DRAFT 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.	A. Permittee Information							
1.	. Permittee (Agency Name): County of Santa Cruz							
2.	Contact Person: Rachel Fatoohi							
3.	Mailing Address	: 701 Ocean S	Street, Room	410				
4.	. Mailing Address: 701 Ocean Street, Room 410 . City, State and Zip Code: Santa Cruz, CA 95060							
5.	Contact Phone N	Jumber: (831)	454-2160					
6.	. WDID# 344MS03016							
7.	Have any areas been added to the MS4 due to annexation or other legal means? YES X NO If YES							
	Outfall	Has map been updated?		Has SWMP been updated?		Receiving Water Name	е	
		YES	NO	YES	NO			
ļ								
ļ								
8.	8. Are you subject to the Design Standards contained in Attachment 4 of the General Permit? X YES NO See the reports on BMPs 7-1-1 and 1-1-4 regarding implementation of design standards							
	B. Reporting Period (check one): X July 1, 2012 to June 30, 2013 July 1, 2004 to June 30, 2005							
(Report is due by September 13)								

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 fourth 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 BMP Implementation Status Table below gives a summary of the status of the last four years of program implementation.

Section D of this Report provides detailed descriptions for each BMP implemented during Year Four of this permit. At the bottom of each BMP is a section for planned activities for next year – which will be Year One of coverage under the new State General Permit Order No. 2013-001-DWQ. This section includes a description of where that particular BMP will fall in the structure of the new General Permit. The County did submit a Notice of Intent and Guidance Document to the State Water Resources Control Board in June 2013 in order to receive coverage under the new General Permit. Therefore, County stormwater management activities planned for the next year and permit cycle will meet the minimum requirements in the new General Permit except where BMPs from our SWMP were more protective of water quality than the minimum requirements – in these cases the County will continue implementation of the more protective BMPs as detailed in the Guidance Document.

County of Santa Cruz - Stormwater Management Program BMP IMPLEMENTATION STATUS

March 2009 - June 2013

March 2009 - J						
	Responsible	Status/				
BMPs	County Departments	Schedule				
	See Legend	See Legend				
Public Education and Outreach						
	Coordinator: Ana Maria Rebelo - DPW					
3-1-1: Brochures	DPW, SAN	C/A				
3-1-2: Website	DPW DPW BY GAN	C/O				
3-1-3: Community Events	DPW, EHS, SAN	C/O				
3-1-4: Dog Waste Program	PARKS	C/O				
3-1-5: Watershed and Creek Signage Project	DPW	F				
3-1-6: Riparian Restoration and Protection	EHS, PLN	C/A				
3-1-7: Septic System Maintenance	EHS	C/O				
3-1-8: Public Opinion Survey	DPW	I/B				
3-1-9: Social Marketing Strategies	DPW	I/O				
3-1-10: Educational Programs for Children	DPW	C/O				
3-1-11: Disadvantaged Communities	DPW	C/O				
3-1-12: Landscape Workshop	DPW	C/O				
3-1-13: Our Water Our World Program	DPW	C/O				
3-1-14: Monterey Bay Area Green Business Program	DPW, SAN	C/A				
3-1-15: Green Building Outreach	Combined with 3-1-14	C/A				
3-1-16: Business/Industry Outreach	DPW, EHS, SAN	C/A				
3-1-17: Media Campaign	DPW	C/O				
3-1-18: Master Permit for Environmental Enhancement Projects	PLN	C/O				
3-1-19: Water Quality Messages	AC, DPW, EHS, GS, PARKS, PLN, SAN	C/O				
3-1-20: Interested Party List	DPW	C/O				
Public Involvement and Participation Coordinator: Ana Maria Rebelo - DPW						
4-1-1: Storm Drain Stenciling	Combined with 8-1-6					
4-1-2: Countywide Stormwater Information Exchange Group	AC, DPW, EHS, GS, PARKS, PLN, SAN	C/O				
4-1-3: Coordinate Local Stakeholder Outreach	DPW	C/O				
4-1-3. Cooldmate Local Stakeholder Outleach 4-1-4: Monterey Bay Area Pollution Prevention Partnership	Combined with 3-1-14	C/O				
4-1-5: Community Clean Ups	DPW	C/A C/O				
4-1-6: Clean Beaches Coalition	DPW	C/O				
4-1-7: Participate in Regional Efforts	DPW, GS, PLN	C/O				
4-1-8: Water Quality Messages	AC, DPW, EHS, GS, PARKS, PLN, SAN	C/O				
4-1-9: Public Opinion Survey	DPW	I/B				
Illicit Discharge Detection		1/ D				
Coordinator: John						
5-1-1: Storm Sewer Mapping	DPW	C/O				
5-1-2: Sanitary Sewer Mapping	SAN	C/O				
5-1-3: Illicit Discharge Program	EHS	C/O				
5-1-4: Illicit Discharge Field Screening Investigation	EHS	C/O				
5-1-5: MS4 Maintenance	DPW	C/O				
5-1-6: Commercial/Industrial Facility Inspections	EHS, SAN	C/O				
5-1-7: Information from the Public	AC, DPW, EHS, GS, PARKS, PLN, SAN	C/O				
5-1-8: Locate and Correct Cross Contamination in Capitola	EHS, SAN	C/O				
5-1-9: Implement Pet Waste Ordinance	EHS	C/O				
5-1-10: Septic System Maintenance and Management Program	EHS	C/O				
5 1 To. Septie System Mantenance and Management Program						

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

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

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

CEOA California Environmental Quality Act

CPESC Certified Professional in Erosion and Sediment Control

CUPA Certified Unified Program Agencies

CWC Coastal Watershed Council Departmental Advisory Group DAG **DPW** Department of Public Works **Environmental Health Services EHS Environmental Protection Agency EPA** Geographic Information System GIS General Services Department **GSD** Green Schools Program **GSP**

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. 20% of brochures distributed will be in Spanish to Spanish Speaking households/residents

Status: During the past eight years the County distributed over 60,000 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 the County of Santa Cruz bans on plastic bags and polystyrene and rainwater harvesting. 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 is consistently exceeded every year.

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

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

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.a.

• Continue to compile the number of brochures distributed and reach 15 percent of the target audience in 2013/14. 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: Compile the number of website hits annually.

Status: The stormwater website received 2,106 visitors in Year Four.

Cross promotion with other environmental programs such as advertising regionally and locally in the EcoCruz web portal and newsletters were established in Year Two and continued in following years.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.8.d.

• 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: Every year, the Departments of Public Works (DPW) of the County of Santa Cruz and the City of Santa Cruz join the local non-profits such as Ecology Action and Save Our Shores to sponsor and coordinate Earth Day Santa Cruz. This is an opportunity for the County to promote environmental education in a fun and relaxed way for the residents to participate and learn our environmental message. Earth Day Santa Cruz has become the most widely attended event in the Monterey Bay Area. Approximately 4,000 people visit Earth Day every year with about 100 vendors of which about half of them are non-profit agencies offering environmental education

and providing educational materials. The County of Santa Cruz' booths provide information on Best Management Practices for waste reduction, recycling medicines and sharps, hazardous materials, stormwater, and water quality. The County also promotes its Green Business program and provides education on sanitary sewer overflow prevention. The Planning Department is the leading agency for the Climate Action Strategy (CAS) and its staff joins forces every year with DPW staff to promote CAS and educate residents on how they can reduce their Green House Gas emissions. The population targeted for the Earth Day Santa Cruz event were residents of the City of Santa Cruz, unincorporated areas of the County of Santa Cruz, and neighboring Cities, but many residents from the Bay Area attend this event as well.

In addition, the County partnered with Save Our Shores (SOS), a local non-profit, 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, 3,500 volunteers removed 16,827 lbs of trash during CCD 2012.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.a.d.

• 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 31,000 doggie waste bags were distributed by County Parks in 2012-13. One additional dog box was added at the Chanticleer St. Park. and Felt St. Park. Below is the list of locations where doggie waste bags are distributed:

Dog Waste Box Locations – 2012-13

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

County of Santa Cruz Small MS4 General Permit Annual Report

Jose Avenue Park
Brommer Park
Moran Lake Park
Pinto Lake County Park
Mesa Village Park
Scott Park
Aldridge Lane Park
Chanticleer Park
Felt St. Park

Beach access

Rockview

38th Avenue

30th Avenue

26th Avenue

21st Avenue

20th Avenue

11 D 1 T

Johans Beach Drive

Pleasure Point

Via Palo Alto

Dolphin and Sumner Beach Access

13th Avenue

12th Avenue

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.7.a.d

• Continue to distribute doggie waste bags and report the number distributed annually. Assess the need for additional doggie waste bags distribution sites and/or signage. Include evaluation of the need for doggie waste bags distribution sites at County beaches. 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: There were approximately 100 guides distributed to County residents during fiscal year 2012-13. Currently, guides are placed at the County Environmental Health and Planning Department counters. Through a partnership with the County of Santa Cruz Resource Conservation District (RCD), the guide is distributed to the agricultural community too. Next fiscal year, the County is updating the Stream Care Guide using grant money from the RCD. The guide can be found at: http://www.dpw.co.santa-cruz.ca.us/Streamcare_Guide.pdf

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

County of Santa Cruz Small MS4 General Permit Annual Report

This BMP falls under Element No. E.7.a.d.

• 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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No E.9.e

• Provide information on the educational aspects of the County's septic system maintenance program in the annual report

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.

Measurable Goal: Determine target audience 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. Resurvey citizens on previously surveyed topics to assess effectiveness of targeted educational efforts.

Status: This BMP has not been completed yet. The County is joining the Monterey Bay Stormwater Action Group (SWAG) to conduct a regional Public Opinion Survey (Survey) next fiscal year. The region has already received various proposals from vendors which will be evaluated by the SWAG in next year's permit. This way, the region has an opportunity to evaluate its outreach programs and tailor them based on the Survey's results.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.a., E.7.b and E.7.e.

• Two surveys within the five year permit term are required. The first survey is due by the end of the second permit year. 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.

Measurable Goal: Assess community based social marketing strategies and incorporate them into the educational BMPs where appropriate.

Status: This BMP has been completed partially. There are various programs that are being implemented in the County of Santa Cruz. Public Works Departmenthas already engaged in social marketing strategies which include the Central Coast Media Coalition and the Green Business Program. Please see BMPs 3.1.14 and 3.1.17. In addition, the County is joining the Monterey Bay Stormwater Action Group (SWAG) to select a marketing specialist to comply with the implementation of social marketing strategies for specific stormwater related BMPs. The SWAG is waiting to complete the Public Opinion Survey (POS) to revise all educational materials which will be conducted next fiscal year. This BMP is contingent upon the results of the POS.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.a.a and E.7.a.b.

 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 Green School Program (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 strategic resource activities in 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 Four, the GSP conducted 99 presentations, comprised of 10 assemblies and 69 individual classroom presentations servicing a total of 140 classes and 3,133 students. The most popular presentation was the Waste Reduction for Healthy Oceans presentation, which comes in both assembly and classroom format. Other requested presentations were the Perils of Plastic, Mistaking Plastic for Food, and Food Web and Entanglement activities, Watershed Model and Living downstream activity demonstrating the land-sea connection. All lesson plans and activities were aligned with California Content Standards, which made for easier inclusion into the

teacher's on-going instruction. In addition, the GSP conducted 20 cleanups. This included nine campus cleanups and nine beach cleanups. Approximately 830 students removed a total of 258.5 pounds of trash and 78.75 pounds of recyclables from local beaches, waterways, and school campuses. The GSP continues to engage schools in conducting campus cleanups because students can see firsthand the need to be better at not littering at school and can identify particularly problematic materials.

In order to help gauge the GSP effectiveness, the non-profits are required to conduct surveys to students before and after each presentation or assembly. For consistency purposes, SOS also administers the O'Neill Sea Odyssey (OSO) student survey which is a knowledge-based and behavior change survey. SOS conducted 40 surveys with a total of 1,041 students of which six questions are posted to the students at the beginning and end of presentations and these answers are 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 376 students responded 'yes' in the pre program survey while 945 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, 458 students responded 'yes' in the pre program survey while 1000 responded 'yes' in the post program survey. Regarding behavior change questions, when students were asked whether they protected rivers and oceans by not littering, 675 students responded 'yes' in the pre while 1,030 responded "yes" that they would change their behavior in the post program survey. Similarly, when students were asked whether they recycled, 652 indicated 'yes' in the pre program versus 1,020 in the post program survey indicating they would.

Every year, students also participate 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.

This year, OSO's program serviced 40 classes totaling 1,137 students. Among the community service projects were beach cleanups jointly with SOS, pollution awareness projects, the Struve Slough Plant Restoration Project, in partnership with Watsonville Wetlands Watch, assisting in a native plant restoration program at a State Park campsite, and presentation for other classes at school about watershed importance in Capitola/Soquel area.

In addition, there were two schools were certified green and two more are in the process of getting certified.

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. This means approximately 11 percent of students were educated through the GSP. This BMP exceeds the measurable goal for the year

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.a.j.

• Continue to educate 10 percent of school children every year and administer pre and post presentation evaluations.

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. Follow up on educational efforts to assess effectiveness.

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 27 percent of participating groups came from lower-income communities, 42 percent came from middle-income communities, and 31 percent came from higher-income communities. During the last five years the percentage of groups from middle-income communities has increased slightly, with corresponding slight decreases in the percentages of groups from lower and higher-income communities.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.a.d.

• 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: Every year, County staff presents two composting workshops to residents at Earth Day Santa Cruz. 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. On May 6, the program graduated another class of

certified Green Gardeners from the Watsonville/Aptos Adult School. Of the 46 students who enrolled in the training, 67% of graduates were Spanish-speakers, 33% were English-speakers or bilingual. The Monterey Bay Green Gardener Certification Program has 464 graduates to date.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.a.g.

• Provide an annual landscape workshop.

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.

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

Status: 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. The 2013 partnership with Ecology Action and the County of Santa Cruz OWOW provided pollution prevention trainings and IPM resources to employees and customers of two participating garden retail stores (The Home Depot Soquel and Orchard Supply Hardware) serving residents living in watersheds located within the County of Santa Cruz, The Home Depot Soquel and Orchard Supply Hardware.

In fiscal year 2012/13, the County of Santa Cruz OWOW program provided IPM and pollution prevention education training to 72 Santa Cruz County residents, including:

- Ten new employees of participating OWOW garden retail stores. To supplement OWOW employee trainings, store managers and employees were encouraged to participate in the University of California Cooperative Extension on-line training for retail employees (http://ipm.ucdavis.edu/training/).
- Forty six professional landscapers and gardeners attending the 2013 Green Gardener Certification Program course at the Watsonville Adult School. Bilingual OWOW fact sheets were distributed to students in the Green Gardener course as part of a 2.5 hour integrated pest management class.
- Sixteen customers of participating stores during store maintenance visits.

During store maintenance visits, shelf talker labels are replaced in the pesticide isle (shelftalkers alert the customer as to which products are considered less-toxic for water quality and human health), OWOW fact sheets in the literature racks are cleaned up and restocked, and laminated facts sheets, insect identification charts, and educational prompts are reattached to store shelves and product displays.

Due to an 83% decrease in the operating budget for the Santa Cruz County OWOW program and no supplemental grant funding, program activity was limited to prioritizing employee trainings and store maintenance visits for high volume, big-box stores. Seven participating stores in the unincorporated County did not receive OWOW support in 2013.

The Santa Cruz County OWOW program produced a spring radio ad campaign. The paid 60 second PSA directed customers to the OWOW symbol when looking for a less-toxic pest control product at their local garden center, and to the Monterey Bay Green Gardener website when looking for an ecological landscaping service provider. All participating jurisdictions contributed matching funds to purchase the radio ads. A total of 84 spots were played over a three-week period on Saturday and Sunday from May 16 thru May 31, 2013, on

County of Santa Cruz Small MS4 General Permit Annual Report

KCDU THE BEACH, KPIG, and KKHK. The increased cost of purchasing radio ads without a proportionate increase in funding for ads has limited the reach and intensity of the annual radio ad campaign.

During the May radio campaign, <u>www.green-gardener.org</u> received 132 unique site visits and 246 page views. 66.67% of these were new visits. In comparison, the month before the radio campaign had 108 unique site visits, 73% of which were new visits.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.a.g.

• Provide training at selected garden centers in the unincorporated area of the County each year...

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 333 businesses in the County of Santa Cruz of which 31 are currently in progress. 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 prepares its own database. In 2009, the County joined the statewide database to track progress on various environmental areas. Funding the database has been a challenge as the network keeps adding new features to satisfy new customers' requests. Currently, the statewide network is funding the largest portion of the database, and more funding is being pursued by the network. Recently, Pacific Gas and Electric funded \$10,000 to help fund outreach education and energy audits. This money will also help the network implement better metrics for accurate reporting. At this time, the network does not have valid data to report on Green House Gas emissions reductions, waste reduction, water reduction or fuel reduction like we did in last year's report.

In addition, the priority this past fiscal year was to accept new jurisdictions within the state and upgrade the database. The Checklist committee is evaluating new industries to include for next fiscal year. New business sectors are chosen based on their opportunity to prevent pollution.

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:

<u>Vehicle service facilities</u>: 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.

<u>Food Service and Janitors</u>: 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.

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

<u>Plumbers</u>: Sanitary sewer overflow reductions.

County of Santa Cruz Small MS4 General Permit Annual Report

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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.7.a.

- Continue to meet quarterly to coordinate the Green Business and Pollution Prevention programs.
- Certify/recertify 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: None.

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

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

None. See status note above

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 District conducted 177 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 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, carpet cleaners 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 industrial sectors were inspected by the District in 2012-13:

Major Industries	
Hospital	2
Educational Institutions	1
Photo Developing with Pretreatment	3
Water Supply Treatment	8
Wineries	1
Harbor/Marina	N/A
Light Industries	
Car Wash	1
Vehicle Service Facilitates	20
Medical	2
Dental	1
Plastics	0
Printing	2
Food Establishments	103
Dry Cleaners	1
Machine Shops	0
Other Miscellaneous (including plan reviews, new installs)	32
Total	177

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.

During November 2012, the Environmental Programs Coordinator gave a presentation on Fats, Oils and Grease (FOG) to a community college class for students entering the restaurant industry. The presentation focused on reducing Sanitary Sewer Overflows by increasing awareness of grease management. Staff explained the problems with FOG in sewer lines and stressed the importance in maintaining laterals and keeping solids out of the sewer.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.a.c.

• 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, pollution prevention 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.

In January 2012, the Central Coast Recycling Media Coalition (CCRMC) launched its Facebook page URL: www.facebook.com/protectyourcentralcoast.

CCRMC manages the page with weekly (at minimum) posts. Posts include "Share" of information from CCRMC member pages, news related to the three R's or litter/marine debris, timely reminders for desired actions, and campaign activities.

CCRMC encourages all members to "Like" the page and share postings that resonate, encourage friends and family to "Like" the page, post events and items of interest, and help spread campaign influence through social media.

The "Remember Your Reusable Bags" prompts campaign (featuring 12" x 18" bilingual parking lot signs created in 2011) was expanded with 2,500 3" square static clings to help the willing to remember their reusable bags. CCRMC members distributed the clings directly to the public at various outreach events.

The campaign website <u>www.protectyourcentralcoast.org</u> was updated with new creative, plus Earth Day event and promotional information.

The website had 4,236 visits and 6,006 page views in 2012-13 which was an increase of 2.2% in visitors and 8.9% in page views from 2011-12. Peak activity occurred between April 3 and June 29, 2013 (vs. January-April of 2011).

The five-Year Strategic Plan was updated to reflect the retirement of accomplished goals from 2007-2012, and the addition of new goals, including:

- Develop strategic community partnerships.
- Publicize AB341 mandates.

• Reduce litter.

CCRMC invested around \$100,000 in media of which 1,871 were TV spots and 2,167 Radio spots. Additionally, the radio and television media schedule delivered an estimated of 10,332,358 Television impressions and 6,040,845 Radio impressions for a total gross impressions of 16,373,203.

Ads on KSBW.com and radio station web properties added approximately 1 million additional impressions, and resulted in 203 tracked click-through visits to the campaign website/portal: www.protectyourcentralcoast.org.

The television campaign featured 30-second spots on local Univision, Telemundo, CBS, NBC, ABC and FOX affiliates. Ten-second spots were also included on NBC (KSBW) and Central Coast ABC (NSBW). January-March, 2013 featured the "Resources" message, which reminds people that plastic products are made from petroleum, and recycling or reuse helps to reduce our carbon footprint. April-June, 2013 featured two new productions focused on reusable shopping bags: "BYOB" helped to show the problem of plastic and single-use bags in terms of litter and watershed/ocean pollution, offered the simple solution "Bring your own (reusable) bag" and a free reminder static cling through the campaign website.

Protect Your Central Coast also sponsored the "Down to Earth" weekly news segment on KION and KCBA TV October-December 2012, which included co-branded promotional spots, as well as billboards and spots during the news.

The media campaign also sponsored the weekday morning "Make the Connection" feature, which included a mention and a 60-second spot for 15 consecutive days during the week during February through May 2013.

To kick off the 2012 holiday shopping season, CCRMC held its third annual "Black Friday Blitz" which entailed one 15-second spot per hour, every hour for 18 hours per day on 4 stations, for 6 days (Wednesday before Thanksgiving, through Cyber-Monday) plus PSAs for 647 total spots. Timely reminders about waste reduction during the holiday season, plus "reuse by the numbers" featuring quick facts about the impact of single-use disposable items on the planet, and resources saved by recycling and reuse. Also, a 60-second spot schedule ran from November through December featuring a Spanish "Remember" bags spot.

CCRMC CREATIVE RECAP

- Produced 60-second "Remember Mugs" radio in English
- Produced 60-second "Remember Bags" radio in English
- Produced 60-second "Remember Bottles" radio in English
- Produced Spanish 60-second "Remember Bags" radio for Earth Day and revised for ongoing use
- 15-second "Like us on Facebook"; KDON and KPRC added value production
- Produced 4 new TV spots in English and Spanish
- Produced radio 30's for Earth Day
- Produced 2,500 "Remember" (reusable bag) window clings
- KSMS produced 30-second co-branded recycle holiday tree TV spot for PSA campaign

For Stormwater website tracking and reporting see: 3.1.2.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.a.f.

• 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 seven years implementation of sediment basins, grassed waterways, and streambank protection practices alone have prevented erosion of more than 8,000 tons per acre per year of sediment on agricultural land in the Pajaro Valley watershed. The new round of projects this year included two additional wetlands enhancement projects, one in Hansen Slough and another just northwest of Corcoran Lagoon. This will help filter contaminants from urban areas and agricultural fields though installation of vegetation buffers in the Pajaro River watershed.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.a.c.

• Continue to 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: 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 2012-13, EHS staff responded to the following calls:

- 55 complaints 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). 37 additional calls required emergency response
- 120 complaints received by telephone or email regarding septic system failures, greywater discharges, sewer lateral overflows, mostly in rural areas. 55 did not turn out to be actual problems, 27 are in progress, and the rest were corrected.
- Five complaints regarding pet waste, 3 complaints regarding livestock impacts on water quality.

A draft complaint response matrix has been developed to help better direct public complaints to the appropriate responding agency, depending on the type of complaint and material being discharged. This will facilitate enforcement of the Runoff and Pollution Control Ordinance.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.9.e,

- 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.
- Complete complaint response matrix and incorporate into the enforcement response plan.

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 100 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 fourth year of implementation, the stakeholders were contacted as follows:

- 1. August 10, 2012, notified stakeholders of the availability of the draft annual report and the Board of Supervisors' public meeting and the partial audit of the County's IDDE and Good Housekeeping Programs and invited them to provide comments.
- 2. September 04, 2012, we notified stakeholders of the meeting to be held on September 11, 2012, and invited them to comment on the report and the WAAP attachment.
- 3. June 21, 2013, updated the stakeholders on the adoption of the new State General Permit and shared with them the completed Guidance Document and the County of Santa Cruz Permit Boundary Map.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.8.b.

County of Santa Cruz Small MS4 General Permit Annual Report

- 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:

See Good Housekeeping section.

Measurable Goal: See Good Housekeeping section.

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 five times in Year Four:

- October 13, 2012, to discuss the SWRCB General Permit and potential petition.
- December 12, 2012, to discuss the SWRCB General Permit, the CCRWQCB Post Construction Requirements (PCRs) and potential comment letter.
- February 26, 2013, to discuss PCRs, Community Based Social Marketing and Effectiveness Assessment.
- March 25, 2013, to discuss joint letter to the CCRWQCB regarding PCRs.
- April 25, 2013, to discuss PCRs.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.8.b.

• 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 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 fourth 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, 2012, notified stakeholders of the availability of the draft annual report and the Board of Supervisors' public meeting and the partial audit of the County's IDDE and Good Housekeeping Programs and invited them to provide comments. No comments were received regarding the report or the partial audit.
- 2. September 04, 2012, following up on the previous August notification, we notified stakeholders of the meeting to be held on September 11, 2012, and invited them to comment on the report and the WAAP attachment. We received no comments from the stakeholders regarding the report or the WAAP.
- 3. June 21, 2013, updated the stakeholders on the adoption of the new State General permit and shared with them the completed Guidance Document and the County of Santa Cruz Permit Boundary Map.

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 fourth permit year this group met three times as follows:

- 1. September 19, 2012, at Capitola City Hall Community Room. Local municipal representatives and environmental groups attended. Topics discussed: Grant updates including Prop 84 grants, Community Foundation funding and Packard Foundation grants; NPDES programs and regional coordination.
- 2. January 16, 2013, at Capitola City Hall Community Room. Local municipal representatives and environmental groups attended. Topics discussed: Grant updates, NPDES updates, general announcements.
- 3. June 26, 2013 at Capitola City Hall Community Room. Local municipal representatives and environmental groups attended. Topics discussed: Topics discussed: Future planning, NPDES post construction requirements and regional survey, TACs for Prop 84 Grant programs, general announcements.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.b.

• 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

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 2012. With the help of Save Our Shores, a local non-profit, approximately 3,500 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. The motto is "Be Part of the Solution to Ocean Pollution!"

The following beaches/creeks were part of these cleanups: Panther Beach, Davenport Main Beach, Twin Lakes, Rio Del Mar, and Seacliff beaches.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.8.a and E.8.c.

• 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. Approximately 3,500 volunteers participated this past year removing 16,827 lbs of trash during CCD 2012. In addition, as part of the Green Schools program, students are required to help with beach cleanups. Approximately 830 students removed a total of 258.5 pounds of trash and 78.75 pounds of recyclables from local beaches, waterways, and school campuses. The GSP continues to engage schools in conducting campus cleanups because students can see firsthand the need to be better at not littering at school and can identify particularly problematic materials. See also BMP 3-1-3 and 3-1-10.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.8.a and E.8.c.

• 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

County of Santa Cruz Small MS4 General Permit Annual Report

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 2012/2013 County's IPM program visit:

http://sccounty01.co.santa-cruz.ca.us/bds/Govstream/BDSvData/non_legacy/agendas/2013/20130611/PDF/018.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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.8.a and E.8.b.

• Continue to investigate opportunities to participate in regional, Statewide or national groups, attend at least one IPM DAG meeting and monthly U.S. Green Building Council 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 ad Outreach Section.

ILLICIT DISCHARGE DETECTION AND ELIMINATION

Overview: Ongoing efforts have been maintained and expanded during the fourth year of implementation of the illicit discharge and detection program. Efforts are being further expanded after adoption of the County's stormwater ordinance, which occurred last year. This has provided 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://gis.co.santa-cruz.ca.us/PublicGISWeb/

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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.9.a.

- 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.
- Conduct site inspections of each outfall over the next two years.

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://gis.co.santa-cruz.ca.us/PublicDPWSan/

These maps are used in conjunction with storm drain maps to identify areas of potential contamination where subsurface leaks from the sanitary sewers system could readily enter the storm drain system. Many of these

locations have been sampled to determine if leakage is occurring. No leaks have been identified in the County's jurisdiction. County Sanitation continues efforts to video, evaluate, and upgrade older sewer lines.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.9.a.:

- 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 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. An Enforcement Response Plan is being prepared that will describe enforcement measures and responsibilities in the event that problems are discovered at the businesses. Enforcement actions may be taken by Planning, Public Works, or Environmental Health staff, depending on the type of problem found.

In the remainder of 2013-14, 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 2012. EHS staff will also work with DPW staff to ensure comparable businesses are screened or inspected by DPW within the Sanitation District (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, and Planning. These will be included in the Enforcement Response Plan.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Elements No. E.6.c, E.9.b, and E.9.d.

- 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.
- Develop and implement Enforcement Response Plan

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, 2012, to June 30, 2013, County staff collected and analyzed 400 samples from 17 locations in urban stream and lagoon samples throughout the County (including locations within the City of Santa Cruz). County staff also collected 10 samples at 4 locations in storm drains and ditches. Storm drain outfalls to the coast in the urban area from Santa Cruz to Capitola were surveyed in June, and none were found to be discharging. CWC volunteers collected 28 samples from 7 storm drain outfalls and urban stream locations. CWC urban watch samples are analyzed by County staff for fecal indicator bacteria, nitrate, ammonia and phosphate.

In 2012-13, 48 samples were analyzed using QPCR for human specific bacterioides, which is strong indicator of human contamination. Human contamination has been 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 Rodeo Gulch, Corcoran Lagoon, ocean beaches and other locations on the San Lorenzo River. County staff is working with City staff to further evaluate and address the contaminated storm drains.

Most urban drainages have elevated background levels of indicator bacteria. Only one illicit discharge

(greywater) was identified and corrected as a result of 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 has been awarded Clean Beach Initiative funding to upgrade the sewer line that runs near Noble Gulch.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Elements No. E.9.c, E.9.d, and E.13.d.

- Continue to sample creeks and outfalls and identify areas of significantly elevated bacteria levels and 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 69 silt and grease traps were inspected and cleaned, with 35.99 cubic yards of material removed. 413 catch basins were inspected and 10 cleaned, with 4.4 cubic yards of material removed. No indications of illicit discharges were identified this year during maintenance procedures.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Elements No. E.11.e, E.11.f, and E.11.g

- 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 is being 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. With the adoption of the stormwater ordinance and the development of an enforcement response plan, , 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.

No significant illicit discharge violations (for food facilities served by onsite septic) occurred in 2012-13.

The Environmental Compliance Unit of the Sanitation Districts conducted 212 industrial inspections within the last fiscal year. Inspections consisted of full facility inspection and partial facility inspection in order to alleviate a specific problem on a certain date. The following businesses were inspected by the District during the 2012/2013 fiscal year:

- 3 carwashes
- 3 dry cleaners
- 8 water treatment supply

County of Santa Cruz Small MS4 General Permit Annual Report

2 hospitals

3 machine shops

1 miscellaneous industries

136 food service establishments

48 vehicle service facilities

4 educational institutions

1 winery

1 medical center

1 dental office

1 Photo chemical processer*

*As of this year, there are no longer any existing photo processors within the County Sanitation District and there is currently only one business treating fixer.

Pollution Prevention for the Industrial Sectors

District personnel continue to educate light industries operating in Santa Cruz County on process-specific pollution prevention. 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. A new BEMP was created this year for the carpet cleaning industry. 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 gives 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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Elements No. E.6.c, E.9.b, and E.9.d.

- 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 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.
- 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 2012-13, EHS staff responded to the following calls:

- 55 complaints 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). 37 additional calls required emergency response
- 120 complaints received by telephone or email regarding septic system failures, greywater discharges, sewer lateral overflows, mostly in rural areas. 55 did not turn out to be actual problems, 27 are in progress, and the rest were corrected.
- Five complaints regarding pet waste, 3 complaints regarding livestock impacts on water quality.

A draft complaint response matrix has been developed to help better direct public complaints to the appropriate responding agency, depending on the type of complaint and material being discharged. This will facilitate enforcement of the Runoff and Pollution Control Ordinance.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.9.e,

- 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.
- Complete complaint response matrix and incorporate into the enforcement response plan.

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. In 2012-13, the County was recommended to receive a Clean Beach Initiative Grant to replace the sewer line that runs along Noble Gulch.

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 indictors 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 have been awarded 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. Sanitation District ordinances were amended to provide more authority to require upgrade of laterals with demonstrated problems.

Wording in this BMP will be modified to include actions to evaluate and reduce sewage leaks and spills in all County Sanitation Districts and Sanitation-related County Service Areas.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.9.d.

- Commence upgrade of sewer along Noble Gulch.
- Apply for grants to 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.

BMP 5-1-9 Implement Pet Waste Ordinance

Implementation Details: The County has an ordinance that prohibits the deposition of pet waste in public spaces. Proper management of pet waste will be implemented through education programs, complaint response, and existing enforcement procedures. If necessary, the current ordinance may 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.

Measurable Goals:

- All complaints received regarding handling of pet waste will be pursued.
- Consider amending pet waste ordinance
- Develop educational materials to inform residents of the updated ordinance. Identify the form, content, frequency and target audience for educational efforts.
- Post educational materials on the County website, and distribute at least 100 printed materials annually.
- Number of complaints and other enforcement activities will be reported annually.

Status: The County received and investigated five 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. This is not identified as a significant issue in the new general permit. In the future, if pet waste is documented as a significant problem, amendments of Pet Waste Ordinance and associated educational materials will be considered.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.7.a.

- Maintain public outreach regarding proper handling of pet waste.
- Annually report number of complaints and other enforcement activities.
- Pursue all complaints received regarding handling of pet waste.

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. 701 inspections of individual septic systems were conducted during the past year, including response to 120 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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.9.e.

- 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.
- Develop a Local Area Management Plan to comply with new state wide Onsite Wastewater Order, pursuant to AB 885, and the recently amended Basin Plan

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 drainage ways. 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 7, 2012.

During this past year, the ordinance has only been invoked in two enforcement cases, in conjunction with other provisions of the county code. These cases are still pending as the responsible parties have been given until the end of the dry season to implement the necessary runoff and erosion control measures.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.6.c.

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

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 and enforcement response plan.

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 clean up methods. All spills are reported to the Regional Water Quality Control Board (RWQCB). If a spill reaches a water body, Sanitation District staff takes samples in order to report the bacteria levels to the RWQCB.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.b.1.

- Complete training 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: Environmental Health staff completed the Wasteload Allocation Attainment Program (WAAP) document and submitted it to the Regional Board staff in late 2012. The County has continued to implement various monitoring programs and numerous other actions to attain its wasteload allocations as have been documented in numerous reports. Monitoring activities as detailed in the WAAP have continued.

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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Elements No. E.13.b, E.13.c, E.13.d, and E.15.

- Consult with the Regional Board regarding the adequacy of ongoing monitoring and implementation efforts as outlined in the WAAP and other County programs.
- Report status of implementation via SMARTS.

CONSTRUCTION SITE STORMWATER RUNOFF CONTROL PROGRAM

Overview: The County completed all of the Year Four requirements under the Construction Site Stormwater Runoff Control Program (Table 6-1 of the SWMP). Year Four 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 implementing the new Runoff and Pollution Control Ordinance.

Target Audience: Agency Staff

BMP 6-1-1 Grading Ordinance (County Code Chapter 16.20)

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 our 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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.10.b.

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 feet from intermittent streams, 50 feet from perennial streams, and 100 feet 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 2012 through June 2013, 311 new 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, 17 Riparian Exceptions were approved, (see Table 6-1-1).

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 posted diagrams showing how required riparian corridors, buffers and setbacks are determined on our website.

We plan on starting the revision process of our riparian ordinance in late 2013 or early 2014 to make some modifications that we've previously identified that may be warranted.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.10.c and E.7.b.2

• Same as previous years. Possibly update the riparian ordinance if workload allows.

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.

The new ordinance along with the recent requirements for QSPs to inspect sites in excess of one acre definitely seem to have helped reduce discharge of pollutants from construction sites.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.10.b and E.7.b.2 (b)

 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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.10.b

• 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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.10.b

• 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 5th, 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 have a new Planning Department website that went live in September 2012. The new website has a section

on "Erosion and Stormwater Pollution Control" that includes new items such as an example erosion control plan and checklist, the storm water ordinance, the BMP manual as well as other information.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.10.b

• Continue to approve erosion and sediment control plan (or SWCP) on 100 percent of projects.

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 68 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 68 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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.10.c and E.10.a

- 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.

Staff that was trained has had these trainings many times and now have a really good understanding of storm water BMPs.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.7.b.2

• 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: As stated above under BMP 6-1-6, the Planning Department updated our website in September 2012. As part of the update, we created a section titled "Erosion and Stormwater Pollution Control" (which can be found at

http://www.sccoplanning.com/PlanningHome/Environmental/ErosionStormwaterPollutionControl.aspx). As part of the new website roll-out, all of our brochures regarding erosion and storm water pollution control were updated and placed on the website. The brochures on our website are:

- Construction Site Stormwater BMP Manual
- Erosion Control Plan Requirements
- Example Erosion Control Plan
- Erosion and Sediment Control Acronym List
- Erosion and Sediment Control
- Local QSDs, QSPs, & Erosion and Sediment Control Specialists
- Runoff and Pollution Control Ordinance(Chapter 7.79)
- "Slow It, Spread It, Sink It"

In previous years contractors were invited to attend our free workshop, yet we still had sparse attendance from many of these contractors. We therefore then shifted our focus to host a QSD / QSP training, which despite the cost and time commitment was very well attended by the engineering community. However, very few contractors attended. In year four we had proposed to focus on hosting additional QSD/ QSP trainings.

However after the initial rush of professionals to get certified as QSD / QSP trainings, it became apparent that there was decreased interest in new training program and companies that do training need high attendance rates to offset the costs for onsite classes. In year one of State General Permit Order No. 2013-0001-DWQ, we will focus on creating a flyer to be included with building permits that discuss the erosion and sediment control requirements for a site. This is intended to target the contractors and owners, which we feel are the groups that need the most education and can affect the most significant improvement in reduction of pollutants from construction sites.

In year one of State General Permit Order No. 2013-0001-DWQ, we will turn our focus on creating a flyer to be included with building permits that discuss the erosion and sediment control requirements for a site.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.7.b.2(b)

• Creating a flyer to be included with building permits that discuss the erosion and sediment control requirements for a site.

BMP 6-1-10 Public Inquiry Program

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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.10.c

• Continue to respond to complaints and track the complaints.

TABLE 6.1.1 RIPARIAN EXCEPTIONS JULY 1, 2012 - JUNE 30, 2013

	TABLE 6.1.1 RIPARIAN EXCEPTIONS JULY 1, 2012 - JUNE 30, 2013				
Approval Date	Appl. #	APN	Type Of Project	Rationale For Exception	
03/11/13	111191	040-031-11	Restore a disturbed riparian corridor by providing erosion control and planting	Restoration of riparian corridor.	
03/21/13	111245	045-302-03	Pier and lagging wall	Necessary to protect an existing community driveway	
03/11/13	111615	042-066-23	Replace a sewer line under Aptos Creek	Maintenance of public sewer system	
08/23/12	121005	078-291-01	Replacement of failing culvert	Prevention of downcutting and erosion	
10/10/12	121031	028-154-21	Install a soil pin retaining wall under the curb of an existing driveway serving two residential parcels.	Protection of existing driveway.	
12/11/12	121040	057-151-06	Bridge abutment repair	Necessary to maintain structural integrity of bridge	
08/30/12	121065	104-251-09	Removal of illegal retaining walls	Improvement of slope above the stream, resolution of violation	
03/07/13	121131	N/A	Removal of 2 Eucalyptus trees	Necessary for Sanitation District to replace Public Sewer lines.	
07/16/12	121146	081-271-19	Replacement retaining wall	Necessary to maintain integrity of slope and protection of property	
07/03/12	121161	076-103-10	Removal and replacement of damaged bridge	Necessary to maintain access to existing residences	
09/14/12	121166	081-152-09	Repair of an existing bridge	Necessary to maintain access to existing residence	
03/7/13	121181	051-302-20	Demolish 724 SF of an existing SFD to rectify unpermitted additions	Rectification of riparian and building violation.	
01/28/13	121255	030-341-09	restore approx. 2500 SF of degraded Coastal Terrace Prairie and riparian habitat to consist of removal of non-native vegetation	Restoration work	
02/07/13	121296	026-142-51	Recognize a 272 SF addition	Entire parcel is riparian. Reasonable use of parcel.	

06/11/13	131071	103-051-22	Removal of approximately 40 eucalyptus trees and brush removal	Creation of a fuel break
05/13/13	121263	088-081-10	remove sediment from two existing sediment basins	For protection of water quality
05/28/13	131104	037-331-25	Removal of 11 Eucalyptus trees	Arborist identified these trees are prone to failure and threaten homes.

POST CONTRUCTION 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.
- Continue to measure the effectiveness of the policies/ordinances and modify in the future as necessary.

Status:

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.

During permit year four, the County proposed to continue implementation of our pre-existing post construction stomwater management requirements in place of implementation of the Central Coast Regional Water Quality Control Board Post-Construction Requirements (PCRs) as permitted in Resolution R3-2012-0025. This proposal was conditionally approved, contingent on the County updating its existing Criteria to include: numeric water quality treatment requirements, biofiltration design parameters, and off-site treatment options. These updates are scheduled for the first permit year. Included in the proposal was an assessment and comparison of the County's pre-existing program and the PCRs.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.14.a and will be submitted in Year Two of the next permit term.

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:

• Evaluate new ordinance effectiveness and further modify as necessary.

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. In March 2012 the County Board of Supervisors adopted Ordinance No. 5117 adding Chapter 7.79 - Runoff and Pollution Control to the Santa Cruz County Code.

As described in BMP 7-1-1 the County has and will continue to review and track development projects and their compliance with the ordinance and associated CDC updates.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.14.a and will be submitted in Year Two of the next permit term.

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:

None

Status:

Complete.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) 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 (of the State General Permit).
- 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.

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 covered 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. During permit year four, the County proposed to continue implementation of our preexisting post construction stormwater management requirements in place of implementation of the Central Coast Regional Water Quality Control Board Post-Construction Requirements as permitted in Resolution R3-2012-0025. This proposal was conditionally approved, contingent on the County updating its existing Criteria to include: numeric water quality treatment requirements, biofiltration design parameters, and off-site treatment options. These updates are scheduled for the first permit year. Since the County will be utilizing its existing criteria, a checklist for inspection of post construction runoff controls was not deemed necessary.

In addition, the Criteria will be updated to include the source control measures included in the State General Permit Section E.12.d. These requirements will replace the Attachment 4 requirements from the old General Permit.

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 fourth permit year (July 2012 through June 2013) 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:

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element Nos. E.12.d and E.12.k.

- Update County Design Criteria to include quantifiable water quality treatment standards, biofiltration design parameters, and allowance for off-site compliance.
- Update County Design Criteria to include the source control measures specified in the State's General Permit, replacing Attachment 4 requirements.
- Annual reporting regarding implementation will occur in accordance with the reporting requirements contained within the Central Coast PCRs.

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:

None

Status:

Complete

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: None.

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

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

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.

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.

During the fourth permit year approximately 27 projects had permits that were approved by the Stormwater Management Section with recorded maintenance agreements. Of these, four were large commercial projects requiring maintenance agreement SWM-25B and annual reporting to the County. Inspection and enforcement of the reporting and maintenance of these projects will begin after construction completion.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.12.k.

- Continue to require recorded maintenance agreements and annual reporting for large private stormwater management facilities.
- Track the percentage large stormwater facilities maintained and reported on annually.
- Issue enforcement action for non-compliant conditioned projects.
- Track enforcement actions taken.

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 Four.

Public Works Stormwater Management Section review staff regularly discusses development requirements regarding LID practices for consistency in comments and requirements among reviewing staff.

During permit year four, the County proposed to continue implementation of our pre-existing post construction stormwater management requirements in place of implementation of the Central Coast Regional Water Quality Control Board Post-Construction Requirements as permitted in Resolution R3-2012-0025. This proposal was conditionally approved, contingent on the County updating its existing Criteria to include: numeric water quality treatment requirements, biofiltration design parameters, and off-site treatment options. These updates are scheduled for the first permit year of the new general permit. The need for associated training will be assessed and conducted on an as needed basis as criteria is updated.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP was not included in the new State General Permit. However, if training is needed and conducted it will be reported on under Element E.12.k. Since the County will be utilizing existing criteria for post construction stormwater management additional training is not necessary in Year One.

- Train new staff as they are hired.
- If future updates to the County Design Criteria are made training shall be conducted on an as needed basis.

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: During permit year four, the County proposed to continue implementation of our pre-existing post construction stormwater management requirements in place of implementation of the Central Coast Regional Water Quality Control Board Post-Construction Requirements as permitted in Resolution R3-2012-0025. This proposal was conditionally approved, contingent on the County updating its existing Criteria to include: numeric water quality treatment requirements, biofiltration design parameters, and off-site treatment options. These updates are scheduled for the first permit year of the new general permit. The need for associated training will be assessed and conducted, on an as needed basis.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP was not included in the new State General Permit. However, if training is needed and conducted it will be reported on under Element E.12.k. Since the County will be utilizing existing criteria for post construction stormwater management additional training is not necessary during the Year One.

• If future updates to the County Design Criteria are made training shall be conducted on an as needed basis.

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:

- 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.

Status:

As part of the Joint Effort the County completed the "Gap Analysis" following the template provided by the Central Coast Regional Water Quality Control Board. This analysis was submitted to the Regional Board in April 2011 (Permit Year Two). No new/modified enforceable mechanisms were identified as necessary for implementation of hydromodification controls and LID in new and redevelopment projects.

During permit year four, the County proposed to continue implementation of our pre-existing post construction stormwater management requirements in place of implementation of the Central Coast Regional Water Quality Control Board Post-Construction Requirements as permitted in Resolution R3-2012-0025. This proposal was conditionally approved, contingent on the County updating its existing Criteria to include: numeric water quality treatment requirements, biofiltration design parameters, and off-site treatment options. These updates are scheduled for the first permit year of the new general permit. No additional enforceable mechanisms are anticipated at this time.

In addition, the Criteria will be updated to include the source control measures included in the State General Permit section E.12.d. These requirements will replace the Attachment 4 requirements from the old General Permit.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element Nos. E.12.j and E.12.k.

- Update County Design Criteria to include quantifiable water quality treatment standards, biofiltration design parameters, and allowance for off-site compliance.
- Update County Design Criteria to include the source control measures specified in the State's General Permit, replacing Attachment 4 requirements.
- Conduct an analysis of the landscape code to correct gaps hindering post construction requirements.

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:

• Hydromodification control criteria.

Status:

During permit year four, the County proposed to continue implementation of our pre-existing post construction stormwater management requirements in place of implementation of the Central Coast Regional Water Quality Control Board Post-Construction Requirements as permitted in Resolution R3-2012-0025. This proposal was conditionally approved, contingent on the County updating its existing Criteria to include: numeric water quality treatment requirements, biofiltration design parameters, and off-site treatment options. These updates are scheduled for the first permit year of the new general permit.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.12.k.

• Update the County Design Criteria to include: numeric water quality treatment requirements, biofiltration design parameters, and off-site treatment options

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:

• Applicability thresholds.

Status:

During permit year four, the County proposed to continue implementation of our pre-existing post construction stormwater management requirements in place of implementation of the Central Coast Regional Water Quality Control Board Post-Construction Requirements as permitted in Resolution R3-2012-0025. This proposal was conditionally approved, contingent on the County updating its existing Criteria to include: numeric water quality treatment requirements, biofiltration design parameters, and off-site treatment options. The current Criteria include applicability thresholds.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.12.k.

None

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:

- 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.

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 Four.

County of Santa Cruz

Joint Effort: LID Education and Outreach Summary

Target Audience	LID: Public Education & Outreach Efforts	Estimated Schedule	Status
Residents	Ellorts	Schedule	
Residents			
	County plans to fund the Santa Cruz	Q4-Q9	Not
	Resource Conservation District (RCD)		Done
	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.	02.00	
	County website, Public Works' web	Q2-Q9	On-
	pages provides storm water		going
	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		
A 1. *44	Storm Water Runoff."		
	, Developers, Building Contractors,		
Design Co.	nsultants, etc:		
	Potential: Article in Builder's	Q3-Q5	Not
	Exchange newsletter, Downtown		Done
	Association newsletter/email, or other		
	trade organization.		
	Potential: Workshop co-sponsored by	Q7	Not

	Santa Cruz municipalities.		Done
Residents	s & Architects, Developers, Building		
Contract	ors, Design Consultants, etc:		
	County co-funds Ecology Action,	Q3	Done
	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.		
	Article/informational piece on LID	Q3	Done
	published in the local newspaper, The		
	Sentinel. The article was published on		
	April 30, 2011.		
	Specific guidance on how to achieve	Q8**	N/A
	and demonstrate compliance with the		
	hydromodification control criteria and		
	LID requirements made available to		
	new and redevelopment project		
	applicants.		
County E	Board of Supervisors		
	Potential: Agenda items at one or	Q7-Q8**	N/A
	more meetings regarding new and/or	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	11/11
	modified enforceable mechanism (e.g.		
	revised municipal code or mandatory		
	Development BMPs) for applicable		
	new and redevelopment projects.		
	non una reac veropinent projects.	J	

^{*}Additional Description of the County of Santa Cruz/Resource Conservation District LID Education Program for Residents: 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.

This training was not provided during permit year four. However, the guide "Slow It. Spread It. Sink It!" is provided on the RCD and County websites.

** Since the County has applied and been approved for utilizing our pre-existing program in place of the RWQCB PCRs these items were not necessary.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities: This BMP falls under Element No. E.12.k.

None

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 at facilities have been completed and documented. Recommended improvements or changes from the August 2012 inspection have been made. Inspection sheets are used as documentation and implementation.

Storm drain protectors were installed in the drain boxes in front of the Fleet maintenance shop however, they caused stormwater to back up in the drain box. Either another brand of protector will be installed, or when funding is available a silt and grease trap will be installed.

The legend painting clean up sink has been moved under cover, the settling barrels have been placed in second containment and the old clean up station has been dismantled.

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.

Planned Next (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.11.c.

• Conduct comprehensive annual assessment and identify subset of facilities that could be considered hotspots.

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.

Structural pest control at 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.

During 2012, one public meeting by the IPM Departmental Advisory Group was held.

The policy and most current annual report on this program, which includes the continued reduction in pesticides used, can be found at:

http://sccountv01.co.santa-

cruz.ca.us/Bds/Govstream/Bdsvdata/non_legacy/agendas/2013/20130611/pdf/018.pdf

Planned Next Year (Year One of State General Permit Order No. 2013-001-DWQ) Activities: This BMP falls under Element No. E.11.j.

• 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: A monthly sweeping schedule has been developed for the Public Works Maintenance Yards – Brommer, Felton and Roy Wilson. Each maintenance yard is scheduled to be swept two times each month. Storm drains are inspected regularly and cleaned as needed.

Currently there is no mechanical sweeping of other municipal parking lots. Maintenance consists of debris being blown or raked to specific locations and removed by hand.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWO) Activities:

This BMP falls under Element No. E.11.a and E.11.h.

• Continue with the monthly sweeping schedule for maintenance yards and document that maintenance.

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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.11.a

• 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 413 storm drains were inspected and 10 were cleaned - 4.4 cubic yards of material was removed. This year 69 silt and grease traps were inspected and cleaned - 35.99 cubic yards 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 have been established for catch basin and silt and grease trap cleaning based on the information gathered.

Maintenance of catch basin markings will be coordinated with catch basin cleaning and combined with this BMP.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.11.f and E.11.g

- Track the frequency of cleaning and the amount of waste removed annually.
- Prioritize maintenance efforts based on the amount of waste removed. C
- Complete storm drain markings.
- Check markers during routine maintenance and replace as needed.
- Coordinate route schedules and mapping with GIS.
- Develop and implement the GBA/Lucity software system.

BMP 8-1-7 Stormwater Pump Station BMPs

Implementation Details: The County owns and maintains three pump stations as part of the storm drain system. Maintenance and operation of the pump stations consists of regular inspections and removal of vegetation, siltation and wastes.

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

Status: Removal of vegetation at the 38th Basin was completed and is slated again for 2014.

A description of the pump stations is noted below.

<u>Thirty-eighth Avenue storm water detention basin</u> – 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 bimonthly 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.

<u>Shell Road flood control pump station</u> – 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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.11.f

• 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 at least twice monthly, sometimes more often depending on availability of personnel.

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 2012 to July 2013:

- -1, 267 curb miles and 173.85 center miles were swept.
- -1,356.5 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.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.11.h

• 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/RoadBible.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 Four, 16 culverts were replaced, 10 storm damage sites were repaired and 18.89 miles of roadside ditches were cleaned.

Planned Next Year (Year One of State General Permit Order No. 2013-0001-DWQ) Activities:

This BMP falls under Element No. E.11.g and E.11.h

• Develop and implement a program to assess the various O&M activities.

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 assigned to the Roads and Drainage sections. 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 are two new hires this year who will need to be trained.

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

$Planned\ Next\ Year\ (Year\ One\ of\ State\ General\ Permit\ Order\ No.\ 2013-0001-DWQ)\ Activities:$

This BMP falls under Element No. E.7.b.

• Train the two new employees in the Roads maintenance section.

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."

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