-1-10: Educational Programs for Children	DPW	C/B	N
3-1-11: Disadvantaged Communities	DPW	C/A	N
3-1-12: Landscape Workshop	DPW	C/O	N
3-1-13: Our Water Our World Program	DPW	C/A	N
3-1-14: Monterey Bay Area Green Business Program	DPW, SAN	C/A	N
3-1-16: Business/Industry Outreach	DPW, EHS, SAN	C/A	N
3-1-17: Media Campaign	DPW	C/O	N
3-1-18: Master Permit for Environmental Enhancement Projects	PLN	C/O	N
3-1-19: Water Quality Messages	AC, DPW, EHS, GS, PARKS, PLN, SAN	C/O	N
3-1-20: Interested Party List	DPW	C/O	N
Public Involvement and Participation Coordinator: Ana Maria Rebelo - DPW			
4-1-1: Storm Drain Stenciling	DPW	I/B	Y
4-1-2: Countywide Stormwater Information Exchange Group	AC, DPW, EHS, GS, PARKS, PLN, SAN	C/O	N
4-1-3: Coordinate Local Stakeholder Outreach	DPW	C/O	N
4-1-5: Community Clean Ups	DPW	C/O	N
4-1-6: Clean Beaches Coalition	DPW	C/O	N
4-1-7: Participate in Regional Efforts	DPW, GS, PLN	C/O	N
4-1-8: Water Quality Messages	AC, DPW, EHS, GS, PARKS, PLN, SAN	C/O	N
4-1-9: Public Opinion Survey	DPW	I/B	Y
Illicit Discharge Detection and Elimination Coordinator: John Ricker - EHS			
5-1-1: Storm Sewer Mapping	DPW	C/O	N
5-1-2: Sanitary Sewer Mapping	SAN	C/F	N
5-1-3: Illicit Discharge Program	EHS	I/B	N
5-1-4: Illicit Discharge Field Screening Investigation	EHS	C/O	N
5-1-5: MS4 Maintenance	DPW	C/O	N
5-1-6: Commercial/Industrial Facility Inspections	EHS, SAN	I/B	N
5-1-7: Information from the Public	AC, DPW, EHS, GS, PARKS, PLN, SAN	C/O	N
5-1-8: Locate and Correct Cross Contamination in Capitola	EHS, SAN	C/O	Y
5-1-9: Implement Pet Waste Ordinance	EHS	I/B	Y
5-1-10: Septic System Maintenance and Management Program	EHS	C/O	N

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5-1-11: Stormwater Ordinance	DPW, EHS, PLN	I/B	Y
5-1-12: Train Agency Staff	DPW, EHS, SAN	I/B	Y
5-1-13: Wasteload Allocation and Attainment Program	DPW, EHS, PLN	I/O	N
Construction Site Runoff Control Coordinator: Kent Edler - PLN			
6-1-1: Grading Ordinance	PLN	C/O	N
6-1-2: Riparian Corridor and Wetlands Protection Ordinance	PLN	C/O	Y
6-1-3: Erosion Control Ordinance	PLN	C/O	N
6-1-4: Evaluate Building Permit Program Efficacy	PLN	C/O	N
6-1-5: Discretionary Projects – Land Use Permits	PLN	C/O	N
6-1-6: Plan Review	PLN	C/O	N
6-1-7: Site Inspections	DPW, PLN	C/A	N
6-1-8: Train Agency Staff	DPW, PLN	C/O	Y
6-1-9: Construction Workshops	PLN	C/O	Y
6-1-10: Public Inquiry Program	PLN	C/O	N
Post-Construction Stormwater Management in New Development and Redevelopment Coordinator: Alyson Tom - DPW			
7-1-1: Land Use Policies and Ordinances	DPW, EHS, PLN	I/O	N
7-1-2: Post-Construction Stormwater Control Ordinance	DPW, EHS, PLN	C/O	N
7-1-3: Evaluate Existing Program Efficacy	DPW, PLN	F	N
7-1-4: Design Standards	DPW, PLN	C/O	N
7-1-5: CEQA Checklist	PLN	F	N
7-1-6: On-Going Project Post-Construction	DPW, EHS, PLN	C/O	Y
7-1-7: Train Staff	DPW, PLN	C/O	N
7-1-8: Train Members in Development/Construction Industries	DPW, PLN	C/O	N
7-1-12: Implementation Strategy for LID and Hydromodification	DPW, EHS, PLN	C/O	N
Good Housekeeping and Pollution Prevention for Municipal Operations Coordinator: Dawne Harman - DPW			
8-1-2: Facility BMPs	AC, DPW, EHS, GS, PARKS, SAN	I/B	Y
8-1-3: IPM and IVMP	DPW, GS, PARKS	C/O	N
8-1-4: Municipal Parking Lot Sweeping	DPW, GS, PARKS	I/B	Y
8-1-5: Chlorinated and Brominated Water Discharges	DPW, GS, PARKS, SAN	C/O	N
8-1-6: Storm Drain Facility BMPs	DPW, GS, PARKS	C/O	Y
8-1-7: Storm Water Pump Station BMPs	DPW	C/O	N
8-1-8: Street Sweeping BMPs	DPW	C/O	N
8-1-9: Road Repair and Maintenance BMPs	DPW	C/O	N
8-1-10: Municipal Maintenance Employee Training	DPW, EHS, GS, PARKS, SAN	C/A	N

Departments:

AC - Agricultural Commissioner
 DPW - Department of Public Works
 EHS - Environmental Health Services
 GS - General Services
 PARKS - Parks, Open Space and Cultural Services
 PLN - Planning Department
 SAN - Sanitation Districts

Status/Schedule

C - Complete
 I - In Process
 NA - Not Addressed
 O - On Schedule
 B - Behind Schedule
 A - Ahead of Schedule
 F - Finished

County of Santa Cruz - Stormwater Management Program PROPOSED MODIFICATIONS FOR YEAR FOUR	
BMP	Proposed Modification
Public Education and Outreach	
3-1-4: Dog Waste Program	Implement new “Bring a Bag, Take a Bag” dog waste collection systems throughout the County Parks and Beaches. Monitor compliance. County will still provide waste receptacles for dog waste. Dog Bags will be provided at all formalized Dog Parks. Add/replace distribution stations/signage as needed.
3-1-8: Public Opinion Survey	Postpone this BMP to Year Four. Coordinate regional survey to assess community based social marketing strategies and incorporate them into the educational BMPs where appropriate.
Public Involvement and Participation	
4-1-1: Coordinate/Implement Storm Drain Stenciling Program	Postpone and finalize marking County maintained urban inlets during Year Four. This BMP should be moved to Good Housekeeping section as part of BMP 8-1-6. The County will no longer use volunteers to fulfill this BMP due to quality control and liability issues.
4-1-9: Public Opinion Survey	See BMP 3-1-8
Illicit Discharge Detection and Elimination	
5-1-3: Illicit Discharge Program	Suggest a one-year delay in the time schedule.
5-1-6: Commercial/Industrial Facility Inspections	Suggest a one-year delay in the time schedule.
5-1-8: Locate and Correct Cross Contamination in Capitola	Wording in BMP should be modified to include actions to evaluate and reduce sewage leaks and spills in all sewered areas.
5-1-9: Implement Pet Waste Ordinance	Defer amendment of Pet Waste Ordinance and associated educational materials to Year Three or Four.
5-1-11: Stormwater Ordinance	Suggest a one-year delay in the time schedule.
5-1-12: Train Agency Staff	Suggest a one-year delay in the time schedule.
Construction Site Runoff Control	
6-1-2: Riparian Corridor and Wetlands Protection Ordinance	The riparian diagrams will be posted on the Planning Department website. We also propose to only track riparian exceptions as there is not an easy way in our system to track exemptions in a meaningful way.
6-1-8: Train Agency Staff	We found it more effective to spend time on training rather than developing and tracking quizzes, so in Year Four we plan to cease giving quizzes to staff.
6-1-9: Construction Workshops	While we tried very hard to get contractors to attend our free workshop, we still had sparse attendance from contractors. Additionally, of the 39 attendees that were at the Year Three community workshop, there were not a lot of new faces. We therefore shifted our focus to host a QSD / QSP training, which despite the cost and time commitment was very well attended. In Year Four we proposed to cease the community workshops and instead focus on hosting additional QSD/ QSP trainings. These trainings are more broad and detailed. We will also try to host a CESSWI review course if we can find an interested company to provide one.
Post-Construction Stormwater Management in New Development and Redevelopment	
7-1-6: On-Going Project Post-Construction	Update measurable goal 1 and 2 so that they reflect updates to the County Design Criteria requiring annual reports and periodic inspection by the County only for large stormwater management facilities.
Good Housekeeping and Pollution Prevention for Municipal Operations	

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8-1-2: Facility BMPs	Suggest a delay in the time schedule to address the cost-prohibitive deficiencies that will require reconstruction/regarding until funds become available from grants or other funding sources..
8-1-4: Municipal Parking Lot Sweeping	Postpone schedule due to funding limitations.
8-1-6: Storm Drain Facility BMPs	Include marking County maintained urban inlets during routine maintenance as part of this BMP. Finalize these marking in Year Four.

ACRONYMS AND ABBREVIATIONS

BASMAA	Bay Area Stormwater Management Agencies Association
BEMP	Best Environmental Management Practices
BMP	Best Management Practice
BWET	Bay Watershed Education and Training
CAP	Citizens Advisory Panel
CASQA	California State Stormwater Quality Association
CCRMC	Central Coast Recycling and Solid Waste Media Coalition
CCRWQCB	Central Coast Regional Water Quality Control Board
CDC	County Design Criteria
CEQA	California Environmental Quality Act
CPESC	Certified Professional in Erosion and Sediment Control
CUPA	Certified Unified Program Agencies
CWC	Coastal Watershed Council
DAG	Departmental Advisory Group
DPW	Department of Public Works
EHS	Environmental Health Services
EPA	Environmental Protection Agency
GIS	Geographic Information System
GSD	General Services Department
GSP	Green Schools Program
HazMat	Hazardous Materials
IPM	Integrated Pest Management
IVMP	Integrated Vegetation Management Program
LID	Low Impact Development
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MS4s	Municipal Separate Storm Sewer System
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resources Conservation Services
OWOW	Our Water Our World
Parks	Parks, Open Space and Cultural Services Department
PSA	Public Service Announcement
RCD	Resource Conservation District
RWQCB	Central Coast Regional Water Quality Control Board
SIN	Stormwater Information Exchange
SOS	Save Our Shores
SSOs	Sanitary Sewer Overflows
SUSMP	Standard Urban Stormwater Management Program
SWAG	Santa Cruz Watershed Action Group
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	California State Water Resources Control Board
TMDL	Total Maximum Daily Load
USGBC	U.S. Green Business Council
WAAP	Wasteload Allocation Attainment Program
WFS	Waste Free Schools

D.1 Minimum Control Measures

PUBLIC EDUCATION AND OUTREACH PROGRAM

Target Audience: County Households

BMP 3-1-1 Brochures

Implementation Details: Brochures provide information on how community members can prevent stormwater pollution. Brochures and posters are available in Spanish and English. (Provide the brochures electronically on the website in order to minimize waste.)

Measurable Goal: Compile the number of brochures distributed. Reach 15 percent of the target audience each year.

Status: During the past seven years the County distributed over 55,000 pieces of educational material for County households, restaurants, vehicle service facilities, etc., about preventing storm water pollution. Most of our brochures are translated to Spanish. The County distributes the “Monterey Bay Begins On Your Street” brochures at school presentations through the Green Schools Program. Students in turn bring them home to share stormwater education with their families. Approximately 500 brochures were sent to Spanish speaking households during this fiscal year.

In addition, the County distributes quarterly newsletters promoting pollution prevention and healthy habits for attaining clean water. Approximately 240,000 newsletters go out annually to households and businesses in the County. Related stormwater topics from this last year included “Working together with the residents to protect our bay, Fluorescent bulbs recycling for businesses, E-Waste Collection, No Drugs Down the Drain, Styrofoam Ban broadened, Bring your Own campaign, and the County of Santa Cruz ban on plastic bags.” These articles can be found at the following link:

<http://www.dpw.co.santa-cruz.ca.us/www.santacruzcountyrecycles/News/index.html>

Given there are approximately 60,000 households in the unincorporated Santa Cruz County, the measurable goal was exceeded in Year Three.

The list of public education and outreach materials is given in the following Table.

Name of Brochure
Monterey Bay Begins On Your Street
Pollution Prevention Tips: Preventing Plumbing Problems And Sewer Overflows
Pollution Prevention Tips: Tending Your Garden, Pool And Spa
Pollution Prevention Tips: Taking Care Of Your Home And The Environment
Pollution Prevention Tips: Taking Care Of Your Vehicle And The Environment
Vehicle Service Facility Best Environmental Management Practices
Restaurant Wastewater Best Environmental Management Practices
County of Santa Cruz Recycling Guide
Worm And Backyard Composting
Household Hazardous Waste Collection Program

Alternatives To Household Chemicals
Environmentally Acceptable Food Packaging
Green Building: A Guide To Sustainable Materials And Methods In Santa Cruz County
Use And Disposal Of Pesticides
No Drugs Down The Drain Sharp And Medication Solutions In Santa Cruz County
Less Toxic Pest Management Tips For Pesticides And Water Quality
Less Toxic Pest Management Tips For Growing A Healthy Garden
Less Toxic Pest Management Tips For A Beautiful Lawn
Less Toxic Pest Management Tips For Keeping Fleas Off Your Garden
Less Toxic Pest Management Tips For Keeping Cockroaches Out Of Your Garden
Less Toxic Pest Management Tips For Controlling Aphids In Your Garden

Proposed Modification: None

Planned Year Four Activities: Continue to compile the number of brochures distributed and reach 15 percent of the target audience in 2012/13. Twenty percent of these brochures will be distributed in Spanish to Spanish speaking households.

BMP 3-1-2 County of Santa Cruz Website

Implementation Details: The website will provide information on how community members can prevent stormwater pollution.

Measurable Goal: We continued to compile the number of website hits annually.

Status: We completed the BMPs for this item and identified room for improvement. The County’s stormwater website was updated to include SWMP program information as well as links to related information so that it is easier to access. The stormwater website received 5,415 visitors in Year Three.

Cross promotion with other environmental programs such as advertising regionally and locally in the EcoCruz web portal and newsletters was continued in Year Three. The website address was also added to the general stormwater brochure (Monterey Bay Begins On Your Street) which was distributed to schools, parents via schools, businesses, and events. New materials, such as last year’s Annual Report and information on the County’s new Runoff and Pollution Control Ordinance were added to the website.

Proposed Modification: None

Planned Year Three Activities: Continue to compile the number of website hits annually and develop improvements to increase the utility of the website (i.e. improve presentation, and add new materials posted on site).

BMP 3-1-3 Community Events

Implementation Details: Public events can reach a wide audience in providing information on how to prevent stormwater pollution.

Measurable Goal: Compile the number of events organized or attended. Include the number of people

attending the event. Participate in at least two events each year.

Status: The County sponsors and coordinates Earth Day Santa Cruz on an annual basis. Approximately 4,000 people visited Earth Day in April 2012. Earth Day has become the only big County-wide event where all non-profit and government organizations get together to convey their environmental message. There were approximately 100 vendors, of which half were non-profit agencies offering environmental education and providing educational materials, including the County of Santa Cruz' booths. Information on waste reduction, where to recycle medicines and sharps, hazardous materials, stormwater BMPs, water quality education, green business, and sanitary sewer overflow prevention were distributed at Earth Day. This year, the County passed its Climate Action Strategy (CAS) to be adopted in the following years. The Planning Department is the leading agency for CAS, and staff participated in the event this year educating County residents on the importance of reducing GreenHouse Gas emissions. The targeted population to be reached during this event were residents of the City of Santa Cruz, unincorporated areas of the County of Santa Cruz, and neighboring Cities.

In addition, every year, the County partners with Save Our Shores (SOS), Ecology Action, and the Surfrider Foundation to promote Coastal Cleanup Day (CCD). During this event, SOS, the main coordinator agency of CCD, works with hundreds of volunteers to remove thousands of pounds of trash from beaches, rivers, watersheds, lakes and waterways. Between Santa Cruz and Monterey Counties alone, 4,584 volunteers removed 14,219 lbs of trash and 3,284 lbs of recyclables during CCD 2011.

Proposed Modification: None

Planned Year Four Activities: Continue to compile the number of events organized or attended with displays, and include the number of people attending the event. Continue to participate in at least two events each year.

BMP 3-1-4 Dog Waste Program

Implementation Details: County Parks provides dog waste bag boxes at the parks. Communicate with Parks staff to determine if and where additional signage or doggie waste bags distribution locations are needed.

Measurable Goal: Continue to distribute doggie waste bags. Annually report the number of bags distributed.

Status: Approximately 34,000 doggie waste bags were distributed by County Parks in 2011. Below is the list of locations where doggie waste bags are distributed:

Dog Waste Box Locations - 2011

Parks

Anna Jean Cummings Park
Felton Covered Bridge Park
Highlands Park
Ben Lomond Park
Aptos Park
Polo Grounds
Hidden Beach Park
Seascape Park
Willowbrook Park
Maplethorpe Park
Coffee Lane Park

Soquel Lyons Park
Santa Cruz Gardens Park
Floral Park
Twin Lakes Park
Hestwood Park
Jose Avenue Park
Brommer Park
Moran Lake Park
Pinto Lake County Park
Mesa Village Park
Scott Park
Aldridge Lane Park

Beach access

Rockview
38th Avenue
30th Avenue
26th Avenue
21st Avenue
20th Avenue
Johans Beach Drive
Pleasure Point
Via Palo Alto
Dolphin and Sumner Beach Access
13th Avenue
12th Avenue

Proposed Modification: Next year’s Parks budget does not include funding for doggie bags except for County’s formalized dog parks (Pinto, Polo and Chanticleer). County staff will begin the process of installing the “Bring a Bag, Take a Bag” dispensers and related signage. It is anticipated that by the end of summer Parks will be relying on the public to bring its own dog waste disposal bags. Parks implemented this type of dog waste collection system at the new Felt St. Park which opened a few months ago. There have not been any complaints thus far and compliance has been great.

Planned Year Four Activities: Implement new “Bring a Bag, Take a Bag” dog waste collection systems throughout the County Parks and Beaches. Monitor compliance. County will still provide waste receptacles for dog waste. Dog Bags will be provided at all formalized Dog Parks. Add/replace distribution stations/signage as needed.

BMP 3-1-5 Watershed and Creek Signage Project

Completed in Year One.

BMP 3-1-6 Riparian Restoration and Protection

Implementation Details: Riparian restoration and protection are important aspects of achieving a healthy watershed. The County has a Stream Care Guide that it has developed and distributed for this purpose.

Measurable Goal: Distribute 50 Stream Care Guides to streamside residents. Distribution will be prioritized based on known riparian habitat conditions.

Status: In Year Three approximately 45 guides were distributed to County residents. Currently, guides are placed at the County Environmental Health and Planning Department counters. Through a partnership with the County of Santa Cruz RCD, the guide is distributed to the agricultural community too. The Stream Care Guide has also been posted on the Stormwater website. The guide can be found at:

http://www.dpw.co.santa-cruz.ca.us/Streamcare_Guide.pdf

Proposed Modification: None

Planned Year Four Activities: Continue to distribute the Stream Care Guide at events, fairs, and the Environmental Health and Planning Department counters.

BMP 3-1-7 Septic System Maintenance

Implementation Details: Poorly maintained septic systems can be a significant source of fecal indicator bacteria which is a primary pollutant of concern in the County. The County has developed educational materials for septic system owners as part of the septic system maintenance program.

See http://sccounty01.co.santa-cruz.ca.us/eh/sewage_disposal/ehownergd.htm

Measurable Goal: Provide information on the educational aspects of the County's septic system maintenance program in the annual report. Distribute septic system educational materials to at least 100 households.

Status: The County EHS has developed educational materials for septic system owners as part of the septic system maintenance program. EHS distributes hard copies of brochures on septic systems and greywater systems (approximately 120 brochures per year) at public counters and to residents who make direct inquiries. The brochures are also available on the County website referenced above.

Proposed Modification: None

Planned Year Four Activities: Continue to provide information on the educational aspects of the County's septic system maintenance program in the annual report. Distribute septic system educational materials to at least 100 households annually.

BMP 3-1-8 Public Opinion Survey

Implementation Details: Conduct surveys to determine effectiveness of programs and future program direction. Conduct an initial survey to determine baseline and follow-up survey to determine effectiveness of programs. Coordinate with other local agencies for this survey.

Status: This BMP is not completed yet.

Proposed Modification: Move this BMP to Year Four. Coordinate regional survey to assess community based social marketing strategies and incorporate them into the educational BMPs where appropriate.

Planned Year Four Activities: Determine target audiences and method and distribution for public survey. Citizens solicited and survey completed. Report outcome of public survey and schedule of follow-up activities

in the annual report.

BMP 3-1-9 Social Marketing Strategies

Implementation Details: Continually assess new public education methods in order to improve the public education and outreach program effectiveness.

This BMP is not due until Year Four.

Planned Year Four Activities: Assess community based social marketing strategies and incorporate them into the educational BMPs where appropriate.

Target Audience: Children, regional agencies and local businesses

BMP 3-1-10 Educational Programs for children. (K-12)

Implementation Details: Classroom presentations are provided through the GSP.

Measurable Goal: Educate 10 percent of school children every year. Coordinate stormwater education with our Green Schools Program. Administer pre and post presentation evaluations.

Status: The GSP works with County schools to educate students, teachers, and staff on environmental topics such as storm water runoff, water quality and conservation, energy conservation, recycling, and waste reduction. The goal of this program is to support County schools as they evolve into “Green Schools” that promote wise resource activities by reducing waste, preventing pollution, and training students to conserve scarce resources like energy and water. The program provides both in-class and school-wide presentations, educational assemblies, and technical assistance to member schools. Following the presentations, the students reinforce this education with field trips such as beach cleanups and landfill tours that complement classroom education. The County contracts with Save Our Shores (SOS), a local non-profit whose mission is to promote clean and healthy oceans. SOS conducts assemblies and classroom presentations, as well as field trips such as beach and watershed cleanups and storm drain labeling outings. The County also funds the O’Neill Sea Odyssey (OSO) education program, another local non-profit organization, whose mission is to provide unique ecology, navigation, and marine sciences learning experiences to regional students in grades 4 through 6.

In Year Three, SOS conducted 56 presentations, including 12 assemblies and 44 individual class presentations. For these presentations, SOS worked with a total of 133 classes and educated 3,256 students. SOS also conducted 37 cleanups including 10 beach cleanups and 27 inland cleanups where 937 students helped remove 650 pounds of trash and 186 pounds of recyclable material from local beaches, waterways and school campuses. In addition to these school cleanups, SOS engaged students in the regional July 4th and 5th clean up activities. These activities provided students with an opportunity to receive community service credit during the summer. Students also helped educate people about recyclable items and distributed approximately 500 bags to those that needed them. In order to help gauge program effectiveness, SOS conducted surveys with a random sample of students. In total, 121 students were surveyed from elementary to high school classes. The survey used was designed with funding and staff support from NOAA’s BWET program and consisted of 6 questions designed to gauge student knowledge regarding specific topics and behavior change. SOS staff administered the 6 questions in the beginning and end of our presentations, and pre and post answers were analyzed. Overall, the surveys indicated that students had significant increases in both knowledge of topics covered and positive behavior change. For example, when students were asked whether they felt like they knew a lot about the animals and plants found in the ocean, only 68 students responded ‘yes’ in the pre program survey while 105

responded ‘yes’ in the post program survey. Similarly, when students were asked whether they knew a lot about things that are bad for rivers, the ocean, and the environment, 54 students responded ‘yes’ in the pre program survey while 103 responded ‘yes’ in the post program survey.

Regarding behavior change questions, when students were asked whether or not they littered, 54 students responded ‘yes’ in the pre program survey compared to 28 in the post program survey. Similarly, when students were asked whether they recycled, 59 indicated ‘yes’ in the pre program versus 106 in the post program survey. Interestingly, SOS saw the least positive increase in knowledge correlated with our question surrounding whether or not students conserve energy or water. SOS will thus be using these survey results to help us increase this type of messaging for the coming school year.

Additionally, 1,170 students also participated in the three-hour, hands-on learning event aboard the OSO’s 65-foot catamaran in the Monterey Bay National Marine Sanctuary, with follow-up lessons in the Education Center at the Santa Cruz Harbor. After participating in the program, students are required to perform a community service project. The primary purpose of the program is to foster awareness of environmental stewardship and personal responsibility among program participants. This is done by delivering an interactive curriculum that emphasizes the connections between land and sea through a multidisciplinary approach including ecology, biology, and mathematics. A community service project encompasses a broad range of activities such as native plant restoration, beach or creek cleanup, homeless garden projects, community environmental awareness projects, school recycling programs, and letter-writing campaigns for environmental causes. Teachers and group leaders are required to submit proof of completion of a community service project, which can be done via the OSO website.

For more information on the GSP see:

http://www.dpw.co.santa-cruz.ca.us/www.santacruzcountyrecycles/Green_Schools/index.html

The most recent information available from the County Office of Education indicates an enrollment of approximately 40,000 students. A total of 4,426 students were educated through the GSP in Year Three. This means approximately 12 percent of students were educated through the GSP in the third year. This is over the measurable goal for the year.

Proposed Modification: None

Planned Year Four Activities: Continue to educate 10 percent of school children every year and administer pre and post presentation evaluations pending on funding.

BMP 3-1-11 Disadvantaged Communities

Implementation Details: Some communities may not be reached by initial outreach efforts. This BMP will identify potential communities that could benefit from stormwater education.

Measurable Goal: Identify communities not previously targeted by the stormwater education program.

Status: The County identified disadvantaged students which are being targeted through the GSP. The GSP aims to make its learning experiences available to students from all economic backgrounds. The economic levels of the communities from which participating groups came were estimated using the percentage of students receiving free or reduced price meals. Groups with less than 1/3 of their students receiving this benefit

were considered “higher income,” and groups with more than 2/3 of their students receiving this benefit were considered “lower income.” Groups that fell between these extremes were considered “middle income.” Using this method of analysis, approximately 26 percent of participating groups came from lower-income communities, 12 percent came from middle-income communities, and 46 percent came from higher-income communities.

Proposed Modification: None

Planned Year Four Activities: Continue implementing outreach targeting the communities identified.

BMP 3-1-12 Landscape Workshop

Implementation Details: Provide an annual landscape workshop, contingent on funding.

Measurable Goal: Provide an annual landscape workshop.

Status: The City and County of Santa Cruz partnered during Earth Day events to bring two composting workshops to residents. Topics included stormwater pollution prevention, Integrated Pest Management, water conservation and erosion control among others. Graduates from the County’s previous “Master Composters” program led these workshops. Approximately 100 residents attended.

In addition, the County of Santa Cruz, in partnership with Ecology Action, developed the Monterey Bay Green Gardener Certification Program, which is offered during spring and fall. The Monterey Bay Green Gardener Certification Program offers hands-on, professional, bilingual training to landscape industry workers and the residential gardening community. The program’s focus is to demonstrate ecological alternatives to environmentally destructive landscaping practices that cause non-point source pollution and water waste in the watersheds of the Monterey Bay National Marine Sanctuary. The Monterey Bay Green Gardener Certification Program is financially supported by a consortium of water utilities and four adult education centers located in four major demographic areas of the Monterey Bay. BWET funding has allowed the program to incorporate hands-on learning experiences into the training so that Green Gardener alumni will be better watershed managers when making landscape maintenance decisions. The Monterey Bay Green Gardeners Program trained 129 landscapers in ecological landscaping methods in 2012, and at the end of our 6th season we have 554 graduates.

Proposed Modification: None

Planned Year Four Activities: Provide an annual landscape workshop, contingent on funding.

BMP 3-1-13 Our Water Our World Program

Implementation Details: Provides pollution prevention and integrated pest management resources and training to retail store employees. Continuation of program is contingent upon grant funding.

<http://ourwaterourworld.org>

Measurable Goal: Provide training at 12 garden centers each year in Years Two through Five.

Status: The County was able to secure grant funding for implementation during Year Three.

The Monterey Bay *Our Water Our World* (OWOW) program promotes integrated pest management (IPM) strategies to home gardeners and professional landscapers to prevent pesticide and fertilizer contamination of urban waterways surrounding the Monterey Bay National Marine Sanctuary. In partnership with Ecology Action, the County of Santa Cruz OWOW program provides pollution prevention trainings and IPM resources to employees and customers of 12 participating garden retail stores serving residents living in watersheds located in the County.

The OWOW program trained a total of 26 new employees for an average of 30 minutes in IPM and how to use our materials to educate customers. A packet of OWOW fact sheets, an insect identification chart, and information about UC cooperative extension on-line retail employee training in IPM and how to read pesticide labels was left with each employee. OWOW literature racks were improved with the installment of plexiglass to hold literature in place. Shelftalkers were renewed, and employee and customer pest management questions were answered during the course of each visit.

Two three-hour in-store tabling events were conducted in the pesticide isle at Orchard Supply Hardware, Capitola on Saturday June 2, 2012 and Sunday, June 24, 2012. A total of 45 people were provided less-toxic pest management consultations at these events, which were coordinated through a DPR Alliance grant via BASMAA. Also in June 2012, the County of Santa Cruz contributed funds for Ecology Action staff to coordinate a regional radio campaign with other OWOW municipal sponsors. The paid PSA directs customers to the OWOW symbol when looking for a less-toxic pest control product, and to the Monterey Bay Green Gardener website when looking for an ecological landscaping service provider. A total of 146 spots were played on Saturday and Sunday from June 23rd through the 8th of July, 2012 on KCDU-101.7, the Beach, KPIG-107.5, and KKHK-95.5. During the June radio campaign, www.green-gardener.org received 70 unique site visits.

Below is our regional OWOW 60-second PSA script:

“Killing lawn and garden pests with poison can be unsafe for humans, pets and the environment. Poison is poison. When you apply pesticides and fertilizers in your landscape, rain and irrigation can carry these chemicals into storm drains, creeks, rivers, and wetlands of the Monterey Bay National Marine Sanctuary. These chemicals can harm fish, seals, and other water creatures.

Take care of your lawn and garden with less toxic alternatives! Look for the *Our Water Our World* logo and information display where pesticides and fertilizers are sold at local nurseries and hardware stores. Or, hire a certified Green Gardener or an ecological landscaping contractor. Green Gardeners have been trained on less-toxic pest control, efficient irrigation systems, drought tolerant plant choices and more. For more information, visit www.green-gardener.org. This announcement is sponsored by the City of Santa Cruz, the County of Santa Cruz, and the City of Watsonville.”

Proposed Modification: None

Planned Year Four Activities: Provide training at 12 garden centers each year, contingent upon grant funding.

BMP 3-1-14 Monterey Bay Area Green Business Program

Implementation Details: Promotes pollution prevention, waste minimization, and implementing BMPs. <http://www.montereybaygreenbusiness.org>

Measurable Goal: Meet quarterly to coordinate the programs. Certify 30 Green Businesses each year. Provide program tracking information in the annual reports.

Status: The Monterey Bay Area Green Business Program and Pollution Prevention Task Force meets quarterly. To date, the Monterey Bay Green Business Program has certified a total of 306 businesses in the County of Santa Cruz. This number includes the Cities of Scotts Valley, Watsonville, Capitola and the unincorporated area of the County, and it excludes the City of Santa Cruz which has a separate database. The County joined the Statewide database to track progress on various environmental areas.

During the last year this incentive program has been expanded to reach additional business areas. A new checklist was developed for nail salons during this year. The business sectors are chosen based on their opportunity to prevent pollution. In addition, the main checklist for offices has been revamped. During the past fiscal year, all 33 County office buildings were certified green and the main government building was recertified. The County changed its janitorial products to green seal certified, trained and surveyed all employees on the benefits of going green and awareness and included green purchasing BMPs in its County-wide policy for the past 3 years. It also conducted stormwater education to construction crews.

The following are some environmental measures to be considered as County efforts to go green:

Environmental Benefits:

These environmental benefits are calculated from certain quantitative measures that participating businesses completed when filling out their checklists. The column titled *Per Year* savings show the environmental outcomes each year that the measures are implemented and the column titled *Since Enrollment* shows the total environmental outcomes since enrollment of the participating businesses.

	Per Year	
Greenhouse Gas Emissions Saved	1,353,958 lbs of CO2	
<i>Recycling and Composting</i>	685,122 lbs of CO2	
<i>All other measures</i>	668,836 lbs of CO2	
Solid Waste Diverted from Landfill	1,991,180 lbs	
Energy Saved	747,711 kWh	
Water Saved	1,909,122 gallons of water	
Hazardous Waste Reduced (gallons)	142 gallons	
Fuel Saved	2,208 gallons	
Mercury Reduced	31 mgs	
Hazardous Waste Reduced (lbs)	1,200 lbs	

Following are some of the stormwater pollution prevention opportunities as they relate to particular business sectors that are put into practice with the Green Business Program:

Vehicle service facilities: Switch to dry shop practices, improved spill cleanup, minimize tracking spills outside of shop, no servicing of vehicles outside of service bays, and no car washing where wastewater can enter a storm drain.

Food Service and Janitors: No washing of floor mats outside, improved tallow storage, eliminate the discharge of mop water outside, exterior dumpster storage BMPs, and proper pressure washing wastewater management.

Construction/Remodeling: Erosion control, exterior storage, and paint management.

Plumbers: Sanitary sewer overflow reductions.

Landscapers: Eliminate the use of pesticides that can come into contact with stormwater.

Painting Contractors: Eliminate washing of paint brushes outside. Specify BMPs for pressure washing.

Public Works has been involved in a Statewide California Green Business Program Network for the past seven years. Program coordinators from different Counties throughout the State have joined together to share resources.

Proposed Modification: None

Planned Year Four Activities: Continue to meet quarterly to coordinate the Green Business and Pollution Prevention programs. Certify at least 30 Green Businesses. Provide program tracking information in the annual reports.

BMP 3-1-15 Green Building Outreach

Implementation Details: Promote stormwater BMPs, water conservation, and energy conservation in local construction projects. BMP brochures are available on the County website.

Measurable Goal: Promote stormwater BMPs, water conservation, and energy conservation in local construction. Certify 30 professionals per year.

Status: This BMP was consolidated with the BMP 3-1-14 Monterey Bay Area Green Business Program.

Proposed Modification: None

Planned Year Four Activities: None.

BMP 3-1-16 Business/Industry Outreach

Implementation Details: Written materials and posters were distributed to businesses to minimize illicit discharges to the storm drain. Provide materials in both English and Spanish when applicable. This outreach currently targets the following sectors: dentistry, photo processors, restaurants, dry cleaners, printers, machine shops, surfboard manufacturers, paint contractors, medical facilities, plumbers, restaurants, automotive services and office and retail.

If grant funding can be found, this program will be expanded to cover the tourist industry.

Measurable Goal: Compile number of materials distributed annually. Compile and report on the percentage of each type of business/industry contacted in each annual report. Deliver brochures to at least 100 businesses by hand to enable direct communication with business owners. Conduct at least two workshops on pollution prevention.

Status: The Environmental Compliance Unit of the Sanitation Districts conducted 465 industrial inspections

within the last fiscal year. District personnel continue to educate light industries operating in Santa Cruz County on process-specific pollution prevention and waste minimization opportunities. During inspections, Best Environmental Management Practices (BEMP) pamphlets and demonstrations for each particular industry are given to business owners, managers, and employees. The inspector highlights proper stormwater issues and the importance of following the BEMPs. Additionally, the inspector explains the differences between storm drains and the sanitary sewer drains. BEMPs have been created for vehicle service facilities, dentists, photo processors, restaurants, dry cleaners, printers, machine shops, surfboard manufacturers, paint contractors, mobile car washers and medical facilities. Businesses/industries that are inspected are given the appropriate BEMP pamphlet. These pamphlets can be found at:

<http://www.dpw.co.santa-cruz.ca.us/environment.htm>

The following businesses were inspected by the District in 2011/12:

- 5 Carwashes
- 13 Dry Cleaners
- 7 Water Treatment Supply
- 3 Hospitals
- 10 Machine Shops
- 5 Photoprocessors
- 3 Print Shops
- 48 Miscellaneous Industries
- 273 Food Service Establishments
- 90 Vehicle Service Facilities
- 2 Wineries
- 4 Educational Institutions
- 1 Medical Center
- 1 Dental

NOTE: Inspections consisted of full facility inspection, partial facility inspection (in order to alleviate a specific problem on a certain date), plan reviews and new installs, and re-inspections. Only full facility inspections are recorded in the District's Pretreatment Program database.

District staff also partnered with the County, neighboring Cities, and non-profits to hold an Earth Day event in April 2012. The event featured kids' activities, while also disseminating adult environmental outreach. The event featured five pollution prevention workshops. The workshops included composting, green building, greywater systems and earth friendly eating. The event was attended by nearly 4,000 people.

Proposed Modification: None

Planned Year Four Activities: Continue to compile number of materials distributed annually; report on the percentage of each type of business/industry contacted in each annual report; deliver brochures to at least 100 businesses by hand to enable direct communication with business owners; conduct at least two workshops on pollution prevention; and, if grant funding becomes available, implement outreach to the tourist industry.

BMP 3-1-17 Media Campaign

Implementation Details: Media campaigns based on events such as Earth Day, Pollution Prevention Week, Creek Week, Marine Debris awareness, and year-round campaigns promote recycling and waste reduction, and storm water education. The County partners with non-profit organizations to promote pollution prevention. Media information will be provided in both English and Spanish.

Measurable Goal: Co-sponsor at least two media campaigns each year. Advertise County website to increase the number of visitors to the website. Track and report on the number of visitors to the County website.

Status: Media campaign events such as Earth Day, Pollution Prevention Week, Creek Week, Marine Debris awareness, and year-round campaigns promote recycling, waste reduction and stormwater education. The County partners with other agencies in the Monterey Bay region, as well as non-profit organizations, to promote pollution prevention. This year the County sponsored and participated in various local and regional media campaigns such as the “dog doo,” Protect your Central Coast, Bring your Own (water bottle, mug, bag, lunch box), California Coastal Cleanup Day, Our Water Our World, and various storm drain PSAs, surpassing the measurable goal for this BMP. These were placed in multiple radio, television and movie theater ads. These ads were run in English and Spanish.

The Central Coast Recycling and Solid Waste Media Coalition (CCRMC) campaign included Spanish and English language broadcast radio and television to effectively reach the tri-County regional population which ran through June 2012. The mission of the CCRMC is to promote uniform waste reduction, reuse and recycling messages in Monterey, Santa Cruz and San Benito Counties using media to help achieve sustainable lifestyles.

The campaign focus for FY 11-12 was to promote waste reduction by replacing commonly used single-use disposable items with reusable ones, while reinforcing the campaign brand message “***Reduce, reuse, recycle and don’t litter to protect your central coast; the difference you make is real.***” The “remember” theme was carried over from its introduction at the end of the last campaign fiscal year.

Based on research regarding effectiveness of environmental / sustainability cause marketing and a recommendation by AdManor, the target audience for English was adjusted to target adults 25+, while Spanish remained targeting adults 18+.

Media distribution:

- 43% media budget allocated to Spanish media (includes KDON Radio)
- 57% media budget allocated to English media

Media delivered:

- 1,010 Spots TV English (plus promotional mentions)
- 617 Spots TV Spanish (plus promotional mentions)
- 978 Spots Radio English (plus promotional mentions)
- 899 Spots Radio Spanish
- 3,504 total spots, plus promotional mentions, web and mobile impressions

Earth Day promotion:

- 3 consecutive weeks of media promoting “bring your own bag,” Earth Day events
- 2 English radio interviews
- 1 Spanish television interview
- 1 English radio contest
- 1 Spanish TV contest

Facebook:

- Protect Your Central Coast page launched January 5, 2012
- 59 Likes/fans

Creative delivered:

2 new TV spots executed in Spanish (English produced in FY 10-11):
 “Remember Mugs” and “Remember Bags”
27 new 15-second spots in English
30 new 15-second spots in Spanish
3 new 60-second “remember” spots in English
2,500 static cling window reminders to “remember” / “recuerde” reusable bags
(Productions can be seen/heard at <http://protectyourcentralcoast.org/media.php>)

Creative “reused”:

4 30-second English TV spots from FY 10-11
2 30-second Spanish TV spots from FY 10-11
Several 15-second recorded “tips” that did not require re-recording

11,746,671 Estimated minimum gross impressions from measured media (*plus* promotional spots, mobile impressions, web visits, social media impressions and unmeasured media)

The CCRMC campaign also sponsored the heavily-promoted and widely-used KSBW.com mobile web page, which helped to link users to the www.protectyourcentralcoast.org web page.

The stormwater region (Monterey and Santa Cruz Counties) media campaign included 702 ads aired on 4 TV stations (KION 46, CW, Fox 35, Telemundo) from July 2011-June 2012.

For website tracking and reporting see: 3.1.2.

Proposed Modification: None

Planned Year Four Activities: Continue to sponsor at least two media campaigns, advertise County’s website, and track and report on the number of visitors.

BMP 3-1-18 Master Permit for Environmental Enhancement Projects

Implementation Details: Outreach to farmers through National Resource Conservation Service (NRCS), the Resource Conservation District (RCD) of Santa Cruz County, and Watsonville area groups to minimize discharges of pollutants of concern to stormwater facilities.

Measurable Goal: Provide outreach information regarding the Master Permit program at the Planning Department information desk.

Status: The County has coordinated with the RCD in establishing a Master Permit for Environmental Enhancement Projects. This permit is specifically designed to allow private property owners to implement resource conservation activities that would otherwise be cost prohibitive. The Master Permit includes certain practices identified in the NRCS National Handbook of Conservation Practices that have already gone through the CEQA process and have been permitted by all required State and Federal agencies. The Master Permit was originally issued in 2005, and was extended on August 11, 2010. Most of the practices specifically address agricultural operations, and include installation of sediment ponds, grassed waterways and other plantings, grade control structures, stream channel stabilization, improvement of access roads, and other practices designed to reduce sediment loads in local streams. Over the past six years implementation of sediment basins,

grassed waterways, and streambank protection practices alone have prevented erosion of 6,800 tons per acre per year of sediment on agricultural land in the Pajaro Valley watershed. The new round of projects this year included the Molino Pond Restoration Project off of Swanton Road, Watsonville Slough Farms Sediment Basin Project, the Prospect Pond Habitat Enhancement Project, the Soquel Creek Riprap Removal and Revegetation of Stream Bank project, and the Sempervirens Access Road Improvement Project. Three are pond enhancements, one improves road crossings over creeks, and the last is a stream bank stabilization. Prior years' projects are continuously maintained to ensure their benefits to Pajaro River in preventing erosion issues and sedimentation transfer from the project sites

Proposed Modification: None

Planned Year Four Activities: Provide outreach information regarding the Master Permit for Environmental Enhancement Projects at the Planning Department information desk.

BMP 3-1-19 Water Quality Phone Messages

Implementation Details: Establish protocol for receiving and replying to phone calls to the County regarding water quality questions or concerns.

Measurable Goal: Establish protocol for receiving and replying to phone calls to the County regarding water quality questions or concerns. Respond to 100 percent of calls to County staff within two days. Track and report on the number of calls received each year, date of calls, issues raised, and response to issues for each call.

Status: County Environmental Health has an existing water quality hotline (831) 454-3188 that provides information on bacteria levels at beaches and also provides an opportunity for the public to report water-related illness or other concerns. The phone line is checked on a daily basis for phone messages, with follow up action taken as needed. Reports and inquiries can also be submitted by e-mail to the County Environmental Health Water Resources website. County Environmental Health staff is on-call 24/7 to respond to reports of spills or discharges that are reported to 911. County Public Works also maintains a dispatch line 24/7 where the public can report sewage overflows (831) 477-3907 or storm drain problems (831) 477-3999. Calls involving construction related concerns are handled by the Planning Department. See BMP 5.1.7 for more related information.

The County investigated the possibility of establishing a single coordinated water quality hotline with other jurisdictions but does not currently have the resources to pursue this at this time. In addition, it was decided that our water quality phone messages process is working appropriately.

Proposed Modification: None

Planned Year Four Activities: Respond to 100 percent of calls to County staff within two days, and track the number of calls received each year.

BMP 3-1-20 Interested Party List

Implementation Details: The County has an interested party email list that is used to distribute the latest developments in the stormwater program.

Measurable Goal: The County has an interested party email list that is used to distribute the latest

developments in the stormwater program. Coordinate with the City of Capitola to update the list. Provide summary of information sent out to list members in the annual report.

Status: During the preparation of the SWMP stakeholders were involved with development as well as providing input on changes along the way. The stakeholders' list started with a few interested groups at the beginning of the SWMP development to over 103 people representing multiple groups of the community such as watershed groups, local non-government agencies, City, County and State representatives, water districts, professional groups, developers, and any person/group who expressed interest in the SWMP. The stakeholders' list is the same for the County and the City of Capitola. We continue to update and add to the list as necessary.

During this third year of implementation, the stakeholders were contacted as follows:

1. August 10, 2011, notified stakeholders of the availability of the draft annual report and the Board of Supervisors' public meeting.
2. August 17, 2011, we notified stakeholders of the meeting to be held on September 13, 2011.
3. November 22, 2011, notified the stakeholders of the availability of the revised Ordinance, CDC Changes and the Manual to be presented to the County Board of Supervisors on December 6, 2011, and invited them again to provide comments on or before the BOS public meeting.
4. February 3, 2012, reminded stakeholders of the continued public hearing on Feb 7, 2012.
5. March 6, 2012, notified the stakeholders of and invited them to attend a meeting on March 23, 2012

Proposed Modification: None

Planned Year Four Activities: Update the list annually. Provide summary of information sent out to list members in the annual report.

PUBLIC INVOLVEMENT AND PARTICIPATION

Target Audience: General Population

BMP 4-1-1 Coordinate / Implement Storm Drain Stenciling Program

Implementation Details: Label half of storm drains in major business and residential areas. Coordinate with the local Surfrider Foundation, Save Our Shores, and other volunteer organizations for this work.

Measurable Goal: Check markers during routine maintenance and replace as needed. Coordinate this work with GIS inventory.

Status: The original idea to use volunteer labor to help complete marking turned out not to be feasible due to quality control and liability issues. Originally, the County was using stencils to label inlets. Because stenciling fades over time and overspray is hard to control, the County is now replacing the stenciled markings with more permanent labels. Due to these issues, we are behind schedule. However, since Year One the County of Santa Cruz, in collaboration with Save the Whales and Hope Services, has labeled approximately 1,200 inlets with stencils, and approximately 900 of those have been replaced with new markers. There are approximately 2,200 inlets in County maintained roads within urbanized areas.

This work was coordinated and tracked with the County's GIS.

Proposed Modification: This BMP should be moved to the Good Housekeeping section as part of BMP 8-1-6. The County will no longer use volunteers to fulfill this BMP due to quality control and liability issues.

Planned Year Four Activities: As part of BMP 8-1-6, complete storm drain marking by Year Four. Check markers during routine maintenance and replace as needed. Coordinate this work with GIS.

Target Audience: Agency Staff, General Population

BMP 4-1-2 Participate in Countywide Stormwater Information Exchange (SIN) Group

Implementation Details: Coordinate with local agency staff to create a group for discussing regional stormwater issues.

Measurable Goal: Coordinate with local agency staff to create a group for discussing regional stormwater issues. Participate in/organize two meetings per year.

Status: Staff from local agencies met three times in Year Three:

- August 1, 2011, at Watsonville Municipal Services Center 9-10 AM; Discussed draft MS4 Stormwater Permit, regional hotline feasibility and regional media campaign and TV advertisement for FY 2011/2012
- April 11, 2012, at Capitola City Hall 2-3 PM: discussed draft RWQCB Joint Effort Hydromodification Threshold and Criteria documents

Proposed Modification: None

Planned Year Four Activities: Continue to participate in/organize two meetings per year.

BMP 4-1-3 Coordinate Local Stakeholder Outreach

Implementation Details: Establish a process for providing information to the public regarding the County's stormwater program and a process for receiving and incorporating public input into the program.

Measurable Goal: Establish a process for providing information to the public regarding the County's stormwater program and for receiving and incorporating public input into the program.

- Establish stakeholder process.
- Conduct one meeting per year.
- Stakeholder committee reviews SWMP and annual report.
- Advertise to increase attendance to stakeholder meetings and promote public participation in SWMP development and implementation in accordance with public notification and hearing requirements as needed.
- Report on number of attendees at stakeholder meeting and comments received.
- Encourage local agencies and organizations on ongoing mutual issues (e.g. funding, direction of public education efforts, targeted information campaigns, emerging issues).

Status: In conjunction with BMP 3-1-20, during this third year of implementation, stakeholders who were interested in being on the County's Interested Party List were added to an e-mail list. We continue to communicate with stakeholders by electronic mail.

1. August 10, 2011, notified stakeholders of the availability of the draft annual report and the Board of Supervisors' public meeting. No concerns or comments were received regarding the report.
2. August 17, 2011, following up on previous notifications and posting of the draft Runoff and Pollution Control Ordinance (Ordinance), County Design Criteria (CDC) changes and the new Stormwater Construction Best Management Practices Manual (Manual), we notified stakeholders of the meeting to be held on September 13, 2011, to present the new documents and seek their comments. We received comments from the Sierra Club prior to the September 13 meeting, and we considered them in our September 13 meeting materials presented to the stakeholder. We also received comments from Robert Dewitt, local Civil Engineer, regarding the Manual, and his comments were addressed.
3. November 22, 2011, notified the stakeholders of the availability of the revised Ordinance, CDC Changes and the Manual to be presented to the County Board of Supervisors on December 6, 2011, and invited them again to provide comments on or before the BOS public meeting. We received comments from Mesiti-Miller Engineering, Inc., and their comments were addressed prior to the December 6, 2011, BOS public meeting. The stakeholders were also informed that the December 6 public meeting would continue to February 7, 2012.
4. February 3, 2012, stakeholders were reminded of the continued public hearing on February 7, 2012. Additional comments were received regarding the ordinance and the CDC changes mainly regarding the notification process as well as the request to implement infiltrative practices from the EPA's Green Stormwater Management best practices list.
5. March 6, 2012, notified the stakeholders of and invited them to attend a meeting on March 23, 2012, to clarify issues they may have regarding implementation of the new Ordinance, CDC changes and the Manual. Issues were brought up and addressed during the March 23rd meeting.

The County has also been an active participant in the Santa Cruz Watershed Action Group (SWAG), a group of local agencies and organizations whose work relates to watershed health. During the third permit year this

group met five times as follows:

1. August 18, 2011, at City of Capitola. County of Santa Cruz, City of Santa Cruz, City of Watsonville, Ecology Action, MBNMS, and Coastal Watershed Council attended. Topics discussed: updates from each permitted municipality; grant opportunities; SC County IRWM grants update; regional Storm Water Allocation Program.
2. November 7, 2011, a Ecology Action, 877 Cedar Street, Suite 240 Santa Cruz, Main topic was early discussion regarding a comprehensive Prop 84 grant application.
3. November 17, 2011, at Community Foundation, Aptos. County of Santa Cruz, City of Santa Cruz, MRSWMP, City of Pacific Grove, RCD, Ecology Action, Coastal Watershed Council, and MBNMS attended. Topics discussed: Prop 84 Storm Water Grant Response Planning and regional LID work.
4. March 8, 2012, at Capitola City Hall, Capitola. County of Santa Cruz, City of Santa Cruz, City of Watsonville, City of Monterey, MRSWMP, Ecology Action, Coastal Watershed Council and UCSC attended. Topics discussed: Prop 84 Storm Water Grant project applications submitted, Storm Water Allocation Program project with City of Watsonville & RCD, potential to jointly conduct/fund surveys regarding SWMP assessments, and new draft GP requirements for monitoring.
5. May 16, 2012, at Capitola City Hall, Capitola. County of Santa Cruz, City of Santa Cruz, City of Watsonville, City of Monterey, MRSWMP, Ecology Action, Coastal Watershed Council and UCSC attended. Topics discussed: Prop 84 Storm Water Grant project applications submitted, and potential to jointly conduct/fund surveys regarding SWMP assessments.

Proposed Modification: None

Planned Year Four Activities: Continue to conduct one meeting per year. Stakeholders review SWMP and annual report. Advertise to increase attendance to stakeholder meetings and promote public participation in SWMP development and implementation in accordance with public notification and hearing requirements as needed. Report on number of attendees at stakeholder meeting and comments received. Encourage local agencies and organizations on ongoing mutual issues (e.g. funding, direction of public education efforts, targeted information campaigns, emerging issues).

BMP 4-1-4 Monterey Bay Area Pollution Prevention Partnership

See BMP 3-1-14

BMP 4-1-5 Community Cleanups

Implementation Details: The County sponsors creek cleanups during Coastal Cleanup Day, working with Save our Shores, Surfrider Foundation, and other watershed and environmental groups.

Measurable Goal:

- Sponsor volunteer coastal cleanup each fall, affecting a minimum of two watersheds per year.
- Sponsor two beach cleanups each year.
- Report on number of volunteers.

Status: County staff, in cooperation with local non-profits, sponsored the annual 4th of July weekend and Coastal Cleanup Day in September 2011. With the help of Save Our Shores, a local non-profit, approximately 4,584 volunteers participated in both events last year. The 4th of July and the Coastal Cleanup Day events engage the public to remove trash and debris from our beaches and waterways. It also helps to identify the sources of debris, and to change the behaviors that cause pollution in our County. Our motto is “Be Part of the Solution to Ocean Pollution!”

Proposed Modification: None

Planned Year Four Activities: Continue to work with Save our Shores, Ecology Action, and other watershed and environmental groups to sponsor beach and creek cleanups.

BMP 4-1-6 Clean Beaches Coalition

Implementation Details: The County coordinates marine debris cleanups with local organizations. <http://www.cleanbeachescoalition.org/the-coalition-partners.html>

Measurable Goal: The County coordinates marine debris cleanups with local organizations. Coordinate quarterly marine debris cleanups. Report on number of volunteers.

Status: The County participates with local non-profits such as Save Our Shores and Ecology Action in the 4th of July weekend and Coastal Cleanup day. Between Santa Cruz and Monterey Counties alone, 4,584 volunteers removed 14,219 lbs of trash and 3,284 lbs of recyclables during CCD 2011. In addition, as part of the Green Schools program, students are required to help with beach cleanups. SOS conducted 37 cleanups including 10 beach cleanups and 27 inland cleanups where 937 students helped remove 650 pounds of trash and 186 pounds of recyclables from local beaches, waterways and school campuses. In addition to these school cleanups, SOS engaged students in the regional July 4th and 5th cleanup activities. See BMP 3-1-3.

Proposed Modification: None

Planned Year Four Activities: Continue to participate in the Clean Beaches Coalition, coordinate quarterly cleanups and report the number of volunteers.

BMP 4-1-7 Participate in Regional Efforts

Implementation Details: Investigate opportunities to participate in regional, Statewide or national groups.

Measurable Goal: At a minimum, attend annual Integrated Pest Management Departmental Advisory Group meetings and monthly U.S. Green Building Council (USGBC) meetings.

Status: The County Board of Supervisors (Board) adopted an Integrated Pest Management (IPM) policy for County properties pest control. The policy established an IPM Departmental Advisory Group (DAG) to review the implementation and make recommendations to the Board. The group includes various members of County Public Works, General Services, and the community. The IPM DAG meets quarterly. For a detailed report on the 2011/2012 County’s IPM program visit:

http://sccounty01.co.santa-cruz.ca.us/bds/Govstream/BDSvData/non_legacy/agendas/2012/20120612/PDF/021.pdf

The USGBC is a non-profit organization dedicated to sustainable building design and construction. The Monterey Bay USGBC is a regional chapter that meets monthly to discuss how to implement green building

practices in County schools. County staff attends these monthly meetings and are members of the Green Schools Advisory Committee.

The Integrated Waste Management Local Task Force is charged by the Board of Supervisors with coordinating recycling and waste reduction efforts between the County and the Cities of Watsonville, Capitola, Scotts Valley, and Santa Cruz. Programs include reduction of litter and debris which can contaminate the aquatic and marine environments. Special emphasis is placed on diversion of toxic and hazardous materials through the operation of Household Hazardous Waste (HHW) facilities and retail takeback programs for materials such as sharps, pharmaceuticals, fluorescent lamps, and used motor oil.

In addition, the County collaborates with other regional groups. The Household Hazardous Waste group is a County-wide coalition that collaborates on programmatic issues and program promotion. Also, the Central Coast Recycling Media Coalition is a tri-County coalition that works together on promoting various issues such as marine debris education, recycling and waste reduction, as well as stormwater pollution as mentioned in BMP 3-1-1 and 3-1-17 Media Campaigns.

Proposed Modification: None

Planned Year Four Activities: Continue to investigate opportunities to participate in regional, Statewide or national groups, attend at least one IPM DAG meeting and monthly USGBC meetings.

BMP 4-1-8 Water Quality Messages

Implementation Details: See Public Education and Outreach Section.

Measurable Goal: See Public Education and Outreach Section.

BMP 4-1-9 Public Opinion Survey

Implementation Details: See Public Education and Outreach Section.

Measurable Goal: See Public Education and Outreach Section.

ILLICIT DISCHARGE DETECTION AND ELIMINATION

Overview: Ongoing efforts have been maintained and expanded during the third year of implementation of the illicit discharge and detection program. Efforts are being further expanded upon final adoption of the County's stormwater ordinance, which occurred this year. This will give us more authority to eliminate other non-stormwater discharges to the storm drain system and natural waters.

BMP 5-1-1 Storm Sewer Mapping

Implementation Details: Storm drain sewer system and outfalls are mapped in the urban areas of the County. The maps are utilized to track potential sources of illicit discharges and identify areas where infiltration might occur.

Measurable Goals:

- Provide ongoing database maintenance and updated maps in annual report.
- Incorporate storm drain mapping into GIS system.
- Provide updated maps on County GIS website.

Status: Storm sewers have been mapped and are available for use in the County's GIS system. They have been transferred to the general public web-based GIS system:

<http://gissc.co.santa-cruz.ca.us/default.aspx>

The storm drain maps are being updated in Zone 5 and Zone 6 as a part of a grant funded effort to update the drainage master plans for those zones. This effort is expected to be completed in Year Four.

Proposed Modification: None

Planned Year Four Activities:

- Continue to update storm drain maps as additional information becomes available.
- Use storm drain maps to track potential sources of contamination when detected, or to determine the path of spills if they occur.

BMP 5-1-2 Sanitary Sewer Mapping

Implementation Details: Incorporate sanitary sewer maps to identify possible leaks or spills to the storm drain.

Measurable Goals:

- Incorporate sanitary sewer with storm sewer map.

Status: Sanitary sewers have been mapped and are available for use in the County GIS system. They have been added to the general public web-based GIS system (see link above) and to a dedicated Sanitation Districts GIS website:

<http://sccsdgis.co.santa-cruz.ca.us/>

These maps are used in conjunction with storm drain maps to identify areas of potential contamination where leaks from the sanitary sewer system may enter the storm drain system. These locations have been sampled to determine if leakage is occurring. No leaks have been identified in the County's jurisdiction.

Proposed Modification: None

Planned Year Four Activities: This BMP is complete.

- Continue to update sanitary sewer maps as additional information becomes available.
- Use sanitary sewer maps in conjunction with storm drain maps to identify potential sources of contamination for follow-up investigation.

BMP 5-1-3 Illicit Discharge Program

Implementation Details: Develop and implement a program to identify and eliminate possible storm water pollution coming from those businesses and operations within the County's SWMP permit area that are not otherwise inspected by Environmental Health (Food Facilities and Hazardous Waste generators) and Public Works, or certified by Public Works as a Green Business.

Measurable Goals:

- Structure/procedures for illicit discharge screening and investigation completed.
- Procedures and staff identified to conduct screening investigations and follow-up.
- Database to track illicit discharge reports and follow-up actions developed.
- Measurable goals will include annual routine inspections of 50 percent of the prioritized businesses and operations that may be sources of illicit discharge.

Status: Environmental Health staff has developed a base-line list of those industrial and commercial businesses not routinely inspected by County staff but that have the potential to cause stormwater pollution. These were prioritized and targeted based on their ability to emit pollutants of concern which include indicator bacteria and pathogens, nutrients, priority organics, sediment and heavy metals. Various sources of information, including the fictitious business names database and the telephone directory, were reviewed to identify businesses that have the potential to release contaminants. An initial assessment was conducted of the businesses in the main commercial areas outside of the Sanitation Districts (San Lorenzo Valley and Corralitos).

The following business categories were used to identify those businesses served by onsite sewage disposal (and not already inspected by the EHS HazMat and Consumer Protection teams) that have the potential to emit stormwater pollutants of concern: garden stores/florists/landscaping; feed/pet supply; lumber/building materials/hardware; auto supply; heavy industrial equipment; hauling/storage; veterinarian/animal shelters; undertaking/cemeteries; metal/metalwork; paving/excavating; wood works; beauty salons; bike repair; carpet rug cleaners; glass/tile; printing.

The initial focus for business screening targeted business establishments located nearest to the primary receiving water body in northern Santa Cruz County, the San Lorenzo River. The County identified and field checked 25 businesses in the San Lorenzo Valley. An additional 16 businesses in south County were screened in 2012 and added to the list. The stormwater ordinance was approved on March 6, 2012, and went into effect on April 6, 2012. The County now has the authority to more thoroughly inspect these targeted businesses for potential illicit discharges, track any enforcement activities, and remove businesses from the list that have been inspected and pose no threat of illicit discharge. In the remainder of 2012, EHS will inspect those businesses (served by onsite sewage systems) throughout Santa Cruz County that have been be screened and targeted for illicit discharge inspections in 2011- 2012. EHS staff will also work with DPW staff to ensure comparable businesses are screened or inspected by DPW within the Sanitation Districts (see BMP 5-1-6 for a list of current DPW inspections).

Uniform procedures are currently being coordinated and developed within this Illicit Discharge Detection

program for education, inspections, and enforcement by both Environmental Health and Public Works.

Proposed Modification: None

Planned Year Four Activities:

- Maintain and expand the database listing facilities of potential concern, and track illicit discharge reports and follow up actions.
- Perform additional field assessments of facilities.
- Provide incentives for targeted businesses to become ‘Certified Green’ Businesses through Public Works.

BMP 5-1-4 Illicit Discharge Field Screening Investigations

Implementation Details: Perform field investigations to identify illicit discharges from storm drain outfalls. Creeks and outfalls will be sampled for fecal indicator bacteria, ammonia, nitrate, and human-specific bacterioides. Use of field test kits for other parameters will be considered.

Measurable Goals:

- Inspect and sample major creeks and outfalls annually for dry weather flows. Conduct upstream sampling and inspection where problems are found at outfalls. Approximately six creek locations and eight major outfalls will be sampled on at least an annual basis.
- Identify sources of dry weather flows annually.
- Abate illicit discharges or connections identified.
- Utilize current procedures to track illicit discharges and ensure completion of corrective work.
- Identify recurring illicit discharges.
- Report the number of illicit connections found/repaired/replaced annually.

Status: Samples have been collected from urban streams and storm drains by County Environmental Health staff and volunteers with the Coastal Watershed Council (CWC). From July 1, 2011 to June 30, 2012, County staff collected and analyzed 456 samples from 25 locations in urban stream and lagoon samples throughout the County (including locations within the City of Santa Cruz). County staff also collected 91 samples at 48 locations in storm drains and ditches. Forty samples were analyzed using quantitative real time polymerase chain reaction (QPCR) for human specific bacterioides, which is a strong indicator of human contamination. CWC volunteers collected 16 samples from 4 storm drain outfalls and 12 samples from 3 other urban stream locations. CWC also collected samples from 80 locations, primarily urban streams, during Snapshot Day in 2012. CWC urban watch samples are analyzed by County staff for fecal indicator bacteria, nitrate, ammonia and phosphate.

Human contamination was observed consistently in two storm drain pump stations in Santa Cruz and the lower San Lorenzo in the vicinity of those discharges. Other tested locations did not show human contamination, including Aptos Creek, Rodeo Gulch, Corcoran Lagoon, ocean beaches and other locations on the San Lorenzo River. County staff are working with City staff to further evaluate and address the contaminated storm drains. Although most urban drainages have elevated background levels of indicator bacteria, no illicit discharges or other water quality problems were identified by the sampling efforts this year. Although there was limited County sampling in Capitola this period, the CWC samples continued to show significantly elevated bacteria levels in Noble Gulch. The County does plan to seek funding to upgrade the sewer line that runs near Noble Gulch.

Proposed Modification: None

Planned Year Four Activities:

- Continue to sample creeks and outfalls and identify sources of dry weather flows annually.
- Abate illicit discharges or connections identified.
- Utilize current procedures to track illicit discharges and ensure completion of corrective work.
- Identify recurring illicit discharges.
- Report the number of illicit connections found/repaired/replaced annually.

BMP 5-1-5 MS4 Maintenance

Implementation Details: MS4 inspection and maintenance is an important opportunity for identifying illicit connections and discharges.

Measurable Goals:

- Storm Drain maintenance staff inspects for illicit discharges and connections during routine maintenance.
- Results of inspections are reported annually.

Status: Maintenance staff inspects and cleans the storm drain systems on a regular basis using a vacuum truck and hand equipment. The storm drain systems consist of drop inlets (DIs) and silt and grease traps. The surfaces of the DI grates are cleared of debris on an as needed basis for flood control maintenance. Two times a year (before winter and after winter) the DIs and silt/grease traps are inspected and cleaned out as needed. While performing this duty, if any illicit discharges are found, maintenance staff reports the situation to the Public Works dispatcher who in turn notifies the Environmental Health Department. Staff is directed to stay clear of any unknown substances until a representative from Environmental Health has given procedural guidance.

The results of the inspections are documented and recorded. Items noted in the report are location, size of the drain facility, volume and type of material removed, the time the facility was cleaned, as well as any observations made by the maintenance staff, such as “full of trash,” “oily sheen on water,” “dead animal,” etc. (See BMP 8-1-6)

This year 86 silt and grease traps were inspected and cleaned; 66.57 cubic yards of material was removed totaling 83 tons; 717 catch basins were inspected and 65 cleaned; and 13.70 cubic yards of material removed totaling 13 tons. No indications of illicit discharges were identified this year during maintenance procedures.

Proposed Modification: None

Planned Year Four Activities:

- Continue to inspect for illicit discharges and connections during routine maintenance.
- Results of the inspections reported annually.
- Report on the number of illicit connections found/repaired/replaced annually.

BMP 5-1-6 Commercial and Industrial Facility Inspections

Implementation Details: County Environmental Health Inspectors inspect and monitor regulated facilities that handle hazardous materials annually for storage practices and spill response. Food facilities are inspected three times a year for good house-keeping practices, and proper disposal of garbage and wastewater. Additional elements will be added to the inspection procedures to ensure full compliance with stormwater BMPs at least

once per year. DPW Sanitation Inspectors inspect regulated facilities that are connected to sewers, and EHS Inspectors inspect those facilities served by onsite sewage disposal systems.

Measurable Goals:

- Reporting, record keeping, and referrals will continue under the Certified Unified Program Agencies (CUPA) program and the food facility program. All facilities will be inspected. Records will be maintained of identified impacts on the storm system and correction made.
- Inspection programs will be expanded, and inspectors will be trained to provide for full stormwater inspections to ensure all BMPs are in compliance.

Status: Stormwater illicit discharge inspection coverage and enforcement powers reside with both Public Works-Sanitation and the EHS. County Public Works-Sanitation has stormwater inspection responsibilities for industrial, commercial, and food facilities served by sewer. EHS staff will be responsible for inspecting sites served by onsite sewage disposal.

As the designated CUPA since July 1997, the Hazardous Material (HazMat) Section of the County Environmental Health Services (EHS) is responsible for the administration of hazardous materials and hazardous waste programs within the stormwater permit coverage area. This includes inspecting sites and monitoring their compliance with hazardous materials provisions and spill response as authorized under the County's CUPA program. Since 1997, EHS HazMat inspectors have inspected inventoried sites with the potential to discharge hazardous waste and materials into storm drain systems. HazMat staff will continue reporting, record keeping, and spill response as directed under the current CUPA.

The Consumer Protection section of County EHS is responsible for inspecting all facilities that sell or give away food. Routine inspections are conducted annually with frequent follow-ups and enforcement based upon complaints or inspection violations. The primary stormwater issues that staff focuses on during routine food facility inspections are: cleaning mats outside, dumping wash water outside, exterior material and garbage storage and maintenance, and checking of onsite septic tank and drainfield for surfacing sewage. Stormwater and wastewater violations in the past have been noted on official Food Inspection forms. This will be expanded with the new stormwater forms and the additional authority provided by the stormwater ordinance.

The EHS Consumer Protection Team received online illicit discharge training in July 2011. Now that the stormwater ordinance is adopted, the EHS Stormwater Inspection form will be used once every three years to record stormwater violations and corrections noted by EHS staff. During other routine inspections CalCode currently allows EHS staff to inspect for and conduct enforcement on illicit discharges detected at food facilities.

In 2012 a Consumer Protection team inspector identified an illicit discharge at a small scale brewery which has been corrected. No other major illicit discharge violations (for food facilities served by onsite septic) occurred.

The Environmental Compliance Unit of the Sanitation Districts conducted 465 industrial inspections within the last fiscal year. Inspections consisted of full facility inspection, partial facility inspection (in order to alleviate a specific problem on a certain date), plan reviews and new installs, and re-inspections. Only full facility inspections are recorded in the Districts' Pretreatment Program database. The following businesses were inspected by the District in 2011:

- 5 carwashes
- 13 dry cleaners
- 7 water treatment supply
- 3 hospitals

10 machine shops
3 print shops
46 miscellaneous industries
273 food service establishments
90 vehicle service facilities
4 educational institutions
2 wineries
1 medical center
1 dental office
5 photo developing with pretreatment

District personnel continue to educate light industries operating in Santa Cruz County on process-specific pollution prevention and waste minimization opportunities. During inspections, Best Environmental Management Practices (BEMP) pamphlets and demonstrations for each particular industry are relayed to business owners, managers, and employees. The inspector educates the representative about proper stormwater issues and the importance of following the BEMPs. Additionally, the District highlights the differences between storm drains and the sanitary sewer drains. BEMPs have been created for vehicle service facilities, dentists, photo processors, restaurants, dry cleaners, printers, machine shops, surfboard manufacturers, paint contractors, mobile car washers and medical facilities. Businesses/industries that are inspected are given the appropriate BEMP pamphlet. These pamphlets can be found at:
<http://www.dpw.co.santa-cruz.ca.us/environment.htm>

The stormwater ordinance will give both departments enhanced onsite enforcement powers for identified stormwater violations at industrial and commercial sites, including the authority to issue immediate notices of violation if necessary.

Proposed Modification: None

Planned Year Four Activities:

- Environmental Health HazMat Inspectors and Consumer Protection inspectors will receive further training in storm water illicit discharge identification; training will focus on CASQA storm water BMPs developed for Hazardous Materials and Hazardous Waste sites and CASQA BMPs designed specifically for food facilities, respectively.
- The enforcement and penalty provisions of the recently adopted County Stormwater Ordinance will be implemented in Years Three to Five and will support the inspection efforts.
- Consumer Protection inspectors will use a new supplemental Stormwater Inspection form. A similar form will be developed for HazMat Inspectors.
- Inspectors will distribute information on stormwater BMPs as a handout to all commercial and industrial facility operators over the course of Years Three-Five.
- Annual tracking and submission of stormwater violations, enforcement efforts, and follow-ups will be accomplished and recorded with the use of the new EHS Stormwater Inspection Form, including entry in a database.

BMP 5-1-7 Information from the Public

Implementation Details: The County currently receives and responds to reports from public of non stormwater discharges.

Measurable Goals:

- Use current water quality message protocol to receive and respond to calls from the public.

- Report number of calls received and follow-up actions taken, including number of illicit discharges identified and corrected.

Status: The County currently receives reports from the public in a variety of ways:

- Direct calls to Environmental Health Services (EHS) during regular business hours which may relate to septic system failures, sewage spills, hazardous materials discharge, or other water quality related report or inquiry. The large majority of calls are received this way.
- Emails to EHS on the same subject.
- Calls to the EHS water quality hotline.
- Calls to Public Works dispatch (24/7) regarding sewer spills or storm drain issues.
- Calls to 911-Netcom (24/7) regarding sewer spills, hazmat spills or storm drain issues. Netcom pages the on-call EHS staff.
- Calls to Planning Department regarding erosion and pollution from construction projects or erosion in general.

In 2011-12, EHS staff responded to the following calls:

- 33 emergency response calls that related to some type of hazardous material that entered or could potentially enter the storm drain and/or creek. Most were either paint or automotive type wastes (fuel, oil, etc). Fourteen of the calls required after-hours emergency response. Five calls involved sewage spills or potential releases into storm drain or water ways.
- 108 complaints received by telephone or email regarding septic system failures, greywater discharges, sewer lateral overflows, mostly in rural areas. Fifty-four did not turn out to be actual problems, 17 are in progress, and the rest were corrected.
- Seven complaints regarding pet waste, and no complaints regarding livestock impacts on water quality.

Proposed Modification: None

Planned Year Four Activities:

- Use the current water quality message protocol to receive and respond to calls from the public.
- Report number of calls received and follow-up actions taken, including number of illicit discharges identified and corrected.

BMP 5-1-8 Locate and Correct Cross-Contamination from Sewers in the City of Capitola

Implementation Details:

The County has conducted video surveillance of all sewer systems in Capitola in the vicinity of Soquel Creek and is upgrading substandard sewer mains in that area with the assistance of the Clean Beach Program and other grant funds. No additional work was completed in 2011-12.

Measurable Goals:

- Monitoring and testing of sanitary sewer lines initiated within 100 yards of Soquel Creek. (Year One to Three)
- Priority replacement / repair list completed. (Year Three)
- Replacement / repair of illicit or substandard connections initiated. (Year Three)
- Develop and implement a sewer lateral upgrade program as necessary based on water quality evaluation conducted after sewer main replacement. (Year Four)
- Report on progress and follow-up activities in annual documentation of linear feet of sewers upgraded and number and percentage of laterals inspected and upgraded. (Year Two to Five)

Status: Most of the sewer lines in close proximity to Soquel Creek and Aptos Creek in Capitola Village and the Rio del Mar area have been videoed during the past five years. Sewers and lateral connections were found to be in poor condition, with potential for leaks to groundwater, the stormdrain system, and eventually the creeks and lagoons, which have elevated bacteria levels, with some presence of indicators of human sources (potentially 10 percent).

Most of the main sewer lines have now been replaced in Capitola and Rio del Mar. During 2010-11, 4,569 feet of sewer line was replaced in Rio del Mar, including 50 lateral connections, and 5,692 feet of sewer line was replaced in the Live Oak area. Sanitary sewer leaks into Noble Gulch have been identified as a continuing significant source of contamination to Soquel Creek and Capitola Beach. Plans to replace the sewer line have been developed, and grant funds are being sought to upgrade those sewers. The force main from Rio del Mar was replaced and relocated away from the immediate coast. The old line was observed to be deteriorated in several areas, and this work will reduce the potential for leakage into the ocean and into Porter Gulch.

We believe that private sewer laterals could be sources of contamination. Grant funds will be sought for a pilot inspection program to confirm the condition of the laterals and help fund upgrades as needed.

Proposed Modification: None

Planned Year Four Activities:

- Apply for grants to upgrade sewer lines along Noble Gulch and initiate a lateral inspection and upgrade program.
- Continue to identify any sewer lines in need of upgrade throughout the County based on spill records, water quality testing, and maintenance records.
- Report on progress and follow-up activities in annual documentation of linear feet of sewers upgraded and number and percentage of laterals inspected and upgraded. (Year Two to Five)

BMP 5-1-9 Implement Pet Waste Ordinance
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Implementation Details: The County has an ordinance that prohibits the deposition of pet waste in public spaces. The ordinance will be amended to require the proper collection and disposal of pet waste on private property to prevent discharge of fecal material to the storm drain system. The ordinance will be implemented through education programs, complaint response, and existing enforcement procedures.

Measurable Goals:

- Amendment of pet waste ordinance.
- Number of complaints and other enforcement activities will be reported annually.
- All complaints received regarding handling of pet waste will be pursued.

Status: The County received and investigated seven complaints regarding pet waste creating a health hazard or nuisance. All but one of these has been resolved. Amendment of the pet waste ordinance and related activities has not yet been initiated, as this is a lower priority relative to other issues, such as adoption of the stormwater and water conservation ordinances. Amendment of the pet waste ordinance will be considered in Year Four or Five.

Proposed Modification: Defer amendment of Pet Waste Ordinance and associated educational materials to Year Four or Five.

Planned Year Four Activities:

- Amendment of pet waste ordinance.
- Number of complaints and other enforcement activities will be reported annually.
- All complaints received regarding handling of pet waste will be pursued.

BMP 5-1-10 Implement Septic Systems Maintenance and Management Program

Implementation Details: The County implements a septic system management program in the San Lorenzo Watershed and other areas of the County. This program provides for water quality testing and investigation, tracking of septic system maintenance efforts, and requirements for system evaluation and upgrade in conjunction with remodels.

Measurable Goals:

- County will require all systems to be evaluated prior to approval of a major remodel.
- Inspect 1,000 septic systems every three years.
- County will provide a triennial report of the number of septic systems pumped, inspected and upgraded in its primary watersheds. The Basin Plan calls for triennial reporting of onsite system maintenance efforts.

Status: The County continued to implement its Onsite Wastewater Management Program. The triennial status report is in preparation and will be completed this summer. Approximately 730 inspections of individual septic systems were conducted during the past year, including response to 106 complaints. All systems are evaluated at the time that a building permit is submitted for a remodel. If the septic tank has not been pumped and inspected within three years, it is required. If the remodel proposes adding bedrooms or more than 500 square feet, the system must be brought up to current standards.

Proposed Modification: None

Planned Year Four Activities:

- County will provide a triennial report of the number of septic systems pumped, inspected and upgraded in its primary watersheds of the County. The Basin Plan calls for triennial reporting of onsite system maintenance efforts.
- Inspect 1,000 septic systems every three years.
- Continue to require all systems to be evaluated prior to a major remodel.

BMP 5-1-11 Stormwater Ordinance

Implementation Details: Prepare ordinance to prohibit non-stormwater discharges into storm drain, and implement appropriate enforcement procedures and actions.

Measurable Goals:

- Adopt and enforce ordinance.
- Evaluate effectiveness of ordinance based on enforcement activities and abatement results.
- Make recommendations for improvement where shortcomings are identified.

Status: Staff from Environmental Health, Planning and Public Works developed a comprehensive ordinance for Santa Cruz County. This ordinance includes sections to address hydromodification and physical modification of drainageways. The ordinance empowers staff from all three departments to require compliance

with key provisions of the stormwater program, including prohibition of non-stormwater discharges. Chapter 7.79 of the County Code, Runoff and Pollution Control, was adopted by the board of Supervisors on March 6, 2012, and went into effect on April 6, 2012.

Proposed Modification: None.

Planned Year Four Activities:

- Enforce ordinance.
- Evaluate effectiveness of the ordinance based on enforcement activities and abatement results.
- Make recommendations for improvement where shortcomings are identified.

BMP 5-1-12 Train Agency staff

Implementation Details: Provide training to Agency staff on the administrative process for the Illicit Discharge Program.

Measurable Goals:

- One hundred percent of applicable agency staff will be trained, including food facility inspectors, CUPA inspectors, environmental compliance inspectors, road and storm drain maintenance workers, and water quality investigators.
- Report outcome of training and follow-up activities.

Status: Environmental Health Consumer Protection staff (EH CP) responsible for food facility inspection received illicit discharge training focusing on the most common discharge violations encountered at food facilities. These areas of concern include dumpsters, tallow bins, outdoor storage, indoor drains and exterior wastewater management (equipment and mat washing). While CalCode currently gives EH CP inspectors the authority to address illicit discharges at food facilities served by onsite sewage disposal systems during any routine inspection, a stormwater inspection checklist will now be used by CP staff once every three years for all food facilities served by onsite sewage. Those food facilities on public sewer will continue to be inspected by DPW-Sanitation. EH CP and Hazardous Materials (CUPA) staff will be further trained upon completion of the stormwater inspection checklist for commercial and industrial facilities.

DPW Environmental Compliance staff conducted stormwater training for Santa Cruz County Public Works staff. Training focused on pollution prevention and stormwater best management practices for municipal operations. A copy of the training can be found at:

http://dpwintranet/NPDES/Npdes_DPW_Stormwater_Training.ppt#1

Sanitary sewer spill response training for sanitation workers was also conducted. Training focused on proper response procedures in the event of a sanitary sewer overflow. Staff was informed on how to prevent the spill from reaching a storm drain and proper cleanup methods. All spills are reported to the RWQCB. If a spill reaches a water body, Sanitation Districts' staff takes samples in order to report the bacteria levels to the RWQCB.

Proposed Modification: Suggest a one- year delay in the time schedule.

Planned Year Four Activities:

- Complete training of 100 percent of applicable agency staff, including food facility inspectors, CUPA inspectors, environmental compliance inspectors, road and storm drain maintenance workers, and water quality investigators.
- Report outcome of training and follow-up activities.

BMP 5-1-13 Wasteload Allocation Attainment Program

Implementation Details: Develop, submit, and implement Wasteload Allocation Attainment Programs (WAAP) addressing the San Lorenzo River, Aptos/Valencia Creeks, Soquel Lagoon, and Watsonville Slough pathogens/fecal indicator bacteria Total Maximum Daily Loads, as well as the San Lorenzo River sediment TMDL and the Aptos/Valencia Creeks sediment impairment.

Measurable Goals:

The Wasteload Allocation Attainment Program will address:

- An implementation and assessment strategy.
- Source identification and prioritization.
- BMP identification, prioritization, implementation (including schedule), analysis, and assessment.
- Monitoring program development and implementation (including schedule).
- Reporting and evaluation of progress toward achieving wasteload allocations.
- Coordination with stakeholders
- Other pertinent factors.

Status: Most of this work has already been completed through the preparation of the TMDLs, implementation plans, stormwater program and the County investigations that went into preparation of the TMDLs. It is not anticipated that preparation of a WAAP will result in substantial changes to already ongoing activities. Preparation of the formal WAAP was deferred, pending final adoption of the pathogen TMDLs for San Lorenzo River, Soquel Creek and Aptos Creek in 2010. It has subsequently been deferred to lack of available staff time and other more pressing priorities.

It is our intention to prepare a single WAAP document that will address all of the TMDLs for Santa Cruz County. We expect to have a draft of that document available for submittal to the RWQCB by September 1, 2012. In the meantime, the County is already implementing numerous actions to attain its wasteload allocations as have been documented in numerous reports. The WAAP will further document and summarize those activities.

The County faces the ongoing challenge of directing limited staff and funding resources toward those efforts that will provide the greatest improvements in water quality, water resources management, and watershed functioning. It is not possible to implement all programs with current resources, and staff time is directed at those efforts that are expected to result in the most likely improvements in water quality.

Proposed Modification: One year delay.

Planned Year Four Activities:

- Complete preparation of WAAP description and track implementation.

CONSTRUCTION SITE STORMWATER RUNOFF CONTROL PROGRAM

Overview: The County completed all of the Year Three requirements under the Construction Site Stormwater Runoff Control Program (Table 6-1 of the SWMP). Year Three of this program focused, in large part, on inspecting construction sites and ensuring compliance with the County’s grading, erosion control, and riparian and wetlands protection ordinances, as well as working on the new Runoff and Pollution Control Ordinance (formely referred to as the “stormwater ordinance”). Several training courses on construction stormwater BMPs were also developed and provided to County staff and private consultants and contractors. The County also hosted a QSD / QSP training and is in the process of hosting another. One of the biggest accomplishments was the adoption of the Runoff and Pollution Control Ordinance which we are currently enforcing.

Target Audience: Agency Staff

BMP 6-1-1 Grading Ordinance (County Code Chapter 16.20)
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Implementation Details: The existing County Grading Ordinance requires all grading permit applications to include an erosion control plan for all surfaces exposed during construction. The ordinance also requires the plan to include revegetation measures for all surfaces exposed during grading activities.

Measurable Goal: Compare Grading Ordinance to construction Minimum Control Measure (MCM) and evaluate effectiveness. Report on required BMPs.

Status: All grading permit applications submitted were reviewed for conformance with the Grading Ordinance intended to prevent erosion and drainage issues. Plans were evaluated for the following BMPs:

- Driveway and roadway surfacing requirements (depending on grade).
- Slope stability requirements (2:1 or flatter).
- Slope compaction requirements.
- Minimization of disturbance and grading.
- Submittal of an erosion and sediment control plan.

Additionally, when appropriate, discretionary approvals included a condition that grading be initiated no later than a specified date. The purpose of this condition is to help ensure that grading can be completed, and erosion and sediment control BMPs installed by October 15 every year, which is typically the beginning of the rainy season.

The County’s Erosion Control and Grading ordinances were also compared to construction MCMs to evaluate effectiveness. In general, these ordinances meet or exceed construction MCMs. The County’s Erosion Control and Grading ordinances work to limit excessive disturbance of site and grading in the rainy season. These ordinances also require erosion control plans for all sites that include grading, even if they disturb less than one acre.

The grading ordinance was reviewed for effectiveness for improving storm water quality, and the grading ordinance is ok as is. This is especially true now that the County has adopted the new Runoff and Pollution Control Ordinance, which spells out in greater detail measures that need to be incorporated into construction to protect storm water quality.

Proposed Modification: None

Planned Year Four Activities:

- Report on required BMPs.

BMP 6-1-2 Riparian Corridor and Wetlands Protection Ordinance (Chapter 16.30)

Implementation Details: The existing Riparian Corridor and Wetlands Protection Ordinance sets forth rules and regulations to limit development activities in order to achieve long-term watershed protection, to protect water quality, maintain open space, and prevent erosion. The Riparian Ordinance currently requires the development to be located outside of riparian woodlands, outside of ephemeral streams, 30’ from intermittent streams, 50’ from perennial streams, and 100’ from the high water mark of a lake, wetland, estuary, lagoon or natural body of standing water. The ordinance also requires “buffers” from arroyos within the urban / rural services line, riparian woodlands, and other woody vegetation.

Measurable Goals: Inspect sites twice yearly during construction to verify compliance with riparian setbacks. Issue non-compliance letters to applicants if violations occur, and track the number issued per year. Evaluate effectiveness of erosion and sediment control measures indicated on the plans and commonly used on construction sites, and modify as necessary. Report on required BMPs. Annually report on the number of exceptions, exemption or variances granted by the County to the Riparian and Wetlands Protection Ordinance as well as the number of times the ordinance is applied to a new development or redevelopment project. Include a description of any Exception and the rationale for the Exception. Compile the descriptions and make them publicly available. Provide the Regional Water Quality Control Board with notification at least 30 days prior to the issuance of any major Exception, and the rationale for its issuance, as a sole correspondence.

Status: From July 2011 through June 2012, 244 building permits were reviewed by County Planning Department resource planning staff. Inspections conducted to date indicate that all of the projects permitted are in compliance with the required riparian setbacks. No violations occurred, and no non-compliance letters were issued.

Of the applications reviewed, 12 Riparian Exceptions were approved, (see Table 6-1-2.1).

Best Management Practices incorporated into the Riparian Exceptions included: 1) obtaining and adhering to the approved plans and conditions of all other required permits (e.g., building, grading); 2) limiting construction activities to the period between April 15 and October 15; and 3) implementing an approved erosion and sediment control plan. Other project-specific measures were also required, as appropriate, such as limitations on use of mechanized equipment, biological surveys and monitoring, informational training sessions for construction personnel, and approval and implementation of a habitat restoration plan.

In the past year we also created diagrams showing how required riparian corridors, buffers and setbacks are determined. These are available to the public, but have not yet been posted on our website. We had hoped to have an entirely new Planning Department website up this past year, but it has been delayed to approximately late 2012.

We’ve also identified some areas in our riparian ordinance where modifications may be warranted. We plan on starting the revision process in early 2013.

Proposed Modification: The riparian diagrams will be posted on the Planning Department website. We also propose to only track riparian exceptions as there is not an easy way in our system to track exemptions in a meaningful way.

Planned Year Four Activities: Same as previous years except discontinue tracking riparian exemptions.

BMP 6-1-3 Erosion Control Ordinance (Chapter 16.22)

Implementation Details: The existing Erosion Control Ordinance, a product of the San Lorenzo River Watershed Management Plan and subsequent General Plan adoptions (see BMP 7-1-1), applies to all projects with a potential to cause accelerated erosion. All grading projects, new single-family dwellings, and commercial projects are required to have an erosion control plan. Smaller projects (such as additions) are reviewed on a case-by-case basis to determine whether an erosion control plan is required. The ordinance requires erosion and sediment controls during construction and mechanisms for enforcement. The ordinance also requires projects to limit disturbance of existing vegetation and also to control runoff to prevent erosion on a long-term basis.

Measurable Goals: Update Erosion Control Ordinance to require BMPs to cover containment of construction waste on site (such as concrete washouts, building materials, sanitary waste, and litter). Report on required BMPs.

Status: Rather than update the Erosion Control Ordinance to deal with construction waste, the County is addressing this issue within the context of the Runoff and Pollution Control Ordinance required in BMP 5-1-11. That ordinance was approved by our Board of Supervisors and went into effect on April 6, 2012. The ordinance requires all building permits applications to address storm water pollution during construction through the use of required details and notes regarding four primary areas: erosion control, sediment control, drainage control and site housekeeping. Additionally, for certain types of projects, the plan must be prepared by an individual experienced in storm water control.

All applications for grading projects, single-family dwellings and commercial projects that came in prior to the adoption of the new ordinance were already required to have an erosion and sediment control plan submitted to the County for review and approval. The plans were required to show locations and details of erosion and sediment control measures to be implemented during construction. More specifically, plans were required to show:

- Protection of inlets.
- How bare soils would be treated (seed, straw, erosion control blankets).
- Perimeter controls (straw rolls, silt fencing, etc.).
- Stabilized construction entrance(s).
- Temporary drainage control.
- Covering of stockpiles.
- Notes regarding cessation of work during inclement weather.

The new ordinance takes the requirements a step further.

The County's Erosion Control and Grading ordinances were also compared to construction MCMs to evaluate effectiveness. In general, these ordinances meet or exceed construction MCMs. The County's Erosion Control, Grading and Runoff and Pollution Control ordinances work to limit excessive disturbance of site and grading in the rainy season. These ordinances also require storm water control plans for all sites that include ground disturbance, even if they disturb less than one acre.

Proposed Modification: None

Planned Year Four Activities: Evaluate effectiveness of new runoff and pollution control ordinance. Continue reporting on required BMPs.

BMP 6-1-4 Evaluate Building Permit Program Efficacy

Implementation Details: Evaluate the Building Permit program for construction BMPs.

Measurable Goals: Condition projects, as appropriate, for BMPs.

Status: Permits have been conditioned to use appropriate BMPs where warranted. We've found that one of the most effective BMPs is to limit extensive grading activities in the rainy season, and if projects do propose grading in the rainy season to require detailed phased plans showing how storm water pollution will be controlled.

We've also found that the requirement for QSPs to inspect sites that exceed one acre of disturbance is extremely effective.

Proposed Modification: None

Planned Year Four Activities: Same as previous year.

BMP 6-1-5 Discretionary Projects – Land Use Permits

Implementation Details: Additional BMPs may be required for discretionary projects (e.g. restricted fueling areas, equipment maintenance).

Measurable Goals:
Condition projects, as appropriate, for BMPs.

Status:
The BMP is basically the same as 6-1-4 in that we also similarly condition Discretionary Permits to use appropriate BMPs where warranted.

Proposed Modification: None

Planned Year Four Activities: Same as previous year.

Target Audience: Agency Staff, Design Firms and Construction Contractors

BMP 6-1-6 Plan Review

Implementation Details: Erosion and sediment control plans must be submitted and approved prior to construction.

Measurable Goals: Approval of erosion and sediment control plan (or Stormwater Pollution Prevention Plans) on 100 percent of projects. Update the Planning Department's website to include an example erosion and

sediment control plan and also a checklist for items to be included on the plans.

Status: The County reviewed, tracked and ultimately approved all erosion and sediment control plans submitted with permit applications. As of April 6, 2012, we also started requiring and reviewing Stormwater Pollution Control Plans (SWCPs) for projects that involve ground disturbance as required by the new Runoff and Pollution Control Ordinance.

We had also planned on having a new Planning Department website up in the past year but it likely won't be until late 2012, so the example erosion control plan and checklist won't be posted on our website until that time.

Proposed Modification: None

Planned Year Four Activities:

- Continue to approve erosion and sediment control plan (or SWCP) on 100 percent of projects.
- Update the Planning Department's website to include an example erosion and sediment control plan and also a checklist for items to be included on the plans.

BMP 6-1-7 Site Inspections

Implementation Details: Grading and Erosion Control ordinances require site inspection and enforcement at permitted construction sites. Inspections focus on sediment and erosion control BMPs.

Measurable Goals: Inspect 100 percent of active grading permits at the start of the rainy season and again in the middle of the rainy season. Focus inspections on the presence of required BMPs as well as proper installation and anticipated effectiveness. Conduct inspections of grading projects, new single-family dwellings, and commercial projects for stormwater construction BMPs during the non-rainy season. Take enforcement actions where BMPs are found to fail, or have been installed or implemented improperly.

Status: County staff sent letters to the 115 permit-holders with active grading permits reminding them to install erosion and sediment control on their construction sites. After the letters were sent, the County inspected these 115 projects twice during the winter season. The types of projects included single-family dwellings, commercial developments, stand-alone grading projects, and retaining walls. Inspections focused on the adequacy of erosion, sediment and drainage control on the sites, and were performed at least twice during the rainy season for each site. An inspection checklist was utilized for guidance during inspections.

The required erosion control plans that were submitted as part of the applicant's permit application had to show erosion and sediment control BMPs to be implemented during construction (see BMP 6-1-3 for specific requirements). The inclusion of BMPs on the plans was effective in making property owners and contractors aware of erosion and sediment control requirements and also gave them a better idea of what to install.

Proposed Modification: None

Planned Year Four Activities:

- Inspection (and enforcement) of all active grading permits for stormwater BMPs twice during the rainy season.
- Inspection of active grading permits for stormwater BMPs at rough grade, final and building inspections during non-rainy season.
- Send erosion and sediment control reminder letters.
- Inspect for control of waste at construction sites.

BMP 6-1-8 Train Agency Staff

Implementation Details: Inspector and permit reviewers trained on implementing construction stormwater BMPs, including enforcement protocols.

Measurable Goal: Train 100 percent of grading and building inspectors as well as plan review staff annually. Track results of pre and post training quizzes.

Status: All Planning Department grading and building inspectors were trained on erosion and sediment control as well as all plan reviewers. The training focused on:

- The background and genesis of the NPDES requirements.
- Why erosion and sediment control is important.
- Requirements of the County’s Stormwater Permit.
- Examples of the Stormwater Permit implementation program.
- Photos and a discussion of good and bad erosion and sediment control measures.
- Construction waste control.
- Other training and certifications available.
- Discussion, questions and answers.

Quizzes were given during the trainings. Staff that were trained have had these trainings many times and now have a good understanding of storm water BMPs.

Proposed Modification: We found it more effective to spend time on training rather than developing and tracking quizzes, so in Year Four we plan to cease giving quizzes to staff.

Planned Year Four Activities: Train all Planning Department permit and plan review staff in addition to building and grading inspectors.

BMP 6-1-9 Construction Workshops

Implementation Details: Provide BMP workshops for construction community. Augment website information. Brochures available at the County Website.

http://www.sccoplanning.com/html/misc/all_brochures.htm#Environment

Measurable Goal: Update brochures if and when needed. Develop workshop material for construction community. Provide one public workshop annually.

Status: There are several brochures on the County website that relate to construction-related requirements. One, titled “Erosion and Sediment Control Plans,” identifies the information that must be submitted for approval of an erosion and sediment control plan. A sample plan for a single-family dwelling under construction is also included in this brochure. A second pamphlet, titled “Erosion and Sediment Control on Your Construction Site,” provides information on specific erosion, sediment, and runoff (drainage) control measures, and the importance of maintaining these measures after installation. A third brochure presents a list of Certified Professionals in Erosion and Sediment Control that can assist in the preparation of erosion and sediment control plans.

County staff gave two free 1.5 hour public workshops to the community that focused on effective erosion and sediment control practices. The training included an overview of the County’s SWMP requirements, pictures of good and bad sites, an example erosion control plan and other information. Thirty-nine people attended the training. In previous year’s we noticed that the number of contractors who attended was low, so we sent notices of the trainings to more contractors and also contacted the local Santa Cruz County Builder’s Exchange to help get the word out about the trainings. The following table shows a breakdown of the participants for the previous two years:

Summary of Erosion Control Training Attendees		
	<u>Year 2 Training</u>	<u>Year 3 Training</u>
Civil Engineers	16	14
Soils Engineers	5	3
Architects	5	1
Planning Consultants	4	2
Contractors	5	7
Geologists	2	1
Designers	3	4
City Water Department	0	7

In addition to the training that was given by County staff, we also hosted and provided the facilities for a company (EnviroTech) to provide QSD / QSP training. Thirty-six people attended the QSD / QSP class. The breakdown of attendees is shown below:

QSD / QSP Training Attendees	
City / County Staff	17
Contractors	9
Civil Engineers	10

Proposed Modification: While we tried very hard to get contractors to attend our free workshop, we still had sparse attendance from contractors. Additionally, of the 39 attendees that were at the Year Three community workshop, there were not a lot of new faces. We therefore shifted our focus to host a QSD / QSP training, which despite the cost and time commitment was very well attended. In Year Four we proposed to cease the community workshops and instead focus on hosting additional QSD / QSP trainings. These trainings are more broad and detailed. We will also try to host a CESSWI review course if we can find an interested company to provide one.

Planned Year Four Activities:

- Host at least one QSP / QSP training.
- Try to host a CESSWI review course.

BMP 6-1-10 Public Inquiry Program
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Implementation Details: Develop a process for responding to public questions and concerns regarding the stormwater program. Coordinate with the water quality message protocol as applicable.

Measurable Goal: Process for receiving and considering public inquiries regarding construction activities implemented. Method for tracking publicly submitted information established. Track the number of public inquires and complaints received about stormwater issues on projects.

Status: When complaints are received regarding stormwater concerns, the messages are directed to the resource planner assigned to the particular area where the complaint is. Resource planners then investigate the complaint to determine if there is an active building permit or not. If there is an active building permit, the resource planner visits the site, and the visit is logged in the erosion control tracking spreadsheet. If there is not an active building permit, the complaint is transferred to the Planning Department's Code Compliance section to determine if there is a violation of the County Code.

Proposed Modification: None.

Planned Year Four Activities: Continue to respond to complaints and track the complaints.

TABLE 6.1.2 RIPARIAN EXCEPTIONS JULY 1, 2011 - JUNE 30, 2012

Approval Date	Appl. #	APN	Type Of Project	Rationale For Exception
07/15/11	111065	074-181-01	Construction of a retaining wall along a County maintained road.	Necessary to restore the public roadway.
07/19/11	111007	103-171-79	Construction of a 1680 SF SFD.	Necessary to allow use of the parcel. Site is severely restricted.
07/26/11	09-0052	NA	Placement of fill to repair a County maintained road.	Necessary to restore the public roadway.
09/28/11	08-0039	028-302-01	Proposal to construct 3 SFDs and grade 980 cubic yards.	Necessary to allow access to the parcels.
10/28/11	111191	040-311-11	Removal of unpermitted work and restoration.	Necessary for restoration.
04/03/12	111273	028-291-57	Removal of a Eucalyptus tree.	Dangerous tree.
04/05/12	N/A	075-332-08	Repair of failed culvert.	Necessary to maintain access to public road.
05/01/12	N/A	064-281-13	Repair of failed culvert.	Necessary to maintain access to public road.
05/11/12	121067	102-243-02 102-372-06	Landslide repair.	Necessary to allow repair of landslide and protection of existing home.
05/15/12	111245	045-302-03	Construction of a retaining wall to stabilize a landslide.	Necessary to stabilize existing access to site facilities.
06/01/12	111615	042-066-23	Relocation of an in-stream sewer line to the underside of a bridge.	Necessary to remove.
03/27/12	N/A	064-281-13	Removal of sediment that has plugged a culvert.	Without removal, the road will continue to fail.

POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW AND RE-DEVELOPMENTS

Target Audience: Agency Staff

BMP 7-1-1 Land Use Policies and Ordinances

Implementation Details: Since 1980 existing General Plan policies and County land use ordinances have provided an implementation framework for compliance with this minimum control measure and provide significant long-term watershed protection (these policies and ordinances were revised and strengthened in 1983 with the adoption of the Local Coastal Program Land Use Plan and IP). These policies and ordinances were originally identified in the **San Lorenzo River Watershed Management Plan** as necessary implementation measures to improve the water quality of the San Lorenzo River Watershed. The 1980 and 1994 County General Plans and the 1983 Local Coastal Program Land Use Plan incorporated these policies and ordinance provisions for County-wide application.

These policies and ordinances include, but are not limited to, the protection of riparian corridors, wetlands and other sensitive habitats, implementation of FEMA floodplain/floodway protection measures, application of grading and erosion control requirements to all development activities, and protection of Monterey Bay and Coastal Water Quality through development controls on storm water runoff. [Existing General Plan/LCP policies and ordinances are found on the County Website: <http://www.sccoplanning.com> see Sections 5.1, 5.2, 5.4, 5.5, 5.7, 6.3 of the General Plan/LCP and Chapters 16.10, 16.20, 16.22, 16.30 and 16.32]

These policies are implemented as a part of the review for all development activities conducted in the unincorporated area of the County, regardless of size or location.

Because of our long-standing implementation of watershed protection measures and low impact development (LID), the BMP proposed is to assess the effectiveness of the implementation of the existing policies in maintaining and enhancing long-term watershed protection. To accomplish this, a program to measure the effectiveness of these controls shall be instituted. The program will assess habitat degradation and pollutant loading in the context of contributing land use types. This should be accomplished in conjunction with other jurisdictions where watersheds are shared. Intermediate results of this program will be used to determine what policies and/or ordinances need to be revised to strengthen watershed protection. (see BMP 7-1-2)

Measurable Goals:

- In conjunction with the joint effort for developing hydromodification control criteria, develop and implement a review program to measure the effectiveness of County policies and ordinances in providing long-term watershed protection and healthy functioning watersheds.
- Modify policies/ordinances if necessary.
- Amend current criteria to incorporate the specific BMPs associated with the land uses identified in Attachment 4 of the General Permit (except section B.2.i because this will be covered by the hydromodification control criteria covered by BMP 7-1-10). Include the implementation of the amended criteria in the proposed monitoring program. Conduct stakeholder outreach to get feedback on the draft Stormwater Ordinance. Adopt the Runoff and Pollution Control Ordinance, updates to the County Design Criteria, and the County Construction Site Stormwater Pollution Control BMP Manual.

Status: County staff from the Departments of Public Works, Planning, and Environmental Health met multiple times over the second and third permit years to develop a new Runoff and Pollution Control Ordinance that could be used by all three departments for illicit discharge detection and elimination, construction stormwater management and post construction stormwater management. In addition, updates to the County's Design Criteria and new County Construction Site Stormwater Pollution Control BMP Manual were developed in

coordination with the Runoff and Pollution Control Ordinance. The Runoff and Pollution Control Ordinance includes a listing of the Special Use Categories identified in Attachment 4 of the General Permit. Based on the median sized commercial property in urban areas, the County has opted to lower the sizing threshold for commercial developments subject to Attachment 4 of the General Permit to 10,000 square feet. The updated County Design Criteria includes the specific BMPs required for each Special Use Category as described in Attachment 4 of the General Permit with the exception of section B.2.i because it is anticipated that this will be covered by the hydromodification control criteria that will be developed by the joint effort and documented as BMP 7-1-10. Additional updates to the County Design Criteria include project size thresholds for mitigation requirements including requirements for redevelopment projects as well as updated maintenance agreement documents for different sized projects and types of stormwater BMPs.

After a series of internal and stakeholder/public reviews in 2011 the Board of Supervisors in March 2012 adopted Ordinance No. 5117 adding Chapter 7.79 - Runoff and Pollution Control to the Santa Cruz County Code, a new Construction Site Stormwater Pollution Control BMP Manual, and updates to the County Design Criteria.

As part of the effectiveness evaluation, Public Works staff continues to review and track development projects that are permitted by the County. In conjunction with BMP 7-1-12 staff tracks each approved project, the amount of impervious area added, and what type(s) of stormwater BMPs are included as part of their project.

As reflected under BMP 6-1-6, the County has implemented a tracking system to evaluate erosion and sediment control plans submitted with permit applications and implemented during construction. This effort includes tracking whether the plans are complete at the first submittal, who prepared the plans (e.g., property owner, architect), and inspection results regarding whether the plans were installed and maintained properly. Specific problems and deficiencies are recorded. This information will be used, in part, to determine whether any changes to the County's erosion control policies and/or ordinance are called for and, if so, what particular deficiencies need to be addressed. If policy and/or ordinance changes are not warranted, the tracking data may be useful in other ways, such as identifying methods in which public outreach and education could be improved.

In conjunction with the Central Coast Regional Water Quality Control Board's joint effort for developing hydromodification control criteria (joint effort) the County completed a gap analysis as described in BMP 7-1-9. This analysis identified County code, ordinance, and criteria that may need to be updated in conjunction with the development and implementation of hydromodification control criteria. Since stormwater management requirements being developed as part of the Joint Effort are still in draft form, review and updates to County code/ordinance/criteria has not yet occurred.

Proposed Modification: None

Planned Year Four Activities:

- In conjunction with the joint effort for developing hydromodification control criteria, develop and implement a review program to measure the effectiveness of County policies and ordinances in providing long-term watershed protection and healthy functioning watersheds.
- Modify policies/ordinances if necessary.
- Continue to measure the effectiveness of the policies/ordinances and modify in the future as necessary.

BMP 7-1-2 Post Construction Stormwater Control Ordinance

Implementation Details: The County has routinely reviewed all development permits (discretionary and

building) to reduce the impacts of stormwater runoff based on existing policies and ordinances. As discussed in BMP 7-1-1, a program will be instituted to measure the effectiveness of the policies and ordinances. If, as a result of the monitoring, there is a need to revise the policies and ordinances to provide long-term watershed protection, a stormwater control ordinance shall be created if changes to the existing ordinances are inadequate.

Measurable Goal:

- Conduct stakeholder outreach to address questions and comments on the draft Runoff and Pollution Control Ordinance.
- Adopt the Runoff and Pollution Control Ordinance.

Status: Per the assessment completed in the first year for BMP 7-1-1, it was determined that the County would develop a new Runoff and Pollution Control Ordinance rather than providing updates to multiple existing ordinances.

County staff from the Departments of Public Works, Planning, and Environmental Health met multiple times over the second and third permit years to develop a new Runoff and Pollution Control Ordinance that could be used by all three departments for illicit discharge detection and elimination, construction stormwater management and post construction stormwater management.

After a series of internal and stakeholder/public reviews in 2011 the Board of Supervisors in March 2012 adopted Ordinance No. 5117 adding Chapter 7.79 - Runoff and Pollution Control to the Santa Cruz County Code, a new Construction Site Stormwater Pollution Control BMP Manual, and updates to the County Design Criteria..

Proposed Modification: None

Planned Year Four Activities:

- Evaluate new ordinance effectiveness and further modify as necessary.

Target Audience: Agency Staff, Design Firms, Project Owners

BMP 7-1-3 Evaluate Existing Program Efficacy

Implementation Details: Prior to the issuance of any discretionary permit for a development activity that will create more impervious surface, a preliminary drainage and erosion control plan is required to be submitted for review and approval. These preliminary plans must demonstrate that stormwater from the impervious surfaces will not contribute to flooding and water quality degradation and that all sediment will be contained on-site. For those projects where there will be no building permit or map filing, final plans are reviewed and approved based on the requirements of the ordinances and policies prior to authorization to commence work. Periodic inspections are required (see Chapter 6).

Prior to issuance of all building permits and prior to the recording of all Final and Parcel Maps, a final drainage and erosion control plan must be submitted for review and approval by Public Works and the Planning Department. After issuance of building permits or recordation of maps and Subdivision Agreements, periodic inspections occur (see Chapter 6 for Construction BMP implementation).

Conditions of approval for all drainage and erosion control plans require the implementation of construction

and post construction measures to protect water quality, riparian habitats and prevent flooding.

Measurable Goal:

- If it is determined that changes need to be made based on the program discussed in 7-1-1, revise procedures as necessary.

Status: As reflected in 7-1-1, County staff from the Departments of Public Works, Planning, and Environmental Health met multiple times over the second and third permit years to develop a new Runoff and Pollution Control Ordinance that could be used by all three departments for illicit discharge detection and elimination, construction stormwater management and post construction stormwater management. In addition, updates to the County’s Design Criteria and new County Construction Site Stormwater Pollution Control BMP Manual were developed in coordination with the Runoff and Pollution Control Ordinance.

Proposed Modification: None

Planned Year Four Activities: None

BMP 7-1-4 Design Standards

Implementation Details: The County Code Chapters cited in BMP 7-1-1 and the County Design Criteria contain specific standards and conditions for the design of drainage and erosion control measures for all development and redevelopment within the County’s jurisdiction. As stated in BMP 7-1-1, the County’s ordinances already provide and will continue to provide a high level of long-term watershed protection and promote Low Impact Development (LID). The requirements include stormwater retention where feasible, bio-filtration of stormwater, and reduction of post-development flow rates to pre-development rates (through detention and other means). Planning policies promote retention of vegetation, protection of riparian corridors and site planning to minimize grading and site disturbance. Should the monitoring program identify ordinance or Design Criteria measures that are inadequate to protect watershed health or functioning, these ordinances and/or criteria will be amended to provide the level of protection necessary to protect the watersheds, including maximization of LIDs. The ordinances or Design Criteria will be revised to incorporate any subsequently approved hydromodification measures attached to this permit.

Measurable Goals:

- Modify the Design Criteria as identified as part of BMP 7.1.1 to incorporate interim hydromodification criteria, and to ensure compliance with Attachment 4.
- Apply the Design Criteria to 100 percent of applicable development projects.
- In conjunction with BMP 7.1.12 condition structural and nonstructural stormwater control BMPs.

Status: In conjunction with BMP 7-1-1, in March 2012 the Board of Supervisors adopted Ordinance No. 5117 adding Chapter 7.79 - Runoff and Pollution Control to the Santa Cruz County Code, associated Design Criteria Updates, and a new Construction Site Stormwater Pollution Control BMP Manual.

The Runoff and Pollution Control Ordinance along with updates to the County Design Criteria ensure compliance with Attachment 4 of the General Permit (with exception to section B.2.i because this will be covered by the hydromodification control criteria cover by BMP 7-1-10).

As part of the joint effort and BMP 7-1-12 the County and Central Coast Regional Water Quality Control Board agreed that the County’s existing plan review process is sufficient as interim LID implementation for new and

redevelopment projects.

The County Design Criteria is applied to each applicable project that is routed to the Stormwater Management section of Public Works, including projects in the County that are outside of urban permit boundaries. During the third permit year (July 2011 through June 2012) 100 percent of the applications routed to the Stormwater Management Section of Public Works were reviewed relative to Design Criteria requirements. These requirements include mitigations for a range of storms for all projects that result in an increase in impervious area. In order to meet these criteria, project applicants utilize both structural and nonstructural BMPs. Since March 2012 mitigations are also required for redeveloped impervious areas. See Section 3 of the current Design Criteria, which can be accessed at:

<http://www.dpw.co.santa-cruz.ca.us/DESIGNCRITERIA.pdf>

Proposed Modification: None

Planned Year Four Activities:

- Modify the Design Criteria and standards/conditions contained within County Ordinances if identified as needed in BMP 7.1.1.
- Apply the Design Criteria to 100 percent of applicable development projects.
- In conjunction with BMP 7.1.12 condition structural and nonstructural stormwater control BMPs.
- Review inspection program and revise as needed to include a post construction runoff controls checklist to verify that runoff controls are implemented.

BMP 7-1-5 CEQA Checklist

Implementation Details: Review and revise, if necessary, the CEQA Initial Study checklist to ensure that stormwater runoff quality and quantity are considered.

Measurable Goal: Review and revise, where necessary, the CEQA Initial Study checklist to ensure that stormwater runoff quality and quantity are addressed, consistent with the goal of long term watershed protection.

Status: In May 2010 the County updated its CEQA Initial Study Checklist to fully reflect all current CEQA environmental review requirements. In addition, under BMPs 5-1-11 and 7-1-2, County staff has adopted a Runoff and Pollution Control Ordinance. County staff reviewed the CEQA checklist and determined that revisions were not necessary to compliment the Runoff and Pollution Control Ordinance.

Items B-7, B-8 and B-10 of the Initial Study Checklist require a discussion of both storm water quantity and quality and we feel do not need to be revised. These sections require the Initial Study to address quantity and quality as follows:

Would the project....

B-7: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding, on- or off-site?

B-8: Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems, or provide substantial additional sources of polluted runoff?

B-10: Otherwise substantially degrade water quality?

When initial studies are prepared by various planners they are all reviewed by the Environmental Coordinator in the Planning Department. The Environmental Coordinator has been attending RWQCB workshop and familiarizing himself with the new storm water requirements to make sure that the initial studies adequately address these issues.

Proposed Modification: None

Planned Year Four Activities: None

BMP 7-1-6 On-Going Project Post-Construction Monitoring

Implementation Details: Following final inspection and acceptance of erosion control and drainage facilities associated with development or redevelopment, review of annually submitted reports will be conducted to insure that facilities are maintained.

Measurable Goals:

- Continue to require recorded maintenance agreements for private stormwater management facilities.
- Track the number of structural controls maintained and reported on annually.
- Issue enforcement action for non-compliant conditioned projects.
- Track enforcement actions taken.
- Prepare ordinance amendments, if necessary, to strengthen requirements to provide for on-going monitoring and maintenance by property owners, with oversight by the County.

Status: The Public Works Department Stormwater Management Section has required all projects that are proposing structural stormwater quality or quantity treatment facilities to record a maintenance agreement that requires annual maintenance and reporting to the County. During the third permit year approximately 30 projects had permits that were either issued or finalized with recorded maintenance agreements.

The requirement for recorded maintenance agreements has been in effect for more than 10 years at the County. This program was initially implemented for commercial projects that either had detention and/or water quality treatment units and has now grown to cover structural stormwater BMPs that are proposed for any residential or commercial project. The database was consolidated during the first permit year. There have been about 380 total stormwater maintenance agreements recorded since 1996. While the County has consistently required recorded documents prior to finalizing development permits, follow-up on annual maintenance and reporting has not been as consistent. This was partially due to the lack of funding and enforceable mechanisms available for routine system oversight by the County prior to the March 2012 adoption of the Runoff and Pollution Control Ordinance and Design Criteria updates.

Recognizing the need for enforcement authority, the Runoff and Pollution Control Ordinance and County Design Criteria updates adopted in March 2012, include on-going maintenance requirements for stormwater management facilities consistent with Attachment 4 of the General Permit and provide a mechanism for the County to fund the monitoring and enforcement of the maintenance of large private stormwater management facilities. Updated maintenance agreement requirements in the Design Criteria include a tiered system for providing oversight for these private facilities. Stormwater management facilities for large projects require a recorded maintenance agreement, annual reporting to the County, and an annual fee to cover County inspection costs (based on inspection occurring once every five years). Smaller projects and projects with recorded maintenance agreements prior to March 2012 will be inspected on a complaint driven basis.

Proposed Modification: Measurable goals No. 1 and 2 will be updated to reflect that only large projects will be

required to submit annual reports to the County and will be inspected on a routine five-year basis.

Planned Year Four Activities:

- Continue to require recorded maintenance agreements and annual reporting for large private stormwater management facilities.
- Track the percentage of large stormwater facilities maintained and reported on annually.
- Issue enforcement action for non-compliant conditioned projects.
- Track enforcement actions taken.
- Prepare ordinance amendments, if necessary, to strengthen requirements to provide for on-going monitoring and maintenance by property owners, with oversight by the County.

Target Audience: Agency Staff

BMP 7-1-7 Train Staff

Implementation Details: Train designated staff in plan review, proper inspection and monitoring of structural controls, BMPs, and record keeping procedures. Particular emphasis will be placed on evaluating the adequacy of post-construction controls, low impact development, and hydromodification.

Measurable Goal:

- Train new staff as they are hired.
- Train 100 percent of existing staff annually.

Status: No new staff was hired in Year 3.

Public Works Stormwater Management Section review staff regularly discusses development requirements regarding LID practices for consistency in comments and requirements among reviewing staff. Three of the five Stormwater Management staff attended the CASQA's Stormwater Conference in September 2011. There were many presentations at the conference focusing on post construction hydromodification controls, and low impact development strategies. In February 2012 a formal meeting with 100 percent of Stormwater Management Plan review staff occurred to review the Runoff and Pollution Control Ordinance and updates to the CDC.

Proposed Modification: None

Planned Year Four Activities:

- Train new staff as they are hired.
- Train 100 percent of existing staff annually.

BMP 7-1-8 Train Members of the Development and Construction Industries

Implementation Details: Conduct training sessions with County planners and public sector engineers, architects, developers, consultants, etc. These training sessions will include specific attention to Low Impact Development (LID) and hydromodification.

Measurable Goal: Conduct one training session each year for County planners and public sector engineers, architects, developers, consultants, etc.

Status: There were several informational meetings regarding the County’s Runoff and Pollution Control Ordinance and associated Design Criteria updates. One meeting occurred in September 2011 to present draft documents and receive feedback from the stakeholders, who were largely represented by the local development community. A second meeting was held at the end of March 2012 after the ordinance and criteria updates were approved to provide an overview on these new regulations.

Proposed Modification: None

Planned Year Four Activities:

- Conduct one training session each year for County planners and public sector engineers, architects, developers, consultants, etc. The training will include specific attention to low impact development and hydromodification.

Joint Effort for Developing Hydromodification Control Criteria

Target Audience: Agency Staff, Design Firms, Project Owners

The joint effort for developing hydromodification control criteria began on October 1, 2010. Implementation of BMPs 7-1-9 – 7-1-12 will be completed as part of the joint effort. Joint efforts’ quarters one through three fall in Permit Year Two, quarters four through seven fall in Permit Year Three, and quarters eight and nine fall in Permit Year Four.

BMP 7-1-9 Enforceable Mechanisms

Implementation Details: Develop and/or modify enforceable mechanisms that will effectively implement hydromodification controls and Low Impact Development (LID). Enforceable mechanisms may include municipal codes, regulations, standards and specifications.

Measurable Goal: None in Year Three per the joint effort schedule.

Status: n/a

Proposed Modification: None

Planned Year Four Activities:

- Approve new and/or modified enforceable mechanisms that effectively resolve regulatory conflicts and implement hydromodification controls and LID in new and redevelopment projects.
- Apply new and/or modified enforceable mechanisms to all applicable new and redevelopment projects.

BMP 7-1-10 Hydromodification Control Criteria

Implementation Details: Derive County-specific criteria for controlling hydromodification in new and redevelopment projects using RWQCB-approved methodology developed through the joint effort.

Measurable Goal: None in Year Three per the joint effort schedule.

Status: n/a

Proposed Modification: None

Planned Year Four Activities: Hydromodification control criteria.

BMP 7-1-11 Applicability Thresholds

Implementation Details: Select applicability thresholds for applying Hydromodification Control Criteria to new and redevelopment projects. Applicability thresholds will be consistent with long-term watershed protection.

Measurable Goal: None in Year Three per the joint effort schedule.

Status: n/a

Proposed Modification: None

Planned Year Four Activities: Applicability thresholds.

BMP 7-1-12 Implementation Strategy for Low Impact Development (LID) and Hydromodification

Implementation Details: Develop and enact a strategy for implementing LID and hydromodification control for new and redevelopment projects. The strategy will provide appropriate education and outreach for all applicable target audiences, and will include specific guidance for LID BMP design and for complying with hydromodification control criteria. The strategy will also apply LID principles and features to new and redevelopment projects during the two-year period preceding adoption of hydromodification control criteria.

Measurable Goal: Develop and enact a strategy for implementing LID and hydromodification control for new and redevelopment projects. The strategy will provide appropriate education and outreach for all applicable target audiences and will include specific guidance for LID BMP design and for complying with hydromodification control criteria. The strategy will also apply LID principles and features to new and redevelopment projects during the two-year period preceding adoption of hydromodification control criteria.

- Interim LID Implementation – Apply LID principles and features to all applicable new and redevelopment projects.

Status: The County originally developed the following education and outreach strategy as part of the joint effort in Year Two. The schedule below includes updates and status as of Year Three.

**County of Santa Cruz
 Joint Effort: LID Education and Outreach Summary**

Target Audience	LID: Public Education & Outreach Efforts	Estimated Schedule	Status
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Residents			
	County plans to fund the Santa Cruz Resource Conservation District (RCD) to conduct an LID education program for residents w/in the County. A brief description of this program is provided in text below* and some of the specific work elements are included in this table.	Q4-Q9	Not Done Yet
	County website, Public Works' web pages provides storm water information including a link to publications from the RCD. This includes the LID guidance manual "Slow it. Spread it. Sink it! A Homeowner's Guide to Greening Storm Water Runoff."	Q2-Q9	On-going
Architects, Developers, Building Contractors, Design Consultants, etc:			
	Potential: Article in Builder's Exchange newsletter, Downtown Association newsletter/email, or other trade organization.	Q3-Q5	Not Done
	Potential: Workshop co-sponsored by Santa Cruz municipalities.	Q7	Not Done Yet
Residents & Architects, Developers, Building Contractors, Design Consultants, etc:			
	County co-funds Ecology Action, Santa Cruz Adult School, and the City of Santa Cruz to conduct a Green Gardner education program for landscapers and residents. In spring 2011, a series of "Ocean Friendly Landscaping" classes were held to teach landscaping skills that conserve water and reduce runoff pollutants such as: ecological landscape design, rainwater and gray water harvesting, proper installation of irrigation systems, less toxic pesticide control, etc.	Q3	Done
	Article/informational piece on LID published in the local newspaper, <i>The Sentinel</i> . The article was published on April 30, 2011.	Q3	Done
	Specific guidance on how to achieve	Q8**	Not

	and demonstrate compliance with the hydromodification control criteria and LID requirements made available to new and redevelopment project applicants.		Done Yet
County Board of Supervisors			
	Potential: Agenda items at one or more meetings regarding new and/or modified enforceable mechanism (e.g. revised municipal code or mandatory Development BMPs) for applicable new and redevelopment projects.	Q7-Q8**	Not Done Yet

**Additional Description of the County of Santa Cruz/Resource Conservation District LID Education Program for Residents during the FY 2011:* The County plans on funding and partnering with the Resource Conservation District of Santa Cruz County (RCD) to conduct a Low Impact Development (LID) education program for residents within the County. Highlights of the program include the following:

- ◆ Public education workshops held at various public forums.
- ◆ Distribution of the RCD home drainage guide "Slow It. Spread It. Sink It!" in local nurseries and landscape supply stores; and
- ◆ Distribution of the RCD home drainage guide "Slow It. Spread It. Sink It!" by RCD and County staff to residents upon request who heard about the brochure either by word of mouth, info cards from local nurseries, or from the RCD or County web sites.

** Schedule is dependent upon the Joint Effort’s development of RWQCB approved methodology and may be delayed in accordance with any Joint Effort schedule changes per RWQCB approval.

As part of the joint effort process, County and Central Coast Regional Water Quality Control Board staff agreed that the County’s existing plan review process is sufficient as interim LID implementation for new and redevelopment projects. The County continues to review and require LID measures in development and redevelopment projects by requiring compliance with the County Design Criteria (see BMP 7.1.4).

Proposed Modification: None

Planned Year Four Activities:

- Guidance – Specific guidance on how to achieve and demonstrate compliance with the hydromodification control criteria and LID requirements made available to new and redevelopment project applicants.
- Education and Outreach – Tracking report indicating County’s accomplishments in education and outreach supporting implementation of LID and hydromodification control for new and redevelopment projects.
- Interim LID Implementation – Apply LID principles and features to all applicable new and redevelopment projects.
- Tracking Report for the period Q2 to Q8 identifying LID design principles and features incorporated into each applicable new and redevelopment project.

POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Target Audience: Agency Staff

BMP 8-1-1 Review Agency Housekeeping Programs

This BMP was completed in Year One.

BMP 8-1-2 Facility BMPs

Implementation Details: Develop BMPs for agency facilities such as corporation and construction yards to address vehicle maintenance, material storage, and fueling operations. Use the Municipal Handbook from CASQA as a guidance document.

Measurable Goal: Annually document that facility BMPs are being implemented at 100 percent of facilities. Complete facility inspections checklist per schedule developed in Year One.

Status: Corporation Yard Storm Water Assessment checklists have been updated to be consistent with Environmental Compliance and Green Business checklists. Inspections using these updated checklists will begin in Year Three.

Inspections at facilities have been completed and documented. Recommended improvements or changes from the inspection are acknowledged. The County will address the deficiencies that do not require reconstruction or regrading as soon as possible, within this fiscal year. The County plans on addressing the other cost-prohibitive deficiencies that will require reconstruction/regrading when funds become available from grants or other funding sources. See Section D.2 for responses to the May 2012 audit. Inspection sheets are used as documentation for implementation.

There are County facilities that are operating under separate discharge permits from the State. The tracking and reporting on these operations will continue under their respective permit programs.

Proposed Modification: Suggest a delay in the time schedule to address the cost-prohibitive deficiencies that will require reconstruction /regrading, until funds become available from grants or other funding sources.

Planned Year Four Activities: Annually document that facility BMPs are being implemented at 100 percent of facilities.

BMP 8-1-3 Integrated Pest Management (IPM) and Integrated Vegetation Management Program (IVMP)

Implementation Details: The County Board of Supervisors adopted an IPM Policy that has the long-term goal of eliminating pesticide use on County property. The County has also adopted an IVMP that limits herbicide use on County roads. The policies are located at the following websites:

http://sccounty01.co.santa-cruz.ca.us/Bds/Govstream/Bdsvdata/non_legacy/agendas/2008/20080610/pdf/015.pdf

http://www.dpw.co.santa-cruz.ca.us/Operations/IVMP_Feb08.pdf

Measurable Goal: Document annual updates of IPM strategy, and report on BMPs implemented. Report reduction of County pesticide use.

Status: The County Board of Supervisors adopted an IPM Policy that has the long-term goal of eliminating pesticide use on County property. The County has also adopted an IVMP with the goal of eliminating herbicide use on the most environmentally-sensitive County roads.

Since its inception, the Santa Cruz County Integrated Pest Management program has been successful in significantly reducing the amount of the County’s pesticide usage. All departments are well aware of the program and the procedures for responding to pest concerns. The use of EPA Category I and II pesticides has been discontinued, and use of many Category III materials has been reduced.

Maintenance staff for County facilities continues to apply less toxic measures, mechanical controls and habitat modification to reduce pest impacts. Monthly inspections at key facilities identify structural and sanitation problems that may encourage pest entry. Sustainable, low-toxicity products continue to be used.

County Parks continues to use alternative approaches for landscape and parks pest management. BMPs include mechanical pest exclusion, green-flaming weeds, landscaping with hardy native plants and hardscape elements (vs. lawns) and drip irrigation.

The County Administrative Office and each department are committed to achieving the goals of the IPM program. The following table shows trends in the use of the four major pesticides still used by the County:

Pesticide	Year					% Change
	2007	2008	2009	2010	2011	10 to 11
Glyphosate gal.	160	105	171	142	160	13
Aluminum Phosphide lbs.	22	134	111	107	145	35
Diphacinone lbs.	38	23	0	0	0	0
Bromodialone lbs.	30	46	55	26	26	0

During the third permit year, three public meetings by the IPM Departmental Advisory Group were held.

The policy and most current annual report on this program can be found at:

http://sccounty01.co.santa-cruz.ca.us/bds/Govstream/BDSvData/non_legacy/agendas/2012/20120612/PDF/021.pdf

Proposed Modification: None

Planned Year Four Activities: Document annual updates of IPM strategy and report on BMPs implemented. Report on reduction of County pesticide use.

BMP 8-1-4 Municipal Parking Lot Sweeping

Implementation Details: The County owns and maintains parking lots. Parking lots can be a source of pollutants and should be swept regularly.

Measurable Goal: Develop a sweeping schedule. Implement and document maintenance per the sweeping schedule.

Status: Due to reduced funding, the County currently has limited staff and available resources to sweep parking lots. However, in order to more efficiently utilize existing resources, the Department of Public Works purchased the GBA/Lucity software, a Geographic Information System (GIS) database, that will help operations staff develop, track, and report on parking lot sweeping, as well as develop a sweeping schedule. The database will provide consistency between County Public Works divisions and will assist in tracking reporting. Unfortunately, due to limited GIS staff, this software has not been configured for use by Public Works Maintenance staff. Maintenance programs for parking lots that are under County Parks and General Services Departments will be developed separately.

Reduced funding has postponed the development and implementation of a municipal parking lot sweeping program. Currently there is no mechanical sweeping of municipal parking lots. Debris is currently being blown or raked to specific locations and removed by hand. A monthly sweeping schedule is being developed for the Public Works Maintenance Yards – Brommer, Felton and Roy Wilson. In the meantime, storm drains are inspected and cleaned as needed.

Proposed Modification: Postpone schedule due to funding limitations.

Planned Year Four Activities: Develop a sweeping schedule. Implement and document maintenance per the sweeping schedule.

BMP 8-1-5 Chlorinated and Brominated Water Discharges

Implementation Details: Municipal operations may result in the discharge of chlorinated and/or brominated water.

Measurable Goal: Implement and document that water discharges from maintenance at the County's public swimming pool go directly to the sanitary sewer without any discharges to the storm drain system.

Status: Water discharges from maintenance of the County's swimming pool go directly to the sanitary sewer without any discharges to the storm drain system.

Proposed Modification: None

Planned Year Four Activities: Implement and document BMP established in Year One.

BMP 8-1-6 Storm Drain Facility BMPs

Implementation Details:

The County owns and maintains a storm drain system. The system includes ditches and creeks, and silt and

grease traps. Maintenance consists of regular inspections and removal of wastes.

Measurable Goal: Develop cleaning schedule. Track the frequency of cleaning and the amount of waste removed annually. Prioritize maintenance efforts based on the amount of waste removed.

Status: Maintenance staff inspects and cleans the storm drain systems on a regular basis using a vacuum truck and hand equipment. The storm drain systems consist of drop inlets (DIs) and silt and grease traps. The surfaces of the DI grates are cleared of debris on an as needed basis for flood control maintenance. Two times a year (before winter and after winter) the silt/grease traps are inspected and cleaned out as needed, more often if the area is a known pollutant producer. Cleaning and the amount of waste removed annually are currently being tracked. Additional maintenance is based on the amount of waste removed. While performing this duty, if any illicit discharges are found, maintenance staff reports the situation to the Public Works dispatcher who in turn notifies the Environmental Health Department. Staff is directed to stay clear of any unknown substances until a representative from Environmental Health has given procedural guidance. This year 717 storm drains were inspected and 65 were cleaned - 13.7 cubic yards netting 13 tons of material were removed, and 86 silt and grease traps were inspected and cleaned - 66.57 cubic yards totaling 83 tons of material was removed. No indications of illicit discharges were identified this year during maintenance procedures. Silt and grease traps are scheduled to be cleaned twice yearly, more often if the area is a known pollutant producer. Specific routes are being established for catch basin and silt and grease trap cleaning based on the information gathered.

Maintenance/installation of catch basin markings will be coordinated with catch basin cleaning and combined with this BMP. The County will no longer use volunteers to fulfill this BMP due to quality control and liability issues.

Staff attended an introductory training of GBA (see BMP 8-1-4) in 2010.

The GBA system is now called Lucity.

The input of the drainage data into Lucity was completed. Public Works staff did a series of initial meetings to discuss and review current maintenance protocols, procedures, and maintained infrastructure. Through these meetings and review of existing documentation, we have begun to isolate from our comprehensive Lucity drainage inventory infrastructure that is maintained by the County and requires associated recording of said maintenance.

We are in the process of building queries within Lucity to isolate this infrastructure which will be used in building preventative maintenance work orders for operations staff, and will allow for appropriate documentation of work performed.

We will also be building a web-based interface for our operations dispatch staff to automate the service request and work order process for drainage related complaints and concerns.

Proposed Modification: Include marking County maintained urban inlets during as part of this BMP. Urban inlets to be marked will be determined utilizing the 2010 census urbanized areas and County maintained roads. Finalize these marking in Year Four.

Planned Year Four Activities: Track the frequency of cleaning and the amount of waste removed annually. Prioritize maintenance efforts based on the amount of waste removed. Complete storm drain markings on urban inlets in County maintained roads by Year Four. Check markers during routine maintenance and replace as needed. Coordinate this work with GIS.

BMP 8-1-7 Stormwater Pump Station BMPs

Implementation Details: The County owns and maintains pump stations as part of the storm drain system.

Maintenance and operation of the pump stations consists of regular inspections and removal of wastes.

Measurable Goal: Track the frequency of cleaning and the amount of waste removed annually.

Status: No removals in 2011 based on visual inspections. Removal of vegetation is slated for 2012, dependent on the acquisition of permits.

The County currently maintains three stormwater pumps.

One is a pump station at a County maintained detention basin at 38th Avenue and Brommer Street. This detention basin is off-line and has a well vegetated bottom. Sediment build up has not been and is not expected to be an issue at this facility. Visual inspections of this facility occur on a regular basis. The electrical pump equipment was recently retrofitted. The pump is only run during and subsequent to large (greater than 10 year) storm events.

The County also maintains two additional pumps located on the Pajaro River levee, one at Shell Road and another at Harkins Slough. The maintenance of these pumps consists of regular visual inspections and removal and disposal of built up material on an as needed basis.

There are three flood control pump stations, noted below, that are maintained by the Public Works Drainage maintenance section.

38th Avenue storm water detention basin – during storm events water is diverted into the retention basin to prevent flooding to downstream streets and properties. During normal operation, run off flows through a concrete lined channel that runs around the perimeter of the basin and off the property to an open channel downstream. This pump station is monitored on a weekly basis for proper operation of the pumps, vegetation control throughout the basin, and building and perimeter fence maintenance. Sediment, trash, and debris are removed on a regular basis to prevent material from being carried downstream by flood waters. Any sediment that is removed is disposed of properly. During a storm event the pump station is monitored daily for the above reasons.

Harkins Slough flood control pump station – this pump station prevents water from the adjoining Watsonville Slough from flowing into Harkins Slough, which is at a lower elevation, and flooding property upstream of the station. The water pumped by this station is used by the Pajaro Valley Water Management Agency (PVWMA) in its ground water recharge system. The pumps and station structure are monitored by Public Works staff bi-monthly during the summer season and daily during the winter months. The pumps use a float system which activates the pumps on an as needed basis. Sediment and floating vegetation in the slough channel are removed periodically (three to five years) to keep the area around the impellers clear to assure proper operation of the lift pump. Trash and debris are removed regularly and disposed of properly.

Shell Road flood control pump station – this pump station is located on the Watsonville Slough and prevents flooding to upstream properties along the slough from the tidal flow of the Pajaro River lagoon. The pumps use a float system which activates the pumps on an as needed basis. The pump station structure and lift pumps are monitored on a daily basis during the summer months and three to four times a day during a storm event. Sediment, trash, and debris from within the concrete weir at the station are removed regularly and disposed of properly.

Proposed Modification: None

Planned Year Four Activities: Track the frequency of cleaning and amount of waste removed annually.

BMP 8-1-8 Street Sweeping BMPs

Implementation Details: The County sweeps 225 miles of commercial and arterial streets. Street sweeping is performed twice monthly.

Measurable Goal: Report the number of miles swept and the amount of waste removed annually. Prioritize efforts based on patterns of waste removal and field observation.

Status: Due to cuts in funding and personnel, Public Works is now operating one sweeper on an average of three to four days a week (concentrating on sweeping of bike lanes and curb and gutter in sensitive areas). Schedule 1 is swept on a regular basis. The streets listed on these schedules are swept at least once a month. Roads in Schedules 2 and 3 are no longer swept on a regular basis. They are monitored and swept on an as needed basis. The following describes the areas swept.

Schedule 1: Includes all designated bike lanes county-wide as well as roads and streets in the Live Oak and Mid County areas. This schedule includes the Opal Cliffs area, the streets around the various lagoons and beaches, and the Avenues between 41st and the Yacht Harbor.

Schedule 2: Subdivision areas in Mid County, Soquel, and south County to the Watsonville area.

Schedule 3: North County areas with and without curb and gutter such as Felton, Ben Lomond, Boulder Creek, Mt. Hermon, and the Davenport area.

For the calendar year July 2011 to July 2012:

-1,555 curb miles and 241 center miles were swept.

-2,179 cubic yards of material was collected and properly disposed.

The number of miles and amount of waste removed annually is documented. Sweeping efforts are prioritized based on accumulated sediment in bike lanes and curb and gutters in sensitive areas. New sweeping schedules are being created based on need.

Proposed Modification: None

Planned Year Four Activities: Report the number of miles swept and the amount of waste removed annually. Prioritize efforts based on patterns of waste removal and field observation.

BMP 8-1-9 Road Repair and Maintenance BMPs

Implementation Details: Public Works road maintenance crews currently inspect, clean, and replace storm drain culverts (cross culverts) located within the public road right of way. Road crews also clean and grade roadside drainage ditches. Public Works has a road maintenance manual available at:

http://www.fishnet4c.org/projects_roads_manual.html

Measurable Goal: Summarize road repair and maintenance BMPs implementation annually.

Status: The County maintains 599 miles according to an approved road maintenance manual. The road maintenance manual is posted on the County website and can be found here:

http://www.fishnet4c.org/projects_roads_manual.html

The list of County maintained roads is available here:
<http://www.dpw.co.santa-cruz.ca.us/Operations/CMRoads.pdf>

Repair and Maintenance BMPs are implemented for routine as well as emergency work including: culvert replacements, storm damage repairs and ditch cleaning. Erosion and sedimentation control are used according to FishNet 4C recommendations. During Year Three 28 cross culverts were replaced, 2 storm damage sites were repaired, and 20 miles of ditch cleaning was performed.

Proposed Modification: None

Planned Year Four Activities: Summarize road repair and maintenance BMPs implementation annually.

BMP 8-1-10 Municipal Maintenance Employee Training

Implementation Details: Develop initial and refresher training program for municipal maintenance employees. The Department of Public Works has several Erosion Control and BMP training videos that are used for training and are available on its website at:
www.dpw.co.santa-cruz.ca.us/EROSIONCONTROL.htm

Measurable Goal: Provide training to new employees.

Status: A stormwater training was developed for all operations employees at the Brommer Street Maintenance Yard. One hundred percent of the operators were trained on Stormwater Management BMPs during Year One. The presentation has been posted on the County's intranet for managers and supervisors to use in future years to train new and existing employees. There was one new employee hired during Year Three, but they are currently out on leave and will be trained when they return to work.

The Parks Maintenance Manager and two Parks Maintenance Supervisors in the Parks, Open Spaces and Cultural Services Division of Public Works attended numerous IPM training sessions in 2010 in order to obtain more information about IPM practices. The topics included, among others:

- . Biting and stinging arthropods
- . Vertebrate Pest Control
- . Soil Fertility
- . Turf grass renewal in spring
- . Identification and control of Wasps
- . Re-emergence of bed-bugs
- . Weed Resistance Management

Proposed Modification: None

Planned Year Four Activities: Provide training to new employees.

D.2 Response to Audit

Program Violations

1. *Violation of General Permit section D.1 for failure to “maintain, implement, and enforce an effective SWMP.” Illicit Discharge Detection and Elimination Best Management Practice (BMP) #13 states the County will “develop, submit, and implement Wasteload Allocation Attainment Programs.”*

Action: *The County must develop the WAAP or WAAPs in accordance with Illicit Discharge Detection and Elimination BMP #13.*

Response: The County has developed a WAAP (see Attachment 1) that addresses all TMDLs and listed impairments in County waterways related to stormwater system discharges. As discussed previously the WAAP will serve primarily as a compilation of previous and ongoing efforts that the County is already engaged in through its stormwater management and water quality monitoring programs. The County already has programs in place that address the objectives of the WAAP to the extent allowed under current resources and priorities.

2. *Violation of General Permit section D.1 for failure to “maintain, implement, and enforce an effective SWMP.” Pollution Prevention/Good Housekeeping for Municipal Operations BMP #2 states the County will identify facility BMPs and “develop an inspection checklist and schedule for agency facilities where storage, maintenance, and cleaning occur.”*

Action: *The County must develop site specific BMPs and inspection checklists for its facilities. The County must implement BMPs to correct the needed improvements described above, including BMPs to (1) prevent contaminated stormwater runoff as a result of contact with uncovered materials, (2) clear out storm drain inlets plugged with debris, (3) protect the fueling station from run-on, (4) eliminate erosion at the eastern portion of the Brommer Maintenance Yard, (5) prevent sedimentation to Rodeo Gulch Creek, and (6) establish long-term functional perimeter control for the eastern boundary of the Brommer Maintenance Yard.*

Response: The County has developed site-specific checklists for 691/701 Ocean Street, Brommer Yard, and the Lode Street Sanitation Facility as well as for many other County facilities. The following BMPs have also been implemented: (1) Metal and debris were removed from the 691/701 Ocean Street site. In the future the area will not be used for storing materials that can potentially contaminate stormwater. The uncovered materials stored at Brommer Yard have been covered with black plastic and/or blue plastic tarps. (2) The plugged inlets at 691/701 Ocean Street have been cleaned. Sediment was removed and vegetation was cut back. A regular maintenance schedule has been developed and included in a Storm Drain Maintenance Plan for the General Services Department Fleet Services for this site. (3) Regarding run-on at the fueling station, staff determined in consultation with a Senior Civil Engineer that run-on in the fueling area is minimal. Small amounts of rain may blow under the canopy and vehicle tire tracks. The biggest contributor to water under the canopy is rainwater that drips from the SE corner of the canopy onto the SE corner of the fueling area. Water running onto the fueling areas from these sources does not run back out onto the pavement and down to the storm drains. If it moves at all, it runs towards the curb around the CNG system. It is stopped by the curb and evaporates there. If there is a residue left over at the curb it can be cleaned up in the same manner as a minor fuel spill. No additional measures are required at this time to manage run-on under the canopy at the fueling area. (4) Erosion at Brommer Yard has been minimized by using tarps. Sedimentation, resulting from any incomplete elimination of the erosion, gets stopped along the waddle and the silt fence. (5) and (6) Both sediment waddles and silt fences have been installed at the Brommer Yard adjacent to Rodeo Gulch. The waddles will be inspected and replaced as needed but at least

annually to prevent sedimentation to Rodeo Gulch. Sediments (if any) accumulated along the waddle and silt fence will be removed, as necessary, and disposed of properly. See Attachment 2 for photos of these sites after the additional BMPs were implemented.

3. *Violation of General Permit section D.1 for failure to “maintain, implement, and enforce an effective SWMP.” Public Involvement and Participation BMP #1 states the County will mark all storm drains in the commercial and residential neighborhoods within the permit area.*

Action: *The County must mark all storm drains in the commercial and residential neighborhoods within the permit area and establish a systematic inspection and marker replacement program.*

Response: The wording in the SWMP regarding this BMP is unclear. The intent of this BMP (as is reflected in the last two years of Annual Reports) was to mark half of the inlets in commercial and residential areas within permit limits utilizing volunteer labor. Based on the audit and the CCRWQCB staff interpretation of the SWMP language expecting that all storm drain inlets in these areas are to be marked it is obvious that the language in the SWMP did not clearly reflect our intentions. Regardless, the County is willing to commit to mark all inlets in County maintained roads that lie within 2010 census designated urban areas. This work will be completed under BMP 8-1-6.

In addition to the unclear SWMP language, the County has run into additional difficulties in completing this BMP. The reason this BMP was included in the Public Involvement and Participation chapter was that the County was going to rely on local volunteer organizations to complete the marking. The original idea to use volunteer labor to help complete marking turned out not to be feasible due to quality control and liability issues. The County has had to pay outside groups to help complete the markings. Originally, the County was using stencils to label inlets. Because stenciling fades over time and overspray is hard to control, the County is now replacing the stenciled markings with more permanent labels. The tracking between the two different marker types was difficult, and the County now is only tracking inlets with the new more permanent labels.

As part of a long term maintenance plan, staff is systematically updating County GIS inventory to locate all County maintained inlets in residential and commercial areas within permit limits. These inlets are being inventoried and marked utilizing the Community Action Board. This inventory will be used by Road Maintenance staff in the future to maintain existing markings and add new markings over time. It is anticipated that all inlets in these areas will be marked by the end of the fourth permit year.

Program Deficiencies

4. *Pollution Prevention/Good Housekeeping for Municipal Operations BMP #6 Storm drain facility BMPs*

Action: *The County must develop a tracking system for the maintenance of storm drain facilities that will allow it to prioritize maintenance efforts based on the amount of waste removed. The County must also determine a method for cleaning the five traps described above.*

Response: The County does utilize a tracking system for the maintenance of silt and grease trap facilities. The standard procedure for County staff when removing material from a silt and grease trap is to remove all of the material in the trap. The final elevations shown on the log sheet represent the invert elevations of the traps. Based on these logs, County maintenance staff have determined that there are approximately 86 traps that routinely require removal of larger amounts of waste. Maintenance of these traps has been prioritized to check twice yearly. Additionally there are 65 traps that routinely have small amounts of waste. These

traps have been moved to a biannual maintenance schedule.

Of the five traps that were not cleaned due to restricted access: A.) two were due to design issues (the old inlet boxes are too small to accommodate cleaning equipment) and are located on County Maintenance Yards B.) one is inaccessible due to a rusted lid and C.) two are not accessible due to installation of a fence by a private property owner.

In regards to the above deficiencies:

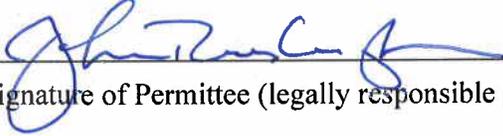
A.) The Sanitation Maintenance Section has been contacted and will check to see if their equipment can access the two traps in the County Yards. If their equipment cannot access the traps, the traps will be modified to accept the suction tube of the Roads Maintenance Section's equipment.

B.) Work is scheduled for August 27 to free the rusted lid and then to clean the trap.

C.) The County has mailed a letter to these owners informing them that they are to remove the fence so that the County can access the traps for maintenance.

E. Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

	9/12/2012
Signature of Permittee (legally responsible person)	Date Signed
John J. Presleigh	Director of Public Works
Name (printed)	Title