

# 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. Permittee Information**

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

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

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

- B. Reporting Period** (check one):  Coverage Commencement (March 20, 2009) to June 30, 2010 **-or-**
- July 1, 2004 to June 30, 2005
  - July 1, 2005 to June 30, 2006
  - July 1, 2006 to June 30, 2007
  - July 1, 2007 to June 30, 2008
- (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 areas of Santa Cruz County (unincorporated areas). 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.

Subsequently, we completed changes to the Post Construction Stormwater Management in New Development and Redevelopment minimum control measure, based on our electronic mailing between County Staff and CCRWQB Staff, on 5/21/10 and 6/28/10, to include revisions addressing the CCRWQCB's Joint Effort for developing hydromodification control criteria.

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

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

**County of Santa Cruz - Stormwater Mangement Program**  
**YEAR ONE BMP IMPLEMENTATION STATUS**  
 March 2009 - June 2010

BMPs Due in Year One	Responsible County Departments See Legend Below Table	Status/ Schedule See Legend Below Table	Update/ Changes? See Legend Below Table
<b>Public Education and Outreach</b> Coordinator: Ana Maria Rebelo - DPW			
3-1-1: Brochures	DPW, SAN	C/A	N
3-1-2: Website	DPW	C/O	N
3-1-3: Community Events	DPW, EHS, SAN	C/O	N
3-1-4: Dog Waste Program	PARKS	C/O	N
3-1-5: Watershed and Creek Signage Project	DPW	C/F	N
3-1-6: Riparian Restoration and Protection	EHS, PLN	C/A	N
3-1-7: Septic System Maintenance	EHS	C/O	N
3-1-10: Educational Programs for Children	DPW	C/A	N
3-1-12: Monterey Green Gardener Certification Program	DPW	NA/B	Y
3-1-13: Our Water Our World Program	DPW	C/A	N
3-1-14: Monterey Bay Area Green Business Program	DPW, SAN	C/A	Y
3-1-15: Green Building Outreach	PLN	I/B	N
3-1-16: Business/Industry Outreach	DPW, EHS, SAN	C/O	N
3-1-17: Media Campaign	DPW	C/A	N
3-1-18: Outreach to Farmers	AC, DPW	NA/B	Y
3-1-19: Water Quality Messages	AC, DPW, EHS, GS, PARKS, PLN, SAN	I/B	N
3-1-20: Interested Party List	DPW	C/O	N
<b>Public Involvement and Participation</b> Coordinator: Ana Maria Rebelo - DPW			
4-1-1: Storm Drain Stenciling	DPW	C/A	N
4-1-2: Countywide Stormwater Information Exchange Group	AC, DPW, EHS, GS, PARKS, PLN, SAN	C/O	N
4-1-3: Coordinate Local Stakeholder Outreach	DPW	C/O	N
4-1-4: Monterey Bay Area Pollution Prevention Partnership	DPW, SAN	C/O	Y
4-1-5: Community Clean Ups	DPW	C/O	Y
4-1-6: Clean Beaches Coalition	DPW	C/O	N
4-1-7: Participate in Regional Efforts	DPW, GS, PLN	C/O	N
4-1-8: Water Quality Messages	AC, DPW, EHS, GS, PARKS, PLN,	I/B	N
<b>Illicit Discharge Detection and Elimination</b> Coordinator: John Ricker - EHS			
5-1-1: Storm Sewer Mapping	DPW	C/O	N
5-1-2: Sanitary Sewer Mapping	SAN	C/FA	N
5-1-3: Illicit Discharge Program	EHS	I/B	N
5-1-4: Illicit Discharge Field Screening Investigation	EHS	C/O	N
5-1-5: MS4 Maintenance	DPW	C/O	N
5-1-6: Commercial/Industrial Facility Inspections	EHS, SAN	I/B	Y
5-1-7: Information from the Public	AC, DPW, EHS, GS, PARKS, PLN, SAN	C/O	N

5-1-8: Locate and Correct Cross Contamination in Capitola	EHS, SAN	C/A	N
5-1-9: Implement Pet Waste Ordinance	EHS	C/O	N
5-1-10: Septic System Maintenance and Management Program	EHS	C/O	N
5-1-11: Stormwater Ordinance	DPW, EHS, PLN	I/O	N
5-1-12: Train Agency Staff	DPW, EHS, SAN	I/B	N
5-1-13: Wasteload Allocation and Attainment Program	DPW, EHS, PLN	I/O	N
Construction Site Runoff Control Coordinator: Claudia Slater - PLN			
6-1-1: Grading Ordinance	PLN	C/O	N
6-1-2: Riparian Corridor and Wetlands Protection Ordinance	PLN	C/O	N
6-1-3: Erosion Control Ordinance	PLN	C/O	N
6-1-6: Plan Review	PLN	C/O	N
6-1-7: Site Inspections	DPW, PLN	C/A	N
6-1-8: Train Agency Staff	DPW, PLN	C/O	N
6-1-9: Construction Workshops	PLN	C/O	N
Post-Construction Stormwater Management in New Development and Redevelopment Coordinator: Alyson Tom - DPW			
7-1-1: Land Use Policies and Ordinances	DPW, EHS, PLN	I/O	N
7-1-2: Post-Construction Stormwater Control Ordinance	DPW, EHS, PLN	I/A	Y
7-1-4: Design Standards	DPW, PLN	C/O	N
7-1-5: CEQA Checklist	PLN	C/O	N
7-1-6: On-Going Project Post-Construction	DPW, EHS, PLN	C/O	N
7-1-7: Train Staff	DPW, EHS, PLN	C/O	N
Good Housekeeping and Pollution Prevention for Municipal Operations Coordinator: Ana Maria Rebelo - DPW			
8-1-1: Review Agency Housekeeping Programs	AC, DPW, EHS, GS, PARKS, SAN	C/O	N
8-1-2: Facility BMPs	AC, DPW, EHS, GS, PARKS, SAN	C/O	N
8-1-3: Integrated Pest Management and Integrated Vegetation Management	DPW, GS, PARKS	C/O	N
8-1-4: Municipal Parking Lot Sweeping	DPW, GS, PARKS	I/B	N
8-1-5: Chlorinated and Brominated Water Discharges	DPW, GS, PARKS, SAN	C/O	N
8-1-6: Storm Drain Facility BMPs	DPW, GS, PARKS	I/B	N
8-1-7: Storm Water Pump Station BMPs	DPW, GS	C/O	N
8-1-8: Street Sweeping BMPs	DPW	C/O	N
8-1-9: Road Repair and Maintenance BMPs	DPW	C/O	N
8-1-10: Municipal Maintenance Employee Training	DPW, EHS, GS, PARKS, SAN	C/A	Y

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 District

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
BMP	Best Management Practice
BWET	Bay Watershed Education and Training
CAP	Citizens Advisory Panel
CASQA	California State Stormwater Quality Association
CCRWQCB	Central Coast Regional Water Quality Control Board
CDC	County Design Criteria
CEQA	California Environmental Quality Act
CPESC	Certified Professional in Erosion and Sediment Control
CUPA	Certified Unified Program Agencies
CWC	Coastal Watershed Council
DAG	Departmental Advisory Group
EHS	Environmental Health Services
EPA	Environmental Protection Agency
GIS	Geographic Information System
GSD	General Services Department
GSP	Green Schools Program
HazMat	Hazardous Materials
IPM	Integrated Pest Management
IVMP	Integrated Vegetation Management Program
LID	Low Impact Development
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MS4s	Municipal Separate Storm Sewer System
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resources Conservation Services
OWOW	Our Water Our World
PSA	Public Service Announcement
RCD	Resource Conservation District
RWQCB	Regional Water Quality Control Board
SIN	Stormwater Information Exchange
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. Minimum Control Measures**

***PUBLIC EDUCATION AND OUTREACH PROGRAM***

**Target Audience: County Households**

**BMP 3-1-1 Brochures**

**Implementation Details:**

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

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

**Status:** During the past five years, the County distributed over 32,000 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.

In addition, the County distributes quarterly newsletters promoting pollution prevention and healthy habits for attaining clean water. Approximately 140,000 newsletters go out annually to every household and business in the County. These 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 unincorporated Santa Cruz County, the measurable goal was exceeded in Year One.

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

<b>Name of Brochure</b>
Monterey Bay Begins On Your Street
Pollution Prevention Tips: Preventing Plumbing Problems And Sewer Overflows
Pollution Prevention Tips: Tending Your Garden, Pool And Spa
Pollution Prevention Tips: Taking Care Of Your Home And The Environment
Pollution Prevention Tips: Taking Care Of Your Vehicle And The Environment
Vehicle Service Facility Best Environmental Management Practices
Restaurant Wastewater Best Environmental Management Practices
County Of Santa Cruz Recycling Guide
Worm And Backyard Composting
Household Hazardous Waste Collection Program
Alternatives To Household Chemicals
Environmentally Acceptable Food Packaging
Green Building: A Guide To Sustainable Materials And Methods In Santa Cruz County
Use And Disposal Of Pesticides
No Drugs Down The Drain Sharp And Medication Solutions In Santa Cruz

County
Less Toxic Pest Management Tips For Pesticides And Water Quality
Less Toxic Pest Management Tips For Growing A Healthy Garden
Less Toxic Pest Management Tips For A Beautiful Lawn
Less Toxic Pest Management Tips For Keeping Fleas Off Your Garden
Less Toxic Pest Management Tips For Keeping Cockroaches Out Of Your Garden
Less Toxic Pest Management Tips For Controlling Aphids In Your Garden

**Proposed Modification:** None

**Planned Year Two Activities:** Continue to compile the number of brochures distributed and reach 15 percent of the target audience in 2010/11.

### **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. Develop improvements to increase utility of website.

**Status:** We completed the BMPs for this item and identified room for improvement. The County's stormwater website was updated to include SWMP program information as well as links to related information so that it is easier to access. Currently, the stormwater website received 850 visitors in Year One.

Cross promotion with other environmental programs such as advertising regionally and locally in the EcoCruz web portal and newsletters may help increase traffic to the stormwater website and is planned for Year Two.

**Proposed Modification:** None

**Planned Year Two Activities:** Continue to compile the number of website hits annually.

### **BMP 3-1-3 Community Events**

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

**Measurable Goal:** Compile the number of events organized or attended. Include the number of people attending the event. Participate in at least two events each year.

**Status:** The County sponsored and coordinated Earth Day Santa Cruz. Approximately 2,000 people visited Earth Day in April 2010. There were 100 vendors, of which half were non-profit agencies, offering environmental education and providing educational materials including the County of Santa Cruz' booths. Information on waste reduction, where to recycle medicines and sharps, hazardous materials, stormwater BMPs, water quality education, green business and sanitary sewer overflow prevention were distributed at Earth Day. The targeted population to be reached during this event were residents of the City of Santa Cruz and those of

the unincorporated areas of the County of Santa Cruz.

The County supported and participated in the Redwood Mountain Faire in June 2010. This is a local faire that was reinstated this year. This faire took place in Felton, a northern area of the County of Santa Cruz which serves a more rural population. Approximately 1,000 people visited this faire. The same information that was available at Earth Day was distributed at this event.

**Proposed Modification:** None

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

### **BMP 3-1-4 Dog Waste Program**

#### **Implementation Details:**

County Parks Department provides dog 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 28,000 doggie waste bags were distributed by County Parks, Open Space and Cultural Services Department in 2010. Below is the list of locations where dog waste bags are distributed:

#### Dog Waste Box Locations - 2010

##### Parks

Anna Jean Cummings Park  
Felton Covered Bridge Park  
Highlands Park  
Ben Lomond Park  
Aptos Park  
Polo Grounds  
Hidden Beach Park  
Seascape Park  
Willowbrook Park  
Maplethorpe Park  
Coffee Lane Park  
Soquel Lyons Park  
Santa Cruz Gardens Park  
Floral Park  
Twin Lakes Park  
Hestwood Park  
Jose Ave Park  
Brommer Park  
Moran Lake Park  
Pinto Lake County Park  
Mesa Village Park  
Scott Park

Aldridge Lane Park

Beach access

Rockview

38<sup>th</sup> Av

30<sup>th</sup> Av

26<sup>th</sup> Av

21<sup>st</sup> Av

20<sup>th</sup> Av

Johans Beach Dr

Pleasure Point

Via Palo Alto

Dolphin and Sumner Beach Access

13<sup>th</sup> Av

12<sup>th</sup> Av

**Proposed Modification:** None

**Planned Year Two Activities:** Continue to distribute doggie waste bags and report the number distributed annually.

**BMP 3-1-5 Watershed and Creek Signage Project**

**Implementation Details:**

Partner with the Resource Conservation District of Santa Cruz County to provide signage on selected, well traveled county roads at their intersections with targeted creeks and watershed boundaries.

**Measurable Goal:** Partner with the Resource Conservation District to provide signage on selected, well traveled county roads at their intersections with targeted creeks and watershed boundaries. Install at least 30 watershed signs. Install at least 100 creek signs.

**Status:** This project was completed. A total of 105 creek signs and 30 watershed signs were installed in unincorporated areas of the County. The installation was completed by the Resource Conservation District of Santa Cruz County (RCD) with support in the form of waived permit fees by the County. This project improved community watershed and creek awareness through the installation of informational signs on selected, well-traveled County roads at their intersections with targeted creeks and watershed boundaries. Information on exact locations of sign installation is available from the RCD.

**Proposed Modification:** None

**Planned Year Two Activities:** None, this BMP is completed.

**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:** The County Environmental Health Department has distributed approximately 500 Stream Care Guides by July 2010. Prior to permit coverage the County mailed a Stream Care Guide to each creekside residence. Currently, guides are placed at the County Environmental Health and Planning Department counters as well as being distributed to water quality related non-profits for use in their educational outreach programs. The Stream Care Guide has also been posted on the Stormwater website. The guide can be found at:  
[http://www.dpw.co.santa-cruz.ca.us/Streamcare\\_Guide.pdf](http://www.dpw.co.santa-cruz.ca.us/Streamcare_Guide.pdf)

**Proposed Modification:** None

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

### **BMP 3-1-7 Septic System Maintenance**

**Implementation Details:**

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

See [http://sccounty01.co.santa-cruz.ca.us/eh/sewage\\_disposal/ehownergd.htm](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 Environmental Health Department has developed educational materials for septic system owners as part of the septic system maintenance program. It distributes hard copies of brochures on septic systems and greywater systems (approximately 150-200 brochures per year) at public counters and to residents who make direct inquiries. They are also available on the County website referenced above.

**Proposed Modification:** None

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

### **BMP 3-1-8 Public Opinion Survey**

**Implementation Details:**

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

This BMP is not due until Year Three.

### **BMP 3-1-9 Social Marketing Strategies**

#### **Implementation Details:**

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

This BMP is not due until Year Four.

**Target Audience: 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 Waste Free Schools/Green Schools Program

<http://www.wastefreeschools.org/>

**Measurable Goal:** Educate 10 percent of school children every year. Coordinate stormwater education with our Waste Free Schools (WFS)/Green Schools Program. Administer pre-and post presentation evaluations.

**Status:** The WFS was the original, award-winning program which focused entirely on waste reduction and recycling education. The Green Schools Program (GSP) is the modified County schools program which builds on the success of the WFS program.

The GSP works with the County's 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 the County's schools as they evolve into "Green Schools" that promote wise resource activities, by reducing waste, preventing pollution, and training students to conserve scarce resources like energy and water. The program provides both in-class and school-wide presentations, educational assemblies, and technical assistance to member schools. Following the presentations, the students reinforce this education with field trips such as beach cleanups and storm drain markings or landfill tours that complement classroom education.

In Year One, the GSP gave 173 presentations at 25 different schools. Out of these presentations, 157 were held in the classroom and 16 were assembly-style presentations. The program reached 11,755 students and each was given the "Monterey Bay Begins on Your Street" brochure in English or Spanish to take home and continue stormwater education with their peers and families. In addition, 283 students (10 to 18 years old) participated in 12 beach cleanup events and 70 students (13 to 18 years old) helped with 11 storm drain marking outings. For more information on the GSP see:

[http://www.dpw.co.santa-cruz.ca.us/www.santacruzcountyrecycles/Green\\_Schools/index.html](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 30 percent of students were educated through the GSP in the first year. This surpasses the measurable goal.

**Proposed Modification:** None

**Planned Year Two Activities:** 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.

This BMP is not due until Year Two.

### **BMP 3-1-12 Monterey Green Gardener Certification Program**

#### **Implementation Details:**

Annual watershed and stormwater pollution prevention training of gardeners in Spanish and English. Continuation of program is contingent upon grant funding.

<http://www.green-gardener.org/about/index.html>

**Measurable Goal:** Train 10 gardeners annually and obtain 25 percent customer surveys.

**Status:** The Monterey Green Gardener Certification Program is coordinated by Ecology Action, a local non-profit. The program was transitioned to the Adult Education program and is funded by various agencies. The County did not receive a grant to implement this BMP. However, the Green Business Program, funded mostly by the County with minor funding from Proposition 50 state funding, certified three landscape businesses. A landscape workshop was presented to gardeners and landscapers. In addition, 31 Master Composters were certified through the County's compost program.

**Proposed Modification:** Update this BMP to be called "Landscape Workshop." The implementation detail will provide landscape workshops through the County compost program, contingent on funding. The measurable goal will be: Provide an annual landscape workshop.

**Planned Year Two Activities:** 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.

<http://ourwaterourworld.org>

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

**Status:** While this BMP was not due until Year Two, the County was able to secure grant funding for

implementation during Year One.

The Monterey Bay *Our Water Our World* (OWOW) program promotes integrated pest management (IPM) strategies to home gardeners and professional landscapers to prevent pesticide and fertilizer contamination of urban waterways surrounding the Monterey Bay National Marine Sanctuary. In partnership with Ecology Action, the County of Santa Cruz OWOW program provides pollution prevention trainings and IPM resources to employees and customers of 13 participating garden retail stores serving residents living in watersheds located in the County. A Bay Watershed Education and Training (BWET) grant from the National Marine Sanctuaries Program of the National Oceanic and Atmospheric Administration (NOAA) provided matching material and staff support for Our Water Our World program. The Cities of Watsonville and Santa Cruz also contributed a total of \$7,500 in match funding in support of OWOW activities for their respective jurisdictions.

In fiscal year 2009/2010, the County of Santa Cruz OWOW program provided IPM and pollution prevention education training to 521 individuals, including:

- 20 new employees of participating OWOW garden retail stores.
- 438 County residents and customers of participating OWOW garden retail stores at 10 community events (see Table below for details).
- 38 professional landscapers and gardeners attending Green Gardener Certification classes at the Watsonville Adult School.
- 25 Master Gardeners from the University of California Cooperative Extension, nine of whom volunteered at one or more County of Santa Cruz OWOW store maintenance visits or community tabling events.

Our Water Our World media promotion in 2009/2010 included a holiday movie theatre ad and a spring, bilingual radio ad campaign. The 30-second holiday theatre Public Service Announcement (PSA) “Got Ants” ran on all screens at Santa Cruz Cinema 9 from Decemeber 12<sup>th</sup> through the 31<sup>st</sup>, 2009, and reached 25,373 people attending the movies during that time. The OWOW 60-second radio PSA was co-sponsored by the BWET grant and the Cities of Watsonville and Santa Cruz. The ad played on KPIG, the Beach, HANK, radio Tri-Color and radio JOSE from June 12<sup>th</sup> through the 27<sup>th</sup>, 2010. The radio ad promoted less-toxic gardening practices through the Our Water Our World store program and Green Gardener websites. During the June radio campaign, [www.green-gardener.org](http://www.green-gardener.org) received 515 unique site visits.

**Table: Our Water Our World Education Event Outcomes**

Date and Time of Event	Event Location	IPM Consultations Given
April 10, 2010, 10am-2pm	The Home Depot, Soquel	45
April 17, 2010, 10am-2pm	The Home Depot, Watsonville	48
April 21, 2010, . 2pm-6pm	Santa Cruz Farmer’s Market, Santa Cruz	55
April 25, 2010, 11am-4pm	Dia del Nino Event, Watsonville	52
May 2, 2010, 10am-2pm	The Home Depot, Soquel	38
May 15, 2010, 10am-2pm	Orchard Supply Hardware, Watsonville	35
May 16, 2010, 10am-2pm	Orchard Supply Hardware, Capitola	32
June 20, 2010, 10am-2pm	The Home Depot, Watsonville	54
June 13, 2010, 10am-2pm	Pro-Build Garden Center, Santa Cruz	31
June 13, 10am-2pm	Orchard Supply Hardware, Capitola	48
	<b>Total IPM Consultations:</b>	<b>438</b>

**Proposed Modification:** None

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

<b>BMP 3-1-14 Monterey Bay Area Green Business Program</b>
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**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:** To date, the Monterey Bay Green Business Program has certified 157 businesses in the County of Santa Cruz. There are 49 additional businesses that are currently going through the process and 76 more that have expressed interest. A total of 282 businesses have participated in the Green Businesses Program to date from the County of Santa Cruz. Below are the types of industries that have been targeted by the Green Business Program to prevent pollution and conserve resources.

<b>Green Business Certification</b>	
<b>by Industry</b>	
VEHICLE SERVICE FACILITY	18
FOOD SERVICE	28
GOVERNMENT	9
CONSTRUCTION	3
OFFICE/ RETAIL	77
PLUMBER	3
LANDSCAPE	3
HOTEL & HOSPITALITY	7
JANITORIAL	4
SALON	1
PRINTER	2
MEDICAL FACILITY	1
PROPERTY MANAGER	1
<b>Total</b>	<b>157</b>
<b>Expressed Interest</b>	<b>76</b>
<b>In Progress</b>	<b>49</b>
<b>Total</b>	<b>125</b>
<b>Overall Total Business</b>	<b>282</b>

During the last year this incentive program has been expanded to reach additional business areas. New checklists have been developed for Landscapers, Painting Contractors, Wineries, and Schools. These will be the new business sectors that will be targeted during future years. This BMP, which was due in Year Three has been completed ahead of schedule. The 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:

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

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

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

Plumbers: Sanitary sewer overflow reductions.

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

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

Public Works has been involved in a statewide California Green Business Program Network for the past seven years. Program coordinators from different counties throughout the state have joined together to share resources. One of the first endeavors of this Network was to attempt measuring the success of the Green Business Program using scientific measurement tools. Measurement tools, although still in preliminary stages, have been provided by the Department of Toxic Substances Control and Environmental Protection Agency, as well as other sources. Using these tools, it is estimated that the 200 plus certified Green Businesses save each year over 14 million gallons of water, reduce hazardous material and hazardous waste generation by 11,000 pounds, and air pollution by 300,000 pounds. Through outreach and garbage bin optimization, Green Businesses also divert the equivalent of 180 refuse trucks, or 122,000 cubic feet of waste from the landfill. This estimate does not include savings from soon to be certified Green Hotels who could each divert up to 17 garbage trucks or 11,000 cubic feet on an annual basis. Lighting and refrigeration retrofits and other energy upgrades accounted for reductions in power demand and usage by 489 kW and 2.8 million kWh, respectively, or enough electricity to power 477 average American homes. By not using the 2.8 million kWh of electricity, Green Businesses collectively saved approximately 3.1 million pounds of carbon dioxide which is approximately equivalent to the carbon dioxide emitted by 5,000 road trips from Santa Cruz to Los Angeles in a Honda Civic.

**Proposed Modification:** Include the activities from BMP 4.1.4, Monterey Bay Pollution Prevention Partnership into this BMP and report on Pollution Prevention coordination between regional agencies by documenting attendance and actions taken at quarterly meetings.

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

### **BMP 3-1-15 Green Building Outreach**

#### **Implementation Details:**

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

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

**Status:** The County passed a Green Building Ordinance in January 2010. A Green Points Checklist for residential projects was created to help County residents comply with this Ordinance. This checklist helps to address global climate change by cutting greenhouse gas emissions in the County. It involves modest requirements to upgrade energy efficiency in new residential buildings and additions such as indoor air quality and resource conservation. More information can be found at:

[http://www.sccoplanning.com/pdf/bldg/CountyResidentialChecklist\\_rev34.pdf](http://www.sccoplanning.com/pdf/bldg/CountyResidentialChecklist_rev34.pdf)

[http://www.sccoplanning.com/pdf/bldg/ProposedGreenList\\_ver.24.pdf](http://www.sccoplanning.com/pdf/bldg/ProposedGreenList_ver.24.pdf)

The County did not certify any professionals as green this year due to the timing of the adoption of the State-wide green building code effective in 2010. The County has scheduled two green building workshops for September and October 2010 in collaboration with the City of Santa Cruz.

**Proposed Modification:** None

**Planned Year Two Activities:** Certify at least 30 professionals.

### **BMP 3-1-16 Business/Industry Outreach**

#### **Implementation Details:**

Written materials and posters 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 is received, 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 352 inspections within the last fiscal year. During these inspections, the District provided Best Management Pamphlets specific to each industry. The inspector educates the representative about proper stormwater issues and the importance of following the Best Management Practices in both English and Spanish. Additionally, the District highlighted the differences between storm drains and the sanitary sewer. The following businesses are inspected every year:

- 5 carwashes
- 6 dry cleaners
- 2 medical facilities
- 9 machine shops
- 7 photoprocessors

1 print shop  
13 miscellaneous industries  
226 food service establishments  
82 vehicle service facilities  
1 winery

Businesses/industries that are inspected are given an appropriate BMP pamphlet from the following:

Food Service Establishments (English and Spanish)  
Vehicle Service Facilities  
Machine Shops  
Printers  
Dentists  
Dry Cleaners  
Surfboard Manufacturers  
Medical Facilities  
Photoprocessors  
Paint Contractors  
General Business/Industry pamphlet

These pamphlets can be found at: <http://www.dpw.co.santa-cruz.ca.us/environment.htm>

In addition, the County conducted two workshops (one for painters and one for landscapers). The Environmentally Responsible Painting workshop was offered on November 5, 2009. There were 30 attendees and each was given a certificate of completion. Three of those attendees later asked to become a green business. The County is in the process of working on a checklist for painters for the Green Business Program. The overall presentation was based on BMPs for painters.

The Benefits of Compost and Mulching for Environmental Enhancement workshop was offered on April 8, 2010, and approximately 20 attendees received the training. The overall presentation was based on the use of compost as a soil amendment, mulch for effective erosion and sediment control, and BMPs for stormwater Pollution Prevention Plan construction permits.

**Proposed Modification:** None

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

### **BMP 3-1-17 Media Campaign**

#### **Implementation Details:**

Media campaigns based on events such as Earth Day, Pollution Prevention Week and Creek Week, and Marine Debris awareness and year-round campaigns promote recycling and waste reduction. 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 and Creek Week, and Marine Debris awareness and year-round campaigns promote recycling and waste reduction and stormwater education. The County partners with other agencies in this Monterey Bay region and 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 ads, TV and movie theaters. These ads were run in English and Spanish.

For website tracking and reporting see: 3.1.2.

**Proposed Modification:** None

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

### **BMP 3-1-18 Outreach to Farmers**

**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:** Support an annual presentation regarding stormwater pollution to farmers.

**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 has recently (August 11, 2010) been extended, with some minor amendments, for a ten-year period. Most of the practices are geared specifically toward 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 five years implementation of sediment basins, grassed waterways, and streambank protection practices alone have prevented erosion of 6,800 tons per acre per year of sediment on agricultural land in the Pajaro Valley watershed. One of the minor amendments that came out of the recent permit extension was the commitment by the Planning Department to provide outreach information regarding this invaluable program at their information desk.

**Proposed Modification:** This BMP will be updated to be named Master Permit for Environmental Enhancement Projects. The measurable goal will be to provide outreach information regarding the Master

Permit program at the Planning Department information desk.

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

### **BMP 3-1-19 Water Quality Phone Messages**

**Implementation Details:**

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

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

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

A protocol for tracking and reporting on response time is being developed and will be implemented in Year Two.

The County is working with other jurisdictions to explore the possibility of a single coordinated water quality hotline.

**Proposed Modification:** None

**Planned Year Two Activities:** Promote use of water quality phone messages through printed materials and website. Respond to 100 percent of calls to County staff within two days and track the number of calls received each year.

### **BMP 3-1-20 Interested Party List**

**Implementation Details:**

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

**Measurable Goal:** The County has an interested party email list that is used to distribute the latest developments in the stormwater program. Coordinate with the City of Capitola to update the list. Provide summary of information sent out to list members in the annual report.

**Status:** During the preparation of the SWMP the County has involved stakeholders in developing it as well as seeking their 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 as well as the City of Capitola.

During this first year of implementation, the stakeholders were contacted twice:

1. The stakeholders were informed on May 4, 2009, of the changes to the SWMP resulting from the List of Required Revisions from the Regional Board staff as well as making the stakeholders aware of the County Board of Supervisors public meeting on May 20, 2009, in case any stakeholder wanted to attend and provide public comments.
2. On February 25, 2010, the stakeholders were notified of the changes to the SWMP resulting from the County's decision to participate in a regional joint effort to develop the region-wide Hydromodification control criteria. The stakeholders were invited to review and send us their comments prior to or during the County Board of Supervisors meeting on March 2, 2010.

The Stakeholders will be informed of this annual report and their opportunity to comment on it prior to or during the County Board of Supervisors public meeting in September 2010.

**Proposed Modification:** None

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

## ***PUBLIC INVOLVEMENT AND PARTICIPATION***

### **Target Audience: General Population**

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

##### **Implementation Details:**

Mark half of storm drains in major business and residential areas. Coordinate with our local Surfrider Foundation, Save Our Shores and other volunteer organizations for this work.

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

**Status:** The Department of Public Works Stormwater Management section bought 1,000 labels from “das” Manufacturing, Inc., and approximately 500 were used to mark County-wide stormdrains in 2009/2010. This was in collaboration with Save Our Shores using volunteers and students and as part of the Green Schools Program where students also get to participate in the storm drain markings. Previously, inlets were stenciled, and we have begun the process of replacing the stenciled markings with labels. There are approximately 2,000 inlets maintained by the County. This includes areas inside and outside of the MS4 permit limits.

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

**Proposed Modification:** None

**Planned Year Two Activities:** Complete storm drain marking so that half of storm drains are marked in major business and residential areas. Check markers during routine maintenance and replace as needed. Coordinate this work with GIS.

### **Target Audience: Agency Staff, General Population**

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

##### **Implementation Details:**

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

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

**Status:** The County held two SIN meetings, one on July 6, 2009, in Watsonville and one on March 11, 2010, in Capitola. The agendas included discussion of Joint Effort project, Development of BMP and LID guidance manuals, and enforcing Maintenance Agreements.

**Proposed Modification:** None

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

### **BMP 4-1-3 Coordinate Local Stakeholder Outreach**

#### **Implementation Details:**

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

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

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

**Status:** In conjunction with BMP 3-1-20, during this first year of implementation, stakeholders who were interested in being on the County's Interested Party List were added to an e-mail list. It was determined that it would be most efficient to distribute information and accept comments on the SWMP via e-mail. This list was used in conjunction with other public notification and hearing requirements to hold two public hearings on SWMP related items during the first permit year.

1. The stakeholders were informed on May 4, 2009, of the changes to the SWMP resulting from the List of Required Revisions from the Regional Board staff as well as making the stakeholders aware of the County Board of Supervisors public meeting on May 20, 2009, in case any stakeholder wanted to attend and provide comments. No comments were received prior to or at the public meeting.
2. On February 25, 2010, the stakeholders were notified of the changes to the SWMP resulting from the County's decision to participate in the Regional joint efforts to develop the region-wide Hydromodification Control criteria. The stakeholders were invited to review and send us their comments prior to or during the County Board of Supervisors public meeting on March 2, 2010. One local engineer did request some clarifying information which was submitted and responded to via email.

Since there was no annual report due during the first permit year, the meeting to review and comment on the annual report will not be conducted until permit Year Two. Rather than limiting review of the SWMP and annual report to a single committee the County plans on providing the draft document for review by the entire Interested Party List developed under BMP 3-1-20. Stakeholders will be informed of this annual report and their opportunity to comment on it prior to or during the County Board of Supervisors public meeting in September 2010.

In addition, staff presented information on the County's SWMP at a Blue Circle Meeting on December 10, 2009. In 1996 the Resource Conservation District of Santa Cruz County and the Natural Resource Conservation Service created the first Blue Circle as a way for local agencies, governmental and nongovernmental groups to meet in a social climate and exchange views on natural resource issues in Santa Cruz County's watersheds.

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 first permit year this group met four times. Topics of discussion included: Integrated Regional Water Management Plan, grant opportunities, Low Impact Development (LID), hydromodification, graywater permits, single use bag ban, NPDES updates, construction general permits, stormwater allocation/alternatives program, etc.

**Proposed Modification:** None

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

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

**Implementation Details:**

The goal of this partnership is to share outreach information and pool resources.

**Measurable Goal:** Meet quarterly and document attendance and actions.

**Status:** The Monterey Bay Area Pollution Prevention Partnership was dissolved this year for lack of attendance in the meetings. Instead, the Monterey Bay Area Green Business Program assimilated the P2 discussion to its agenda.

**Proposed Modification:** This BMP will be eliminated and Pollution Prevention work will be reported as part of BMP 3-1-14.

**Planned Year Two Activities:** Consolidate the Monterey Bay Area Pollution Prevention Partnership with the Monterey Green Business Program.

#### **BMP 4-1-5 Community Cleanups**

**Implementation Details:**

The County sponsors creek cleanups during Creek Week, working with Save our Shores, Surfrider Foundation and other watershed and environmental groups.

**Measurable Goal:**

- Sponsor volunteer creek 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 4<sup>th</sup> of July and Coastal Cleanup Day in September 2009. With the help of Save Our Shores, a local non-profit, approximately 4,000 volunteers participated in both events last year. The 4<sup>th</sup> of July and the Coastal Cleanup Day events engage the public to remove trash and debris from our beaches and waterways. It also helps to identify the sources of

debris, and to change the behaviors that cause pollution in our County. Our motto is “Be Part of the Solution to Ocean Pollution!”

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

**Proposed Modification:** Update the BMP language to correctly identify the fall clean up event as “Coastal Cleanup Day” instead of Creek Week.

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

#### **BMP 4-1-6 Clean Beaches Coalition**

**Implementation Details:**

The County coordinates marine debris cleanups with local organizations.

<http://www.cleanbeachescoalition.org/the-coalition-partners.html>

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

<http://www.cleanbeachescoalition.org/the-coalition-partners.html>

**Status:** The County participates with local non-profits such as Save Our Shores and Ecology Action in the 4<sup>th</sup> of July weekend and Coastal Cleanup day. Approximately 4,000 volunteers participated this past year of which 32 were County employees. In addition, as part of the Green Schools program, students are required to help with beach cleanups. This year, there were 10 beach cleanups in which 283 students from the ages of 10-18 participated.

**Proposed Modification:** None

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

#### **BMP 4-1-7 Participate in Regional Efforts**

**Implementation Details:**

Investigate opportunities to participate in regional, statewide or national groups.

**Measurable Goal:** At a minimum attend annual Integrated Pest Management Departmental Advisory Group meetings and monthly U.S. Green Building Council 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 to 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 County's IPM program visit:

[http://sccounty01.co.santa-cruz.ca.us/bds/Govstream/BDSvData/non\\_legacy/agendas/2010/20100622/PDF/020.pdf](http://sccounty01.co.santa-cruz.ca.us/bds/Govstream/BDSvData/non_legacy/agendas/2010/20100622/PDF/020.pdf)

The U.S Green Building Council (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 attend these monthly meetings and currently are members of the Green Schools Advisory Committee.

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.

**Proposed Modification:** None

**Planned Year Two Activities:** 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 and Outreach Section

## ***ILLICIT DISCHARGE DETECTION AND ELIMINATION***

**Overview:** Many of the elements of the illicit discharge detection and elimination program have been underway for many years in the County. Considerable progress has been made in identifying and correcting leaky sanitary sewers and inadequate pump stations. The number and volume of sewage spills entering the storm drain system or natural waters has declined substantially. A number of other efforts have been implemented to identify and eliminate sources of contamination to urban waterways and lagoons. However, in preparing this annual report it has become apparent that there is a need to better document and track the outcomes of these efforts. We also look forward to completion of the storm water ordinance, which will give us more authority to eliminate other non-stormwater discharges to the storm drain system and natural waters.

### **BMP 5-1-1 Storm Sewer Mapping**

#### **Implementation Details:**

Storm sewer system and outfalls are mapped in the urban areas of the County. The maps will be utilized to track sources of illicit discharges.

#### **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 available on a dedicated stormwater website which allows the user to track the flow of water from an address or to a particular location. The maps are being transferred to the general public web-based GIS system. Storm drain maps are being updated in Zone 5 and Zone 6 as a part of a grant and County Redevelopment Agency funded efforts to update the drainage master plans.

The storm drain maps can be used to track potential sources of contamination when it is detected, or to determine the path of spills if they occur.

**Proposed Modification:** None

#### **Planned Year Two Activities:**

- Continue to provide ongoing database maintenance and updated maps in annual report.

### **BMP 5-1-2 Sanitary Sewer Mapping**

#### **Implementation Details:**

Incorporate sanitary sewer maps to identify possible leaks or accidental 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 are being added to the general public web-based GIS system. These maps are used in conjunction with storm drain maps to identify areas of potential contamination where leaks from the sanitary sewers system may enter the storm

drain system. These locations have been sampled to determine if leakage is occurring. Leaks have been identified in the City of Santa Cruz in the past, but not in the County's jurisdiction.

**Proposed Modification:** None

**Planned Year Two Activities:** This BMP is complete. The County will continue to update sanitary sewer maps as additional information becomes available.

### **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.

**Status:** The County is in the process of developing a baseline list of those industrial and commercial businesses not routinely inspected by County staff. Business types identified as having potential to cause stormwater pollution will be prioritized and targeted based on their risk 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, are being reviewed to identify businesses that have the potential to release contaminants.

Field staff from Public Works and Environmental Health will be trained by Senior staff currently conducting illicit discharge detection (IDD) and elimination investigations. IDD training will be tailored for those business types screened and identified.

Uniform procedures are currently being coordinated and developed within this IDD program for education, inspections, and enforcement by both Environmental Health and Public Works. This program will include annual routine inspections of 50 percent of the prioritized businesses and operations that may be sources of illicit discharge. This will be completed after the Stormwater Ordinance is adopted, giving authority for inspection and enforcement.

In addition, during routine inspections, the County provides incentives for targeted businesses to become Certified Green Businesses through Public Works.

**Proposed Modification:** None

**Planned Year Two Activities:**

- Complete structure/procedures for illicit discharge screening and investigation.
- Complete procedures and identification of staff to conduct screening investigations and follow-up.
- Develop a database to list facilities of concern and track illicit discharge reports and follow up actions.

### **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 also 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.

**Status:** Samples have been collected from urban streams and storm drains by County Environmental Health staff as well as from volunteers with the Coastal Watershed Council (CWC). From January 1, 2009 to June 30, 2010, CWC volunteers collected 44 samples from 10 storm drain outfalls. CWC also collected samples from 80 locations, primarily urban streams, during Snapshot Day in May 2010. CWC samples are analyzed by County staff for fecal indicator bacteria, nitrate, ammonia and phosphate. The County collected and analyzed 540 samples from 29 locations in urban stream and lagoon samples throughout the County (including locations within the City of Santa Cruz). The County also collected 64 samples at 23 locations in storm drains and ditches.

No specific illicit discharges were identified this past year, except for one failing septic system. Follow up testing and investigation will be done at locations with the highest bacteria and nutrient levels. Sampling during previous years has identified sewer leaks in both the City of Santa Cruz and Capitola. As a result, numerous sewer upgrades have been completed. The next priority is the upgrade of sanitary sewers in the vicinity of Noble Gulch in Capitola.

**Proposed Modification:** None

#### **Planned Year Two Activities:**

- Continue to sample creeks and outfalls and identify sources of dry weather flows annually.
- Abate illicit discharges, failed sewer connections or other illicit connections when 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 inspect for illicit discharges and connections during routine maintenance.
- Results of inspections 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. 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. No indications of illicit discharges were identified this year during maintenance procedures.

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)

**Proposed Modification:** None

**Planned Year Two Activities:**

- Continue to inspect for illicit discharges and connections during routine maintenance.
- Results of the inspections reported annually.

<b>BMP 5-1-6 Commercial and Industrial Facility Inspections</b>
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**Implementation Details:**

County Environmental Health Inspectors inspect and monitor regulated facilities 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.

**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:** 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 CUPA program. 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.

Stormwater illicit discharge inspection coverage and enforcement powers reside with the County Sanitation District and EHS. The Stormwater Ordinance will give the County enhanced onsite enforcement powers for identified stormwater violations at industrial and commercial sites, including the authority to issue immediate notices of violation.

The County Sanitation District Environmental Compliance section has stormwater inspection responsibilities for industrial, commercial and food facilities served by sewer. Sanitation staff has updated their inspection form to address stormwater issues (Attachment 5-1-5a). This will be implemented once the stormwater ordinance is

adopted. EHS staff will be responsible for inspecting sites served by onsite sewage disposal. 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, keeping records, and follow up spill responses as directed under the current CUPA. Mandated CUPA reporting of any hazmat-related stormwater violations and Public Works commercial and industrial stormwater inspection reports will continue to be made available as an addendum within an annual EHS report.

EHS staff is responsible for identifying illicit discharge issues at food facilities served by onsite sewage disposal. 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 check of onsite septic tank and drain field for surfacing sewage. Stormwater and wastewater violations in the past have been noted on official Food Inspection forms. This will be expanded with the new stormwater forms and the additional authority provided by the Stormwater Ordinance. Consumer Protection inspectors will use a new supplemental Stormwater Inspection form (attachment 5-1-5b). A similar form will be developed for HazMat Inspectors. Environmental Health HazMat Inspectors and Consumer Protection inspectors will receive training in storm water illicit discharge identification; training will focus on California Stormwater Quality Association (CASQA) storm water BMPs developed for Hazardous Materials and Hazardous Waste sites and CASQA BMPs designed specifically for food facilities, respectively.

**Proposed Modification:** Stormwater inspections of commercial and industrial facilities within the County Sanitation District will be conducted by County Sanitation District Environmental Compliance inspectors. Environmental Health Inspectors will conduct inspections of facilities that are not connected to a sewer.

**Planned Year Two Activities:**

- Continue reporting, record keeping, and referrals under the CUPA program, the food facility program, and the Sanitation Districts' Environmental Compliance program. All facilities will be inspected. Records will be maintained of identified impacts on the storm drain system and corrections made.
- Complete inspection program expansion and training for full stormwater inspections to ensure BMPs are in compliance.

<b>BMP 5-1-7 Information from the Public</b>
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**Implementation Details:**

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.

**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.
- Call to Planning Department regarding erosion and pollution from construction projects or erosion in general.

In 2009-2010, EHS staff responded to the following calls:

- 25 emergency response calls that were related to some type of hazardous material that either did or potentially could make it to a storm drain and/or creek. Most were either paint or automotive type wastes (fuel, oil, etc).
- 14 additional complaint types (non emergency) calls that alleged dumping, washing or otherwise depositing hazardous materials into gutters/storm drain systems.
- 5 after hours emergency response calls that involved sewage spills or releases into storm drain or water ways.
- 98 complaints received by telephone or email regarding septic system failures, greywater discharges, sewer lateral overflows, mostly in rural areas.
- 17 complaints regarding pet waste and livestock impacts on water quality.

All calls received were investigated, with necessary follow up actions to correct the problem, if any. We will be developing a better way to capture and record the results of reports from the full range of sources. A shared and publicized water quality hotline with other agencies may also increase the number of reports from the public.

**Proposed Modification:** None

**Planned Year Two Activities:**

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

<b>BMP 5-1-8 Locate and Correct Cross-Contamination from Sewers in the City of Capitola</b>
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**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. The County will consider establishing a program for the evaluation and upgrade of private sewer laterals, if such a program is justified by evidence of significant contamination from leaking laterals.

**Measurable Goals:**

- Monitoring and testing of sanitary sewer lines initiated within 100 yards of Soquel Creek. (Year One to Three)
- Priority replacement / repair list completed. (Year Three)
- Replacement / repair of illicit or substandard connections initiated. (Year Three)
- Develop and implement a sewer lateral upgrade program as necessary based on water quality evaluation conducted after sewer main replacement. (Year Four)

- Report on progress and follow-up activities in annual documentation of linear feet of sewers upgraded and number and percentage of laterals inspected and upgraded. (Year Two to Five)

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

Most of the main sewer lines have now been replaced in Capitola and Rio del Mar. Sanitary sewer leaks into Noble Gulch have been identified as a continuing significant source of contamination to Soquel Creek and Capitola Beach. Plans to replace the sewer line have been developed, and grant funds are being sought to upgrade those sewers.

Once these modifications are complete, further monitoring will be conducted to indicate whether or not the private sewer laterals are significant sources of contamination. If it is believed that they may be, grant funds will be sought for a pilot inspection program to confirm the condition of the laterals and help fund upgrades as needed.

**Proposed Modification:** None

**Planned Year Two Activities:**

- 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)

<b>BMP 5-1-9 Implement Pet Waste Ordinance</b>
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**Implementation Details:**

The County has an ordinance that prohibits the deposition of pet waste in public spaces. The ordinance will be amended to require the proper collection and disposal of pet waste on private property to prevent discharge of fecal material to the storm drain system. The ordinance will be implemented through education programs, complaint response, and existing enforcement procedures.

**Measurable Goals:**

- All complaints received regarding handling of pet waste will be pursued.

**Status:** The County received and investigated 13 complaints regarding pet waste creating a health hazard or nuisance. All but three of these have been resolved.

The County has a draft Stormwater Ordinance to address all non-storm water discharges, including pet waste. It is anticipated that this draft ordinance will be adopted during the second year of this permit and that no additional amendments to the current Pet Waste ordinance will be necessary.

**Proposed Modification:** None

**Planned Year Two Activities:**

- Amendment of pet waste ordinance. (Year Two)
- 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. (Year Two)
- All complaints received regarding handling of pet waste will be pursued.

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

#### **Implementation Details:**

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

Brochures for this program are available at:

[http://sccounty01.co.santa-cruz.ca.us/eh/sewage\\_disposal/ehownergd.htm](http://sccounty01.co.santa-cruz.ca.us/eh/sewage_disposal/ehownergd.htm)

#### **Measurable Goals:**

- County will require all systems to be evaluated prior to approval of a major remodel.

**Status:** The County continues to implement its Onsite Wastewater Management Program. A triennial status report will be prepared next year. Approximately 450 inspections of individual septic systems were conducted during the past year, including responses to 88 complaints. Staff has implemented a process for system inspection and evaluation at the time of property transfer. There has not been much demand for this service and staff is considering recommending that such evaluations be mandatory. More outreach will also be done. 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 the prior three years, that service will be required. If the remodel proposes adding bedrooms or more than 500 square feet, the system must be brought up to current standards.

**Proposed Modification:** None

#### **Planned Year Two Activities:**

- County will provide a triennial report of the number of septic systems pumped, inspected and upgraded in the primary watersheds of the county. The Basin Plan calls for triennial reporting of onsite system maintenance efforts.
- Inspect 1000 septic systems every three years.
- Continue to require all systems to be evaluated prior to a major remodel.

### **BMP 5-1-11 Stormwater Ordinance**

#### **Implementation Details:**

Prepare ordinance to prohibit non stormwater discharges into storm drain and implement appropriate

enforcement procedures and actions. Provide for an exemption of non stormwater discharges that do not pose a significant threat to water quality provided they are in compliance with the Regional Water Board General Waivers for Low Threat Discharges, Highly Treated Groundwater and Specific Discharges.

**Measurable Goals:**

- Adopt and enforce ordinance. (Year One to Five).

**Status:** In Year One, Environmental Health, Planning, and Public Works reviewed stormwater ordinances from other agencies and developed a comprehensive draft ordinance for Santa Cruz County. This ordinance also includes sections to address hydromodification and physical modification of drainageways. The ordinance will empower staff from all three departments to require compliance with key provisions of the stormwater program. The draft ordinance is currently undergoing an in-house review, and will soon be made available to stakeholders for review and comment, including an anticipated workshop for stakeholders.

**Proposed Modification:** None

**Planned Year Two Activities:**

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

<b>BMP 5-1-12 Train Agency staff</b>
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**Implementation Details:**

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

**Measurable Goals:**

- 100 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:** Road and storm drain workers have been trained regarding proper housekeeping measures (see BMP 8-1-10). Sanitation District environmental compliance inspectors are trained annually consistent with the District’s discharge permit. Environmental Health staff will be trained upon completion of the stormwater ordinance and stormwater inspection checklist for commercial and industrial facilities.

**Proposed Modification:** None.

**Planned Year Two Activities:**

- Following adoption of the Stormwater Ordinance, complete training of 100 percent of applicable agency staff, including food facility inspectors, CUPA inspectors, environmental compliance inspectors, road and storm drain maintenance workers, and water quality investigators.
- Report outcome of training and follow-up activities.
- Annual training, as appropriate for new staff and when changes to the program occur.

### **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 towards achieving wasteload allocations;
- Coordination with stakeholders; and
- Other pertinent factors.

**Status:** Most of this work has already been completed through the preparation of the TMDLs, implementation plans, stormwater program and the County investigations that went into preparation of the TMDLs. Preparation of the formal WAAP will be completed pending final adoption of the pathogen TMDLs for San Lorenzo River, Soquel Creek and Aptos Creek. These were considered by the State Water Board in June and July 2009, but have not yet been approved by EPA or the Office of Administrative Law.

**Proposed Modification:** None

**Planned Year Two Activities:** Continue development, submission and implementation of WAAP (Years One to Five).

**DRAFT**  
**SANTA CRUZ COUNTY**  
**Stormwater General Industrial User Inspection Report**

APN:	Today's Date:	Last Inspection:
Name of Establishment:		
Address:		City:
Facility Contact:		Phone:
Type of industry/ business _____		

**Types of chemicals used (look over inventory and check all that apply):**

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Parts washing solvent    | <input type="checkbox"/> Fuels: gasoline and diesel | <input type="checkbox"/> Machine oils and lubes |
| <input type="checkbox"/> Paint and paint thinners | <input type="checkbox"/> Aqueous cleaners           | <input type="checkbox"/> Food prep equipment    |
| <input type="checkbox"/> Oil and coolants         | <input type="checkbox"/> Chlorinated cleaners       | <input type="checkbox"/> Other _____            |

Types of wastes generated:	
Hazardous Waste Hauler/Recycler:	

**Best Management Practices**

**Good Housekeeping**

- |  |                              |                             |
|--|------------------------------|-----------------------------|
| Outside areas are kept neat, clean and orderly.  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Parking lot is cleaned using dry sweep.  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Storm drain inlets are labeled "No Dumping, Flows to Bay"                                | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Storm drains are clear and grates are clean.   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Garbage cans, waste bins, and dumpsters are covered.                                     | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Loading docks are covered, paved and kept clean.   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Has the stormwater conveyance system been recently altered?                              | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If yes, does the alteration maintain SWPPP compliance?                                   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Are outdoor maintenance activities conducted in areas that will not impact storm drains? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Mop wastewater is going to sanitary sewer.   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| All floor mats are cleaned in an area where the wastewater can go to the sanitary sewer. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Have employees been trained on stormwater pollution prevention?                          | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

**Vegetation Management**

- |   |                              |                             |
|---|------------------------------|-----------------------------|
| Banks, slopes and other areas of the site are not subject to erosion. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Only trained, certified personnel apply herbicides and pesticides.    | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Manual or mechanical methods are used to remove vegetation.           | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

**Raw/Bulk Material Storage Areas**

Check if N/A

- |  |                              |                             |
|--|------------------------------|-----------------------------|
| Materials are stored away from storm drains.                         | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Materials are stored under cover.                                    | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Areas are graded to prevent run-off.                                 | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Areas are inspected regularly for spills, ruptures, and eroded stock | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

piles.

Materials stored onsite:

**Chemical and Waste Storage Management**  Check if N/A

- Is there a posted Spill Response Plan?  Yes  No
- Have employees been trained how to respond to a spill.  Yes  No
- Are there adequate spill response materials to contain a spill.  Yes  No
- All hazardous materials secondarily contained.  Yes  No
- Waste materials kept onsite are in closed leak proof containers.  Yes  No
- Waste oil and/or tallow is properly stored.  Yes  No
- Above Ground Storage Tanks (ASTs) have leak detection systems.  Yes  No
- Areas are inspected regularly for leaks, spills, corrosion and structural failure.  Yes  No

**Vehicle and Equipment Maintenance Area**  Check if N/A

- Leaking vehicles or equipment is equipped with drip pans.  Yes  No
- Vehicle maintenance is conducted in designated, paved indoor areas.  Yes  No
- Outdoor maintenance areas have overhead protection.  Yes  No
- Does the area have excessive staining?  Yes  No
- Spill clean-up materials are stored in area.  Yes  No
- Dry clean-up methods are used for spills  Yes  No

**Vehicle and Equipment Washing**  Check if N/A

- Wash pad area is enclosed and covered  Yes  No
- Wash rack has an oil/water separator that discharges to the sanitary sewer.  Yes  No
- Signs are posted to inform staff that oil changing and disposing of substances other than wash water is prohibited.  Yes  No

**Clarifier (Required if vehicle washing)**

Type:		Size:	
Impermeable to Storm water:		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Condition:	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Last date of Service:		Pump Cycle:	

Violation: <input type="checkbox"/> Recommendation: <input type="checkbox"/> Required: <input type="checkbox"/>

\_\_\_\_\_  
Inspector Signature

\_\_\_\_\_  
Facility Operator Signature

**SANTA CRUZ COUNTY ENVIRONMENTAL HEALTH SERVICES  
Food Facility Inspection Storm Water Report**

APN:	Today's Date:	Last Inspection:
Name of Establishment:		
Address:		City:
Facility Contact:		Phone:
Type of food prepared		

- |  |   |
|--|---|
| <input type="checkbox"/> Dishwasher          | <input type="checkbox"/> Grill              |
| <input type="checkbox"/> Low Temp. Sanitizer | <input type="checkbox"/> Fryer              |
| <input type="checkbox"/> Garbage Disposal    | <input type="checkbox"/> Stove              |
| <input type="checkbox"/> Oven                | <input type="checkbox"/> 3 - Tub Wash Basin |

<b>INTERIOR GREASE TRAP</b>		Size:	
Self Cleaning	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Self Cleaning Log is maintained	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Condition:	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Last date of Service:		Pump Cycle:	
Liquid Waste Hauler			
<b>EXTERIOR INTERCEPTOR</b>		Size:	
Condition:	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Outlet Tee's are in place	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Last date of Service:		Pump Cycle:	
Liquid Waste Hauler			

**Fats, Oil, and Grease Required Best Management Practices**

- Are screens being used to reduce solids?  Yes  No
- Are grease trap additives being used?  Yes  No
- If yes, name: \_\_\_\_\_
- Food from plates is scraped prior to primary rinse?  Yes  No

**Stormwater Required Best Management Practices**

- Trash enclosures are free of litter and spills?  Yes  No
- Used grease/oil containers are stored properly? (Covered, leak free, and away from storm drains).  Yes  No
- Is mop wastewater going to sanitary sewer?  Yes  No
- Kitchen equipment (floor mats, hoods, etc.) is cleaned inside and wastewater is discharge to sanitary sewer?  Yes  No
- Wastewater from pressure washing or hosing down of outdoor areas (trash storage, sidewalks) is discharged to sanitary sewer?  Yes  No
- Liquids are not disposed of in trash containers?  Yes  No
- Employees trained on Stormwater BMPs?  Yes  No

Violation: <input type="checkbox"/> Recommendation: <input type="checkbox"/>

\_\_\_\_\_  
Inspector Signature

\_\_\_\_\_  
Facility Operator Signature

## ***CONSTRUCTION SITE STORMWATER RUNOFF CONTROL PROGRAM***

**Overview:** The County completed all of the Year One requirements under the Construction Site Stormwater Runoff Control Program (Table 6-1 of the SWMP). Year One 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. A training course on construction stormwater BMPs was also developed and provided to select County staff, and information on construction requirements was posted on the County website. The only slight departure from the approved SWMP was related to BMP 6-1-3. Rather than update the erosion control ordinance to deal with construction waste, the County elected to address this issue within the context of the stormwater ordinance revision required in BMP 5-1-11.

### **Target Audience: Agency Staff**

#### **BMP 6-1-1 Grading Ordinance (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:** 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.

**Proposed Modification:** None

##### **Planned Year Two Activities:**

- Compare Grading Ordinance to Construction Minimum Control Measure (MCM) and evaluate effectiveness.
- 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 following development setbacks:

50' from each side of a perennial stream.

30'(minimum) from each side of an intermittent or ephemeral stream

100' from the high water mark of a lake, wetland, estuary, lagoon or natural body of standing water

**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 Riparian Exceptions 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 2009 through June 2010, the County issued building permits on 75 parcels. Twenty-three of these parcels contain a riparian resource. Inspections conducted to date indicate that all of the projects permitted are in compliance with the required riparian setbacks, with the exception of two projects for which Riparian Exceptions were issued. One of these Riparian Exceptions was approved several years ago and the second was approved in June 2010 and appears in Table 6-1-2 under Application 09-0426. No violations occurred and no non-compliance letters were issued.

Between March 1, 2009 and June 30, 2010, the County issued 18 Riparian Exceptions (see Table 6-1-2.1). As reflected in the table, five of the Riparian Exceptions were issued for new developments. None were issued for redevelopment projects. The Regional Water Quality Control Board was specifically notified of the two major Riparian Exceptions, and the rationale for their issuance, in correspondence to Mr. Phil Hammer dated June 8, 2009 and September 17, 2009.

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.

The County also tracked erosion and sediment control measures on 150 active grading permits during the 2009/2010 winter season. A spreadsheet was developed to track the effectiveness of the various types of erosion and sediment control measures. 87 percent had adequate erosion, sediment and drainage control onsite at the first winter inspection.

The erosion control plans that were submitted 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. The fact that 87 percent of the sites inspected during the rainy season had adequate erosion and sediment control measures installed at the first winter inspection, is probably attributed to the requirement that erosion and sediment control BMPs be shown on the plans, reflecting the continuing success of this program.

**Proposed Modification:** None

**Planned Year Two Activities:** Same as Year One.

### **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 stormwater ordinance revision required in BMP 5-1-11. That ordinance has been drafted to include a section on best management practices for construction activities, which will allow the County to require and enforce plans for the containment and control of construction waste. Specific measures that can be employed to fulfill this requirement will be incorporated into the County Construction Site Stormwater Pollution Control BMP Manual. In that way, the most appropriate measures can be selected and tailored to a specific site and project.

In addition, all applications for grading projects, single-family dwellings and commercial projects were 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

**Proposed Modification:** None.

**Planned Year Two Activities:** Present the ordinance to the Board of Supervisors for consideration and approval, and begin implementing the new requirements. Continue reporting on required BMPs. Compare requirements of the construction MCM and report effectiveness.

### **BMP 6-1-4 Evaluate Building Permit Program Efficacy**

**Implementation Details:**

Evaluate the Building Permit program for construction BMPs.

This BMP is not due until Year Three.

**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).

This BMP is not due until Year Three.

**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. Track how many erosion control plans were not accepted on the first review and what the problems were. Track the types of designers who prepared the plans that were not approved on the first review (e.g., home owners, architects).

**Status:** The County reviewed, tracked and ultimately approved all erosion and sediment control plans submitted with permit applications. Tracking included documenting deficiencies and other problems with the plans and who prepared the plans. Of the erosion control plans reviewed, 65 percent were adequate as originally submitted. Problems identified on the other 35 percent of the plans were broad, and ranged from not showing locations and details of BMPs to lack of notes or improper application of BMPs. Problems associated with the plans did not appear to be associated with whether they were prepared by a civil engineer, architect, unlicensed designer, or a property owner.

**Proposed Modification:** None

**Planned Year Two Activities:** Continue to approve erosion and sediment control plan (or SWPPP) on 100 percent of projects. Track how many erosion control plans were not accepted on the first review and what the problems were. Track the types of designers who prepared the plans that were not approved on the first review (e.g., home owners, architects). Develop a County Construction Site Stormwater Pollution Control BMP Manual that includes required information to be submitted with erosion and sediment control plans.

**BMP 6-1-7 Site Inspections**

**Implementation Details:**

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

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

**Status:** Although not required until Year Two, County staff sent out 188 letters to all 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 and tracked erosion and sediment control measures on 150 projects that included grading permits during the 2009/2010 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.

The effectiveness of the various types of erosion and sediment control measures were tracked as the inspections were performed. Following is a summary of the enforcement actions taken during the inspections.

<b>Summary of Enforcement Actions (#)</b>							
1 <sup>st</sup> Round of Inspections				2 <sup>nd</sup> Round of Inspections			
No Action / In-Compliance	Verbal Warning	Written Correction Notice	Stop Work Notice	No Action / In-Compliance	Verbal Warning	Written Correction Notice	Stop Work Notice
131	8	9	2	126	6	3	0

In general, the projects that were not in compliance were visited again within a week to verify compliance. One of the two projects that were given a “Stop Work” was required to have a Certified Professional in Erosion and Sediment Control (CPESC) develop an erosion, sediment and drainage control plan to resume construction. Additionally, bi-weekly inspections were performed for three months by the County with the site foreman and CPESC.

The problems encountered during the inspections are summarized below:

<b>Type of Problem</b>	<b># of Times Encountered</b>
Seed not applied / not applied properly	5
Straw not applied / not applied properly	15
EC blankets not installed / not installed properly	3
Stockpiles not covered	8
Silt fences not installed / not installed properly	3
Straw rolls not installed / not installed properly	6
Inlets not protected	3
Drainage control inadequate	17

**Proposed Modification:** None

**Planned Year Two Activities:**

- Inspection (and enforcement) of all active grading permits for stormwater BMPs twice during the rainy season.
- Inspection of active grading permits for stormwater BMPs at rough grade, final and building inspections during non-rainy season.
- Creation of a construction site BMP checklist to be used by field staff.
- Send erosion and sediment control reminder letters. Track number and status of violations.

**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 annually.

**Status:** All Planning Department grading and building inspectors were trained on erosion and sediment control. In addition, several staff members from the Department of Public Works were trained as well. 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 plans to update the presentation to include photos from the 2009/2010 winter season.

**Proposed Modification:** None

**Planned Year Two Activities:** Train all Planning Department permit and plan review staff in addition to building and grading inspectors. Track results of pre and post training quizzes.

**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](http://www.sccoplanning.com/html/misc/all_brochures.htm#Environment)

**Measurable Goal:** Provide construction-related requirements on the County website.

**Status:** There are several brochures on the County website that relate to construction-related requirements. One, titled “Erosion and Sediment Control Plans,” identifies the information that must be submitted for

approval of an erosion and sediment control plan. A sample plan for a single family dwelling under construction is also included in this brochure. A second pamphlet, titled “Erosion and Sediment Control on Your Construction Site” provides information on specific erosion, sediment, and runoff (drainage) control measures, and the importance of maintaining these measures after installation. A third brochure presents a list of Certified Professionals in Erosion and Sediment Control that can assist in the preparation of erosion and sediment control plans.

**Proposed Modification:** None.

**Planned Year Two Activities:** Update brochures if and when needed. Develop workshop material for construction community. Provide one public workshop annually.

### **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.

This BMP is not due until Year Two.



TABLE 6-1-2.1 RIPARIAN EXCEPTIONS, MARCH 2009 – JUNE 2010

July 22, 2009	09-0200	Roadway and drainage improvements	Construction of left turn lane to serve Roaring Camp Railroad driveway, installation of paved shoulders, and replacement of an undersized culvert necessary for safer functioning of Graham Hill Road.
August 20, 2009	09-0202	New driveway and culvert	Construction of driveway and culvert necessary to access buildable portion of parcel to allow for permitted use of the property.
August 31, 2009	09-0164	New driveway and culvert	Construction of driveway and culvert necessary to access buildable portion of parcel to allow for permitted use of the property.
October 2, 2009	08-0532**	Restoration of Quail Hollow brook pond.	Failure of a crossing upstream of Quail Hollow brook pond released approximately 2,700 cubic yards of sediment into the pond, effectively filling it up. Removal of the sediment is necessary to prevent it from being washed downstream during storm events into Zayante Creek.
October 21, 2009	09-0189	Recognition of dredging and vegetation removal (code violation)	Unpermitted dredging and vegetation removal within a historically channelized intermittent drainage way resulted in conditions that led to flooding of adjacent lands. Encroachment into the riparian corridor/buffer required to implement habitat restoration plan.
November 20, 2009	09-0370	Recognition of cistern (code violation)	Recognition of unpermitted cistern within perennial stream necessary to promote slope stability. Removal of cistern could increase potential for failure of Smith Grade.
January 20, 2010	09-0421	Recognition of sheet pile wall extension	Extension of sheet pile wall on the south side of Kelly Lake required to stabilize slope between permitted garage and lake.
** Major Riparian Exception			

TABLE 6-1-2.1 RIPARIAN EXCEPTIONS, MARCH 2009 – JUNE 2010

March 5, 2010	09-0314	Bridge replacement	Existing bridge over Lockhart Gulch Creek to private parcel structurally unstable and replacement bridge necessary to safely pass large vehicles.
April 13, 2010	08-0453	Replacement of single family dwelling	Nearly entire parcel within 100-foot setback of Moran Lake. Riparian Exception required for permitted use of property (i.e., replacement of residential dwelling).
May 4, 2010	No Number	Bridge repair/improvement	Inspectors deemed existing bridge on Swanton Road over Scott Creek in danger of imminent failure. Repairs and improvements necessary to meet Caltrans requirements for loading capacity.
June 10, 2010	09-0426	Replacement of single family dwelling	Nearly entire parcel within 50-foot urban riparian buffer. Riparian Exception required for permitted use of property (i.e., replacement of residential dwelling).
June 25, 2010	10-0075	Replacement of bridge abutment	Replacement of abutment on existing bridge over tributary to Hester Creek necessary to maintain structural integrity of bridge.

## ***POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW AND RE-DEVELOPMENTS***

### **Target Audience: Agency Staff**

#### **BMP 7-1-1 Land Use Policies and Ordinances**

##### **Implementation Details:**

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

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

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

Because of our long-standing implementation of watershed protection measures and low impact development (LID), the BMP proposed is to assess the effectiveness of the implementation of the existing policies in maintaining and enhancing long-term watershed protection. To accomplish this, a program to measure the effectiveness of these controls shall be instituted. The program will assess habitat degradation and pollutant loading in the context of contributing land use types. This should be accomplished in conjunction with other jurisdictions where watersheds are shared. Intermediate results of this program will be used to determine what policies and/or ordinances need to be revised to strengthen watershed protection. (see BMP7-1-2)

##### **Measurable Goals:**

- 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;
- Amend current ordinances to incorporate the specific BMPs associated with the land uses identified in Attachment 4 (except section B.2.i because this will be covered by the hydromodification control criteria covered by BMP 7-1-10). Include the implementation of these amended ordinances in the proposed monitoring program.

**Status:** County staff from the Departments of Public Works, Planning, and Environmental Health met multiple times over the first permit year to determine how to most effectively update current land use policies and ordinances to incorporate requirements of Attachment 4 of the General Permit and to develop an effectiveness review program for current policies and ordinances. As a group it was determined that it would be most effective to develop a new Stormwater Ordinance that could be used by all three departments for illicit detection and elimination, construction stormwater management and post construction stormwater management.

It is anticipated that updates to the County's Design Criteria and new County Construction Site Stormwater Pollution Control BMP Manual will be developed in coordination with the Stormwater Ordinance. The current draft of the Stormwater Ordinance includes a listing of the Special Use Categories identified in Attachment 4 of the General Permit. Based on the median sized commercial property in urban areas, the County has opted to lower the sizing threshold for commercial developments subject to Attachment 4 of the General Permit to 10,000 square feet. The County Design Criteria will be updated to include the specific BMPs required for each Special Use Category as described in Attachment 4 of the General Permit with the exception of section B.2.i because it is anticipated that this will be covered by the hydromodification control criteria that will be developed by the joint effort and documented as BMP 7-1-10.

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.

**Proposed Modification:** None

**Planned Year Two Activities:**

- 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;
- Amend current ordinances to incorporate the specific BMPs associated with the land uses identified in Attachment 4 of the General Permit (except section B.2.i because this will be covered by the hydromodification control criteria covered by BMP 7-1-10). Include the implementation of these amended ordinances in the proposed monitoring program. Conduct stakeholder outreach to get feedback on the draft Stormwater Ordinance. Adopt the Stormwater Ordinance.

**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:** None for Year One.

**Status:** Per the assessment completed in the first year for BMP 7-1-1 it was determined that the County would develop a new Stormwater Ordinance rather than providing updates to multiple existing ordinances. It is anticipated that this ordinance will be adopted during Year Two of the SWMP.

**Proposed Modification:** The initial timeline will be accelerated so that the new ordinance is adopted in Year Two.

**Planned Year Two Activities:** Conduct stakeholder outreach to get feedback on the draft Stormwater

Ordinance; Adopt and Stormwater Ordinance.

**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.

This BMP is not due until Year Three.

**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:**

- Assess and modify where necessary the County Design Criteria and other development project conditions to ensure compliance with General Permit requirements (Attachment 4, except section B.2.i because this will be covered by the hydromodification control criteria covered by BMP 7-1-10);
- Apply current and updated Design Criteria to 100 percent of applicable development projects.

**Status:**

In conjunction with BMP 7-1-1, County staff has drafted a new Stormwater Ordinance and has identified areas of the County Design Criteria that need to be updated to comply with Attachment 4 of the General Permit. The updates to the Design Criteria are anticipated to go through public review and adoption during Year Two.

The current 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 first permit year (March 2009 through June 2010) 100 percent of the application routed to the Stormwater Management Section of Public Works were reviewed relative to Design Criteria requirements. See Section 3 of the current Design Criteria, which can be accessed at: <http://www.dpw.co.santa-cruz.ca.us/DESIGNCRITERIA.pdf>

**Proposed Modification:** None

**Planned Year Two Activities:** Modify the Design Criteria to ensure compliance with Attachment 4; Apply the Design Criteria to 100 percent of applicable development projects; In conjunction with BMP 7.1.12 condition structural and nonstructural stormwater control BMPs.

#### **BMP 7-1-5 CEQA Checklist**

**Implementation Details:**

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

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

**Status:** In May 2010 the County updated its CEQA Initial Study Checklist to fully reflect all current CEQA environmental review requirements. In addition, under BMP 5-1-11, County staff is drafting a stormwater runoff and pollution control ordinance. Once completed and approved by the Board of Supervisors, staff will determine whether any revisions should be made to the Checklist in conjunction with this ordinance change. Although it is premature to comment with certainty, we anticipate that it may be appropriate to expand the Checklist section on “Hydrology, Water Supply, and Water Quality” to include one or more additional questions.

**Proposed Modification:** None

**Planned Year Two Activities:** Review the final stormwater ordinance change adopted by the Board of Supervisors and, if appropriate, revise the County’s Initial Study Checklist to ensure that all relevant environmental issues associated with water quality control are adequately evaluated.

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

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

**Measurable Goals:** Require, as a condition of approval of all building permits, discretionary permits and subdivisions, that annual reports be submitted prior to the winter season from property owners with constructed facilities. The report will document current condition of the facility and actions taken in the past year to maintain the facility; identify existing structural controls previously approved with maintenance agreements in the County; develop a program for tracking and enforcing maintenance of privately maintained structural controls.

**Status:** The Public Works 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 (an example agreement is on page 100 as figure SWM-25 of the County Design Criteria and can be found at: <http://www.dpw.co.santa-cruz.ca.us/DESIGNCRITERIA.pdf>). During the first permit Year 38 projects had permits that were either issued or finalized with recorded maintenance agreements.

The requirement for recorded maintenance agreements has been in effect for more than 10 years at the County. This program was initially implemented for commercial projects that either had detention and/or water quality treatment units and has now grown to cover structural stormwater BMPs that are proposed for any residential or commercial project. The database was consolidated during the first permit year. There have been 309 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 is partially due to the lack of funding and enforceable mechanisms available for routine system oversight by the County.

Recognizing the need for enforcement authority, the proposed draft Stormwater Ordinance and Design Criteria updates developed with BMPs 7-1-2 and 7-1-4 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 private stormwater management facilities. County staff will be developing a tiered system for providing oversight for these private facilities during Year Two of the SWMP. It is expected that the recorded maintenance agreement provided in the Design Criteria will be updated to be consistent with the tiered approach.

**Proposed Modification:** None

**Planned Year Two Activities:** 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.

**Target Audience: Agency Staff**

<b>BMP 7-1-7 Train Staff</b>
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**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 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. Train 100 percent off existing plan review and inspection staff annually.

**Status:** The first year of training was included in the SWMP prior to the County joining the Regional Water Quality Control Board's Joint Effort for developing hydromodification control criteria. Since the joint effort has not yet begun and Design Criteria requirements for new LID or hydromodification BMPs have not changed training on these topics was not needed during the first permit year. However, 100 percent of Public Works stormwater management review staff did attend the Construction General Permit and LID training held by the State and Central Coast Regional Water Boards in May 2010. Additionally, staff from Public Works, Planning and Environmental Health Services Departments attended presentations by the Central Coast Regional Board on hydromodification on September 8 and November 9 and 17, 2009.

**Proposed Modification:** None

**Planned Year Two Activities:** Train new staff as they are hired; Train 100 percent of existing staff annually.

#### **BMP 7-1-8 Train Member 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:** None in Year One

**Status:** n/a

**Proposed Modification:** None

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

#### **Joint Effort for Developing Hydromodification Control Criteria**

##### **Target Audience: Agency Staff, Design Firms, Project Owners**

As of June 30, 2010, the joint effort for developing hydromodification control criteria had not begun. Implementation of BMPs 7-1-9 – 7-1-12 will commence with the joint effort. The planned Year Two activities for BMPs 7-1-9 – 7-1-12 listed below assume that the joint effort will commence in the second half of 2010.

#### **BMP 7-1-9 Enforceable Mechanisms**

**Implementation Details:**

Develop and/or modify enforceable mechanisms that will effectively implement hydromodification controls and

Low Impact Development (LID). Enforceable mechanisms may include municipal codes, regulations, standards and specifications.

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

**Status:** n/a

**Proposed Modification:** None

**Planned Year Two Activities:** An analysis of all applicable codes, regulations, standards, and/or specifications that identifies modifications and/or additions necessary to effectively implement hydromodification controls and LID.

### **BMP 7-1-10 Hydromodification Control Criteria**

**Implementation Details:**

Derive County-specific criteria for controlling hydromodification in new and redevelopment projects using Water Board-approved methodology developed through the joint effort

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

**Status:** n/a

**Proposed Modification:** None

**Planned Year Two Activities:** None

### **BMP 7-1-11 Applicability Thresholds**

**Implementation Details:**

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

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

**Status:** n/a

**Proposed Modification:** None

**Planned Year Two Activities:** 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:** None in Year One per the joint effort schedule.

**Status:** n/a

**Proposed Modification:** None

**Planned Year Two Activities:** 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.

- Guidance - Develop, advertise and make available LID BMP Design Guidance suitable for all stakeholders;
- Education and Outreach - Documentation of goals, schedules, and target audiences for education and outreach the County will conduct in support of the following strategic objectives: enforceable mechanisms, hydromodification control criteria, applicability thresholds, LID BMP design, and compliance with LID and hydromodification control criteria;
- Interim LID Implementation – Apply LID principles and features to all applicable new and redevelopment projects.

***POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS***

**Target Audience: Agency Staff**

**BMP 8-1-1 Review Agency Housekeeping Programs**

**Implementation Details:**

Survey facilities to determine nature of existing housekeeping activities. Process will follow Section 2 of the Municipal Handbook developed by CASQA. Suggested modifications for housekeeping will be implemented under BMP 8-1-2 as facility BMPs.

**Measurable Goal:** Document existing housekeeping programs and suggested modifications for the Stormwater Program. Report on these suggested modifications in the annual report. Review and document Spill Response Protocols at County facilities.

**Status:** Personnel are routinely trained on proper indoor storage of all potential pollutants in secondary containment as well as to take care of spills immediately. Spill response material is available at County facilities and there is a response plan on file. All hazardous waste is stored indoors and hauled by a licensed hauler. All vehicles are washed at the Brommer Yard where there is a clarifier to properly treat the wastewater. Any wash down of equipment is done in an area that drains to the wet well (sanitary sewer). Parking lots are cleaned using dry sweep methods. Silt and Grease traps are inspected and cleaned as necessary by the drainage maintenance division. In addition, dumpsters are covered and leak free. Pesticides are not used in the County buildings. Weeding is done mechanically, and irrigation is infrequent. Storm drains have been labeled with “No Dumping” labels in every County facility.

The General Services Department (GSD) stripes parking places and cleans storm drains as needed. Fleet Services has a clarifier which is connected to the sanitary sewer. Water treatment effluent from chillers is plumbed to the sanitary sewer. GSD has switched to safer alternative cleaners per the environmentally friendly purchasing plan under the County green government program. All back-up generators and equipment using water treatment chemicals have Spill Control plans which are on file with Environmental Health and the Health Service Agency. All such equipment has secondary containment.

**Proposed Modification:** None

**Planned Year Two Activities:** None

**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:** Facility BMPs completed. Develop an inspection checklist and schedule for agency facilities where storage, maintenance, and cleaning occur.

**Status:** BMPs were selected by staff responsible for each County facility. Following the inventory, assessment and selection process described in the CASQA Handbook for Municipal Operations, the Departments of Public Works, General Services, and Parks selected appropriate BMPs for each facility under their jurisdiction. The list of BMPs selected from the CASQA handbook includes: SC-10, SC-11, SC-20, SC-21, SC-22, SC-30, SC-31, SC-32, SC-33, SC-34, SC-41, SC-43, SC-60, SC-61, SC-70, SC-72, SC-73, SC-74, SC-75 and SC-76 as appropriate. The County developed a municipal inspections checklist for agency facilities where storage, maintenance and cleaning occur. The checklist includes Deficiencies, Corrective Actions, Date Resolved and Comments and is based on the CASQA Handbook. The County plans on having the checklist completed on an annual basis for each facility.

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

**Proposed Modification:** None

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

### **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://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](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. Develop quantifiable, measurable goals.

**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.

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

**05 – 09 Changes in Use of Four Major Pesticides**

Pesticide	Year					% Change
	2005	2006	2007	2008	2009	08 to 09
Glyphosate gal.	428	201	160	105	171	+63%
Aluminum Phosphide lbs.	53	28	22	134	111	-17%
Diphacinone lbs.	146	76	38	23	0	-100%
Bromodialone lbs.	106	49	30	46	55	+19%

During the first permit year, four public meetings by the IPM Departmental Advisory Group were held. County staff also attended numerous IPM trainings in 2009.

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

[http://govstream.co.santa-cruz.ca.us/BDSvData/non\\_legacy/agendas/2010/20100622/PDF/020.pdf](http://govstream.co.santa-cruz.ca.us/BDSvData/non_legacy/agendas/2010/20100622/PDF/020.pdf)

**Proposed Modification:** None

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

<b>BMP 8-1-4 Municipal Parking Lot Sweeping</b>
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**Implementation Details:**

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

**Measurable Goal:** Review current municipal parking lot maintenance practices and develop sweeping schedule.

**Status:** Due to reduced funding, the County currently has limited staff and available resources to sweep parking lots. However, in order to more efficiently utilize existing resources, the Department of Public Works purchased the GBA software, a Geographic Information System (GIS) database that will help operations staff develop, track, and report on parking lot sweeping as well as develop a sweeping schedule. The database will provide consistency between County Public Works divisions and will assist in tracking reporting. Maintenance

programs for parking lots that are under County Parks and General Services Departments will be developed separately.

Since the sweeping schedule was not fully developed in Year One, this will be completed in Year Two.

**Proposed Modification:** None

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

### **BMP 8-1-5 Chlorinated and Brominated Water Discharges**

**Implementation Details:**

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

**Measurable Goal:** County operations may result in the discharge of chlorinated and/or brominated water discharges. Review current County operations to determine if there is a potential for discharge of chlorinated and/or brominated water. Establish BMPs to minimize chlorinated and/or brominated water discharges via County operations, including measurable goals.

**Status:** As a BMP, 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.

**Proposed Modification:** None

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

### **BMP 8-1-6 Storm Drain Facility BMPs**

**Implementation Details:**

The County owns and maintains a storm drain system. The system includes ditches and creeks, and silt and grease traps. Maintenance consists of regular inspections and removal of wastes.

**Measurable Goal:** Document existing practices. Establish and implement BMPs for County-owned and operated storm drainage facilities. BMPs to include a cleaning schedule. Utilize CASQA's Municipal Handbook to select BMPs. Identify these BMPs in the annual report.

**Status:** County operations schedule storm drain maintenance on as-needed basis. Over 300 storm drain inlets and manholes were maintained last year and were prioritized based on the location of the storm drain. Appropriate BMPs from the CASQA handbook have been selected following the procedure described in BMPs 8-1-1 and 8-1-2. The County Department of Public Works is in the process of automizing operations which will produce a schedule and method for tracking and reporting, using the new GBA software. Time of completion is estimated for fall 2010. The tracking and reporting on storm drain facilities maintained by Parks and General Services will continue to be done manually by the department.

The cleaning schedule will be developed Year Two.

**Proposed Modification:** None

**Planned Year Two Activities:** 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.

### **BMP 8-1-7 Stormwater Pump Station BMPs**

#### **Implementation Details:**

The County owns and maintains pump stations as part of the storm drain system. Maintenance and operation of the pump stations consists of regular inspections and removal of wastes.

**Measurable Goal:** Document stormwater pump stations operation and maintenance practices. Develop operation and maintenance BMPs utilizing CASQA's Municipal Handbook.

**Status:** The County currently maintains three stormwater pumps.

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

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

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

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

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

Shell Road flood control pump station – this pump station is located on the Watsonville Slough and prevents

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

**Proposed Modification:** None

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

### **BMP 8-1-8 Street Sweeping BMPs**

#### **Implementation Details:**

The County sweeps 225 miles of commercial and arterial streets. Street sweeping is performed bi-weekly.

**Measurable Goal:** Document street sweeping practices. Develop street sweeping utilizing CASQA's Municipal Handbook.

**Status:** Prior to 2009 the Public Works sweeping program consisted of three separate schedules, and depending on the availability of street sweepers and operators, one sweeper operated four to five days a week and a second sweeper operated two to three days a week. The three sweeping schedules are noted below.

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 41<sup>st</sup> 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 January 1, 2009 to December 31, 2009:

-3,924 curb miles were swept.

-667 cubic yards of material was collected and properly disposed.

-an average of 5.88 miles swept, which is equal to 1 cubic yard of debris picked up.

After 2009 due to cuts in funding and personnel, Public Works is now operating one sweeper on an average of three to four days a week. Schedule 1 and Schedule 2 are swept on a regular basis. The streets listed on these schedules are swept at least once a month. Roads in Schedule 3 are no longer swept on a regular basis. They are monitored and swept on an as needed basis.

There are daily work records kept which document which roads/streets are swept, noting the curb miles and the amount of material collected.

**Proposed Modification:** None

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

### **BMP 8-1-9 Road Repair and Maintenance BMPs**

#### **Implementation Details:**

Public Works road maintenance crews currently inspect, clean and replace storm drain culverts (cross culverts) located within the public road right of way. Road crews also clean and grade roadside drainage ditches. Public Works has a road maintenance manual available at: [http://www.fishnet4c.org/projects\\_roads\\_manual.html](http://www.fishnet4c.org/projects_roads_manual.html)

**Measurable Goal:** Document road repair and maintenance practices. Provide road maintenance manual on the County website.

**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](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>

**Proposed Modification:** None

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

### **BMP 8-1-10 Municipal Maintenance Employee Training**

#### **Implementation Details:**

Develop initial and refresher training program for municipal maintenance employees. The Department of Public Works has several Erosion Control and BMP training videos that are used for training and are available on it's website at:

[www.dpw.co.santa-cruz.ca.us/EROSIONCONTROL.htm](http://www.dpw.co.santa-cruz.ca.us/EROSIONCONTROL.htm)

**Measurable Goal:** Develop Training Program. Conduct annual training. Document training and outcomes annually. Train at least 20 percent of maintenance staff annually with the goal of all staff being trained at least once every five years.

**Status:** A stormwater training was developed for all operations employees at the Brommer Yard. 100 percent of the operation operators were trained on Stormwater Management BMPs this year. 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.

**Proposed Modification:** Because all current employees have been trained ahead of schedule, the measurable goals will be updated to provide training to new employees.

**Planned Year Two Activities:** Provide training to new employees.

**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."*

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 Signature of Permittee (legally responsible person)

Date Signed

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 Name (printed)

Title