BMP 6.1 Evaluation of Santa Barbara County Facilities (Self-Audit)

Measurable Goal 6.1.1: *Survey facilities to determine nature of activities and appropriate BMPs (Year 0).*

Status: A survey of County facilities was completed prior to implementation of the SWMP. A description of the results from that survey can be found in the Year 1 Annual Report as well as the SWMP.

See also MG 6.4.5 for discussion of the South Coast Recycling and Transfer Station's Storm Water Pollution Prevention Plan per Central Coast Regional Water Quality Control Board letter dated January 28, 2008.

The County will address new Permit Provision E.11.a for appropriate BMPs at County facilities.

Proposed Modifications: No changes are recommended.

BMP 6.2 Site Specific Water Quality Protocols

Measurable Goal 6.2.1: *Complete 100% of facility-specific protocols by year 3*

Status: The following facilities have protocols for storm water practices:

Table 6-1
Facility-Specific Water Quality Protection Protocols (SWQPPs)

Site	Location	Activities
Fire Department Construction Yard	99 Centennial Road, Los Alamos	Vehicle operations, corporate yard, et al.
General Services South County Garage	4568 A Calle Real Road, Santa Barbara	Vehicle operations
General Services North County Garage	912 West Foster Road, Santa Maria	Vehicle operations
Public Works Flood Control Yard	4568 D Calle Real Road, Santa Barbara	Vehicle operations, corporate yard
Santa Maria Corporation Yard	912 W. Foster Rd. Santa Maria	Corporate yard
Lompoc Road Yard	2010 Sweeney Road, Lompoc	Corporate yard
Santa Barbara Road Yard	4415 Cathedral Oaks Road, Santa Barbara	Corporate yard

Site	Location	Activities
Santa Ynez Road Yard	5035 Zaca Station Road Santa Ynez	Corporate yard
Cuyama Road Yard	5073 Highway 166, Cuyama	Corporate yard

These facilities support activities such as vehicle or equipment operations, storage and handling of materials, etc. but are not regulated by the state through an NPDES Industrial General Permit although the format and content of the storm water protocol was modeled after the Storm Water Pollution Prevention Plan (SWPPP), a condition of the Industrial General Permit. The main difference between the protocols (SWQPPs) and a SWPPP is that the protocols do not include water quality sampling of storm events. The County will address new Permit Provision E.11.d for Storm Water Pollution Prevention Plans at identified County facilities.

Proposed Modifications: No changes are recommended.

BMP 6.3 Municipal Operations Best Management Practices Fact Sheets

Measurable Goal 6.3.1: *Prepare and publish BMP fact sheets (completed).*

Status: Complete. See summary Year 1.

Proposed Modifications: None. The County will incorporate the work shown in the BMP fact sheets as appropriate into the new Permit Provision E.11.d.

BMP 6.4 BMP Fact Sheet Implementation & Reporting

Measurable Goal 6.4.1: *Update and revise BMP Fact Sheets as necessary based upon staff input; revise or add based upon BMPs from other Phase I and Phase II municipalities as appropriate (year 1).*

Status: Complete. No revisions to the BMP Fact Sheets made. The County will incorporate the work shown in the BMP fact sheets as appropriate into the new Permit Provision E.11.d.

Proposed Modifications: None

Measurable Goal 6.4.2 *Develop an interactive web-based program for departmental reporting on BMP implementation as listed in the Fact Sheets, including BMPs selected, performance measures, or a schedule for BMP implementation and reporting (Year 2).*

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Status: As reported in Year 2, County staff used the BMP Fact Sheets to develop a web-based interactive reporting system, or BMP database. The database is used by facility managers to review BMPs and report on those which were implemented or a schedule for implementation. (See Year 2 Annual Report.)

Managers of facilities with protocols (see Table 6-2 below for list of those facilities) entered their BMP implementation data into the web-based system during Year 7. The records will be used to ensure BMP implementation and retained to track implementation over time. The County will determine how best to incorporate the database into the new Permit Provision E.11.d.

Proposed Modifications: None.

Measurable Goal 6.4.3 *Tabulate number of BMPs implemented and report annually based on the following schedule: Achieve 50% implementation by County departments on BMPs by Year 2; achieve 75% by Year 3; and achieve 100% by Year 4.*

Status: During Year 7, the web-based reporting system was used to track BMPs at the following locations:

Table 6-2
BMP Implementation

Location	Completed Report and Implemented SWQPPs?
Flood Control Yard Santa Barbara	Yes
General Services Fleet Maintenance, North	Yes
General Services Fleet Maintenance, South	Yes
Fire Department Construction Yard	Yes
Lompoc Road Yard	Yes
Santa Ynez Road Yard	Yes
Public Works Yard, Santa Maria (includes Roads and Flood Control)	Yes
Santa Barbara Road Yard	Yes

Results indicate that all County Departments implemented appropriate BMPs in Year 7. This program element will be updated using new Permit Provision E.11.e, Inspections, Visual Monitoring, and Remedial Action.

Proposed Modifications: None.

Measurable Goal 6.4.4: *Evaluate the nature, type, and effectiveness of BMPs implemented through a system of PCW internal audits. Perform audits for each department for at least one facility by the end of each reporting year (years 2-5).*

Status: See discussion above, MG 6.4.3. This program element will be updated using new Permit Provision E.11.e, Inspections, Visual Monitoring, and Remedial Action.

Proposed Modifications: None.

Measurable Goal 6.4.5: *Continue to implement existing programs and activities that protect water quality (i.e., regulated flood control maintenance and Annual Plan activities; solid and hazardous waste collection, disposal, and recycling programs; maintenance of storm drain treatment control facilities), and include update of these ongoing programs and activities in annual reports (Years 1-5)*

Status: Complete. A summary of existing programs that protect urban runoff water quality is provided below. Maintenance of storm drain treatment control facilities is addressed under BMP 6.7.

Public Works Flood Control & Water Conservation District. Annual maintenance plans are submitted to the U.S. Army Corps of Engineers, Ventura District Office, California Dept of Fish and Game, and the RWQCB to fulfill conditions of the Fish & Game Streambed Alteration Agreement No. R5-2002-0083, USACE Permit No. 200500145-JCM and Technically Conditioned Water Quality Certification from RWQCB under the requirements of the Routine Maintenance Plan Programmatic EIR (1991).

Because the Flood Control Maintenance and Revegetation Report is submitted to the RWQCB and is performed under numerous permits regulating and protecting water quality and mitigating for impacts, it is not included in this Annual Report. The Maintenance and Revegetation Report describes the maintenance and revegetation activities that occurred at the following creeks and channels. Those creeks and channels that had maintenance activities performed during 2012-13 are summarized in the Table 6-3 below. (A complete list of all district-maintained facilities is shown in Appendix J of the SWMP.)

Table 6-4
Flood Control Maintenance and Revegetation Activities Performed Yr 7

South Coast	North County
Arroyo Burro	Adobe Canyon
Arroyo Paredon	Alamo Pintado
Atascadero	Bradley Canyon
Canada de la pila	Cebada Canyon
Carpinteria	Green Canyon Ditches
Cieneguitas	Orcutt-Soloman
Hospital	Rodeo-San Pascual Channel
La Vereda	San Antonio – Los Alamos
Las Vegas	Santa Maria Airport/ABEX
Lower Devereux	Santa Maria RIver
Maria Ygnacio	Santa Ynez River
Mission Creek	Tanglewood
Refugio Creek	Unit 2 Ditches
San Antonio – Goleta	Zaca Creek
San Pedro	Zanja de Cota
San Jose	
San Roque	
San Ysidro	
Sycamore	

Public Works Roads Division Culvert Inspections and Maintenance. County tracks all routine maintenance activity to storm drain culverts by service area. Routine inspections are performed every year at every single culvert. There are 4,200 culverts in the County, many are routinely inspected more than once. Routine maintenance includes clean-out, if needed. In addition, during and after storm events culverts are inspected and cleaned-out, if needed. The need for cleaning is based upon visual inspections.

Table 6-5
Culverts Inspected Yr 7
(Some more than once)

Area		Number
South County		2,252
Lompoc / Santa Ynez Area		1,921
Orcutt / Santa Maria		1,283
	Total:	5,456

Solid Waste Facilities. County of Santa Barbara accepts waste at the following five locations: South Coast Recycling Transfer Station, Santa Ynez Valley Recycling and Transfer Station, Tajiguas Landfill, New Cuyama Transfer Station, and Ventucopa Transfer Station. Practices to protect water quality at these facilities are implemented consistent with facility Storm Water Pollution Prevention Plans, as required by the State Water Resources Control Board consistent with the NPDES Industrial General Permit No. 97-03-DWQ.

Proposed Modifications: None.

BMP 6.5 Purchasing and Contracts

Measurable Goal 6.5.1: *Complete contract revisions (year 1).*

Status: There were no contract revisions during Year 7.

Proposed Modifications: None.

Future Plans: This measurable goal is updated using new Permit Provision E.7.b.

Measurable Goal 6.5.2: *Tabulate number of County staff participating in training that addresses clean water BMP implementation through County contracts and purchasing practices.*

Status: Staff training in Year 7 was provided by facility managers during regularly scheduled shop or tailgate meetings. Leaders reviewed protocols for clean water best practices on an as needed basis.

This measurable goal will be moved to the reporting requirements of the new Permit Provision E.7.b Staff and Site Operator Training and Education.

Proposed Modifications: None.

Measurable Goal 6.5.3: *Evaluate contractor compliance (years 2-5).*

Status: This Measurable Goal is completed.

Proposed Modifications: None.

Measurable Goal 6.5.4: *Take enforcement action on 100% of projects with BMP failures constructed under contract to the County, such as Notices of Violation, Stop Work*

Orders, or fines. Report the number of Notice of Violations or Corrective actions (years 2-5).

Status: No violations or corrective actions (see MG 6.5.3). This measurable goal is updated using new Permit Provision E.7.b.

Proposed Modifications: None.

BMP 6.6 Countywide Integrated Pest Management Plan

Measurable Goal 6.6.1: *Report pesticide use on a departmental basis and provide updates, if any, to the countywide IPM strategy (years 1-5).*

Status: Complete.

Table 6-7
Pesticide Use on Departmental Basis

Pesticide	Parks (S)	Flood Control	Roads	Resource Recovery	Ag Com.	Laguna San
Gly Star Original						
Gopher Getter Type 2 AG Bait	55.8 lb					
Wilco Ground Squirrel Bait	2 lb					
Ramik Green	4 lb					
Remuda Full Strength	76 oz.					10.4 gal
XL2G	62 lb					
Aquamaster Herbicide		87 gal				
DuPont Telar DF		27.2 lb				
Milestone		9.6 gal				
Proclipse 65 WDG		274.3 lb				
Roundup Pro Concentrate Herbicide	4 oz	89.7 gal				
Roundup Pro Herbicide				6 oz		
Roundup Promax Herbicide			72 qts		226 oz	
Target Pro-Spreader Activator		29.4 gal				
Milestone VM Plus					15 oz	
Aquamaster					205 oz	2.5 gal

Pesticide	Parks (S)	Flood Control	Roads	Resource Recovery	Ag Com.	Laguna San
Herbicide						
Agri-Dex					9 oz	
Weed Impede						28 oz
Tri-Fol			180 oz			
Garlon 4Ultra			17 oz			

Since its inception in 2005, the Santa Barbara County Green Landscape Consortium (formerly Integrated Pest Management Focus Group) provides collaboration among governmental entities and community organizations within their respective districts regarding pesticide usage. The Santa Barbara County Green Landscape Consortium's mission is to promote sustainable natural strategies for the healthy growth of plants, while preventing pests and threats to humans, animals, businesses and the environment.

The consortium is coordinated and managed by County Parks Department, and consists of representatives from the County, City of Goleta, City of Santa Barbara, various South Coast school districts and community organizations such as Lotusland. Activities related to integrated pest management are organized by the County Parks Department.

See http://www.countyofsb.org/sbc/ipm/ for information on the Green Landscape Consortium, such as Best Practices for Green Landscaping.

County will implement the new Permit Provision E.11.j.

Proposed Modifications: None.

BMP 6.7 Storm Drain Maintenance

Measurable Goal 6.7.1: *Establish and implement a cleaning schedule for County-owned and operated treatment control facilities (years 1-5).*

Status: The County owns and maintains eight CDS units, three bioswales, and one ultraviolet radiation treatment system, all located along the south coast. The schedule established for these includes annual clean-out of CDS units, biweekly inspection of bioswales with weeding or minor vegetation (cattail) removal as-needed for aesthetics and function, and monthly inspections with annual bulb replacement at the UV system. In the case of the transfer station onsite CDS unit, that unit is inspected prior to and throughout the rainy season to assure performance, and is cleaned on an as-needed basis, which varies from year-to-year.

During seasons of unusually heavy rainfall which can cause the CDS units to fill more rapidly, the County may clean out any individual CDS unit more often.

The following discussion describes the implementation of a cleaning schedule for County-owned and operated treatment control facilities for Year 7.

CDS Units. The CDS units perform by intercepting and straining large (>7mm diameter) particles from low to medium sized storm flows. Also, smaller particles such as sands and gravels settle out from gravity. The treated flows then return to the storm drain for additional treatment, in the case of the bioswales and UV system, or discharged directly to the ocean, in the case of three CDS units in Isla Vista.

A total of 62,380 lbs of trash and waste material was removed from the storm drains in Year 7.

Bioswales. There are three storm water runoff treatment bioswales maintained by the County. The three bioswales include (1) Turnpike, which is located at the end of Turnpike Road before Atascadero Creek, (2) Rhoads East and (3) Rhoads West, both located within the Walnut Park Townhomes along Rhoads Ave. near Walnut Ave. The Turnpike bioswale was installed in the fall of 2002; the Rhoads Ave. bioswales were installed in spring of 2003. Each receives flow that is pretreated by a CDS unit at the upstream storm drain.

County staff makes visual inspections of the three bioswales on a bi-weekly basis. During the inspections, staff inspect for overall appearance (trash, vandalism), health of vegetation, and during warmer months, inspection for the presence of mosquito larvae. (staff apply a targeted mosquito larvicide if needed).

In May 2013, maintenance of the Turnpike bioswale consisted of:

- Remove weeds from pocket park
- Remove invasive species from bioswale and nearby banks
- Remove willows growing in channel, leave willows on banks
- Remove wood debris from broken split rail fence

The Rhoads Ave. bioswales are maintained by the Walnut Park Homeowners Association. Unlike the Turnpike bioswale, there is little to no chronic low flow (non-storm flow) at the Rhoads Ave bioswales. Lack of water during the growing season, combined with routine landscape-related maintenance, limits excessive growth of weeds and vegetation, particularly cattails which are so prevalent at Turnpike bioswale. Other than that provided by the property owner, no additional maintenance was necessary.

UV Treatment. The UV system was inoperable throughout Year 7. A chronic problem of the system is plugged drainage at the point the UV system connects to the existing storm drain. This is caused by a poorly-installed connection. The point where the connection was bored into the concrete storm drain is at or near invert. This location collects solid material from the storm drain, when it discharges without treatment during moderate to high flows. Ultimately, the solids block the connection to the storm drain. The boring and connection should have been installed at least half-way up the side of storm drain. Project Clean Water learned of the problem years ago when a contractor climbed into the storm drain from the outfall (at the beach), and made a visual observation. Since then, to correct occasional clogging, the line has been opened using a high pressure water jet several times. Each time that the system isn't draining (which cannot be observed without climbing into the storm drain itself) the UV lamps are on without flow through the sheath. Therefore, it puts strain on the bulbs and electronic system. The County decided in Year 7 to stop providing maintenance and retire the UV system in-place. The UV system was always intended as a pilot project and experiment. It was installed as an after-thought during CDS installation (Change Work Order). Therefore, we believe that the pilot project is completed. Data of indicator bacteria concentrations from the UV system compared to discharges from the other, non-treated CDS units, shows an overall decrease from the UV. However, levels still remained above the body contact standards most of the time.

Proposed Modifications: None.

BMP 6.8 Street Sweeping

Measurable Goal 6.8.1: *Report number of lane-miles swept and number of events per year, at minimum three events per year.*

Status: Complete, see tables below. The County sweeps commercial districts and heavily-used arterial streets three times per year, prior to storms likely to mobilize accumulated materials into the storm-drain system. These include areas of Orcutt, Goleta (unincorporated), Montecito, and Summerland but not Vandenberg Village, Mission Hills, Santa Ynez, or Los Olivos, which are primarily residential areas with relatively light traffic (on average, thousands of daily trips less than daily trips in areas swept). Isla Vista is swept every two weeks year-round by the Goleta West Sanitary District. In addition, Isla Vista Parks and Recreation District organizes weekly volunteer litter removal and monthly community cleanup events throughout the Isla Vista area.

The County's street sweeping program was designed to provide the greatest water quality benefit per dollar spent. In consultation with Transportation Division maintenance crews, areas were selected for street sweeping in commercial areas that typically produce more

pollutants than residential areas due to more traffic movement with cars frequently coming and going (hot cars drip more than cold cars) and higher concentrations of people. Since the sweeper operates at night, the streets are generally free of vehicles, thereby avoiding more expensive signage, ticketing, and towing of cars.

Timing of street sweeping (prior to forecast rain and after at least four weeks of antecedent dry conditions) is also intended to maximize water quality protection. The County has focused on sweeping approximately 27 lane miles in those areas where the greatest benefit is derived.

The following tables list the date and lane miles swept during Year 7.

Table 6-9
Street Sweeping Results

2012-2013	#1	Sept. 2012	South Coast	Goleta and Hollister/Turnpike Area	5.0
			South Coast	Summerland	6.0
			South Coast	Montecito	17.5
			North County	Orcutt	8.5
			Total		**37.0 lb**
2012-2013	#2	Jan 2013	South Coast	Goleta and Hollister/Turnpike Area	6.0
			South Coast	Summerland	7.0
			South Coast	Montecito	23.0
			North County	Orcutt	9.0
			Total		**45.0 lb**
2012-2013	#3	Mar 2013	South Coast	Goleta and Hollister/Turnpike Area	4.5
			South Coast	Summerland	6.0
			South Coast	Montecito	17.5
			North County	Orcutt	8.5
			Total		36.5 lb
2012-2013 Totals					**118.5 lb**

	Street	Length One-way (ft.)	Lane Miles
Orcutt Area	Orcutt Rd.	5,560	2.11
	Lakeview Rd.	1,031	.39
	Clark Ave.	1,929	.73

	Broadway St.	594	.23
	Clark Ave.	2,900	1.09
	Bradley Rd.	2,460	.93
	Totals	14,474 ft	5.48 mi

	Street	**Length One-way (ft.)**	**Lane Miles**
Goleta Area	Hollister Ave.	11,070	4.19
	Turnpike Rd.	4,570	1.73
	Totals	15,640 ft	5.92 mi

	Street	**Length One-way (ft.)**	**Lane Miles**
Montecito Area	Olive Mill Rd.	1,060	.40
	Olive Mill Rd.	2,590	.98
	Middle Rd.	2,835	1.07
	Hot Springs Rd.	6,240	2.36
	North Jameson Ln.	8,525	3.23
	San Ysidro Rd.	9,342	3.54
	East Valley Rd.	3,465	1.31
	Totals	34,057 ft	12.89

	Street	**Length One-way (ft.)**	**Lane Miles**
Summerland Area	Ortega Hill Rd.	4,452	1.69

	Lillie Ave.	3,380	1.28
	Totals	7,832 ft	2.97 mi

Proposed Modifications: None.

Measurable Goal 6.8.2 *Report weight and volume of materials collected for each event*

Status: The following Table 6-10 shows weight and volume of materials for each event.

Table 6-10
Street Sweeping Event Summary

2012-2013	#1	Sept. 2012	South Coast	Goleta and Hollister/Turnpike Area	5.0	
			South Coast	Summerland	6.0	
			South Coast	Montecito	17.5	
			North County	Orcutt	8.5	
			Total		**37.0 yd**	**25,900 lb**
2012-2013	#2	Jan 2013	South Coast	Goleta and Hollister/Turnpike Area	6.0	
			South Coast	Summerland	7.0	
			South Coast	Montecito	23.0	
			North County	Orcutt	9.0	
			Total		**45 yd**	**31,500 lb**
2012-2013	#3	Mar 2013	South Coast	Goleta and Hollister/Turnpike Area	4.5	
			South Coast	Summerland	6.0	
			South Coast	Montecito	17.5	
			North County	Orcutt	8.5	
			Total		**36.5 yd**	**25,550**
2012-2013 Totals					**118.5 yd**	**82,950**

Proposed Modifications: None.

BMP 6.9 Staff Training

Measurable Goal 6.9.1: *Achieve 100% completion of countywide training by Year 3.*

Status:

Corporation Yard Leadership Training

In Year 7, crew leaders or superintendents continued providing training to crews during regularly scheduled shop or tailgate meetings. Leaders reviewed protocols for clean water (per BMP 6.2), best practices for the site including schedules and activities. Material provided included the Employee Pocket Guide "Recognizing and Reporting Storm Water Pollution" and the Project Clean Water hotline magnet.

- ☑ General Services Fleet Maintenance North County (Santa Maria)
- ☑ General Services Fleet Maintenance South County (Santa Barbara)
- ☑ Fire Department Construction Yard (Los Alamos)
- ☑ Public Works Road Yard (Lompoc)
- ☑ Public Works Road Yard (Santa Ynez)
- ☑ Public Works Road Yard (Cuyama)
- ☑ Santa Maria Corporation Yard (Flood Control/PW, Roads/PW, Fleet/General Services)
- ☑ Public Works Road Yard (Santa Barbara)
- ☑ Public Works Flood Control District Yard (Santa Barbara)

Survey

A survey was taken of General Services lead supervisors in Year 6 which showed overall effective training program over the past five years for staff involved.

Audit

During Year 7, Central Coast Regional Water Quality Control Board staff audited the municipal operations and made site investigations at several County corporation yard facilities. Any program revisions made as outcome of that audit will be addressed in the following Annual Report.

Proposed Modifications: None.

Measurable Goal 6.9.2: *Document number of training sessions presented (Years 3-5)*

Status: In Year 7, the following training was provided to County staff

Table 6-11
Staff Training

	Public Works	General Services, Fleet	Fire
# sessions	1	12 (monthly)	1
# staff	10	6-8 per	6

Proposed Modifications: None.

Measurable Goal 6.9.3: *Document number of staff attending (Years 3-5).*

Status: See above.

Proposed Modifications: None.

Measurable Goal 6.9.4: *Document number of email messages on water quality (Years 3-5).*

Status: In Year 7, an announcement of Creek Week and its related events associated with water quality and urban creeks was posted both on the County and the main County website. Training will continue to be performed by onsite crew leaders or superintendents as appropriate and consistent with the Permit Provision E.7.b.

Proposed Modifications: None.