

County of Santa Barbara
Storm Water Management Program
December 31, 2005

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ACRONYMS

BMP	Best Management Practice
CASQA	California Storm Water Quality Association
CCRWQCB	Central Coast Regional Water Quality Control Board
CEC	Community Environmental Council (a community-based organization)
CEQA	California Environmental Quality Act
CK	Channelkeeper (a community-based organization)
CURE	Clean Up Rincon Effluent (a community-based organization)
EHS	County Environmental Health Services Division
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
GGCP	Green Gardener Certification Program
GIS	Geographic Information System
GSD	Goleta Sanitary District
HTO	Heal the Ocean (a community-based organization)
IPM	Integrated Pest Management
LUDP	Land Use Development Policy
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
ND	Negative Declaration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
P&D	County Planning and Development Department
PCA	Pest Control Advisors
PCW	Project Clean Water
POC	Pollutants of Concern
POTW	Publicly Owned Treatment Works
PW	County Public Works Department
RFQ	Request for Qualifications
RWQCB	Regional Water Quality Control Board
SCWRC	South Coast Watershed Resource Center
SOPs	Standard Operating Procedures
SUSMP	Standard Urban Storm Water Mitigation Plans
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USEPA	United States Environmental Protection Agency
WRC	South Coast Watershed Resource Center

INTRODUCTION

This Storm Water Management Program (SWMP) has been prepared by the County of Santa Barbara (County) pursuant to State Water Resources Control Board Water Quality Order No. 2003-005-DWQ National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS0000004 Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (General Permit). The General Permit establishes certain unincorporated areas on the South Coast, in the Santa Ynez Valley, and in the Orcutt area of the Santa Maria Valley (see Figure 1 and Appendix A) in which the County is responsible for water quality in storm-drains and surface drainages. Figure 1 shows the geographic area identified by the U.S. Environmental Protection Agency and the California State Water Resources Control Board subject to the NPDES Phase II regulations. This SWMP describes the County's program to protect water quality in those areas.

Table 1 lists the major streams throughout the entire County, identifies those which are within the County's permit area or within another jurisdiction's permit area, and shows which are listed as "impaired" by the State of California. The listing of impaired streams was considered in development of this SWMP. Streams listed as impaired may be subject to further, more focused, regulatory action by the State such as implementation of "total maximum daily load" limitations.

The goals of this SWMP are to (1) protect the health of the public and the environment, (2) meet Clean Water Act mandates through compliance with the General Permit requirements and applicable regulations (including Attachment 4 of the General Permit), and (3) to increase public involvement and awareness. Storm drains typically flow into creeks that have already passed through a variety of land uses, including natural, agricultural, urban and industrial, and often through more than one permit jurisdiction. Water quality monitoring has identified bacteria, nutrients, pesticides, heavy metals and other pollutants in certain creeks (see Appendix B for a discussion of monitoring results). According to the EPA (40 CFR Parts 9, 122, 123, and 124 Preamble, page 68746) a pollutant of concern is defined as any "...pollutant that has been identified as a cause of impairment". The SWMP describes those Best Management Practices (BMPs) that will reduce, control or eliminate identified pollutants of concern including those listed in Table 1 and those identified through local monitoring.

This SWMP outlines activities for a five-year implementation period of July through June, corresponding to the County's fiscal year that is the basis for County-wide performance measure reporting, with the first year starting after approval by the Central Coast Regional Water Quality Control Board (Year 1).

The County's storm water quality program, known as Project Clean Water, was initiated in 1998 in response to community requests to improve water quality in local creeks and the ocean. Project Clean Water is managed and staffed by members of the Santa Barbara County Water Agency (Public Works Department) and staff from the Environmental Health Services Division of the Public Health Department. In addition, Project Clean Water staff work closely with other County departments to ensure appropriate implementation of BMPs.

Because many of the elements of the original Project Clean Water work plan are also stormwater BMPs, the strategy outlined here generally describes an existing but evolving program. During the implementation period, the County will maintain existing efforts and augment them as necessary in permit areas that were not the focus of the original Project Clean Water work plan. The communities included in the original Project Clean Water program were parts of Carpinteria Valley, Montecito, the Goleta Valley and Orcutt. The community of Vandenberg Village is now included in permit area, and is thus part of this SWMP. More information on Project Clean Water and other water quality programs may be obtained at the Project Clean Water website: http://www.countyofsb.org/project_cleanwater/default.htm

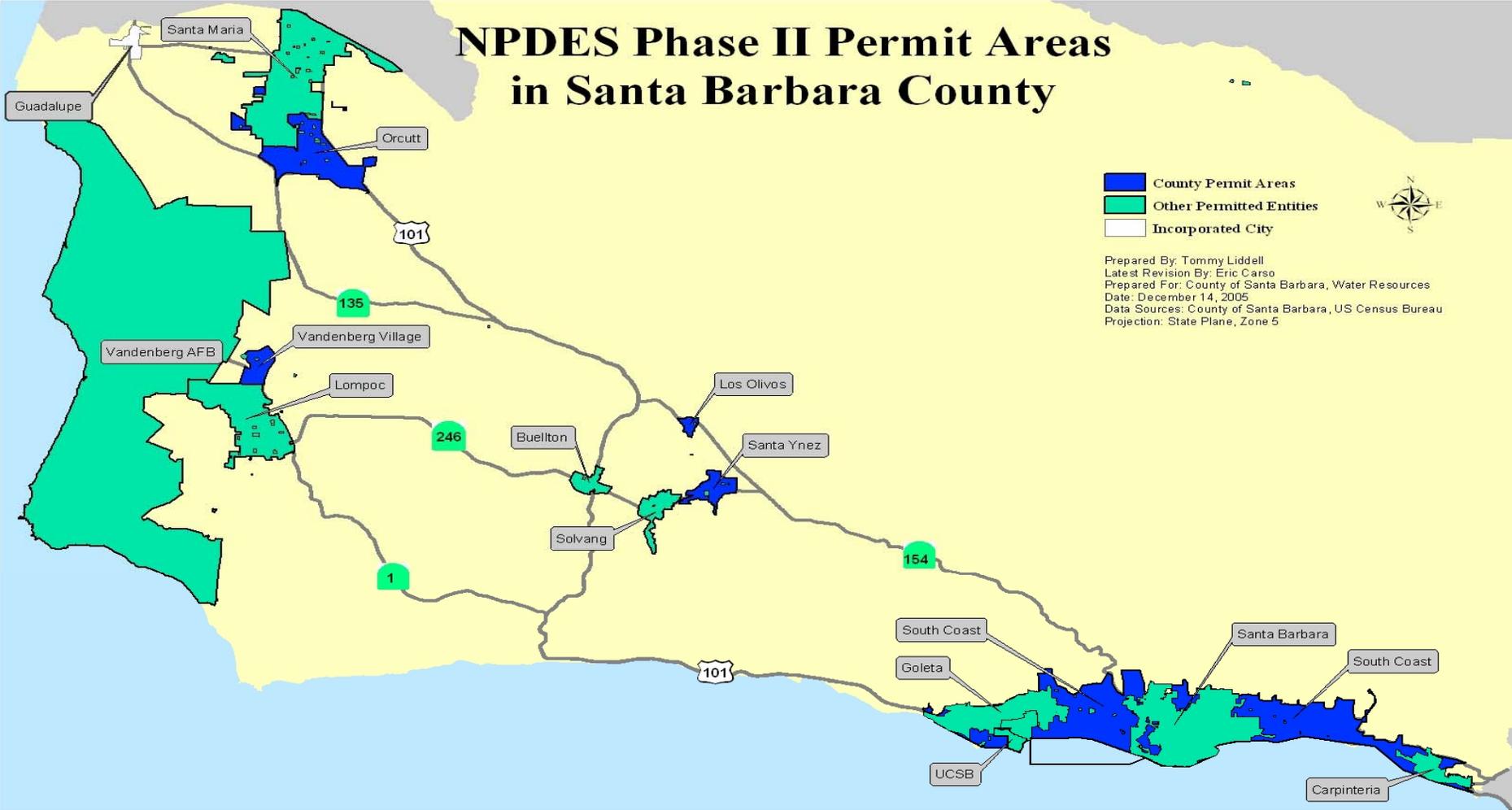


Table 1 – Santa Barbara County Receiving Waters Including Impaired Waterbodies, County NPDES Permitted Areas, and Adjacent Land-Use Jurisdictions

Stream / Waterbody	County Permit Area	Impairment* (CWA §303(d))	Adjacent Land-use Jurisdiction(s)
Alamo Pintado	Los Olivos	No listing	City of Solvang
Arroyo Burro Creek	South Coast	Pathogens	City of Santa Barbara
Arroyo Paredon Creek	South Coast	No listing	
Atascadero Creek	South Coast	No listing	
Barger Canyon Creek	South Coast	No listing	City of Santa Barbara
Bell Creek	South Coast	No listing	City of Goleta
Blosser Channel	Not in permitted area	Fecal coliform	City of Santa Maria
Bradley Canyon Creek	Not in permitted area	Fecal coliform	City of Santa Maria
Bradley Channel	Not in permitted area	Fecal coliform	City of Santa Maria
Buena Vista Creek	South Coast	No listing	
Carneros Creek	South Coast	No listing	City Goleta, City Santa Barbara (at airport)
Carpinteria Creek	South Coast	Pathogens	City of Carpinteria
Carpinteria Marsh	South Coast	Nutrients, Organic Enrichment/Low Dissolved Oxygen, Priority Organics, Sedimentation/Siltation	City of Carpinteria
Cieneguitas Creek	South Coast	No listing	City of Santa Barbara
Devereux Creek	South Coast	No listing	City of Goleta
Ellwood Creek	South Coast	No listing	City of Goleta
Franklin Creek	South Coast	No listing	City of Carpinteria
Fremont Creek	South Coast	No listing	
Garrapata Creek	South Coast	No listing	
Glen Annie Creek	South Coast	No listing	City of Goleta, City of Santa Barbara (at airport)
Goleta Slough	South Coast	Metals, pathogens, priority organics, sedimentation/siltation	City of Goleta, City of Santa Barbara (airport), UCSB
Greenwell Creek	South Coast	No listing	
Hospital Creek	South Coast	No listing	
Las Palmas Creek	South Coast	No listing	
Las Vegas Creek	South Coast	No listing	City of Goleta

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Stream / Waterbody	County Permit Area	Impairment* (CWA §303(d))	Adjacent Land-use Jurisdiction(s)
Maria Ygnacio Creek	South Coast	No listing	City of Goleta
Mission Creek	South Coast	Pathogens, unknown toxicity	City of Santa Barbara
Montecito Creek	South Coast	No listing	
Oak Creek	South Coast	No listing	
Orcutt Creek	Orcutt	No listing	
Orcutt Solomon Creek	Orcutt	Boron, fecal coliform, nitrate	
Pacific Ocean at Arroyo Burro	South Coast	Total coliform	City of Santa Barbara
Pacific Ocean at Carpinteria State Beach	South Coast	Fecal coliform, total coliform	City of Carpinteria
Pacific Ocean at East Beach, mouth of Mission Creek	South Coast	Fecal coliform, fecal coliform	City of Santa Barbara
Pacific Ocean at East Beach, mouth of Sycamore Creek	South Coast	Total coliform	City of Santa Barbara
Pacific Ocean at Gaviota Beach	Not in permit area	Total coliform	State of California
Pacific Ocean at Hammonds Beach	South Coast	Fecal coliform	
Pacific Ocean at Hope Ranch Beach	South Coast	Fecal coliform	
Pacific Ocean at Jalama Beach	Not in permit area	Total coliform, fecal coliform	
Pacific Ocean at Ocean Beach	Not in permit area	Total coliform, Fecal coliform	
Pacific Ocean at Refugio Beach	Not in permit area	Total coliform	State of California
Pacific Ocean at Rincon Point	South Coast	Total coliform, fecal coliform	County of Ventura
Picay Creek	South Coast	No listing	
Rattlesnake Creek	South Coast	No listing	
Rincon Creek	South Coast	No listing	
Romero Creek	South Coast	No listing	
San Antonio Creek	Not in permit area	Sedimentation / siltation, Boron	
San Jose Creek	South Coast	No listing	City of Goleta
San Miguelito Creek	Not in permit area	No listing	City of Lompoc
San Pedro Creek	South Coast	No listing	City of Goleta
San Roque Creek	South Coast	No listing	City of Santa Barbara

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Stream / Waterbody	County Permit Area	Impairment* (CWA §303(d))	Adjacent Land-use Jurisdiction(s)
San Ysidro Creek	South Coast	No listing	
Santa Maria River	Not in permit area	Fecal coliform, nitrate	City of Santa Maria
Santa Monica Creek	South Coast	No listing	City of Carpinteria
Santa Ynez River	Not in permit area	Nutrients, Salinity/TDS/chlorides, Sedimentation / siltation	City of Solvang, City of Buellton, City of Lompoc
Sycamore Creek	South Coast	No listing	City of Santa Barbara
Toro Creek	South Coast	No listing	
Vandenberg Village Creek	Vandenberg Village	No listing	
Zaca Creek	Not in permit area	No listing	City of Buellton
Zanja de Cota Creek	Santa Ynez	No listing	

*From: California State Water Resources Control Board 2002 Clean Water Act Section 303(d) List Of Water Quality Limited Segments (Approved by USEPA July 2003)

Regulatory Requirements and Applicable Standards

The General Permit applies to the operator of a regulated small municipal separate storm sewer system (MS4) because discharges of storm water from such systems are considered “point sources” of potential pollution. MS4s are considered point sources because they collect storm water and direct it into discrete conveyances.

According to 40 CFR 122.26(b)(8), “municipal separate storm sewer means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law)...including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges into waters of the United States;
- Designed or used for collecting or conveying storm water;
- Which is not a combined sewer; and
- Which is not part of a Publicly Owned Treatment Works as defined at 40 CFR 122.2.”

EPA categorizes MS4s as either “small,” “medium,” or “large.” Regulated small MS4s are automatically designated if they are located in “urbanized areas” (as defined by the Bureau of the Census). The unincorporated areas of the South Coast area east of Bell Canyon as well as the Communities of Vandenberg Village and Orcutt fall into this category. Other small MS4s located outside urbanized areas may be designated on a case-by-case basis by the NPDES permitting authority. Both the areas automatically designated and those designated on a case-by-case basis (the communities of Santa Ynez and Los Olivos) are covered in this SWMP (see Figure 1).

The EPA delegated to the State Water Resources Control Board the authority to administer and enforce the municipal Phase II NPDES Program within the State of California. The final implementing regulations were published in the Federal Register (Vol. 64 No. 235) on December 8, 1999 and are referenced herein as the Phase II rules. On April 30, 2003 the SWRCB adopted the General Permit for storm water discharges.

County Responsibilities

The County is responsible for implementing the SWMP in state designated unincorporated urbanized areas pursuant to the General Permit (see Figure 1). The Cities of Carpinteria, Santa Barbara, Goleta, Buellton, Solvang, Lompoc, and Santa Maria are responsible for implementing independent SWMPs within their municipal boundaries, but have a close working relationship with the County on topics of overlapping interest, such as public education (see Section 1.0).

In addition to the activities described in the SWMP, the County's Project Clean Water program includes watershed planning and restoration, pilot treatment control BMPs and monitoring, and additional projects that are not required elements of the SWMP pursuant to the General Permit. These additional measures are described in Appendix B Additional Water Quality Measures. To the extent that funding is available in the future, either through the County budget, or a grant funding source, these efforts may be continued at the discretion of the Board of Supervisors. Furthermore, in the case of land use regulation policies, BMPs incorporated to protect water quality in construction site and post-construction activities have been adopted and are applicable in the unincorporated areas countywide, regardless of whether they are included in the NPDES permit area.

Requirements for Regulated Small MS4s

Pursuant to State and Federal regulation, the owner or operator of a Phase II regulated small MS4, is required to submit a Notice of Intent (NOI) and Storm Water Management Program (SWMP) to obtain coverage under an NPDES storm water permit. The plan needs to describe how the regulated entity will identify and implement a range of BMPs into an effective storm water management program that includes the six "Minimum Control Measures", evaluation/assessment and reporting efforts, and record-keeping. Under these regulations the program must be developed and implemented. The storm water management program is intended to:

- Reduce the discharge of pollutants to the "maximum extent practicable";
- Protect water quality; and
- Satisfy the appropriate water quality requirements of the Clean Water Act.

"Maximum extent practicable" (MEP) is a standard introduced by the EPA that establishes the level of pollutant reductions that MS4 operators must achieve through implementation of a SWMP. Permittees such as the County will determine what the MEP is on a location-by-location basis and consider such factors as conditions and uses of receiving waters, specific local concerns, and other aspects of a comprehensive watershed plan, geography of the watershed and ability to implement BMPs. A more detailed discussion of MEP and the methodology employed by the County for selection of BMPs is provided in the following section.

Consistent with the Phase II rules, the General Permit defines a SWMP for a small MS4 as a program composed of six elements that, when implemented together, are expected to reduce pollutants discharged into receiving water-bodies to the MEP. As stated in the Federal Register (Vol. 64, No. 235, p. 68753):

Because the six measures represent a significant level of control if properly implemented, EPA anticipates that a permit for a regulated small MS4 operator implementing BMPs to satisfy the six minimum control measures will be sufficiently stringent to protect water quality, including water quality standards, so that additional, more stringent and/or more prescriptive water quality based effluent limitations will be unnecessary.

These six program elements, or minimum control measures, are:

1. Public Education and Outreach on Storm Water Impacts
2. Public Involvement/Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Storm Water Management in New Development and Redevelopment
6. Pollution Prevention/Good Housekeeping for Municipal Operations

The implementation and evaluation of these 6 minimum control measures comprise the heart of the County's SWMP. Because so many diverse factors can dictate the specifics of a storm water management program, the County has evaluated which BMPs will best satisfy each of the minimum control measures based on listed "impairments" (see Table 1), water quality data (see www.countyofsb.org/project_cleanwater/storm.htm for data), observations made during regular "creekwalks" and knowledge of local land uses. Through the annual reporting process, the County will evaluate both current conditions and BMP effectiveness, and, as appropriate, update the SWMP to achieve the objective of meeting water quality standards consistent with Receiving Water Limitations stipulations in Attachment 4 of the General Permit. It is recognized that, pursuant to the Phase II rule, this will be an iterative process as described in Attachment 4 of the General Permit.

In order to meet water quality objectives and standards in the Basin Plan, the County may expand or better tailor existing BMPs after implementing the minimum control measures described in this SWMP. Such changes would be based on the results of monitoring documented in the annual reports and developed in consultation with stakeholders and the Central Coast Regional Water Quality Control Board staff.

Achieving Maximum Extent Practicable

Through implementation of this SWMP, the County will achieve compliance with the Maximum Extent Practicable (MEP) standard through the identification, selection and implementation of BMPs described in this SWMP. The County has applied the following regulatory framework in order to meet its MEP obligations.

Flexibility in selecting appropriate BMPs is given to the County, or "permittee", as stated in the General Permit:

Permittees must implement Best Management Practices (BMPs) that reduce pollutants in storm water runoff to the technology-based standard of Maximum Extent Practicable (MEP) to protect water quality. In accordance with 40 CFR section 122.44(k)(2), the inclusion of BMPs in lieu of numeric effluent limitations is appropriate in storm water permits.

And

If a Permittee employs all applicable BMPs except those that are not technically feasible in the locality, or whose cost exceeds any benefit to be derived, it would meet the MEP standard. MEP requires Permittees to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs are not technically feasible, or the cost is prohibitive.

And

It is understood that storm water quality programs and regulations are new to the entities that will be regulated under this General Permit. Therefore, it is anticipated that this General Permit term will serve as a "ramping-up" period and that programs implemented by Phase II communities will not necessarily conform to programs implemented by Phase I communities.

The State Water Resources Control Board provides guidance for achieving the MEP standard in their Phase II Small MS4 General Permit Questions and Answer document (posted 08/05/04):

It is recognized that "pollutant reductions that represent MEP may be different for each small MS4, given the unique local hydrologic and geologic concerns that may exist and the differing possible pollutant control strategies. Therefore, each permittee will determine appropriate BMPs to satisfy each of the six minimum control measures through an evaluative process" (Federal Register, Volume 64, No. 235, page 68754, December 8, 1999.).

The preamble to the Federal Register states [sic]: "EPA has intentionally not provided a precise definition of MEP to allow maximum flexibility in MS4 permitting. MS4s need the flexibility to optimize reductions in storm water pollutants on a location-by-location basis. EPA envisions that this evaluative process will consider such factors as conditions of receiving waters, specific local concerns, and other aspects included in a comprehensive watershed plan. Other factors may include MS4 size, climate, implementation schedules, current ability to finance the program, beneficial use of receiving water, hydrology, geology, and capacity to perform operation and maintenance." (Id.)

The flexibility and "ramping-up" period for implementation of the SWMP is based upon the changing state of the art of storm water BMPs, as reflected in the Central Coast Regional Water Quality Control Board Basin Plan:

Several important points about Best Management Practices must be emphasized;

- *Best Management Practices are not officially considered "best" practices for use in California unless they have been certified by the State Board.*
- *The use of Best Management Practices does not necessarily ensure compliance with effluent limitations or with receiving water objectives. Because nonpoint source control has been a priority only since the 1970's, the long-term effectiveness of some Best Management Practices has not yet been documented.*

The "state-of-the-art" for Best Management Practices design and implementation is expected to change over time. The State planning process will include periodic review and update of Best Management Practices certifications.

BMPs are defined in the implementing federal regulations (40 CFR §122.2) as follows:

***Best Management Practices (BMPs)** – Best management practices means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States (40 CFR §122.2)*

Furthermore, BMPs must address “reasonably controlled” water quality conditions as defined in the Central Coast Regional Water Quality Control Board Basin Plan:

Controllable water quality conditions are those actions or circumstances resulting from man's activities that may influence the quality of the waters of the State and that may be reasonably controlled.

Similar to the General Permit, the federal definition of MEP includes explicit language about timing and economic feasibility to clarify further that BMPs are practicable. The County interprets the State and EPA definitions as establishing the same level of requirement so as to avoid the State regulations inadvertently establishing an unfunded mandate... “EPA has intentionally not provided a precise definition of MEP to allow maximum flexibility in MS4 permitting... Other factors may include MS4 size, climate, implementation schedules, current ability to finance the program, beneficial uses of receiving water”... (USEPA Phase II Final Rule, Section II.H.3.a.iii in *Federal Register*, Volume 64, No. 235, page 68754, December 8, 1999). Given this guidance from the State of California and EPA for achieving MEP through the selection and implementation of BMPs, the County has relied on three basic sources for identification of appropriate BMPs for the SWMP: (1) input from the community, (2) review of other nonpoint source programs, and (3) review of various published BMP manuals and lists, (including the EPA “Fact Sheets” and “Management Measures” contained in the State of California Nonpoint Source Pollution Control Program). Factors considered in the selection of BMPs for this SWMP include (1) existing ambient water quality of local streams and beaches, including “impairments” listed in the Basin Plan (Table 1), (2) BMP applicability to known pollutants, (3) local geographic and hydrologic factors, (4) land use, (5) likely effectiveness and (6) technical and economic feasibility.

Notice of Intent

The County has filed a Notice of Intent to apply for coverage under the State of California General Permit (Appendix A Notice of Intent). As required, the Notice of Intent and this SWMP together contain the following information:

- The area covered by the SWMP;
- Best management practices (BMPs) for each of the six minimum control measures;
- Measurable goals for each of the BMPs (i.e., narrative or numeric standards used to gauge program effectiveness);

- A timeline for implementation of each measure (estimated months and years to implement each measure, including interim milestones and frequency of measurement); and
- Individual(s) or group(s) responsible for implementing or coordinating the storm water program.

How to Use This Document

This document describes the measures the County will develop and/or carry out during the 5-year term of the SWMP. BMPs and their implementation for each minimum control measure are discussed in Sections 1.0 through 6.0. Because significant overlap exists between minimum control measure efforts, some sections contain cross-references to other sections in order to avoid redundancy. Sections 1.0 through 6.0 use the following format for describing implementation of the six minimum control measures. Each section lists BMPs that are currently being implemented, future BMPs, a timeline for implementation, measurable goals for each BMP, and reporting requirements. The SWMP also contains a discussion of the annual report required to be submitted to the Regional Water Quality Control Board. Appendices to this report provide (1) specific examples of BMPs the County has already implemented and will continue to implement as well as (2) information regarding other local programs which relate to the success of this SWMP. In the case of municipal operations, examples are provided of BMPs that the County has identified and will implement during the term of this permit.

Additional information regarding this SWMP or other elements of Project Clean Water may be obtained at www.countyofsb.org/project_cleanwater or by contacting the County Public Works Department, Water Resources Division, at 805.568.3440.

MINIMUM CONTROL MEASURES

The Phase II Rule defines a storm water management program for a small MS4 as a program composed of six elements that, when implemented together, are expected to reduce pollutants discharged into receiving water-bodies to the MEP. These six program elements, or minimum control measures are:

1. Public Education and Outreach on Storm Water Impacts;
2. Public Involvement/Participation;
3. Illicit Discharge Detection and Elimination;
4. Construction Site Runoff Control;
5. Post-Construction Storm Water Management in New Development and Redevelopment; and
6. Pollution Prevention/Good Housekeeping for Municipal Operations.

The implementation and evaluation of these six minimum control measures comprise the heart of the County’s SWMP. Within each minimum control measure category, specific BMPs were identified from (1) input from the community (Table 2), (2) review of other programs, and (3) review of various published BMP manuals and lists, including the EPA “Fact Sheets” and “Management Measures” contained in the State of California Nonpoint Source Pollution Control Program.

A number of factors were used to select BMPs for this SWMP including (1) water quality of local streams and beaches, including “impairments” listed in the Basin Plan, (2) BMP applicability to known water quality, (3) likely effectiveness, and (4) technical and economic feasibility. This information has been summarized in annual reports and other studies posted on the County website at www.countyofsb.org/project_cleanwater.

Table 2 – Public Participation in SWMP development

	Stakeholder meetings	Workshops	Planning commission hearings/briefings	Board of Supervisor hearings
Initial program scope (1998-99)	15 (monthly)	2	1	4
Construction site controls	3	5	1	3
Post construction design guidelines	3	2	1	3
Storm Water Management Program	1	5		1

Commitment to Implement SWMP and Continue Existing County BMPs:

The County will implement the measures in this SWMP to protect water quality from the impacts of storm water runoff to the maximum extent practicable. In particular the County will continue to implement those BMPs described as previously developed and ongoing and will implement new/expanded BMPs as described. The County would also continue to seek outside sources of funding that are relevant to the storm water program, consistent with the types of funding obtained by Project Clean Water to date (see Appendix B). To the extent that similar opportunities for funding measures are available, the County will actively seek outside sources of funds to supplement the existing SWMP efforts.

However, the County has a concern regarding the impracticability of program implementation due to unexpected adverse fiscal events beyond the control of the County. Specifically, the revenues received by the County are constrained by state law, the annual actions of the State Legislature and Governor in the state budget process, and the State constitution. In the event that substantial revenue reductions occur, a consideration of the County financial situation would occur in the annual review process with evaluation for compliance with the MEP standard, as required by the General Permit.

MONITORING PROGRESS AND REPORTING

Monitoring and Reporting Requirements

The purpose of monitoring and reporting is to document successful implementation of the SWMP. The draft General Permit requires annual reports be submitted starting in August 2004. The County intends these annual reports to cover the fiscal year immediately prior to the reporting period.

The County will monitor the implementation of its program and the overall effectiveness by measuring and reporting the data discussed in the individual Minimum Control Measures sections discussed above.

In general, four types of data will be collected:

- Progress in establishing BMPs that are developed during the SWMP implementation period, or establishing existing BMPs in newly identified permit areas;
- Training the staff (and contractors, as appropriate) who work for the County;
- Objective measures of ongoing BMPs, such as public participation or education outreach; and
- Response time and results of pollution cleanup.

The County will evaluate both current conditions and BMP effectiveness, and, as appropriate, update BMPs and measurable goals to achieve the objective of meeting water quality standards to the MEP. It may be necessary to expand or better tailor existing BMPs after implementing the minimum control measures described in this SWMP. Such changes will be based on the results of monitoring provided in the annual reports and developed in consultation with stakeholders and the RWQCB.

Form and Content of Annual Report

The County will provide annual reports pursuant to state guidance provided in “Final Draft” form March 4, 2004. Consistent with this guidance, the County intends to provide summaries of data in tabular form. Data such as number of employees trained, number of construction sites inspected, etc. will be presented in summary tables. Because the County is required to keep records for five years and due to the intent of the reporting requirement, the annual report will focus on a summary of progress and discuss any changes to the SWMP to be implemented in meeting the MEP standard. Of necessity, the reporting format needs to be flexible and if changed, reasons will be given. Focus will be to clearly show progress, to discuss program adjustments, and respond to challenges in implementing the SWMP.

Reporting and Compilation of Data

The County is developing a central reporting system to allow a web-based reporting of BMPs. This County-wide program is intended to track BMP selection and implementation, identify schedules for all facilities, and provide the opportunity for feedback and clarification on BMPs. Report results will be used directly in the annual report to the RWQCB to identify BMPs implemented by the County.

Pursuant to the General Permit, the County will retain storm water records for five years. Each department responsible for implementing substantive elements of the SWMP will be directed to keep their records for five years. These records will be the source of compiled data contained in the annual report.

1.0 PUBLIC EDUCATION AND OUTREACH

Responsible Person to Implement or Coordinate this Minimum Control Measure: County Public Works Director.

This minimum control measure is intended to ensure greater public support and compliance for the Storm Water Management Program (SWMP). Specifically these efforts are to teach the public the importance of protecting storm water quality, both for the benefit of the environment and human health.

Although difficult to measure, public education is essential to achieving behavioral changes that can protect water quality. Because the SWMP focuses on non-point source pollution, the role of the individual in preventing this pollution is key. The BMPs selected for implementation include efforts that can be made by community members both at work and at home.

1.1 Minimum Requirements

EPA guidelines suggest the following “Best Management Practices” for Public Education and Outreach Minimum Control Measure (*Fact Sheet 2.3 – Public Education and Outreach Minimum Control Measure, 01/00*):

- Distribute educational materials on the impact of storm water discharges and steps that can be taken to reduce storm water pollution
- Brochures or fact sheets
- Alternative information sources such as websites, bumper stickers, and refrigerator magnets
- A library of educational materials
- Volunteer citizen educators
- Event participation
- Educational programs for school children
- Storm drain stenciling
- Storm water hotlines
- Tributary signage

However, the EPA emphasizes that the permittee has a great deal of flexibility in choosing exactly how to satisfy the minimum control measurement requirements. The BMPs listed here were selected from a broad range of sources based on the factors discussed in the introduction to the MCM section as well as the County’s demographics and opportunities to cooperate with other Phase II communities.

1.2 Best Management Practices

The County has implemented or will implement all BMPs listed below. The County will maintain the level of implementation for existing BMPs. Each BMP implemented is described in more detail below.

Best Management Practices:

- **Measure Public Opinion:** In 2002, the County and City of Santa Barbara conducted a study to provide the foundation for a public education campaign designed to increase awareness of the causes and consequences of storm water pollution, and to reduce pollution-causing behaviors. The study identified the public's level of knowledge about storm water issues, level of concern, and willingness to make changes, and key population demographics that were less informed. The County will implement a similar study every five years to track education program success and identify the most appropriate outreach efforts.
- **Brochures:** PCW has developed a series of four informational brochures on storm water quality targeting dog and horse owners, creekside residents, and gardeners. Additional informational brochures include a general storm water brochure called "The Ocean Starts at Your Door", and a brochure on proper disposal of and alternatives to hazardous household products. These materials are all produced in both Spanish and English. The brochures are distributed at special events, by mail, through enforcement activities, and upon request. All educational materials produced by PCW are listed in Appendix C - Project Clean Water Public Education & Outreach Materials, and can be viewed at www.countyofsb.org/project_cleanwater.
- **PCW website:** The objectives of the website are to provide information to the public on Project Clean Water in general and what individuals can do to protect water quality. The PCW website features general information, copies of reports, studies, and educational materials, and a calendar of events. The website currently receives over 300 hits per month. The PCW website is advertised as part of the media campaigns. PCW also distributes magnets that list the website address and hotline phone number, and a poster about the storm drain – ocean connection. These items are distributed at special events, to school groups, by mail and upon request.
- **Community Events:** Each fall, PCW sponsors Creek Week, which features guided walks, presentations, public forums and other events that highlight watersheds and water quality issues. PCW provides exhibits and materials for the annual Earth Day Festival, Sustainable Landscape Fair and other relevant public events.
- **South Coast Watershed Resource Center (WRC):** The WRC is a joint effort among the County and the Community Environmental Council (CEC); these partners also shared the initial costs of development and construction. The County and the CEC provide the ongoing operational costs. The WRC is located in a former ranger residence at Arroyo Burro County Beach, one of the South Coast's most popular and often most polluted beaches. The Center features exhibits on watersheds and nonpoint source pollution, a wet lab, native plant exhibits, a library and computer research area, and a Chumash tomol (canoe) construction area. The WRC is open to the public during the day, hosts field trips for school groups, is available for meetings or events for community groups in the evening, and provides information in Spanish. A project housed at the WRC is the Watershed Projects Volunteer Coordinator, who conducts outreach to local high school and college students to solicit volunteers for watershed related projects that have a direct impact on improving water quality. These projects include restoration efforts, exotic plant removal, and creek clean-up efforts.

- **Educational programs for school children:** PCW provides classroom presentations for grades K – 6, and distributes materials such as a coloring book on nonpoint source pollution, stickers, and storm drain marker decals. In partnership with the City of Santa Barbara and the Community Environmental Council, PCW also developed a watershed science curriculum called “Mountains to the Sea”. Curriculum training for teachers is offered annually, and the curriculum is also distributed to teachers who request classroom presentations. PCW staff also offer teacher training for the Project WET curriculum, which features water quality activities. Project WET is a national water education program designed to promote awareness, appreciation, knowledge and stewardship of water resources.
- **Storm drain marking:** PCW has marked the majority of the storm drain drop inlets on the permit area with markers that say “Don’t Dump – Drains to Ocean” in Spanish and English. The County will continue this effort, to mark all storm drains in the commercial and residential neighborhoods in the County permit area, and establish a systematic replacement program.
- **Green Gardener Certification Program (GGCP):** The GGCP trains landscape maintenance professionals in techniques that reduce resource use and pollution from landscaped sites. The class is offered in both Spanish and English, and has trained over 500 gardeners since its inception in 2000. The program is promoted to the community through advertising and the distribution of a Certified Green Gardener List. The program was initiated through grants, and the County will not continue this BMP without future grant funding. Program partners include local water districts and other resource management agencies, as well as Santa Barbara Community College District Continuing Education Division (South Coast) and Allan Hancock College Noncredit Program (North County). Classes are offered in the fall and spring by both institutions. In 2005, the GGCP will develop a program assessment tool to help determine the success of the training on reducing water quality impacts.
- **Storm water hotlines:** The PCW water quality hotline is accessible at 1-877-OUR-OCEAN. Callers can report water quality problems or get information such as where to dispose of hazardous waste. The County organizes and funds this regional (multi-agency) effort.
- **Landscape Education Program:** The County has an extensive sustainable landscaping education program that includes information on reducing polluted runoff from landscaped areas through efficient irrigation and reduction of fertilizers and pesticides. The program includes annual landscape fairs in North County and South Coast locations, Earth Day exhibits, and brochures and other outreach materials. The County revised the brochure “Sustainable Landscapes for the Central Coast” to include specific recommendations on protecting water quality in June 2003.
- **Business Outreach and Education:** The objective of this BMP is to eliminate inappropriate discharges from businesses through education. PCW produced and distributes four different brochures and two posters in Spanish and English that target restaurants (poster and brochure), automotive services (poster and brochure), construction contractors (brochure), and mobile cleaners (brochure). These are distributed during site visits by PCW staff and EHS restaurant inspectors. Business outreach and education is

also accomplished through the County's inspection programs, which include face-to-face communication and follow-up to ensure elimination of illicit discharges (see Section 3.0 Illicit Discharge & Detection Elimination). In addition, the Restaurant Recognition Program presents certificates on a quarterly basis to restaurants that implement water quality BMPs. The winning restaurants receive a certificate and recognition by the County Board of Supervisors and city councils, as well as advertising in the newspaper. PCW has also partnered with the Goleta Sanitary District to offer BMP training to restaurant managers. The first training took place in December 2002.

- **Media Campaigns:** Each year, a print ad campaign is run in conjunction with the Earth Day (spring) and Creek Week (fall) events. Additional media campaign efforts have included radio and television ads in Spanish and English, bus signs, and theater ads. Using the Storm Water Education Study conducted in 2002 as a guide, the media campaign will target a priority demographic each year. For example, past efforts have focused on Spanish speakers and young males, both delineated as under-reached populations in the study. The medium will continue to be selected based on budget and target audience. One objective of the media campaigns will be to increase utilization of the Project Clean Water website.
- **Hazardous materials collection.** The Santa Barbara County Resource Recovery and Waste Management Division has established a household hazardous waste collection program for motor oil, antifreeze, pesticides and other common waste materials. In addition, regular events are held to collect and recycle unused electronic devices. For more information, see the Division's website at <http://www.countyofsb.org/pwd/swud>.
- **Latino outreach:** Improve outreach to the Latino community through media campaigns, participation in Latino community events, and school programs implemented by Agua Pura. Development of this effort began in December 2002; program development will be completed by the end of year 1 and implementation of the outreach efforts will be ongoing throughout the permit period.
- **Incentives for built-out areas:** This effort will identify potential retrofits for existing development to reduce polluted runoff. Research will include current technologies and programs in other relevant communities. Grant opportunities to implement the retrofits will also be identified.
- **Tributary signage:** Improve public awareness of the urban creek systems by installing signs identifying the major tributaries (e.g., second order streams) of the first order streams (e.g., streams that lead to the ocean) in County permit area. The County will develop a proposal for signage and seek permits and funding to install signs where County roads cross the tributaries.

1.3 Measurable Goals

The County will educate the general public about storm water quality issues and their role in the solutions by outreach to the community, school children, and businesses. Measurable goals for each BMP are listed below. In 2001, the County and City of Santa Barbara sponsored a public opinion survey to determine the level of community awareness on storm water issues. In addition, the survey provided important information for future program development and specific

target audiences. As a Measurable Goal for the entire Public Education and Outreach Program, the County will conduct another public opinion survey in year 5.

BMP: Measure Public Opinion

- Conduct a follow-up public opinion survey by the end of the implementation period (year 5) to determine the level of knowledge concerning general storm water quality concepts, level of knowledge on and degree to which lifestyle changes have been made to protect water quality, and willingness to make further changes to protect water quality. The study will also be designed to determine which segments of the population need outreach the most.

BMP: Brochures

- Compile the number of brochures distributed
- Reach 15% of the brochure target population each year.

BMP: Project Clean Water Website

- Compile the number website hits annually
- Increase hits to the website by 10% per year
- Develop improvements to increase utility of website (i.e., increase usefulness, improved presentation, better communication, more minutes spent on website, etc.)

BMP: Community Events

- Compile the number events organized or attended with displays as well as the number of people who attended each event.
- Reach 15% of the permit area population each year.

BMP: South Coast Watershed Resource Center

- Increase visitation by 10% each year, with FY 2003-04 visitation as the base year.

BMP: Educational Programs for School Children

- Educate a minimum of 30% of school children (K-8) in the permit area every two years on storm water quality by providing school districts with classroom presentations, copies of the “Mountains to the Sea” Watershed Curriculum, curriculum training workshops for teachers, field trips to the Watershed Resource Center, Agua Pura Program¹ and materials such as posters, brochures and videos.
- Administer pre- and post-presentation evaluations to students who receive PCW administered classroom presentations to assess the level of success of the program in transmitting the concept of storm water pollution and how to reduce it. Report the results from these evaluations in the annual report and use the results to revise the presentation content as needed.

¹ The Agua Pura Program, which is operated by the UC Cooperative Extension Youth Development Program, was created to inform, educate, and engage Latino children and parents in water quality issues affecting their community. PCW is an Agua Pura sponsor.

BMP: Storm Drain Marking

- Complete marking of storm drains in all County permit areas by the end of year 2.
- Maintain storm drain markers throughout the permit area by checking markers every year and replacing as them necessary.

BMP: Storm Water Hotline

- Maintain hotline and document its usage.
- Expand hotline usage into all County permit areas by the end of year 1, and continue to document usage.
- Promote use of the hotline by publicizing the number on all printed materials and through the website.
- Respond to 100% of calls to Project Clean Water staff within 24 hours. Complaints outside direct County jurisdiction are forwarded to appropriate regulatory agency responsible for elimination of illegal discharges. Where the County of Santa Barbara has enforcement authority (i.e., Planning & Development, Solid Waste, Fire Department), County will respond directly and identify and control or eliminate illicit discharges as described in Section 3.2.4.

BMP: Green Gardener Certification Program (will not continue past FY 04/05 without additional grant funding)

- Train 100 landscape maintenance professionals in Green Gardener practices each year.
- Complete pilot water quality study to evaluate the level of pollution reduction achieved by Green Gardener practices by the end of year 2, and use results to revise the program as needed.
- Obtain customer surveys from a minimum of 25 certified gardeners each year during years 2-5.
- Seek additional grant funding for continuation of program.

BMP: Landscape Education Program:

- Reach 1,500 community members annually through events featuring landscape water quality information.
- Distribute at least 1,000 landscape brochures annually.

BMP: Business Outreach

- Compile the number of brochures/posters distributed, restaurants awarded through the Restaurant Recognition Program, and businesses that attend training workshops.
- Model outreach after the joint restaurant education program with Goleta Sanitary District, expand the program to Montecito, Carpinteria, Laguna County, and the Vandenberg Village Community Services District which are in the South Coast and North County permit areas, by the end of year 3.
- Deliver brochures to businesses by hand and conduct face-to-face communication with owners and operators.
- Report results of water quality inspections completed by County Departments (as defined in Section 3.2.4).

BMP: Media Campaign

- Sponsor at least two media campaigns per year associated with Earth Day, Pollution Prevention Week, or Creek Week. Compile the number of print, television or radio ads run, and storm water related press releases/media coverage.
- Target advertisement of the Project Clean Water website to increase the number of visitors to the website.

BMP: Latino Outreach

- Document the number of Spanish language brochures distributed, number of Latino events attended with displays, and number of students reached by the Watershed Resource Center, and Agua Pura.

BMP: Incentives for business & residents in built-out areas

- The County will research grant opportunities for such a program beginning in year 1, and if grant funds are secured, will implement an incentives program by year 3.

BMP: Tributary signage

- In year 3, the County will develop a program proposal to fund or seek outside funding to install signs where County roads cross the major tributaries of first order streams in the County permit area.

1.4 Reporting

The data collected for each measure (such as number of brochures distributed) will be compiled, reviewed and summarized in annual reports. Significant variance from targets will be assessed and discussed in annual reports. Progress towards achieving goals that have multi-year timelines (such as joint outreach with sanitary districts) will be reported annually. Implementation of existing BMPS will be modified as needed. Measurable goals will be adjusted as appropriate, and the basis for any changes will be documented in the next annual report.

**Table 1-1
BMP Implementation: Public Education & Outreach**

Year(s)	BMP/Pollutants of Concern	Current Status	Implementation Details	Measurable Goal	Implementing Entity
5	Public Opinion Survey All POCs	Survey performed in 2001.	Conduct survey in coordination with the County, to determine effectiveness of programs and future program direction.	<ul style="list-style-type: none"> Conduct public opinion survey in year 5. 	County/regional partners
1 - 5	Brochures All POCs	Brochures and posters are available in Spanish and English.	Brochures provide information on how community members, including business owners and staff, can prevent storm water pollution.	<ul style="list-style-type: none"> Compile the number of brochures distributed. Reach 15% of the brochure target population each year. 	County
1 - 5	PCW Website All POCs	Website is established.	The website provides information on how community members can prevent storm water pollution and also provides data on water quality within the County.	<ul style="list-style-type: none"> Compile the number website hits annually. Increase hits to the website by 10% per year. Develop improvements to increase utility of website (i.e., increase usefulness, improved presentation, better communication, more minutes spent on website). 	County
1 - 5	Community Events All POCs	The County currently sponsors Creek Week which includes a Kid's Creek Fest as well as a booth for Earth Day.	Public events can reach a wide audience in providing information on how to prevent storm water pollution.	<ul style="list-style-type: none"> Compile the number of events organized or attended with displays as well as the number of people who attended each event. Reach 15% of the permit area population each year. 	County
1 - 5	South Coast Watershed Resource Center All POCs	Center opened in fall 2001	The Center hosts exhibits, activities, field trips for school groups, summer camps, community meetings, volunteer coordination and a resource library.	<ul style="list-style-type: none"> Increase visitation 10% each year, with FY 03-04 as the base year 	County/CEC

County of Santa Barbara
 Storm Water Management Program (2006-11)
 For Submittal: December 31, 2005

Year(s)	BMP/Pollutants of Concern	Current Status	Implementation Details	Measurable Goal	Implementing Entity
1 - 5	Educational Programs for children All POCs	Ongoing	Classroom presentations are available on request and annual training is held for the Mountains to the Sea watershed curriculum.	<ul style="list-style-type: none"> • Educate 30% of school children (K-8) every two years. • Administer pre-and post presentation evaluations. 	County
1 - 5	Storm drain marking All POCs	The majority of storm drains are marked	The majority of storm drains were marked in the major business and residential areas.	<ul style="list-style-type: none"> • Complete storm drain marking by the end of year two. • Check markers and replace every year as needed. 	County
1 - 5	Green Gardener Certification Program (Contingent on future grant funding): (Pathogens; Nutrients; Organic Enrichment/Low DO)	Over 500 gardeners trained to date, annual training in Spanish and English.	Continuation of program is contingent upon grant funding.	<ul style="list-style-type: none"> • Train 100 gardeners annually. • Complete pilot water quality study • Obtain 25 customer surveys annually. • Seek additional grant funding. 	County/ program partners

County of Santa Barbara
Storm Water Management Program (2006-11)
For Submittal: December 31, 2005

Year(s)	BMP/Pollutants of Concern	Current Status	Implementation Details	Measurable Goal	Implementing Entity
1 - 5	Storm water hotline; All POCs	Hotline is established	Hotline directs complaints and gives information.	<ul style="list-style-type: none"> • Maintain hotline and document its usage. • Expand hotline usage into all County permit areas by the end of year 1, and continue to document usage. • Promote use of hotline through printed materials and website. <p>Respond to 100% of calls to Project Clean Water staff within 24 hours. Complaints outside direct County jurisdiction are forwarded to appropriate regulatory agency responsible for elimination of illegal discharges. Where the County of Santa Barbara has enforcement authority (i.e., Planning & Development, Solid Waste, Fire Department), County will respond directly and identify and control or eliminate illicit discharges as described in Section 3.2.4.</p>	County
1 - 5	Landscape Education Program; Pathogens Nutrients Organic Enrichment/Low DO	Program includes printed materials and public events	Written materials are distributed through the annual landscape fair, and Water Awareness Day.	<ul style="list-style-type: none"> • Reach 1,500 community members annual through materials and events. • Distribute at least 1,000 landscape brochures annually. 	County

County of Santa Barbara
Storm Water Management Program (2006-11)
For Submittal: December 31, 2005

Year(s)	BMP/Pollutants of Concern	Current Status	Implementation Details	Measurable Goal	Implementing Entity
1 - 5	Business Outreach; All POCs	Program focuses on restaurants, automotive services, mobile cleaners, and construction trades.	Written materials and posters are distributed to businesses, during complaint response, and at workshops. A Restaurant Recognition Award is presented quarterly.	<ul style="list-style-type: none"> • Compile number of materials distributed annually. • Document workshops and number of participants. • Deliver brochures to businesses by hand to enable more face-to-face communication with owners. • Report results of water quality inspections completed by County Departments (as defined in Section 3.2.4). 	County
1 - 5	Media Campaign; All POCs	Media campaigns are run on an annual basis.	Media campaigns are run around events such as Earth Day, Pollution Prevention Week, and Creek Week.	<ul style="list-style-type: none"> • Co-sponsor at least two media campaigns each year. • Target advertisement of the Project Clean Water website to increase the number of visitors to the website. 	County/regional partners
1 - 5	Latino Outreach All POCs	Media campaign completed in FY 03/04.	Media campaigns will be run again in the future as funding permits.	<ul style="list-style-type: none"> • Document number of Spanish brochures, Latino events, students reached. 	County Agua Pura WRC
1 - 5	Incentives for built-out areas All POCs	None	Research grant opportunities and establish program is funds are found.	<ul style="list-style-type: none"> • Research grants/apply. • Implement incentive program. 	County
3-5	Tributary signage	None	Install signs identifying the major tributaries (i.e., second order streams) of first order streams (streams that lead to the ocean) in the County permit area.	<ul style="list-style-type: none"> • In year 3, the County will develop a program proposal and seek permits and outside funding to install signs where County roads cross the major tributaries of first order streams in the County permit area. 	County

2.0 PUBLIC PARTICIPATION AND INVOLVEMENT

Responsible Person to Implement or Coordinate this Minimum Control Measure: County Public Works Director.

This minimum control measure is intended to foster active community support for the SWMP and direction as to its implementation. Participation by the public ensures that the program reflects community values and priorities and thus has the highest potential for success.

2.1 Minimum Requirements

EPA guidelines establish the following “Best Management Practices” for the Public Participation/Involvement minimum control measure (*Fact Sheet 2.4 – Public Participation/Involvement Minimum Control Measure, 01/00*; and “Measurable Goals Guidance for Phase II Small MS4s”):

- Establish a steering committee
- Hold regular public meetings
- Establish regular coordination among agencies
- Volunteer water quality sampling
- Community clean-ups

The County has implemented all the suggested “Best Management Practices” listed above and intends to maintain them at current levels (see below). In addition, special meetings will be held at minimum bi-annually in Carpinteria Valley, Goleta, Vandenberg Village, and Orcutt to identify the needs or concerns of these specific communities or to attract involvement of groups or interests who have not participated to date.

2.2 Best Management Practices

The County has implemented all BMPs listed above, and plans to maintain this level of implementation as well as develop new efforts as deemed appropriate for the community. Each BMP implemented is described in more detail below.

2.2.1 Establish Steering Committee

In order to incorporate community concerns and ideas into PCW objectives, the Project Clean Water Stakeholders Committee was formed in 1998 to provide a forum for this input. The Stakeholders Committee includes representatives of community organizations, local government agencies such as the Cities of Santa Barbara, Goleta and Carpinteria, staff from Santa Barbara City College and UCSB, and other interested individuals. All interested individuals or organization representatives are encouraged to attend.

Community organizations represented in the Stakeholders Committee are listed in Table 2.1. Working groups to focus on specific issues were also convened as part of the initial work plan development for PCW, and met on a monthly basis. Working groups identified water quality solutions and made recommendations. These groups are now convened on an as-needed basis. These groups all focused initially on south coast issues and efforts.

Because the northern part of the County is geographically separated and has different concerns, a separate stakeholders group will be convened in that area.

**Table 2-1: Organizations & Agencies Represented on Stakeholders Committee
(past and present)**

Government Agencies:

City of Santa Barbara	City of Solvang
City of Carpinteria	Carpinteria Sanitary District
City of Goleta	Goleta Sanitary District
City of Santa Maria	Goleta West Sanitary District
City of Guadalupe	Laguna Sanitary District
City of Buellton	Montecito Sanitary District

Organizations:

All Saints-by-the-Sea	League of Women Voters
Allied Neighborhoods Assn.	Lideres Latinos
Automotive Service Council	Ocean Futures
Clean Up Rincon Effluent	Patterson Area Neighborhood Assoc.
Cal Trout, Inc.	Project Recovery
California Coastal Commission	Rincon Point Property Owners' Assn.
Carpinteria Creeks Committee	Samarkand District Improvement Assn.
Carpinteria Valley Assn.	Santa Barbara Assn. of Realtors
Carpinteria Valley Chamber of Commerce	Santa Barbara Audubon Society
Casa de la Raza	Santa Barbara Channel Keeper
Citizens Planning Assn.	Santa Barbara Contractors Assn.
Coalition of Labor, Agriculture & Business	Santa Barbara SEA
Commercial Fishermen of Santa Barbara, Inc.	Shoreline Preservation Foundation
Community Environmental Council	So. Cal. Edison
Community Planet Foundation	Surfrider Foundation
Conception Coast Project	Surfrider Foundation - Santa Barbara
Earl Warren Showgrounds	Surfrider Foundation - Ventura County
Environmental Defense Center	Sustainability Project
Environmental Horticulture	Syukhtun
For the Sake of Salmon	The Conception Coast Project
Gaviota Coast Conservancy	UCSB Bren School of Environmental Science and Management
Goleta Chamber of Commerce	UCSB Cooperative Extension 4-H
Heal the Ocean	Urban Creeks Council
Hope Ranch Assn.	Westmont College
Growing Solutions	

2.2.2 Hold Regular Public Meetings

The Stakeholders Committee meetings, feature updates on the PCW and other storm water programs, guest speakers, and provide the opportunity for community members to discuss any issues of concern and provide feedback on program direction. PCW staff maintains a Stakeholder email and mailing list with over 200 names, and those on the list are noticed of regular meetings, announcements, and other events through the email system. A North County Stakeholders Committee will be convened and will meet on a regular basis. The City of Santa Maria is filing a separate NPDES permit, but is interested in working cooperatively with the County and we will coordinate on forming a stakeholders committee. In addition, County staff will continue to work with nonprofit groups and the Regional Water Quality Control Board (RWQCB) to organize public forums on water quality.

In addition to the Stakeholders Committee, several ad hoc working groups were formed to evaluate potential water quality problems, develop solutions to specific problems or issues, and make recommendations to County staff for implementation. These working groups were key to the initial development of the PCW work plan and BMPs. These working groups now meet on an as-needed basis and are modified or created to address emerging issues. A list of the initial PCW working groups with brief description of each group’s focus appears in Table 2-2. The report prepared by the working groups is available as “Appendix A” to the 1999-2000 Annual Report posted at: http://www.countyofsb.org/project_cleanwater.

Table 2-2: Project Clean Water Working Groups

Working Group Name	Focus
Wetland & Riparian Restoration	Makes recommendations for restoration and participate in watershed planning activities.
Animal Waste Management	Makes recommendations for enforcement/development of policies to control domestic animal waste.
Infrastructure Cleaning & Maintenance	Works with City/County staff to develop policies/procedures for regular infrastructure cleaning & maintenance.
Ordinance & Policy Review	Evaluates existing policies regarding water quality and determine if enhanced enforcement/ additional policies are needed.
South Coast Watershed Resource Center	Develops design and education program for center at Arroyo Burro Beach.
Illegal Encampment	Evaluates methods for reducing illegal encampments and improving sanitation in creeks, including alternatives to police action.
Storm Drain Marking	Develops & promotes storm drain stenciling program, and research permanent markers and development requirements.

Working Group Name	Focus
Youth Education	Develops & implements youth education programs
Septic System Maintenance	Reviews county/city policies on septic system maintenance.
Sewer System Testing/Maintenance	Reviews & makes recommendations for sewer system testing/maintenance.
Signage & Posting	Develops and implements signs to provide information on beach status and water quality issues.
Targeted Information Campaign	Develops & distributes targeted information on water quality issue solutions.
Hot Line	Reviews and implements improvements to water quality hotline (1-877-OUR-OCEAN)
Business Incentives	Develops programs to encourage businesses to implement water quality solutions.
Illegal Activities	Considers options for installing signs, trash cans & portable toilets. Examine options for policies to reduce vehicle “droppings”.

2.2.3 Establish Regular Coordination Among Agencies

Since 1998 the County has hosted a quarterly meeting of local, state and federal agencies with interests in local storm water issues. This meeting of the “intergovernmental committee” includes both regulators (such as the Central Coast RWQCB) and regulated entities. Topics for discussion are suggested by participants and include development and interpretation of storm water regulations, opportunities for cooperative efforts, emerging technologies and sharing of water quality information. In addition, the County is a member of the California Storm Water Quality Association (CASQA), which facilitates the exchange of information and joint research and efforts among Phase I and Phase II agencies statewide. CASQA meets on a bimonthly basis.

2.2.4 Volunteer Habitat Monitoring and Water Quality Sampling

Originally, the County sponsored the Creek Watchers Program, which was a volunteer water quality monitoring effort implemented by the Community Environmental Council (CEC). This program was eliminated in 2004. In place of the Creek Watcher Program, the County will organize and/or sponsor volunteer “snapshot” water quality sampling events twice a year. This event will recruit community members to sample water quality at established points on the creek. The County will continue to coordinate with community groups such as the CEC or Santa Barbara Channel Keepers to implement volunteer sampling.

2.2.5 Community Clean-ups

Each year in conjunction with Creek Week, PCW sponsors community creek or beach clean-up efforts in a variety of South Coast Watersheds. With funding from the County the Watershed Resource Center (described in MCM #1) sponsors four beach clean-ups each year.

2.2.6 Community Meetings/Forums

Community meetings are held to discuss the direction and focus of PCW, including the definition of problems and ways to address problems as well as emerging issues. These meetings are sometimes video recorded and played back on public access channels throughout the County. In addition, the County sponsors special events such as Creek Week. They celebrate the value of creeks and beaches and call attention to the status and direction of a wide range of community-based programs, but also encourage individuals to become directly involved.

2.2.7 Water Quality Hotline

See discussion under “Public Education & Outreach,” Minimum Control Measure 1. The hotline encourages community members to report water quality problems that they observe. The hotline is promoted on all printed materials and through the PCW web site.

2.2.8 Public Opinion Surveys

See discussion under “Public Education & Outreach,” Minimum Control Measure 1. In 2001 the County completed a public opinion survey to provide the foundation for the public education campaign. The survey gauged public awareness of the causes and consequences of storm water pollution and the willingness to reduce pollution-causing behavior. Another survey will be done in year 5.

2.3 Measurable Goals

Public involvement and participation has been essential to the development and ongoing activities of PCW, ensuring that the program reflects community concerns and priorities while improving creek and ocean water quality. Measurable goals for each BMP are listed below.

BMP: Establish Steering Committee

- Maintain South County Stakeholders Committee at the current level
- Establish stakeholders committee for the Orcutt permit area, in conjunction with other North County permittees, by the end of year 1.
- Document attendance at stakeholder meetings (North and South County).
- Utilize stakeholder committee as the preliminary review team for SWMP annual reports.

BMP: Hold Regular Public Meetings

- Continue meetings of the Stakeholder Committee, alternating north and south County committee meetings bi-monthly.
- Advertise to increase attendance to committee meetings. Contact committee members in person to encourage their participation and to determine what would make the meetings worth attending.
- Organize and facilitate regular working group meetings to engage local agencies and organizations on ongoing mutual issues (e.g., funding, direction of public education efforts and targeted information campaigns, emerging issues).
- Document attendance at stakeholder meetings (North and South County).
- Hold public forums at least once/year on relevant water quality topics.

BMP: Establish Regular Coordination Among Agencies

- Continue quarterly meetings of the Regional Intergovernmental Committee and document attendance and actions.
- Continue to participate in the statewide California Stormwater Quality Association (CASQA) by participating in a minimum of four bimonthly meetings each year.

BMP: Volunteer Water Quality Sampling

- Organize and/or sponsor volunteer water quality sampling events a minimum of twice a year.

BMP: Community Clean-ups

- Sponsor a volunteer creek clean-up each fall, affecting a minimum of four watersheds on the South Coast and one watershed in North County.
- Sponsor four beach clean-ups each year through the South Coast Watershed Resource Center.

BMP: Community Meetings/Forums

- Sponsor at least one public forum on water quality issues each year, rotating among different communities to target specific issues/needs.
- Document the number of participants and issues addressed.

BMP: Water Quality Hotline

See Public Education and Outreach Measurable Goals.

BMP: Public Opinion Surveys

See Public Education and Outreach Measurable Goals.

2.4 Reporting

The data collected for each measure will be compiled and reviewed. Significant variance from targets will be assessed and discussed in the annual report. Measurable goals and BMPs will be adjusted as appropriate; and the basis for any changes will be included in the next annual report. Feedback from stakeholders and other sources will be used to improve implementation of all six minimum control measures.

**Table 2-3
 BMP Implementation: Public Participation**

Year	BMP/Pollutant of Concern	Current Status	Implementation Details	Measurable Goal	Implementing Entity
1	Establish Steering Committee	Ongoing stakeholder meetings are held monthly in South County	Establish North County Stakeholder Committee by advertising and contacting community groups.	<ul style="list-style-type: none"> • Maintain South County Stakeholder Committee • North County Stakeholder Committee meeting bi-monthly by end of year 1. • Stakeholder committees review SWMP annual reports. 	County/regional partners

County of Santa Barbara
 Storm Water Management Program (2006-11)
 For Submittal: December 31, 2005

Year	BMP/Pollutant of Concern	Current Status	Implementation Details	Measurable Goal	Implementing Entity
1 - 5	Regular Public meetings	Ongoing stakeholder meetings are held monthly in South County. Public forums are held semi-annually.	Establish separate City stakeholder committee by advertising and contacting community groups.	<ul style="list-style-type: none"> • Continue meetings of the Stakeholder Committee, alternating north and south County committee meetings bi-monthly. • Advertise to increase attendance to committee meetings. Contact committee members in person to encourage their participation and to determine what would make the meetings worth attending. • Organize and facilitate regular working group meetings to engage local agencies and organizations on ongoing mutual issues (e.g., funding, direction of public education efforts and targeted information campaigns, emerging issues). • Document attendance at stakeholder meetings. • Hold public forums at least once/year on relevant water quality topics. 	County/regional partners
1 - 5	Coordination among agencies	Ongoing	The Intergovernmental Committee meets quarterly, and the California Storm Water Quality Association meets bi-monthly.	<ul style="list-style-type: none"> • Continue to convene/ attend meetings. • Document attendance and actions. 	County/regional partners

County of Santa Barbara
Storm Water Management Program (2006-11)
For Submittal: December 31, 2005

Year	BMP/Pollutant of Concern	Current Status	Implementation Details	Measurable Goal	Implementing Entity
1 - 5	Volunteer water quality sampling	Ongoing	Statewide Snapshot day provides regular volunteer water quality sampling opportunities.	<ul style="list-style-type: none"> Sponsor volunteer sampling a minimum of twice/year 	County
1 - 5	Community Clean-ups (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority organics; Sedimentation/Siltation; Fecal coliform; Total coliform; Heavy metals)	The County sponsors creek clean-ups during Creek Week.	Continue sponsorship of creek clean-ups during Creek Week.	<ul style="list-style-type: none"> Sponsor a volunteer creek clean-up each fall, affecting a minimum of four watersheds. Sponsor four beach clean-ups each year 	County/CEC
1 - 5	Community meetings/forums (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority organics; Sedimentation/Siltation; Fecal coliform; Total coliform; Heavy metals)	Community forums are held on a semi-annual basis.	Community forums will continue and will focus on water quality topics.	<ul style="list-style-type: none"> Sponsor a minimum of one community forum each year. Document issues addressed and number of participants. 	County
1 - 5	Water Quality Hotline	See Public Education and Outreach section			
5	Public Opinion Surveys	See Public Education and Outreach section			

3.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

Responsible Person to Implement or Coordinate this Minimum Control Measure: County Public Works Director.

This minimum measure of the Storm Water Management Program is designed to reduce pollutants in storm water runoff to receiving waters. It requires the development and implementation of a system to identify and eliminate sources of illicit discharge and illegal dumping. As per the General Permit requirements, and also using EPA guidance including the Illicit Discharge Detection and Elimination Guidance Manual for Program Development and Technical Assessments (Center for Watershed Protection, October 2004), the County has developed a program to identify and eliminate illicit discharges throughout the permit area. The program depends on a number of partners including the public, environmental groups, and other local agencies. The specific requirements for this system are described in detail below, followed by a discussion of the existing program, including measurable goals for evaluating effectiveness.

3.1 Minimum Requirements

The General Permit establishes the following minimum requirements under the Illicit Discharge Detection and Elimination minimum control measure:

1. Develop, implement, and enforce a program to detect and eliminate illicit discharges (as defined at 40 CFR §122.26[b][2] into the regulated Small MS4);
2. Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the U.S. that receive discharges from those outfalls;
3. To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the MS4 and implement appropriate enforcement procedures and actions;
4. Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the system that are not authorized by a separate NPDES permit;
5. Inform public employees, businesses, and the general public of the hazards that are generally associated with illegal discharges and improper disposal of waste.

An illicit discharge is defined as “a point source discharge of pollutants to a separate storm drain system which is not composed entirely of storm water and not authorized by an NPDES permit.” Improperly disposed of materials that enter the storm water system can cause health and safety concerns as well as other receiving water impacts. Discharge sources must be controlled and illegal behavior prevented. Controlling and eliminating illicit discharges through a comprehensive detection and abatement program can protect the public health and safety. Prevention can be enhanced through education on the hazards and consequences of illegal disposal, providing alternative disposal options and incentives, and through legal enforcement procedures. (*Fact Sheet 2.5 – Illicit Discharge Control, 01/00*)

Non-storm water discharges may be classified as illicit or exempted. The following discharges may be exempted from being regulated discharges unless they are determined to be a significant source of pollution or a nuisance (see General Permit section D[2][c][6]).

Table 3-1: Discharges Exempted from SWMP Regulation

1. water line flushing;
2. landscape irrigation;
3. diverted stream flows;
4. rising ground waters;
5. uncontaminated ground water infiltration (as defined at 40 CFR §35.2005[20]) to separate storm sewers;
6. uncontaminated pumped ground water;
7. discharges from potable water sources;
8. foundation drains;
9. air conditioning condensation;
10. irrigation water;
11. springs;
12. water from crawl space pumps;
13. footing drains;
14. lawn watering;
15. individual residential car washing;
16. flows from riparian habitats and wetlands; and
17. dechlorinated swimming pool discharges.

Discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the U.S. According to the Central Coast Water Resources Control Board, (letter dated July 8 2005 to Robert Almy Santa Barbara County Water Agency), water line flushing, potable water discharges, uncontaminated pumped ground water, and dechlorinated swimming pool discharges would likely require a waiver or low threat permit from the Central Coast Water Board.

Based on water quality sampling (see Appendix B - Additional Water Quality Measures and www.countyofsb.org/project_cleanwater for more information), creekwalks and the nature of complaints received in the last five years, the County has not identified any of these discharges to be significant contributors of pollution to the County MS4. However, where such discharges are identified by complaints or discoveries as significant contributors of pollution, the County will undertake action to abate the pollution source under existing enforcement authority (See Table 3-2 and Section 3.2.4 below), and/or future ordinance enforcement policies described below in Section 3.2.2.

3.2 Best Management Practices

Generally speaking, BMPs within this MCM fall into 1) physical description of the MS4, 2) regulations to control or prohibit potential pollutants, 3) education and enforcement to assure compliance, and 4) training of staff and business representatives in the most cost effective pollution prevention and control practices. An important dimension of this MCM is coordination among local agencies with complementary regulatory responsibilities. The responsibilities and relationships of other agencies to this Program are also discussed below.

3.2.1 Storm Sewer Mapping

As per 40 CFR 122.34(b)(3)(ii)(A), the County has prepared a storm sewer system map recording the “location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls.” In addition, the map includes surface and subsurface infrastructure in a majority of the permit area, which is not required by law.

The construction of the storm sewer map commenced in 2000 when the existing Flood Control atlas was digitized. Since this atlas had not been updated in 15 years, over 5,000 digital copies of post-1987 as-built road and flood control drawings were opened and reviewed. These were then added to the scanned atlas to create a map showing creeks, some outfalls, and storm sewer facilities where such information was available. The final portion of this phase was to convert the maps from AutoCAD to ArcView. This was done to facilitate the inclusion of the information in the County’s existing Geographic Information System (GIS). The total cost of this phase of the mapping project, completed in late 2001, was over \$69,000.

During annual creekwalks in 2001, Project Clean Water staff mapped all visible outfalls greater than two inches in diameter. This was done for all sections of those creeks within the permit area, as well as some sections outside the permit area. During this cataloging effort, 664 outfalls were recorded along with information such as latitude, longitude, size and material of the pipe and whether water was flowing from the pipe. The approximate cost of this portion of the project was \$5,000.

Another set of data that became available following the 2000-2001 mapping effort was the location (sub-meter accuracy) of most of the drop inlets, manholes, headwalls, and other structures related to water conveyance. The effort to catalog and locate these structures was undertaken by the Roads Division at the County of Santa Barbara in response to General Accounting Standards Board (GASB) Statement 34 requirements.

The County of Santa Barbara attempted to fill in some of the “holes” in the existing data by having another consultant view the inside of pipes with a remotely controlled television camera. Due to the numerous difficulties involved with this technique (e.g., locked manholes, presence of rocks or other debris etc.), only 11,000 feet of pipe were cataloged in Goleta, Isla Vista, and Orcutt, at a cost of almost \$20,000.

In 2002, another consultant was hired to bring together data from the 2000-2001 mapping effort, the 2001 creekwalks, the GASB 34 data and as many of the pre-1987 “as-built” road and flood control drawings that could be opened given the limited budget. The product of this phase of the mapping effort is a map that shows all creeks and streams, all major and most minor outfalls, and many of the storm sewer facilities that connect above-ground runoff with the aforementioned outfalls. The total cost of this phase of the mapping project was just under \$40,000.

Since the 2002 mapping effort, 20 new outfalls have been added to the database as a result of observations during annual creekwalks. There are also many more road and flood control as-built digital files that have not been opened and the information transferred to the storm sewer maps due to insufficient monetary resources. This source of information contains both those projects that existed before the completion of this phase of mapping and those projects completed since. In the future, these data sources will be reviewed and the information contained within shall be added to the existing maps as monetary resources become available.

Electronic and hard copy versions of the current maps are available in the offices of the County Public Works Department, Water Resources Division.

Public Works staff will maintain and update this database as new information is made available, through creekwalks, complaints and discoveries, or new development.

3.2.2 Storm Water Ordinance

In 1999, the County evaluated relevant laws, ordinances and policies that effectively regulate the quality of surface waters through pollution prevention and enforcement against the unpermitted discharge of liquid waste, and illegal disposal of solid waste. Results of this evaluation, conducted by County Counsel and reviewed by an independent Project Clean Water Stakeholder working group, indicated that the current regulations are adequate to protect water quality through the prohibition, enforcement and abatement remedies that they encompass. Although these ordinances have been sufficient to meet storm water protection objectives, some improvements were suggested, including greater enforcement, better public awareness to improve reporting of violations, and better coordination among enforcement agencies. Staff members have worked to improve the effectiveness of enforcement, awareness, and coordination since that time. A re-evaluation of current practices was completed in FY 2003-04 to determine if additional improvements can be made. It was determined that a Storm Water Ordinance would provide additional improvements.

In June 2004, a draft discharge ordinance was circulated for public review following several public workshops. It is expected that the ordinance will be adopted prior to or in any event no later than Year 1. This draft ordinance is based on an evaluation of the scope of existing ordinances, the extent of revisions to the County grading ordinance and the level of success of addressing illicit discharge under existing regulations. Existing regulations were evaluated in the context of the draft storm water ordinance to ensure that they did not conflict, interfere with, duplicate or negate existing law and enforcement by all appropriate County departments. Upon adoption, County will effectively implement and enforce the Storm Water Ordinance to fulfill the requirements of the General Permit.

Additional authority for detection and elimination of illicit dischargers and illegal connections are referenced or described in:

- Adoption of “conditions of approval” for new development projects. Per AB 3180 (PRC 21081.6), the County’s Planning and Development Department has established a program to monitor CEQA mitigation measures adopted as conditions of approval on new development projects. (See Appendices F and G)
- County Grading Ordinance, which includes preparation and implementation of erosion control plans (See Appendix G)
- Comprehensive Plan Elements: recent updates have been primarily in the form of Community Plans for Goleta, Montecito, Summerland, Los Alamos, and Orcutt. The Toro Canyon Plan is complete, and preparation of the Santa Ynez Valley Plan is underway.

Where water quality impacts are anticipated, new developments are required to participate in riparian and/or wetland restoration. Creek restoration plans are included in the County Planning and Development Department’s Standard Conditions and Mitigation Measures. Additionally, water quality issues that may impact storm water issues are addressed in the legal references shown in Table 3-1.

Once the draft ordinance is adopted, the County will evaluate its effectiveness. For example, improved enforcement and better coordination amongst enforcement agencies were identified as areas needing improvement. Therefore, a determination will be made regarding whether additional staff resources are needed for enforcement. Criteria may include ability to achieve measurable goals and community and regulatory agency feedback. Additional funding sources for enforcement, if necessary will be provided to the appropriate departments.

The evaluation will also consider prevention of illicit discharges through other County regulations. For example, an ongoing evaluation of options for a specific septic system maintenance ordinance shall be completed, as discussed in the report prepared by the septic system working group and currently being managed by EHS. Evaluation will include a periodic review and update of the County General Plan policies and the local Coastal Plan policies that address discharges into sensitive receiving waters.

Table 3-2: Legal References

The following legal references may be accessed in a law library or on the internet at the following locations:

Federal laws: <http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-D.htm>
California codes: <http://www.leginfo.ca.gov>
California Code of Regulations: www.calregs.com
County codes: <http://bpc.iserver.net/codes/stbarb/index.htm>

Animal waste

County Code Chapter 17 Solid Waste
County Code Chapter 26 Parks & Recreation
Health and Safety Code §§5410 et.seq.
Water Code §§13000 et.seq.
Fish and Game Code §§5650 et.seq.
Penal Code §§374.3 et.seq.

General dumping of trash

County Code Chapter 17, Solid Waste
County Code Chapter 24 Prohibition of Dumping in Watercourse
Health and Safety Code §§5410 et.seq.
Health and Safety Code §§117550
Water Code §§13000 et seq.
Fish and Game Code §§5650 et seq.
Penal Code §§374.3 et seq.

Liquid discharge from mobile carpet cleaners

County Code Chapter 17, Solid Waste
Health and Safety Code §§5410 et seq.
Water Code §§13000 et seq.
Fish and Game Code §§5650 et seq.
Penal Code §§374.3 et seq.

Dumping of human waste from recreational vehicles

County Code Chapter 17
County Code Chapter 24
County Code Chapter 26 Parks & Recreation
Health and Safety Code §§5410 et seq.
Health and Safety Code §§117550
Water Code §§13000 et seq.
Fish and Game Code §§5650 et seq.
Penal Code §§374.3 et seq.

Dumping of hazardous materials

County Code Chapter 17
Health and Safety Code §§25100 et seq

3.2.3 Education & Outreach

Experience has shown that the most effective action in the elimination and prevention of illicit discharges is the education and cooperation of a concerned public. Education is the primary tool of compliance activities; PCW has developed a number of brochures that address illicit discharges and appropriate actions for eliminating these sources of pollution. The efforts for educating the community about controlling illicit discharges, listed below, are discussed in greater detail in Section 1.0 Public Education and Outreach and are described in Appendix C Project Clean Water Public Education & Outreach Materials.

- Project Clean Water website (www.countyofsb.org/project_cleanwater)
- Water Quality Hotline (1-877-OUR-OCEAN)
- Business outreach
- Restaurant Recognition Program
- Brochures
- Public events
- Media campaigns
- South Coast Watershed Resource Center
- Hazardous Materials Collection Program

In general, illicit discharges occur because of a lack of awareness on the part of the discharger. Often, simply pointing out the error and suggesting BMPs to be used in the future are enough to convince businesses and homeowners to cease discharging, dumping or to eliminate the illegal connection. In most cases the individual responsible can be motivated to do the right thing, and will implement appropriate BMPs. Targeted information brochures have been developed for creek-side residents, owners of domesticated animals, and businesses to educate them on appropriate BMPs to reduce these illegal discharges.

3.2.4 Identification and Elimination of Illicit Discharge Sources

In order to maximize the limited resources available, potential sources of illegal dumping and illicit connections are identified and prioritized based in part on public access and contact to the area (or storm drain), and characterization of nearby land uses as industrial, commercial and older residential areas. In addition, the sources shown in Table 3-3 will be evaluated on an on-going basis for their potential impacts to the storm water quality within county watersheds.

The County's existing program for identification and elimination of illicit discharge sources is comprised of two parts:

1. Spill and Complaint Response
2. Field Investigation and Abatement

These two program elements are discussed in more detail below. EHS, Planning and Development, Flood Control/Water Resources, the Parks Department, the Fire Department, the Sanitary Districts and other agencies are engaged in detection and elimination of illicit discharge activities.

Table 3-3: Potential Illicit Discharge Sources

Accidents <ul style="list-style-type: none"> • Spills of Vehicle Fluids (antifreeze, gas, oil, grease, hydraulic fluids, lubricants) • Glass • Asbestos Brake Fibers 	Illicit Connections <ul style="list-style-type: none"> • Residential • Commercial • Industrial
Auto Dealers	Illegal Dumping <ul style="list-style-type: none"> • Solids • Liquids
Auto Shops	Industrial Cooling Water
Auto - Residential Cleaning	Oil Drips/Fuel Leaks (new/used)
Businesses Washdown	<ul style="list-style-type: none"> • Commercial • Residential • Apartments
Commercial Irrigation	
Construction	
Sediment	Paint
Asphalt Cuttings	Parking Lots
Carpet/Residential Cleaning	Pools and Spas
Cement Washing	Residential
Equipment Cleaning	<ul style="list-style-type: none"> • Gray Water • Hazardous Materials • Pesticides • Fertilizers • Sediments
Food Facility Cleaning <ul style="list-style-type: none"> • Facility Cleaning - gray water • Cooking Equipment - grease, oil and hazardous cleaning agents • Grease Trap • Dumpsters 	RV Waste
	Sewage Spills
Gas Stations/Vehicle Service Stations	Septic Spills
Car Wash	Sumps/Dewatering

Spill and Complaint Response

Complaint response is an important aspect of the illicit discharge discovery and abatement process. Many complaints on water quality issues are received and evaluated by the PCW staff. PCW staff respond directly to complaints that relate to the storm water program; some complaints may fall under the jurisdiction of other county departments or agencies. Referral of these complaints is made to the appropriate agencies with a request to respond to the complainant on the action taken.

The following procedures are used by PCW to address the ongoing identification and abatement of illicit discharges:

- Receive complaint or notice of the spill, discharge or illegal connection. Complaints are often received from other County staff, community groups who are concerned about illicit discharges and/or through the Project Clean Water Hotline at 1-877-OUR-OCEAN. Calls are referred to the appropriate agency for response; the hotline call referral system is outlined in Appendix D.
- Identify the potential source of the discharge.
- Document response and track the spill/discharge to source.
- Use education and enforcement to eliminate the discharge to the storm drain/sewer or ground surface.
- Apply BMPs if applicable to assure on-going compliance.
- Conduct follow-up inspections to assure that discharge has been eliminated.
- Maintain records of response to establish a database, and to identify recurrence patterns.

Field Investigation and Abatement

Field investigations occur on a scheduled basis and are conducted by County staff representing Project Clean Water and the Santa Barbara County Flood Control District. Follow-up on discoveries of illicit discharges is the responsibility of the County or other state official such as Fish and Game or the State Water Resources Control Board, as shown by the legal references in Table 3-2. The following steps outline the County's role in investigating and abating illicit discharges:

- Identify and prioritize areas of potential illicit discharges and/or illegal connections for residential, commercial, and industrial locations based on the criteria described in the paragraphs below.
- Conduct annual creekwalks to identify potential sources.
- Conduct field/manhole/site inspections.
- Verify illicit discharge/illegal connection and identify the source.
- Use education and/or enforcement to eliminate the discharge to the storm drain/sewer or ground surface.
- Apply BMPs if applicable to assure on-going compliance.
- Maintain records of response to establish database and to identify recurrence patterns.

In order to prioritize and focus resources in areas most likely to cause illicit discharges, two programs will be established. The first will address potentially polluting businesses and operations that are not regulated or are not being inspected on a routine basis. The goal of this program will be to remove sources of illicit discharges to the storm drain system. This will include but not be limited to mobile auto detailers. At a minimum, this program will include (1) criteria to prioritize businesses and operations within the permit area that may be a source of illicit discharges, (2) a targeted education and outreach component, (3) a schedule for routine follow-up, and (4) measurable goals for the number of businesses and operations to be inspected. A description of this program will be developed by the end of Year 1.

The second program will address those businesses and operators that have been inspected and were cited or educated about illicit discharges. The goal of this program will be to prevent ongoing recurrence of illicit discharges. At a minimum, this program will include (1) a method to identify those businesses cited or contacted regarding violation of discharge regulations (i.e. Health and Safety Code), (2) follow-up efforts such as a targeted education and outreach component, (3) a record-keeping system to track and schedule follow-up efforts, and (4) measurable goals. A description of this program will be developed by the end of Year 2.

Creekwalks. Since Project Clean Water was founded in 1998, each creek on the south coast that passes through the urban area had been walked from top to bottom each year. Creeks that were walked from 2001 through 2004 by Project Clean Water within the permitted area and by Flood Control District staff, including creeks outside of the permitted area, are shown in Appendix J.

During these creekwalks, Project Clean Water staff recorded the location of homeless encampments, greenwaste dumping, excessive animal excrement and other sites where water quality could be significantly impacted by human activities. Information from these creekwalks was entered into the PCW Geographic Information System (GIS) database for future analysis.

Prior to creekwalks in the 2005 season, staff used the GIS to target the creekwalking effort. Each section of creek was evaluated based on the following questions:

- Is the section located within another city's jurisdiction?
- Is the section located on private property?
- Does the section pass through agricultural property?

Sections of creek where any of these questions were answered positively were removed from the creekwalk rotation. To determine the potential pollution that staff might encounter on future creekwalks, each section was then evaluated based on the following criteria:

- Number of previous discoveries (none → many)
- Creek use (light → heavy)
- Channelization (yes, no)
- Vegetation (light → heavy)

Creeks where many discoveries had been made, where access to the creek was easy, and where vegetation in the channel was light were assigned a more frequent number in the creekwalk rotation.

This targeted approach allows staff to walk creeks in a more efficient manner. Considerably less time will be spent bushwhacking through extremely dense vegetation where the potential for discovery of problem areas is minimal and historically no problems have been found. This will allow staff to visit section of the creek where dumping and pollution occur on a regular basis (e.g., bridges, heavily used access points). The County will inspect these priority areas on an annual basis.

Also, staff from the County of Santa Barbara's Flood Control walk many of these same creeks annually. These staff report potential water quality problems to Project Clean Water staff for follow-up. This two-pronged approach ensures that many of the creeks are walked twice a year, while some sections of difficult to access creeks where water quality problems are not expected and have not been found in the past are walked every two to three years.

Hazardous Material Inspections. The County of Santa Barbara Fire Department currently conducts an inspection program that includes facilities that handle and/or store hazardous materials and wastes. Each facility is inspected on a routine basis for compliance with very stringent hazardous material laws. Included in this inspection is a review of the facility's business plan, general hazardous material and hazardous waste handling and storage operations, procedures, and general housekeeping issues related to strict control of the materials. Hazardous waste complaints, spills and accidents are responded to by the Fire Department. The incident is abated and cleanup assured. Non-compliance issues are handled with the opportunity to correct the violation, education of the persons involved, and progressive enforcement where necessary, including fines and potential incarceration.

NPDES Regulated Facilities. Industrial facilities that hold waste discharge requirements from the RWQCB are inspected by this agency for compliance with their discharge permits. Non-compliance with the facility permit results in an enforcement process that includes correction of the violation, education, fines and potential incarceration in some cases.

Enforcement of existing policies and ordinances is crucial to the effort of maintaining water quality in the creeks and oceans. PCW has established a "single point" system for reporting water quality problems, tracking follow-up, and ensuring enforcement of water quality policies/ordinances. These efforts include a water quality reporting hotline (1-877-OUR-OCEAN), coordination among various enforcement agencies and personnel, and increased report follow-up.

The initial approach to prevention and elimination is education on what the pollution source is, what effects it has on our watershed and how the problem may be eliminated through BMPs. When necessary, education can be used in combination with legal enforcement to achieve elimination of the illicit discharge.

In addition to complaints, the scheduled creekwalks conducted in each watershed identify places where solid waste has been discarded into the creek or along the creek banks. To address these issues, letters and informational brochures are sent to property owners whose parcels are clearly identified as a source of contamination. For example, if a large pile of greenwaste is seen directly on the creek bank behind a home, a letter would be sent to the owner of that parcel explaining the impacts greenwaste has on water quality and outlining alternative methods of disposal or composting of greenwaste. Brochures, such as “Gardener’s Guide to Clean Water”, “Creekside Concerns”, “A Dog-Owner’s Duty”, and “Helpful Hints for Horse Owners” are included in the letter as appropriate.

Educating the general public, business owners, industries, school children, teachers, and regulatory personnel on the hazards associated with illegal discharges and improper disposal of waste is being accomplished in a number of ways. A detailed discussion on storm water educational outreach and participation is provided in Sections 1.0 and 2.0 of this document.

County Department Roles and Responsibilities. Activities to identify and eliminate illicit discharges are summarized by department below:

Project Clean Water: PCW staff respond to complaints regarding water quality throughout the year. Response occurs within 24 hours of notification. Complaints range from illegal dumping of trash, horse manure and greenwaste in the creeks, to the illegal disposal of liquid waste from RVs, mobile carpet cleaners, and disposal of washwater.

Complaint response may be the responsibility of another agency (i.e. California Department Fish and Game, California Water Resources Control Board) or may require the cooperation of many agencies. Callers are not always aware of the unincorporated area boundaries or of the agency responsible for follow-up, so a call referral system has been established so that calls can be efficiently redirected to the correct agency.

County Environmental Health Services (EHS): Another program that abates illicit discharge violations is the EHS Community Health Program. District Specialists perform routine annual inspections and complaint investigations at all retail food facilities, as authorized by Health & Safety Code Section 113725 and County Health & Sanitation Code Chapter 18. EHS has expanded their normal inspection techniques (such as time and temperature controls for perishable foods) to include storm water management activities. For example, it is a violation to wash restaurant floor mats or dispose of washwater outside where it would discharge into the storm drain system.

Annual inspections are performed at all licensed facilities, which represents approximately 1789 facilities Countywide. (Any facility that sells or gives away food products is regulated by the County.) Most facilities are inspected more than once due to follow-up site visits where violations are noted, or due to complaints directed to EHS. Where violations occur, either a verbal or written notice of correction is provided and a reinspection occurs within 24 hours or up to two weeks, depending on the nature of violation. Notices of violation may also be issued for repeat offenders. Actions can include but are not limited to clean-up and abatement, misdemeanor penalties (up to \$1,000 per day), revocation of their health permit, or imprisonment of not more than 6 months in jail. Pertinent regulatory authority over unauthorized discharges is defined in Health & Safety Code Sections 5411, 114035, 114100, and 114165.

Due to increased public awareness, EHS has received a greater number of complaints associated with unlawful discharges from permitted food facilities. Illegal activities include floor mat and floor wash-down discharge to storm drains. EHS responds to each complaint and takes appropriate enforcement action. The appropriate Health and Safety Code authority is cited for each violation and abatement obtained.

EHS has also cooperated with the staff of PCW and the Cities of Santa Barbara, Goleta and Carpinteria to create an outreach and recognition program for restaurants that have established good operational practices to prevent the discharge of liquid waste off-site and into storm drains. This program is described in Section 1.0 Public Education and Outreach.

Furthermore, EHS commissioned the Septic System Sanitary Survey in 2001. This effort is described in greater detail in Appendix B Additional Water Quality Measures.

EHS Liquid Waste Program: This program investigates and abates liquid waste discharge violations. Illegal and/or illicit discharges of liquid waste onto the ground surface and/or into the storm drain collection system may be the result of discharges from faulty sewer laterals, leaking sewer mains or failing septic systems. Correction notices are issued to owners of deficient septic systems, requiring them to make repairs or upgrades as necessary to meet current septic system sanitary standards. Inspections to ensure remediation of the problem may be made by EHS and/or Planning and Development's Building & Safety staff.

In an effort to prevent illicit discharges from faulty septic systems, in April 1999, EHS revised Chapter 29 of the County Code to include mandatory reporting of septic system servicing and inspection. This ongoing reporting system of voluntary septic system servicing reveals operational problems in existing septic systems. These systems are required to make repairs or modifications to meet minimum operational sanitary standards. EHS has regulatory authority over individual septic systems, including the authority to require repairs, modification or replacement.

EHS Authority from County Code
CHAPTER 29 SEWERS, Article II. On-Site Sewage Disposal Systems
Sec. 29-7. Definitions. Unless the context requires otherwise, the definitions set forth in this section shall govern the construction of this article.
(b) "Administrative authority" means the director the environmental health services division of the Santa Barbara County public health department, or a duly authorized representative

Concurrent with the efforts described above, EHS is supporting the efforts of several local community groups (e.g., Heal the Ocean, CURE, etc.) to provide incentives to parcel owners using septic systems in problem areas to convert their systems to sanitary sewer (See also the discussion of sanitary district programs in Section 3.2.5).

County Fire Department: As of December 31, 1996, Cal-EPA certified the Santa Barbara County Fire Department as the designated Certified Unified Program Agency (CUPA) for Santa Barbara County. As such, the CUPA is responsible for the administration of hazardous materials and hazardous waste programs consolidated under one agency within Santa Barbara County (see County Code Table 3-4). The Santa Barbara County Fire Department has organized these duties under the Fire Prevention Division. Other Fire agencies, in Santa Barbara County, act as Participating Agencies. The Fire Prevention Division oversees and regulates those businesses associated with the programs mentioned below, while the Participating Agencies oversee inspections of business that fall within the Business Plan Program within their own Fire jurisdictions.

The CUPA programs organized in the Fire Prevention Division include the following:

- Hazardous Materials Inventory and Business Plan Program
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment (Tiered Permitting) Programs
- Underground Storage Tank Program (UST)
- Above Ground Storage Tank, Spill Prevention Control & Countermeasure Plan (AST / SPCC) Program
- California Accidental Release Program (Cal-ARP)
- Leaking Underground Fuel Tank (LUFT) Program
- Site Mitigation Unit (SMU) Program.

As the designated CUPA, the Fire Department's Fire Prevention Division is responsible for inspecting facilities and monitoring their compliance with hazardous materials regulations for best management storage practices and spill response. If necessary, the CUPA proceeds with enforcement activities to gain compliance as needed (see below).

Fire Prevention Division also responds to all hazardous materials complaints and emergency responses for spills throughout the county. For example, if Project Clean Water staff receive a complaint (e.g. from the hotline), and initial inspection indicates a potential for hazardous materials, staff would redirect response to Fire Prevention for follow-up.

Businesses that handle amounts of hazardous materials equal to or greater than the regulated threshold quantities must submit annual hazardous materials Business Plan updates with inventory information to Fire Prevention Division. Hazardous Material / Waste Generators, UST, and AST/SPCC facilities are required to obtain permits and are inspected to ensure their compliance with the pertinent hazardous materials programs. Permit conditions typically require:

- Employee training;
- Appropriate handling, storage, and disposal; and
- Reporting of hazardous materials and wastes including plans for the containment of spills and the procedures to be followed in the event of a spill.

The Cal-ARP Program is intended to prevent the release of toxic or flammable/explosive materials that could cause harm to the public or the environment, and to ensure there are proper mitigation measures in place should a release occur. A facility that utilizes over a specified threshold quantity of one of these regulated substances may be required to prepare a Risk Management Plan. The County Fire Department is responsible for inspection of Cal-ARP facilities and the review, approval, and enforcement of the Risk Management Plan.

When chemical/waste releases are found during inspections, inspectors direct facility operators to stop illegal waste/hazardous waste discharges, to legally clean up affected areas, and to prevent future discharges of wastes. Inspectors also refer releases, when appropriate, to the SMU/LUFT section and to other agencies as appropriate.

Fire first responders and the hazardous materials response team may make a spill response depending on the hazard level and severity of the spill. Emphasis is made on containment and cleanup with public health and safety as the foremost consideration in an environmentally sensitive manner.

Another program under Fire Prevention Division is the Site Mitigation Unit (SMU) Program. This program provides oversight for the assessment and remediation of hazardous materials releases that are not associated with underground storage tanks, including all other types of hazardous materials spills. Fire Prevention Division follows guidance and works closely with other agencies including the State Water Resources Control Board, the Regional Water Quality Control Board, the Department of Toxic Substances and Control, and the County Planning Department, that have oversight responsibility concerning assessment and remediation of each site. Thus, while Fire Prevention Division inspects the sites, if potential contaminants to storm water runoff are identified, it may issue immediate notices to correct and refer the incident to other agencies as appropriate.

California Department of Toxic Substances Control has concurrent authority to bring administrative action for hazardous material/waste violations. For minor violations, the first step in enforcement is to instruct the violator to remedy the violation. If the violator does not immediately do so, Fire Prevention Division would issue the violator a Notice to Comply. If the violator comes into compliance within thirty days and sends the agency certification of compliance, there is no further enforcement action. The statute does not diminish in any way the enforcement agency authorities to penalize or enjoin violations that are not minor violations. Provisions relating to minor violations of water quality requirements are codified in State Water Code §§ 13399-13399.3. Specific limitations in the statutes for all three programs circumscribe the scope of the minor violation and give broad discretion to state and local agencies to enforce hazardous waste and water quality requirements.

County Parks Department: The Mutt Mitt program consists of providing pet waste disposal bags at various County parks and open spaces for use by the public. This program has been successful in reducing pet waste pollution. The County evaluates new stations and more visible signage at various county parks and trails as needs are identified. Over 117,000 Mutt Mitts were distributed at County parks in the first year of the program. The Parks Department facilities and operations are discussed in Section 6.0 Pollution Prevention/Good Housekeeping.

Table 3-4: CHAPTER 15 FIRE PREVENTION Article VII. Fire Department Administration of Hazardous Materials/Wastes Laws

<p>Sec. 15-128. Successor of authority.</p> <p>(a) The fire department succeeds to and is vested with the duties, purposes, responsibilities and jurisdiction, imposed by law or contract or memoranda, heretofore exercised by environmental health services, health officers, local health officers or county health departments as defined in state law and the Santa Barbara County Code and ordinances as they relate to hazardous materials, hazardous substances and hazardous wastes, including, but not limited to, the following state laws, together with their implementing regulations, and the following provisions of the Santa Barbara County Code and ordinances:</p> <p>(1) Chapter 6.95 (Hazardous Materials Release Response Plans and Inventory), §§ 25500 et seq., of division 20 of the Health and Safety Code;</p> <p>(2) Chapter 6.7 (Underground Storage of Hazardous Substances), §§ 25280 et seq., of division 20 of the Health and Safety Code;</p> <p>(3) Chapter 6.75 (Petroleum Underground Storage Tank Cleanup), §§ 25299.10 et seq., of division 20 of the Health and Safety Code;</p> <p>(4) Chapter 6.5 (Hazardous Waste Control), §§ 25100 et seq., of division 20 of the Health and Safety Code;</p>	<p>(5) Chapter 6.11 (Unified Hazardous Waste and Hazardous Materials Regulatory Program), §§ 25404 et seq., of division 20 of the Health and Safety Code;</p> <p>(6) Chapter 6.65 (Unified Review of Hazardous Materials Release Sites), §§ 25260 et seq., of division 20 of the Health and Safety Code;</p> <p>(7) Chapter 6.67 (Aboveground Storage of Petroleum), §§ 25270 et seq., of division 20 of the Health and Safety Code;</p> <p>(8) Chapter 6.8 (Hazardous Substance Account), §§ 25300 et seq., of division 20 of the Health and Safety Code;</p> <p>(9) Article III (Hazardous Materials Storage Ordinance), §§ 18-21 et seq., of chapter 18 of the Santa Barbara County Code;</p> <p>(10) Article IV (Hazardous Waste Generator Ordinance), §§ 18-30 et seq., of chapter 18 of the Santa Barbara County Code; and</p> <p>(11) Article VI (Reporting Requirements), §§ 18-41 et seq., of chapter 18 of the Santa Barbara County Code.</p> <p>(b) Chapter 6.6 (Safe Drinking Water and Toxic Enforcement Act of 1986), §§ 25249.5 et seq., of division 20 of the Health and Safety Code; and article VII (Monitoring), §§ 18-49 et seq., of chapter 18 of the Santa Barbara County Code, are excluded and excepted from the transfer of authority of hazardous materials, substances, and wastes laws and regulations to the fire department. (Ord. No. 4215, § 1; Ord. No. 4494)</p>
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3.2.5 Sanitary District Programs

Co-operation with other concerned agencies to detect and eliminate illicit discharges and illegal connections enhances the effectiveness of illicit discharge control. Districts that serve unincorporated areas are essential partners in the County's NPDES SWMP. County staff coordinates closely with local sanitary districts on such issues as:

- Illicit discharge detection
- Regional water quality monitoring
- Incentives for septic to sewer conversions
- Geographical Information System data sharing

In an effort to further improve water quality and public health, each district has policies providing for conversion of parcels served by septic systems to those served by the sanitary sewer. Such policies include the annexation of areas outside their service districts.

Goleta West Sanitary District

The Sanitary District Act of 1923 gives the District broad powers for sewage and storm water systems collection and disposal within the District. The District has maintained programs to protect storm water quality, including a street sweeping program, since 1961. The District has become involved with Project Clean Water in order to support the County and City of Goleta in their long term NPDES Phase II Permit activities. Some areas in which the District has agreed to work with PCW include:

- Determining whether existing street sweeping programs can be improved to maximize water quality benefits;
- Locating and reporting illicit connections to the storm drain system;
- Continuing the District's municipal BMPs (maintain good housekeeping practices and eliminate potential District sources of pollution and contamination of the creeks and ocean);
- Continuing the District's Collection System Maintenance program to locate and seal leaking pipes; eliminating cross-connection locations, locating and eliminating illegal connections to the storm water systems; and
- Continuing to develop a program for public involvement, building upon the work established by PCW to eliminate illicit discharges and illegal connections.

Goleta Sanitary District

Rapid growth in the Goleta Valley since 1965 required an expansion of the treatment plant which now serves 25 times the number of people it served when it was founded. The Goleta Sanitary District treatment facilities are utilized by four public agencies: Goleta West Sanitary District, University of California at Santa Barbara, City of Santa Barbara Municipal Airport, and certain facilities of Santa Barbara County. The District's collection system serves the Airport, eastern portion of the City of Goleta and the unincorporated area between the cities of Santa Barbara and Goleta.

The Goleta Sanitary District utilizes a number of new technological tools to facilitate an ongoing maintenance program for the District's sewer system. This program reduces the potential for domestic and industrial waste to be discharged to creeks, storm drains, and groundwater. Goleta Sanitary District also employs procedures designed to discover illicit discharges and illegal connections to the storm sewer system. These include:

- Good housekeeping and preventive maintenance of facility equipment and machinery to capture and prevent spills and discharges;
- Smoke testing of the District's sewer system. Smoke testing is used to detect interconnections (cross connections), and leaks between the sewer system and the storm drain system, groundwater, and creeks. The District also performs smoke testing to detect illicit storm drain connections to the sewer, including residential rain gutters and other hard piped connections directing surface runoff to the sewer. Diverting storm water discharge away from the sewer prevents sewer overflows to storm drains and creeks in wet weather conditions;
- Closed circuit television video of sewer lines is part of the ongoing program to assess the condition of the sewer lines. As part of the maintenance program, the District can prioritize problem areas and detect and fix leaks, plugs, root balls, oil and grease buildup, and replace aging sewer lines;
- Use of a Geographic Information System (GIS). Goleta Sanitary District closely monitors the sewer system using a computerized database and mapping GIS. The GIS contains data on location, age, size and construction of the pipelines and is used to develop maintenance plans for the 127-mile pipeline system to treat problematic areas on a priority basis. Preventive maintenance reduces spills and accidental breaks and thus reduces discharges to the storm water system; and
- Development of public education programs. The District holds workshops for contractors, plumbers, engineers, other industrial and professional groups and classes for young people to teach them about the hazards of illicit discharges and illegal connections.

Laguna County Sanitary District

The County of Santa Barbara Solid Waste & Utility Division's largest utility responsibility is the Laguna County Sanitation District, which operates a wastewater treatment plant serving the unincorporated community of Orcutt and portions of southern Santa Maria. The plant is located at the end of Dutard Road west of Black Road. The District serves approximately 11,700 connections and collects, treats and disposes of 2.4 million gallons of wastewater per day. Wastewater is generated primarily from domestic sources with minor contributions from commercial establishments but does not include storm water collection. The District maintains one pump station and 155 miles of collection sewers. All of the water is recycled and used for irrigation purposes on over 620 acres of pasture land.

To meet Central Coast Basin Plan requirements and permit conditions as well as to broaden disposal alternatives, the District has initiated several improvements. The proposed improvements include new treatment processes to improve effluent quality to tertiary levels. Technologies such as reverse osmosis to remove dissolved solids, ultrafiltration and ultraviolet disinfection are employed. Because water is a precious commodity, the effluent is distributed and sold as recycled water for landscape irrigation.

The District conducts routine flushing of the entire collection system every two years. In addition, maintenance is provided on a regular basis for older portions of the system. Pipeline video inspection is done routinely to further assess the system's condition. Known trouble spots are then identified for repair. At this time, the District has only a few minor industrial discharges and does maintain a set of requirements for pretreatment for these facilities.

Because this District is a part of the County, operations at the facility have been evaluated under municipal operations (see Section 6.0). Therefore, BMP implementation, reporting, and record keeping will be consistent with all County departments, as described in Section 6.0.

Carpinteria Sanitary District

Carpinteria Sanitary District began handling liquid waste in their district in 1929. Today the District covers approximately 2.4 square miles with 39.5 miles of sewer lines that carry 620,000,000 gallons of wastewater for treatment each year in the Carpinteria City area. The District serves 580 businesses and three industrial facilities.

PCW has been coordinating with and supporting the Carpinteria Sanitary District as it seeks to fund septic system to sewer conversion projects. By converting from septic to sewer, potential discharges from poorly functioning septic systems will be eliminated.

In order to discover potential illegal connections, the Carpinteria Sanitary District investigates complaints, referrals, and suspicious drain connections, and conducts smoke testing of the sewer lines. Line maintenance is scheduled by a computerized system and lines are also inspected in their closed circuit television (CCTV) inspection program.

The District also issues permits to grease generators and conducts annual inspection of these generators, the majority of which utilize grease traps. The District also monitors the cleanout process for grease interceptors.

Employee education is conducted regularly through in-house training, association conferences, and training seminars.

Santa Ynez Community Services District

The Santa Ynez Sanitary District has provided sanitary sewer collection, treatment and disposal services to the community since 1979. The District primarily serves residential customers but includes 60 businesses and no industrial facilities. Approximately 103 million gallons of wastewater are treated each year by the District.

The District ensures that wastewater is collected and retained in the system by conducting ongoing routine inspection of manholes, sewer lines, pump stations, generators, filters and other components of the system. The lines are checked in the early morning (1-3 a.m.) to check for infiltration and intrusion. Filters are changed out regularly, the stations are cleaned and the alarm systems are checked and/or tested. Backup generators are also exercised to ensure that they will be ready in case of an emergency. All maintenance activities are conducted to ensure that no surface runoff occurs and wastewater is discharged back into the sewer system.

The District also evaluates the integrity of the sewer lines by running a television camera through them and flushing them periodically. In order to detect illicit discharges, smoke testing is conducted and wastewater flow volume is monitored. Unusually high flows in wet weather conditions are investigated to determine the cause and abated when necessary.

All grease traps in the District are inspected every two months or more often if there are problems. Facilities with grease traps are required to submit maintenance schedules and proof of service. Regular inspection of the lines is conducted and "hot spots" are identified for extra monitoring frequency. During inspections, if graywater is noted, County of Santa Barbara, EHS is contacted and a referral of the problem is made. Commercial businesses that use exchange system water softeners are also checked by the District for proper hookup and operation.

Spill response is covered by all operations staff on a rotational basis and the District Manager receives the pump station alarms. Appropriate agencies are notified promptly if there is a spill and a report is dispatched to them. Spills are contained and cleaned using a vacuum truck followed by thorough disinfection of the affected area.

Community support and involvement in keeping the environment free of wastewater is important to the District. Educational materials are provided to septic system owners to help them understand and care for their systems. Homeowners may also obtain information on the care of water softeners. Business operators are provided with information on why a grease trap is required, and the maintenance requirements to avoid sewage backups.

Montecito Sanitary District

The Montecito Sanitary District provides sanitary sewer collection, treatment and disposal services to approximately 9,500 people in the unincorporated Montecito area of the County. The District primarily serves residential customers, approximately 54 businesses, and no industrial customers.

The District boundary includes approximately 448 properties that are currently on septic systems with no sewer mains in the near vicinity. Additionally, there are approximately 99 properties that have chosen to remain on septic systems, even though sanitary sewer service is available. The District has not mandated property connection to the sanitary sewer system. Throughout 2000 and ending in 2001, the District offered a reduced sewer connection fee, as an incentive to encourage people to convert from septic to sewer. By converting from septic to sewer, potential illicit discharges from poorly functioning septic systems are eliminated. Although reduced connection fees are no longer available, the District Board approved a Septic Tank Abandonment Program that provides limited funding to sewer main extension projects.

Routine maintenance programs have been initiated to prevent potential sewer spills. These maintenance activities are performed by highly qualified staff that is on call 24 hours a day, every day of the year, to respond to sewer complaints, concerns or emergencies. Routine maintenance activities include regular cleaning of the collection system, in addition to the following:

- Good housekeeping and preventive maintenance of facility equipment and machinery to prevent and capture spills and discharges;
- Smoke testing of the sewer collection system. Smoke testing is used to detect undesirable interconnections and leaks between the sewer system and the storm drain system, groundwater and creeks. Smoke testing may also detect illicit storm drain connections to the sewer, such as rain gutters and other hard piped connections conveying storm water into the sewer. Such connections increase the flows in the sewer during rain events and may cause sewer overflows that can pollute creeks and the ocean; and
- Closed circuit television video of sewer lines is utilized to assess the condition of the sewer collection system pipes. The District prioritizes the problem areas to take appropriate actions such as removing root balls, grease and oil buildup, and rehabilitating or replacing deteriorated pipes.

The District has contracted for an Infiltration and Inflow Investigation of the sewer system that drains to the District's largest sewer lift station. This lift station receives increased flow during rain events from an unknown source.

The Fat, Grease and Oil Program provides outreach to all of the restaurants and institutional kitchens within the District including training of the kitchen staff in the proper procedures for disposing of food waste, grease and oil. District staff tracks the facility's grease interceptors and grease traps pumping schedule as well as conducts routine inspections of the cleaning operations. Additionally, random sampling and testing of the interceptors/traps discharge are performed to ensure that it falls below the required limit of 100 mg/l.

A GIS is currently being developed by the District. The automated map will be linked to a computerized databases containing information pertinent to the collection system. The GIS will contain data on the location, age, size and material type of the pipelines within the District. The information will also be used to create preventative maintenance programs to reduce spills and breaks.

Employee education is conducted regularly through in-house training, association conferences, and training seminars. Public outreach programs include community and school involvement, and plant tours that are tailored to meet the needs and interests of all age groups.

Summerland Sanitary District

The Summerland Sanitary District was established in 1957 to meet the sewage treatment needs of the surrounding population. Currently the District is comprised of 20 miles of sewer line which carries 2.4 million gallons of wastewater for treatment at the District facility. The District includes residences and 10 businesses, but no industries in its service area.

A grease trap monitoring program has been put in place to help area businesses avoid problems with grease that is generated in those businesses. This proactive measure helps the District maintain the lines free of clogs and backups caused by grease buildup in the system, thus helping to eliminate surface pollution. A Source Control Program is also utilized by the District to help promote approved sewerage disposal. These programs also assist the District in minimizing plant upsets and "down" time caused by impairment of the waste digestion process

Additionally the District uses liquid smoke flushed into the system lines to detect broken lines and potential illegal cross connections and illicit hookups. A video camera is used within the system lines to also detect and locate line breaks, line blockages and areas where the line may need to be replaced. The District responds to complaints and will place a composite sampler at a site that is implicated. This sampler enables the District to assess the wastewater composition and determine if there is an illicit discharge coming from the location. If an illicit discharge is discovered, the District takes action to immediately halt the violation.

The Summerland Sanitary District provides educational opportunities to its customers to learn how the plant and system works and why it is necessary for every individual to do their part in promoting the safe and efficient operation of the sewer system. These educational outreaches include visits to the local schools to invite involvement of the students in learning about the plant and how sewage is managed for them. Tours of the plant are also offered to heighten the experience for the students and the public.

Training is a part of the ongoing maintenance of the District. District staff is trained to respond immediately to emergencies in a safe and effective manner. This minimizes any adverse affect that an accident may have on the environment and safeguards the health of the public in the vicinity.

Vandenberg Village Community Services District

The District started operation of its wastewater collection activities in December 1988. It operates 23 miles of wastewater collection system, covering over 6 square miles, with four pumping lift stations. The Village's annual discharge of approximately 180 million gallons of wastewater is treated at the City of Lompoc's Regional Reclamation Plant and includes wastewater collection for residences, 40 businesses and no industrial facilities.

The District has ordinances to cover programs such as cross-connection control and backflow prevention, commercial and restaurant grease and toxic substance control, system maintenance, (i.e. methods of detection of line failure), preventative maintenance activities, and annual line replacement rate schedules.

The District conducts an on-going scheduled maintenance and inspection program for sewer collectors, manholes, and lift stations. Their preventative maintenance program is supported by scheduled sewer line cleaning with a high pressure jetter, video camera inspections on a recurring basis, and repairs as needed when identified by inspection. The "Inflow and Infiltration Report" is annually reviewed and updated. Past reports conclude that the collection system and lift stations are in excellent condition. Only one line in the last ten years was identified as failing and it was replaced with a new line in 1996. One line with root infestation was identified in 2001 to be replaced and it is scheduled for replacement in 2003.

An up-to-date sewage spill and response plan that provides procedures for containment, treatment, cleanup, disposal, disinfection, and notification of agencies and the public, and safety procedures for District personnel is utilized. Also, the District implements a "Commercial and Restaurant Grease and Toxic Substance Control Program" which provides for quarterly inspection and reporting of commercial establishments' compliance with District Ordinances. Educational outreach to individual commercial facilities is conducted during each quarterly inspection.

The District area is overseen by service personnel on a daily basis. They are alert to any unusual activities that may affect the wastewater collection or wastewater operations of the District. Inspections are made daily at all pump stations, and collectors, and manholes are inspected on a scheduled basis. Effluent quality and constituents are monitored by the regional treatment plant daily, and are reported to the District monthly. The District invested in prevention by providing lockable man-hole covers to prevent vandalism at locations susceptible to vandals. This has prevented blockages and overflows from these areas. Additionally, the District initiated a project that raised manhole elevations in areas susceptible to storm flows in order to prevent inflows or spills from storm water mixing with wastewater. The District's sewer facilities are maintained in top condition so that accidental spills/overflows do not occur.

Employee education and public outreach materials are used to encourage participation by the community in safe wastewater disposal, which helps to eliminate illicit discharges. Onsite and operational BMPs to protect surface water quality are also being utilized by the District. These include equipment maintenance protocols, cover materials, containment of waste to eliminate site surface runoff and review of operations to improve site storm water management where possible.

3.3 Measurable Goals

The following measurable goals for BMPs have been selected to ensure that illicit discharges are detected, eliminated and prevented:

BMP: Storm Sewer Mapping

- Completed insofar as meeting minimum requirements of showing the location of all outfalls and the names and locations of all waters of the U.S. that receive discharges from those outfalls.
- Provide ongoing database maintenance and revise as new information becomes available or mistakes are identified. List revisions made in each annual report.
- Make PDF files available on Project Clean Water website by year 1.

BMP: Storm Water Ordinance

- Adopt and enforce storm water ordinance (year 1).
- Evaluate effectiveness of Storm Water Ordinance based on enforcement activities and abatement results. Make recommendations for improvement where inadequacies are identified; provide schedule or timetable to implement improvements (year 2).

BMP: Education & Outreach

- Document number of brochures and alternative information sources distributed, website hits, and number of people attending public events (see Section 1.0).
- Reach 15% of permit area annually (see Section 1.0).
- Document number of graduates from Green Gardener Certification Program (see Section 1.0).
- Document number of commercial/business/industrial training workshops and number of attendees.
- Provide Mutt Mitts for proper pet waste disposal.
- Continue implementation and provide an annual summary of County Resource Recovery and Waste Management Division's existing recycling programs and household hazardous waste collection program (See Section 6.2.7 Solid Waste Handling and Recycling) (years 1-5).

BMP: Spill & Complaint Response

- Respond to complaints of illicit/illegal discharge within 24 business hours of receiving the complaint, referral or notice.
- Document response to complaints, notices and referrals received.
- Respond to 100% of calls to PCW staff within 24 hours. Complaints outside direct County jurisdiction are forwarded to appropriate regulatory agency responsible for elimination of illegal discharges. Where the County of Santa Barbara has enforcement authority (i.e., Planning and Development, Solid Waste, Fire Department), County will respond directly and identify and control or eliminate illicit discharges.

BMP: Commercial/Industrial Facility Inspections

- The Fire Department is responsible for inspecting sites and monitoring their compliance with hazardous materials best management storage practices and spill response. Fire Department shall continue to inspect and monitor all regulated commercial and industrial facilities that use, store, or generate hazardous materials/wastes. Reporting, recordkeeping, and referrals shall continue as directed under the current regulatory programs with designated state and local agencies.
- County Environmental Health Department is responsible for inspecting all facilities that sell or give away food. Routine inspections are conducted annually with frequent follow-up and enforcement, based upon complaints or violations. Reporting, record-keeping, and complaint response will continue under the current regulatory programs.

BMP: Illicit Discharge Field Investigation & Abatement

- Inspect targeted creeks within the County permit area twice annually with follow-up inspections as appropriate to ensure abatement of violations.
- Ensure conversion of failing septic systems to sewer when the system is within 200 feet of an approved sewer system, as determined by EHS.
- Take action to abate deficiencies that are identified on septic system pumper reports.
- Eliminate 100% of all other illicit discharges reported to or discovered by County staff.

3.4 Reporting

The data collected for each BMP will be compiled, reviewed and reported in annual reports. Significant variance from targets will be assessed and discussed in annual reports. Measurable goals will be adjusted as appropriate; the basis for any changes will be included in the next annual report. Feedback from stakeholders and other sources will be used to improve implementation of all six minimum control measures.

**Table 3-4
 BMP Implementation: Illicit Discharge Detection and Elimination**

Year	BMP/(POC)	Current Status	Implementation Details	Measurable Goal	Implementing Entity
1-5	Storm Sewer Mapping (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Fecal coliform; Total coliform; Heavy metals)	Minimum requirements of storm sewer system have been mapped and surveyed by County Water Resources Division.	Utilize maps to track sources of illicit discharges.	<ul style="list-style-type: none"> • Provide ongoing database maintenance and list all revisions in annual report. (years 1-5) • Make PDF files available by year 1 	County Public Works
1-2	Storm Water Ordinance (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Fecal coliform; Total coliform; Heavy metals)	Draft ordinance in circulation.	Comments or suggestions on draft ordinance will be reviewed by Project Clean Water staff.	<ul style="list-style-type: none"> • Adopt and enforce ordinance by the end of year 1. • Evaluate effectiveness of Storm Water Ordinance based on enforcement activities and abatement results. Make recommendations for improvement where inadequacies are identified; provide schedule or timetable to implement improvements (year 2). 	County Public Works
2-5	Storm Water Ordinance (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Fecal coliform; Total coliform; Heavy metals)	Draft ordinance in circulation	Annual report will include enforcement activities and follow-up abatement results. Where inadequacies are identified, recommendations will be made with a schedule for implementation.	<ul style="list-style-type: none"> • Evaluate effectiveness annually (years 2-5). • Recommend improvements and rectify inadequacies as appropriate (years 2-5) 	County Public Works

County of Santa Barbara
Storm Water Management Program (2006-11)
For Submittal: December 31, 2005

Year	BMP/(POC)	Current Status	Implementation Details	Measurable Goal	Implementing Entity
1 - 5	E ducation & Outreach (see Section 1.0 Public Outreach & Education) (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Fecal coliform; Total coliform; Heavy metals)	Brochures and posters are available in Spanish and English, and web site is established. Mutt mitt program in effect at County Parks and other open spaces. Recycling and collection program in effect.	Brochures provide info on how community members can prevent storm water pollution. Other outreach includes misc. alternative info sources, website, and public events.	<ul style="list-style-type: none"> • Compile number of brochures and alternative information sources distributed, website hits, number of people attending public events (years 1-5). • Reach 15% of permit area annually (years 1-5). • Continue implementation and provide an annual summary of County Resource Recovery and Waste Management Division's existing recycling programs and household hazardous waste collection program (years 1-5). 	County Public Works; Parks
1 - 5	Green Gardener Certification Program (see Section 1.0 Public Outreach & Education) (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Fecal coliform; Total coliform; Heavy metals)	Over 500 gardeners trained to date, annual training in Spanish and English.	Continuation of program is contingent upon grant funding.	<ul style="list-style-type: none"> • Train 100 gardeners annually. • Complete pilot water quality study • Obtain 25 customer surveys annually. • Seek additional grant funding. • Document number of graduates from Green Gardener Certification Program (years 1-5). 	County Public Works/ program partners
1 - 5	Business Outreach (see Section 1.0 Public Outreach & Education) (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Fecal coliform; Total coliform; Heavy metals)	Program focuses on restaurants, automotive services, mobile cleaners, and construction trades.	Written materials and posters are distributed to businesses, during complaint response, and at events. A Restaurant Recognition Award is presented quarterly.	<ul style="list-style-type: none"> • Compile number of materials distributed annually. • Document number of commercial/business/industrial training workshops and number of attendees (years 1-5). 	County Public Works
1 - 5	Mutt Mitts (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Fecal coliform; Total coliform; Heavy metals)	The Parks and Public Works Depts. Provide mutt mitts at County parks and open spaces.	Continue to provide mutt mitts at County parks and open spaces.	<ul style="list-style-type: none"> • Continue distribution of mutt mitts (years 1-5). • Document number of mutt mitts distributed annually at County parks and open spaces (years 1-5). 	County Parks and Public Works

County of Santa Barbara
Storm Water Management Program (2006-11)
For Submittal: December 31, 2005

Year	BMP/(POC)	Current Status	Implementation Details	Measurable Goal	Implementing Entity
1 - 5	Spill & Complaint Response (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Fecal coliform; Total coliform; Heavy metals)	Ongoing	Respond to complaints received through the water quality hotline, observations, and reports from field personnel.	<ul style="list-style-type: none"> Respond to complaints of illicit/illegal discharge within 24 business hours of receiving the complaint, referral or notice. Document response to complaints, notices and referrals received. Respond to 100% of calls to PCW staff within 24 hours. Complaints outside direct County jurisdiction are forwarded to appropriate regulatory agency responsible for elimination of illegal discharges. Where the County of Santa Barbara has enforcement authority (i.e., Planning and Development, Solid Waste, Fire Department), County will respond directly and identify and control or eliminate illicit discharges. 	County Public Health and Public Works
1-5 (ongoing)	Commercial/ Industrial Facility Inspections	The Fire Department inspects and monitors regulated facilities for best management storage practices and spill response. County EHS performs routine inspections at all food facilities.	Fire Department shall continue to inspect and monitor all regulated commercial and industrial facilities that use, store, or generate hazardous materials/wastes. County EHS shall continue food inspection program that includes proper disposal of commercial wastes.	<ul style="list-style-type: none"> Reporting, recordkeeping, and referrals shall continue as directed under the current regulatory programs with designated state & local agencies. 	County Fire Department
1 - 5	Illicit Discharge Field investigation & Abatement (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Fecal coliform; Total coliform; Heavy metals)	Ongoing	Perform field investigations to identify and abate water quality problems.	<ul style="list-style-type: none"> Inspect creeks twice annually to identify illicit discharges. Ensure conversion of failing septic systems under EHS criteria. Address deficiencies identified in septic system pumper reports. Eliminate 100% of all other illicit discharges reported to or discovered by County staff. 	County Public Health and Public Works

4.0 CONSTRUCTION SITE RUNOFF CONTROL

Responsible Person to Implement or Coordinate this Minimum Control Measure:
County Planning and Development Director.

The purpose of construction site runoff controls is to prevent soil and construction waste from entering storm water. Sediment is usually the main pollutant of concern; during a short period of time, construction sites can contribute more sediment to creeks than can be deposited naturally over several decades. In addition, there is little buffering or filtering where construction occurs in an urban setting because site discharges may occur directly to gutters or stormdrains. The resulting siltation and the contribution of other pollutants from construction sites can cause physical, biological, and chemical harm to local waterways.

4.1 Minimum Requirements

EPA guidelines establish the following minimum requirements for Construction Site Runoff Control Minimum Control Measure (*Fact Sheet 2.6 – Construction Site Runoff Control Minimum Control Measure, 01/00*):

- Ordinance or other regulatory mechanism as well as sanctions to ensure compliance
- Requirements for construction site operators to implement appropriate erosion and sediment control BMPs
- Requirements for construction site operators to control construction-related wastes such as sediment, plaster, cement, paint, fuel, etc.
- Procedures for site plan review which incorporate consideration of potential water quality impacts
- Procedures for receipt and consideration of information submitted by the public
- Procedures for site inspection and enforcement of control measures

The State's General Permit requires the County to apply these control measures to all construction sites of one acre or more. The County must also comply with the Receiving Water Limitations defined in Attachment 4 of the General Permit ("discharges shall not cause or contribute to exceedences of water quality standards..."). Section 14-2 of the Grading Ordinance states:

This chapter also addresses compliance with the National Pollutant discharge Elimination System (NPDES) Phase II storm water regulations and sets forth local storm water requirements for the disturbance of less than one acre, to avoid pollution of water courses with sediments or other pollutants generated on or caused by surface runoff on or across the construction site.

In addition to County rules, the NPDES General Permit for Construction Sites requires development of a Storm Water Pollution Prevention Plan and submittal of NOI directly to RWQCB for construction activities greater than 1.0 acres.

4.2 Best Management Practices

Generally speaking, Best Management Practices for Construction Site Runoff Control fall into three categories: 1) regulations that establish parameters, procedures and sanctions pertaining to construction site activities, 2) inspection and enforcement, and 3) training of staff. In October 2002 the County modified its Grading Ordinance and updated land use policies to address Phase II requirements including BMPs in all three categories. Because the modifications were adopted before the adoption of the final Phase II General Permit, the County will review the adequacy of its Grading Ordinance and discretionary review process with respect to the Phase II General Permit and modify the Grading Ordinance as necessary within the term of this permit. The BMPs that will be implemented by the County are discussed below.

4.2.1 Grading Ordinance Revisions

Federal rules (40 CFR §122.34) require that the County's program include *an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable local law*. The County's Grading Ordinance (Chapter 14 of County Code, Ordinance No. 4477), which addresses construction site runoff control and associated inspection and enforcement procedures under the Building and Safety Division of Planning and Development (P&D), provides the appropriate framework for implementing construction runoff control measures. P&D staff revised the grading ordinance to specifically incorporate NPDES Phase II regulations by expanding requirements for construction-related disturbance of one or more acres and enhancing grading permit plan check and site inspection practices applicable for regulated development. The County Board of Supervisors adopted the revisions on October 1, 2002. (Appendix E - 2002 Revised Grading Ordinance).

Under the existing grading ordinance, a permit is required when 50 cubic yards or more are graded. This is less than the one-acre threshold under the EPA's Phase II requirements, thus no change was made to the applicability of the ordinance. The revisions also did not affect agricultural grading or practices. The major revisions to the Grading Ordinance were the minimum acreage trigger and clarification on the construction BMPs required, including reference to County-approved BMP manuals.

The scope of the Grading Ordinance is as follows (see Section 14-6):

(a) Except as herein provided, these regulations, including the incorporation of relevant best management practices, shall apply to all new grading, excavations, fills, cuts, borrow pits, stockpiling, compaction of fill, and land reclamation projects

on privately owned land where the transported amount of materials individually for any of the above mentioned operation, exceeds fifty cubic yards; or the cut or fill exceeds three feet in vertical distance to the natural contour of the land. Agricultural grading, whether exempt or required to be permitted hereunder, is not subject to NPDES Phase II storm water regulations or the local storm water requirements imposed by this chapter. No work subject to the provisions of this chapter shall be commenced, maintained or completed, in violation of these regulations.

In summary, the revisions to the Grading Ordinance included:

- Language linking the ordinance to the NPDES Phase II regulations
- New definitions to clarify NPDES-related terms used in the ordinance
- Required preparation and implementation of erosion and sediment control and storm water BMPs for all grading operations that require a grading permit (many projects are also required to implement erosion and sediment control measures as conditioned by their discretionary permit)
- Prohibitions of non-storm water construction related discharges (e.g. concrete truck washout, proper disposal of discarded building materials, construction vehicle leaks and maintenance, etc.)
- Submittal of copies of the Notice of Intent and Storm Water Pollution Prevention Plan (SWPPP) for sites of one or more acres of land disturbance in accordance with the Phase II construction program
- Enhanced site inspection procedures
- Specific guidance on the use of approved BMP manuals.

The County will evaluate the potential scope of and adopt a specific Storm Water Ordinance, or Water Quality Pollution Prevention Ordinance, as discussed above under Illicit Discharge Detection and Elimination (Section 3.0). Since the Grading Ordinance does contain all the necessary components of the Construction element of the SWMP, it is necessary to be deliberate as to how such a new ordinance would relate to enforcement actions pursuant to the Grading Ordinance, since enforcement of construction BMPs is already regulated under the existing Grading Ordinance by the County Planning and Development Department.

Sanctions to ensure compliance are outlined in Sections 20, and 31 through 33 of the Grading Ordinance and include:

- 1) Assigning authority to the Director of Planning and Development for enforcement and interpretation
- 2) Ensuring a Stop Work Order where violation of any provision of the permit (or exemption of the permit) has occurred
- 3) Providing for appeals through the County Board of Supervisors
- 4) Defining that a violation is an infraction or misdemeanor at the discretion of the County District Attorney
- 5) Providing fines and civil penalties (up to \$25,000 or imprisonment for six months).

4.2.2 Erosion and Sediment Control Requirements

Federal rules (40 CFR §122.34) require that the County's SWMP include *requirements for construction site operators to implement appropriate erosion and sediment control (ESC) best management practices and requirements for construction site operators to control construction-related wastes such as sediment, plaster, cement, paint, fuel, etc.* Section 14-29 of the Grading Ordinance requires an Erosion and Sediment Control Plan be submitted and approved prior to construction. In lieu of an Erosion and Sediment Control Plan, the County will accept a Storm Water Pollution Prevention Plan (SWPPP) if required by the RWQCB, provided it contains the requirements of the County's Erosion and Sediment Control Plan.

The Erosion and Sediment Control Plan must include:

- 1) Description of the proposed practices to retain sediment on site and a schedule for their maintenance.
- 2) Description of surface runoff and erosion control practices to be implemented
- 3) Description of vegetative practices to be used (including seeds, fertilizers, irrigation, and schedule for maintenance)
- 4) Measures to ensure that vehicles do not track materials onto public streets (and actions to remove such materials if necessary)
- 5) Best Management Practices for control of storm water and non-storm water discharges, such as discarded building materials, litter, sanitary waste, washout of waste materials such as drywall, grout, gypsum, plaster, mortar, concrete, etc.

In order to provide consistent and appropriate implementation of BMPs for construction activities, the Grading Ordinance refers to existing effective BMP manuals already published and widely applied by the construction community. The manuals, adopted by the Board of Supervisors on September 24, 2002, help applicants select and implement site-specific appropriate BMPs. The three manuals adopted by reference in the Grading Ordinance (14-38) include:

- California Department of Transportation. *Storm Water Quality Handbook: Construction Site Best management Practices (BMPs) Manual*. 2000 or current.
- California Regional Water Quality Board San Francisco Bay Region. *Erosion and Sediment Control Field Manual*. 1999 or current.
- California Stormwater Quality Task Force. *California Storm Water Best Management Practices Handbooks: Construction Activity; Industrial/Commercial Activity; and Municipal Activity*. Three volumes, March 1993.

These particular manuals offer a wide range of choices to the applicant for selection and implementation of BMPs. The wide range of choices provides measures that can be applied appropriately for each unique project. They include detailed and specific

BMPs for large or complex projects to simple and straightforward BMPs for small or low impact projects.

The types of BMPs that are included in these manuals and will be considered by staff reviewing the permits include:

- Runoff control measures (e.g., minimize excavation, provide permanent diversion, minimize clearing of vegetation, provide stabilized construction entrances, check-dams, filter berms, drainage swales, chemical stabilization, vegetated stabilization, mulching, geotextiles or erosion control blankets, terracing, slope drains, etc.)
- Sediment control measures (e.g., diversion dikes, silt fences, sediment basins, sediment filters or traps, storm drain inlet protection, etc.)
- Good housekeeping (e.g., waste management, spill prevention and control, vehicle maintenance, controlled washout areas with plans for removal of wastes, etc.)

The final decision on which specific BMPs should be applied to a project based on the appropriateness and effective use of the proposed BMPs will be made by Planning and Development staff and approved through the Erosion and Sediment Control Plan consistent with the provisions of the General Permit.

4.2.3 Requirements for Plan Review, Receipt and Consideration of Information Submitted by the Public, and Site Inspection and Enforcement

Federal rules (40 CFR §122.34) require that the County's SWMP include *procedures for site plan review which incorporate consideration of potential water quality impacts; procedures for receipt and consideration of information submitted by the public, and procedures for site inspection and enforcement of control measures.*

Procedures for reviewing Grading Permit submittals, including the Erosion and Sediment Control Plan described above, include how to file for a permit (14-11), what to include in the application (14-11), time limits of the permit (14-13), denial of permit if grading operations commence before securing the permit (14-15), permit and plan check fees (14-16), submittal of security with P&D Director (14-17). Work conducted under a grading permit requires the owner or contractor to adhere to the Santa Barbara County Building and Safety Division Grading Notes. The Grading Notes are provided to each applicant as part of the grading permit. The Grading Notes list 12 requirements, several of which pertain to protection of water quality by preventing erosion or sediment movement both during and after construction. These include:

- *Grading Note #3: Contractor shall employ all labor, equipment and methods required to prevent his operations from producing dust in amounts damaging to adjacent property, cultivated vegetation, and domestic animals or causing*

a nuisance to persons occupying buildings in the vicinity of the job site. Contractor shall be responsible for damage caused by dust from his grading operation.

- *Grading Note #4: Before beginning work requiring exporting or importing of materials, the Contractor shall obtain approval from Public Works Road Division for haul routes used and methods provided to minimize deposit of soils on roads.*
- *Grading Notes #5, #8, #9 and #10 guarantee that cut slopes and fill material will not erode or slump which could adversely affect water quality if material moves into a water conveyance system. They include requirements such as verification by a geotechnical engineer that work is properly completed, all slopes appropriately keyed and benched, all fill material properly moist and compacted, and excavation does not exceed 1 ½ horizontal to 1 vertical.*

Inspections (Sec 14-18) are required for all permits by authorized employees of the Planning and Development Department. The builder or contractor must keep a set of the Erosion and Sediment Control Plans on site at all times while work is in progress. The following inspections are required under an applicant's Grading Permit:

- 1) Initial (prior to beginning grading to inspect and review erosion and sediment control BMPs)
- 2) Toe (prior to receiving fill to review Erosion and Sediment Control BMPs)
- 3) Excavation (before vertical excavation exceeds ten feet)
- 4) Fill (before vertical fill exceeds ten feet)
- 5) Drainage Device inspection (after forms and pipe are in place to inspect Erosion and Sediment Control BMPs)
- 6) Rough Grade (prior to final grade)
- 7) Final (all work, planting, and slope stabilization is complete)
- 8) Other (at any time, for any purpose, including compliance with the Grading Ordinance and any other laws and regulations as may be required by the Director of P&D such as the requirements of the County NPDES permit for its storm water discharges).

A licensed landscape architect, qualified biologist, archeologist, agricultural advisor, or other qualified professional may be required to be present during inspections.

During the rainy season (November 1 to April 15), a minimum of two County inspections per month will be conducted on active projects with open grading with one acre or more of land disturbance to verify that all construction BMPs are in place and performing, and to evaluate whether additional BMPs may be warranted to control site runoff.

County Grading Inspectors will consider priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water quality.

Section 14-8 also specifically states:

On construction sites of one acre or more, which are subject to NPDES regulations, county inspectors of the Planning and Development Department shall inspect for adequate installation and functionality of Best Management Practices (BMPs) prescribed by the erosion and sediment control plan or Storm Water Pollution Prevention Plan (SWPPP), at any time throughout the year. County inspectors may identify maintenance and repair needs on the site with the permittee, or permittee's agent, to ensure compliance with the minimum requirements of Best Management Practices.

Enforcement and interpretation of the provisions of the Grading Ordinance are authorized and directed by the Director of Planning and Development (14-31). As described above, the Director may order any work stopped, and may require certification, approval, guidance, and/or recommendation that may assist in the determination of the propriety of the activity to be carried on before allowing the progress of work to continue. In addition, the public may submit complaints through the existing Planning and Development process or Project Clean Water water quality hotline (see Section 1.2).

Enforcement carries the weight of a civil penalty. Sec. 14-33 of the Grading Ordinance states:

(a) Any person, firm, or corporation, whether as principal, agent, employee or otherwise who shall commence, construct, enlarge, alter, repair or maintain any grading, excavation, or fill, or cause the same to be done, contrary to or in violation of any provision of this chapter is guilty of a crime. The offense may be filed as either an infraction or a misdemeanor at the discretion of the Santa Barbara County district attorney.

(b) If filed as an infraction and upon conviction thereof, the crime shall be punishable by a fine not to exceed one hundred dollars for a first violation; a fine not exceeding two hundred dollars for a second violation of the same ordinance within one year; and a fine not exceeding five hundred dollars for each additional violation of the same ordinance within one year.

(c) If filed as a misdemeanor, and upon conviction thereof, the punishment shall be a fine of not less than five hundred dollars nor more than twenty-five thousand dollars, or imprisonment in the county jail for a period not exceeding six months, or by both such fine and imprisonment.

(d) Any person violating any of the provisions of this chapter shall be guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this chapter is committed, continued or permitted. (Ord. No. 4477, § 1)

Sec. 14-34. Injunction--Civil remedies and penalties--And costs.

(a) Any person, firm, or corporation, whether as principal, agent, employee or otherwise who shall commence, construct, enlarge, alter, repair, or maintain any grading, excavation, or fill or causes the same to be done, contrary to or in violation of any provision of this chapter, shall be subject to injunction against such activity and shall be liable for a civil penalty not to exceed twenty-five thousand dollars for each day that the violation continues to exist.

(b) When the director determines that any person has engaged in, is engaging in, or is about to engage in any act(s) or practice(s) which constitute or will constitute a violation of provisions of this chapter, or order issued, promulgated or executed hereunder, the district attorney or the county counsel may make application to the superior court for an order enjoining such acts or practices, or for an order directing compliance, and upon a showing that such person has engaged in or is about to engage in any such acts or practices, a permanent or temporary injunction, restraining order, or other order may be granted by a superior court having jurisdiction over the cause. In any civil action brought pursuant to this section in which a temporary restraining order, preliminary injunction or permanent injunction is sought, it shall not be necessary to allege or prove at any stage of the proceeding that irreparable damage will occur should the temporary restraining order, preliminary injunction, or permanent injunction not be issued, or that the legal remedies are inadequate.

(c) Any person, firm, or corporation, whether as principal, agent, employee or otherwise who shall commence, construct, enlarge, alter, repair, or maintain any grading, excavation, or fill, or causes the same to be done, contrary to or in violation of any provision of this chapter shall be liable for and obliged to pay the County of Santa Barbara for all costs incurred by the county in obtaining abatement or compliance, or which are attributable to or associated with any enforcement or abatement action, whether such action is administrative, injunctive or legal; and for all damages suffered by the county, its agents, officers or employees as a result of such violation or efforts to enforce or abate the violation.

(d) In determining the amount of a civil penalty to impose, the court shall consider all relevant circumstances, including, but not limited to, the extent of the harm caused by the conduct constituting the violation; the nature and persistence of such conduct; the length of time over which the conduct occurred; the assets, liabilities and net worth of the persons responsible, whether corporate or individual; and

corrective action taken by the persons responsible; and the cooperation or lack of cooperation in public efforts toward abatement or correction. (Ord. No. 4477, § 1)

Information submitted by the public helps reinforce the public participation element of the Storm Water Management Plan and helps to identify instances of non-compliance. Information may either be provided to Project Clean Water staff or directly to Planning and Development staff. For information provided to Project Clean Water staff, the procedures include a 24-hour minimum response. The information would be directed to Planning and Development staff, including the grading inspector if a Grading Permit had been issued, or compliance officer with Development Review if project conditions were violated. Project Clean Water maintains a database of all complaints and discoveries; outcome of all complaints and discoveries are recorded and reported to the RWQCB through annual reports. Information collected by Planning and Development would be provided directly to the construction site inspector or compliance officer, or both, for immediate follow-up as appropriate.

Procedures for receiving and considering information that is directed to the Zoning Division of Planning and Development are described in the Zoning Code Chapter 35 Article II, and Article III Sections 35-330.8. Procedures include request for a hearing and establishing timelines for determining the validity of the complaint. For information that is directed to Building & Safety Division (i.e., violations of Building Permits or Grading Ordinance), a complaint form is used to record the name, address and site location concerning a potential grading or building violation. Building & Safety will respond to 100% of all information submitted by the public within three days. This includes a site inspection, verification of whether a Grading Permit or Building Permit has been issued, and determination of whether a permit violation has occurred. If a violation is determined, a case number is established and follow-up would depend on the nature of the violation, usually starting with verbal instructions to correct, followed by correction notice, and possibly ending in enforcement action (see Grading Ordinance Section 14-33 Violations and Penalties Appendix E for details).

Table 4-1: How Grading Ordinance Meets or Exceeds the Construction MCM

Construction MCM Requirement	Compliance	Additional Effort Required
Ordinance or other regulatory mechanism as well as sanctions to ensure compliance	Grading Ordinance: Applies to all construction projects of 50 cubic yards or more and includes sanctions to ensure compliance through civil penalty. Also, all discretionary projects are subject to review and	None.

County of Santa Barbara
Storm Water Management Program
(2006-11)
For Submittal: December 31, 2005

Construction MCM Requirement	Compliance	Additional Effort Required
	conditioning to protect water quality. Sanctions to assure compliance include civil penalty.	
Requirements for construction site operators to implement appropriate erosion and sediment control BMPs	Section 14-29 of the Grading Ordinance requires an approved Erosion and Sediment Control Plan. Implementation of the plan is verified through regular site inspections. Discretionary projects are also subject to conditioning to protect water quality.	None.
Requirements for construction site operators to control construction-related wastes such as sediment, plaster, cement, paint, fuel, etc.	Section 14-29 of the Grading Ordinance requires an approved Erosion and Sediment Control Plan. Implementation of the plan is verified through regular site inspections. Discretionary projects are also subject to conditioning to protect water quality.	
Procedures for site plan review which incorporate consideration of potential water quality impacts	Section 14-29 of the Grading Ordinance requires an approved Erosion and Sediment Control Plan that lists BMPs on the site plan to prevent potential water quality impacts. Discretionary projects are also subject to conditioning to protect water quality – see above discussion on discretionary review process.	None.
Procedures for receipt and consideration of information submitted by the public	Planning and Development staff and Project Clean Water staff will receive and verify information submitted by public, with follow-up measures as appropriate (see Illicit Discharge and Detection).	None.
Procedures for site inspection and enforcement	Inspection schedule established in Grading	None.

Construction MCM Requirement	Compliance	Additional Effort Required
of control measures	Ordinance Section 14-8. Enforcement in Grading Ordinance Section 14-3 (Authority to Regulate), Section 14-33 (Violations and penalties), and 14-34 (Injunction--Civil remedies and penalties--And costs) For discretionary projects, inspection and enforcement are included in the project conditions and subject to a variety of enforcement actions, depending on the nature of violation.	

4.2.4 Discretionary Projects – Land Use Permits

In addition to the ministerial requirements of the Grading Ordinance, the County’s discretionary permit review process provides additional authority for regulating discharges associated with construction activities. The discretionary review process compliments the Grading Ordinance by providing additional conditioning, monitoring, and enforcement authority through the Zoning Ordinance, while providing opportunity to protect construction site runoff where the Grading Ordinance does not apply. For example, some projects may not require a grading permit (i.e., redevelopment that does not meet the 50 cubic yard threshold) but would be subject to a land use permit. In cases where both a grading permit and a discretionary permit apply, there are two divisions of the Planning and Development Department, Building and Safety (enforcing the Grading Ordinance) and Development Review (enforcing the Zoning Ordinance), responsible for monitoring and enforcement of construction-related BMPs.

Before construction occurs, site-level planning occurs to minimize construction related impacts to water quality. The County’s Comprehensive Plan provides policies to minimize grading and erosion during construction (Hillside and Watershed Protection Policies 3, 4, 5 and 7, Coastal Plan Policies 3-15, 3-16, 3-17 and 3-19). Specifically, these include requirements to: minimize grading; limit grading on steep slopes; encourage good site design; provide development setbacks “buffers” from creeks and streams; and protect and restore sensitive habitats including wetlands.

Review of surface water quality issues occurs during CEQA review and as a part of planning review (Staff Report preparation) during which projects are evaluated for consistency with the County’s Comprehensive Plan policies and Zoning Ordinance

requirements. Discretionary projects are also reviewed by multiple County Departments, including Water Resources Division staff (Flood Control District and Water Agency), who will evaluate proposed BMPs for their appropriateness to site conditions.

Comprehensive Plan riparian and wetland protection policies also address water quality protection through preservation and restoration of riparian corridors and vegetation. In December 2000, P&D issued a policy paper to staff on creek and riparian protection clarifying the intent and application of these policies. This paper addresses appropriate application of riparian buffers, when encroachment into buffers may be permitted, requirements for offsetting measures when encroachment is permitted, appropriate measures to physically delineate protected areas and other requirements for ensuring consistency with creek protection policies. Guidance material published by EPA in support of the Phase II regulations encourages controls such as buffer strips and riparian zone preservation to improve water quality.

The implementation guidelines are shown in Appendix F. The following are examples of interpretive and implementation guidelines:

- Site planning to avoid, protect, and restore sensitive areas (e.g., wetlands and riparian corridors);
- Adequate space on each project site shall be reserved to incorporate the BMPs
- Site planning to avoid grading or vegetation removal on slopes over 20%
- Site planning to avoid grading in areas containing soils with a high erosion hazard or in geologically unstable areas
- Site planning to minimize grading or vegetation removal where slopes over 20% cannot be avoided to allow reasonable use of a legal lot
- Protection of existing native vegetation and enhancement of sensitive areas (e.g., wetlands and riparian corridors)
- Good housekeeping practices (e.g., designated waste collection areas, designated areas for vehicle maintenance and washing, proper vehicle maintenance to avoid leaks, elimination of connections to storm drains, immediate clean up of spills, recycling and reuse of materials, etc.)
- All construction-related BMPs shall be maintained in working order.
- Provisions shall be made for maintenance of construction-related BMPs.

CEQA Guidelines for Water Quality

The 1995 Santa Barbara County Environmental Thresholds and Guidelines Manual includes guidelines and thresholds to determine the significance of program and project-related impacts under CEQA. The thresholds and guidelines are adopted by the Board of Supervisors and are applied to all new private and public projects to determine when a project's water quality impacts may be considered significant. The guidelines summarize EPA studies demonstrating adverse water quality impacts

from construction activities, provide guidance as to when a project's surface and storm water quality impacts may be considered significant, less than significant or cumulatively significant, and provide a mitigation hierarchy. See Appendix F2.

Standard Conditions of Approval/Mitigation Measures

P&D has developed "A Planners Guide to Conditions of Approval and Mitigation Measures". This document provides a list of recommended conditions of approval and mitigation measures for discretionary projects. Examples of the standard conditions to protect water quality during construction activities are shown in Appendix F4: Conditions of Approval and Mitigation Measures (specifically, see conditions 34, 40, 62, B, and P).

The conditions in the document enforce existing state and local regulations, Comprehensive Plan policies and include mitigation measures for commonly occurring environmental impacts. The Conditions/Measures are developed in conjunction with other County departments (e.g., Flood Control, Fire, Environmental Health Services, Parks). When adopted as a CEQA mitigation measure, all measures include a monitoring requirement.

Monitoring and Enforcement

During construction, discretionary project sites are monitored for compliance with the conditions of approval for construction-related BMPs. These site inspections by Development Review Division are conducted separately and in coordination with Building and Safety inspections (different staff), discussed above under the Grading Ordinance. Failure to comply with the conditions could result in any of the following enforcement actions: correction notice, stop work order, collection of bonds, and establishing a time frame for developer to take corrective steps to resume work. Violations of the conditions of approval are considered to be violations of the Zoning Ordinance.

4.2.5 Public Projects

County projects, whether constructed by County staff or County contractors, must conform with all legal requirements applicable under the Grading Ordinance (County enforced) and the NPDES Construction General Permit (RWQCB) (enforced). The only exception under the Grading Ordinance applies to the Flood Control and Water Conservation District.

The County's Flood Control and Water Conservation District is specifically exempt from the Grading Ordinance for maintenance and construction activities within their prescribed easements (14-6(b)(8)). However, such activities performed by the Flood Control and Water Conservation District forces would rarely, if ever, exceed 1.0 acres and furthermore are regulated under separate permits to protect surface water quality, as described in Pollution Prevention and Good Housekeeping Practices for Municipal Operations, in Section 6.2.1. The Flood Control and Water Conservation

District must mitigate all impacts pursuant to the District's Programmatic Environmental Impact Report and its addenda. Mitigation of impacts is described in the environmental document. Annual reports on the mitigation efforts, including construction-related BMPs, are provided to the relevant permitting agencies (i.e., California Department of Fish & Game, U.S. Army Corps of Engineers, and Regional Water Quality Control Board).

Construction activities performed by the District, like all other County construction projects, are subject to the NPDES Construction General Permit (99-08-DWQ). Furthermore, the County Public Works Department requires contractors to follow the Caltrans standard specifications as part of the contract special provisions. The Caltrans specifications require construction BMPs be applied for all projects, regardless of size of project (for projects over 1 acre, a SWPPP is required; for projects less than 1 acre, a Water Control Plan must be implemented). Proper implementation of construction BMPs consistent with the terms of this General Permit is enforced under contract.

4.3 Measurable Goals

The following goals will be used to check progress each year as well as demonstrate the efforts made to reduce pollutants to the maximum extent practicable. The intent is to provide an opportunity to assess and evaluate the program and provide a feedback mechanism to measure and update the program as appropriate.

The following measurable goals will be applied to the construction program:

BMP: Grading Ordinance Revisions

- Completed; revisions facilitate implementation of BMPs below.

BMP: Evaluate Grading Ordinance Efficacy

- Compare the effectiveness of revised Grading Ordinance to the requirements of the construction minimum control measure and evaluate effectiveness. This will be based upon feedback from County inspectors, RWQCB staff, construction contractors, project owners and the public. This review will include records of violation cases and enforcement activities (year 2).
- If it is determined that changes need to be made to better comply with this minimum control measure, staff will make recommendations to the County Board of Supervisors to modify or revise Grading Ordinance as necessary so that it meets or exceeds all of the requirements in the General Permit (year 3).

BMP: Erosion & Sediment Control; Control of Construction-Related Wastes

- Implement an approved Erosion and Sediment Control plan (or SWPPP, as appropriate) on 100% of all applicable projects, as required under the Grading Ordinance.

BMP: Plan Review, Receipt and Consideration of Information Submitted by the Public, and Site Inspection and Enforcement:

- Minimum of two County inspections per month during the rainy season (November 1 to April 15) on projects one acre or more of land disturbance.
- Minimum of four County inspections conducted throughout project duration during non-rainy season.
- County-implemented enforcement action at 100% of sites where BMPs failed, which may include verbal warnings, letters to correct, Stop Work Order, use of construction bonds, etc. Also may include cooperative enforcement coordination with RWQCB, where RWQCB violations have also occurred. Where a violation of Grading Ordinance has occurred, the results of enforcement actions will be provided in the Annual Report.
- Review and act on all information submitted by public (complaints and discoveries) to Project Clean Water concerning construction site activities within 24 hours.
- Review and act on all information submitted by public to Building and Safety Division within three days.

BMP: Discretionary Projects - Land Use Permits

- Completed; the County has developed Standard Conditions that relate to construction site controls that provide for erosion control plans and plans to prevent non-storm water discharges for construction. Conditions may include requirements such as restricted fueling areas, restricted maintenance of equipment, control of construction site debris, etc. See Appendix F4, revised conditions 34, 40, 62, and new condition B.

BMP: Evaluate Land Use Permit Program Efficacy

- Compare the effectiveness of existing zoning ordinance, policies, and procedures pursuant to the requirements of the construction minimum control measure and evaluate effectiveness (year 2).
- If it is determined that changes need to be made to better comply with this minimum control measure, then the relevant ordinance, policy, procedures, or standard conditions will be modified or developed as necessary so that they meet or exceed all of the requirements in the General Permit (year 3).

BMP: Staff Training

- Annual training of 100% of County grading inspectors (years 1-5).
- 100% attendance at annual training of permit and review staff in the appropriate selection and application of adopted Standard Conditions for construction related activity (year 2).

BMP: Construction Workshops

- Development of County-sponsored training/workshops directed toward the construction community with brochures and guidance materials developed and distributed to development and construction community by Year 2 of the permit.
- Details of construction-related requirements posted on County website by Year 1 of permit.
- Present at least one public workshop on County construction site BMPs per year starting in year 2.

4.4 Reporting

Feedback from County inspectors, RWQCB staff, construction contractors, project owners and the public will be evaluated and potential changes to the Grading Ordinance and its implementation will be evaluated. This includes a review of the enforcement activities that are recorded as violation cases by Building and Safety staff. To the extent these changes could change the level of protection to storm water quality they will be discussed in the annual report and recommendations made for improvement.

**Table 4-1
BMP Implementation: Construction Site Runoff Control**

Year(s)	BMP / (POC)	Current Status	Implementation Details	Measurable Goals	Implementing Entity
0	Grading Ordinance Revisions / (Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Unknown Toxicity; Heavy Metals)	Revisions adopted by Board of Supervisors in 2002.	Revisions include language linking the ordinance to NPDES Phase II regulations.	<ul style="list-style-type: none"> • Completed; revisions facilitate implementation of BMPs below. 	County Planning and Development Department
2-3	Evaluate Grading Ordinance Efficacy	Revisions adopted by Board of Supervisors in 2002.	Review and verify that implementation of the Grading Ordinance complies with the General Permit requirements of this MCM.	<ul style="list-style-type: none"> • Compare Grading Ordinance to the Construction MCM and evaluate effectiveness (year 2). • If necessary, modify or revise Grading Ordinance (year 3) 	County Planning and Development Department

County of Santa Barbara
Storm Water Management Program
(2006-11)
For Submittal: December 31, 2005

Year(s)	BMP / (POC)	Current Status	Implementation Details	Measurable Goals	Implementing Entity
1-5	Erosion & Sediment Control Requirements; Control of Construction-Related Wastes (Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Unknown Toxicity; Heavy Metals)	Requirement included in Grading Ordinance.	Erosion and Sediment Control Plan must be submitted and approved prior to construction. A SWPPP may be substituted if it meets the County's requirements.	<ul style="list-style-type: none"> • Approval of an Erosion and Sediment Control Plan (or SWPPP, as appropriate) on 100% of projects. 	County Planning and Development Department
1-5	Review of Plans, Receipt and Consideration of Information Submitted by the Public, and Site Inspection and Enforcement / (Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Unknown Toxicity; Heavy Metals)	Requirements included in Grading Ordinance. Information submitted by public also provided to Project Clean Water staff for appropriate referral.	Grading Ordinance provisions require plan review, site inspection, and enforcement at all permitted construction sites. Information submitted by the public is taken by PCW staff or P&D staff and addressed as appropriate. PCW information (complaints / discoveries) recorded.	<ul style="list-style-type: none"> • Two inspections per month during rainy season on 1+ acre sites (years 1- 5). • Four inspections during non-rainy season (years 1 – 5). • Enforcement actions at 100% of sites where BMPs failed (years 1-5). • Review and act on all info submitted by public to PCW concerning construction site activities within 24 hrs. • Review and act on all info submitted by public to B&S within three days. 	County Planning and Development Department; Project Clean Water staff.

County of Santa Barbara
Storm Water Management Program
(2006-11)
For Submittal: December 31, 2005

Year(s)	BMP / (POC)	Current Status	Implementation Details	Measurable Goals	Implementing Entity
0	Discretionary Projects - Land Use Permits (Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Unknown Toxicity; Heavy Metals)	Land use policies and Standard Conditions include protection of resources during construction and controls for erosion and non-storm water discharges. See Appendix F4	In addition to ESCP required under Grading Ordinance, additional BMPs may be required such as restricted fueling areas, restricted maintenance of equipment, etc.	<ul style="list-style-type: none"> Completed; conditions will be applied as appropriate and BMPs evaluated for effectiveness (See Post-Construction MCM). 	County Planning and Development Department & Project Clean Water
2-3	Evaluate Land Use Permit Program Efficacy	Land use policies and Standard Conditions include construction site controls for erosion and non-storm water discharges. See Appendix F4	Results of an evaluation of the Land Use Permit program for construction BMPs will be reported to the Regional Board. Revisions will be made to meet or exceed the requirements of the General Permit Post-Construction Minimum Control Measures.	<ul style="list-style-type: none"> Compare to the requirements of the construction MCM and report on effectiveness (year 2). Revise as necessary to meet or exceed all of the requirements of this MCM (year 3). 	County Planning and Development Department & Project Clean Water
1-5	Staff Training / (Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Unknown Toxicity; Heavy Metals)	Specific training on storm water BMPs for construction	Staff will be trained in currently applicable regulations.	<ul style="list-style-type: none"> 100% annual training of grading inspectors (years 1-5). 100% attendance at annual training of permit & review planning staff in selection & application of adopted standard conditions for construction related activities (year 2). 	County Planning and Development Department & Project Clean Water

County of Santa Barbara
Storm Water Management Program
(2006-11)
For Submittal: December 31, 2005

Year(s)	BMP / (POC)	Current Status	Implementation Details	Measurable Goals	Implementing Entity
2-5	Construction Workshops / (Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Unknown Toxicity; Heavy Metals)	None	Develop BMP workshops for construction community. Augment with website information.	<ul style="list-style-type: none"> • Develop workshop material for construction community (year 2). • Provide construction-related requirements on county website (year 1). • At least one public workshop on BMPs annually (years 2-5). 	County Planning and Development Department & Project Clean Water

5.0 POST-CONSTRUCTION RUNOFF CONTROL

Responsible Person to Implement or Coordinate this Minimum Control Measure: County Planning and Development Director.

One of the best opportunities to reduce the generation of storm water pollution from urban runoff is through planning and design, before developments are built. Once built, it is complex and expensive to correct problems. This minimum control measure focuses on site planning and design considerations, which are most effective when addressed in the early stages of project development. Effective long-term management and maintenance are critical, so the best design opportunities are those with the least maintenance needs. The goal of the program is to integrate basic and practical storm water management techniques into new development to protect water quality.

5.1 Minimum Requirements

The State General Permit minimum control measure for post-construction runoff control requires that the County must, at a minimum:

- Develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the Small MS4 by ensuring that controls are in place that would prevent or minimize water quality impacts;
- Develop and implement strategies that include a combination of structural and/or non-structural BMPs;
- Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment to the extent allowable under local law; and
- Ensure adequate long-term operation and maintenance of BMPs.

Furthermore, the State General Permit requires “Those regulated traditional and non-traditional Small MS4s serving a population over 50,000 or that are subject to high growth (at least 25 percent over ten years) must comply with the requirements in Attachment 4 of this General Permit.” The requirements of Attachment 4, which address Receiving Water Limitations and Design Standards, apply to the County of Santa Barbara. The Receiving Water Limitations of Attachment 4(A) state that discharges shall not cause or contribute to an exceedence of water quality standards contained in a Statewide Water Quality Control Plan, the California Toxics Rule, or in the applicable RWQCB Basin Plan. Of relevance to this Minimum Control Measure are the standard condition requirements of Attachment 4(B). The County will comply with the provisions of this minimum control measure, including Attachment 4(B), through application of land use policy, design standards, California Environmental Quality Act (CEQA) review and impact mitigation, and through standard conditions. Enforcement is ensured through the zoning ordinance. Details of these programs are presented below.

Background

Under state planning law and CEQA, the County Planning and Development Department (P&D) is responsible for evaluating new development and redevelopment projects, therefore P&D has a key role in implementing the NPDES Phase II post-construction runoff control measures.

In general, the County's existing land use policies and development review process provide a strong framework for water quality protection and compliance. To comply with NPDES Phase II objectives, the County must ensure consistent interpretation and application of policies, adequate implementation tools, and consistent and adequate implementation and enforcement of mitigation measures. To provide this, P&D staff recommended the following revisions that were formally adopted through approval by the County Board of Supervisors on September 24, 2002:

- Provide interpretive and implementation guidelines for key Comprehensive Plan policies addressing water quality (see Section 5.2.1 below);
- Revise County CEQA initial study checklist to bring attention to storm water pollution as an issue area on new development and redevelopment;
- Provide a new section to the Environmental Thresholds and Guidelines Manual to assess surface and storm water quality impacts, to determine whether impacts are significant and to provide a mitigation hierarchy; and
- Provide new conditions of approval and mitigation measures to ensure that projects are consistent with key policies and address identified CEQA impacts.

In addition to the efforts in P&D, the Public Works Department has developed criteria for hierarchy in approving new projects (site design, source control, treatment control) with design standards for post-construction treatment control BMPs. The design standards are conditioned by the Public Works Department through the *Standard Conditions for Project Plan Approval – Water Quality BMPs* shown in Appendix G and discussed below. The Public Works Department also provides review of new development projects as part of the County Subdivision Review Committee and during CEQA review. Their review assists P&D in assessing the need for, and the adequacy of, proposed storm water quality treatment measures as required by the County's Comprehensive Plan policies.

To assist in the evaluation of the County's compliance with the NPDES Phase II regulations, the County contracted with Science Applications International Corporation (SAIC) in 2000 to help review the County's current post-construction practices and policies. SAIC assisted P&D with review of the County's existing Land Use Element and Local Coastal Plan policies that address water quality, the County's CEQA initial study checklist, CEQA thresholds and guidelines, and standard conditions of approval and mitigation measures.

The results of this evaluation were presented to the public through a series of workshops held in Santa Maria, Buellton, and Santa Barbara over a period of several months. Public comment on this work provided clarification and improvements on the final recommendations. The recommendations on policy interpretations and guidelines were presented to the County Board of Supervisors on two separate occasions during the spring and summer of 2002, and were adopted by the Board on September 24, 2002.

The new Board-adopted interpretive guidelines clarify applicability and interpretation and provide more consistent policy application. Coupled with new CEQA significance guidelines, environmental thresholds and guidelines manual, and conditions of approval and mitigation measures, the new interpretation guidelines will enhance policy implementation to protect water quality. A copy of these guidelines, including specific language implementing the BMPs that will be required on all new development requiring permits can be found in Appendix F - New Development Policies and Guidelines. The specific items are summarized below.

5.2 Best Management Practices

The County land use policies include a number of measures that address/protect storm water quality. They include requirements to: minimize grading (including limitations on grading on steep slopes); encourage good site design; provide development setbacks “buffers” from creeks and streams, and protect and restore sensitive habitats including wetlands. Review of surface water quality issues occurs during CEQA review and as a part of planning review (Staff Report preparation) during which projects are evaluated for consistency with the County’s Comprehensive Plan policies and Zoning Ordinance requirements. The protective policies and guidelines adopted by the County are discussed below. In addition, staff training will be conducted to provide for effective implementation of this minimum control measure.

5.2.1 Land Use Policy

Interpretive and Implementation Guidelines.

Interpretive guidelines were developed and adopted by the County to promote the consistent interpretation and implementation of Santa Barbara County’s existing key Comprehensive Plan water quality policies. P&D has historically used interpretive guidelines as a tool for clarifying policy objectives (e.g., Land Use Development Policy [LUDP] 4, Lompoc Area Interpretive Guidelines). The interpretive guidelines for water quality policies are applied to all new development and redevelopment projects proposed in the unincorporated areas of the County that generate runoff that is directly or indirectly discharged to storm drains, creeks, streams, rivers, the ocean, or other receiving water bodies in Santa Barbara County. These guidelines provide County staff and the development community with a framework to identify appropriate water quality protection measures for proposed projects, including the development of reasonable and feasible BMPs.

The Comprehensive Plan provides policy guidance in three general areas that address water quality protection: policies that encourage environmentally sensitive site design (LUDP 2, Hillside and Watershed Protection Policies 1 and 2, Coastal Plan Policies 3-13 and 3-14), policies that address minimizing grading, erosion water quality degradation during construction (Hillside and Watershed Protection Policies 3, 4, 5 and 7, Coastal Plan Policies 3-15, 3-16, 3-17 and 3-19), and policies that address post-construction water quality (Hillside and Watershed Policies 7 and Coastal Plan Policy 3-19). Hillside and Watershed Protection Policy 7 and Coastal Plan Policy 3-19 provide the mandate for the County to require both structural and non-structural BMPs to comply with the post-construction storm water runoff management in new development and redevelopment.

Existing Comprehensive Plan riparian and wetland protection policies also address water quality protection through preservation and restoration of riparian corridors and vegetation. In December 2000, P&D issued a policy paper to staff on creek and riparian protection clarifying the intent and application of these policies. This paper addresses appropriate application of riparian buffers, when encroachment into buffers may be permitted, requirements for offsetting measures when encroachment is permitted, appropriate measures to physically delineate protected areas and other requirements for ensuring consistency with creek protection policies. Guidance material published by EPA in support of the Phase II regulations encourages controls such as buffer strips and riparian zone preservation to improve water quality. This P&D riparian policy paper combined with the additional policy guidance provided by the adopted interpretation guidelines is part of achieving compliance with the Phase II regulations.

These policies are intended to direct growth away from sensitive areas, encourage environmentally sensitive site design, protect wetland and riparian resources, and minimize degradation of water quality.

The implementation guidelines are shown in Appendix F. The following are examples of interpretive and implementation guidelines:

- Site planning to avoid, protect, and restore sensitive areas (e.g., wetlands and riparian corridors);
- Minimizing impervious surfaces and directly connected impervious surfaces, using existing natural features to allow for on-site infiltration of water;
- Vegetative treatment (e.g., bioswales, vegetative buffers, constructed or artificial wetlands);
- Mechanical or structural storm water treatment (e.g., storm drain filters and inserts);
- Adequate space on each project site shall be reserved to incorporate the BMPs;
- Site planning to avoid grading or vegetation removal on slopes over 20%;
- Site planning to avoid grading in areas containing soils with a high erosion hazard or in geologically unstable areas;
- Site planning to minimize grading or vegetation removal where slopes over 20% cannot be avoided to allow reasonable use of a legal lot;
- Protection of existing native vegetation and enhancement of sensitive areas (e.g., wetlands and riparian corridors);
- Good housekeeping practices (e.g., designated waste collection areas, designated areas for vehicle maintenance and washing, proper vehicle maintenance to avoid leaks, elimination of connections to storm drains, immediate clean up of spills, recycling and reuse of materials, etc.);
- Adequate room shall be made available on the construction site to accommodate the BMPs throughout and after construction;
- All BMPs shall be maintained in working order; and
- Provisions shall be made for maintenance of BMPs over the life of the project, or the period in which the development exists as permitted.

CEQA Initial Study Checklist Revisions

The CEQA Initial Study Checklist provides a preliminary analysis of the potentially significant environmental impacts of a proposed project. The Initial Study is used to determine whether a project may have a significant effect on the environment, to determine whether mitigation measures are available to reduce or eliminate the potential impact and thus to determine what type of CEQA document will be required (e.g., Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report). The County's initial study checklist was adapted from the recommended checklist contained in the State CEQA Guidelines. Historically, the County checklist combined water resources and flooding into one category and included only one direct question regarding project related water quality impacts. Revisions to the County Initial Study checklist have been made to specifically evaluate potential storm water quality impacts.

CEQA Guidelines for Water Quality

The 1995 Santa Barbara County Environmental Thresholds and Guidelines Manual includes guidelines and thresholds to determine the significance of program and project-related impacts under CEQA. The thresholds and guidelines are adopted by the Board of Supervisors and are applied to all new private and public projects. Prior to the revisions adopted by the Board in September 2002, there were no thresholds or guidelines specific to surface water quality. Surface water quality impacts have historically been evaluated through the related effects on biological resources or in coordination with the RWQCB and its water quality regulations. New guidelines were developed to provide more explicit guidance to determine when a project's water quality impacts may be considered significant. The new guidelines summarize EPA studies demonstrating adverse water quality impacts from construction activities and new development, provide guidance as to when a project's surface and storm water quality impacts may be considered significant, less than significant or cumulatively significant, and provide a mitigation hierarchy.

Standard Conditions of Approval/Mitigation Measures

P&D has developed "A Planners Guide to Conditions of Approval and Mitigation Measures." This document provides a list of recommended conditions of approval and mitigation measures for discretionary projects. The conditions in the document enforce existing state and local regulations, Comprehensive Plan policies and include mitigation measures for commonly occurring environmental impacts. The Conditions/Measures are developed in conjunction with other County departments (e.g., Flood Control, Fire, Environmental Health Services, Parks). Several new conditions have been added to the document and several conditions were revised to specifically address construction site pollution control and post-construction runoff control for new development and redevelopment. All CEQA mitigation measures include a monitoring requirement.

Examples of some of the measures are provided below. All of the conditions/mitigation measures are provided in Appendix F:

- Extensive mulching (2” minimum depth) in all landscaped areas to improve water-holding capacity of soils;
- Permeable surfaces such as turf block, porous pavement, unit pavers on sand, or intermittent permeable surfaces such as French drains shall be used for all parking areas, driveways, patios, sidewalks around buildings, etc.;
- The project shall provide for onsite retention of storm water runoff, infiltration, and recharge where feasible;
- Labeling of storm drains that dumping waste is prohibited (i.e., “Don’t dump, drains to ocean”);
- Biofilters/bioswales for projects of 5 or more lots;
- Permanent grass or vegetated swale for projects of 4 or less lots;
- Roof runoff collection and disposal system through infiltration, French drains, irrigation system, or landscaped areas;
- Fuel dispensing areas shall be covered with runoff directed away to prevent drainage across fueling area;
- Parking lot and storm drain cleaning program for lots greater than 5,000 square feet;
- Combination structural and non-structural BMPs to prevent pollutants from project site from entering storm drain; and
- Submittal of a Storm Water Quality Management Plan for any project identified as having a significant storm water quality impact, assuring long-term operation and maintenance of required BMPs

Standard Conditions for Project Plan Approval – Water Quality BMPs

Applicable design standards in Attachment 4 of the General Permit are applied during project review. P&D staff apply conditions on projects that cover most of the design standards defined in Attachment 4 of the General Permit, except for item B(2i) Design Standards for Structural or Treatment Control BMPs and B(2a) Peak Storm Water Runoff Discharge Rates. In that case, the Public Works Department, through Water Resources Division staff, reviews new development plans for consistency with these items through the *County of Santa Barbara Standard Conditions of Project Plan Approval – Treatment Control BMPs* (Appendix G) and the *Santa Barbara County Flood Control and Water Conservation District Standard Conditions of Project Plan Approval*. Public Works is responsible for issuing final plan check approvals and land use clearance on those projects conditioned for structural or treatment control BMPs.

Treatment Control BMPs. Structural water quality BMPs refer specifically to engineered treatment facilities that improve the quality of runoff from developed areas, such as detention ponds, treatment wetlands, bioswales, and filters sized to treat the design storm, as defined in Attachment 4 (B)(2i). BMP sizing requirements are defined based on an analysis of local rainfall data. The proposed standard conditions include sizing criteria for volume-based and flow rate-based treatment facilities. These criteria would provide treatment of storm water and nuisance flows prior to discharge into the storm drain system, creeks, or ocean.

Specifically, these standard conditions are required on all new or redevelopment projects that are one acre or larger in size for residential development, 0.5 acre or larger in size for commercial, industrial, and transportation/vehicle development, as well as all the categories required in Attachment 4 for discretionary projects. The County of Santa Barbara Standard Conditions require treatment control BMPs be installed to accommodate rainfall events up to 1.2 inches in volume for detention-based BMPs, or 0.3 inches per hour for flow-through facilities. Specific design standards for these facilities are provided in the County of Santa Barbara Standard Conditions, and the Public Works Department has the authority to accept the developer's design or waive all or part of the conditions based upon a demonstrated impracticability for a specific property or project, as defined in the General Permit Attachment 4 Section (B)(4).

This sizing criterion is based on storm event analysis and continuous rainfall/runoff simulation (SYNOP and SWMM) on rainfall data from 1948 to 1999. The criteria were developed for the County prior to publication of the General Permit and Attachment 4. Although the recommended methods in Attachment 4 are an adequate gross estimate for determining the stormwater quality design volume, the County's approach included both a storm event analysis (SYNOP) and a continuous rainfall/runoff simulation model (SWMM) for a more conservative and realistic criteria.

The first approach used to obtain the 1.2 inch sizing criteria was based on the U.S. EPA statistical rainfall analysis program SYNOP, which was used to convert the hourly rainfall data from two representative gages (Santa Maria airport NCDC 047946 and downtown Santa Barbara NCDC 047902) to individual storm events with inter-event mean times (the dry period used to separate and aggregate hours of rainfall into "events") of 6 hours or greater and total rainfall depth of 0.1 inches or greater (storms less than 0.1 inch were omitted because they do not typically generate creek flows or significant runoff). The criteria for Santa Barbara County did not analyze 24-hour storms as this typically truncates many storm events artificially (i.e., storm events often begin and end before and after midnight, respectively) and is not how storm events naturally occur.

A second more comprehensive approach was employed where long-term rainfall records were used together with a rainfall/runoff simulation model (SWMM) to assess the effects of potential design storm sizing requirements. For example, successive storm events may reduce the amount of runoff treated due to the fact that the volume-based facility has not completely emptied. Thus, the results from combining the two approaches provide a more accurate value than the 85th percentile value commonly used in other communities. However, if converted to the recommended approach of Attachment 4 (WEF Manual of Practice No. 23) the design storm would be between 0.59 inches (for Santa Maria) and 1.1 inches (for Santa Barbara). Thus, the County's criteria to treat a 1.2 inch event exceeds the requirements of Attachment 4. Similarly for flow-through facilities, using the method of Attachment 4 results in a treatment rate of 0.2 inches per hour (for Santa Maria) and 0.4 inches/hour (for Santa Barbara), the average of which is equal to the County's design criteria of 0.3 inches / hour.

Peak Storm Water Runoff Discharge Rates. The Santa Barbara County Flood Control and Water Conservation District reviews and conditions all ministerial projects that are located along the coast, creeks, rivers and/or special flood hazard areas or those that potentially adversely increase storm water runoff, and all projects that are subject to the County's discretionary review process. Flood Control conditions require that drainage shall be conveyed to established water courses in a non-erosive manner. This is assured through review of submittals including hydrologic studies of the entire watershed contributing drainage to the projects, pre-development and post-development analysis for the 5 through 10 year storm events, and mitigation provided for increased runoff such as retention basins.

5.2.2 Discretionary Permit Review Process

The discretionary permit review process described below applies to all land use permits, including but not limited to those development and redevelopment projects that fall into one of the following categories:

- Single-family hillside residences
- 100,000 square foot commercial developments
- Automotive repair shops
- Retail gasoline outlets
- Restaurants
- Home subdivisions with 10 or more housing units
- Parking lots 5,000 square feet or more or with 25 or more parking spaces and potentially exposed to storm water runoff

Discretionary project applications are reviewed and projects conditioned as appropriate for water quality measures. Non-compliance is subject to penalties under the County Zoning Ordinances and may include a correction notice, stop work order, collection of any bonds, and establishing a time frame for developer to take corrective steps to resume work. The land use review process often starts prior to formal application ("pre-application") and continues through approval, construction and may include post-construction monitoring.

Pre-application Review

One venue for early identification of storm water quality impacts is the County's pre-application review process. The pre-application review meeting is held between P&D and a project applicant in advance of a formal project submittal. The pre-application meeting is voluntary but recommended for most moderately complex or complex projects where there is the potential for significant environmental impacts or policy concerns. During the meeting, staff provides a preliminary evaluation of environmental issues associated with the project and can advise the applicant on potential water quality policy and CEQA issues. Project design changes or mitigation measures may be identified to avoid policy conflicts and significant water quality impacts. During the review, a preliminary assessment of the project's consistency with the County's comprehensive plan policies (including the key water quality policies) is made. Staff also describe the required material necessary for a complete application submittal.

Application Submittal

To proceed with development an applicant must first apply for a permit from P&D. Permitted uses and permit requirements are set forth in the County's Zoning Ordinances. As a part of the application package information and maps regarding proposed uses of the land and structures must be submitted. Planning & Development updated its application to ensure that sufficient information is provided to evaluate storm water impacts. Accordingly, the application package must also include information regarding current and proposed storm water drainage, proximity to creeks, proposed impermeable area, and proposed measures to reduce impacts to water quality.

Application Review

Under the Permit Streamlining Act and CEQA for discretionary permits, P&D has 30 days from initial application submittal to determine application completeness. The application undergoes an internal P&D review and applications for discretionary permits and complex ministerial permit applications, are also reviewed by other departments with land use regulatory authority such as Public Works (concerning water quality and flood control) through the County's Subdivision and Development Review Committee. This provides another opportunity for the County and applicants to discuss project design and water quality protective measures that can be incorporated into the project. If a project has the potential to adversely affect storm water quality, a water quality advisory is included in the complete/incomplete letter.

CEQA Review

Projects that are not ministerial or that are not otherwise exempt from CEQA are reviewed under the State and County CEQA guidelines. This includes preparation of an Initial Study to determine the scope and the significance of project impacts, including impacts to water quality, and to determine the level of environmental review required. The County's Initial Study checklist form has been updated to more specifically address urban storm water quality impacts. The County has also adopted new CEQA guidelines for surface and storm water quality to assist in the assessment of water quality impacts. The County has also developed new and revised water quality BMPs in its updated standard conditions of approval and mitigation measure manual to address water quality impacts. If water quality and other project impacts can be feasibly mitigated to a less than significant level, a Negative Declaration (ND) is prepared. If there is the potential for residually significant impacts an Environmental Impact Report (EIR) is prepared. The EIR can include identification of additional mitigation measures or alternative project designs, which reduce water quality impacts. Both the ND and EIR are subject to public review and comment, which provide an additional opportunity for the public to comment on water quality issues.

Staff Report Preparation and Decision-maker Hearings

Ultimately, the project is subject to review by a County decision-making body. Depending on the project type, the decision maker can be the P&D Director, Zoning Administrator, Planning Commission, or Board of Supervisors.

Recommendations for approval or denial of the project are contained in a staff report or Board letter. Project approval can only be granted where the appropriate permit findings can be made, including a finding that the project is in conformance with the County's Comprehensive and/or Coastal Plan policies. An inconsistency with the County's water quality policies would be grounds for project denial.

If mitigation measures are required to address significant water quality impacts or to address policy consistency, the measures will be adopted as Conditions of Approval. Violations of Conditions of Approval are considered to be violations of the Zoning Ordinance and may be subject to a variety of enforcement actions. This includes proper operation and maintenance of conditioned water quality BMPs and flow control facilities (i.e., retention basins).

Land Use Clearance and Permit Compliance

To implement the project's approval, the applicant must receive land use clearance from P&D and obtain applicable Building and Grading Permits. Planning staff verify that the project plans submitted for building and grading are consistent with the approved actions, and that any compliance items required to be completed prior to land use clearance are completed. This would typically include review of detailed design plans for water quality treatment facilities. To obtain clearance to use or occupy the development, the applicant must implement any water quality measures adopted as a Condition of Approval.

Inspection Procedures

P&D staff provides regular inspection of discretionary projects during construction to ensure compliance with permit conditions and mitigation measures under CEQA. Project conditions vary but often do include water quality protection. Measures to protect water quality may apply to construction activities (temporary) or long-term measures (permanent) built into the project (structural features, bioswales, drainage design, revegetation and landscaping, etc.). Some long-term measures require a maintenance program that is usually approved by P&D and administered by a homeowners association (i.e., residential subdivision) or business owner (i.e., commercial or industrial).

These site inspections by Development Review Division are conducted separately and in coordination with Building and Safety inspections, discussed above under the Grading Ordinance. If, upon inspection, a project is found to be in violation of a condition of approval, a corrective action such as “Correction Notice” or “Stop Work Order” may be issued.

As a condition of approval, applicants will be required to submit annual evidence of the proper use and maintenance of their water quality measures and site inspections will be conducted as needed by P&D or Public Works to confirm proper operation of water quality measures. Violations of Conditions of Approval are considered to be violations of the Zoning Ordinance and may be subject to a variety of enforcement actions.

5.2.3 Staff Training

Planning staff need ongoing training to recognize potential storm water impacts during design review, and to condition projects appropriately. Training can be used to initiate new staff, and to provide updates on innovative site design for existing staff. There is an existing monthly voluntary training curriculum offered to P&D staff which provides an opportunity for most staff to attend required training on the County’s responsibilities under this Post-Construction minimum control measure. This existing training program now includes a course on compliance with the County’s NPDES permit requirements (i.e., implementation of this MCM). Those staff unable to attend training provided on the given dates will be required to review a videotape of the training and associated hand-outs summarizing the role and responsibilities of P&D staff. This will enable the training to reach 100% of all staff. Interactive teleconferencing between Santa Maria and Santa Barbara will be used during the trainings to improve attendance. Maintaining this training course and encouraging attendance are critical to successful implementation of this MCM.

5.2.4 Incentive Program for Innovative Site Design

The design community can provide the best source of innovative and appropriate techniques for site design that minimizes runoff. Examples of innovations include 100% vegetation cover for bioswales, use of sand filter/infiltration areas for recreation (i.e. volleyball), turf-grass roofing material, etc. Incentives that the County may consider include “fast-tracking” of projects through design review, reduction in permit fees, or direct financial incentives. Innovative projects can also be tracked and used as case-studies for the design/development community. The County will also consider annual awards for innovative projects to provide additional incentive as well as educational value.

5.3 Measurable Goals

The following goals will be used to check progress each year as well as demonstrate the efforts made to reduce pollutants to the maximum extent practicable. The intent is to provide an opportunity to assess and evaluate the program and a feedback mechanism to measure and update the program as appropriate.

The following measurable goals will be applied toward the new development and redevelopment minimum control measure:

BMP: Update of Land Use Policies

- Completed; updated policies provide implementation framework for BMPs listed below. (year 0)

BMP: Implement Design Standards for Post-Construction BMPs Per NPDES General Permit Including Provisions of Attachment 4(B)

- Apply standards to 100% of applicable projects (years 1-5).

BMP: Evaluate Program Efficacy

- Compare the existing policies, procedures, and standard conditions to the Post-Construction Minimum Control Measure requirements and the specific requirements of the General Permit Attachment 4(B) (year 1).
- If it is determined that changes need to be made to better comply with those requirements, then the relevant policy, procedures, or standard conditions will be developed or modified so that they meet or exceed all of the requirements in the General Permit including Attachment 4(B) (year 2).

BMP: Discretionary Permit Review Process: Project Evaluations

- Evaluate 100% of all discretionary projects receiving approval for construction, implementation, and, as appropriate, proper functioning and maintenance of water quality measures (years 2-5).
- Take enforcement actions on 100% of all projects where there is non-compliance on conditioned projects with approved water quality design, operation and/or maintenance procedures (including a correction notice, Stop Work Order, collection of any bonds, and establishing a time frame for developer to take corrective steps to resume work) (years 2-5).

BMP: Staff Training

- 75% attendance by P&D permit and review staff involved in design review at annual storm water trainings by year 1.
- 100% attendance by P&D permit and review staff involved in design review at annual storm water trainings or through videotape by year 2.
- Achieve participation of 100% of all new planning staff in a County water quality training (in-house) (years 1-5).

BMP: Incentive Program for Innovative Site Design

- Establish an incentive program for developers/contractors who implement good site design. Incentives could be in the form of reduced fees or fast-tracking through permit process. This would also apply to remodels or redevelopment that requires a discretionary permit (year 3).
- Establish an annual award program in following year for the most innovative project approved by County. This program would include projects nominated by the County as well as the public. The number of projects and types of innovations that are nominated each year will be tracked and reported to determine whether there is an overall increase in projects with innovative site design or overall improvement in the type of innovations (year 4).

5.4 Reporting

Data collected for each measurable goal will be compiled, reviewed, and summarized in the annual reports. Significant variance from targets will be assessed and discussed in the annual reports to the RWQCB. Feedback from P&D staff, permittees, developers, stakeholders, etc. will be used to modify BMPs or the measurable goals, as appropriate; the basis for any changes will be included in the next annual report.

**Table 5-1
 BMP Implementation: Post Construction Runoff Control**

Year(s)	BMP / (POC)	Current Status	Implementation Details	Measurable Goals	Implementing Entity
0	Update Land Use Policies (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation /Siltation; Fecal coliform; Total coliform; Heavy metals)	Updated policies adopted by Board of Supervisors in 2002.	Updated policies provide implementation framework for compliance with this MCM.	<ul style="list-style-type: none"> • Completed 	County Planning and Development Department

County of Santa Barbara
 Storm Water Management Program (2006-11)
 For Submittal: December 31, 2005

Year(s)	BMP / (POC)	Current Status	Implementation Details	Measurable Goals	Implementing Entity
1-5	Implement Design Per this MCM (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation /Siltation; Fecal coliform; Total coliform; Heavy metals)	Design standards to protect water quality are required on all new and redevelopment projects through policy, CEQA, and Zoning Ordinances.	Treatment control BMPs are conditioned by Public Works; all other design standards are conditioned by P&D.	<ul style="list-style-type: none"> • Apply standards to 100% of all applicable projects. 	County Planning and Development Department
1-5	Evaluate Program Efficacy	Design standards to protect water quality are required on all new and redevelopment projects through policy, CEQA, and Zoning Ordinances.	Existing policies, procedures, and standard conditions used to protect water quality will be evaluated through comparison to the General Permit requirements including Attachment(4).	<ul style="list-style-type: none"> • Compare existing policies, procedures, and standard conditions to the General Permit Attachment(4) requirements (year 1). • If it is determined that changes need to be made to better comply with those requirements, then the relevant policy, procedures, or standard conditions will be developed or modified so that they meet or exceed all of the requirements in the General Permit including Attachment 4(B) (year 2). 	Planning and Development Department; Public Works Department

County of Santa Barbara
Storm Water Management Program (2006-11)
For Submittal: December 31, 2005

Year(s)	BMP / (POC)	Current Status	Implementation Details	Measurable Goals	Implementing Entity
2-5	Discretionary Permit Review Process; Project Evaluations (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation /Siltation; Fecal coliform; Total coliform; Heavy metals)	Water quality measures are identified during pre-application review, application submittal and review, CEQA review. Project implementation verified through construction monitoring and applicant reporting.	Discretionary projects will be monitored for compliance with water quality measures, and non-compliance may include a correction notice, stop work order, collection of any bonds, and establishing a time frame for developer to take corrective steps to resume work.	<ul style="list-style-type: none"> Annually evaluate 100% of all discretionary projects for compliance with water quality measures. Take enforcement actions on all non-compliant conditioned projects. 	County Planning and Development Department
1-5, incrementally	Staff Training (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation /Siltation; Fecal coliform; Total coliform; Heavy metals)	Permitting and review staff. hold regular staff training on multiple subjects, including compliance with NPDES Permit conditions. Training materials including videotape of one training class are available.	Training can be used to initiate new staff, and to provide updates on innovative site design for existing staff. Training is critical to successful implementation of this MCM.	<ul style="list-style-type: none"> Existing staff attend annual training, 75% of all planners in year 1. 100% of all planners by year 2. New staff: 100% attendance in annual training. 	County Planning and Development Department & Project Clean Water
4-5	Incentive Program for Innovative Site Design (Pathogens; Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation /Siltation; Fecal coliform; Total coliform; Heavy metals)	Storm water issues are not covered by existing incentive programs.	The incentive program will encourage site design that minimizes runoff, while also educating the design/construction community.	<ul style="list-style-type: none"> Incentive program established by year 3. Establish annual award program in following year 4. 	County Planning and Development Department & Project Clean Water

6.0 POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Responsible Person to Implement or Coordinate this Minimum Control Measure: County Public Works Director.

The purpose of this minimum control measure for Municipal Operations/Good Housekeeping Practices is to assure that the County's delivery of public services occurs in a manner protective of storm water quality. In this way the County may serve as a model to the community.

6.1 Minimum Requirements

The State's General Permit states that the County must develop and implement an operations and maintenance plan that will prevent or reduce pollutants in runoff from municipal operations (*EPA Fact Sheet 2.8 – Pollution Prevention/Good Housekeeping, 01/00*).

The minimum requirements are:

- To consider municipal activities and identify those that may contribute pollutants to storm water;
- To select and implement Best Management Practices (BMPs) that will reduce or eliminate pollutants in storm water runoff from these activities to the Maximum Extent Practicable; and
- To train new and existing employees on the potential impacts to storm water from municipal activities and the implementation of BMPs to prevent and reduce these impacts.

6.2 Best Management Practices

The County engages in numerous activities that cover the gamut from road and building maintenance to hiring contractors to construct roads and buildings. To cover all these activities under the SWMP requires flexibility in implementing the BMPs. As discussed below, the County has evaluated the services it provides and the facilities it owns and operates. The BMPs under this MCM include changes to facilities, procedures and training of County staff.

6.2.1 Evaluation of Santa Barbara County Facilities and Operations (Self-Audit)

The County operates many different kinds of facilities over a wide and varied area. In order to address the need for storm water protection for all facilities and operations, every County facility was surveyed and facility managers or operational managers interviewed to determine the nature of activities, identify appropriate BMPs, and provide for their implementation. Each facility or operation was evaluated with respect to operations, activities and existing storm water management practices.

Prior to beginning the surveys, a comprehensive list of all County facilities was developed. Since no one department maintained such a list, several departments were contacted for their database of facilities (both owned and leased). PCW staff surveyed over 250 individual sites that comprise all County-owned or leased sites, ranging from corporate yards to leased youth camps. In addition to making a visual survey of each, PCW staff spoke with facility supervisors and managers regarding operations and activities, and completed a storm water information questionnaire. Undeveloped and un-maintained County-owned or leased sites were not part of the survey program because, by their nature, they have little to no impact storm water quality.

Some County facilities are regulated under an Industrial Storm Water Permit General Permit, issued by the SWRCB under the NPDES Phase I rules that have been in effect since 1992. These facilities are subject to a separate storm water permit as it relates to their particular operation (or Standard Industrial Classification code). These facilities include the Tajiguas landfill, Foxen Canyon landfill, transfer stations, and the Santa Ynez airport. (Information on these facilities and the industrial NPDES program is available from the RWQCB.) One of these Phase I facilities, the South Coast transfer station, is located within the urbanized area and is therefore part of the County's SWMP. Because of the existing industrial permit conditions, the South Coast Transfer station was not included in the County inventory discussed below.

For example, the General Industrial Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) and a monitoring plan. Sources of pollutants are identified and the means to manage the sources to reduce storm water pollution are defined in the SWPPP. Under the Phase 1 rules, facilities must implement management measures to achieve the performance standard of best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT). The General Industrial Permit requirements accomplish similar goals of the Storm Water General Permit minimum control measures for municipal operations: identifying activities that may contribute pollutants to storm water, selecting and implementing BMPs and providing for corrective action and dates of implementation, and training employees. The General Industrial Permit also requires analytical storm water monitoring and an annual report.

A questionnaire was developed for the inventory survey to ensure appropriate, detailed and standardized information was collected. In addition, the questionnaire covered current pollution prevention BMPs, permits and inspections, record keeping and reporting methods. During the facility surveys, potential water quality impacts were noted based on activities, materials used, wastes generated, standard operating procedures (SOPs), and storage practices.

It was evident that many County facilities were implementing pollution prevention practices, which also reduce impacts to storm water. Periodic inspections specific to permits were documented. For example, the Flood Control District has a Program EIR for their annual maintenance activities. Each of the projects within the scope of the Program EIR is presented as addenda to the Program EIR, utilizing appropriate standard maintenance practices for the project impacts. Each of these PEIR projects has a mitigation and monitoring program attached to the addendum. Once the Board has approved projects defined in the Annual Maintenance Plan, application is made to the State Department of Fish and Game, U.S. Army Corps of Engineers,

and other regulatory agencies for environmental permits or approvals. Applicable permits are obtained from local, State and Federal regulatory agencies prior to project implementation. Flood Control projects beyond the scope of the Program EIR require additional environmental documentation with individual hearings to consider these projects. Thus, the Flood Control District works under permits with detailed work plans for their operation and maintenance activities. The County Flood Control District commits to continue their routine creek maintenance program including water quality protection measures as set forth in the associated environmental permits (see Annual Maintenance Plan <http://www.countyofsb.org/pwd/water/creek.htm> for additional detail).

Over 26 managers of field operations were interviewed. Supervisors and managers who oversee the field operations provided detail on activities conducted off-site that could have potential impacts to storm water. Recommendations for field activity BMPs were developed. Individual field operations and activities were not evaluated by PCW staff since the logistics of scheduling proved very difficult (a lot of the work is seasonal and includes responding to emergencies). Instead, data was gathered by interviewing the supervisors and managers who oversee this work.

Below are the departments interviewed and their field projects and field programs reviewed:

Agricultural Commissioner: Vector Control, Weed Abatement Program, Weights & Measures

Air Pollution Control District: Monitoring stations

Alcohol, Drugs, Mental Health Services (ADMHS): Client contact

Fire: Training exercises, Equipment repair, Fire Prevention Program, Hydrant testing, Emergency response

General Services: Communications, Vehicle Operations, Facilities maintenance

Probation: Graffiti Abatement Program, Home visits, Los Prietos Boys Camp & Tri-Counties Boot Camp, Community Service Program

Public Health: Animal Services, Vector control, Home visits

Public Works: Construction/Lab, Flood Control, Laguna Sanitation, Roads, Traffic, Solid Waste

Sheriff: General, SWAP, Drug labs/Bomb Squad

Social Services: Client contact

The results of the facility surveys were compiled in a spreadsheet, which identified each facility or field operation (by department and division) with its potential to impact storm water. During the surveying a list of municipal activities with the potential to impact storm water was created. The matrix identifies activities and the associated BMPs for each department and facility. This spreadsheet is being transferred to a web-based application so that each department can track and report on their individual accomplishments. This information will be used directly in the annual reports to the RWQCB.

6.2.2 Site Specific Water Quality Protocols

To ensure compliance with the County's SWMP, facilities with a greater potential to create or release pollutants are completing their own site-specific written Water Quality Protocols. Such protocols have been, or will be, developed for the following sites:

General Services: Vehicle Operations

Fire: Construction Yard

Public Works: Flood Control, Roads, Traffic, Corporation Yards, Laguna Sanitation

6.2.3 Municipal Operations Best Management Practices Fact Sheets

A total of 19 Best Management Practices Fact Sheets (Fact Sheets) have been developed and are shown in Appendix H - Best Management Practices Fact Sheets – Municipal Operations. Based on activities identified during interviews and onsite surveying, the Fact Sheets primarily focus on source control (including employee training) to reduce or prevent pollution.

Each Fact Sheet presents a variety of specific BMPs for preventing and reducing pollution covering one activity, such as: housekeeping, landscaping or storm drains. This menu approach allows each department and facility to take credit for their existing pollution prevention efforts (whether written or not) and to select appropriate BMPs to augment their current efforts. In addition, all County employees are encouraged to suggest new BMPs; PCW will either add these suggestions to the Countywide Fact Sheets or recommend that they be used as site- or operation-specific BMPs only. In this way the Fact Sheets can be continuously updated to ensure the best menu of BMPs are available.

The BMP Fact Sheets include:

- SC1. Alternative Safer Products
- SC2. Building Maintenance & Repairs
- SC3. Employee Training
- SC4. Housekeeping (addresses cleaning practices conducted by County employees and their contractors)
- SC5. Kitchen, Restaurant & Deli
- SC6. Landscape & Undeveloped Areas
- SC7. Loading & Unloading
- SC8. Material & Hazardous Waste Storage
- SC9. Metal, Wood, Paint & Print Shops
- SC10. Parking Lots & Garages
- SC11. Spill Prevention & Cleanup
- SC12. Storm Drains & Catch Basins
- SC13. Horses
- SC14. Trash & Dumpster Management
- SC15. Vehicle & Equipment Fueling
- SC16. Vehicle & Equipment Maintenance & Repairs
- SC17. Vehicle & Equipment Washing and Steam Cleaning
- SC18. Basic BMPs for Employees
- TC1. Treatment (Structural) Controls

While the surveys and interviews showed that source control BMPs are generally the best approach to reduce pollution, on occasion treatment controls are needed in some circumstances to protect storm water. Since site-specific conditions and project requirements are highly variable, a reference list was developed in lieu of County-specific treatment control BMPs. The TC1 Fact Sheet references several well-known handbooks chosen for their expertise in handling storm water runoff under the wide variety of conditions found in California. These are the same references given in the Construction Storm Water Program under the County's Planning and Development Department. The references are:

- California Department of Transportation. *Storm Water Quality Handbook: Construction Site Best management Practices (BMPs) Manual*. 2002 or current.
- California Regional Water Quality Board San Francisco Bay Region. *Erosion and Sediment Control Field Manual*. 2002 or current.
- California Stormwater Quality Task Force. *California Storm Water Best Management Practices Handbooks: Construction Activity; Industrial/Commercial Activity; New Development and Redevelopment; and Municipal Activity*. Four volumes, January 2003 or current.

6.2.4 Reporting on BMP Implementation

PCW staff are developing an interactive web-based program that will enable those staff responsible for facilities and operations to report on their individual storm water program, including BMPs selected and a schedule for BMP implementation and reporting.

Results of this program will be used for updating and revising the BMPs and for annual reporting to the RWQCB under the NPDES permit. PCW staff will also evaluate relevant program activities implemented by other Phase I and Phase II communities, including but not limited to Los Angeles and San Diego Counties, and revise the County-wide BMPs (as shown on the Fact Sheets) as appropriate.

6.2.5 Purchasing and Contracts

The County is reviewing policy language requiring vendors and contractors who provide services for the County to implement storm water BMPs relevant to its work. Such services and contracts may include housekeeping, painting, and construction. Contracts will be worded to include specific language requiring contractors to obtain approval from the County for project-oriented BMPs. The contractor's BMPs or plan will describe how storm water conveyances will be protected from potential pollutants specific to the project undertaken. If the contractor violates the plan, it will be sufficient reason for termination of the contract without harm to the County. Current contract language used by General Services Purchasing incorporates by reference the current edition of the Standard Specifications for Public Works Construction ("Green Book").

The Public Works Department, which is a major contractor for construction activities, incorporates Caltrans Standard Specifications into all contract documents. These specifications include strict provisions for the protection of water quality. Specifically, Water Pollution Control Programs are required on all construction projects with soil disturbance of less than 1 acre and Storm Water Pollution Prevention Plans are required on all projects greater than 1 acre. These

plans must include BMPs to address erosion and sediment control measures, as well as non-storm water runoff control measures.

6.2.6 Green Team and the Countywide Integrated Pest Management Plan

The County of Santa Barbara's Green Team was developed in 1999 to promote environmental stewardship in County operations. In June 1999 the County Green Team was asked to initiate a process by which the County could assess its pesticide use. A Pesticide Subcommittee was formed with representatives from the Public Works Department, the General Services Department, the Parks Department, and the Agricultural Commissioner's Office. Representatives from these County Departments have developed an *Integrated Pest Management Strategy* (Appendix I - Integrated Pest Management Strategy and Integrated Pest Management Plan) in support of the goal of reducing the potential impact of pesticide use on the community.

The Integrated Pest Management (IPM) Strategy promotes the design, construction and maintenance of County landscapes and structures in a way that protects and enhances the region's natural resources and public health. In addition, the IPM Strategy provides a framework for evaluating pesticide use by County Departments.

The purpose of the IPM Strategy is to ensure that County application of pesticides is done in a manner that protects and enhances the region's natural resources and public health; that County use of pesticides is a model of environmental stewardship in the eyes of the public; that the County establishes a leadership role in developing both aesthetically pleasing and ecologically sensitive landscapes and structures; and that there is a consistent standard of environmental stewardship observed by County departments managing structures, landscapes, and other grounds.

The IPM Strategy also provides for periodic re-evaluation of pesticides used by County employees, to phase out products that pose human health or environmental risks, and to promote the use of non-hazardous and/or reduced-risk alternatives by the County that are protective of human health and the environment. The IPM Strategy requires updates that list the pesticides in use by all County departments and allows employees involved in pesticide use to make conscious decisions about the pesticides selected, to use pesticides wisely, and to make full use of pesticides purchased. Each department is required to appoint an IPM Coordinator to oversee pilot projects that implement IPM techniques.

As part of the IPM Strategy, a Grounds Management Committee has been established to coordinate activities, exchange information, review requests for new products, set goals and evaluate progress. In addition a summary of pesticide use will be compiled and submitted to the Board of Supervisors on an annual basis along with progress reports for each of the pilot projects.

The IPM Strategy was prepared in a manner that allows the document to be updated and improved on a regular basis. In addition, several future actions have been set forth with the input from Board members and public interest groups to encourage future enhancements to the program. A Request for Qualifications (RFQ) process will be developed to seek outside contractors for departments that do not have Pest Control Advisors (PCA) on staff. Qualified contractors must have IPM experience to qualify for County contract work. It should be noted that all PCAs are trained to some degree in IPM techniques and that efforts will be made to find outside contractors with extensive training and experience and that training for PCAs currently on County staff will be enhanced to the maximum extent practicable.

Public notification procedures have also been developed. The General Services Department has a post/notification requirement (see Appendix I) and intends to implement this process immediately. Providing information to employees and the public is a key concern to General Services. The Parks Department, which has been posting public notices for several years, is updating their notification procedure as part of adopting the IPM strategy. Although most of their pesticide use has much lower exposure to the public, Flood Control has also posted public notification in areas of public use or in applications close to existing residences and businesses for several years.

The County's Board of Supervisors approved the IPM Strategy and Plan in April 2000. The most recent status report was presented to the Board of Supervisors on June 21, 2005. For more information on the County's Integrated Pest Management Plan strategy, see www.countyofsb.org/greenteam.

As described in the preceding paragraphs, the County's IPM strategy directs all County Departments to find effective alternatives to the use of pesticides that could be harmful. However, it should be noted that the use of pesticides in California is subject to state and federal rules, and misuse of any pesticide is a violation of these laws. California has additional controls on certain pesticides that could be especially hazardous to human health or the environment if they are used improperly. County programs that involve pesticides use must use certified applicators or trained persons working under their supervision in order to use regulated pesticides, defined as "restricted materials" (California Code of Regulations, Title 3, Division 6, Section 6400 et seq.). In addition to the permitting requirements enforced by the Department of Pesticide Regulation, the SWRCB also regulates and enforces pesticide use where there is discharge to surface waters. On May 20, 2004, the SWRCB adopted two General Permits regulating the use and application of pesticides under a National Pollutant Discharge Elimination System (NPDES) permit. They are:

1. Water Quality Order No. 2004-0008-DWQ Statewide General NPDES Permit for Discharges of Aquatic Pesticides to Surface Waters of the United States For Vector Control (General Permit No. CAG990004); and
2. Water Quality Order No. 2004-0009-DWQ Statewide General NPDES Permit for the Discharge of Aquatic Pesticides for Aquatic Weed Control in Waters of the United States (General Permit No. CAG 990005).

Water Quality Order No. 2004-0009-DWQ specifically addresses the discharge of aquatic pesticides related to the application of 2,4-D, acrolein, copper, diquat, endothall, fluridone, glyphosate, and triclopyr-based aquatic pesticides to surface waters for the control of aquatic weeds. Water Quality Order No. 2004-0008 requires that dischargers implement BMPs to mitigate effects to water quality resulting from pesticide applications and consider alternative control measures to reduce potential water quality impacts. County staff and programs that use the pesticides regulated under these Orders must comply with the conditions of the General Permits.

6.2.7 Solid Waste Handling and Recycling

The County Resource Recovery and Waste Management Division is responsible for the management of solid waste in the County and provides landfill disposal for the unincorporated areas of the south coast of Santa Barbara County, the City of Santa Barbara, Santa Ynez Valley, and the Cuyama Valley. The County's job is to provide environmentally safe solutions for the collection and disposal of Santa Barbara County's trash.

The Division's comprehensive program for the management of solid waste includes the collection, recycling, and disposal of solid waste, and also the abatement of illegal dumping of waste (see Illicit Discharge MCM). These programs are established and regulated under separate state and federal regulations than the Phase II program mandating this SWMP. Discussion of County Resource Recovery and Waste Management Division programs in this SWMP is for informational purposes and does not subject them to additional regulation.

Programs implemented by the County to prevent improper disposal of wastes into the environment include:

- Backyard Composting
- Business Recycling Program
- California Coastal Cleanup Day
- Christmas Tree Recycling
- Construction & Demolition Debris Recycling
- Electronics Recycling Program
- Green Award Program
- Household Hazardous Waste
- Illegal Dumping/Abandoned Vehicle Program
- Junk Mail Recycling
- Multi-Family Residential Recycling
- Recycling Market Development Zone
- Recycling Resource Guide
- School Recycling
- Single-Family Residential Recycling
- South coast solid Waste and recycling facility (4430 Calle Real)
- Telephone Book Recycling
- Food Scrap Recycling Program

Through the County of Santa Barbara's Household Hazardous Waste Program, the community has several avenues to safely dispose of household hazardous waste. Education of the public about the proper disposal of household hazardous waste occurs through fliers, community events, and radio and newspaper advertisements.

The County of Santa Barbara has been awarded the Household Hazardous Waste/Used Oil Program, Program Excellence Award by the California Environmental Protection Agency (Cal/EPA) for the calendar year 2001. Cal/EPA's Household Hazardous Waste/Used Oil Program awards are intended to promote and recognize local programs engaged in pollution prevention, hazardous waste reduction, waste stream toxicity reduction, and recycling.

The Household Hazardous Waste Program encompasses the following programs and partners:

- Permanent collection facility known as the Community Hazardous Waste Collection Center (CHWCC) located on the campus of the University of California at Santa Barbara;
- North Santa Barbara County curbside used oil collection program operated by a waste hauler, Health Sanitation Service;
- The Foxen Canyon Landfill Antifreeze, Batteries, Oil, and Paint (ABOP) facility in the Santa Ynez Valley;
- Annual one-day Household Hazardous Waste collection events in the Santa Ynez and Cuyama Valleys;
- Home Generated Sharps Collection Program for the collection and proper disposal of used needles; and
- Comprehensive used oil collection program operated by the Community Environmental Council.

No measurable goals are needed since this is an ongoing and separately mandated program with its own independent reporting requirements. Information on this program may be obtained from the County Resource Recovery and Waste Management Division.

6.2.8 Storm Drain Maintenance

The County currently owns and maintains several storm water treatment control facilities, including seven CDS units, three bioswales, and one ultraviolet radiation treatment system, all of which were installed as pilot projects to evaluate cost-effectiveness. Several drop inlet filters were installed on a pilot-scale basis, but were removed due to maintenance difficulties and constraints. Four of the CDS units and the UV treatment system are located in Isla Vista and treat runoff prior to discharge onto the beach. The remaining three units and three bioswales are located in the unincorporated Goleta area and treat runoff prior to discharge into Atascadero Creek. Maintenance consists of regular inspections, removal of wastes from the CDS units on biannual basis or as needed, minor landscaping management efforts at the bioswales on as-needed basis, and vector control/treatment as-needed. The County will continue to perform regular cleaning and maintenance of these facilities, and will establish a regular inspection and maintenance schedule to ensure that facilities are cleaned prior to the rainy season and at other appropriate times of the year.

6.2.9 Street Sweeping

The County currently sweeps commercial district and heavily-used arterial streets three to four times per year, prior to storms likely to mobilize accumulated materials into the storm-drain system. Field observations indicate a minimum of four to six weeks after significant rainfall is long enough to accumulate material in the gutter of these streets to make street sweeping worthwhile. The County sweeps 22 miles each event; both volume and weight of materials collected are recorded prior to disposal. Local disposal through the County's Resource Recovery and Waste Management Division program is a necessary element of this BMP to maintain control of the waste stream, disposal location and cost. The County will continue to sweep the currently targeted streets (22 miles) a minimum of three times per year prior to storms likely to mobilize accumulated materials into the storm-drain system. The County will monitor and report both volume and weight of material collected.

6.2.10 Training

All County employees will receive an appropriate level of training on storm water pollution prevention based on their work responsibilities. Much of the training programs will be integrated into existing training presented to staff. Departments are encouraged to incorporate storm water training into their routine classes. The surveys indicated that most departments have some type of training or handout to educate their employees on the specific hazards of their job, so storm water issues may be incorporated into current training.

A program will be developed countywide for distributing the BMP Fact Sheet entitled "Basic BMPs for County-Wide Employees." This Fact Sheet provides general direction to all County employees through new employee orientation to protect water quality both at work and at home. This Fact Sheet emphasizes that even small actions can impact storm water for benefit or cost; employees have a choice in their everyday activities. At work they are asked to report these to either their Department or the PCW team via an 800 number. They are also given web sites that provide alternatives practices to prevent pollution at home.

Depending on personnel involved, storm water training will occur either quarterly or annually. In addition, managers will be given specific guidance on their departmental and contractual responsibilities for storm water management, while facilities with Water Quality Protocols may have very specific training requirements as directed in the protocol. Frequency and type of training will depend on the activities targeted.

6.3 Measurable Goals

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

- Survey facilities to determine nature of activities and appropriate BMPs (year 0).

BMP: Site Specific Water Quality Protocols

- Complete 100% of facility-specific protocols by year 3.

BMP: Municipal Operations Best Management Practices Fact Sheets

- Prepare and publish BMP Fact Sheets. (Completed; see Appendix H) (year 0)

BMP: BMP Fact Sheet Implementation & Reporting

- 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).
- 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).
- 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.
- 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).
- 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).

BMP: Purchasing and Contracts

- Complete contract revisions (year 1).
- Tabulate number of projects that require BMPs or plans (year 1).
- Evaluate contractor compliance (years 2-5).
- 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).

BMP: Countywide Integrated Pest Management Plan

- Document annual updates of IPM Strategy (years 1-5).
- Report reductions in pesticide use on a departmental basis (years 1-5).

BMP: Storm Drain Maintenance

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

BMP: Street sweeping

- Report number of lane-miles swept and number of events per year.
- Report weight and volume of materials collected for each event.

BMP: Staff Training

- Achieve 100% completion of countywide training by year 3.
- Document number of training sessions presented (years 3-5).
- Document number of staff attending (years 3-5).
- Document number of email messages on water quality (years 3-5).

6.4 Reporting

Data collected for each measurable goal will be compiled, reviewed and summarized as part the annual reports to the RWQCB. Significant variance from targets will be assessed and discussed in the annual reports to the RWQCB. Feedback from County employees, stakeholders, etc. will be used to modify BMPs or the measurable goals, as appropriate; the basis for any changes will be included in the annual report.

**Table 6-1
 BMP Implementation: Pollution Prevention and Good Housekeeping
 for Municipal Operations**

Year(s)	BMP /(POC)	Current Status	Implementation Details	Measurable Goals	Implementing Entity
Complete	Evaluation of Facilities (Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Heavy metals)	Project Clean Water staff has completed onsite evaluations of County facilities and surveyed County activities with respect to storm water and non-storm water discharges.	Survey facilities to determine nature of activities and appropriate BMPs	<ul style="list-style-type: none"> • Completed; results will guide implementation of BMPs below. 	County Project Clean Water
3	Site Specific Water Quality Protocols (Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Heavy metals)	Some facilities have already developed protocols.	Sites with activities such as vehicle operations, construction yards, corporation yards, and sanitary treatment facilities are completing specific Water Quality Protocols.	<ul style="list-style-type: none"> • Complete development of site-specific protocols (year 3) 	County Project Clean Water with Public Works, Parks, General Services

County of Santa Barbara
Storm Water Management Program (2006-11)
For Submittal: December 31, 2005

Year(s)	BMP /(POC)	Current Status	Implementation Details	Measurable Goals	Implementing Entity
0	Municipal Operations BMP Fact Sheets (Pathogens, Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Heavy metals, Total coliform, Fecal coliform)	Based upon the facility and activity surveys, a list of appropriate BMPs for various operations has been developed. See Appendix H.	Each department and facility can take credit for existing pollution prevention efforts and select appropriate BMPs to augment current efforts.	<ul style="list-style-type: none"> • Prepare and publish BMP fact sheets (completed). 	County Project Clean Water
2-5	BMP Implementation & Reporting (Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Heavy metals)	An interactive web-based program is being developed to facilitate reporting on storm water programs.	Staff will utilize web-based program to report BMP implementation or implementation schedule.	<ul style="list-style-type: none"> • Update and revise BMP Fact Sheets as needed, based upon staff input and other Phase I and Phase II community programs (years 1-5). • Develop program for reporting (year 2). • Tabulate number of BMPs implemented 50% by year 2, 75% year 3; 100% year 4. • Audit one facility per department each year, starting year 2 (years 2-5). • Continue existing programs (i.e., Flood Control maintenance, solid and hazardous waste handling/recycling, storm drain maintenance, etc.). Update annual reports (years 1-5). 	County-wide
2-5	Purchasing & Contracts (Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Heavy metals)	Projects that could affect water quality are often performed by outside contractors. Contract language is under development to require implementation of BMPs.	Contractors will be required to implement BMPs to protect water quality.	<ul style="list-style-type: none"> • Complete contract revisions (year 1). • Tabulate number of projects that require BMPs or plans (year 1). • Evaluate contractor compliance (years 2-5). • Report the number of Notice of Violations or Corrective actions (years 2-5). 	County General Services - Purchasing

County of Santa Barbara
Storm Water Management Program (2006-11)
For Submittal: December 31, 2005

Year(s)	BMP /(POC)	Current Status	Implementation Details	Measurable Goals	Implementing Entity
1-5	Integrated Pest Management Plan (Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Heavy metals)	The IPM Strategic Team has established County policy for pesticide use that commit County departments to reduce or eliminate the use of pesticides.	IPM Strategy will be evaluated annually for effectiveness. Departments must appoint an IPM coordinator and report pesticide usage.	<ul style="list-style-type: none"> Document annual updates of IPM Strategy (years 1-5). Report reductions in pesticide use on a departmental basis (years 1-5). 	County Public Works, Parks, General Services, Agricultural Commissioner, Planning & Development
1-5	Storm Drain Maintenance (Pathogens, Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Heavy metals, Total coliform, Fecal coliform)	The County currently owns and maintains several storm water treatment control facilities, including seven CDS units, three bioswales, and one ultraviolet radiation treatment system.	Maintenance consists of regular inspections, removal of wastes from the CDS units on biannual basis, minor landscaping management efforts at the bioswales on as-needed basis, and vector control/treatment as-needed.	<ul style="list-style-type: none"> Establish and implement a cleaning schedule for County-owned and operated treatment control facilities (years 1-5). 	County Public Works
1-5	Street sweeping (Pathogens, Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Heavy metals, Total coliform, Fecal coliform)	The County currently sweeps 22 miles of commercial and arterial streets.	County staff monitors the occurrence and forecast of storms year-round. After 4 to 6 weeks without rain, County staff initiates street sweeping on the basis of storm predictions.	<ul style="list-style-type: none"> Report number of lane-miles swept and number of events per year. Report weight and volume of materials collected for each event 	County Public Works
3-5	Staff Training (Nutrients; Organic Enrichment/Low DO; Priority Organics; Sedimentation/Siltation; Heavy Metals)	Many employees have job responsibilities that can affect water quality.	Staff will receive appropriate training on water pollution prevention.	<ul style="list-style-type: none"> Achieve 100% completion of countywide training by year 3. Document number of training sessions presented (years 3-5). Document number of staff attending (years 3-5). Document number of email messages on water quality (years 3-5). 	County -wide

APPENDICES

Appendix A - Notice of Intent

Appendix B - Additional Water Quality Measures

Appendix C - Project Clean Water Public Education and Outreach Materials

Appendix D - Water Quality Hotline Referral System

Appendix E - 2002 Revised Grading Ordinance

Appendix F - New Development Policies and Guidelines

Appendix F1 - Policy Interpretive and Implementation Guidelines for Hillside and Watershed Protection Policies 7, 3, 4 and 5 (Coastal Plan Policies 3-19, 3-15, 3-16 and 3-17)

Appendix F2 - CEQA Initial Study Checklist Revisions

Appendix F3 - Guidelines for Surface and Storm Water Quality

Appendix F4 - Revisions to a Planner's Guide to conditions of Approval and Mitigation Measures

Appendix G - County of Santa Barbara Standard Conditions for Project Plan Approval – Water Quality BMPs

Appendix H - Best Management Practices Fact Sheets – Municipal Operations

Appendix I - County of Santa Barbara Integrated Pest Management Strategy

Appendix J - Water Related Monitoring In Santa Barbara County

Appendix A

Notice of Intent

State Water Resources Control Board
 NOTICE OF INTENT
 TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT FOR
 STORM WATER DISCHARGES FROM
 SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
 (WQ ORDER No. 2003-0005-DWQ)

I. NOI Status

Mark Only One Item 1. New Permittee 2. Change of Information WDID # _____

II. Agency Information

A. Agency County of Santa Barbara			
B. Contact Person Robert Almy		C. Title Water Agency Manager	
D. Mailing Address 123 E. Anapamu St.		E. Address (Line 2)	
F. City Santa Barbara	State CA	G. Zip 93101	H. County Santa Barbara
I. Phone (805) 568-3542	J. FAX (805) 568-3434	K. Email Address ralmy@co.santa-barbara.ca.us	
L. Operator Type (check one) 1. <input type="checkbox"/> City 2. <input checked="" type="checkbox"/> County 3. <input type="checkbox"/> State 4. <input type="checkbox"/> Federal 5. <input type="checkbox"/> Special District 6. <input type="checkbox"/> Government Combination			

III. Permit Area

Santa Barbara County South Coast and Other Unincorporated Areas (See Figure 1 SWMP)

IV. Boundaries of Coverage (include a site map with the submittal)

Urbanized unincorporated areas along south coast from approximately Ventura-Santa Barbara county line to the east, Pacific Ocean to the south, foothills of Santa Ynez mountains to the north, western edge of City of Goleta to the west. Does not include Cities of Carpinteria, Santa Barbara or Goleta. Unincorporated areas of north County including Santa Ynez, Los Olivos, Vandenberg Village, and Orcutt. (See Figure 1 SWMP)

V. Billing Information

A. Agency County of Santa Barbara, Public Works Department			
B. Contact Person Lynn Hogan		C. Title Accountant	
D. Mailing Address 123 E. Anapamu St.		E. Address (Line 2)	
F. City Santa Barbara	State CA	G. Zip 93101	H. County Santa Barbara
I. Phone (805) 568-3128	J. FAX (805) 568-3019	K. Email Address shogan@co.santa-barbara.ca.us	

L. Population <u>144,000</u> Please check the appropriate box on the right and submit the corresponding fee. Check (s) should be made payable to the SWRCB.	<input type="checkbox"/> Population greater than 250,000.....\$20,000
	<input type="checkbox"/> Population between 200,000 and 249,999.....\$17,500
	<input type="checkbox"/> Population between 150,000 and 199,999.....\$15,000
	<input checked="" type="checkbox"/> Population between 100,000 and 149,999.....\$12,500
	<input type="checkbox"/> Population between 75,000 and 99,999.....\$10,000
	<input type="checkbox"/> Population between 50,000 and 74,999.....\$7,500
	<input type="checkbox"/> Population between 25,000 and 49,999.....\$5,000
	<input type="checkbox"/> Population between 10,000 and 24,999.....\$3,000
	<input type="checkbox"/> Population between 1,000 and 9,999.....\$2,000
	<input type="checkbox"/> Population between 0 and 1,000.....\$1,000
	<input type="checkbox"/> K - 12 School District.....Exempt

VI. Discharger Information (check applicable box(es) and complete corresponding information)

1. Applying for Individual General Permit Coverage

2. Applying for a permit with one or more co-permittees

The undersigned agree to work as co-permittees in implementing a complete small MS4 storm water program. The program must comply with the requirements found in Title 40 of the Code of Federal Regulations, parts 122.32. Attach additional sheets if necessary. Each co-permittee must complete an NOI.

Lead Agency	Signature
Agency	Signature
Agency	Signature
Agency	Signature

3. Separate Implementing Entity (SIE)

A. Agency			
B. Contact Person		C. Title	
D. Mailing Address		E. Address (Line 2)	
F. City	State	G. Zip	H. County
I. Phone	J. FAX	K. Email Address	
L. Operator Type (check one)			
1. <input type="checkbox"/> City 2. <input type="checkbox"/> County 3. <input type="checkbox"/> State 4. <input type="checkbox"/> Federal 5. <input type="checkbox"/> Special District 6. <input type="checkbox"/> Government Combination			
Minimum Control Measures being implemented by the SIE (check all that apply)			
<input type="checkbox"/> Public Education		<input type="checkbox"/> Public Involvement	
<input type="checkbox"/> Construction		<input type="checkbox"/> Post Construction	
		<input type="checkbox"/> Illicit Discharge/Elimination	
		<input type="checkbox"/> Good Housekeeping	
<p>"I agree to coordinate with the agency identified in Section III of this form and comply with its qualifying storm water program. I certify under penalty of law that this document and all attachments were prepared under my direction and 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, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. Additionally, I certify that the provisions of the permit, including the development and implementation of a Storm Water Management Program, will be complied with."</p>			
M. Signature of Official		Date	

VII. Storm Water Management Plan (check box)

As per section A.2. of this General Permit, the SWMP is attached.

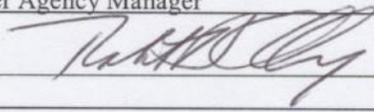
VIII. Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction and 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, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. Additionally, I certify that the provisions of the permit, including the development and implementation of a Storm Water Management Program, will be complied with."

A. Printed Name: Robert Almy

B. Title: Water Agency Manager

C. Signature:  D. Date: 12/30/05

Appendix B

Additional Water Quality Measures

Appendix B – Additional Water Quality Measures

In addition to the Best Management Practices described in this SWMP, the County's Project Clean Water has implemented water quality programs that are not required by the NPDES regulations. Those programs are listed here and described in more detail below:

- A GIS project that maps impermeable areas using remote sensing technology
- Watershed planning and restoration efforts that involve the County
- Treatment control BMPs grant project
- The Questa septic to sewer conversion study
- Benthic Macroinvertebrate (BMI) monitoring
- Chemical monitoring

Detailed Impervious Surface GIS Project

In 2003, the County of Santa Barbara initiated a project to map imperviousness at a parcel-level to target priority areas for future BMP implementation. The project used remote sensing combined with traditional GIS approaches to develop a database tool. The database can be used to prioritize small areas, on a catchment-size scale, for potential BMP projects. Interpretation of the data promises to yield significant benefits in planning for BMP implementation and future modeling of runoff quantity and quality.

The project correlates highly impervious areas with land use and zoning information, topography, and storm drain infrastructure data. The design and population of the database provides a platform for long-term adaptive management as new or improved information becomes available. A detailed assessment of impervious surfaces by feature extraction from high-resolution (60cm) satellite imagery was used to populate the database utilizing multi-spectral remote sensing imagery (4-band including infrared and true-color) obtained from Digital Globe's QuickBird satellite for over 300 km². Results from a subset of the analysis was compared with available GIS data such as roads, buildings, driveways, parking lots, and parcels to ensure the extraction process was within acceptable error limits

The use of multi-spectral satellite imagery for identification of imperviousness can eliminate the need to digitize impervious surfaces for use in modeling and source area identification while still providing very detailed information over large regions. This approach for identifying imperviousness can be a cost effective alternative for planning level imperviousness assessments.

Watershed planning and restoration:

Stakeholder interest has expanded the scope of Project Clean Water (PCW) to include riparian and wetland ecosystem restoration, which is included in the long term goals and objectives of PCW. Riparian areas with healthy vegetation can filter polluted runoff before it reaches the creeks and ocean, and some pollutants can be removed from the water through uptake by plants. In addition to these water quality benefits, healthy riparian areas provide important habitat, recreational opportunities, and have aesthetic value for our communities. PCW implements a number of programs that help meet the goal restoring and maintaining healthy riparian system functions. For more information, visit www.countyofsb.org/project_cleanwater.

- **Guidebook for Reference-Based Assessment of the Functions of Riverine Waters/Wetlands Ecosystems in the South Coast Region of Santa Barbara County, California:** This guidebook, based on assessment of hydrogeomorphic (HGM) functions, was developed in 2000 with grant funding from the US EPA. The guidebook provides domain descriptions and defines HGM functions for the south coast creeks. It is used to

assess creek function at a given reach, and can be used to prioritize restoration sites, monitor restoration projects, or assess and mitigate for the impacts of proposed development. A training workshop was held in December 2001 that comprised County and other agency staff, community members, students and consultants. Additional complimentary studies performed include *Watershed-Level Assessment of the Conditions of Riverine Waters/Wetlands Ecosystems in the South Coast Region of Santa Barbara County, California* (2002), and *Demonstration of reference-Based Assessment of Riverine Waters/Wetlands Functions in the Restoration of Riverine Ecosystems in the South Coast Region of Santa Barbara County, California* (2002).

- **Restoration Projects:** As part of the project to develop the HGM Guidebook (described above), staff also implemented three restoration projects to demonstrate the use of the guidebook in ecosystem restoration. Restoration sites are on Carpinteria, Mission, and Arroyo Burro creeks. In addition, design and permitting were completed for a site on San Jose Creek.
- **San Jose Creek Watershed Plan:** In November 2001, PCW initiated a community effort to develop a watershed plan for the San Jose Creek Watershed. Through a series of stakeholder meetings, issues of concern for the watershed were identified, and goals and objectives intended to improve and protect the natural processes and resources of the San Jose Creek watershed were developed. The draft plan will be released in summer 2004 and should be finalized in the fall. The Plan will serve as a reference document to assist the future planning efforts of the County of Santa Barbara and the City of Goleta within the San Jose Creek watershed.
- **Rincon Creek Watershed Plan:** In 2004, PCW received a grant from the Department of Fish and Game's Fisheries Restoration Grant Program to develop a watershed restoration plan for Rincon Creek, with emphasis on the improvement of steelhead habitat. This plan will be completed in 2006.
- **Watershed Groups:** PCW staff participate actively in a number of local watershed groups, including the Carpinteria Creek Watershed Coalition, the Mission Creek Restoration Partnership, the Arroyo Burro Visioning Team, and the Southern California Wetlands Recovery Project. The City of Santa Barbara has initiated (2004) watershed planning efforts in the Arroyo Burro, Mission, and Sycamore creek watersheds, and the County will participate in these efforts.
- **Watershed Coordinator Grant:** In 2004, PCW staff received a grant to fund a watershed coordinator position for the Southern Santa Barbara County watersheds. The goal of this program is to improve the water quality, water use efficiency, and ecosystem restoration within these watersheds by implementing a number of programs. Tasks include implementing water use efficiency/water quality workshops for agricultural and landscape irrigators and greenhouse operators, continuing efforts with local watershed groups, developing the Rincon Creek Watershed Plan, and researching and preparing recommendations for a watershed protection and management function within County government. This position is split with staff from the Cachuma Resource Conservation District.

Treatment Control BMPs

In 2000, PCW received a \$2.1 million grant from the California Coastal Conservancy to retrofit South Coast urban storm drain systems with treatment control BMPs. The goal was to improve water quality of runoff in the developed areas to the extent possible, and to assess the overall effectiveness of the

technology locally for future applications. A preliminary study identified candidate sites for treatment control BMP installations. Installations implemented through the grant include two systems with the combination of a gross pollutant filter (Continuous Deflective Separation, or CDS) with bioswale in two Goleta neighborhoods, one stand-alone CDS unit in Carpinteria, four stand-alone CDS units in Isla Vista, and an ultraviolet radiation unit in Isla Vista. This grant was completed in June, 2004. For more information, see www.countyofsb.org/project_cleanwater.

Septic System Sanitary Survey (2003)

In June 2001, Santa Barbara County Environmental Health Services hired Questa Engineering Corporation to conduct the Septic System Sanitary Survey of Santa Barbara County. This effort was a survey and compilation of previously existing information on septic systems in the county, not a scientific study to delineate the discharge of pollutants entering ground water that flows into surface water.

The purpose of this survey was to collect and consolidate pertinent data regarding onsite sewage disposal systems, assess the associated impact on public health and water quality, and develop recommendations on ways to address certain types of problems or specific problem areas. This survey was not intended to isolate or evaluate the functioning status or impact from individual septic systems. Collected data were assessed and evaluated to identify and prioritize areas for further study of the onsite systems. For more information, see www.sbcphd.org/ehs/liquid.htm.

Santa Barbara County Creeks Bioassessment Program

The Santa Barbara County Creeks Bioassessment Program (Program) was a long-term effort to assess and monitor the integrity of local stream communities as they respond through time to changing environmental conditions shaped by natural processes and human factors. The Program focused on the use of benthic macroinvertebrates (BMIs) as indicators of stream community integrity. (For more information see www.countyofsb.org/project_cleanwater/documents)

The goals of the Program were to:

1. Determine the strength and nature of natural relationships between local stream biota and physiochemical parameters including stream temperature, water chemistry, stream discharge, microhabitat (e.g., riffles vs. pools), stream width, elevation, gradient, stream order, catchment area, and climatic trends.
2. Determine the strength and nature of relationships between local stream ecosystem integrity and human disturbances including urban development, agricultural development, cattle grazing, physical habitat alterations (e.g. channelization), increased sedimentation, altered hydrology, and water pollution.
3. Determine which biological parameters are the most reliable indicators of local stream ecosystem integrity.
4. Determine how local stream biota responds through time to changing human influences, including changes in land use and stream habitat restoration and water quality improvement efforts.

The study area included 35 miles of creeks on the South Coast from Rincon Creek west to Gaviota Creek. A total of 44 study reaches in 18 coastal streams were surveyed over the course of the Program from 2000 through 2003.

The analyses of the data collected were used to develop an Index of Biotic Integrity (IBI) to be used in assessing the biologic integrity of study area streams. Because the IBI can be used to translate complex biologic data into a composite measure of biological integrity, it can be a powerful tool for communicating the health of riparian systems to a wide audience, and an important basis for environmental management decisions.

It is envisioned that this type of BMI sampling could replace chemical sampling as a way to monitor the long-term health of local creeks. In 2004, flow in the creeks was inadequate to allow sampling during May, but the study continued with sampling in May 2005.

Water Quality Sampling

In 1998, the South Coast Watershed Characterization Study was conducted by Project Clean Water staff to characterize the water quality of four South Coast streams. This study marked the first major local effort at evaluating baseline water quality conditions and water quality impacts from storm water runoff and wet weather conditions. Both dry and wet weather sampling occurred within the watersheds of Arroyo Burro, Mission, Carpinteria, and Rincon creeks. The most significant water quality parameter that was consistently high was the indicator bacteria (total coliform, fecal coliform, and enterococcus groups).

In order to gain a better understanding of the types and extent of pollutants contributed by storm water and low flow runoff, Project Clean Water staff implemented a program of dry and wet weather sampling for the 1999-2000 season. The sampling program significantly broadened the previous year's study by adding many more creek sites and water quality parameter measurements, such as volatile organic compounds (VOCs) and various pesticides. In addition, the 1999-2000 storm water sampling program focused heavily on collecting samples during the "first flush" of each storm event (i.e., during increasing flow due to initial runoff). The purpose of this sampling effort was to conduct a broad screening of water quality in local creeks in order to ascertain which contaminants are present at significant levels, and which watersheds exhibit consistently higher levels of contaminants.

This sampling regime was continued during the 2000-01 and 2001-02 seasons. Due to funding issues in the 2002-2003 rain year, the program was scaled back and attention turned to selected watersheds. On the South Coast, time-series, longitudinal sampling was conducted on San Jose Creek. That this creek provided flow to a 303(d)-listed waterbody (the Goleta Slough), had established sampling locations, and was the subject of an in-progress watershed plan were all critical in the selection of this watershed. Special studies were also performed at the South Turnpike BMP site and at the discharge point of the Glen Annie Golf Course. In the North County, sampling sites were selected to ascertain the inputs to the Santa Ynez River from the communities of Santa Ynez, Vandenberg Village and Mission Hills. Also in the North County, sampling was continued at sites on Orcutt Solomon creek.

The storm-water quality data obtained in 1999-2000, 2000-01, 2001-02 and 2002-03 was developed, in part, to be the basis for both efforts to improve water quality and more limited sampling in subsequent years. Since very little was previously known about the characteristics of the County's urban runoff prior to the first year's sampling effort, results from these first four full seasons of water quality testing have established general characteristics of storm water quality and provided a screening-level evaluation of pollution problems in local creeks.

Typical results showed very high levels of indicator bacteria were present in most creeks (up to 25 times the State's Ocean Water Advisory level). Metals were also detected in most creeks at levels approaching or, in many cases, exceeding basin plan standards. Nitrogen and phosphorus were found in all creeks with highest levels found in agriculturally dominated watersheds. A limited number of VOCs were detected in some creeks. Pesticide results indicate that glyphosate, malathion, and diazinon were present in a majority of the creeks. For details on the sampling results, refer to the annual Water Quality Analysis Reports, found on the Project Clean Water website at www.countyofsb.org/project_cleanwater.

Appendix C
Project Clean Water Public Education
& Outreach Materials

PROJECT CLEAN WATER PUBLIC EDUCATION AND OUTREACH MATERIALS

(S) Denotes availability in Spanish

Brochures:

A Dog Owner's Duty (S)
Helpful Hints for Horse Owners (S)
Gardener's Guide to Clean Water (S)
Creekside Concerns (S)
Healthy Creeks and Ocean Depend on You
The Ocean Begins at Your Door (S)
A Guide for Restaurant Managers
A Guide for Construction Contractors (S)
A guide for Automotive Businesses and Parking Lots (S)
Protect Our Creeks and Ocean: Take Care of Hazardous Household Chemicals (S)
Free RV Dumping
Project Clean Water Web Site and Hotline postcard
Do You Have Certified Green Gardener?

Posters:

Make the Connection: Storm Drains Lead Straight to the Ocean
Good Cleaning Practices – Auto Repair Industry (S)
Your Work Affects Your Family's Play – restaurant (S)

Additional Materials:

Project Clean Water web site & hotline magnets
Storm Drain marker stickers (S)
Be Kind to Animals coloring books (S)

School Education Materials:

Mountains to the Sea Watershed Curriculum, Grades 4 – 8
Water Quality: Potential Sources of Pollution (USGS poster)

Appendix D

Water Quality Hotline Referral System

Referral System: Water Quality Hotline (1-877-OUR-OCEAN)

Please direct calls from the Water Quality Hotline according to the chart below. Record all relevant information on the report form, then call the appropriate agency and relay the information, or fax it to them if requested. If you have an ongoing problem with misdirected calls from the Water Quality Hotline, please call Michelle Gibbs, Santa Barbara County Water Agency, at 568-3546. Thank you for your participation in the hotline!

FOR CALLS REPORTING...	NECESSARY INFORMATION...	REFER TO: (Depending on location)
<p>Sewage spills or leaks Refer immediately</p>	<ul style="list-style-type: none"> • Exact location • If it is an RV dumping waste, or other sewage spill that is not directly from the sanitary district's lines, refer the complaint to EHS at 681-4900 	<p>Carpinteria Sanitary District684-7214 After hours phone.....451-7802 Fax.....684-7213</p> <p>Goleta Sanitary District967-4519 Fax.....964-3583</p> <p>Montecito Sanitary District969-4200 Fax.....969-9049</p> <p>City of Santa Barbara564-5413 Fax.....897-1991</p> <p>Solvang Wastewater Division.....688-6997 Fax.....686-2049</p> <p>Summerland San. Dist/Art Custer.....969-4344 Fax.....969-5794</p>
<ul style="list-style-type: none"> • Polluted runoff • Oils spills • Equipment or grading in a creek • Dumping in a creek 	<ul style="list-style-type: none"> • Exact location • Nature of runoff • Time/date that incident was observed • Oils spills should also be referred to Fire Haz Mat 	<p>County Areas/City of Goleta:568-3321 Fax.....568-3434</p> <p>City of SB:879-2688 Fax.....897-1927</p> <p>City of Solvang.....688-6046 Fax.....686-2049</p>

FOR CALLS REPORTING...	NECESSARY INFORMATION...	REFER TO: (Depending on location)
<ul style="list-style-type: none"> • Failing septic systems • Disposal of wastewater into a creek, street, or ocean • Restaurant complaints 	<ul style="list-style-type: none"> • Exact location • Nature of dumped material/wastewater 	Environmental Health Services.....681-4900 Fax.....681-4901
<ul style="list-style-type: none"> • Hazardous waste spills • Refer immediately 	<ul style="list-style-type: none"> • Exact location • This could be a dangerous situation – refer immediately 	County Fire Department.....681-5500 24 hour phone line.....692-5723 Fax.....692-5720 City of Solvang.....686-6046
<ul style="list-style-type: none"> • Dumping of green waste or animal waste in a creek • Large items dumped in creeks, i.e. car parts, mattresses, etc. 	<ul style="list-style-type: none"> • Exact location • Nature of dumped material/wastewater 	County Solid Waste681-5632
<ul style="list-style-type: none"> • Building or other construction in or near a creek 	<ul style="list-style-type: none"> • Exact location • Is activity occurring now? 	County Building Hotline.....568-3558 Or County Flood Control.....568-3449 City of Carpinteria.....684-5405, ext. 408 City of Goleta.....961-7500 City of Santa Barbara.....564-5485 City of Solvang.....688-5575, ext. 219
<ul style="list-style-type: none"> • Dumping of green waste or animal waste in or near a creek • Large debris dumped in creeks (mattresses, car parts, etc) 	<ul style="list-style-type: none"> • Exact location • Is hazardous waste involved? (i.e. chemical drums) 	County Solid Waste681-5632 Cell Phone.....680-4939 Fax.....882-3601
<ul style="list-style-type: none"> • Agricultural operations grading into creek 	<ul style="list-style-type: none"> • Exact location • Is the activity occurring now? 	CA Fish & Game684-6281 Fax.....684-6281

Last Updated: December 2005

Appendix E
2002 Revised Grading Ordinance

AN ORDINANCE OF THE COUNTY OF SANTA BARBARA AMENDING CHAPTER 14 OF THE COUNTY CODE OF THE COUNTY OF SANTA BARBARA TO REGULATE THE GRADING, EROSION, SEDIMENT CONTROL, EXCAVATION, FILLING, STOCKPILING OF MATERIALS, AND RECLAMATION OF LAND WITHIN THE UNINCORPORATED AREAS OF THE COUNTY OF SANTA BARBARA AND ADOPTING THAT CERTAIN PUBLICATION KNOWN AS THE PROCEDURES FOR TESTING SOILS PUBLISHED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS.

The Board of Supervisors of the County of Santa Barbara ordains as follows:

Section 1

Chapter 14 of the County Code of the County of Santa Barbara is hereby rescinded and reenacted as follows:

Sec. 14-1. Title.

The regulations contained in this chapter may be known and referred to as the "Santa Barbara County Grading, Erosion, and Sediment Control Ordinance."

Sec. 14-2. Purpose.

The Board of Supervisors expressly finds that the regulations, conditions and provisions of this chapter constitute minimum standards and procedures necessary to protect and preserve life, limb, health, property and public welfare. This chapter also addresses compliance with the National Pollutant Discharge Elimination System (NPDES) Phase II storm water regulations and sets forth local storm water requirements for the disturbance of less than one (1) acre, to avoid pollution of water courses with sediments or other pollutants generated on or caused by surface runoff on or across the construction site. Agricultural grading, whether exempt or required to be permitted hereunder, is not subject to the NPDES Phase II storm water regulations or the local storm water requirements imposed by this ordinance.

Sec. 14-3. Authority--Administration.

This chapter is adopted pursuant to the authority granted by section II of article XI of the Constitution of the State of California to a county to make and enforce within its limits all such local, police, sanitary, and other regulations as are not in conflict with general laws. It is further adopted in conformity with the provisions of sections 50022.1 to 50022.10, inclusive, of the California Government Code relating to adoption of codes by reference. The Santa Barbara County Director of Planning and Development (herein the "Director") shall be responsible for administration of this chapter and shall be responsible for administration of land use permits for grading as provided herein.

Sec. 14-4. Applicability.

This chapter shall be applicable to all unincorporated territory of the County of Santa Barbara, State of California.

Sec. 14-5. Adoption of primary soil testing code.

That certain code and manual known and designated as "Procedures for Testing Soils," 1990 Edition, promulgated and published by the American Society for Testing and Materials, (herein sometimes referred to as ASTM) is hereby adopted and enacted as a primary code and made a part of this chapter by reference, with the same force and effect as if fully set forth herein, provided, however, that the Director shall not be restricted to or required to follow any specific testing procedures set out therein, but may utilize other methods at the Director's discretion.

Sec. 14-6. Scope; general.

(a) Except as herein provided, these regulations, including the incorporation of relevant Best Management Practices, shall apply to all new grading, excavations, fills, cuts, borrow pits, stockpiling, compaction of fill, and land reclamation projects on privately owned land where the transported amount of materials individually for any of the abovementioned operation, exceeds fifty (50) cubic yards; or the cut or fill exceeds three (3) feet in vertical distance to the natural contour of the land. Agricultural grading, whether exempt or required to be

permitted hereunder, is not subject to NPDES Phase II storm water regulations or the local storm water requirements imposed by this ordinance. No work subject to the provisions of this chapter shall be commenced, maintained or completed, in violation of these regulations.

Notwithstanding these regulations, no person shall cause or allow a significant environmental impact to occur as a result of new grading as defined herein, including grading that is otherwise exempt from these regulations. In the event that the Director determines that a significant environmental impact is likely to occur or has occurred as a result of new grading, the Director may deny or revoke a grading permit and a land use permit for such grading. If necessary, the Director may also require grading and land use permits for work that is otherwise exempt from these regulations in order to address the significant environmental impact identified.

The term "grading," for purposes of this chapter, shall not include surface mining or quarrying operations (including the extraction and stockpiling of excavated products and the reclamation of mined lands) carried out under a vested rights determination, or under a permit or reclamation plan approval issued pursuant to the county's surface mining and reclamation (SMARA) ordinances. The county's surface mining and reclamation ordinances contain provisions for the imposition of appropriate engineering and geologic standards and other environmental mitigation requirements for surface mining permits and reclamation plans, together with associated fees payable to the Director.

(b) Aside from areas designated as open space on the Orcutt Community Plan Open Space Areas Map, these regulations shall not apply to the following exceptions:

(1) The stockpiling of rock, sand, aggregate involved in the construction of a building authorized by valid county building permit, as appear on approved plans;

(2) Excavation and fill of trenches for utility lines not exceeding twenty-four (24) inches wide or an average of five (5) feet deep, or holes for utility poles or anchors and minor grading accessory thereto;

(3) Excavation and fill of trenches for maintenance and repair of existing oil and natural gas transmission lines, within established

petroleum producing areas, but not within two hundred feet of an exterior boundary of a petroleum producing area, or within two hundred feet of any residential development including three or more housing units, or for any amount of grading in excess of five hundred cubic yards of material;

(4) The initial excavation and fill necessary to effect such temporary repair or maintenance of oil and gas and utility lines (located outside of an existing oil producing area) as can be completed within seven days of commencement where such excavation or fill does not exceed a total of one hundred cubic yards of material and where all work is protected, as may be required, by a safety fence or other similar protective device;

(5) Temporary holes or trenches for geological, geotechnical and archeological exploration, not exceeding one hundred cubic yards of material, where such holes or trenches are protected by a safety fence meeting Occupational Safety and Health Agency standards;

(6) The excavation of material below finished grade for tanks, vaults, basements, swimming pools, bomb shelters or footings of a building or structure where such excavation is authorized and under the provisions of a valid county building permit;

(7) The excavation or deposit of earth materials within a property dedicated, used, or to be used, for cemetery purposes, except where such grading is intended to support structures or affects natural drainage patterns;

(8) The maintenance and construction work within the prescribed easements of the Santa Barbara County Flood Control and Water Conservation District;

(9) The digging of trenches or holes for utility poles and anchors, or underground electric and natural gas vaults that do not exceed fifty (50) cubic yards in volume, by public companies within their easements and that are regulated by the California Public Utilities Commission.

(c) The digging of trenches or holes under the specific authority of a public agency within their prescribed easements and not exempt under subsection (b)(3) of this section will be subject to a plan review for determination of whether a full grading permit will be necessary. Such

plan review shall include an evaluation of environmental and accepted engineering practices.

Sec. 14-7. Definitions.

The following definitions pertaining to grading and erosion control shall apply to the interpretation and enforcement of this chapter.

Access Driveway. A road to the site of a building for which a county building permit is required.

Acre Foot. An engineering term used to denote a volume one (1) acre in area and one (1) foot in depth.

Agricultural Advisory Committee. A county-wide policy advisory committee appointed by the Board of Supervisors that is made up of representative members of the agricultural community interest groups, such as the Farm Bureau, the Cattlemen Association, the Growers and Shippers, the Nursery and Flowers Association, California Women in Agriculture and other similar organizations, and to which the Director may refer questions for advice as to recognized normal and usual agricultural practices. In the absence of such a committee the Board of Supervisors may select a suitable substitute group, which shall represent the agricultural interest in the County of Santa Barbara.

Agricultural Road. Access to field, pasture or similar use, or agricultural structure which does not require a county building permit.

Annual Plant (Annuals). A plant that completes its life cycle and dies in one (1) year or less.

Applicant. A person, partnership, corporation or public agency applying for a county permit.

Approved. Reviewed and found to be in substantial compliance with requirements of this chapter and the applicable uniform codes.

Bench. A relatively level step excavated into earth material on which fill may be placed. Usually a mid-slope drainage device.

Berm. An earthen mound used to direct the flow of runoff.

Bench Drain. Lined channel that conveys surface waters from slopes to a safe disposal point.

Construction Site Pollution Control Best Management Practices (Construction Site BMPs). Means good housekeeping, pollution prevention

and educational practices, maintenance procedures, and other management practices to prevent or reduce to the Maximum Extent Practical (MEP) the discharge of pollutants or grading sediment directly or indirectly into storm water, receiving waters or storm water conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, non-storm water discharges, spillage or leaks, sludge or water disposal, or drainage from raw materials storage, and other management practices published by the State of California or designated area-wide planning agencies and referenced by this ordinance adoption.

Board of Supervisors. The Board of Supervisors of the County of Santa Barbara.

Building. (see Structure)

Borrow. Earth material acquired from an off-site location for use in grading on a site.

Certification. The attestation of a licensed professional that, based upon the appropriate level of observation and testing, and in accordance with applicable principles of the professional's training, background and experience, the work in question has been completed and performed in conformity with the plans and specifications approved and the provisions of this chapter.

Clearing. The removal of vegetation, structures or other objects.

Compaction. The densification of a fill by mechanical means.

Conduit. Any pipe for collecting and directing storm water.

Continuous. At all times throughout the day (twenty-four hours) while work is in progress.

Conveyance System. Any channel or pipe for collecting and directing storm water.

County. The County of Santa Barbara.

Creek. (See Watercourse).

Culvert. A covered channel or a large-diameter pipe that directs water flow below the ground level.

Cut. (1) An excavation; (2) the difference between a point on the original ground and a designated point of lower elevation on the final grade; (3) the material removed in excavation.

Debris. A term applied to the loose material arising from the disintegration of rocks and vegetative material transportable by landslides, streams or floods.

Dike. A berm of earth or other material constructed to confine or control surface water in an established drainage system.

Director of Planning and Development (herein Director). Director of the Department of Planning and Development for the County of Santa Barbara, or authorized representative.

Disturbance. Refers to exposed soil resulting from construction activities such as clearing, grading and excavating. Construction activities can include road building, construction of residential houses, office buildings, industrial sites or demolition.

Diversion. A temporary or permanent structure consisting of a channel or ditch and a ridge constructed across a sloping land surface on the contour or with pre-determined grades to intercept and divert surface runoff before it gains sufficient volume and velocity to cause erosion.

Drainage. The removal of excess surface water or groundwater from land by means of surface or subsurface drains.

Drainage Pattern. The configuration or arrangement of streams within a drainage basin or other areas.

Drainage Way. Natural depression in the earth's surface such as swales, ravines, draws, and hollows in which surface waters collect as a result of rain or melting snow but at other times are destitute of water.

Drop-Inlet Spillway. Inlet structure in which the water drops through a vertical riser connected to a discharge conduit.

Drop Structure. A structure for dropping water to a lower level and dissipating its surplus energy; a fall. A drop may be vertical or inclined.

Earth Material. Any rock, natural soil and/or any combination thereof.

Easement. A legal right to use or control the property of another for a designated purpose, which appears of record in favor of the owner of the easement.

Energy Dissipater. A device used to reduce the excess energy of flowing water.

Engineered Grading. Grading designed under the direct supervision of a licensed registered civil engineer.

Engineer, Civil. Professional engineer holding a valid registration and license from the State of California in civil engineering.

Engineering Geologist. Individual holding a valid registered geologist certification and a valid engineering geologist certification and is licensed to practice in the State of California.

Engineering Geology. The application of geological data and principles to engineering problems dealing with naturally occurring earth material for the purpose of assuring that geological factors are recognized and adequately interpreted in engineering practice.

Engineer, Geotechnical. Professional engineer holding a valid registration and license to practice in geotechnical engineering by the State of California.

Engineering, Soils. The application of soils mechanics in investigations and reports regarding stability of existing or proposed slopes, in the control of fill installation and compaction, in recommending soil bearing values, and in providing design criteria and calculations for earth structures, foundations, fills, subsurface drains and other engineering works.

Erosion. The wearing away of the land surface by running water, wind, ice or other geological agents, including such processes as gravitational creep. Erosion occurs naturally from weather or runoff, but can be intensified by human activities.

Erosion and Sediment Control Plan. A plan which fully indicates necessary land treatment and structural measures, including a schedule of the timing for their installation which will effectively minimize soil erosion, sedimentation, and non-storm water construction related discharges.

Erosion Control Permit. A document issued by the Director to authorize grading work which requires only erosion control measures as provided in this chapter.

Excavation. Any activity by which earth, sand, gravel, rock or any other similar material is dug into, cut, quarried, uncovered, removed,

displaced, relocated or bulldozed and shall include the conditions resulting therefrom.

Exterior Property Line. The legal property line shared with a property which is not under the ownership or control of the applicant.

Existing Natural Grade. The vertical elevation of the existing ground surface topography prior to excavation or filling.

Fill. (1) A deposit of earth, sand, gravel, rock or any other suitable materials placed by artificial means; any act by which earth, sand, gravel, rock or any other suitable material is placed, pushed, dumped, pulled, transported or moved to a new location above the natural surface of the ground or on top of the stripped surface and shall include the conditions resulting therefrom. (2) The difference in elevation between a point on the original ground and a designated point of higher elevation on the final grade, as measured in a vertical plane.

Finish Grade. The level of the finished surface of the ground at the completion of all grading as designated in the final project grading plans.

Grading. Any activity which involves the physical movement of earth material, including any excavating, filling, stockpiling, movement of material, compaction of soil, creation of borrow pits, land reclamation, surface mining operations exempted from the county's surface mining and reclamation ordinance, or combinations thereof. Grading does not include surface mining or quarrying operations (including the extraction and stockpiling of excavated products and the reclamation of mined lands) carried out under a vested rights determination or a permit or reclamation plan approval issued pursuant to the county's SMARA ordinance. (See section 14-6(a)).

Groundwater. Subsurface water in a zone of saturation.

Gully. A channel or miniature valley cut by concentrated runoff but through which water commonly flows only during and immediately after heavy rains or during the melting of snow.

Interceptor Ditch. Interceptor ditches are permanent structures located on top of man-made or natural slope that divert drainage from the face of the slope.

Key. A designed compacted fill placed in a trench excavated in competent earth material at the bottom of a proposed fill slope.

Land Reclamation Fill. Fill consisting of solid materials or soil that is non-toxic, non-combustible, non-organic and not hazardous, and which is used as fill to contour existing uneven terrain for the purpose of reclaiming land for agricultural use.

Land Use Permit. A final permit required by the Planning and Development Department of the county for all uses and development permitted under the regulations of the zoning ordinance articles II, III and IV.

Natural Gradient. The slope of the area being worked in its natural state, exclusive of minor deviations.

Periodic. Intermittent while work is in progress.

Open Grading. A raw, exposed, uncovered earthwork not stabilized and not completed.

Pollutant. Any chemical or substance that degrades the physical, chemical or biological properties of the environment.

Permit, Grading. A document issued by the Director authorizing grading work.

Person. Any individual person, firm, corporation, association, partnership, public agency, public district or municipal corporation, but shall not include the County of Santa Barbara, the Santa Barbara County Flood Control and Water Conservation District, the State of California, or the United States.

Planning and Development Department. The department of the County of Santa Barbara which has the responsibility to implement and enforce the county comprehensive plan and zoning ordinances.

Precipitation. Any form of rain or snow.

Receiving Water. Any lake, pond, stream, wetland, groundwater or coastal water body into which storm water runoff is directed.

Retention. The storage of storm water to prevent it from leaving the development site; may be temporary or permanent.

Rough Grade. Approximate elevation of ground surface conforming to within two-tenths of a foot of the proposed design elevation.

Run on. Flow that originates offsite and that drains onto a site.

Runoff. Surface water originating from precipitation or other sources (e.g., springs, seeps, sprinklers, landscape irrigation) that is found in drainage facilities, rivers, streams, ponds, lakes, wetlands and shallow groundwater.

Scarify. To abrade, scratch or modify the surface, for example, to break the surface of the soil with a narrow blade implement.

Sediment. Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface.

Sedimentation. Deposition of soil particles, clays, silts, sands, or other sediments carried by runoff.

Sediment Detention Basin. A sediment detention basin is a reservoir which retains flows sufficiently to cause deposition of transported sediment and debris.

Seepage. (1) Water escaping through or emerging from the ground along an extensive line or surface as contrasted with a spring where the water emerges from a localized spot. (2) The process by which water percolates through the soil.

Sheet Flow. Water, usually storm runoff, flowing in a thin layer over the ground surface; overland flow.

Site. Any lot or parcel of land or contiguous combination thereof, under the same ownership, where grading is performed or permitted.

Slope. An inclined ground surface. The inclination of which is expressed as a ratio of horizontal distance to vertical distance, as in two to one (2:1), meaning a horizontal distance of two feet to one foot vertical.

Slope Drains. Permanent or temporary devices that are used to carry water down cut, fill or natural slopes to and from bench drains.

Soil (Earth). Sediments or other unconsolidated accumulation of solid particles produced by the physical and chemical disintegration of rocks, and which may or may not contain organic matter.

Stockpiling. The temporary placement of earth material in one location.

Storm Water Pollution Prevention Plan (SWPPP). An approved pre-construction plan documenting storm water and non-storm water Best Management Practices required under 40 CFR Section 122 and the Clean Water Act.

Stripping. Any activity which significantly disturbs vegetated or otherwise stabilized soil surface including clearing and brushing operations.

Structure. That which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner, including without limitation, any building, fence, landscaping feature or enclosed barn.

Swale. A low-lying stretch of land which gathers or carries surface water runoff.

Terrace. A relatively level step constructed on the face of a graded slope surface for drainage and maintenance purposes.

Top of Creek Bank. The uppermost ground elevation paralleling a creek or watercourse where the gradient changes from more vertical to more horizontal.

Topography. (1) The configuration of a surface, including its relief and the position of its natural and manmade features. (2) A rendering of the results of a topographical survey.

Topsoil. Surface soil, ordinarily rich in organic matter or humus debris.

Unsuitable Material. All vegetation, non-complying fill, soil containing organic matter, compressible earth material and all other earth material which would adversely affect the safety or stability of proposed grading.

Urban Boundary. A boundary line established by the Planning and Development Department separating urban from rural areas.

Watercourse. A creek or stream designated by a blue line on the largest scale of the latest edition of the United States Geological Survey map or a creek or stream which supports fish at any time of the year, or has significant water flow thirty days after the latest significant storm.

Sec. 14-8. Grading for agricultural practices.

(a) The county recognizes the importance of agriculture and shall provide for protection and conservation and the promulgation of safe and environmentally sane earthwork practices. Therefore, grading for the production of food and fiber, the growing of plants, the raising and keeping of livestock incidental to agriculture shall be exempt as provided in this chapter. Such agriculturally associated earthwork as grading for recognized, normal and usual agricultural practices to prepare a field for a crop or range improvement, including such harrowing, disking, ridging, listing, fire breaks, chaining, maintenance of existing agricultural roads, and construction of support roads on land with a natural gradient of less than thirty percent, and similar practices which provide prudent measures for erosion control, and which conform to the recommendations of guidelines made or promulgated by the Santa Barbara County Agricultural Advisory Committee is exempt. Agricultural leveling, pursuant to normal and usual agricultural practices, which does not result in any cut or fill which exceeds, at any point, three (3) feet from the natural contour of the surface of the land, and which conforms to recommendations or guidelines made or promulgated by the Santa Barbara County Agricultural Advisory Committee is also exempt. In order to qualify for exemption under the provisions of this subdivision, the grading must be conducted upon a parcel or contiguous parcels of land exceeding twenty acres in size under one ownership upon which crops are grown or livestock is raised. In addition, the property must be in an agriculturally zoned district and/or land use designation with no other special overlay district or designation, as shown on the adopted county zoning maps or comprehensive plan land use maps.

(b) Agricultural grading not exempt under subsection (a) of this section on slopes with a natural gradient over thirty percent and where earthwork exceeds fifty (50) cubic yards in volume and/or when excavation and fills are made in excess of three (3) feet in vertical distance to the natural contour shall require an erosion control permit for agriculturally associated grading such as:

(1) Grading to establish any new agricultural road, as defined in this chapter;

(2) Terracing and leveling where the cut or fill slope exceeds three (3) feet in depth or height.

Note: The Director may waive the requirements for the issuance of an erosion control permit if the proposed grading meets the departmental regulations for erosion control permit waiver.

(c) Agricultural grading for the following projects and including the following practices is not exempted under subsections (a) and (b) of this section, and shall comply with all other provisions of this chapter.

(1) Excavation or fill upon which a building which requires a county building permit is to be supported;

(2) The entire length of any access driveway from an existing road to any building which requires a county building permit or site for such building;

(3) The grading is in excess of fifty (50) cubic yards within two hundred (200) feet of any exterior property line;

(4) Grading for areas which are to be used for commercial wholesale or retail nursery operations, or grading for the construction of greenhouses, commercial shade structures, or buildings for which a county building permit may otherwise be required;

(5) Grading for horse training facilities, horse tracks, arenas, polo fields, or commercial horse breeding facilities;

(6) Grading within fifty (50) feet of the top of the bank of any stream, creek or natural watercourse;

(7) The construction of water impounding structures of earth (which are not under the direct control of the State of California or the federal government) where the maximum depth to which water may be impounded is five (5) feet or more where one (1) acre-foot or more of water will be impounded, and is located within two hundred (200) feet of the property line;

(8) Grading on agricultural land on slopes over thirty percent which does not meet the departmental regulations for an erosion control permit waiver and which is not deemed appropriate by the Agricultural Advisory

Committee, or any grading where there is potential for significant environmental damage;

(9) Agriculturally associated grading within five hundred (500) feet of any urban boundary line.

Sec. 14-9. Erosion control permits.

(a) No person shall perform any agricultural grading, excavation or fill which requires an erosion control permit as specified under section 14-8(b) of this chapter, without first obtaining an erosion control permit for such work from the Director.

(b) Applications for erosion control permits shall be filed with the county Planning and Development Department and shall include two copies of an erosion control plan to allow for reasonable review and interpretation of the proposed work.

(c) Where erosion control permits are required under provisions in this chapter, they shall be valid for a period of two years from the date of issuance, except that prior to expiration of the permit the Director may grant a two-year extension for good cause shown.

(d) A fee for each erosion control permit shall be paid to the county according to a fee schedule adopted from time to time by resolution of the Board of Supervisors. The amount shall be halved for the purpose of a time extension.

(e) The following inspections are required for work completed with an erosion control permit:

(1) Site investigation: upon submittal of an application for an erosion control permit;

(2) Initial inspection: when permittee is ready to begin work, or during the early stages of the permitted work;

(3) Final inspection: when all erosion control work, including installation of drainage structures, other protective devices, seeding and slope stabilization has been completed.

(f) Work conducted under the provisions of an erosion control permit shall incorporate such reasonable dust and debris control measures as are required by the Director.

(g) An erosion control permit for agricultural grading shall include evidence of the inclusion of erosion and sediment control measures, including, but without limitation, the following:

(1) Three sets of topographical maps sufficiently detailed to allow reasonable review and interpretation of the proposed work and the associated erosion control measures provided. Maps shall include all property boundaries and shall be drawn to the scale of one inch equals two hundred feet or the most reasonable scale available for the area;

(2) The location and details of runoff control, drainage devices, sedimentation basin and other measures of erosion control, including revegetation of new slopes and other denuded areas;

(3) A brief description of the revegetation practices to be used, including types of seeds and their application dates. Where surface erosion will not be a nuisance, revegetation may be delayed until just prior to the next rainy season;

(4) A typical road detail for the construction of agricultural roads.

Note: Erosion control devices as a part of an approved erosion control project may encroach into the two hundred feet boundary grading setback line.

Sec. 14-10. Grading permits.

(a) Except as provided in sections 14-6, 14-8 and 14-9 of this chapter, no person shall perform any grading, excavation or fill without first obtaining a grading permit and land use permit for such work from the Planning and Development Department of the County of Santa Barbara. Issuance of a land use permit by the Planning and Development Department shall be subject to the application, processing and enforcement procedures provided in Chapter 35 of the County Code of the County of Santa Barbara. A separate permit shall be required for each site and may cover both excavation and fills. Adjacent sites being graded as one integrated project may be considered one site for purposes of this section.

(b) The issuance of a permit under this chapter shall constitute an authorization to do only that work which is described or illustrated on

the grading plans and erosion and sediment control plans (or SWPPP, if applicable) specifications approved by the Director.

(c) Permits issued under the requirements of this chapter shall not relieve the owner of the responsibility for securing permits required by any other ordinance, department or division of the County of Santa Barbara, State of California, or United States government.

(d) The issuance of a permit, performance of grading under an exemption provided in this chapter, or inspections by the county pursuant to this chapter, shall not relieve the owner or permittee of responsibility for damages from work performed nor transfer responsibility for such damages to the County of Santa Barbara nor to any of its officers, agents or employees.

(e) In granting any permit under this chapter, the Director may impose such conditions as may be necessary to prevent creation of a nuisance or a hazard to public health, public safety, on public or private property or to assure conformity to the county comprehensive plan.

(f) Corrections, remedies and repairs made necessary by an emergency situation involving the sudden, unexpected occurrence of a break, rupture, flooding or breach of an existing facility, which break, rupture, flooding or breach presents an immediate threat to life, health or property, may be made as required before permits are applied for or issued.

(g) Permits for emergency work, temporary work and projects begun under temporary exemption, which require permits, shall be applied for on the next business day following commencement of such work.

Sec. 14-11. Permit applications.

Applications for grading permits shall be filed with the Santa Barbara County Planning and Development Department in accord with the submittal requirements approved by the Director. Planning and Development Department submittal requirements may be obtained from the Planning and Development Department. Applications submitted shall include, but not be limited to, the following documents or information:

(a) Plans and specifications, prepared by or under the supervision of a qualified professional and sufficiently detailed to allow reasonable review and interpretation of the proposed work, except that minor erosion control plans and minor grading plans may be prepared without the supervision of a professional engineer;

(b) A description of the land upon which work is to be performed, including assessor's parcel number, street address, tract and block number;

(c) An engineering geology report and/or a geotechnical (soil) engineering report, shall be filed along with the application for a permit. The report shall be prepared by a licensed professional geologist or geotechnical engineer and must include a description of the site relative to distribution and strength properties of the soil, recommendations and conclusions for grading and foundation designs. All reports shall be subject to approval by the Director;

(d) Quantity and type of material to be graded, excavated or filled;

(e) Proposed routes for hauling material, hours of work and methods of controlling dust;

(f) Any additional plans, drawings, or calculations required for the proper execution of the work as determined by the Director;

(g) A drainage, erosion, and sediment control plan as required under the provisions of this chapter (see Sec. 14-29). No grading work shall be permitted unless the plans and specifications submitted for approval include an erosion and sediment control plan (or SWPPP if applicable) approved by the Director. The requirements of the erosion and sediment control plan shall be implemented, as required by the plan, prior to any grading. Control measures contained in the erosion and sediment control plan shall be implemented according to the county approved Construction Site BMP Manual(s).

(h) Where the construction site activity is regulated under 40 CFR 122, and/or the Clean Water Act (sites of one (1) acre or more of disturbance), the application shall include a copy of the Notice of Intent (NOI) and the Storm Water Pollution Prevention Plan (SWPPP).

Exception. Requirement for soil report and geology report may be waived by the Director.

Sec. 14-12. Who may apply for permit.

If the quantity of material to be graded, excavated or filled exceeds ten thousand (10,000) cubic yards, the application for a permit shall be made by the owner or lessee of the land upon which the grading, excavation or fill is to be made, and said owner or lessee shall also furnish the security required by this chapter and shall be the principal obligor. If material to be graded is less than ten thousand (10,000) cubic yards, the application may be made by the owner, lessee, contractor or agent of such owner or lessee, and the security required hereunder shall be furnished by such applicant.

Sec. 14-13. Time limits of permits.

The permittee shall fully perform and complete all of the work required to be done pursuant to the permit, and any applicable land use permit, within the time specified therein. If no time limit is specified, a grading permit shall expire if the work authorized under such permit has not commenced within one hundred eighty (180) days or is not completed within one (1) year of the date of issue, except that prior to the expiration of the permit, the Director may grant a reasonable extension. Land use permits shall expire two (2) years from the date of issuance if the grading for which the permit was issued has not been established or commenced, except that the Director may grant one extension of up to one year for good cause shown.

Sec. 14-14. Revocation and denial of permits.

(a) Failure to comply with any of the provisions of this chapter or the permit may cause revocation or suspension of the permit, and in either case, the owner or permittee shall be notified of such action and the reasons therefor in writing.

(b) If the operations of the permittee create an unreasonable occurrence of dust, noise, excessive traffic or other reasons, the public works director may require the permittee to take measures to abate said nuisance and may suspend the permit until such measures are taken.

Continuance of such work without abating such nuisance shall be grounds to revoke the permit.

Sec. 14-15. Denial of permit; restoration.

(a) A permit shall not be issued where the work proposed is likely to endanger human life or property.

(b) A permit may be denied unless provisions are included to assure conformity with the rules, regulations and ordinances of the County of Santa Barbara and other agencies as may have jurisdiction.

(c) If grading operations are commenced before first securing a proper permit, no permit will be issued until all illegal grading has been stopped. In the event that no grading permit, erosion control permit or land use permit can be issued for such operation, the site shall be restored to its original condition.

(d) If restoration is required of a site by the Director, restoration plans prepared by a licensed landscape architect, or by other additional qualified professionals at the discretion of the Director, shall be submitted to the Director for review and approval prior to any restoration. The party responsible shall pay a restoration permit fee which shall be equal to the fee that would be charged for a grading permit fee for the same work. Restoration shall be in conformity with the approved plans.

Sec. 14-16. Permit and plan checking fees.

(a) A fee for each grading permit, erosion control permit and land use permit shall be paid to the county according to a fee schedule adopted from time to time by resolution of the Board of Supervisors and based on the number of cubic yards of material in either excavation or fill, whichever is greater.

(b) A double (2x) permit fee shall be assessed for violations of this chapter by commencement of grading work without permit.

(c) A plan checking fee equal to sixty-five percent (65%) of the base grading permit fee, and in addition to the grading permit fee, shall be paid before plans and specifications for a grading permit are accepted for checking. If the applicant changes the plans and specifications

subsequent to approval, the Director may require that a second plan checking fee, as applicable, be paid.

Sec. 14-17. Faithful performance of security.

(a) A grading permit shall not be issued for more than five hundred (500) cubic yards of material unless the permittee first files performance and remedial security, with the Director. The Director may also require appropriate filing for complex and difficult sites, involving less than 500 cubic yards.

(b) The applicant may post security in the form of cash, corporate surety bond, a certified check, cashier's check, certificate of time deposit or a letter of credit from an accredited financial institution in the name of the County of Santa Barbara. An instrument of credit security shall be in a form approved by the Santa Barbara County Counsel before posting as security.

(c) In the event of failure to complete the work and failure to comply with all of the conditions and terms of the permit, the Director may order all or part of the work required by the permit to be completed, or such work or remedial work done as is necessary to protect public health, safety and the property affected. The security provided shall be subject to provide payment of all necessary costs and expenses that may be incurred by the County of Santa Barbara in causing any and all such work as may be ordered to be completed. Any unused portion thereof shall be refunded to the permittee.

(d) The security shall be in the full amount required to assure completion, restoration and/or remediation, based upon engineering estimates approved by the Director.

(e) Upon completion of grading, final approval by the Director, and satisfaction of all conditions, the security shall be released.

(f) Any contractor or other person engaged in continuous or repeated excavations may provide a blanket security or blanket deposit in an amount sufficient to insure prompt completion of all excavation projects being conducted at any one time. If the number or amount of excavation projects exceeds the amount of the security or deposit, the Director may

require additional security or deposit to insure completion of all work being done at any one time.

(g) The amount of the security or deposit provided shall be based upon full estimated costs to complete the project, restore the site, and/or complete necessary remedial action according to the estimate approved by the Director. Such estimate may be made pursuant to engineering estimates approved by the Director, referencing the number of cubic yards of material in either excavation or fill, whichever is the greater amount, and including the full estimated costs of all drainage or other protective devices as may be required.

Sec. 14-18. Inspections.

(a) All construction and other work for which a permit is required shall be subject to either periodic or continuous inspections by authorized employees of the Planning and Development Department. Where the Director determines it to be necessary to protect the public safety because of the nature and type of material involved, the type of work proposed or the purpose of the work, the work shall have either continuous or periodic inspections and supervision by one or more of the following as a condition of issuance of the grading permit: (1) civil engineer, (2) geotechnical engineer, (3) engineering geologist. Prior to final approval of grading work under any type of permit, a final inspection shall be made of all construction or work for which a permit has been issued.

(b) Grading shall not be commenced until the permittee or his agent shall have posted an inspection record card in a conspicuous place on the site to allow the Director to make the required entries thereon regarding inspection of the work. This card shall be maintained on site by the permittee until a grading certificate is issued by the Director.

(c) The builder or contractor shall have an approved set of grading plans, specifications, and erosion and sediment control plans (or SWPPP if required) on the site at all times while work is in progress.

(d) In the absence of specific work site designation upon which grading is to be performed, the Director may require the site surveyed and staked by a civil engineer or land surveyor licensed by the State of

California so that the proper location of the work on the lot may be determined.

(e) Inspections for a grading permit shall be made as provided herein and work shall not continue until approval to proceed has been granted following inspection. The permittee shall be responsible for notifying the Planning and Development Department at least twenty-four hours prior to the time when the inspection is to be made.

Required Inspections.

(1) Initial inspection: when the permittee is ready to begin work, but before any grading or brushing is started, inspect and review erosion and sediment control BMP's with permittee;

(2) Toe inspection: after the natural ground is exposed and prepared to receive fill, but before any fill is placed, review erosion and sediment control BMP's with permittee;

(3) Excavation inspection: after the excavation is started, but before the vertical depth of the excavation exceeds ten feet;

(4) Fill inspection: after the fill emplacement is started, but before the vertical height of the fill exceeds ten feet;

(5) Drainage device inspection: after forms and pipe are in place, but before any concrete is placed, inspect erosion and sediment control BMP's;

(6) Rough grade inspection: when all rough grading has been completed;

(7) Final inspection: when all work, including installation of drainage structures, other protective devices, planting and slope stabilization has been completed and the "as-graded" plan and required reports have been submitted to the Director and accepted as complete.

(8) Other inspections: in addition to the inspections above, such other inspections of any work to ascertain compliance with the provisions of this chapter and other laws and regulations as may be required by the Director including requirements of the NPDES permit of the County of Santa Barbara for its storm water discharges. A licensed landscape architect, qualified biologist, archeologist, agricultural advisor, or other qualified professional may be required to be present during inspections.

On construction sites with one (1) acre or more of land disturbance, county inspectors of the Planning and Development Department shall inspect for adequate installation and functionality of Best Management Practices (BMPs) prescribed by the erosion and sediment control plan or SWPPP at any time throughout the year. County inspectors may identify maintenance and repair needs on the site with the permittee, or permittee's agent, to ensure compliance with the minimum requirements of Best Management Practices.

During the rainy season (between November 1 and April 15), a minimum of two (2) county inspections per month shall be conducted on active projects with open grading with one (1) acre or more of land disturbance. Reports of such inspections shall be kept with the grading permit file.

(f) Periodic reports by a geotechnical engineer, an engineering geologist, or other qualified professional, certifying the compaction or acceptability of all fills may be required. These shall include, but need not be limited to, inspection of cleared areas and benches prepared to receive fill and removal of all unsuitable materials, the bearing capacity of the fill to support structures, the placement and compaction of fill materials, and the inspection of buttress fills, subterranean drains, cut slopes and similar devices.

(g) Upon completion of the work, the Director may require a certification from a civil engineer of record that all grades, lot drainage, and drainage facilities have been completed in conformity with the approved plans and as-graded plan of the completed work.

(h) A geotechnical engineering report including, but not limited to, certification of soil capacity, and compaction summaries of field and laboratory tests, location of tests, and showing limits of compacted fill on a grading plan. This certification shall include specific approval of the grading as affected by soils on the site.

(i) An engineering geology report by an engineering geologist based on the grading plan, including specific approval of the grading as affected by geological facts. Where necessary, a revised geologic map and cross-sections and any recommendations necessary shall be included.

(j) Where the nature of the project, type of soils, geologic conditions or drainage dictate that special engineering, geotechnical

engineering, or geological inspections are necessary to prevent danger to public health, safety or welfare, the Director may require the permittee to retain one or more of the following:

(1) A civil engineer to supervise and coordinate all field surveys and the setting of grade stakes in conformity with the plans, to check elevation of grades, inclination of slopes, installation of drainage structures and other matters related to the geometric design of the work, including the design of revised or modified plans and "as-graded" plans, if necessary;

(2) A geotechnical engineer shall provide either periodic or continuous inspection of all soils work, including grading and compaction;

(3) An engineering geologist to provide geological inspections.

On work requiring the continuous supervision and inspection of a civil engineer or geotechnical engineer, required inspections may be delegated to the civil engineer or geotechnical engineer by the Director. At the time of checking of the plans, the Director shall indicate on each application for a grading permit the types of inspection, if any, to be made by the civil engineer or geotechnical engineer.

If the civil engineer or geotechnical engineer or geologist finds that the work is not being performed in substantial conformity with this chapter, or the plans and specifications, the engineer shall issue a notice to the persons in charge of the grading work and to the Director.

All work shall immediately stop upon issuance of the notice of violation by the Director, or upon termination of the services of the engineer approved to supervise grading work, the permit holder shall terminate all such grading work, and it shall not commence again until a civil engineer, geotechnical engineer or engineering geologist certifies in writing to the Director that he has reviewed all phases of the project, is thoroughly familiar with the proposed work, and that he approves the work already completed or will assume responsibility for making the necessary improvements thereto. Upon receipt of this notice, the Director shall immediately give written notice that work may proceed. No work shall proceed unless and until the issuance of such written notice that work may proceed.

(k) If the Director determines by inspection that grading as authorized is likely to endanger public health, safety or welfare in the deposition of debris on any public way, or interfere with any existing drainage course, the Director may require that reasonable safety precautions be taken to remove such likelihood of danger. Written notice to comply shall be served onto the permittee allowing no more than ten days for corrections to begin unless an imminent hazard to the public health, safety or welfare exists, in which case the corrective work shall begin immediately.

(l) Final inspection, as required in this chapter, shall be made by an employee of the Planning and Development Department.

Sec. 14-19. Modifications to approved plans.

No work shall proceed upon any modifications to the approved plans, including erosion and sedimentation control plans or SWPPP, unless and until such modifications shall have been approved by the Director.

Sec. 14-20. Stop work orders.

(a) Whenever any construction or work is being done contrary to the provisions of any approval or of any rule, regulation, law or ordinance, or whenever approval was based upon misinformation or misrepresentation, or whenever the public health, safety or welfare is endangered, the Director may issue a written notice or order to stop work for any work that is not in compliance with the permit approved for the project. Such notice or order to stop work shall be served upon any persons engaged in the doing or causing such work to be done, and any such persons shall forthwith stop such work until authorized by the Director to proceed with the work. The notice or order shall state the reason for the notice and no work shall be done on that portion until the matter has been corrected and approval obtained from the Director.

(b) It shall be unlawful for any person to continue the progress of any work regulated under the provisions of this chapter in violation of, or contrary to, any stop work notice or stop work order issued pursuant to this section.

(c) It shall be unlawful for any person to commence any work under the provisions of this chapter in violation of, or contrary to, any stop work order issued pursuant to this section.

Sec. 14-21. Exposure of work.

Whenever any work on which inspections are required is covered or concealed by other work without having been inspected, the Director may require that such work be exposed for examination. The cost of exposing such work shall not entail any expense to the County of Santa Barbara.

Sec. 14-22. Grading hours; limitation.

No grading work (except for emergency operations), which requires a grading permit under the provisions of this chapter shall take place between the hours of 7:00 P.M. and 7:00 A.M., unless the Director finds that such operation is not likely to cause significant public nuisance and authorizes such night operations in writing.

Sec. 14-23. Dust debris control.

All graded surfaces and materials, whether filled, excavated, transported or stockpiled, shall be wetted, protected or contained in such a manner as to prevent the generation of dust. Construction equipment and materials on the site shall be used in such a manner as to avoid creating a public nuisance. Roadways and graded areas on the site shall be surfaced or wetted sufficiently to prevent the generation of excessive dust at all times. However, such wetting shall not cause offsite runoff of sediment or pollutants.

Sec. 14-24. Responsibility of permittee.

(a) The permittee and his agents shall carry out the proposed grading in accordance with the approved plans and specifications, conditions of the permit and the requirements of this chapter and conditions and permits as required by the Director.

(b) The permittee and his agents shall maintain all required protective devices and temporary drainage facilities during the progress of the grading work and shall be responsible for observance of working

hours, dust controls and methods of hauling. The permittee and his/her agents shall be responsible for debris and material deposits placed on private or public roads during the construction period of the project. Debris and/or materials shall be removed as necessary in order to prevent offsite impacts to roads and/or watercourses. Such removal shall be included in the Drainage, Erosion and Sediment Control Plan. The permittee and his agents shall be responsible for maintenance of the site until such time as a grading certificate has been issued by the Director. The permittee, his agents, and each of them shall become subject to the penalties set forth herein in the event of failure to comply with this chapter and other applicable laws of the County of Santa Barbara. No approval shall exonerate the permittee or his agents from the responsibility of complying with the provisions and intent of this chapter.

Sec. 14-25. Excavations.

(a) No excavation shall be made with a cut face steeper in slope than one and one-half horizontal to one vertical, except under one or more of the following conditions:

(1) The Director may permit an excavation to be made with a cut face steeper in slope than one and one-half horizontal to one vertical if the applicant shows through geotechnical engineering and engineering geology reports that the material making up the slope of the excavation and the underlying earth material is capable of standing on a steeper slope.

(2) A retaining wall or other approved support is provided to support the face of the excavation.

(b) The Director may require an excavation to be made with a cut face flatter in slope than one and one-half horizontal to one vertical if the material in which the excavation is to be made is such that the flatter cut slope is necessary for stability or safety.

(c) No excavation shall be made which is sufficiently close to the property line to endanger any adjoining public or private property or structures without supporting and protecting such property or structures from any settling, cracking or other damage which might result.

(d) No slope shall be cut steeper than the bedding plane in any formation where the cut slope will lie on the dip side of the strike line unless engineering geology and geotechnical engineering reports approved by the Director indicate that the slope will be stable at a steeper angle.

(e) No cut slope shall exceed a height of twenty-five (25) feet without intervening, fully paved benches having a minimum width of eight (8) feet. These benches shall be spaced at intervals of twenty-five (25) feet vertically, except that for slopes less than forty (40) feet in vertical height the bench shall be approximately at mid-height. The Director may modify this requirement if the Director determines that it is justified because of competent rock or other special conditions.

(f) All cut slopes shall be within properties or parcels under one ownership. Tops of cut slopes shall be made not nearer to a road right-of-way or site boundary line than one-fifth of the vertical height of cut with a minimum of two (2) feet and a maximum of ten (10) feet. The setback may need to be increased for any required interceptor drains. The Director may make adjustments as a condition of the permit, as required by individual site conditions.

Sec. 14-26. Fills.

(a) No fill shall be made which creates any exposed surface steeper in slope than two horizontal to one vertical, except under one or more of the following conditions:

(1) A retaining wall or other approved support is provided;

(2) The Director may permit a fill to be made which creates an exposed surface steeper in slope than two horizontal to one vertical if the applicant shows through the investigation and report, to be approved by the Director, of a geotechnical engineer that the strength characteristics of the material to be used in the fill are such as to produce a safe and stable slope, and that the areas on which the fill is to be placed are suitable to support the fill.

(b) The Director may require that fill be constructed with an exposed surface flatter than two horizontal to one vertical if, under the

particular conditions, such flatter surface is necessary for stability or safety.

(c) No fill slope shall exceed a vertical height of one hundred (100) feet unless horizontal benches within a minimum width of thirty (30) feet are installed at each one hundred (100) feet of vertical height.

(d) No fill slope shall exceed a height of twenty-five (25) feet without intervening fully paved benches having a minimum width of eight (8) feet. These benches shall be spaced at vertical intervals of twenty-five (25) feet, except that for slopes less than forty (40) feet in height, the bench shall be approximately at mid-height.

(e) Unless specified as non-structural land reclamation fills, or a fill under erosion control permit, all fills shall be placed, compacted, inspected and tested in accordance with the following provisions:

(1) The natural ground surface shall be prepared to receive fill by removing all unsuitable material. Where natural slopes are five horizontal to one vertical or steeper, keys and benches at least ten (10) feet wide shall be placed into firm earth material. Five (5) feet of the lowermost bench shall be exposed beyond the toe of sidehill fills. Where special conditions, such as some types of canyon filling, are encountered, the Director may waive the requirement of benching provided that a geotechnical engineering report approved by the Director indicates that benching is unnecessary for lateral and vertical support or to prevent slippage or settling, and provided, further, that the soils engineer, upon completion of grading, certifies the fill as being stable.

(2) Except as otherwise permitted by the Director, no rock or similar irreducible material with a maximum dimension greater than six inches shall be buried or placed in fills. No organic material shall be permitted in fills.

(3) A fill shall be spread in a series of layers with a compacted thickness as specified by the geotechnical engineer and approved by the Director or not exceeding six inches, and shall be compacted into a fill of uniform moisture and density as specified in paragraph (4) of this subsection.

(4) All fills shall be compacted to a minimum of ninety percent (90%) of maximum density as determined by ASTM D 1557-(latest edition) or other approved testing method giving equivalent test results. The required degree of relative compaction on slope surfaces shall be ninety percent (90%) to within eight inches of the surface and eighty-five percent (85%) to within three (3) inches of the surface, and shall be certified to by the geotechnical engineer. Field density shall be determined by ASTM D 1556-(latest edition) or other equivalent methods approved by the Director.

(5) A field density test, as herein provided, shall be taken for each eighteen (18) inches of fill, or portion thereof, measured vertically from the lowest point of the area to be filled, and for each five hundred (500) cubic yards of fill placed. In addition, in the case of subdivisions, at least one field density test shall be taken on each lot which receives fill.

(6) All fills regulated by this chapter shall be tested for relative compaction by a qualified geotechnical testing agency. A certificate of compliance with the terms of this chapter, and the grading permit, setting forth densities, relative compaction and other fill characteristics shall be prepared and signed by a geotechnical engineer. This report shall be submitted to and approved by the Director before any final approval of the fill is given and before any foundation construction begins except for the digging of trenches and placing of reinforcing steel.

(f) Fills toeing out on natural slopes which are steeper than two horizontal to one vertical shall not be permitted.

(g) The toes of fill slopes shall be made not nearer to a road right-of-way or the site boundary than one-half the height of the slope with a minimum of two (2) feet and a maximum of twenty (20) feet. Where a fill slope is to be located near a road right-of-way, or the site boundary, and the adjacent off-site property is developed, special precautions, including, without limitation, additional setback, retaining or slough walls, mechanical or chemical treatment of the surface, and provisions to control surface waters, shall be incorporated into the work, as the Director may require, to protect the adjoining property from

damage as a result of such grading. Fill slopes shall not be divided horizontally by property lines. The Director may require an investigation and recommendation by an engineer or an engineering geologist to demonstrate that the provisions of this chapter have been satisfied. The Director may make adjustments as a condition of the permit, as required by individual site conditions.

(h) No person shall place, deposit, maintain or suffer the placement of unsuitable material within the unincorporated area of the County of Santa Barbara except in a properly permitted landfill or permitted waste facility.

Sec. 14-27. Planting.

Exposed man-made slopes in excess of three (3) feet in vertical height from the natural contour of the land shall be planted to prevent erosion. All earth fills shall be planted and mulched with temporary vegetation, or otherwise protected from the effects of storm runoff or dust erosion within thirty days of the completion of grading, or as specified in the approved erosion and sediment control plan or SWPPP. Grading for recognized, normal and usual agricultural practices to prepare a field for a crop or range improvement which provide prudent measures for erosion control and which conform to the provisions of this chapter and the recommendations or guidelines made or promulgated by the Santa Barbara County Agricultural Advisory Committee may be protected by recognized agricultural erosion control methods. Planting shall be irrigated or maintained until established as determined by the Director. Land use permits for grading activity may be conditioned upon the provision of landscape and maintenance security as required by the Director. Planting shall conform to the county approved Construction Site Pollution Control BMP Manual(s).

Sec. 14-28. Slope restrictions; building foundation and pool setback.

(a) Unless otherwise recommended in an approved geotechnical or geology report, the placement of buildings and structures on or adjacent to slopes steeper than three horizontal to one vertical shall be in

accordance with the most recent edition of the Uniform Building Code adopted by reference, from time to time, by this Code.

(b) The setbacks provided in the Uniform Building Code may be modified by the Director if the Director determines it to be justified because of special conditions.

(c) The setbacks required in the Uniform Building Code may be increased by the Director if found to be necessary for safety or stability or to prevent possible damage from water, soil, or debris or to be consistent with the zoning regulations.

(d) Buildings shall not be constructed on slopes two horizontal to one vertical or steeper unless geotechnical engineering and engineering geology reports indicate that the slopes will be stable. The building shall be designed by a registered civil or structural engineer or architect; and the design is approved by the Director.

(e) No building shall be founded partially on cut and partially on fill unless an engineered foundation design is provided.

Sec. 14-29. Drainage, erosion and sediment control.

(a) An erosion and sediment control plan shall be required as part of the grading plan and permit requirements. The plan shall incorporate applicable County approved Best Management Practices. In lieu of the erosion and sediment control plan, the county may accept a SWPPP, prepared for the state, if it contains the requirements of the county's erosion and sediment control plan. The erosion and sediment control plan shall contain:

(1) A delineation and brief description of the proposed practices to retain sediment on the site, including sediment basins and silt traps, and a schedule for their maintenance;

(2) The location and a brief description of the surface runoff and erosion control practices to be implemented, including types and methods of applying mulches, hydro seeding, or other slope stabilization methods; construction material and waste management practices to be used, including temporary borrow and waste disposal areas, temporary debris and garbage disposal, and chemical/fuel storage areas.

(3) A brief description of the vegetative practices to be used, including types of seeds and fertilizer and their application rates, dates of seeding and a schedule for maintenance and upkeep, including irrigation.

(4) A brief description of reasonable precautionary measures to ensure that vehicles do not track or spill earth materials into public streets and actions necessary to remove such materials if the materials are spilled or tracked.

(5) Drainage, erosion and sediment control plans shall include Best Management Practices for control of pollutants from onsite storm water discharges and non-storm water discharges, such as discarded building materials, litter, sanitary waste, and the washout of excess construction materials, including but not limited to drywall, grout, gypsum, plaster, mortar and concrete. Water contaminated with washout pollutants shall be collected and controlled and shall be removed from the site.

(b) An erosion control permit for any agricultural grading operation shall comply with section 14-9 of this chapter.

(c) A master drainage plan shall be required as a part of the grading plan for all grading permit applications. Design standards for drainage and terraces shall conform to the following provisions of this section:

(1) Concrete diverting terraces or ditches at least three (3) feet wide and one (1) foot deep shall be installed at the top of all cut slopes where the tributary drainage area has a slope steeper than ten horizontal to one vertical and a horizontal projection of greater than fifty (50) feet;

(2) Berms or drainage divides at least one (1) foot high and three (3) feet wide at the base shall be constructed at the top of all fill slopes;

(3) Downdrains shall be of concrete or corrugated metal pipe having a diameter of a size required by runoff calculations, but not less than twelve (12) inches, and shall be aligned so as to minimize velocity head at pipe entrance and discharge points. Alternate designs approved by the Director may be permitted;

(4) Inlet structures into pipes shall be of concrete, galvanized iron, or approved equivalent and shall be provided with overflow structures;

(5) Outlet structures shall be of concrete, galvanized iron or approved equivalent. Where discharging into public roads or streets, the design shall be approved by the county road department. At other locations the structures shall be provided with adequate velocity reducers, diversion walls, riprap, concrete aprons or similar energy dissipaters and shall be approved by the Director or, in the case of natural drainage courses, by the flood control engineer.

(6) An approved drainage dispersal wall shall be constructed wherever it is necessary to convert channel flow to sheet flow.

(7) Approved eave or ground gutters shall be provided to receive all roof water and deliver it through a non-erodible device to a street or watercourse where the Director determines it to be necessary because of steepness of slope or presence of erodible materials.

(8) All graded building pads shall slope a minimum of two percent (2%) to an approved drainage device or street. Where used, the drainage device shall be an approved system which conducts the water to a street or watercourse. The top of footing stems or finish floor, if a concrete slab, shall extend above the top of street curb or inlet into the drainage device by a minimum of six (6) inches plus two percent (2%) of the distance from the footing to the drainage device or curb. The Director may allow one percent (1%) to be used if, because of terrain or soils, two percent (2%) is not reasonably attainable or necessary.

(9) On graded sites the Director may require that drainage devices be installed to conduct storm water around buildings and to the nearest street or watercourse when the director determines that it is necessary to prevent erosion.

(10) In areas where underground water is anticipated, the Director may require the installation of approved subdrains.

(11) Runoff computations shall be based upon the latest methods adopted by the Santa Barbara County Flood Control and Water Conservation District.

(12) Design of improved and artificial watercourses shall meet the standards of and be approved by the Santa Barbara County Flood Control and Water Conservation District.

(13) Alternate designs which provide equivalent safety and are approved by the Director may be used in lieu of those contained in this section.

(d) The erosion and sediment control plan shall specify which erosion control measures necessary to control runoff shall be in place during the rainy season (November 1 through April 15) and which measures shall be in place year round. At a minimum, during the rainy season no grading shall occur unless approved erosion and sediment control measures are implemented. Erosion and sediment control measures shall be in place prior to any grading on hillsides, sloping or mountainous terrain. Measures for non-storm water construction site discharge control shall be implemented year round.

Sec. 14-30. Dams and reservoirs.

(a) Dams and reservoirs or other water impounding structures which are not constructed, regulated or owned by the State of California or the federal government shall be deemed to be engineered grading under the provisions of this chapter. However, the construction of a reservoir which impounds water to a depth of less than five (5) feet and less than one (1) acre-foot in quantity, shall not be deemed to be engineered grading, when located more than five hundred (500) feet from any exterior property line of the parcel. If required by the Director, engineered grading shall be under the strict supervision of a registered civil engineer who shall be responsible for the structural design and the supervision of construction of such dam, reservoir or water impounding structure.

(b) The Director in granting a permit for construction may require supporting geological and geotechnical engineering reports as deemed necessary for the safe design and construction of such facility. A report from a civil engineer certifying that the constructed facility has been completed in conformity with the approved plans and specifications and this chapter.

Sec. 14-31. Enforcement and interpretation.

(a) The Director is hereby authorized and directed to enforce and interpret the provisions of this chapter 14. The final decision of the Director in enforcing the provisions of this chapter or in interpreting the provisions thereof, or in exercising any authority delegated thereby shall be subject to appeal as provided in section 14-32 hereof.

(b) The Director may order any work stopped where there is reason to believe it is being conducted in violation of any provision of the permit or approval, or of any provision of the county code or regulations adopted pursuant thereto, or in violation of any provision of any exemption so that there is reason to doubt that such exemption is applicable.

(c) It shall be unlawful to undertake any work or to permit any work in progress beyond the date of posting or service of such order, except in conformity to the terms of such order or notice of order, or until relief from such order is obtained from the Director, or upon appeal from the Board of Supervisors.

(d) The Director may require such certification, approval, guidance and/or recommendation as may assist in the determination of the propriety of the activity to be carried on, before allowing the progress of such work to continue.

(e) The Director shall be responsible for enforcement and interpretation of provisions related to the issuance of land use and grading permits.

Sec. 14-32. Appeals.

All decisions, interpretations, or acts of the Director regarding the implementation of this chapter 14 shall be subject to appeal to the Santa Barbara County Board of Supervisors. Any person affected by such decision may, within ten (10) days after such decision is rendered, file an appeal in writing with the clerk of the Santa Barbara County Board of Supervisors. The decision of the Board of Supervisors shall be final. A fee for filing an appeal shall be paid by the appellant to the clerk of

the board as set forth by resolution of the Board of Supervisors from time to time.

Sec. 14-33. Violations and penalties.

(a) Any person, firm, or corporation, whether as principal, agent, employee or otherwise who shall commence, construct, enlarge, alter, repair or maintain any grading, excavation, or fill, or cause the same to be done, contrary to or in violation of any provision of this chapter is guilty of a crime. The offense may be filed as either an infraction or a misdemeanor at the discretion of the Santa Barbara County district attorney.

(b) If filed as an infraction and upon conviction thereof, the crime shall be punishable by a fine not to exceed one hundred dollars (\$100) for a first violation; a fine not exceeding two hundred dollars (\$200) for a second violation of the same ordinance within one (1) year; and a fine not exceeding five hundred dollars (\$500) for each additional violation of the same ordinance within one (1) year.

(c) If filed as a misdemeanor, and upon conviction thereof, the punishment shall be a fine of not less than five hundred dollars (\$500) nor more than twenty-five thousand dollars (\$25,000), or imprisonment in the county jail for a period not exceeding six (6) months, or by both such fine and imprisonment.

(d) Any person violating any of the provisions of this chapter shall be guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this chapter is committed, continued or permitted.

Sec. 14-34. Injunction--Civil remedies and penalties--And costs.

(a) Any person, firm, or corporation, whether as principal, agent, employee or otherwise who shall commence, construct, enlarge, alter, repair, or maintain any grading, excavation, or fill or causes the same to be done, contrary to or in violation of any provision of this chapter, shall be subject to injunction against such activity and shall be liable for a civil penalty not to exceed twenty-five thousand dollars (\$25,000) for each day that the violation continues to exist.

(b) When the Director determines that any person has engaged in, is engaging in, or is about to engage in any act(s) or practice(s) which constitute or will constitute a violation of provisions of this chapter, or order issued, promulgated or executed hereunder, the district attorney or the county counsel may make application to the superior court for an order enjoining such acts or practices, or for an order directing compliance, and upon a showing that such person has engaged in or is about to engage in any such acts or practices, a permanent or temporary injunction, restraining order, or other order may be granted by a superior court having jurisdiction over the cause. In any civil action brought pursuant to this section in which a temporary restraining order, preliminary injunction or permanent injunction is sought, it shall not be necessary to allege or prove at any stage of the proceeding that irreparable damage will occur should the temporary restraining order, preliminary injunction, or permanent injunction not be issued, or that the legal remedies are inadequate.

(c) Any person, firm, or corporation, whether as principal, agent, employee or otherwise who shall commence, construct, enlarge, alter, repair, or maintain any grading, excavation, or fill, or causes the same to be done, contrary to or in violation of any provision of this chapter shall be liable for and obliged to pay the County of Santa Barbara for all costs incurred by the county in obtaining abatement or compliance, or which are attributable to or associated with any enforcement or abatement action, whether such action is administrative, injunctive or legal; and for all damages suffered by the county, its agents, officers or employees as a result of such violation or efforts to enforce or abate the violation.

(d) In determining the amount of a civil penalty to impose, the court shall consider all relevant circumstances, including, but not limited to, the extent of the harm caused by the conduct constituting the violation; the nature and persistence of such conduct; the length of time over which the conduct occurred; the assets, liabilities and net worth of the persons responsible, whether corporate or individual; and corrective action taken by the persons responsible; and the cooperation or lack of cooperation in public efforts toward abatement or correction.

Sec. 14-35. Constitutionality.

(a) If any section, subsection, sentence, clause, or phrase of this chapter is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of this chapter. The Board of Supervisors hereby declares that it would have adopted this chapter and each section, subsection, sentence, clause, or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be unconstitutional or invalid.

Sec. 14-36. Recovery of costs.

(a) The Director shall maintain records of all costs including, but not limited to, administrative, professional fees, court costs, attorney's fees, laboratory costs, remedial construction costs and other costs incurred in the processing of violations and enforcement of this chapter, and shall, to the extent feasible, recover such costs from the owner of the property upon which the violation occurs, or other person responsible.

(b) Upon investigation and determination that a violation of any of the provisions of this chapter exists, the Director shall notify the record owner or person in possession or control of the property, or other person responsible, by mail, of the existence of the violation, the director's intent to charge the person for all administrative costs associated with enforcement, and of the person's right to a hearing on objections thereto.

(c) At the conclusion of the case the Director shall send a summary of costs associated with enforcement to the owner and to the person having possession or control of the subject property, or other responsible person, by mail, first class postage prepaid. Such summary shall include a notice of the right to a hearing before the Director to object to the imposition of the charges.

(d) Any request for hearing to be made upon the imposition of the charges proposed shall be filed with the Director within ten (10) days of the service of the summary of costs.

(e) The Director shall, within thirty (30) days of receipt of such request for hearing, schedule a hearing upon the imposition of such costs, such hearing to be held at a time and place convenient to the parties, as the Director may arrange.

(f) In determining the validity of the costs assessed, the Director shall consider whether the total costs are reasonable in the circumstances of the case. Factors to be considered include, but are not limited to, whether the present owner created the violation; whether there is a present ability to correct the violation; whether the person responsible moved promptly to correct the violation; the degree of cooperation or lack thereof, provided by the person responsible; whether reasonable minds may differ as to whether a violation exists and whether the current owner knew or should have known that violations existed.

(g) The decision of the Director shall be appealable to the Board of Supervisors by any affected party as provided in section 14-32.

(h) Until all costs, fees and penalties assessed by the Director under this chapter are paid in full, no final inspections, certificates of completion, certificates of compliance, certificates of occupancy, conditional use permits, land use permits, or final map shall be issued by the Planning and Development Department or other county agency.

Sec. 14-37. Secondary codes.

Whenever in this chapter or in any of the codes adopted by reference hereby, another code or publication of standards or of rules or regulations is referred to, any language to the contrary notwithstanding, such reference shall not incorporate by reference such other codes, standards or rules or regulations as part of this chapter or of any codes adopted by reference herein unless set out in full therein, but they shall be considered and may be used by the Director as guides to the provisions of this chapter or of any of the codes adopted by reference hereby. The Director shall not be bound by the provisions of any such other codes, standards or rules or regulations not expressly adopted by reference in this chapter in determining such compliance.

Sec. 14 - 38. County Regulations and Manuals

The Board of Supervisors shall, from time to time, adopt Construction Site Pollution Control Best Management Practices Manuals. Such manuals, when adopted, shall be valid County regulations and shall be used as a basis for developing and implementing any required Drainage Erosion and Sediment Control Plan. These manuals, as may be amended from time to time, are hereby adopted by reference. The Clerk of the Board of Supervisors and the Director of Planning and Development shall keep current copies of said manuals on file for public review. Copies shall be available for purchase from the Director at a price covering the cost of printing or reproduction.

SECTION 2

A copy of said "Preliminary Soil Testing Code" has been on file in the Office of the Clerk of the Board of Supervisors, fifteen (15) or more days preceding the public hearing hereon and said copy of said code shall be kept at said office for public inspection while this Chapter is in force. The Clerk of the Board of Supervisors shall at all times maintain a reasonable supply of copies of said Primary Code available for purchase by the public, at a moderate price, not to exceed the actual cost thereof to the County of Santa Barbara.

SECTION 3

This Ordinance shall take effect and be in force at the expiration of thirty (30) days from and after its passage, and before the expiration of fifteen (15) days after its passage, it or a summary of it, shall be published once, with the names of the members of the Board of Supervisors voting for and against the same in the Santa Barbara News Press, a newspaper of general circulation published in the County of Santa Barbara.

PASSED, APPROVED, AND ADOPTED this ____ Day of _____, 2002.

AYES:

NOES:

ABSENT:

ABSTAIN:

Signed: _____

GAIL MARSHALL
Chair, BOARD OF SUPERVISORS

Attest:

MICHAEL F. BROWN,
Clerk of the Board of Supervisors

By _____
Deputy Clerk

Approved as to form:
STEPHEN SHANE STARK, County Counsel

By _____
Deputy County Counsel

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Appendix F

New Development Policies and Guidelines

**Appendix F1 - Policy Interpretive and Implementation Guidelines
for Hillside and Watershed Protection Policies 7, 3, 4 and 5 (Coastal
Plan Policies 3-19, 3-15, 3-16 and 3-17)**

Appendix F2 - CEQA Initial Study Checklist Revisions

Appendix F3 - Guidelines for Surface and Storm Water Quality

**Appendix F4 - Revisions to a Planner's Guide to conditions of
Approval and Mitigation Measures**

**LAND USE ELEMENT HILLSIDE AND WATERSHED PROTECTION POLICIES 7, 3, 4,
AND 5 (COASTAL PLAN POLICIES 3-19, 3-15, 3-16 AND 3-17)**

POLICY INTERPRETIVE AND IMPLEMENTATION GUIDELINES

The purpose of these guidelines is to promote consistent implementation of the Santa Barbara County Comprehensive Plan's water-quality related policies by providing clear interpretation of the Comprehensive Plan, and addressing the requirements of U.S. Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Storm Water Regulations. These guidelines apply to all new development and redevelopment projects proposed in the urban and rural unincorporated areas of the County. These guidelines apply to any project that has the potential to generate point source discharges, or storm water runoff that is directly or indirectly discharged to storm drains, creeks, streams, rivers, the ocean, or other receiving water bodies in Santa Barbara County.

Land Use Element Hillside and Watershed Protection Policy 7 & Coastal Plan Policy 3-19:

“Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste shall not be discharged into or alongside coastal streams or wetlands either during or after construction.”

Interpretive and Implementation Guidelines

The following definitions shall be used to interpret this policy:

- A. “Degradation” of water quality means a negative alteration to the physical, chemical, or biological qualities of surface water (including storm water runoff) or groundwater compared to existing conditions. Degradation includes detrimental impacts to aquatic and terrestrial organisms, adverse effects on aesthetic qualities (due to sheens, sediment, floatable material, etc.), or other negative impacts to the beneficial uses¹ of receiving water.
- B. “Pollutant” means any chemical or substance that degrades the physical, chemical, or biological properties of the environment. Water pollutants include those listed in the policy, and as defined by the State Water Resources Control Board include but are not limited to: paints, varnishes, and solvents; hydrocarbons and metals from vehicle use or business operations; non-hazardous solid wastes; yard wastes; sediment from construction activities (including silts, clays, slurries, concrete rinsates, etc.); ongoing sedimentation due to changes in land cover or land use; nutrients, pesticides, herbicides, and fertilizers (e.g., from landscape maintenance); hazardous substances and wastes; sewage, fecal coliform, animal wastes, and pathogens;

¹ Beneficial uses for Santa Barbara County are identified by the Regional Water Quality Control Board in the Water Quality Control Plan for the Central Coastal Basin, or Basin Plan, and include (among others) recreation, agricultural supply, groundwater recharge, fresh water habitat, estuarine habitat, support for rare, threatened or endangered species, preservation of biological habitats of special significance.

dissolved and particulate metals; sediments, floatables; metals and acidity from mining operations; heat; discarded equipment.

- C. “Discharge” as addressed by this policy includes point source discharges (i.e., from outfall pipes) and non-point source discharges (i.e., overland runoff or sheetflow) that flow directly or indirectly into receiving waters (e.g., creeks, streams, rivers, the ocean or other receiving water bodies), or into storm drains that subsequently flow into receiving waters. The term includes both construction and post-construction discharges.

To be consistent with this policy the discharge of pollutants from newly developed and redeveloped sites must be reduced to the “maximum extent feasible”. This can be achieved through the implementation of non-structural or structural best management practices (BMPs) and maintenance of the BMPs over the life of the project. BMPs are methods, activities, maintenance procedures, or other management practices for reducing the amount of pollution entering a water body. Non-structural BMPs include but are not limited to site designs that reduce the area and connectivity of impervious surfaces, protection or restoration of native vegetation, wetlands and riparian corridors, and where applicable, parking lot sweeping programs to remove accumulated debris, oil and grease. Structural BMPs include but are not limited to storm water treatment facilities, grassed swales, bio-swales, porous pavement and storm drain treatment systems (e.g., catch basin filters).

- A. In order of preference, the following BMPs shall be used to minimize water quality impacts associated with new development and redevelopment projects in urban and rural areas:
- site planning to avoid, protect, and restore sensitive areas (e.g., wetlands and riparian corridors);
 - minimizing impervious surfaces and directly connected impervious surfaces, using existing natural features to allow for on-site infiltration of water;
 - vegetative treatment (e.g., bio-swales, vegetative buffers, constructed or artificial wetlands);
 - mechanical or structural treatment (e.g., storm drain filters and inserts).
- B. Combinations of BMPs listed above may be required to reduce runoff and water quality impacts to achieve consistency with this policy.
- C. Adequate space on each project site shall be reserved to incorporate the BMPs.
- D. Provisions shall be made for maintenance of BMPs over the life of the project.

Land Use Element Hillside and Watershed Protection Policy 3 & Coastal Plan Policy 3-15:

“For necessary grading operations on hillsides, the smallest practical area of land shall be exposed at any one time during development, and the length of exposure shall be kept to the shortest practicable amount of time. The clearing of land should be avoided during the winter rainy season and all measures for removing sediments and stabilizing slopes should be in place before the beginning of the rainy season.”

Land Use Element Hillside and Watershed Protection Policy 4 & Coastal Plan Policy 3-16:

“Sediment basins (including debris basins, desilting basins, or silt traps) shall be installed on the project site in conjunction with the initial grading operations and maintained through the development process to remove sediment from runoff waters. All sediment shall be retained on-site unless removed to an appropriate dumping location.”

Land Use Element Hillside and Watershed Protection Policy 5 & Coastal Plan Policy 3-17:

“Temporary vegetation, seeding, mulching, or other suitable stabilization method shall be used to protect soils subject to erosion that have been disturbed during grading or development. All cut and fill slopes shall be stabilized as rapidly as possible with planting of native grasses and shrubs, appropriate non-native plants, or with accepted landscaping practices.”

Interpretive and Implementation Guidelines

The following definitions shall be used to interpret these policies:

- A. “Grading” is defined in the Grading Ordinance Chapter 14, Section 7 (Definitions).
- B. “Necessary grading” is grading associated with, and integral to, the proposed development required to establish reasonable use of a legal lot. Only necessary grading shall be permitted on hillsides. (This policy is best understood when read in conjunction with Hillside and Watershed Protection Policies 1 and 2.) For example, necessary grading does not include grading conducted for the purposes of enhancing views or for accessory uses not associated with the reasonable use of the lot.
- C. “Hillsides” means land with slopes exceeding 20%.
- D. “Clearing of land” means the removal of vegetation, structures or other objects.
- E. As defined in the Grading Ordinance, the rainy season is the period from November 1 through April 15.
- F. “Appropriate non-native plants” means drought tolerant species that may not be native to Santa Barbara County, but are not invasive species².

These policies address the discharge of pollutants (including, but not limited to, soil, sediment, and construction waste) from grading and construction activities. To be consistent with these policies, the discharge of pollutants must be reduced to the maximum extent feasible through the

² A list of invasive exotic species of concern in California can be obtained at the California Exotic Pest Plant Council (CalEPPC) - Internet address: <http://www.caleppc.org/info/plantlist.html>. The Sunset Western Garden Book has examples of drought tolerant non-native plants suitable for the climatic, edaphic, and hydrologic conditions in Santa Barbara County. However, proposed non-native plants should not appear on the CalEPPC list and should not be used.

implementation of BMPs and maintenance of the BMPs throughout and, if necessary, after the grading and construction period.

- A. In addition to structural erosion and sediment control measures (e.g., hay bales, silt fences, sediment basins, etc.), the following BMPs shall be used to the maximum extent feasible to reduce storm water pollution from construction sites:
- site planning to avoid grading or vegetation removal on slopes over 20%;
 - site planning to avoid grading in areas containing soils with a high erosion hazard or in geologically unstable areas;
 - site planning to minimize grading or vegetation removal where slopes over 20% cannot be avoided to allow reasonable use of a legal lot;
 - avoidance of grading on slopes over 20% during the rainy season;
 - protection of existing native vegetation and enhancement of sensitive areas (e.g., wetlands and riparian corridors);
 - prohibitions of non-storm water discharges (e.g., concrete truck washout, slurry cuts, etc.) into storm drains or other water bodies;
 - good housekeeping practices (e.g., designated waste collection areas, designated areas for vehicle maintenance and washing, proper vehicle maintenance to avoid leaks, elimination of connections to storm drains, immediate clean up of spills, recycling and reuse of materials, etc.).
- B. Adequate room shall be made available on the construction site to accommodate the best management practices throughout and after construction.
- C. All best management practices shall be maintained in working order.

CEQA INITIAL STUDY CHECKLIST REVISIONS

Existing Checklist

The county's Initial Study Checklist has been adapted from the recommended checklist contained in the State CEQA Guidelines Appendix G. The county's Initial Study Checklist combines Water Resources and Flooding into one category. The checklist includes only one direct reference, Item 4.16(d), regarding water quality impacts resulting from project-related discharges. It reads as follows:

[Will the proposed project result in] Discharge into surface waters, or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?

In order to highlight storm water pollution as an issue requiring review in the Initial Study the following modifications are recommended. These recommendations are derived from the Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities¹.

Recommended Initial Study Checklist Revisions

CEQA Initial Study Section	Proposed Revisions
Section 3.0 Environmental Setting	Add surface water bodies to the list of items to describe the setting. (Water bodies include wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, and estuaries.)
Section 4.13 Public Facilities	Add the following new question to the Initial Study Checklist: e. [Will the proposal result in] The construction of new storm water drainage or water quality control facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
Section 4.16 Water Resources/Flooding	Revise the following question of the Initial Study Checklist: d. [Will the proposal result in] Discharge, <u>directly or through a storm drain system</u> , into surface waters (<u>including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc.</u>) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?
	Add the following new question to the Initial Study Checklist: l. [Will the proposal result in] Introduction of storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water?

¹ City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde and Central Coast Regional Water Quality Control Board. EPA Assistance Agreement No. C9-999266-95-0, July 1998.
The MURP can be viewed on the Internet at <http://www.swrcb.ca.gov/stormwtr/murp.html>.

16. SURFACE AND STORM WATER QUALITY GUIDELINES

A. INTRODUCTION

The following information is excerpted from several EPA publications including the preamble to the NPDES Phase II rules as published in the Federal Register¹ and EPA storm water fact sheets and guidance documents².

Storm water runoff from lands modified by human activities can harm surface water resources and, in turn, cause or contribute to an exceedance of water quality standards by changing natural hydrologic patterns, accelerating stream flows, destroying aquatic habitat, and elevating pollutant concentrations. Such runoff may contain or mobilize high levels of contaminants, such as sediment, suspended solids, nutrients (phosphorous and nitrogen), heavy metals and other toxic pollutants, pathogens, oxygen-demanding substances, and floatables. After a rain, storm water runoff carries these pollutants into nearby streams, rivers, lakes, estuaries, wetlands, and oceans. The highest concentrations of these contaminants often are contained in “first flush” discharges, which occur during the first major storm after an extended dry period. Individually and combined, these pollutants impair water quality, threatening designated beneficial uses and causing habitat alteration or destruction. Uncontrolled storm water discharges from areas of urban development and construction activity negatively impact receiving waters by changing the physical, biological, and chemical composition of the water, resulting in an unhealthy environment for aquatic organisms, wildlife, and humans. Although water quality problems also can occur from agricultural storm water discharges and return flows from irrigated agriculture, this area of concern is statutorily exempted from regulation as a point source under the Clean Water Act and is not addressed in these guidelines.

Urbanization alters the natural infiltration capability of the land and generates a host of pollutants that are associated with the activities of dense populations, thus causing an increase in storm water runoff volumes and pollutant loading in storm water that is discharged to receiving waterbodies. Urban development increases the amount of impervious surface in a watershed as farmland, forests, and other natural vegetation with natural infiltration characteristics are converted into buildings with rooftops, driveways, sidewalks, roads, and parking lots with virtually no ability to absorb storm water. Storm water runoff washes over these impervious areas, picking up pollutants along the way while gaining speed and volume because of their inability to disperse and filter into the ground. What results are storm water flows that are higher in volume, pollutants, and temperature than the flows from more pervious areas, which have more natural vegetation and soil to filter the runoff. Studies reveal that the level of imperviousness in an area strongly correlates with decreased quality of the nearby receiving waters. Research conducted in numerous geographical areas, concentrating on various variables and employing widely differing methods, has revealed that stream degradation occurs at relatively low levels of imperviousness, such as 10 to 20 percent (even as low as 5 to 10 percent). Furthermore, research has indicated that few, if any, urban streams can support diverse benthic communities at imperviousness levels of 25 percent or more. An area of medium density single

¹ 64 FR 68722

² Available on the Internet at www.epa.gov/npdes.

family homes can be anywhere from 25 percent to nearly 60 percent impervious, depending on the design of the streets and parking.

Relationship of Sources to Primary Pollutants of Concern

Pollutant Source/Activity	Primary Pollutants of Concern in Urban Runoff*								
	Physical Parameters ^a	Synthetic Organics ^b	Petroleum Hydrocarbons ^c	Heavy Metals ^d	Nutrients	Pathogens	Sediments	Oxygen-Demanding Substances ^e	Floatables ^f
Vehicle Service Facilities		•	•	•					
Gas Stations		•	•	•					
Metal Fabrication Shops		•	•	•					
Restaurants									•
Auto Wrecking Yards	•	•	•	•					
Mobile Cleaners		•							
Parking Lots	•		•	•					•
Residential Dwellings	•	•		•	•	•	•	•	
Parks/Open Spaces					•	•	•	•	•
Construction Sites	•						•	•	
Corporation Yards	•	•	•	•					
Streets & Highways	•		•	•				•	•
Marinas									•
Golf Courses		•			•		•	•	
Sewer Overflows	•					•		•	

a. salinity, pH, temperature. b. pesticides, herbicides, PCBs. c. oil, grease, solvents. d. lead, copper, zinc, cadmium. e. plant debris, animal waste. f. litter, yard wastes.

* adapted from *Model Urban Runoff Program*. July 1998. City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde and Central Coast Regional Water Quality Control Board. EPA Assistance Agreement No. C9-999266-95-0.

In addition to impervious areas, urban development creates new pollution sources as population density increases and brings with it proportionately higher levels of car emissions, car maintenance wastes, pet waste, litter, pesticides, and household hazardous wastes, which may be washed into receiving waters by storm water or dumped directly into storm drains designed to discharge to receiving waters. More people in less space results in a greater concentration of pollutants that can be mobilized by storm water discharges into storm sewer systems.

The first national assessment of urban runoff characteristics was completed for the *Nationwide Urban Runoff Program (NURP)* study. The NURP study is the largest nationwide evaluation of storm water discharges undertaken to date. EPA conducted the NURP study to facilitate understanding of the nature of urban runoff from residential, commercial, and industrial areas. One objective of the study was to characterize the water quality of discharges from separate storm sewer systems that drain residential, commercial, and light industrial (industrial parks) sites. Storm water samples from 81 residential and commercial properties in 22 urban/suburban areas nationwide were collected and analyzed during the 5-year period between 1978 and 1983.

The majority of samples collected in the study were analyzed for eight conventional pollutants and three heavy metals. Data collected under the NURP study indicated that discharges from separate storm sewer systems draining runoff from residential, commercial, and light industrial areas carried more than 10 times the annual loading of total suspended solids (TSS) than discharges from municipal sewage treatment plants that provide secondary treatment. The NURP study also indicated that runoff from residential and commercial areas carried somewhat higher annual loadings of chemical oxygen demand (COD), total lead, and total copper than effluent from secondary treatment plants. Study findings showed that fecal coliform counts in urban runoff typically range from tens to hundreds of thousands of most probable number (MPN) per hundred milliliters (ml) of runoff during warm weather conditions, with the median for all sites being around 21,000 MPN/100 ml.

B. CONSTRUCTION SITE RUNOFF

Polluted storm water runoff from construction sites often flows to storm drains and ultimately is discharged into local rivers and streams. Of the pollutants listed below, sediment is usually the main pollutant of concern. Sediment runoff rates from construction sites are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites, can cause physical, chemical, and biological harm to our nation's waters. The siltation process described previously can (1) deposit high concentrations of pollutants in public water supplies; (2) decrease the depth of a waterbody, which can reduce the volume of a reservoir or result in limited use of a water body by boaters, swimmers, and other recreational enthusiasts; and (3) directly impair the habitat of fish and other aquatic species, which can limit their ability to reproduce. Excess sediment can cause a number of other problems for waterbodies. It is associated with increased turbidity and reduced light penetration in the water column, as well as more long-term effects associated with habitat destruction and increased difficulty in filtering drinking water.

Pollutants Commonly Discharged From Construction Sites

Sediment	Pesticides
Solid and sanitary wastes	Concrete truck washout
Nitrogen (fertilizer)	Construction chemicals
Phosphorous (fertilizer)	Construction debris

C. POST CONSTRUCTION RUNOFF

There are generally two forms of substantial impacts of post-construction runoff. The first is caused by an increase in the type and quantity of pollutants in storm water runoff. As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans. The second kind of post-construction runoff impact occurs by increasing the quantity of water delivered to the waterbody

during storms. Increased impervious surfaces interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process include stream bank scouring and downstream flooding, which often lead to a loss of aquatic life and damage to property.

D. FEDERAL AND STATE REGULATIONS

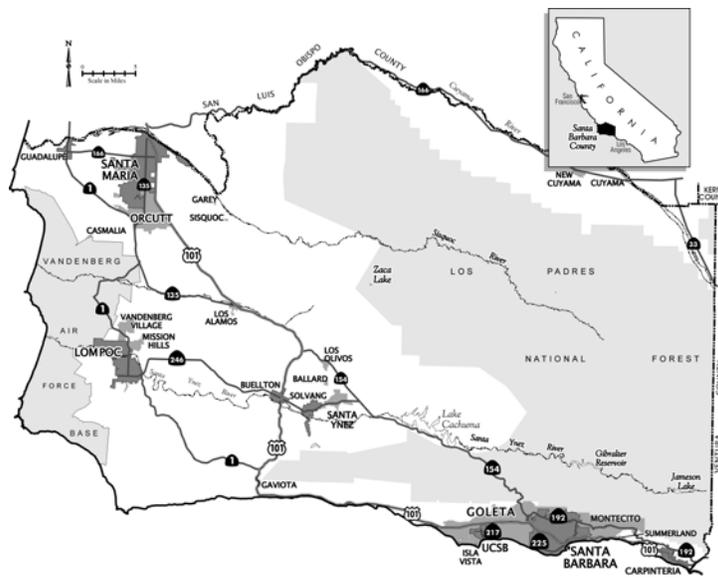
The Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act or CWA) requires that discharges do not substantially degrade the physical, chemical or biological integrity of the Nation's waters. Specifically Section 402 established the National Pollutant Discharge Elimination System (NPDES) Regulations for wastewater and other pollutant discharges.

Congress amended the CWA in 1987 to require the implementation of a two-phased program to address storm water discharges. Phase I, promulgated by the U.S. Environmental Protection Agency (EPA) in November 1990, requires NPDES permits for storm water discharges from municipal separate storm sewer systems (MS4s) serving populations of 100,000 or greater, construction sites disturbing greater than 5 acres of land, and ten categories of industrial activities.

Despite the comprehensiveness of the NPDES Phase I program, the EPA recognized that smaller construction projects (disturbing less than 5 acres) and small municipal separate storm sewers (MS4s³) were also contributing substantially to pollutant discharges nationwide. Therefore, in order to further improve storm water quality, the EPA promulgated the NPDES Phase II program (*Federal Register* Vol. 64, No. 235, December 8, 1999). The Phase II regulations became effective on February 7, 2000, and require NPDES permits for storm water discharges from regulated small MS4s and for construction sites disturbing more than 1 acre of land. The Phase II regulations published by the EPA designated the urbanized areas⁴ of Santa Barbara County as a regulated small MS4.

³ Those generally serving less than 100,000 people and located in an urbanized area as defined by the Bureau of the Census.

⁴ An **urbanized area** is a land area comprising one or more places (central place(s)) and the adjacent densely settled surrounding area (the urban fringe) that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile.



In addition, Section 401 and 404 established regulations for the discharge of dredged or fill material into waters of the United States and water quality impacts associated with these discharges. In California, the Porter-Cologne Water Quality Control Act establishes waste discharge standards pursuant to the Federal NPDES program, and the state has the authority to issue NPDES permits to individuals, businesses, and municipalities.

E. COUNTY WATER QUALITY ISSUES

Because the EPA has determined that the urbanized areas of Santa Barbara County are subject to the Phase II NPDES regulations, it is presumed that the county has a general urban runoff water quality problem. In addition to this general presumption, over the last three years Project Clean Water has collected analytical water quality data and identified the water quality concerns in county streams, creeks and beach areas. These concerns include:

- Bacteria levels consistently above applicable standards during storm events,
- Levels of metals (copper, chromium, zinc, and lead) approaching or exceeding Regional Water Quality Control Board Basin Plan objectives,
- Elevated levels of nitrogen and phosphorus in all creeks during storm events, and
- Detection of pesticides in all watersheds.

The Regional Water Quality Control Board has also identified that the quality of several important recreational water bodies and water supplies have been impaired. These water bodies and their contaminants include:

- San Antonio Creek (northern) – sediments.
- Santa Ynez River – nutrients (e.g., phosphorus and nitrogen), salinity, total dissolved solids, chlorides and sediments.
- Goleta Slough – metals, pathogens, and sediment.
- Arroyo Burro Creek – pathogens (e.g., bacteria).

- Mission Creek – pathogens.
- Carpinteria Salt Marsh – nutrients and sediment.
- Carpinteria Creek - pathogens
- Rincon Creek – pathogens and sediment.

F. COUNTY WATER QUALITY PROTECTION POLICIES

Policies regarding the protection of water quality in the unincorporated areas of Santa Barbara County are provided in the Comprehensive Plan Land Use Element, various Community Plans, and the Local Coastal Plan. The overarching policy which applies to both construction and post-construction is Land Use Element Hillside and Watershed Protection Policy 7 (Coastal Plan Policy 3-19), which states:

Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste shall not be discharged into or alongside coastal streams or wetlands either during or after construction.

Project approval requires a finding of consistency with this and all other applicable water quality policies in the Comprehensive and Community Plans.

G. SIGNIFICANCE GUIDELINES FOR ASSESSMENT OF WATER QUALITY IMPACTS

Guidelines for assessing project-specific and cumulative water quality impacts are presented below. The assessment of impacts must account for construction-related impacts (i.e., vegetation removal, erosion, use of construction materials on the site, and staging of construction activities) and post-construction (or post-development) impacts (i.e., increases in impervious surfaces and increased runoff, entrainment of pollutants, and effects of discharges on aquatic habitats and biota).

G.1 Project Specific Potential Significance Impacts

- (a) A significant water quality impact is presumed to occur if the project:
- Is located within an urbanized area of the county and the project construction or redevelopment individually or as a part of a larger common plan of development or sale would disturb one (1) or more acres of land;
 - Increases the amount of impervious surfaces on a site by 25% or more;
 - Results in channelization or relocation of a natural drainage channel;
 - Results in removal or reduction of riparian vegetation or other vegetation (excluding non-native vegetation removed for restoration projects) from the buffer zone of any streams, creeks or wetlands;
 - Is an industrial facility that falls under one or more of categories of industrial activity regulated under the NPDES Phase I industrial storm water regulations (facilities with effluent limitation; manufacturing; mineral, metal, oil and gas, hazardous waste,

treatment or disposal facilities; landfills; recycling facilities; steam electric plants; transportation facilities; treatment works;; and light industrial activity);

- Discharges pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the Regional Water Quality Control Board's (RWQCB) Basin Plan or otherwise impairs the beneficial uses⁵ of a receiving waterbody; or
- Results in a discharge of pollutants into an "impaired" waterbody that has been designated as such by the State Water Resources Control Board or the RWQCB under Section 303 (d) of the Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act).
- Results in a discharge of pollutants of concern to a receiving water body, as identified in by the RWQCB.

(b) Projects that are not specifically identified on the above list or are located outside of the "urbanized areas" may also have a project-specific storm water quality impact. Storm water quality impacts associated with these projects must be evaluated on a project by project basis for a determination of significance. The potential impacts of these projects should be determined in consultation with the county Water Agency, Flood Control Division, and RWQCB. The issues that should be considered are:

- the size of the development;
- the location (proximity to sensitive waterbodies, location on hillsides, etc.);
- the timing and duration of the construction activity;
- the nature and extent of directly connected impervious areas;
- the extent to which the natural runoff patterns are altered;
- disturbance to riparian corridors or other native vegetation on or off-site;
- the type of storm water pollutants expected; and
- the extent to which water quality best management practices are included in the project design.

(c) All projects determined to have a potentially significant storm water quality impact must prepare and implement a Storm Water Quality Management Plan (SWQMP) to reduce the impact to the maximum extent practicable. The SWQMP shall include the following elements:

- identification of potential pollutant sources that may affect the quality of the discharges to storm water;
- the proposed design and placement of structural and non-structural BMPs to address identified pollutants;

⁵ Beneficial uses for Santa Barbara County are identified by the Regional Water Quality Control Board in the Water Quality Control Plan for the Central Coastal Basin, or Basin Plan, and include (among others) recreation, agricultural supply, groundwater recharge, fresh water habitat, estuarine habitat, support for rare, threatened or endangered species, preservation of biological habitats of special significance.

- a proposed inspection and maintenance program; and
- a method of ensuring maintenance of all BMPs over the life of the project.

Implementation of best management practices identified in the SWQMP will generally be considered to reduce the storm water quality impact to a less than significant level.

G.2 Less than Significant Impacts

The following land uses and projects are generally presumed to have a less than significant project-specific water quality impact. These include:

- Redevelopment projects that do not increase the amount of impervious surfaces on the site nor change the land use or potential pollutants;
- New development and redevelopment projects that incorporate into the project design construction BMPs for erosion, sediment and construction waste control and incorporate post-construction BMPs to protect sensitive riparian or wetland resources, reduce the quantity of runoff, and treat runoff generated by the project to pre-project levels;
- Lot line adjustments that do not alter the development potential of the lots involved;
- Development of a single family dwelling (and associated accessory uses including but not limited to roads and driveways, septic systems, guesthouse, pool, etc.) disturbing less than one acre on existing legal lot.

G.3 Cumulative Impacts

Because of the county's designation under the Phase II NPDES regulations, all discretionary projects (except those that do not result in a physical change to the environment) within the urbanized area whose contributions are cumulatively considerable must implement one or more best management practices to reduce their contribution to the cumulative impact.

H. GENERAL MITIGATION GUIDELINES FOR WATER QUALITY IMPACTS

If water quality impacts are considered from the beginning stages of a project more opportunities are available for water quality protection. Best management practices (mitigation measures) chosen for a project should minimize water quality impacts and attempt to maintain pre-development runoff conditions. Best management practices are divided into two main categories, non-structural BMPs and structural BMPs.

Non-structural BMPs are preventative actions that involve management and source controls such as protecting and restoring sensitive areas such as wetlands and riparian corridors, maintaining and/or increasing open space, providing buffers along sensitive water bodies, minimizing impervious surfaces and directly connected impervious areas, and minimizing disturbance of soils and vegetation. Structural BMPs include: storage practices such as wet ponds and extended-detention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; and infiltration practices such as infiltration basins and infiltration trenches. In many

cases combinations of non-structural and structural measures will be required to reduce water quality impacts.

Non-structural and structural BMPs most applicable to the development projects in the county are included in “ A Planner’s Guide to Conditions of Approval and Standard Mitigation Measures” and the county’s adopted BMP manuals for construction site runoff control. Additional guidance on best management practices is available from the State⁶, the EPA⁷ and from other sources such as BASMAA “Starting at the Source”⁸. Storm water technologies are constantly being improved, and staff and developers must be responsive to any changes, developments or improvements in control technologies.

⁶ *California Storm Water Best Management Practice Handbooks* (California Stormwater Quality Task Force, 1993).

⁷ On the Internet at www.epa.gov/npdes/menuofbmps/menu.htm.

⁸ *Start at the Source: Design Guidance Manual for Stormwater Quality Protection* (Bay Area Stormwater Management Agencies Association, 1999).

REVISIONS TO A PLANNER'S GUIDE TO CONDITIONS OF APPROVAL AND MITIGATION MEASURES:

I. Revisions for Existing Conditions of Approval and Mitigation Measures

28. To minimize pollutants impacting downstream waterbodies or habitat, storm drain filters/ inserts, inline clarifiers, or separators shall be installed in the project area storm drain inlets and/or paved areas. The filters/inserts shall be maintained in working order. **Plan Requirements:** Prior to approval of Land Use Permits\Coastal Development Permits for grading, the applicant shall submit grading and building plans identifying the type and location of filters/inserts to P&D for review and approval. The location of such filters/inserts shall be noted on grading and building plans *{planners: the requirements and schedule for cleaning and maintaining the filters should be specified within the CC&Rs for residential developments or should be the requirement of the landowner for commercial/industrial developments}*. **Timing:** Filters/inserts shall be installed prior to [insert timing] and shall be cleaned using approved methods at least twice a year, once immediately prior to November 1 (i.e. before the start of the rainy season) and once in January. (Additional maintenance/cleaning may be required by P&D.)
MONITORING: P&D shall site inspect periodically throughout the construction phase to ensure proper installation. Records of maintenance shall be maintained by *{the HOA for residential developments or landowner for commercial/industrial developments}* and shall be submitted to P&D on an annual basis prior to the start of the rainy season and for five years thereafter. After the fifth year the records shall be maintained by the landowner or HOA and be made available to P&D on request. P&D shall review the maintenance records and site inspect as needed following completion of construction to ensure periodic cleanout.
33. Outlet structures for energy dissipation shall minimize disturbance to the natural drainage and avoid the use of unnatural materials, such as concrete, grouted rock, and asphalt rubble. Where hard bank materials must be used, natural rock, gabions, crib wall or other more natural means of energy dissipation shall be preferred. Rock grouting shall only be used if no other feasible alternative is available as determined by P&D and Flood Control. **Plan Requirements:** Plans shall be submitted for review and approval by P&D and Flood Control prior to approval of Land Use Permits\Coastal Development Permits for grading. **Timing:** Structures shall be installed during grading operations.
MONITORING: P&D staff shall ensure construction according to plan.
34. Best available erosion and sediment control measures shall be implemented during grading and construction. Best available erosion and sediment control measures may include but are not limited to use of sediment basins, gravel bags, silt fences, geo-bags or gravel and geotextile fabric berms, erosion control blankets, coir rolls, jute net, and straw bales. Storm drain inlets shall be protected from sediment-laden waters by use of inlet protection devices such as gravel bag barriers, filter fabric fences, block and gravel filters, and excavated inlet sediment traps. Sediment control measures shall be maintained for the duration of the grading period and until graded areas have been stabilized by structures, long-term erosion control measures or landscaping. Construction entrances and exits shall be stabilized using gravel beds, rumble plates, or other measures to prevent sediment from being tracked onto adjacent roadways. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods. **Plan Requirements:** An erosion and sediment control plan shall be submitted to and approved by P&D and Flood Control prior to approval of Land Use Permits\Coastal Development Permits. The plan shall be designed to address erosion and sediment control during all phases of development of the site. **Timing:** The plan shall be implemented prior to the commencement of grading/construction.
MONITORING: P&D staff shall perform site inspections throughout the construction phase.
40. During construction, washing of concrete trucks, paint, equipment, or similar activities shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Wash water shall not be discharged to the storm drains, street, drainage ditches, creeks, or wetlands. Areas designated for washing functions shall be at least 100 feet from any storm drain, waterbody or sensitive biological resources. The location(s) of the washout area(s) shall be clearly noted at the construction site with signs. **Plan Requirements:** The applicant shall designate a washout area, acceptable to P&D, and this area shall be shown on the construction and/or grading and building plans. **Timing:** The wash off area

shall be designated on all plans prior to approval of Land Use Permits\Coastal Development Permits. The washout area(s) shall be in place and maintained throughout construction.

MONITORING: P&D staff shall check plans prior to approval of Land Use Permits\Coastal Development Permits and compliance staff shall site inspect throughout the construction period to ensure proper use and maintenance of the washout area(s) .

62. Grading and erosion and sediment control plans shall be designed to minimize erosion and shall include the following: **Planner: Remove items which are not applicable.**

- a. Grading shall be prohibited within [#] feet of the top of bank of [*specify creek name*] creek. The protected area shall be designated with orange construction fencing or other barrier to prevent entry by equipment or personnel.
- b. Methods such as geotextile fabrics, erosion control blankets, retention basins, drainage diversion structures, siltation basins and spot grading shall be used to reduce erosion and siltation into adjacent water bodies or storm drains during grading and construction activities. **Planner: additional methods can be found in County approved construction site best management practices manuals.**
- c. All entrances/exits to the construction site shall be stabilized (e.g. using rumble plates, gravel beds or other best available technology) to reduce transport of sediment off site. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods.
- d. Storm drain inlets shall be protected from sediment-laden waters by the use of inlet protection devices such as gravel bag barriers, filter fabric fences, block and gravel filters, and excavated inlet sediment traps.
- e. Graded areas shall be revegetated within [#] weeks of grading activities with deep rooted, native, drought-tolerant species to minimize slope failure and erosion potential. Geotextile binding fabrics shall be used if necessary to hold slope soils until vegetation is established.
- f. Grading on slopes steeper than 5:1 shall be designed to minimize surface water runoff.
- g. A detailed geological and/or soils engineering study addressing structure sites and the access road shall be prepared to determine structural design criteria, as recommended by the Planning and Development Building & Safety Division. The study shall be submitted for review and approval by Public Works.
- h. Temporary storage of construction equipment shall be limited to a 50 by 50 foot area located *Planner specify* along the existing dirt access road; equipment storage sites shall be located at least 100 feet from any water bodies. **Planner: A smaller or larger site may be needed for some projects.**

Plan Requirements: The grading and erosion and sediment control plan(s) shall be submitted for review and approved by P&D prior to approval of Land Use Permits\Coastal Development Permits. The plan shall be designed to address erosion and sediment control during all phases of development of the site. The applicant shall notify Permit Compliance prior to commencement of grading. **Timing:** Components of the grading plan shall be implemented prior to occupancy clearance. Erosion and sediment control measures shall be in place throughout grading and development of the site until all disturbed areas are permanently stabilized.

MONITORING: Permit Compliance will photo document revegetation and ensure compliance with plan. Grading inspectors shall monitor technical aspects of the grading activities.

63. **Planner: work with Building and Safety and Flood Control to determine if pervious conveyances (e.g., grassed swales, bioretention areas, etc.) can be used before this measure is applied to a project.** All runoff water from impervious areas shall be conveyed by impervious conduits to existing drainage canyons.

Plan Requirements and Timing: A drainage plan which incorporates the above and includes a maintenance and inspection program to ensure proper functioning shall be submitted prior to approval of Land Use Permits\Coastal Development Permits by the applicant to P&D and the Flood Control District for review and approval.

64. Permanent erosion control measures shall be installed. **Plan Requirements:** Prior to approval of Land Use Permits\Coastal Development Permits for grading, the applicant shall submit to P&D for review and approval, detailed plans and a report prepared by a licensed geologist or registered civil engineer for any proposed permanent erosion control measures. **Timing:** Erosion control plans shall be approved prior to approval of Land Use Permits\Coastal Development Permits for structural development.

MONITORING: P&D shall ensure installation prior to any structural development or initiation of grading.

111. The project shall provide for on-site retention of storm water runoff, infiltration, and recharge where feasible. Feasibility shall be determined by the P&D Registered Geologist and SBCFCD engineer. Retention basin(s) shall be maintained for the life of the project by a Homeowners' Association or landowner for commercial/industrial sites. Recharge systems shall be developed in conjunction with the SBCFCD and P&D. **Plan Requirements:** A drainage plan showing the location and design parameters of the retention basin shall be submitted to P&D and Flood Control for review and approval. Installation and maintenance for five years shall be ensured through a performance security provided by the applicant. Long term maintenance requirements shall be specified in homeowner association CC&Rs or in a maintenance program submitted by the landowner of commercial/industrial sites. **Timing:** Retention and/or recharge basins shall be installed (landscaped and irrigated subject to P&D and SBCFCD approval) prior to occupancy clearance.
- MONITORING:** Planning and Development shall site inspect for installation and maintenance of landscaping. Flood Control sign off is required on final grading/drainage plans, and Permit Compliance sign off is required for release of the performance security.

II. *New Conditions of Approval and Mitigation Measures*

The following new conditions/measures address storm water quality from construction, new development, and redevelopment as required by the EPA's NPDES Phase II municipal storm water regulations. Some of these measures should be considered during the initial design phase of a project as they might require significant land area to implement. Consideration of these measures after the initial design phase could result in substantial redesign and project delay.

- A. **Planner: For all new development and redevelopment projects.** To prevent illegal discharges to the storm drains, all on-site storm drain inlets, whether new or existing shall be labeled to advise the public that the storm drain discharges to the ocean (or other waterbody, as appropriate) and that dumping waste is prohibited (e.g., "Don't Dump – Drains to Ocean"). The information shall be provided in English and Spanish. **Plan Requirements and Timing:** Location of storm drain inlets shall be shown on site, building and grading plans prior to approval of grading and land use permits. Labels shall be installed prior to occupancy clearance. Standard labels are available from Public Works, Project Clean Water, or other label designs shall be shown on the plans and submitted to P&D for approval prior to approval of grading and land use permits.
- MONITORING:** Planning and Development shall site inspect prior to occupancy clearance.
- B. **Planner: Use this measure separately if there will be grading but an erosion control plan is not being required.** To prevent sediment from being tracked off of the construction site, stabilized entrances shall be installed. Stabilizing measures may include but are not limited to use of gravel pads, steel rumble plates, temporary paving, etc. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods. **Plan Requirements:** The stabilized entrances/exits shall be located and detailed on the grading and drainage plan. Dry cleaning methods shall be enumerated in the project specifications and included on grading and drainage plans. **Timing:** The plans shall be submitted to P&D for approval prior to approval of Land Use Permit/Coastal Development Permits. The stabilized entrances/exits shall be installed prior to initiation of construction and maintained for the duration of the grading period and until graded areas have been stabilized by structures, long-term erosion control measures or landscaping.
- MONITORING:** P&D shall site inspect during construction.
- C. **Planner: this measure is appropriate for medium to large subdivisions (5 or more lots) or commercial/industrial developments, however sufficient land area must be set aside onsite to accommodate the facility.** A permanent biofilter/bioswale system shall be constructed to treat storm water runoff from the site. The biofilter/bioswale system shall be designed by a registered civil engineer specializing in water quality or other qualified professional to ensure that the retention time of water and the plants selected are adequate to reduce concentrations of the target pollutants including [Planner: list likely pollutants]. Where feasible, local plants sources (i.e., collected from the watershed or propagated from cuttings or seed collected from the watershed) shall be used in the biofilter. Invasive plants shall not be used in the biofilter. Biofilters shall not replace existing riparian vegetation

or native vegetation unless otherwise approved by P&D. **Plan Requirements and Timing:** The applicant shall include the biofilter design, including the plant palette and the source of plant material, on the grading and drainage and landscape plans, and depict it graphically. The applicant shall submit a maintenance plan for the biofilter to P&D for review and approval. A performance security will be required to ensure installation and a five-year maintenance period. Long-term maintenance shall be the responsibility of the HOA (for residential projects) or the landowner (for commercial/industrial projects). Maintenance requirements shall be specified in the CC&Rs or in a maintenance program submitted by the landowner of the commercial/industrial site. The plans and a copy of the long-term maintenance program shall be submitted to P&D, Flood Control, and the Water Agency for review prior to approval of Land Use Permits/Coastal Development Permits.

MONITORING: Planning and Development shall site inspect for installation and periodically inspect for maintenance throughout the five-year performance period. Performance security release requires P&D approval.

- D. **Planner:** *This measure may be used for small catchment areas of a few acres for projects such as small residential developments (4 or fewer lots), small commercial areas (with buildings or structures less than 5,000 square feet), parking lots adjacent to impervious surfaces such as sidewalks, and as an alternative to underground or aboveground impermeable drainage channels.* To allow for infiltration and treatment, runoff from the site shall be directed to a permanent grass or vegetated swale (bioretention area). A registered civil engineer or other qualified professional shall design the vegetated swale. Only non-invasive perennial grass or other drought tolerant vegetation species shall be used in the vegetated swales. **Plan Requirements and Timing:** Swale designs, including the plant palette and the source of plant material, shall be described and detailed on the site, grading and drainage and landscape plans, and depicted graphically. A maintenance program shall be specified in an inspection and maintenance plan. The plan shall specify, at a minimum, annual inspection for signs of erosion, vegetation loss, and channelization, and regular mowing when grasses reach a height of 6 inches with clippings removed from the swale. Long term maintenance shall be the responsibility of the HOA (for residential projects) or the landowner (for commercial/industrial projects). A maintenance program shall be specified in the CC&Rs or in a maintenance program submitted by the landowner for commercial/industrial sites. The plans and a copy of the long-term maintenance program shall submitted to P&D, Flood Control, and the Water Agency for review prior to approval of Land Use Permits/Coastal Development Permits.

MONITORING: Planning and Development shall site inspect for installation of the swale and periodically to ensure long-term maintenance.

- E. **Planner:** *the following can be used in parking areas (for overflow or low traffic areas), patios, sidewalks where ADA requirements do not have to be met, emergency roads, around buildings, driveways, etc. where soil conditions allow.* To reduce runoff from impervious areas and allow for infiltration, the applicant shall incorporate pervious materials or surfaces (e.g., porous pavement or unit pavers on sand) into the project design. **Plan Requirements and Timing:** Pervious surfaces shall be described and depicted graphically on the site, building, grading and landscape plans. The plans shall be submitted to P&D for review prior to approval of Land Use Permits/Coastal Development Permits.

MONITORING: P&D shall site inspect for installation.

- F. **Planner:** *The following measure can be used for single family dwellings and small residential developments (4 or fewer lots) on permeable soils. Work with Building and Safety to ensure that building foundations are adequately protected from site drainage when using this measure.* The applicant shall install a roof runoff collection and disposal system. Runoff shall be directed to either a subsurface infiltration trench, french drains, landscaped areas or connected to the site's irrigation system. **Plan Requirements and Timing:** The roof runoff collection system shall be shown on grading, building and landscape plans. The plans shall submitted to P&D for review prior to approval Land Use Permits/Coastal Development Permits. The system shall be installed prior to occupancy clearance.

MONITORING: P&D shall site inspect for installation of the system.

- G. A Homeowners' Association or the landowner (for commercial/industrial projects) {*planner choose the appropriate*} shall be responsible for the long-term maintenance of the water quality conditions of approval {*planner list conditions here*}. **Plan Requirements and Timing:** The proposed maintenance responsibilities and schedule shall be included in the CC&Rs or in a maintenance program submitted by the

landowner for commercial/industrial sites. The CC&Rs/maintenance program shall be submitted for review by P&D, Flood Control and the Water Agency prior to approval of Land Use Permits/Coastal Development Permits. Annual records of the maintenance activities shall be maintained by the HOA/landowner and submitted to P&D upon request.

MONITORING: P&D shall review the maintenance records or site inspect, as needed. Costs shall be borne by the Homeowners Association.

- H. ***Planner: The following measure can be used for single family dwellings where conditions allow (e.g., when specific paving needs that require good traction are not needed).*** To reduce storm water runoff, one of the following driveway designs shall be used: paving only under wheels, flared driveway, or use of permeable surfaces for temporary or non-permanent parking areas. **Plan Requirements and Timing:** The driveway shall be shown on the site, grading, landscape and building plans. The plans shall be submitted to P&D for review prior to approval of Land Use Permits/Coastal Development Permits.
MONITORING: P&D shall site inspect to ensure installation.
- I. To prevent storm water contamination during roadwork or pavement construction, concrete, asphalt, and seal coat shall be applied during dry weather. Storm drains and manholes within the construction area shall be covered when paving or applying seal coat, slurry, fog seal, etc. **Plan Requirements and Timing:** These requirements shall be specified on the grading and building plans submitted to P&D prior to approval of Land Use Permits/Coastal Development Permits.
MONITORING: P&D shall site inspect, as needed during construction.
- J. ***Planner: This measure should be applied to new or redeveloped gas stations. The fuel dispensing area is defined as extending 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus 1 foot, whichever is less.*** The fuel dispensing areas shall be paved with portland cement concrete (or equivalent smooth impervious surface), with a 2% to 4% slope to prevent ponding, and shall be separated from the rest of the site by a grade break that prevents run-on of storm water to the extent practicable. The paving around the fuel dispensing area may exceed the minimum dimensions of the "fuel dispensing area" stated above. **Plan Requirements and Timing:** These requirements shall be specified on the grading and building plans submitted to P&D. The plans shall be reviewed and detailed prior to approval of Land Use Permits/Coastal Development Permits.
MONITORING: P&D shall site inspect prior to occupancy clearance.
- K. ***Planner: This measure should be applied to new or redeveloped gas stations.*** The fuel dispensing area shall be covered, and the cover's minimum dimensions must be equal to or greater than the area within the fuel dispensing area as defined by the grade break. Runoff from the cover shall be directed away from the fuel dispensing area. **Plan Requirements and Timing:** These requirements shall be specified on grading and building plans submitted to P&D. The plans shall be reviewed prior to approval of Land Use Permits/Coastal Development Permits.
MONITORING: P&D shall site inspect prior to occupancy clearance.
- L. ***Planner: Use this measure on parking lots associated with shopping centers or large commercial or industrial developments (with buildings or structures totaling 5,000 square feet or more).*** A parking lot cleaning program shall be developed and implemented. The program shall include the following elements: removal of litter; spot cleaning of oil, fuel, and other automotive leaks; vacuum sweeping on a [*Specify weekly, monthly, quarterly, or semi-annual*] basis; inspection and cleaning of storm drain inlets and catch basins before November 1 and in January of each year; and posting of signs prohibiting littering, oil changing, and other automotive repairs. Debris removed from the catch basins shall be analyzed and disposed of accordingly. **Plan Requirements and Timing:** The cleaning program shall be submitted to P&D for review prior to approval of Land Use Permits/Coastal Development Permits. The location of the signs and the requirement for storm drain cleaning shall be included on the site and building plans submitted to P&D. The plans shall be reviewed prior to approval of Land Use Permits/Coastal Development Permits.
MONITORING: P&D shall site inspect prior to occupancy clearance and shall respond to complaints. The landowner shall maintain annual records of the storm drain cleaning and make them available for review by P&D on request.
- M. ***Planner: For parking areas with 5 or more spaces.*** The parking area and associated driveways shall be designed to minimize degradation of storm water quality. Best Management Practices (BMPs) such as

oil/water separators, sand filters, landscaped areas for infiltration, basins or equivalent BMPs shall be installed to intercept and effectively prohibit pollutants from discharging to the storm drain system. The BMPs selected shall be maintained in working order. The landowner is responsible for the maintenance and operation of all improvements and shall maintain annual maintenance records. **Plan Requirements and Timing:** The location and type of BMP shall be shown on the site, building and grading plans [*select plans as appropriate based on type of BMP*]. The plans and maintenance program shall be submitted to P&D for approval prior to land use clearance.

MONITORING: P&D shall site inspect for installation prior to occupancy clearance. The landowner shall make annual maintenance records available for review by P&D upon request.

- N. **Planner:** *Use this measure for any project identified as having a significant storm water quality impact and, if appropriate, identify and include the minimum BMPs to be implemented.* A combination of structural and non-structural Best Management Practices (BMPs) (e.g., bioswales, storm drain filters, permeable pavement, etc.) shall be installed to effectively prevent the entry of pollutants from the project site into the storm drain system during and after development. **Plan Requirements:** The applicant/owner shall submit and implement a Storm Water Quality Management Plan (SWQMP). The SWQMP shall include the following elements: identification of potential pollutant sources that may affect the quality of the storm water discharges; the proposed design and placement of structural and non-structural BMPs to address identified pollutants; a proposed inspection and maintenance program; and a method for ensuring maintenance of all BMPs over the life of the project. The approved measures shall also be shown on site, building and grading plans. Records of maintenance shall be maintained by the HOA for residential developments or landowners for commercial/industrial developments. **Timing:** Prior to approval of Land Use Permits/Coastal Development Permits, the SWQMP shall be submitted to P&D, Flood Control, and the Water Agency. All measures specified in the plan shall be constructed and operational prior to occupancy clearance. Maintenance records shall be submitted to P&D on an annual basis prior to the start of the rainy season and for five years thereafter. After the fifth year the records shall be maintained by the landowner or HOA and be made available to P&D or Public Works on request.

MONITORING: P&D, Flood Control and/or the Water Agency shall site inspect prior to occupancy clearance to ensure measures are constructed in accordance with the approved plan and periodically thereafter to ensure proper maintenance.

- O. **Planner:** *For sites where grading involves one or more acres, the following will apply.* The applicant shall submit proof of exemption or a copy of the Notice of Intent to obtain coverage under the Construction General Permit of the National Pollutant Discharge Elimination System issued by the California Regional Water Quality Control Board. **Plan Requirements and Timing:** Prior to approval of Land Use Permits/Coastal Development Permits the applicant shall submit proof of exemption or a copy of the Notice of Intent and shall provide a copy of the required Storm Water Pollution Plan (SWPPP) to P&D. A copy of the SWPPP must be maintained on the project site during grading and construction activities.

MONITORING P&D shall review the documentation prior to approval of Land Use Permits/Coastal Development Permits. P&D shall site inspect during construction for compliance with the SWPPP.

- P. Construction materials and waste such as paint, mortar, concrete slurry, fuels, etc. shall be stored, handled, and disposed of in a manner which minimizes the potential for storm water contamination. **Plan Requirements and Timing:** Bulk storage locations for construction materials and any measures proposed to contain the materials shall be shown on the grading plans submitted to P&D for review prior to approval of Land Use Permits/Coastal Development Permits.

MONITORING P&D shall site inspect prior to the commencement of, and as needed during all, grading and construction activities.

Appendix G
County of Santa Barbara
Standard Conditions for Project Plan Approval –
Water Quality BMPs

COUNTY OF SANTA BARBARA

STANDARD CONDITIONS FOR PROJECT PLAN APPROVAL – WATER QUALITY BMPS

1. All new residential, commercial, industrial, and transportation development projects, including redevelopment projects, must address water quality through the use of best management practices (BMPs) as determined by the Director of Planning & Development and/or the Public Works Director. BMPs shall be applied in the following order of priority: site design, source control, and treatment control. Examples of good site design include reducing directly connected impervious areas and incorporating drainage system elements into site design. Examples of source control include covered parking or use of Integrated Pest Management techniques in landscape maintenance. Examples of treatment control include systems that either detain or filter water to remove pollutants prior to discharge. Furthermore, projects will seek to reduce post-development runoff volumes from pre-development volumes through such measures as infiltration, evapotranspiration, and storage/reuse.
2. Treatment control BMPs shall meet the following specific design requirements unless otherwise approved by the Public Works Director.
3. At a minimum, these specific design requirements for treatment control BMPs apply to all new or redevelopment projects of the following sizes: residential 1 acre or greater in disturbance; and commercial industrial , and transportation / vehicle facilities which are 0.5 acres or greater in disturbance. Treatment control BMPs may be required on new development or redevelopment projects at the discretion of the Public Works Director, based upon the categories listed in Attachment A. The selection of BMPs shall be based upon the ultimate use of the drainage area, unless the facility will be re-built/sized during subsequent phases of construction.
4. Projects cannot be subdivided or phased to avoid complying with these requirements. Development and redevelopment of the same or adjacent property(ies) permitted within 5 years may be considered together for purposes of assessing the above criteria..
5. All water quality facilities will require regular maintenance. Applicants are required to enter a maintenance agreement with the District to ensure adequate performance and to allow County emergency access. Maintenance of the basin is the responsibility of the development, unless otherwise agreed upon. |

6. **Detention Basins.** Detention of storm water runoff allows for the settling of fine particles and associated pollutants. Detention times for water quality control are longer than for flood control. Although a detention system for water quality control could be combined with a flood control system, the volume assigned for water quality control must meet minimum detention times. The required design volume for detention-based storm water quality treatment facilities is equal to the runoff volume that would occur from the contributing area from a 1.2-inch rainstorm event.

a) The volume calculation will be computed as follows:

$$WQDV = (.05 + 0.9 \times IMP) \times 1.2'' \times A \times 3630$$

where,

- WQDV = water quality design volume (cubic feet)
- IMP = total impervious area, expressed as a percentage
- A = tributary area (acres)
- 3630 = factor to convert units from acre-inch to cubic feet

b) The draw-down (or draining) time for the detention volume, which is intended to drain down completely (vs. permanent wet volume), shall be greater than or equal to 36 hours. For the top half of the detention volume, the drawdown time shall be greater than or equal to 12 hours. The remaining bottom-half of the detention volume must drain in no less than 24 hours. The outlet shall be sized using Figure 1 to achieve the required detention times and shall be large enough that clogging is unlikely to occur. Pipes less than 4 inches in diameter should not be used. Perforated risers are acceptable for controlling the flow rate. However, potential clogging of the perforations should be addressed in the maintenance plan.

c) The detention system shall be designed to maximize the distance between the inlet and outlet, and to minimize "dead spaces" (areas where little or no exchange occurs during a storm event), thereby limiting short-circuiting. A minimum flow-path length to width ratio of 3 is recommended and can be achieved using internal berms or other means to prevent short-circuiting.

d) For ponds designed to be permanently wet, the applicant must show a water balance that demonstrates that there will be sufficient dry weather flows to maintain the planned pool volume, without creating stagnate conditions. A Mosquito Management Plan or Service Contract must be approved or waived by the Santa Barbara Coastal Vector Control District for any facility that maintains a pool of water for 72 hours or more.

e) For dry extended detention ponds, the applicant must show that the pond will be able to handle dry-weather flows (such as irrigation return flows) without causing a nuisance (visual eye sore, stagnate water, etc.).

f) Detention based water quality systems are recommended to be off-line from flood conveyance. If they are to be on-line or combined with a flood detention facility, then the facility must be designed to pass the appropriate flood without damage to the facility, as well as to minimize re-entrainment of pollutants.

7. **Flow-through Facilities.** Flow-through based storm water quality facilities are ones where either the flow is passed with little or no storage through a filtration media or infiltrated into a subsurface soil matrix. The purpose is to remove, through filtration, the smaller sized fraction of particles. Examples of these BMPs include vegetated swales, infiltration facilities, bioretention filters, and some types of commercial filters.

a) The required flow rate for flow-through based storm water quality treatment facilities is the runoff that would be produced from a rainfall intensity of 0.3 inches per hour. Water quality treatment shall be maintained at this rate for a minimum of four hours. Flows above this rate can either be by-passed, or routed through the facility if it can be demonstrated that velocities will not re-entrain captured pollutants.

b) The flow-through based facility must be able to completely treat the flow rate based upon the following:

$$WQFR = (0.05 + 0.9 \times IMP) \times 0.3 \times A$$

where,

- WQFR = water quality flow rate in cubic feet per second
- IMP = total impervious area, expressed as a fraction
- A = area of the site in acres

c) Infiltration facilities shall only utilize highly permeable soils with significant pollutant removal capacities. The applicant must demonstrate that slope stability, groundwater quality, and depth to groundwater are suitable for infiltration facilities. Infiltration facilities will require periodic maintenance to maintain permeability.

d) Vegetated (wetland/native plants and/or grass) swales shall be designed so that at the water quality flow rate (WQFR), the swale width is such that the flow depth is no greater than 4 inches and the hydraulic grade line is no greater than 2 percent (unless drop structures are employed) between structures. The inflow should be directed towards the upstream end of the swale as much as possible, but should at a minimum occur evenly over the length of the swale. The length of flow in the swale should be a minimum of 100 feet or the bioswale should provide 10 minutes of contact time with the vegetation.

e) Bioretention filters are vegetated (landscaped) areas where runoff is directed through vegetation and soils for filtration. In most cases, unless there is shown to be

adequate infiltration capacity, underdrains and overflow drains should be included to collect filtered runoff to discharge to the storm drainage system. The ponding depth should be 6 inches or less with a stabilized mulch layer of 2 to 3 inches. A sandy planting soil of 2 to 3 inches should be used. Each facility should have no more than 1 acre of tributary area, and shall be designed to convey larger flows in a manner that does not cause re-entrainment of trapped materials.

f) Commercial (media) filters or such devices shall be accompanied by a certification from a licensed civil engineer that the filter/device will maintain an effluent quality of 10-30 mg/L of total suspended solids with no visible oily sheen under design operating conditions.

8. Combination facilities, or treatment trains, are encouraged to provide better treatment capability. For example, short-term detention may be placed upstream of a flow-through facility to reduce the size of the flow-through facility. In such cases, each facility will be reduced in size accordingly based upon demonstrated water quality effectiveness for the pollutants of concern.
9. These are minimum requirements. If the County determines that additional controls and/or lower thresholds for developments are required to meet specific water quality regulatory requirements (NPDES, TMDL, etc.) in watersheds that drain to sensitive receiving waters (as defined by the Central Coast Regional Water Quality Control Board), additional requirements may be imposed. These may include design requirements that result in larger or more effective facilities as well as additional types of structural or non-structural controls. The design solution will be contingent upon the pollutants that are found to be impacting such water bodies and the regulatory status of the water body.
10. Easements, fencing, grading, access roads, ramps, etc. for water quality facilities shall be provided in accordance with current policies of the Flood Control District. Easements, if required, shall be dedicated on the Final Map or dedicated by a separate instrument. The Developer will pay the cost for easement acceptance by the County and processing through County Real Property Agents.
11. A Surety Bond for structural improvements will be posted with the Public Works Department in an amount approved by the Public Works Director prior to recordation of the Final Map or Zoning Clearance. Bond amounts will be based on the submitted cost estimates of proposed drainage improvements to be constructed outside the Public Road right-of-way.
12. The Flood Control District shall be notified 5 working days in advance of storm drain and attendant auxiliary construction. The District may provide periodic inspection during construction at the developers cost. A note shall be placed on the plans to this effect.

13. During the construction process, the County will review and approve in writing any significant design revisions to the approved Plans prior to construction of the proposed revisions.
14. Prior to occupancy clearance, the "As-Built" Plans shall be submitted to the Santa Barbara County Public Works Department.
15. A Flood Control Encroachment Permit is required for improvements in the Flood Control District right-of-way. An Encroachment Permit shall be executed prior to the start of construction within District right-of-way. District notification shall be required 5 working days prior to the start of construction. An Encroachment Permit fee is required. A note shall be placed in the plans to this effect.
16. Review by the Public Works Department of plans and granting of encroachment permits does not relieve the applicant, developer, contractor and/or owner from the responsibility to obtain all other required permits and approvals required by law, including but not limited to grading permits, building permits, environmental review for CEQA/NEPA requirements, Fish & Game permits, Army Corps of Engineers permits and other City, CalTrans or other County department approvals and the approval of the underlining property owner(s) of record
17. The County reserves the right to modify these conditions as site conditions warrant.

**STANDARD CONDITIONS OF APPROVAL FOR WATER QUALITY
RECOMMENDED BY:**

Signed copy on file Flood Control

Robert Almy
Water Agency Manager

**STANDARD CONDITIONS OF APPROVAL FOR WATER QUALITY
APPROVED AND ADOPTED BY:**

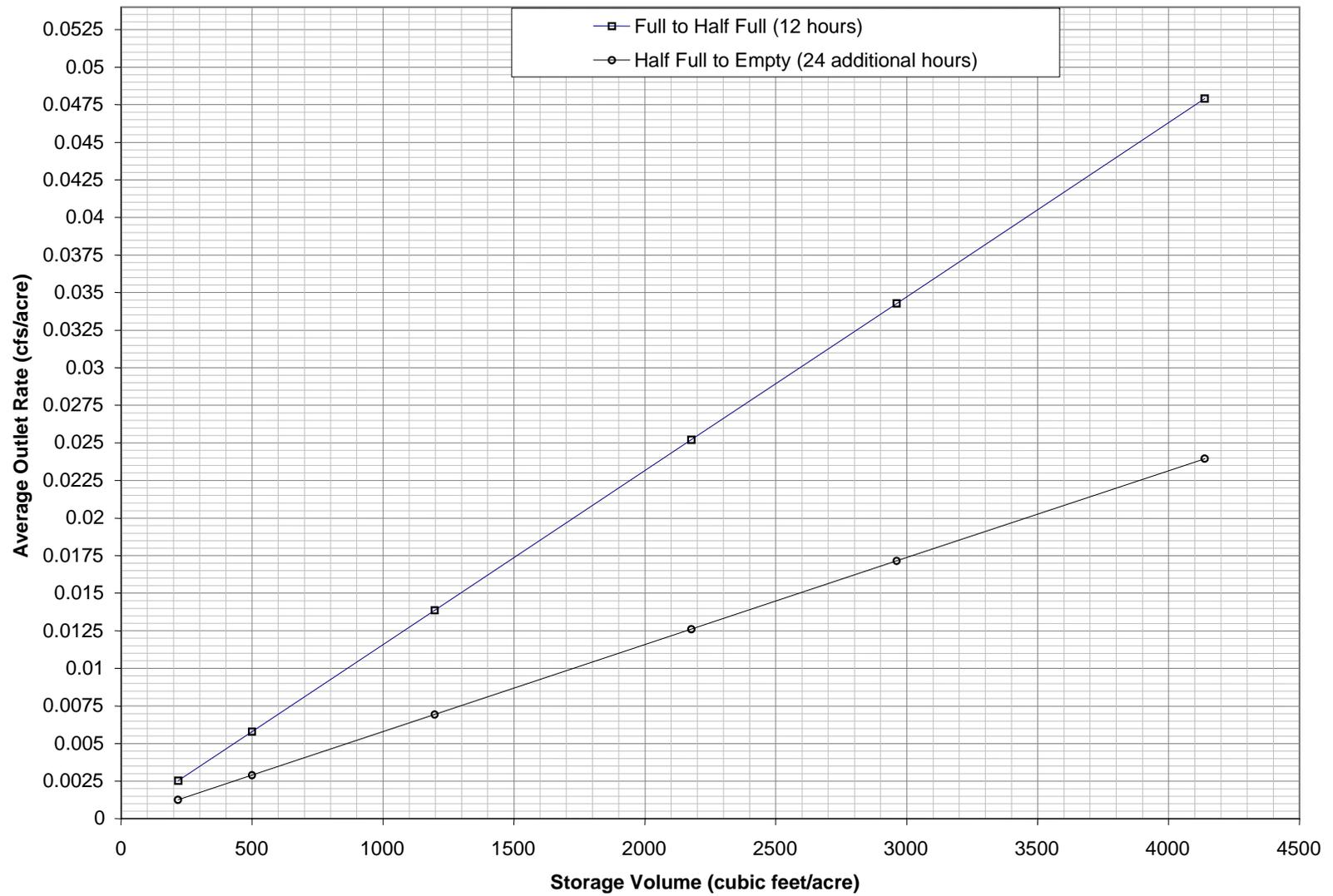
Signed copy on file Flood Control

Thomas D. Fayram, P.E.
Deputy Public Works Director

Attachment A

All discretionary development and redevelopment projects that fall into one of the following categories are subject to these conditions of approval:

- Single-Family Hillside Residences
- 100,000 Square Foot Commercial Developments
- Automotive Repair Shops
- Retail Gasoline Outlets
- Restaurants
- Home Subdivisions with 10 or more housing units
- Parking lots 5,000 square feet or more or with 25 or more parking spaces and potentially exposed to storm water runoff



Appendix H
Best Management Practices Fact Sheets – Municipal
Operations

Alternative Safer Practices

Best Management Practices

The computer is an efficient way to research a specific product or to look for less toxic alternative products for currently used chemicals



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

Since cleanup of pollution is expensive, time consuming and not very effective, it is better to prevent the release of pollutants in the first place. EPA defines the hierarchy of environmental management as follows: First, aim to prevent waste, that which can't be prevented should be recycled, that which can't be recycled should be treated safely, and only that which can't be treated safely should be disposed of properly.

1. Evaluate safer alternative products for any job that uses toxic or hazardous products. For instance, investigate non-caustic detergents, alternative floor and window cleaners, adhesives, paints, lubricants and construction materials, such as carpet and wood. Lighting and energy use also can be evaluated for lower environmental impacts. When available and cost effective, safer products should be used.
2. Carefully evaluate specialty products, such as metal cleaners and degreasers. They often contain compounds that create hazardous waste and therefore cannot be discharged to the sanitary sewer.

Goal / Purpose

To reduce the use of hazardous materials, which will reduce the potential for hazardous compounds to be released to the storm water system.

Santa Barbara County

[www.countyofsb.org/
project_cleanwater](http://www.countyofsb.org/project_cleanwater)

Revised May, 2003



Web sites with alternative product information

There are numerous web sites with information on safer products and practices. The three listed below are quite comprehensive and have links to other informative web sites. A search of the web will identify hundreds of other sites and companies. If you wish to conduct your own search key word include alternative, safer, non-toxic, and green.

3. **Government Service Administration (GSA)** provides some products under a green program. Their web site has data on a variety of products with specific data on the hazardous ingredients of each product. There are guides for alternatives to specific chemicals. Since the internal page address keeps changing go to their main page and then conduct a key word search.

www.gsa.gov

4. **EPA Environmentally Preferable Purchasing (EPP)** has numerous documents to help in the selection of safer alternative products. A wide variety of products and activities are covered. EPA started this program to help agencies prevent waste and pollution by considering environmental impacts along with price, performance and other traditional factors when deciding on what to buy. “The government’s purchase and use of products and services leave a large environmental footprint. Through its purchasing decisions, government can minimize environmental impacts while giving a boost to manufacturers that produce environmentally preferable products and services.”

The EPP Program serves as a clearinghouse of information and tools to facilitate purchase of environmentally preferable products and services.

“EPP’s audience is not limited to the Federal government. Businesses, non-profit organizations, and state & local government agencies have found the program to be of interest and value”.

www.epa.gov/opptinter/epp

5. **EPA Region IX Janitorial Products Pollution Prevention Project (“JP4”)** has a web site specifically for cleaning products. Their JP4 program is producing a series of fact sheets and commentaries on environmental, health, and safety issues. The fact sheets are meant for individual janitorial

Associated BMPs

- Housekeeping
- Building Maintenance & Repairs
- Landscape & Undeveloped Areas
- Metal, Wood, Printing & Paint Shops
- Vehicle & Equipment Maintenance & Repair
- Vehicle & Equipment Washing & Steam Cleaning

workers, supervisors, and environmental, health & safety staff. “One third of the cleaning chemicals used today have ingredients that can harm you. These ingredients are in products for cleaning glass, restroom fixtures, metal, kitchens, carpets, and hard floors, to name only a few.” This site has fact sheets and pilot test data to help in the selection of products and practices.

www.westp2.net/Janitorial/jp4.htm

6. Utilize other websites and references to locate alternative products.

Contractors Requirements

7. Ensure that contracts will contain specific language to inform the contractor that they will comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.

Employee Training

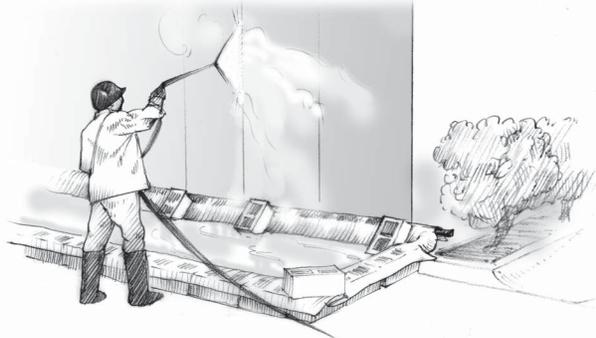
Staff training may include regular tailgate sessions at those facilities that use chemicals. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase stormwater runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County’s responsibilities under the NPDES Phase II federal regulations for storm water discharges, see **www.countyofsb.org/project_cleanwater** or contact Project Clean Water staff at 568-3440.

Building Maintenance & Repairs

Best Management Practices



Simple materials may be utilized in order to prevent wash water from leaving the work area.

Plastic tarp, supported by cement blocks and secured against the building with pvc pipe, catches the runoff water, which will then be vacuumed up and disposed of appropriately.

Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal buildings. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

General

1. During general maintenance and repairs it is important to protect storm water drains, swales, culverts and other water conveyances from materials generated by site work such as vegetation, sediment, soil, debris and chemicals. Work related debris must not be allowed to migrate offsite. Examples of some protection methods include dikes to prevent material from leaving the work area and storm-drain mats to prevent wash-water from entering drains.
2. Wash-water used to clean windows, walls, or sidewalks should be contained and disposed of to the sanitary sewer. Always contact the sanitary district for discharge requirements prior to discharging wash-water into the sanitary sewer.
3. Wash-water from power-washing buildings also should be contained and disposed of properly. Always contact the sanitary district for discharge requirements prior to discharging wash-water into the sanitary sewer.

Goal / Purpose

Minimize the release of potential pollutants, such as sediment, cleaners, paints, fuels, lubricants generated during regular building maintenance and minor repair work.

Santa Barbara County

[www.countyofsb.org/
project_cleanwater](http://www.countyofsb.org/project_cleanwater)

Revised May, 2003



4. Promptly clean up any spill of liquid or solid wastes. Do not hose down an area to clean or handle a spill, unless the liquid will be completely contained, cleaned up and disposed of to the sanitary sewer or offsite (as appropriate for the waste type). There should be no discharge to storm drains, landscape or onto pavement.
5. Do not use drains without knowing whether they flow to the sanitary sewer, storm system or a self-contained internal sump. Confirm before using drains to ensure proper disposal. Update facility schematics with any change to the plumbing or storm water drain system.

Concrete Waste Management

6. Create a temporary containment structure, such as a pit or bermed area, to hold washout from a concrete truck and other equipment. Dispose of the dried material in accordance with the requirements of the local trash hauler or transfer station.
7. Slurry created while cutting concrete or other pavement is placed in the temporary containment structure and allowed to dry. Dispose of the dried material in accordance with the requirements of the local trash hauler's or transfer station's requirements.
8. Use Caltrans' BMP WM#8 at www.dot.ca.gov/hq/construc/Construction_Site_BMPs.pdf.

Painting or Coating

9. During preparation of the building surfaces use a drop cloth to collect the paint chips and dust. After preparing a roof, sweep the area and collect the material at the downspouts. If the paint or debris contains lead, tributyl tin or other hazardous compounds dispose of as hazardous waste or characterize for alternative disposal.
10. Create a designated area to mix paint and materials away from storm drains or protect the storm drains prior to start of work. To catch spills created by the mixing operation spread impermeable ground cloths or locate the mixing operation indoors.
 - a. Check to ensure that the paint complies with the Air Pollution Control District's painting or coating regulations.

Associated BMPs

- Alternative Safer Products
- Housekeeping
- Loading & Unloading
- Material and Hazardous Waste Storage
- Landscape & Undeveloped Areas
- Spill prevention & Cleanup
- Storm Drain & Catch Basins
- Trash & Dumpster Management

11. Use drop cloths while painting wherever possible. Use impermeable material under open paint cans and spray equipment to catch leaks and spills.
12. When working near roof gutters, line the gutter with rags to catch the paint or sealant. Dispose of the rags appropriately.
13. Prohibit spray painting in windy conditions, which causes overspray with losses to the ground.
14. Wash-water from cleaning up water-based paints must be discharged to sanitary sewer. Do not put any wash-water in the storm drain; it is illegal and the responsible party can receive significant fines.
 - a. Consider using drop cloths or draperies to enclose or partially enclose work area to contain overspray.
15. Thinners and solvents used to clean up oil-based paints and coatings must be contained and disposed of as a hazardous waste. Never pour oil-based coatings or cleaning compounds down the sanitary sewer, into storm drain system or on the ground.
16. Never dump excess paint on the ground for disposal. Donate excess paint to a local graffiti abatement group, local charity or dispose of paint at a hazardous waste collection facility.
17. Empty, dry paint cans, five-gallons and under, may be discarded in the general trash.

Sandblasting

18. Use drop cloths to catch abrasives, dust, debris and paint from blasting or other sanding activities. Check with the Air Pollution Control District about permit requirements.
19. Prohibit sandblasting in windy conditions.
20. Collect spent abrasives and debris regularly, then cover or containerize debris for proper disposal.
21. Consider enclosing the work area with drop cloths to block the wind and to collect more of the airborne particles. This also limits the area that must be cleaned up after blasting.

Building Equipment

22. Air Compressor
 - a. Watch for and remove residual grease exposed to storm water.
 - b. Watch the bleed line; make sure that no oily substance is exposed to storm water.
 - c. Fix any leak promptly.
 - d. Place equipment under cover, whenever possible.
23. Air Scrubbers
 - a. Make sure particulate deposition is cleaned up regularly.
 - b. Make sure that wet-scrubber discharges are directed appropriately (as required by permit) for disposal. This is usually the sanitary sewer or an offsite facility.
24. Basement Sumps
 - a. Make sure that only storm water is entering sumps that discharge to the storm water system. Check for any cross connections with other systems.
 - b. Remove any debris prior to discharge to the storm drain.
 - c. Regularly remove standing water from the sumps.
25. Boilers
 - a. Make sure that treated boiler water is only discharged to the sanitary sewer.
 - b. Promptly fix any leaks. Leaked liquid may be hazardous and require specific clean up and disposal methods.
 - c. Check roof vents for condensate on the roof and exposure to storm water; if possible redirect condensate flow to the sanitary sewer.
26. Cleaning Equipment
 - a. Wash-water from power washing of exterior equipment surfaces must be contained and disposed of properly; check with the local sanitation district for discharge standards.

27. Cooling Tower
 - a. Discharge cooling tower blowdown and condensate to the sanitary sewer. Check with the local sanitation district for discharge standards; often these discharges require approval from the sanitary district prior to discharge.
28. Emergency Showers
 - a. Verify that the showers are connected to the sanitary sewer, with no connections to the storm water system.
29. Filter Back Flush
 - a. Back flush or backwash water must be discharged to the sanitary sewer. Dry solids can usually be disposed of in the trash.
30. Grease interceptors & oil/water separators
 - a. Check the area around interceptors and separators to make sure there is no residual oil or grease that rainwater would remove and carry into the storm water system.
 - b. Schedule regular system inspection and cleaning as prescribed by usage. After the vendor has completed removal activities clean up any residual material exposed to storm water.
31. Ground water dewatering
 - a. Make sure that the dewatering system is connected to the sanitary sewer, an infiltration system, or storm water system. A permit is required for all of these discharges.
 - b. Make sure the ground water and produced water do not come into contact with any pollutants prior to discharge.
32. HVAC, Chillers & Refrigerators
 - a. Verify that condensation lines in existing buildings discharge only uncontaminated liquid to the storm drain; make sure the condensate does not contact other sources of pollution before discharge to the storm water system.
 - b. Internal flushing liquids must be contained and disposed of appropriately

(they are usually transported offsite).

33. Ponds, Fountains and Pools
 - a. Connect overflow drains to the sanitary sewer or irrigation lines. Check with the sanitary sewer for discharge limits.
 - b. Make sure that backwash systems are connected to the sanitary sewer with appropriate backflow control device.
34. Roof Vents and Equipment
 - a. Greasy roof vents should be regularly cleaned; use catchment pans and trays whenever possible to assist with clean up.
 - b. Check roof for residuals such as paper dust, sawdust, paint, condensate, etc., and clean up as needed.
35. Water softeners, reverse osmosis & deionization units
 - a. Reject or backwash water should be discharged to the sanitary sewer with appropriate backflow control device. Check with the local sanitary sewer for discharge limits.

Contractors Requirements

36. Ensure that contracts will contain specific language to inform the contractor that they will comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.
37. Contracts must contain specific language to inform the contractor that they will comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Existing contracts must be amended to include this language, if not already included.

Employee Training

Training may include regular tailgate sessions with staff responsible for maintaining or managing a facility. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing

BMPs and to create new BMPs; their suggestions will likely reduce labor and increase stormwater runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County’s responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Wastewater Treatment Plant Contact Information

*All numbers are in the 805 area code unless otherwise noted.

Buellton Wastewater Treatment Plant	688-5177
Carpinteria Sanitary District	684-7214
Casmalia Community Services District (CSD)	9676151
Cuyama Community Services District	(661) 766-2780
Goleta Sanitary District	967-4519
Goleta West Sanitary District	968-2617
Guadalupe Wastewater Treatment Plant	343-1340
Laguna County Sanitation District	739-8750
La Purisima Wastewater Treatment Plant	733-4366
Lompoc Regional Wastewater Treatment Plant	736-1617
Los Alamos Community Services District	344-4195
Mission Hills Community Services District	733-4366
Montecito Sanitary District	969-4200
City of Santa Barbara - El Estero Wastewater Treatment Plant	897-1910
City of Santa Maria Wastewater Treatment Plant	925-5022
Santa Ynez Community Services District	688-3008
Solvang Wastewater Treatment Plant	688-6997
Summerland Sanitary District	969-4344
Vandenberg Village Community Services District	733-2475

Employee Training

Best Management Practices

Training of staff is critical to the success of the County's storm water program. Customize your training program to help staff meet their responsibilities.

Tailgate sessions can be held anywhere and modified to address the current job.



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. Every department or facility must implement this BMP; they may add BMPs when appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

A successful storm water pollution control program depends in large part on the appropriate training and education of employees. Training is important because one mistake or misunderstanding has the potential to create a costly pollution episode. Each department or facility is responsible for training their staff dependent on the types of activities and selected BMPs performed.

Practice

1. Create your annual training plan in August at the same time that you review your program and report to PCW. Include in your plan the number of sessions, information to be covered, length of each session and training location (tailgate, classroom, etc.) of training.
2. Make a copy of the BMPs you want to discuss and note the important points next to each BMP as a reminder. You do not have to create a formal training outline, but it can be very helpful. This also is part of your training plan.
3. Incorporate storm water BMP training into your regular employee training, such as regular safety training sessions. Routine training is the best way to get BMPs integrated into your operations.

Goal / Purpose

To train employees in storm water awareness and pollution prevention as prescribed by their job duties.

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- a. Sessions on storm water BMPs for fieldwork is completed before fieldwork is initiated.
4. Present materials in several different ways, use handouts, read a loud. Handouts can be a good way for staff to follow along during the session and it can be a reminder of what they are expected to do during the year. You can also post the information after going over it verbally. Make the training session interactive to keep peoples' attention.
5. Conduct short, multiple training sessions through out the year to keep people thinking about preventing storm water pollution all year.
6. At a minimum, annually review your BMP strategies and discuss with employees the effectiveness of the program. Make sure that employees understand the storm water discharge prohibitions and the BMPs identified for their facility. Each employee should be trained on BMPs for preventing discharge of pollutants into the storm drain system as it relates to their job responsibilities. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase stormwater runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Implement appropriate improvements to reduce potential pollutants. Notify Project Clean Water of these changes and suggestions for new BMPs in your annual report.

7. Keep the training sessions new by using different methods to present the information each year. Rotate using handouts, tailgates, posters and classroom exercises.
8. Periodically check employee's work practices to ensure correct implementation. If corrections need to be made, update the staff with the new information on the proper procedure to follow in the next training session. Inclusion of corrections and new ideas for every day activities keeps the storm water training more relevant.

Associated BMPs

- All the source control (SC) and the treatment control (TC) BMPs

Contractors Requirements

9. Ensure that contractors provide the County with a copy of their storm water awareness training and procedures for protecting the storm water system.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Housekeeping

Best Management Practices

Make sure that outdoor areas are regularly cleaned to prevent trash and other debris from polluting our creeks and ocean.



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

1. Never dispose of wash-water to storm drain, pavement or other storm water conveyances. Use the sanitary sewer to dispose of wash-water. Wash-water includes any liquid with cleaner or residual dirt and grime; examples include mop-water, floor-mat wash-water, window cleaning water, and all rinse water.
2. Clean floor mats, filters and trash containers in a designated area with a connection to the sanitary sewer such as mop sink or floor drain.
3. Rinse patio furniture, picnic tables and benches without cleaning agents, so flows can drain to areas where the water can soak into the soil and leave little residue. Use a bucket and rag to clean tables with cleaners. Always use a rag to remove cleaners, do not hose down area. Avoid getting runoff into storm drains or waterways that lead to creeks or the ocean.
4. Schedule regular cleaning to eliminate particulate and residue buildup of in both interior and exterior areas that collect debris. Keeping interior areas clean prevents the tracking of contaminants outdoors. Provide trash containers, when appropriate, to minimize littering.
5. Keep brooms, dustpans and trash cans readily accessible. For example place

Goal / Purpose

Reduce the discharge of dust, dirt, grease, grime and floating trash into the storm water system from all County facilities

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cleaning equipment near delivery locations and trash bins.

6. Provide designated smoking areas with cigarette butt containers. Clean containers as needed to encourage their use.
7. Promptly clean up any spill of liquid or solid wastes. Do not hose down an area to clean or handle a spill, unless the liquid will be completely contained, cleaned up and disposed of to sewer or offsite as appropriate for the waste type. There should no discharge to storm drains, landscape or to pavement.
8. Store equipment and supplies under cover whenever possible.
9. Cabinets and containers exposed to the weather must be made for exterior use; interior grade cabinets and containers will rust or deteriorate and contribute contaminants to storm water runoff, when exposed to weather,.
10. Schedule regular cleaning of outside storage areas and yards, preferably before the start of the rain season. At least once a year, review the stock-piled equipment and supplies (materials). Often there are unusable materials at the back of the storage area. Usable materials should be stored to indicate possible use and to minimize contact with storm water. Unused or unusable material should be removed as soon as possible. Develop a plan to regularly dispose of unneeded materials.
11. Do not use drains without knowing whether they flow to the sanitary sewer, storm system or self-contained internal sump. Confirm before using drains to ensure proper disposal.

Contractor Requirements

12. Include specific contract language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.
13. Ensure that contractors provide the County with a copy of their storm water awareness training and procedures for protecting the storm water system. These procedures should cover activities from cleaning windows to painting an entire building.

Associated BMPs

- Alternative Safer Products
- Loading & Unloading
- Material & Hazardous Waste Storage
- Spill Control & Cleanup
- Storm Drains & Catch Basins
- Trash & Dumpster Management



Promptly cleanup all spills.

Employee Training

Training may include regular tailgate sessions with staff responsible for maintaining or managing a facility. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase stormwater runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call PCW at 568-3440 for assistance.

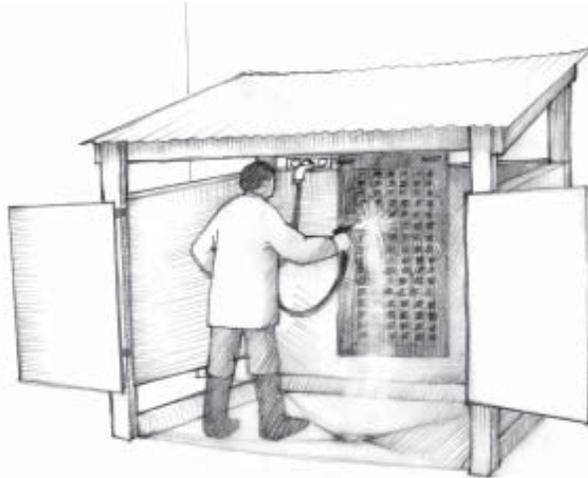
Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Kitchen, Restaurant & Deli Best Management Practices

Setting up a designated area for cleaning floor mats, trash cans and other such equipment will simplify protection of storm drains.

The wash water from cleaning activities must be disposed of to the sanitary sewer.



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis, as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs indicated in that protocol.

This BMP addresses only storm water protection requirements. Any group who stores, uses, handles or disposes of food must follow the appropriate local, state and federal regulations. Contact County Environmental Health Services (EHS) for specific food-facility related questions at 805-681-4900.

Practices

Housekeeping

1. Never dispose of wash-water to storm drain, landscape, pavement or other storm water conveyances. Wash-water should be disposed of to the sanitary sewer. Wash-water includes any liquid with cleaner, residual dirt and grime, food residue, or grease; examples include mop-water, floor-mat wash-water, window cleaning water, and all rinse water.
2. Clean floor mats and trash containers in a designated area with a connection to the sanitary sewer such as mop sink or floor drain.
3. First clean patio furniture, picnic tables and benches, with detergents and a bucket to collect any food residue. If needed, rinse the cleaned surfaces with a bucket and cloth to remove residual. Minimize getting wash water or

Goal / Purpose

Reduce discharge of dust, dirt, oils and greases, and floating materials from restaurants, delis, food stands cafes, or any food establishment in the storm water system.

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debris on the ground. Always avoid drains or waterways that lead to creeks or the ocean. It is important to clean up any food waste before rinsing the surface, since food waste will attach rodents and other pests.

4. If outdoor areas are steam-cleaned, prevent the wash-water from going down the storm drain by blocking the storm drains or creating temporary berms around the area being cleaned. Then mop and/or vacuum up excess water and debris. Excess water should be disposed of to the sanitary sewer (such as mop sink or floor drain). Most cleaners must be kept out of the outdoor environment, cleaners are often toxic to aquatic and other forms of life.
5. Promptly clean up any spill of liquid or solid wastes. Do not hose down an area for a spill, unless the liquid will be completely contained, cleaned up and disposed of to sanitary sewer or offsite (as appropriate for the waste type). There should be no discharge to storm drains, landscape or pavement.
6. Schedule regular cleaning of areas, interior and exterior, that collect debris to eliminate particulate and residue buildup. Keeping interior areas clean prevents the tracking of contaminants outside. Provide trash containers, where appropriate, to minimize littering. Make sure trash containers have lids if exposed to storm water.
7. Review and minimize outdoor stockpiled materials on a regularly (only non-food related equipment and supplies are allowed to be stored outside). Often at the back of the storage area there is old and/or unusable supplies or equipment. Usable and temporarily stored material (e.g., milk crates, wash buckets) should be stored in a way to minimize contact with storm water. Unused material should be disposed of or recycled as soon as possible. Develop a plan to regularly dispose of unneeded equipment.
8. Store equipment and supplies under cover whenever possible. Minimizing contact with storm water minimizes contaminants from getting into storm water system. Food related items shall be stored as required by EHS and the appropriate rules and regulations.
9. Cabinets and containers exposed to the weather must be made for exterior use; interior grade cabinets and containers will rust or deteriorate contributing contaminants to storm water when exposed to weather.

Associated BMPs

- Alternative Safer Products
- Housekeeping
- Loading & Unloading
- Materials & Hazardous Waste Storage
- Spill Control & Cleanup
- Storm Drains and Catch Basins
- Trash & Dumpster Management

10. Keep cleaning equipment, brooms, mops, buckets, etc., near areas that require frequent cleaning.
11. Provide designated smoking areas with cigarette butt containers. Clean as needed to encourage their use.
12. During loading and unloading, promptly place materials in their designated storage locations.
13. Evaluate safer alternative products for any job that usually uses toxic or hazardous products. For instance, investigate alternative floor and window cleaners, and general detergents. When available and cost effective, these products should be used.
14. Do not use drains without knowing whether they flow to the sanitary sewer, storm system or a self-contained internal sump. Confirm before using drains to ensure proper disposal. Make sure that facility schematics are updated when any changes to the plumbing or storm water systems are made.

Grease Traps/Separators/Barrels

15. Regularly check grease traps for proper operation. Quickly repair any problem.
16. Schedule regular cleaning of grease traps to prevent a clog or overflow situation. Keep spill response equipment on hand to contain and clean up an overflow event.
17. Keep grease barrels closed, except when adding or removing grease. Schedule regular pickups for the barrels to ensure that there is always available capacity.
18. Protect grease barrels from contact with storm water.
19. Promptly clean up any spill of grease. A mop and bucket is recommended; do not hose down an area to handle a spill, unless the liquid will be completely contained, cleaned up and disposed of appropriately. There should be no discharge to storm drains, landscape or pavement.
20. Put grease in the grease barrels and other waste liquids down the sanitary sewer. Do not put liquids in trash containers.

Contractors Requirements

21. Contractors who operate food establishments should provide the County with their storm water awareness training and procedures for protecting the storm water system, including the management of wash-water, grease and trash.
22. Include specific contract language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.

For Employee Training

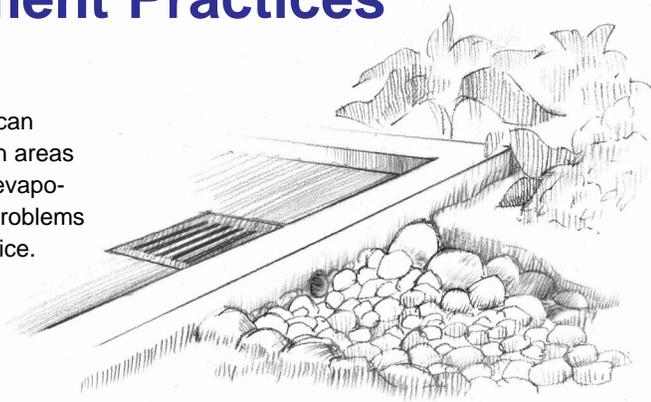
Staff training may include regular tailgate sessions at those facilities that have kitchen facilities, a restaurant or deli. Training sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase storm water runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Landscape & Undeveloped Areas Best Management Practices

Storm water runoff from parking lots can easily be diverted to garden and lawn areas where the water will be infiltrated or evaporated. Make sure potential erosion problems are evaluated before using this practice.



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

1. Each department, that uses or hires a contractor to use pesticides or herbicides, must adopt the County's Integrated Pest Management (IPM) strategy. The County's IPM was created to identify alternatives to herbicide and pesticide usage, which also reduces the potential for storm water contamination. The County's IPM strategy is posted on the County's Internet home page, click on the Green Team link.
www.publicworkssb.org/greenteam
2. Always follow the manufacturer's directions and state regulations when handling or applying chemicals.
3. Make sure that chemical containers are cleaned and disposed of according to state and county regulations. Contact the County Agriculture Commissioner's office for guidance on regulations, appropriate pesticide application certifications and licenses and chemical-specific data.
4. Monitor weather conditions before applying chemicals and only use as directed by the manufacturer or regulating agency. Do not apply chemicals during or shortly before a rain event, as the storm may wash much of the product offsite.

Goal / Purpose

Initial

Minimize the discharge of herbicides, pesticides, fertilizers and sediment from county landscaped or undeveloped areas into the storm water system.

Long term

Implement an Integrated Pest Management (IPM) practices at every applicable site, as defined by the county's IPM strategy.

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Storm drains located within the landscape need to prevent dirt and debris from entering the storm drain system. Perimeter rocks and appropriately sized grate-grids will keep debris out of the waterways.



5. Always have spill response equipment available during the handling and application of chemicals and near the storage area.
6. Promptly clean up any spill of liquid or solid wastes. Do not hose down an area to clean or handle a spill, unless the liquid will be completely contained, cleaned up and disposed of to sanitary sewer or offsite as appropriate for the waste type. Do not discharge any spilled liquid or solid waste to storm drains, landscape or offsite.
7. Properly store pesticides, herbicides and fertilizers as specified in the California Code of Regulations, Title 3.
8. Designate and train supervisors and staff to apply pesticides and herbicides.
9. Design or adjust the facility irrigation system to minimize over-spray and prevent irrigation runoff.
10. Protect storm drains and water conveyances during landscape modification or replanting operations. Select from both source and treatment control Best Management Practices (BMPs). It is important to keep both vegetation and sediment out of the storm water system.
11. Protect storm drains from sediment and vegetation when using disking to control vegetation.
12. Green waste should be recycled onsite or with the local trash hauler. Even though green waste is biodegradable, it can cause significant problems when transported into watercourses.
13. Evaluate the use of mulching mowers, which may be appropriate for some areas. Operators should be trained to evaluate whether to use mulching or not for a specific area so that storm water impacts are minimized.
14. Use mulching mowers at one or more sites.
15. Prevent soil erosion through the use of ground covers, manufactured covers and mulches (which also maintain soil moisture).
16. Use native plants when possible to reduce chemical and water needs.
17. Store landscape equipment under cover whenever possible.

Associated BMPs

- Alternative Safer Products
- Building Maintenance & Repairs
- Material & Hazardous Waste Storage
- Vehicle & Equipment Fueling
- Vehicle & Equipment Maintenance & Repairs
- Vehicle & Equipment Washing & Steam Cleaning

18. Designs for new development or redevelopment should consider retention of storm water onsite to reduce flows and removing contaminants to protect waterways and the ocean. The Post Development requirements are managed by the Planning and Development Department.

Fountains and Pools

19. Overflow drains must discharge to sanitary sewer.
20. Make sure that backwash systems are connected to the sanitary sewer.

Web sites for further information on pesticides and herbicides.

21. Community Environmental Council (CEC) is a co-administrator of the Regional IPM Coalition.
www.communityenvironmentalcouncil.org
22. California Department of Pesticide Regulations (CDPR) is the other Regional IPM Coalition co-administrator.
www.cdpr.ca.gov

Contractors Requirements

23. Contractors must follow the county's IPM strategy for any county building or property where they provide ongoing service. The contractor must submit a copy of their IMP form to the county. This form can be found on the Greenteam website the same place as the IMP strategy. In addition the contractor will provide a copy of their spill response procedures and training records.
24. Contractors must provide the County with a copy of their employee's applicator certification or other appropriate license or certification. Check with the County Agricultural Commissioner if uncertain what certifications are required for a specific chemical treatment.
25. Ensure that contractors provide the county with a copy of their storm water awareness training and procedures for protecting the storm water system. These procedures should cover activities from cleaning to painting.

26. Contractors must recycle green waste, when feasible.
27. Contracts will contain specific language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Existing contracts will be amended to include this language, if its not already included.

Employee Training

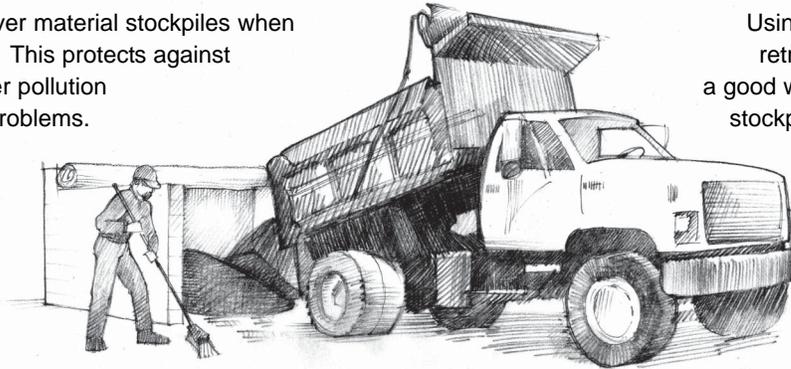
Staff training may include regular tailgate sessions at those facilities responsible for maintaining or managing landscaping and or undeveloped areas. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase storm water runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Loading & Unloading Best Management Practices

Always cover material stockpiles when not in use. This protects against storm water pollution and dust problems.



Using a bin with a retractable top is a good way to contain stockpiled material.

Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

1. Designate loading areas that are protected from storm water, when possible. Permanent or temporary covers, berms, dikes and sloped pads can be used to accomplish this goal.
 - a. During the transfer of liquid substances protect storm drains. Protection includes the placement of portable berms or dikes around the loading area and/or mats to cover storm drains.
2. Promptly fix any leaks in loading equipment.
3. Schedule material transfers when no rain is predicted or load and unload indoors.
4. Be careful to not puncture, rip or tear containers with forklifts or hand trucks. Always use equipment appropriate for the job. Promptly place materials in their designated storage locations.
5. Check loading areas for pollutants such as fuel, oil and grease that could come into contact with storm water runoff. Promptly clean up pollutants and appropriately dispose of the waste.

Goal / Purpose

Reduce potential contaminants from being discharged into the storm water system during loading and unloading activities.

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- a. Designate a person, such as the receiving clerk, to check for spills or debris during (or shortly after) a delivery or removal.
6. Return equipment and material to their proper storage place after use.

Loading docks

7. Remove debris from drains and clean dock area regularly. Docks should be cleaned often to prevent accumulation of grime and debris. First try dry cleaning the dock area, only use water if necessary. Wash-water must be contained and disposed of to the sanitary sewer. Always check with the local sanitation district prior to discharging any liquid to the sanitary sewer line.
8. Catch basins or drains should be protected from accidental spills; keep spill response equipment readily available. Consider installing valved inlet inserts, if safe and practical.
9. Do not conduct maintenance or repairs to transport equipment at the loading docks.
10. Conduct preventative maintenance on dock hydraulics, pipes, valves, pumps and other equipment to ensure proper operation and identify potential leaks.

Contractor Requirements

11. Ensure that contractors provide the County with a copy of their storm water awareness training and procedures for protecting the storm water system. These procedures should cover activities from cleaning windows to painting an entire building.
12. Include specific contract language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.

Employee Training

Staff training may include regular tailgate sessions at those facilities, which load and unload significant amounts of chemicals or raw materials. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing

Associated BMPs

- Housekeeping
- Spill Control & Cleanup
- Storm Drains & Catch Basins

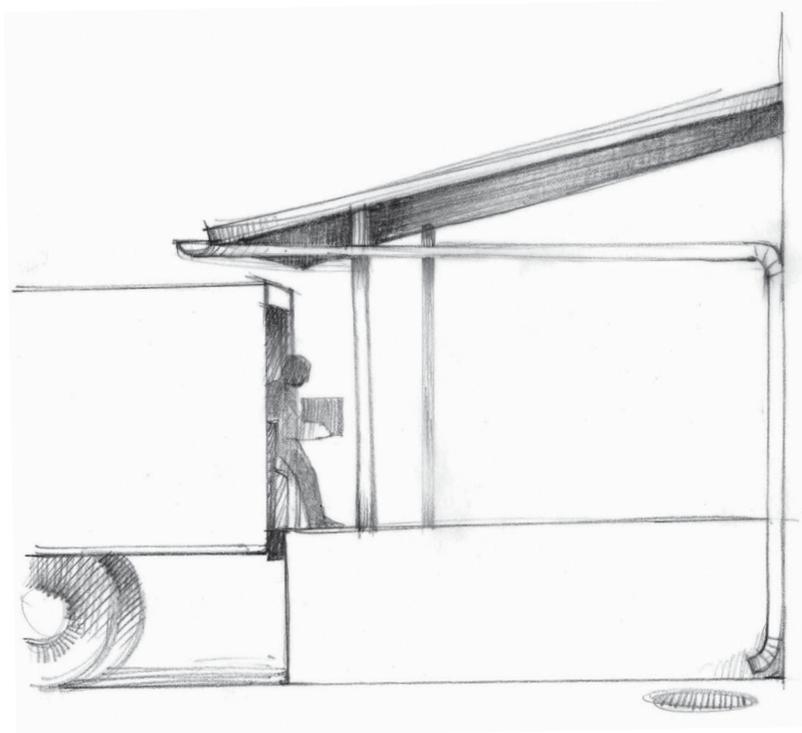
discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase storm water runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Covered docks are the best way to protect products and storm water runoff.

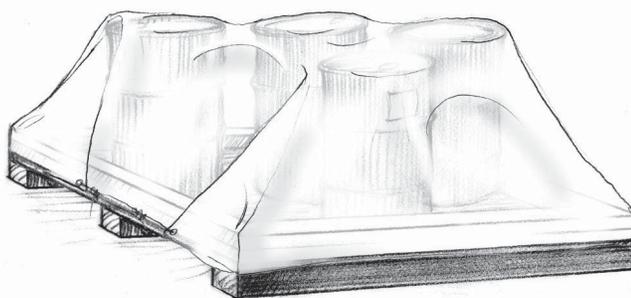
Regularly check storm drains near the dock to keep debris out of creeks and the ocean.



Material & Hazardous Waste Storage Best Management Practices

Non-hazardous materials stored outdoors should be placed on a pallet and covered.

Hazardous chemicals should be stored on a secondary containment unit and covered with a waterproof tarp.



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

This BMP addresses only storm water protection requirements. Any group who stores, uses, handles or disposes of hazardous substances must follow the appropriate local, state and federal regulations.

Practices

General

1. Always store materials and wastes indoors or under cover whenever possible. Covers and up-gradient perimeter berms that prevent contact with storm water will minimize contaminants that leave the site. These berms also make clean up of any spills or leaks easier.
2. Minimize storage needs by purchasing smaller amounts of material more frequently and as needed for specific jobs. Stockpiling materials, which often must be stored outside and exposed to storm water, increases the possibility of pollutants flowing offsite.
3. Store chemicals away from doors and out of traffic pathways. Simple storage sheds with a roof, liquid-tight floor and perimeter berm will usually prevent storm water from becoming contaminated.

Goal / Purpose

Initial

Prevent discharge of oils, greases, metals, sediment and other contaminants from material and waste storage areas into the storm water system.

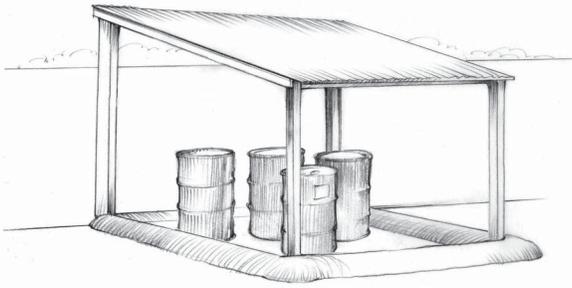
Long term

Provide designated covered and or bermed storage for all types of materials, including gravel, sand, etc., to minimize contact with storm water.

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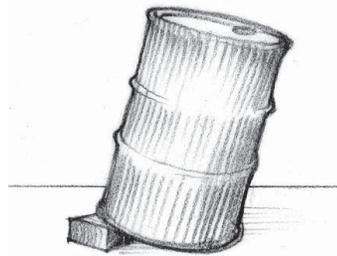


Simple storage sheds with a roof, liquid-tight floor and perimeter berm will usually prevent storm water from becoming contaminated.

4. Use drip pans (or other containment device) under taps, nozzles, and spouts to catch drips.
5. Transfer the contents of a leaking container promptly to another container; make sure the new container is appropriately labeled. OSHA mandates labeling for all containers.
6. Always store used parts (i.e., vehicle, electronic, mechanical) under cover to prevent the leaching of any materials into storm water runoff.
7. Stockpiles of gravel, asphalt, sand, and other raw materials should be stored on a paved surface. The stockpiles should be situated to prevent storm water flowing through the stockpile.
8. Cover stockpiles and put in up-gradient perimeter berms to deflect the storm water. Install down-gradient perimeter berms to prevent sediment and other contaminants from leaving the stockpile area.
9. Install cement or wood stalls with covers to create permanent facilities for raw materials (such as gravel, sand, asphalt).
10. Install perimeter controls around sediment brought back to a county site to dry out to keep particulates on-site.
11. Minimize storage of scrap metal by disposing of it periodically. Cover the stockpile during the rain season to reduce the release of contaminants.
12. Cabinets and containers exposed to the weather must be made for exterior use; interior grade cabinets and containers will rust or deteriorate contributing contaminants to storm water runoff.
13. Conduct preventative maintenance on secondary containment structures, pipes, valves, pumps and other equipment to ensure proper operation and to identify potential leaks.
14. Liquid retained in bermed areas or in secondary containment units must be discharged to an oil/water separator, filtered or properly disposed of offsite. The actual disposal method will depend on the composition and hazardous nature of the liquid.
15. Promptly clean up any spill of liquid or solid wastes. Do not hose down an area to handle a spill, unless the liquid will be completely contained, cleaned

Associated BMPs

- Alternative Safer Products
- Housekeeping
- Loading & Unloading
- Spill Control & Cleanup
- Vehicle & Equipment Fueling



Tipping the drum minimizes liquid from collecting on top of drums.

up and disposed of to sanitary sewer or offsite as appropriate for the waste type. There should be no discharge to storm drains or pavement.

16. Return equipment and material to their proper storage place after use.
17. Schedule regular cleaning of outside storage areas and yards, preferably before the start of the rain season. At least once a year, review the stock-piled equipment and supplies (materials). Often there are unusable materials at the back of the storage area. Usable materials should be stored to indicate possible use and to minimize contact with storm water. Unused or unusable material should be removed as soon as possible. Develop a plan to regularly dispose of unneeded materials.
18. Always have spill response equipment available near the storage of liquid or hazardous substances.
19. Use containers that meet the National Fire Prevention Association (NFPA) or Department of Transportation (DOT) standards for holding hazardous substances.
20. Follow the Uniform Fire Code and NFPA standard when storing chemicals that are flammable, ignitable or reactive.
21. Handling of infectious materials and wastes shall comply with the appropriate federal, state and local rules and regulations.

Hazardous Materials and Wastes

22. Storage of hazardous materials and wastes must comply with the appropriate federal, state and local rules and regulations. This includes, but is not limited to the following items:
 - a. Hazardous wastes must have secondary containment with capacities as specified by regulation
 - b. Containers must be kept closed except when substances are being added or removed.
 - c. Conduct inspections of the storage areas, secondary containment and containers for closed lids, leaks, correctly completed labels and chemical compatibility.

- d. Maintain a Hazardous Materials Business Plan or Hazardous Materials Management Plan if the facility stores more than 55-gallons, 500-pounds or 200-cubic feet of hazardous substances.
- e. Maintain a Spill Prevention, Control and Countermeasures Plan for facilities that store petroleum compounds at or above the following capacity thresholds: A) a single aboveground tank of 660-gallons (this requirement is scheduled to be deleted) or B) multiple containers holding 1320-gallons (containers 55-gallons or larger).
- f. Dispose of or recycle hazardous waste within the timelines set by the regulations based on a site's generator status.
- g. Hazardous substances must be stored to prevent unauthorized people from accessing the area.
- h. Transport of hazardous wastes between County sites must be handled and documented as required by regulation.
- i. Completely label all containers holding hazardous materials and wastes.
- j. Do not mix different types of hazardous wastes together; it usually increases disposal costs.

Contractor Requirements

- 23. Include specific contract language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.

Employee Training

Staff training may include regular tailgate sessions at those facilities that store significant amounts of materials or any hazardous materials or wastes. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase storm water runoff protection. If the above suggested BMPs require some modification to work for you or do not

cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Metal, Wood, Paint & Print Shops

Best Management Practices

Protect storm water by using transparent plastic sheeting to create an enclosure (sides and ground) around the area to be spray-painted. Follow appropriate worker health and safety practices.



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

1. Conduct fabrication, repair and coating activities indoors or under cover whenever possible.
2. Conduct outdoor activities in a manner to minimize the spread of contaminants.
 - a. Use storm drain protection, such as dikes or storm drain mats when appropriate
 - b. Use drop cloths to contain products and grit.
 - c. Sweep or vacuum up any debris at the end of the project or at the end of the day, whichever comes first.
3. Repair equipment leaks promptly and clean up any spill.
4. Use and store inks, paint and solvents away from traffic areas.
5. Conduct sanding, painting and coating in covered areas in accordance with OSHA standards and permit requirements.
 - a. Clean up particulate matter regularly and dispose of properly.

Goal / Purpose

Reduce the discharge of potential pollutants such as: paints, inks, metals, solvents, cleaners, adhesives, oils and greases generated during fabrication or repair work into the storm water system.

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- b. Use efficient spray equipment for coatings, such as high volume/low pressure, air-atomizer or electrostatic.
 - c. Minimize and capture overspray.
 - d. Dispose of or recycle paints, thinners, solvents and coatings as required by regulation. Empty paint containers also must be disposed of or recycled as required by regulation. Empty, dry paint containers, 5-gallons and smaller, may be put in the general trash. Others must be triple rinsed, recycled, or returned to the vender. Rinse water from containers must be disposed of as a hazardous waste, when required by regulation. Do not dispose of wastewater to ground or landscape areas.
6. Use drip pans to collect and transfer liquids or transfer parts that may leak. Carefully empty collection pans daily; use funnels to transfer liquids. Clean up spills or drips immediately.
 7. Contain metal shavings and filings for recycling with scrap metal, when possible. Otherwise follow proper disposal method.

Contractors Requirements

8. Ensure that contractors provide the County with a copy of their storm water awareness training and procedures for protecting the storm water system. These procedures should cover activities from cleaning windows to painting an entire building.

Include specific contract language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.

Employee Training

Staff training may include regular tailgate sessions at those facilities responsible for maintaining or managing a metal, wood, paint or print shop. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions

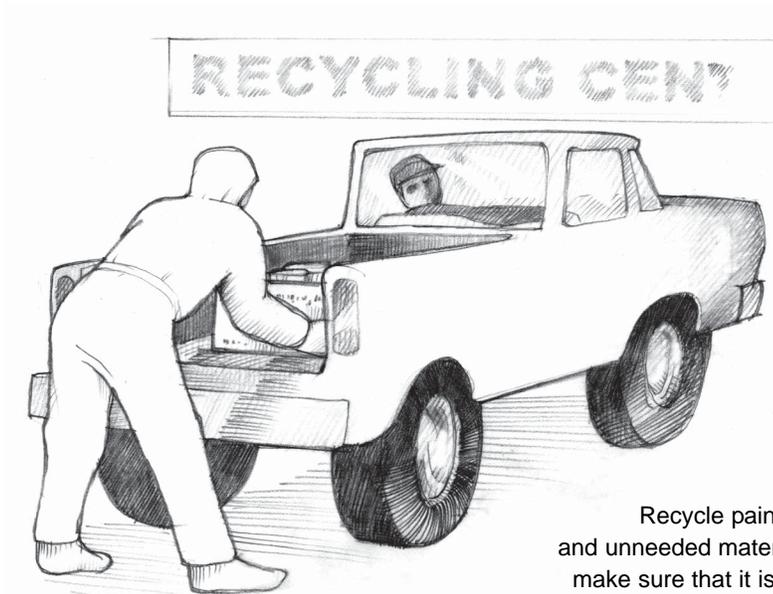
Associated BMPs

- Alternative Safer Products
- Building Maintenance & Repairs
- Housekeeping
- Loading & Unloading
- Material and Hazardous Waste Storage
- Vehicle & Equipment Maintenance & Repairs

will likely reduce labor and increase storm water runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

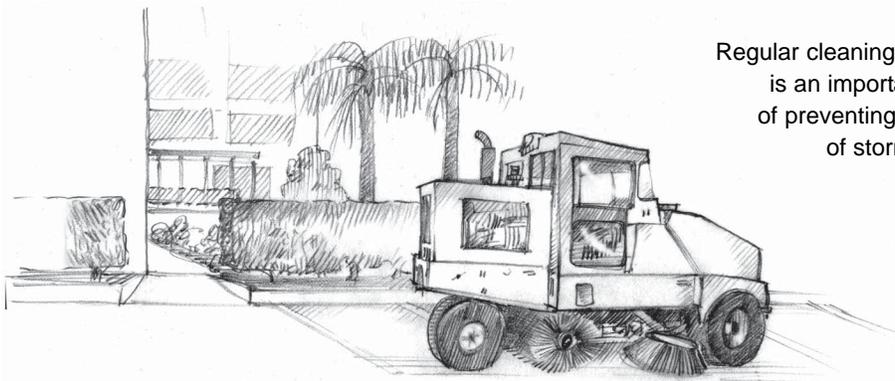
For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.



Recycle paints, inks, solvents, coatings and unneeded materials. If it can't be recycled make sure that it is disposed of appropriately. Do not mix together different waste streams.

Parking Lots & Garages

Best Management Practices



Regular cleaning of parking lots is an important component of preventing contamination of storm water runoff.

Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

1. Regularly clean parking lots to remove dirt, accumulations of grease and oil, general debris and trash. Frequency of cleaning will depend on the intensity of use.
 - a. Lots are cleaned at least once a year.
 - b. Lots are cleaned twice a year, with one cleaning just before October 1, the start of the rain season.
 - c. Lots are cleaned as needed.
2. If a wet cleaning method is used, ensure that the storm drains or offsite migration points (such as driveways and swales) are protected. Collect all waste, liquid and solid, for appropriate disposal either to the sanitary sewer, with approval by the local sanitation district, or at an appropriate disposal facility.
3. Keep spill response equipment for hydrocarbon clean up onsite. Promptly clean up any spill of liquid or solid wastes. Do not hose down an area to clean or handle a spill, unless the liquid will be completely contained, cleaned

Goal / Purpose

Prevent the discharge of pollutants into storm water runoff from vehicle parking areas by removing contaminants before it rains or filtering the runoff before it enters the storm water system.

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up and disposed of to a sanitary sewer or offsite as appropriate for the waste type. There should no discharge to storm drains or surface flow off of the property of contaminated runoff.

4. Schedule maintenance, such as seal coating and repair work, at least five days before predicted rain. Check with County Flood Control (805-568-3440) to confirm weather conditions.
5. Protect storm drains, gutters, or offsite migration points from any liquid or solid waste during maintenance or repair work.
6. Apply only as much sealer as required to completely cover the paved area. Remove any excess and store or dispose of appropriately.
7. If, in spite of your best efforts, rain occurs during or shortly after the seal coating or lot repair work, protect storm drains and offsite migration points with sediment or petroleum selective filters to minimize the migration of contaminants into the storm system.
8. Evaluate the use of storm drain filters to remove petroleum compounds, debris and or sediment. If the parking lot meets one of the following criteria, it could be a candidate for storm drain filters:
 - a. located near environmentally sensitive habitats, such as creek, wetlands and estuaries and lagoons;
 - b. exceeds 5,000 SF in discharge area;
 - c. exceeds 100 vehicles per 1000 SF of area;
 - d. stores 10 or more, 10-ton or larger diesel trucks or other equipment (buses, grader, etc.).
9. Install storm drain filters at one or more drains to remove petroleum, debris or sediment from the storm water system.

Contractor Requirements

10. Ensure that contractors, who conduct cleaning, maintenance and construction work, provide the County with a copy of their storm water awareness training and procedures for protecting the storm water system. These

Associated BMPs

- Housekeeping
- Vehicle or Equipment Washing or Steam Cleaning
- Storm Drains & Catch Basins
- Spill Prevention & Cleanup

procedures should cover activities from cleaning windows to painting an entire building.

11. Include specific contract language to inform contractors that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.

Employee Training

Staff training may include regular tailgate sessions at those facilities responsible for maintaining or managing a garage. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase storm water runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Spill Prevention & Cleanup Best Management Practices

Many spills can be cleaned by using absorbent material, which can then be scooped up and disposed of properly.



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

1. **Always know what the spilled or released material is before trying to clean it up.**
2. Refer to your facility-specific spill response plan or develop a reasonable procedure for identifying, reporting, and cleaning up liquids and solids. Spill response information can be found in your Hazardous Materials Business Plan, Hazardous Materials Management Plan, and/or Spill Prevention Countermeasure and Control Plan. Designate employees, who are trained, to respond for cleanup duty.
3. Always have spill response equipment available near loading and storage areas for prompt cleanup. Different chemicals can require different cleanup methods; keep the appropriate equipment for the chemicals transferred, stored and used onsite.
4. Promptly clean up any spill of liquid or solid waste. Do not hose down an area to clean or handle a spill, unless the liquid will be completely contained, cleaned up and disposed of to sanitary sewer or offsite (whichever is appro-

Goal / Purpose

Prevent discharge of contaminants and hazardous compounds into the storm water system.

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ropriate for the waste type). Do not discharge any liquid or solid to storm drains, landscape or to pavement.

5. Use a shop rag for cleaning up drips and small spills; do not saturate the rag. Do not use paper towels for hazardous wastes. Dirty rags used to clean up hazardous wastes must be handled in compliance with the hazardous waste regulations and the Department of Toxic Substance Control guidance.
6. Use a dedicated shop vacuum, wet mop or absorbent materials for larger spills; dispose of waste properly.
7. Do not use drains without knowing whether they connect to the sanitary sewer, storm system or self-contained internal sump. Confirm before using drains to ensure proper disposal.
8. Prevention is the best spill control. Review the associated BMP Fact Sheets for spill prevention options applicable to your facility (see sidebar).
9. Spill Response Kits (Kits) are available for handling spills and leaks in the field. These Kits are sized according to the equipment in use - from large construction equipment (such as excavators) to small hand held tools (such as chain saws).

Contractors Requirements

10. Contracts must contain specific language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Existing contracts will be amended to include this language, if not already included.

Employee Training

Staff training may include regular tailgate sessions at those facilities responsible for handling a spill at their facility. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase storm water runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Associated BMPs

- Housekeeping
- Loading and Unloading
- Material & Hazardous Waste Storage
- Storm Drains & Catch Basins

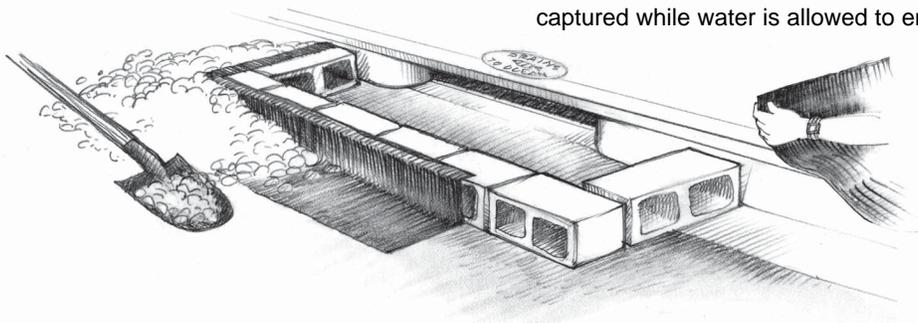
Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Storm Drains & Catch Basins

Best Management Practices

One method to temporarily protect storm drains is with cement blocks, filter cloth and gravel. Debris is captured while water is allowed to enter the drain.



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

1. Inspect storm water drains, grates, inlets, ditches, swales and catch basins at least twice a year. The best times are September, a month before the start of the rain season, and February before the end of the rain season. Keep a log of areas and structures inspected.
2. Clean storm grates, inlets, drains, ditches, swales and catch basins to remove the accumulation of debris and sediment. Keep a log of the material removed from each structure.
 - a. If they are to be cleaned only once during the year, clean these structures prior to the start of the rain season in September.
 - b. Clean structures two or more times a year to keep debris from accumulating.
3. Evaluate the use of storm drains filters for petroleum, debris and or sediment removal at your facility. If observations indicate that petroleum, debris (trash, leaves, etc.) and/or sediment are entering the drains in significant quantities, and source control BMPs have been implemented to the maxi-

Goal / Purpose

Initial

Maintain storm drains and catch basins to reduce the concentration of potential pollutants flushed into the storm water system.

Long Term

Implement a regular cleaning schedule for storm drains, catch basin and other storm water conveyances. Install petroleum, debris and sediment filters where appropriate to reduce pollutant concentrations.

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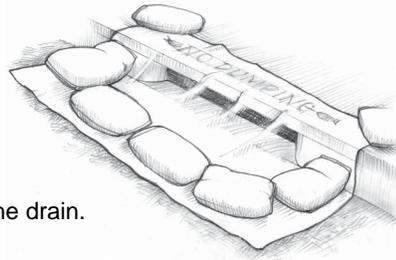
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Here is another type of temporary storm drain protection which prevents any liquid from entering the drain.

Sandbags and plastic sheeting are used to seal the drain.



to the maximum extent possible, these types of filters may be appropriate to reduce contaminants from leaving the site. Here is another type of temporary storm drain protection, which prevents any liquid from entering the drain. Sandbags and plastic sheeting are used to seal the drain.

You may contact Project Clean Water staff for information on products and vendors. See web address in sidebar on first page.

4. Install storm drain filters, in one or more drains, to remove petroleum compounds, debris and/or sediment from runoff. Prepare a written Operation & Maintenance Plan for ongoing maintenance to preserve filter effectiveness.
5. For drains that serve unstable areas, protect the storm drain by using sediment erosion control techniques such as those identified in the Landscaping and Undeveloped Areas BMP Fact Sheet or other measures appropriate for the site to protect the drain system. Contact Project Clean Water Staff for additional information on erosion control measures.
6. For drains that serve unstable areas where erosion cannot be controlled by other methods, protect the storm drain by using filter fences, sediment traps, diversion structures, etc. to protect the drain system. Contact Project Clean Water Staff for additional information on storm water system protection.
7. Make sure that employees know that storm drains, catch basins and culverts are part of the storm water collection system; not part of the sanitary sewer system. Contact Project Clean Water if you want to mark storm drains with “No dumping, flows to ocean”.
8. Authorized non-storm water discharges (for example: irrigation water, HVAC condensate, and sprinkler water) should be directed away from potential pollutant sources such as loading areas or accumulations of oil and grease in parking lots. This will minimize pollutants reaching the storm water system. Contact Project Clean Water staff for a list of authorized non-storm water discharges.
9. Promptly repair any damaged or deteriorating structure or any other problems that may compromise the integrity of the storm water drainage system. Keep a log of storm water system maintenance.

Associated BMPs

- All of Santa Barbara County's source control (SC) BMPs

10. Update facility schematics with any change to the plumbing (to prevent cross connections) or storm water drain system. Only storm water is allowed into the storm water system.

Contractors Requirements

11. Ensure that contractors provide the County with a copy of their storm water awareness training and procedures for protecting the storm water system. These procedures should cover activities from cleaning windows to painting an entire building.
12. Include specific contract language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.

Employee Training

Staff training may include regular tailgate sessions for those responsible for maintaining or managing storm drains and catch basins. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase storm water runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Horses

Best Management Practices



Keep animal corrals away from creeks and gullies. Creating a berm or swale just outside the corral will give liquid time to infiltrate and not pollute storm water runoff.

Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

Site development

1. Stables, corrals, paddocks, animal enclosures, wash areas, etc. should be placed at least 50 feet away from waterways (i.e., creeks, arroyos). Mandatory land use requirements vary by location; check with County Planning & Development for site-specific conditions.
2. Direct runoff from washing and grooming areas into the sanitary sewer, where feasible. Do not let wash-water enter storm water conveyances.
3. Create a buffer zone of grass or plants between structures and creeks or swales; it will help with the infiltration of rainwater by slowing runoff and also preventing erosion. Shallow swales or small berms of straw can be used to control run-off.
4. Consider installing gutters on barns and other buildings to divert storm water away from high use areas. The greatest concentration of pollutants is usually found in high use areas.

Goal / Purpose

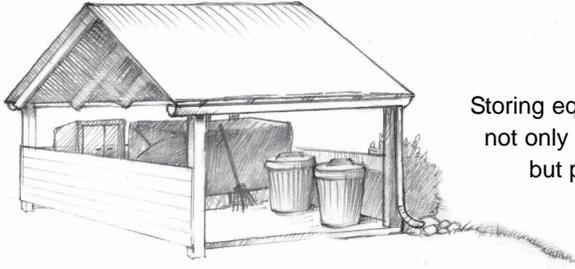
Eliminate discharge of manure and sediment into the storm water system by employing buffer zones and consistent management of manure.

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Storing equipment and supplies under cover not only increases longevity for equipment, but protects storm water runoff as well.

5. Store equipment and supplies under cover whenever possible. Minimizing contact with storm water minimizes contaminants from getting into run-off.
6. Minimize chemical usage by trying alternatives such as biological and mechanical controls. Always follow the manufacturer's direction when using chemicals, using as little as possible to complete the job.

Grazing

7. Fence off creeks and water conveyances to prevent the horses from trampling the creek bed and vegetation; these act as natural filters for the creek.
8. Rotate animals, when possible, to keep the grass at least 3 inches high. This is the minimum length that still allows the grass to provide filtering qualities and maintain good soil conditions for turf growth.

Manure Management

9. Clean stables and paddocks as often as possible, preferably daily, to remove manure and soiled bedding.
10. Clean up manure deposited at the wash area or other wet areas immediately.

There are several ways to handle the manure after consolidation; two of these options are discussed below. It is important to manage the waste to control insects and protect storm water runoff from contamination.

Compost

11. A guide to composting horse manure can be found at Project Clean Water's web site at www.countyofsb.org/project_cleanwater.
12. To contact others who would like to use your manure or have manure to donate go to the Green Gardeners web page at www.Greengardener.org. They will have a bulletin board where you can post your name and find names of those who want manure for their gardens.
13. Parasitic wasps are an alternative biologic control that can help reduce fly populations.

Associated BMPs

- Housekeeping
- Landscape & Undeveloped Areas
- Materials & Hazardous Waste Storage
- Spill Prevention & Cleanup
- Storm Drains & Catch Basins
- Trash & Dumpster Management

Offsite Disposal

14. Contact the local haulers to locate a company that offers disposal.
15. Make sure manure is kept in a watertight container prior to pickup.

Contractors Requirements

16. Ensure that contractors provide the County with a copy of their storm water awareness training and procedures for protecting the storm water system. These procedures should cover activities from cleaning to corral placement.
17. Include specific contract language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.

Employee Training

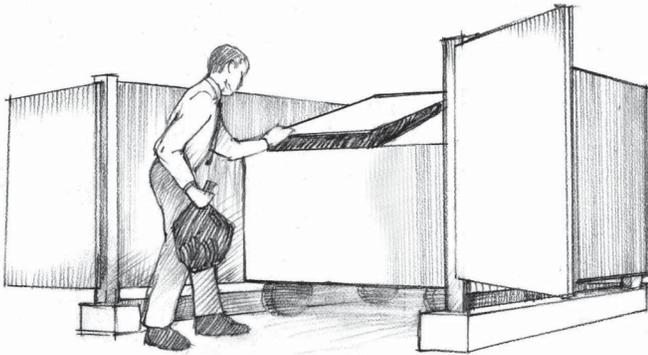
Staff training may include regular training sessions at those facilities responsible for maintaining or managing horses. Training sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase storm water runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Trash & Dumpster Management

Best Management Practices



Keep lids closed, except when dumping or removing trash. This practice keeps storm water from leaching contaminants out of the trash and container and into storm water runoff. Also keep the trash enclosure and adjacent area clean of debris.

Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

1. Keep dumpsters, trashcans and recycling bins covered, except when filling or emptying. Schedule pickup frequency to keep trash from holding the cover open. Open lids allow contact with storm water, which dissolves and transports contaminants into the storm water system. Open lids also invite pests to spread trash around.
2. Do not put liquids or greases in the trash containers. They should go down the sanitary sewer or be discarded in a grease barrel. Liquids may be accepted by the local sanitary sewer district, check prior to discharging any liquid into the sewer line.
3. If using a compactor ensure that there is no liquid leaking out onto the pavement where it will come into contact with storm water.
4. Check that the compactor, dumpster or trashcan are in good condition, with no holes or accumulation of grime. Trash containers should be leak-free. When necessary, call the sanitation company to replace or clean the containers.
5. Regularly inspect the trash enclosure and general area for problems such as trash not in the container and accumulation of grease or food on the ground.

Goal / Purpose

Minimize or prevent the discharge of floating materials and pollutants into storm water runoff from trash and garbage collection containers. Reducing trash disposal through reuse and recycling of as many waste streams as possible, such as paper, cardboard, aluminum cans, plastics, wood and scrap metal.

Santa Barbara County

[www.countyofsb.org/
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Clean the trash enclosure as needed to remove any accumulations of grim and/or general trash.

6. Clean trash cans in a designated area with a connection to the sanitary sewer such as mop sink or floor drain. Do not use a drain without knowing whether it flows to the sanitation sewer, storm drain or self-contained internal sump. Confirm before using drains to ensure proper disposal. Never discharge wash-water to storm drains or offsite.
7. Designate an area for trash collection away from storm drains. This allows problems at the trash container to be corrected before reaching the storm drain or flow offsite.
8. Consider using a locking dumpster to prevent illegal dumping.
9. Consider requiring a trash management deposit when leasing out facilities. This will help ensure that trash is placed in the trash containers, not left on the ground or just thrown in the enclosure.
 - a. Implement a trash management deposit system for rental facilities.
10. Recycle as many waste streams as possible. Contact your trash hauler, check the Green Team's web page at www.publicworkssb.org/greenteam/ (also on the County's intranet web page) and County Public Works, Solid Waste Division for more information on recycling.

Field Work

11. It is important to ensure that the work area is cleaned up and all trash disposed of before leaving the work site.

Contractor Requirements

12. Ensure that contractors provide the County with a copy of their storm water awareness training and procedures for protecting the storm water system. These procedures should cover activities from cleaning windows to painting an entire building.
13. Include specific contract language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as

Associated BMPs

- Housekeeping
- Spill Prevention & Cleanup
- Storm Drains & Catch Basins

required by the Clean Water Act. Amend existing contracts to include this language, if not already included.

Employee Training

Staff training may include regular tailgate sessions for those responsible for trash management. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase storm water runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Vehicle & Equipment Fueling

Best Management Practices

Regularly check to ensure that the spill kit (e.g., absorbent, cleanup container, and shovel) is available for immediate use.



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

1. Minimize mobile fueling at County sites. Take the vehicle or equipment to a permanent fueling station, whenever possible.
2. Adopt written procedures for fueling operators, both mobile and permanent, describing how they will protect the storm water system. Details on contractor requirements are located at the end of this BMP.
3. Discourage topping-off of fuel tanks to reduce accidental spillage. Post "no topping-off" signs at the fuel islands. Encourage the use of 'hold open latches' on fuel nozzles.
4. Clean fuel dispensers with a damp rag and pavement with a damp mop or absorbents. The area may be steam cleaned or hosed down, but the liquid must be contained and cleaned up for offsite disposal.
5. Dispose of wash-water from cleaning windshields to the sanitary system.
6. Keep spill response equipment, including absorbent materials and disposal container, for accidental spills at the fueling station or on the mobile fueling truck.

Goal / Purpose

Initial

Minimize and contain releases from vehicle and equipment fueling, thereby reducing the discharge of pollutants into storm water runoff.

Long term

Minimize overall number of county fueling locations. When economically feasible, cover fueling stations and grade or berm the pad to prevent run-on and contain runoff.

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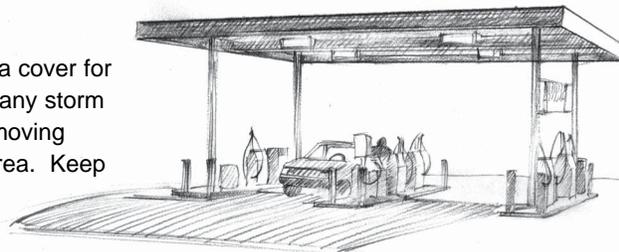


7. Promptly clean up any spill of liquid or solid wastes. Do not hose down an area to clean or handle a spill, unless the liquid will be completely contained, cleaned up and disposed of appropriately for the waste type. Do not discharge any liquid to storm drains or offsite.
8. Regularly inspect oil/water separator and sumps; conduct maintenance as indicated by these inspections. Comply with the local sanitation district's discharge standards.
9. Comply with the appropriate local, state, and federal requirements for underground storage tanks (USTs) and aboveground storage tanks (ASTs). This includes, but is not limited to, the following items:
 - a. Regularly inspect the tanks and dispensing system as required by the Air Pollution Control District, the Water Resources Quality Control Board and the Santa Barbara County Fire Department (Certified Unified Program Agency [CUPA]), who have oversight and enforcement for various programs concerning tanks;
 - b. Maintain certification of the leak detection system.
 - c. Keep your Spill Prevention, Control and Countermeasures (SPCC) Plan up to date. Plans are required for sites that store petroleum products at or above the following thresholds: a single aboveground storage tank holding 660-gallons or multiple containers holding a total of 1320-gallons and underground storage tanks holding a total of 40,000-gallons.
10. Consider installing a canopy or roof for aboveground storage tanks, especially when the secondary containment units are open and can catch rainwater. If the rainwater in the secondary containment unit is contaminated, for example has a hydrocarbon sheen, it must either be filtered or disposed of offsite. Do not discharge any liquid to storm drains, landscape or pavement.

Associated BMPs

- Housekeeping
- Loading & Unloading
- Materials & Hazardous Waste Storage
- Spill Prevention & Cleanup
- Storm Drains & Catch Basins

The best fuel island design has a cover for all the dispensers and prevents any storm water from running over and removing contaminants from the fueling area. Keep spill kit at fuel island, if possible.



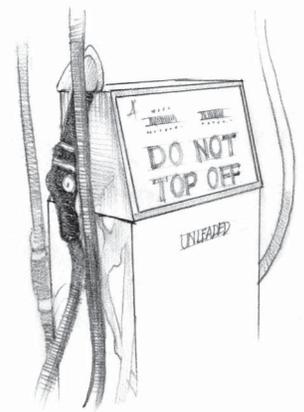
11. When considering a fueling site remodel or new construction, evaluate the feasibility of using offsite retail fueling stations.
12. Design the fueling area to prevent run-on of storm water and control runoff of leaks and spills.
 - a. Cover fueling area.
 - b. Install a perimeter or down-gradient drain to collect spills and leaks, or slope pavement to a central drain to collect spills and leaks. The drain should be connected to a simple sump (i.e., no other connection) or an oil/water separator.
 - c. Pave fueling area with concrete instead of asphalt.
 - d. If pavement is asphalt, apply a coating to protect the asphalt from the spilled fuels.

Contractors Requirements

12. Ensure that contractors provide the County with a copy of their storm water awareness training and procedures for protecting the storm water system. These procedures should cover activities from cleaning windows to painting an entire building.
12. Include specific contract language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.

Employee Training

Staff training may include regular tailgate sessions at those facilities responsible for maintaining or managing a fueling station or operating a mobile fueling truck. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase storm water runoff protection. If the above suggested BMPs require some modification to work for you

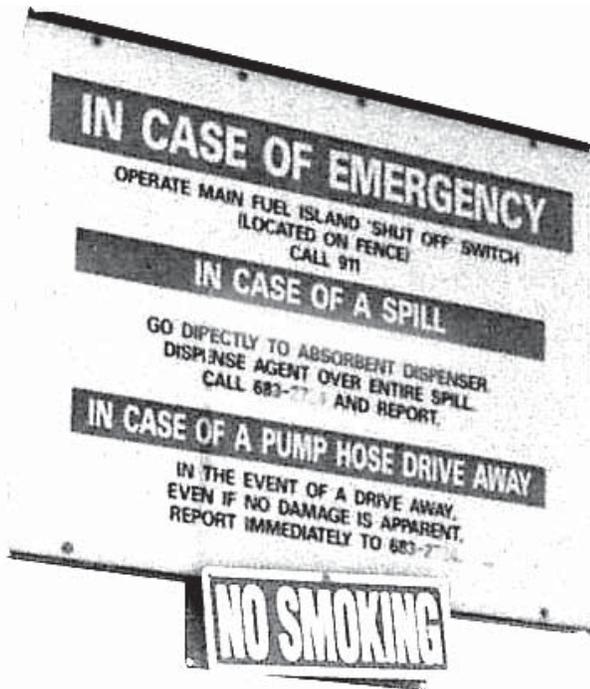


Post 'Do not top off tank' signs at fuel islands to prevent spills and the inevitable drips.

or do not cover some aspect of your operations or facility, call PCW at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

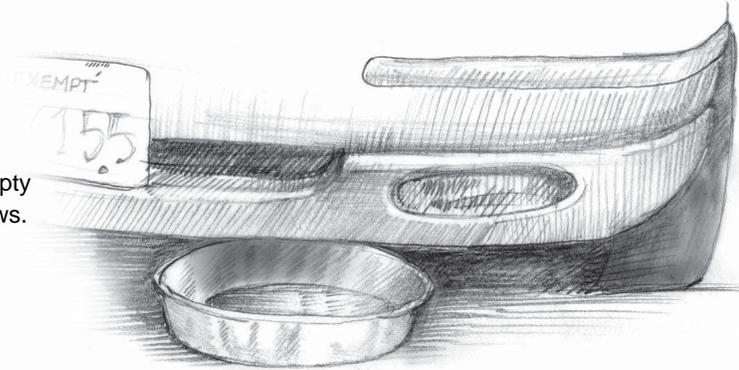
For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.



Make sure that there is a sign describing how employees should handle a spill.

Vehicle & Equipment Maintenance & Repairs Best Management Practices

Use drip pans under leaking vehicles to contain drips and prevent contamination of ground and storm water. Check pans regularly and empty as needed to prevent overflows.



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

1. Conduct maintenance and repair operations indoors or under cover, whenever possible.
2. Periodically throughout the day, clean up your work area to prevent the tracking of pollutants around the work site and outside.
3. Use shop rags and damp mop for general cleanup; never hose down a work area. The mop water must be emptied into a drain connected to the oil/water separator.
4. Use drip pans to collect and transfer liquids or transport parts.
5. Every day carefully empty collection pans. Use funnels to transfer liquids when appropriate. Clean up drips immediately.
6. Check vehicles and equipment awaiting maintenance, repairs or disposal for leaks. Clean up any releases immediately and dispose of appropriately. Place collection pans to collect any further releases.
7. Cover engines and other parts to prevent contact with storm water; use hood, tarp, shed or building.

Goal / Purpose

Initial

Minimize the discharge of pollutants into storm water runoff from vehicle and equipment maintenance operations by containing potential pollutants and preventing release to the storm water system.

Long term

Only emergency maintenance and repairs will be conducted without cover.

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Carefully pick cleaning systems and products to maximize operations while minimizing waste generated and reducing employee exposure to toxic chemicals.

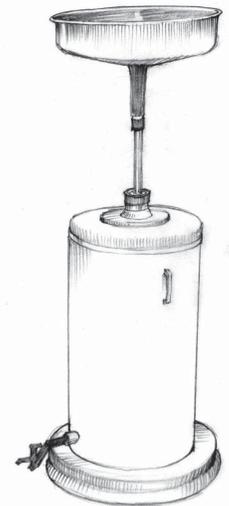
8. Drain fluids from equipment or parts that are to be scrapped.
9. The scrap metal stockpile will be minimized by disposal periodically. Cover the stockpile during the rain season.
10. Do not use drains without knowing whether they flow to the sanitary sewer, storm system or an internal sump. Confirm connections before using drains to ensure proper disposal.
11. When working outside, always protect the storm drain system from accidental releases. One way to protect the storm drain system is by putting portable dikes around the work area and/or placing storm drain mats over the storm drains. Use the most appropriate method to contain any potential spills.
12. Regularly inspect oil/water separator and sumps; conduct maintenance and repairs promptly. Comply with the local sanitation district's discharge standards.
13. Keep vehicle and equipment painting confined to small touch-ups. Using greater amounts of paint or other coatings require the use of a spray booth and a permit from the Air Pollution Control District.
14. Use a water-based parts cleaning system instead of petroleum solvents, if feasible.
15. Maintain labels on all containers; correct identification is important for employee safety and correct disposal. OSHA mandates labels for all containers holding a substance.
16. Maintain an organized inventory of chemical products onsite along with their Material Safety Data Sheets.
17. Conduct preventative maintenance on secondary containment structures, pipes, valves, pumps and other equipment to ensure proper operation and to identify potential leaks.

Contractor Requirements

18. Ensure that contractors provide the County with a copy of their storm water awareness training and procedures for protecting the storm water system. These procedures should cover activities from cleaning windows to painting an entire building.

Associated BMPs

- Alternative Safer Products
- Housekeeping
- Loading & Unloading
- Material & Hazardous Waste Storage
- Metal, Wood, Print & Paint Shops
- Spill Prevention & Cleanup
- Vehicle & Equipment Washing & Steam Cleaning



Spills can be significantly reduced by using containers that can be placed directly under the engine to collect fluids. These containers also allow the waste to be transferred to other accumulation tank with little effort via a nozzle at the bottom of the unit.

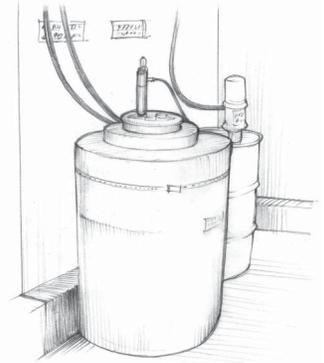
19. Include specific contract language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.

Employee Training

Staff training may include regular tailgate sessions at those facilities responsible for conducting vehicle or equipment maintenance or repairs. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase storm water runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.



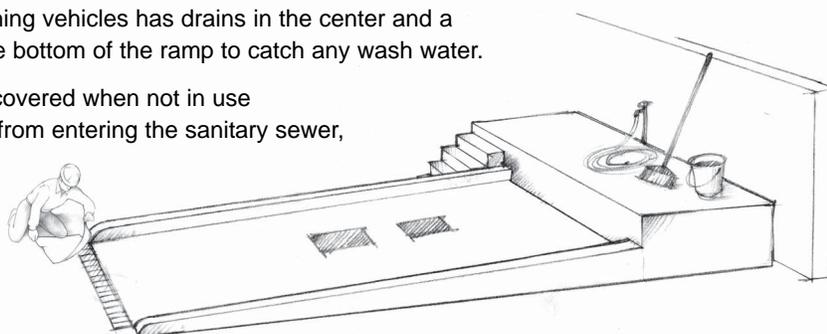
Setting up automated systems to deliver fluids will save employee time and reduce the potential for spills in the shop.

Secondary containment for the storage containers (e.g., curbs or doubled-walled tanks) is required for hazardous chemicals.

Vehicle & Equipment Washing & Steam Cleaning Best Management Practices

This system for washing vehicles has drains in the center and a perimeter drain at the bottom of the ramp to catch any wash water.

The drains must be covered when not in use to prevent rainwater from entering the sanitary sewer, since there is no roof.



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, Best Management Practices (BMPs) must be employed at municipal facilities. BMPs may be selected from the options listed below or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) should follow the BMPs stated in that protocol.

Practices

1. Consider using an offsite commercial washing or cleaning business.
Onsite cleaning options to be used by county or vendors (Only appropriate for cleaning the painted or chromed surfaces. Cleaning engine or other such equipment is prohibited.):
2. Use a designated wash area that is paved, and bermed or sloped so that wash water is contained and directed to a sump with a connection to the sanitary sewer. The washing area should either be covered or have a sump switch to prevent rainwater from entering the sanitary sewer line. The best location for a wash area prevents storm water from contacting the wash pad surface. Without cover, eventually surfactants and wastes from the cleaning process will become mobilized and contribute to pollution of creeks, ocean and groundwater. Always contact the sanitary district for discharge requirements prior to discharging wash water into the sanitary sewer.
3. Use a designated wash area that is paved and protected by permanent or movable berms, dikes, and mats. Contain the wash-water and vacuumed up or otherwise collected for disposal to the sanitary sewer. Wash-water must

Goal / Purpose

Initial

Minimize or prevent the discharge of pollutants into storm drains from vehicle and equipment cleaning operations by discharging to sanitary sewer, containing wash water for offsite disposal or directing wash water (without cleaners) to landscape areas.

Long term

Conduct all washing and steam cleaning operations under cover with water treated prior to release to the sanitary sewer.

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not leave the property. If the driveway is an avenue for runoff it must be bermed to contain the wash-water. Always contact the sanitary district for the discharge requirements prior to discharging wash-water into the sanitary sewer.

4. Conduct rinsing on an unpaved area such as lawn or gravel with just water. Keep washing activities away from storm drains or water conveyances so that the rinse water will infiltrate into the ground and not flow to the storm drains or creeks. This option applies to sites where only one or two vehicles are cleaned every couple of weeks. Do not use this option just before or after a rainstorm.
5. Conduct all steam cleaning activities indoors or on a concrete pad that is bermed or sloped to contain the wastewater with a connection to an oil/water separator and sewer. The best location for a steam cleaning area would preclude storm water from running over the pad, flushing the cleaning products and other pollutants into the storm water runoff. Always contact the sanitary district for the discharge requirements prior to discharging wash water into the sanitary sewer.

General

6. Use phosphate-free, non-toxic, biodegradable soap. Any soap, including those labeled “biodegradable” do not belong in creeks, ocean or ground-water. They are harmful to aquatic life and should never be misconstrued as safe for direct disposal to surface waters (i.e., storm drains). All soaps, detergents and cleaning agents are best treated by a sanitary sewer treatment plant
7. Continue to evaluate safer alternative products for any job that uses toxic or hazardous products. When available and cost effective, these products should be used.
8. Consider using a wash water recycling system.
9. Use as little water as possible during washing. See the County’s Green Team web site for information on water conservation activities.
www.publicworkssb.org/greenteam
10. Promptly clean up any spill of liquid or solid wastes. Do not hose down an

Associated BMPs

- Alternative Safer Products
- Housekeeping
- Spill Prevention & Cleanup
- Storm Drains & Catch Basins

area to clean up a spill, unless the liquid will be completely contained, cleaned up and disposed of to sanitary sewer or offsite as appropriate for the waste type. Do not discharge any liquid to storm drains, landscape or to pavement.

11. Conduct regular inspections of the oil/water separate or holding sump to ensure proper operation and compliance with the local sanitation discharge limitations.
12. Do not wash private vehicles on county property, unless the auto detailer has a procedure for protecting the storm water system by containing the wash water, cleaning up debris, and properly disposing of the wash-water and debris offsite. Disposal of wash-water from commercial car washing activities into the storm drain is illegal.

Field Work

13. In the field, vehicles and equipment shall only be rinsed with plain water to wash off dirt and mud. This rinsing shall take place in a location to minimize any impacts to surface runoff such as an unpaved area away from creeks and other storm water conveyances. No soaps or cleaners will be used unless the wash-water can be disposed of to a sanitary sewer.

Contractor Requirements

14. Ensure that contractors provide the County with a copy of their storm water awareness training and procedures for protecting the storm water system. These procedures should cover activities for handling wash-water and debris.
15. Include specific contract language to inform the contractor that they must comply with federal, state and local storm water rules and regulations as required by the Clean Water Act. Amend existing contracts to include this language, if not already included.

Employee Training

Staff training may include regular tailgate sessions at those facilities that use chemicals. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new

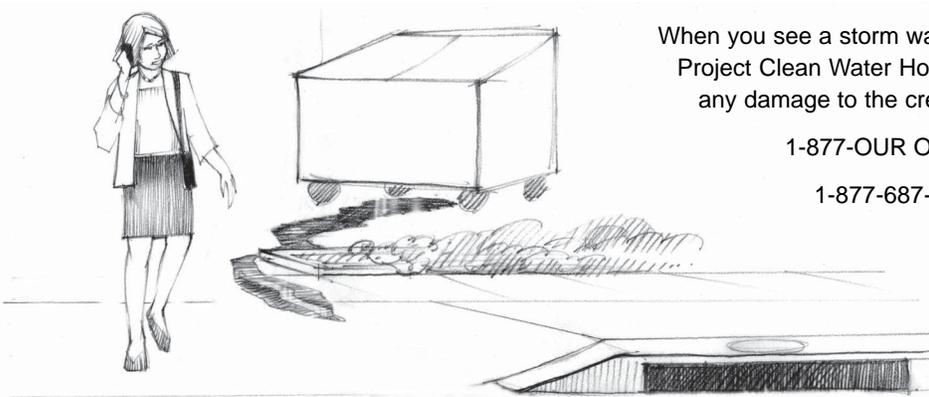
BMPs; their suggestions will likely reduce labor and increase stormwater runoff protection. If the above suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call Project Clean Water at 568-3440 for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Facilities with a Storm Water Plan should follow the training requirements stated in that Plan. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440.

Basic BMPs for Employees

Best Management Practices



When you see a storm water problem call the Project Clean Water Hotline and minimize any damage to the creeks and ocean.

1-877-OUR OCEANS

1-877-687-6232

Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, employees must be provided information on Best Management Practices (BMPs). This Basic BMPs for Employees Fact Sheet is to provide employees with general information on the County's storm water program and how they may participate at work and at home.

Practices

1. Never dispose of wash-water to storm drain or pavement; it must be disposed of to the sanitary sewer. Wash-water can be defined as any liquid with cleaner with residual dirt and grime. Examples include mop-water, window cleaning water, and rinse water (rinsing after a cleaner was used). Plain (no residual cleaner) rinse water may be used for irrigating plants. Always check with sanitary district prior to putting an unconventional waste into the sanitary sewer.
2. Promptly clean up any spill of liquid or solid wastes. Do not hose down an area to clean or handle a spill, unless the liquid will be completely contained, cleaned up and disposed of to sanitary sewer or offsite as appropriate for the waste type. Do not discharge to storm drains, landscape or off-site.
3. Schedule regular cleaning of areas that collect debris to eliminate particulate and residue buildup. This applies to both exterior and interior areas. Keeping interior areas clean prevents the tracking of contaminants outdoors. Add trash containers, when appropriate, to minimize littering.

Goal / Purpose

Promote employee awareness in preventing storm water pollution at work and at home.

Santa Barbara County

[www.countyofsb.org/
project_cleanwater](http://www.countyofsb.org/project_cleanwater)

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4. Evaluate safer alternative products for any job that usually uses toxic or hazardous products. For instance, investigate alternative floor and window cleaners (specialized cleaners), general cleaners, adhesives, paints, and lubricants. When available and cost effective, these products should be used. See the Alternative Safer Products BMP Fact Sheet #1 for further information.
5. Do not use drains without knowing whether they flow to the sanitary sewer, storm system or self-contained internal sump. Confirm before using drains to ensure proper disposal.
6. Store equipment and supplies under cover whenever possible. Minimizing contact with storm water minimizes contaminants from getting into storm water run-off. Use exterior grade cabinets or containers when exposed to the weather; interior grade cabinets and containers will rust or deteriorate contributing contaminants to storm water run-off.
7. Do not have your private vehicles washed or cleaned on County property, unless the auto detailer has a procedure for protecting the storm water system by containing the wash-water, cleaning up debris, and properly disposing of the wash-water and debris.
8. Litter is still a problem; throw all trash in disposal or recycling containers.
9. Report any inappropriate discharge to a storm water drain or creek. Call 1-877-OUR-OCEAN (877-687-6232) to notify staff who will respond to the problem. Examples of problems to report: hazardous substance spill, sewage leak, petroleum spill, green waste dumping, or anything in a creek or storm drain that should not be there. In your report note the exact location of the incident; the type of incident - if spill or dumping; the substance or substances involved; the time and date of your observation and any information regarding the person(s) responsible for the incident.
10. Household activities also can contribute to storm water pollution. The following web sites have information that will help you protect storm water.

Web sites for household information:

www.Greengardener.org

www.Greendifference.org

www.communityenvironmentalcouncil.org

Associated BMPs

- Housekeeping
- Building Maintenance & Repairs
- Landscape & Undeveloped Areas
- Metal, Wood, Printing & Paint Shops
- Vehicle & Equipment Maintenance & Repair
- Vehicle & Equipment Washing & Steam Cleaning

11. For further information about pollution prevention opportunities at work look at the Green Teams web page: www.publicworkssb.org/greenteam/
12. You can get more information about the County's storm water program at the Project Clean Water web page:
www.countyofsb.org/project_cleanwater

Employee Training

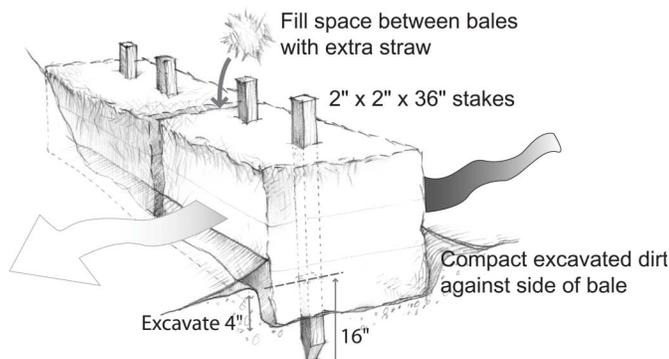
Training should include a handout of this BMP to all County employees, which provides information on methods for preventing discharge of pollutants into the storm drain system. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see **www.countyofsb.org/project_cleanwater** or contact Project Clean Water staff at 568-3440 for assistance.

Treatment (Structural) Control

Best Management Practices

Temporary treatment controls can be easily installed and maintained, effectively keeping sediment on site.



Selection of Best Management Practices

In order to comply with Santa Barbara County's Municipal Storm Water Permit, employees must be provided information on Best Management Practices (BMPs). This Treatment (Structural) Control BMP Fact Sheet provides references for standard treatment control BMPs that should be selected on a case-by-case basis as appropriate for the project. These references may be accessed through the web site of each organization.

References

1. California Department of Transportation. *Storm Water Quality Handbook: Construction Site Best Management Practices (BMPs) Manual*. November, 2000 and as amended from time to time.
2. California Regional Water Quality Board San Francisco Bay Region. Third Edition, July 1999 and as amended from time to time.
3. California Stormwater Quality Task Force. *California Storm Water Best Management Practices Handbooks: Construction Activity; Industrial/Commercial Activity; and Municipal Activity*. Three volumes, March 1993 and as amended from time to time.

Employee Training

Staff training may include regular tailgate sessions at those facilities responsible for using treatment control BMPs. Tailgate sessions should provide information on all the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Storm water BMP training may be incorporated with

Goal / Purpose

Minimize the discharge of pollutants such as sediment, construction materials, vegetation, and chemicals (paints, coatings, herbicides, pesticides, fertilizers, petroleum products, etc.) from County property into the storm water system

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other training sessions such as safety training. Records of the training sessions must be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs, or the County's responsibilities under the NPDES Phase II federal regulations for storm water discharges, see www.countyofsb.org/project_cleanwater or contact Project Clean Water staff at 568-3440 for assistance.

Associated BMPs

- Housekeeping
- Building Maintenance & Repairs
- Landscape & Undeveloped Areas
- Metal, Wood, Printing & Paint Shops
- Vehicle & Equipment Maintenance & Repair
- Vehicle & Equipment Washing & Steam Cleaning

Appendix I
County of Santa Barbara
Integrated Pest Management Strategy

Attachment I

Santa Barbara County Integrated Pest Management Strategy

Mission Statement

It is the mission of the County of Santa Barbara to promote environmentally sensitive pest management while preserving County assets and protecting the health and safety of the public and our employees. As part of this mission all costs and impacts associated with pesticide use, including community and environmental health, will be considered. The following IPM Strategy describes the County's goals and demonstrates how the County will achieve these goals.

Purpose

The purpose of this IPM Strategy is to ensure that County application of pesticides is done in a manner that protects and enhances our region's natural resources and public health; that County use of pesticides is a model of environmental stewardship in the eyes of the public; that the County establishes a leadership role in developing both aesthetically pleasing and ecologically sensitive landscapes and structures; and that there is a consistent standard of environmental stewardship observed by County departments managing structures, landscapes, and other grounds. The IPM Strategy also provides for periodical re-evaluation of pesticides used by County employees, to phase out products that pose human health or environmental risks, and to promote the use of non-hazardous and/or reduced risk alternatives by the County that are protective of human health and the environment. The IPM Strategy will require updates which outline the pesticides that are being used in all County departments and will allow employees involved in pesticide use to make conscious decisions about the pesticides selected for use, to use pesticides wisely, and to make full use of pesticides purchased.

Background

The County of Santa Barbara's Green Team was developed in 1999 to promote environmental stewardship in County operations. In June 1999 the County Green Team was asked to initiate a process by which the County could address its pesticide use. A Pesticide Sub-committee was formed with representatives from the Public Works Department, the General Services Department, the Parks Department, and the Agricultural Commissioner's Office. Representatives from these County Departments have developed an Integrated Pest Management Strategy in support of the goal of reducing the potential impact of pesticide use on our community. The Integrated Pest Management (IPM) Strategy promotes the design, construction and maintenance of County landscapes and structures in a way that protects and enhances the region's natural resources and public health. In addition, the IPM Strategy will provide a framework for evaluating pesticides used by the County.

Departments Affected

All County Departments that are responsible for managing construction projects; managing County-owned structures, grounds, and landscapes; and purchasing and using pesticides are affected. In addition, all County contractors that are applying pesticides on the County's behalf will be required to subscribe to the IPM program.

Definitions

Integrated Pest Management: A coordinated decision making and action process that uses the most appropriate pest control methods in an environmentally and economically sound manner to meet County pest management objectives. The elements of integrated pest management include:

- a. Preventing pest problems;
- b. Monitoring for the presence of pests and pest damage;
- c. Establishing the density of the pest population, which may be set at zero, that can be tolerated or correlated with a damage level sufficient to warrant treatment of the problem based on health, public safety, economic or aesthetic thresholds;
- d. Treating pest problems to reduce populations below those levels established by damage thresholds using strategies that may include biological, cultural, mechanical and chemical control methods and that shall consider human health, ecological impact, feasibility and cost effectiveness; and
- e. Evaluating the effects and efficacy of pest treatments.
- f. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms and the environment.

Sustainable Design, Construction, and Maintenance: Principles, materials, and techniques that conserve natural resources and improve environmental quality throughout the life cycle of the landscape and its surrounding environment.

Landscapes: Grounds that are actively managed such as parks, library lawns, right-of-ways, in-town watersheds, etc., but not large tracts of forestland.

Hazardous Material: A chemical or mixture that can pose a physical hazard, health hazard, or environmental hazard and that is regulated under the law to control its harmful effects. This definition is not intended to be rigid or legalistic because all materials regulated in this manner merit special attention and consideration by the County under this IPM Strategy.

Pesticide: Any substance or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling or mitigating any pest; includes spray adjuvants, insecticides, fungicides, herbicides, acaricides, avicides, rodenticides, bactericides, growth regulators, nematocides, etc.

Integrated Pest Management Strategy

Part I. Purchasing

Pesticides shall be used, stored, transported, and disposed of in compliance with all applicable laws and regulations. In designing, constructing, and maintaining County facilities, and in designing and conducting the County's operations, departments shall give priority to minimizing the need for pesticides. Consideration will be given to options such as process changes, product changes, improved operations and maintenance, and any physical, mechanical, cultural, biological, and educational tactics that can reduce pesticide use. When a pesticide is needed, the amount purchased and used shall be the smallest quantity practical. Recognizing that the purchase price of a product does not reflect its true cost to the County, use of large quantity discounts, bulk container purchases or minimum order requirements that exceed departmental needs should be discouraged when procuring pesticides. County departments shall participate in annual interdepartmental efforts to summarize all pesticides used per year and to develop and maintain a countywide information system on pesticide usage (See IPM Strategy Steps 3 and 4). Upon completion of each annual Countywide summary of pesticide usage, the criteria outlined in Appendix A shall be used to designate certain pesticides for phase-out from County inventories and to limit the purchase of new products, if necessary.

Any pesticide that is not listed on a department's summary shall not be purchased or used by that department without a recommendation by a Pest Control Advisor (PCA) or Structural Pest Control Operator (PCO) and approval by the Agricultural Commissioner's Office. In addition, review by the Grounds Management Committee (See IPM Strategy Step 1 and 9) at the next annual summary review meeting is required. When selecting replacements for pesticides targeted for phase-out (See IPM Strategy Steps 5-7), and in selecting new products for use (See IPM Strategy Steps 9 & 10), departments shall place highest priority on protecting worker health and safety, protecting public health, and protecting the environment. The next level of priority to be considered includes product effectiveness and cost effectiveness. It is recognized that phase-out of those pesticides may not be practical when pesticides serve functions vital to the County's operations (example: levees and dams), in instances where the use of the pesticide is the least damaging alternative and where there are no satisfactory replacements. In those cases, departments shall develop and implement best management practices to minimize the quantity of pesticide required, protect worker health and safety, and minimize release of pesticide to the environment. When appropriate, excess pesticide should be returned to the supplier or offered for use by other County departments.

Part II. Application

In planning, siting, designing, constructing, and maintaining grounds, landscapes, and structures owned and managed by the County, site objectives shall include management and maintenance practices that protect and enhance natural ecosystems. County grounds designers, planners, managers, crews, and their contractors shall give priority to:

- A. Practicing the principles of Integrated Pest Management including the reduced use of pesticides (see IPM Strategy Plan);
- B. Selecting and using fertilizers that minimize negative impacts on soil organisms and aquatic environments;
- C. Designing new and renovating existing landscaped areas to suit the site conditions and with sustainable maintenance in mind.
For example:
 - Using proper soil preparation and amendment;
 - Specifying weed-free soil amendments;
 - Using mulches to control weeds, conserve water, and build healthy, biotically diverse soils;
 - Using site adapted and pest resistant plants: "the right plant for the right place";

- Grouping together plants with similar horticultural needs;
- Retaining and using regionally native plant material where appropriate;
- Controlling noxious weeds and invasive, non-native, plant species;
- Planting for erosion and weed control;
- Assessing whether landscapes can still meet the intended site use objectives while modifying the aesthetic standard and/or applying less maintenance; and
- Matching maintenance standards to site objectives in the design stage;
- Following specifications outline in IPM Strategy Step 8.

Integrated Pest Management Strategy Plan

Strategy Approach

The main component of the IPM Strategy is to reduce the County's reliance on the use of pesticides by formalizing and increasing the County's application of Integrated Pest Management techniques. The following paragraphs discuss the approach to achieving these goals.

Departments Affected

All County Departments that are responsible for managing construction projects; managing County-owned grounds, landscapes, and structures; and purchasing and using pesticides are affected. In addition, all County contractors that are applying pesticides on the County's behalf will be required to subscribe to the IPM program.

Responsibilities

Department heads shall be responsible for:

- Ensuring that departmental procedures, budget, and staffing decisions support implementation of the IPM Strategy;
- Providing training to grounds management staff in the requirements of this IPM Strategy; and
- Appointing a staff person to the Grounds Management Committee* to represent the department on matters related to this IPM Strategy.
- Designate an Integrated Pest Management Coordinator* to ensure products used by the department meet the standards outlined in this IPM Strategy.
*The GMC representative and the IPM Coordinator may be the same individual.

The Green Team shall be responsible for:

- Providing staff support to the Grounds Management Committee; and
- Facilitating interdepartmental resource sharing.

1. Creating a Grounds Management Committee

An interdepartmental Grounds Management Committee shall be formed and shall meet quarterly to coordinate activities, share resources, plan educational opportunities, exchange information, set goals, evaluate progress, and periodically review this IPM Strategy and update it as necessary. Each May, the Committee shall submit a report addressing the Annual Summary and Pilot Project Updates as a part of the Green Team's annual report to the Board of Supervisors.

2. Establishing an Integrated Pest Management Coordinator

Each department will be responsible for designating an Integrated Pest Management Coordinator. Departments will be responsible for providing Integrated Pest Management training opportunities for the Coordinator and other employees responsible for pest management. Other educational opportunities may also be provided as part of the quarterly meetings of the Grounds Management Committee.

The Coordinator will be responsible for:

- Managing the IPM program of the department.
- Selecting a location for the IPM pilot project to take place.
- Reviewing requests for new products to ensure that the products meet the standards of the IPM Strategy and submitting the product for review by the Agricultural Commissioner's Office.
- Attending quarterly meetings of the Grounds Management Committee.
- Reporting annually to the Grounds Management Committee about the implementation of the department's pilot program. The report shall:
 1. Identify planned changes to pest management practices
 2. Evaluate the effectiveness of those changes

3. Identify other areas where successful changes will be implemented.

3. Developing and Conducting Annual Pesticide Summary

The Grounds Management Committee shall coordinate development of an annual comprehensive summary of pesticide usage. Each department will complete the form in Appendix B and will submit the information to the Agricultural Commissioner's Office for input into the Pesticide Management Information System (See IPM Strategy Step 4) by May 1 each year. Department directors shall ensure that departments participate in Countywide planning for the summary, conduct the survey, and report the information in the specified format. Upon completion of the initial summary, each product identified in the summary list shall be approved for use unless it has been identified for phase-out and a replacement option has been approved. The Annual Pesticide Summary will be submitted to the Board of Supervisors for review in the yearly report outlined in IPM Strategy Step 1.

4. Developing, Installing, and Maintaining the Pesticide Management Information System

The Grounds Management Committee shall develop and install the Pesticide Management Information System and develop interdepartmental agreements on use and maintenance of the system. The database shall be maintained and updated by the Agricultural Commissioner's Office. Department directors shall ensure that departments comply with interdepartmental agreements on use of the Pesticide Management Information System.

5. Overall Pesticide Use Reduction

County staff has already significantly reduced the amount and toxicity of pesticides used through IPM. In order to identify ways to reduce pesticide use further, each Department will select a site to serve as a pilot project for the implementation of the IPM Strategy. The department will outline the current pest management strategies used in the area, identify changes they will implement as part of their new IPM Strategy, and create a timeline for the implementation process. Suggestions for targeted changes should come from any knowledgeable source including County vegetation managers due to their knowledge and experience. Specific pest management strategies for ornamentals, turf, trees/woody brush, electrical substations, and rights-of-way should be evaluated. Alternative pest management strategies might include:

- Pest prevention techniques like mulching, irrigating, fertilizing, and using pest-resistant species in landscaping;
 - Mechanical pest control techniques like flame weeding, hand pulling, string trimming, and hot water weeding; and
 - Alternative chemical controls like neem oil products, active bacillus products, and potassium bicarbonate products.
- Increasing pest tolerance thresholds may also be possible. Pesticide use reduction decisions will consider preservation of the landscape asset, safety, economy, and legal requirements.

In June of each year, the pilot projects will be reviewed by the Grounds Management Committee to determine the possibility of implementing similar changes at other sites. At that time, a timeline for implementing the viable changes at other sites will be developed. In addition, a new set of pilot measures will be instituted for the next fiscal year.

Exceptions to the process include areas with a defined purpose in maintaining public health and safety including levees and dams, chemicals used to control pests that cannot be controlled by any other means, and instances where the use of a pesticide is the least environmentally damaging alternative.

6. Eliminating use of the most hazardous pesticides

The Grounds Management Committee will reassess the pesticide review criteria outlined in Appendix A and update the criteria as needed. They will then conduct a hazard assessment of chemicals used by the County to prioritize products for phase-out if necessary. Products shall be categorized into three tiers ranging from greatest potential hazard -Tier 1 to least - Tier 3. New products considered for use will undergo the same analysis and product tier designations will be re-evaluated, as additional information becomes available. (See Appendix A for criteria.)

7. Phasing-out Targeted Chemicals

Each year, the Grounds Management Committee shall compile data from the annual Countywide summary and work with departments and user groups, to refine chemical phase-out criteria, develop a Countywide prioritized list of chemicals targeted for phase-out, and establish a work plan including tasks and schedules for phase-out of chemicals. Department directors shall ensure that departments participate in Countywide efforts to establish the annual phase-out list and annual work plan. Directors will also

incorporate elements of the countywide work plan into departmental work plans. In addition to the chemical phase-out criteria, the Grounds Management Committee shall develop guidelines for evaluating replacement options for the products targeted for phase-out.

The Green Team shall facilitate interdepartmental user groups in evaluating their pesticide usage. The Green Team shall assist user groups and, where applicable, individual departments in researching alternatives to products targeted for phase-out. Department directors shall ensure that departments participate in interdepartmental efforts as needed to phase-out targeted pesticides. Directors shall also evaluate proposed alternatives per guidelines outlined in Integrated Pest Management Strategy Step 5.

8. Reviewing Landscape Plans for New Construction and Renovation Projects

Any County Department that is participating in a project that designs a new landscape or renovates an old one shall submit design plans to the Grounds Management Committee for approval, if the landscape will become the responsibility of another department within a period of 3 years.

9. Reviewing Requests for New Products

Any pesticide that is not listed on a department's summary shall not be purchased or used by that department without prior review to determine whether the product meets the criteria outlined in Appendix A of this plan. In order for a new pesticide to be added to a department's summary the following criteria must be met:

For outdoor use of pesticides -

- 1) A Pest Control Advisor (PCA), who is trained in IPM, must review the pest situation and recommend the pesticide for use. The PCA must review the pest situation and consider other alternatives before recommending a pesticide for use. The PCA must then submit, in writing, details of why other alternatives were not selected in that situation.
- 2) The PCA's recommendation will then be submitted to the Agricultural Commissioner's office to ensure that the pesticide meets the criteria listed in the Integrated Pest Management Strategy, along with other local, state and federal regulations.
- 3) New products shall be subject to additional review by the Grounds Management Committee upon completion of the next annual summary. The Grounds Management Committee, in consultation with the applicable user group, shall make the final determination on product acceptability before such products are added to the permanent summary of approved products.

For indoor use of pesticides -

- 1) A licensed Structural Pest Control Operator (PCO), who is trained in IPM, must review the pest situation and recommend the pesticide for use. The Structural PCO must review the pest situation and consider other alternatives before recommending a pesticide for use. The Structural PCO must then submit, in writing, details of why other alternatives were not selected in that situation.
- 2) The Structural PCO's recommendation will then be submitted to the Agricultural Commissioner's office to ensure that the pesticide meets the criteria listed in the Integrated Pest Management Strategy, along with other local, state and federal regulations.
- 3) New products shall be subject to additional review by the Grounds Management Committee upon completion of the next annual summary. The Grounds Management Committee, in consultation with the applicable user group, shall make the final determination on product acceptability before such products are added to the permanent summary of approved products.

Department directors shall ensure that departments have internal procedures to allow their IPM Coordinator to obtain proper review of requests for new products from a PCA or Structural PCO and the Agricultural Commissioner's Office to prevent unauthorized use of new pesticides that have not been reviewed, or have been reviewed and rejected. Department directors shall ensure that new products approved for use are added to the department's summary list.

10. Reviewing and Revising Procurement Procedures

The Grounds Management Committee shall review procurement practices to ensure that they are consistent with this IPM Strategy, including an assessment of:

1. Standards for size and quantity of materials to be purchased under County contracts, including minimum order requirements, unit sizes, and quantity discounts;

2. Standards for type of materials available under County contracts to restrict availability of chemicals targeted for phase-out;
3. Standards requiring vendors to accept return of unused products;
4. Existing Blanket Contracts, which are high priority for revision or replacement, based on factor (1) or (2) above.

11. Incorporating Hazardous Materials Minimization into Operations

The Grounds Management Committee shall assist departments, as needed, in identifying alternatives and developing and implementing best management practices to minimize pesticide use. Department directors shall ensure that departments incorporate measures into their operations to minimize pesticide use, document those measures, and develop applicable written procedures on those measures.

12. Involving and Educating Employees

The Grounds Management Committee shall invite speakers to quarterly meetings or arrange for other educational opportunities to assist departments in implementing this IPM Strategy. Department directors shall ensure that IPM Coordinators inform employees on departmental policies and procedures relevant to this IPM Strategy and keep staff current with best landscape-management practices and technologies that utilize Integrated Pest Management. Department directors shall also support employee involvement in identifying and implementing strategies to minimize the use of pesticides and in evaluating replacements to chemicals targeted for phase-out. In making landscaping staffing and budget decisions, departments shall consider the potential environmental tradeoffs; for example, will reduced staffing require increased use of pesticides to maintain the landscape at the same standard? Will eliminating the use of herbicides to control vegetation result in the use of more disruptive mechanical means?

13. Tracking Progress and Evaluating the Program

Each April the Grounds Management Committee will conduct a survey to gather information for the Annual Pesticide Summary. In addition, each department will submit a summary of the previous year's pilot project, a timeline for implementing viable changes at other sites, and plans for a new pilot project including changes that will be implemented in the next Fiscal Year and a timeline for their implementation. The Grounds Management Committee shall compile this information and any recommendations for future direction of the program and shall submit the report to the Board of Supervisors each May.

14. Future Actions

Over the next year the Grounds Management Committee and the Green Team will work together to ensure that the tasks outlined in this IPM Strategy are completed. The lessons learned from the pilot projects and annual updates will help us effectively target our resources. Over the next year, we will:

- Research alternative pest control equipment, products, and techniques;
- Create a working group comprised of the Grounds Management Committee and interested members of the public to develop a process for notification of chemical application specific to the application location and type;
- Conduct pilot studies to evaluate alternative effectiveness and potential for use on Countywide scale;
- Develop maintenance standard trial sites to monitor increased pest tolerance thresholds and any resulting damage;
- Conduct public outreach to both increase awareness of and gauge reactions to changing maintenance standards and alternative approaches;
- Develop a Request for Qualifications (RFQ) to locate outside contractors with demonstrated experience in Integrated Pest Management activities;
- Pursue alternative funding sources.

Appendix A (Appendix to Attachment I)

Pesticides meeting the following criteria may be targeted as first priority for phase-out. At this time the County does not use any pesticides that fit these criteria, nor does the County have any intention of using pesticides that fit these criteria, unless extraordinary conditions occur that warrant their use. Exceptions to the restriction will be considered as described below. Affected departments will designate IPM Coordinators to evaluate exception requests.

Criteria

- Products assigned by the U.S. Environmental Protection Agency (EPA) to Hazard Category I: Signal word DANGER appears on label
- Restricted use pesticides – use of the product is restricted to certified pesticide applicators
- Products with active ingredients found on the California Proposition 65 list
- Products labeled as highly toxic or extremely toxic to non-target birds, aquatic species, bees, and wildlife.
- Products that are persistent in the environment.
- Products that move readily in the environment and may impact ground or surface water with specific label warnings about groundwater hazard.

Exceptions

Exceptions to the restrictions will be considered based on:

- a description of the pest problem,
- rationale for chemical control with the proposed product,
- a description of how the product will be used,
- legal requirements,
- public health and safety considerations,
- preservation of landscape assets, and
- an evaluation of all feasible alternatives including non-chemical and no action alternatives,
- the safety, health, and environmental impacts of the alternatives also will be evaluated.

Exceptions may be granted on a one-time-only basis or as a programmatic exception that applies across all departments. One-Time-Only Exceptions - The Departmental IPM Coordinator and the Grounds Management Committee will be responsible for evaluating and approving one-time-only exceptions within each Department. Programmatic Exceptions - All departmental IPM Coordinators and the Grounds Management Committee will meet, as necessary, to evaluate and approve or deny programmatic exceptions. All programmatic exceptions will be re-evaluated annually by the IPM Coordinators and the Grounds Management Committee based on a review of alternatives and a re-evaluation of the need for the control. For all exceptions granted, a Best Management Practice will be required to minimize human health and environmental risk.

Appendix B (Appendix to Attachment I)

IPM Strategy Annual Summary Reporting Form

Department: _____
Contact Name: _____
Contact Extension: _____
Fiscal Year: _____

Pesticide (name/type)	Where Applied (Facility type)	Amount Used	Applied by (County vs. contractor*)	Targeted for phase-out? (Y/N)

***Please attach a copy of the invoice received from the contractor with pesticide name and amount used.**

Appendix J
Water Related Monitoring
In Santa Barbara County

Water Related Monitoring in Santa Barbara County

SWMP PROGRAM EVALUATION

The intent of the Storm Water Management Program Evaluation and Monitoring Section is to evaluate the measurable goals, minimum control measures, and overall program for effectiveness. The measurable goals described in the Minimum Control Measure (MCM) section of the Storm Water Management Plan (SWMP) will be used to help establish a baseline against which future progress at reducing pollutants to the Maximum Extent Practicable (MEP) can be measured. Numerical measurements will be utilized where possible. Monitoring results will be reported in the Annual Report.

WATER QUALITY MONITORING

Santa Barbara County is currently involved in several of the many monitoring studies currently underway throughout its non-federal areas. The activities, which the County are currently working on or helping to finance, are listed in Section 1 below. Other important monitoring activities being conducted by other organizations are listed in Section 2.

1. Monitoring involving Santa Barbara County

The County has performed several water quality assessments, and continues to implement benthic macroinvertebrate assessments (i.e., to calculate a Benthic Macroinvertebrate Index [BMI]) in selected creeks as part of Project Clean Water. Based on availability of funds and identified need, the County may continue with BMI monitoring activities. Other monitoring efforts are funded by sources such as the water purveyors, sanitary districts and other interests, which have restrictions on funding availability and uses, thus cannot be and are not committed to as part of the SWMP. If and when the County becomes involved with new monitoring programs, it will be summarized in Annual Reports.

Because of the extensive monitoring that is already underway on the subject watersheds, the County is not proposing to implement any new water quality monitoring at this time. To better focus our limited resources and avoid duplicating effort of other organizations, the County plans to examine the objectives and results of existing monitoring programs during the term of the SWMP, with an emphasis on monitoring programs that focus on the land uses and pollutants of concern identified in the SWMP. If the results of that evaluation indicate that there is a need for additional monitoring that would help to evaluate the effectiveness of the SWMP activities, a program could then be devised to accomplish this. Such a proposal would be made in the second Annual Report.

The County will communicate with other Phase 2 communities, including the cities of Santa Barbara, Santa Maria and Goleta about monitoring activities that are currently underway or in the planning stages. The County will look for opportunities to partner in water quality monitoring data collection as part of other's monitoring/research efforts using grant or other outside funding sources.

HISTORIC WATER QUALITY MONITORING

South Coast Watershed Characterization Study

The South Coast Watershed Characterization (SCWC) Study was initiated in 1998 by the Santa Barbara County Public Health Department to characterize the water quality of several South Coast streams: Arroyo Burro, Mission, Carpinteria, and Rincon creeks. The SCWC Study involved the collection of water samples from a minimum of ten locations along each creek during four sampling events. The set of first sampling occurred in August and October 1998, and represented a dry weather sampling. The second sampling occurred after the first rainfall in November 1998 to capture the first flush. The last two samplings occurred in the middle and end of the winter runoff period, in January and March 1999, respectively. The report and data are available on the Project Clean Water website (www.countyofsb.org/project_cleanwater/Documents/scwc.final.pdf).

Lower Rincon Creek Watershed Study

The Lower Rincon Creek Watershed Study was designed to identify the sources of coliform bacteria in discharges from dry weather flows. During the spring of 1999, water sample collection was performed over 10 sampling events at each of the 3 sample locations, with 5 water samples collected per sampling event at each location. The report and data are available on the Project Clean Water website (www.countyofsb.org/project_cleanwater/Documents/DNAReport3Rev5.pdf).

Project Clean Water Storm Sampling

Following the South Coast Watershed Characterization Study (see above) and, in order to gain a better understanding of the types and extent of pollutants contributed by storm water and low flow runoff, as well as to address future regulatory requirements (see Section 2.0, Regulatory Setting), Project Clean Water staff designed an expanded program of dry and wet weather sampling for the 1999-2000 season. The sampling program significantly broadened the previous year's study by adding many more creek sites (57 sites within 22 watersheds) and water quality parameter measurements (up to 128), such as volatile organic compounds (VOCs) and various pesticides. In addition, the 1999-2000 storm water sampling program focused heavily on collecting samples during the "first flush" of each storm event (i.e., during increasing flow due to initial runoff). The purpose of this sampling effort was to conduct a broad screening of water quality in local creeks in order to ascertain which contaminants are present at significant levels, and which watersheds exhibit consistently higher levels of contaminants. Five storms were sampled between November 1999 and April 2000. The report and data are available on the Project Clean Water website (www.countyofsb.org/project_cleanwater/documents.htm).

This same water quality sampling program was continued during the 2000-2001 season with some minor modifications. Over 30 creeks were sampled during up to four storm events in each creek to (1) identify the types of contaminants that appear to be present in significant concentrations, (2) ascertain relative levels of contamination in each watershed and (3) identify problematic watersheds. With this information staff refined storm sampling and better focus implementation of source and treatment control Best Management Practices. Samples were tested for a wide range of potential contaminants including bacteria, pesticides, volatile organic compounds (VOCs), nutrients, metals, and others (oil and grease, total suspended solids, etc.). Sample sites were set up in 44 locations within 22 watersheds. Six storms were sampled between October 2000 and May 2001. Sampling was conducted during the initial period of runoff ("first flush") as creek levels approached their maximum flow. The report and data are available on the Project Clean Water website (www.countyofsb.org/project_cleanwater/documents.htm).

During the 2001-2002, four entirely new sites were added at storm drain outfalls selected as pilot project sites for treatment control Best Management Practice. Two sites (Rhoads East and Rhoads West) were located along San Vicente Drive near Walnut Avenue in unincorporated Goleta, one at the end of South Turnpike at Atascadero Creek and one on 6th Street at Carpinteria Creek. The data from these sites reflect urban runoff undiluted by creek flows. Also during this year, the San Jose Creek watershed was (and continues to be) the subject of a watershed plan currently being developed by the County and other agencies and stakeholders. In order to more accurately characterize the sources of pollutants, Project Clean Water staff sampled this watershed at five sites for a full suite of constituents. Furthermore, an intensive bacteria-only sampling was performed on November 29, 2001. The report and data are available on the Project Clean Water website (www.countyofsb.org/project_cleanwater/documents.htm).

Due to funding issues in the 2002-2003 rain year, the program was scaled back and attention turned to selected watersheds. On the South Coast, time-series, longitudinal sampling was conducted on San Jose creek. That this creek provided flow to a 303(d)-listed water body (the Goleta Slough), had established sampling locations, and was the subject of an in-progress watershed plan were all critical in the selection of this watershed. Special studies were also performed at the South Turnpike BMP site and at the discharge point of the Glen Annie Golf Course. In the North County, sampling sites were selected to ascertain the inputs to the Santa Ynez River from the communities of Santa Ynez, Vandenberg Village and Mission Hills. Also in the North County, sampling was continued at sites on Orcutt Solomon creek. The report and data are available on the Project Clean Water website (www.countyofsb.org/project_cleanwater/documents.htm).

ONGOING MONITORING

Beginning in 2000, the County of Santa Barbara began an annual bioassessment program. This program involves collection and analyses of physiochemical and biological (including benthic macroinvertebrates) data from local streams using standardized methods adapted from the U.S. Environmental Protection Agency's (USEPA's) *Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers*.

The study area includes approximately 35 miles of the southern Santa Barbara County coast from the Rincon Creek watershed at the Santa Barbara/Ventura County line west to Gaviota Creek. A total of 44 study reaches in 18 coastal streams have been surveyed one or more times during the spring and summer of 2000, 2001, 2002, 2003, and 2005. In 2003, an index of biotic integrity (IBI) was developed to allow comparison of local creeks and provide a more understandable method for measuring the biological integrity of streams and other water bodies.

Environmental Health Services Beach Monitoring

The County of Santa Barbara's Public Health Department monitors 20 beaches on a weekly basis year round. Water samples are tested for indicator bacteria (total coliform, fecal coliform and enterococci) and compared to standards, as mandated by AB411. Those beaches where test results are above the acceptable standards are placed under warning status and are re-sampled two days later. Data are available on the Public Health Department's website (www.sbcphd.org/ehs/ocean.htm) and in the local newspapers.

Creek Walks

The County of Santa Barbara Public Works Department walks most creeks in the County on an annual basis. The following Table J-1 lists those creeks. Creek names in italics are walked by Flood Control; otherwise, Project Clean Water staff. Flood Control staff walk the same creeks every year. Project Clean Water staff walk the unincorporated urbanized portions during the late summer / early fall in areas most likely to have water quality impacts. See Section 3.2.4 for detail on the Project Clean Water creek walk program.

Table J-1 Creeks Walked Annually: 2001 through 2004

2001	2002	2003	2004
<i>Adobe</i>	<i>Adobe</i>	<i>Adobe</i>	<i>Adobe</i>
<i>Alamo Pintado</i>	<i>Alamo Pintado</i>	<i>Alamo Pintado</i>	<i>Alamo Pintado</i>
<i>Arroyo Burro</i>	<i>Arroyo Paredon</i>	<i>Atascadero</i>	<i>Arroyo Paredon</i>
<i>Arroyo Paredon</i>	<i>Atascadero</i>	<i>Barger</i>	<i>Atascadero</i>
<i>Atascadero</i>	<i>Barger</i>	<i>Bradley Canyon</i>	<i>Barger</i>
<i>Barger</i>	<i>Bradley Canyon</i>	<i>Carneros</i>	<i>Bradley Canyon</i>
<i>Bell</i>	<i>Carneros</i>	<i>Carpinteria</i>	<i>Buena Vista</i>
<i>Bradley Canyon</i>	<i>Carpinteria</i>	<i>Cold Springs</i>	<i>Carneros</i>
<i>Buena Vista</i>	<i>Cieneguitas</i>	<i>Corralitos</i>	<i>Carpinteria</i>
<i>Carneros</i>	<i>Cold Springs</i>	<i>Cuyama R at NCV</i>	<i>Cieneguitas</i>
<i>Carpinteria</i>	<i>Corralitos</i>	<i>Devereaux</i>	<i>Cieneguitas</i>
<i>Cieneguitas</i>	<i>Cuyama R at NCV</i>	<i>El Encanto</i>	<i>Cold Springs</i>
<i>Cold Springs</i>	<i>Devereaux</i>	<i>Foxenwood</i>	<i>Corralitos</i>
<i>Corralitos</i>	<i>El Encanto</i>	<i>Franklin</i>	<i>Cuyama R at NCV</i>
<i>Cuyama R at NCV</i>	<i>Foxenwood</i>	<i>Fremont</i>	<i>Devereaux</i>
<i>Devereaux</i>	<i>Fremont</i>	<i>Getty</i>	<i>El Encanto</i>
<i>El Encanto</i>	<i>Getty</i>	<i>Glen Annie</i>	<i>Foxenwood</i>
<i>Foxenwood</i>	<i>Green Canyon</i>	<i>Green Canyon</i>	<i>Franklin</i>
<i>Franklin</i>	<i>Hospital</i>	<i>Hospital</i>	<i>Fremont</i>
<i>Fremont</i>	<i>Hot Springs</i>	<i>Hot Springs</i>	<i>Fremont</i>
<i>Garrapata</i>	<i>La Vereda</i>	<i>La Vereda</i>	<i>Getty</i>
<i>Getty</i>	<i>Lagunitas</i>	<i>Lagunitas</i>	<i>Glen Annie</i>
<i>Glen Annie</i>	<i>Las Vegas</i>	<i>Las Vegas</i>	<i>Green Canyon</i>
<i>Green Canyon</i>	<i>Maria Ygnacio</i>	<i>Maria Ygnacio</i>	<i>Hospital</i>
<i>Hospital</i>	<i>Mission</i>	<i>Mission</i>	<i>Hot Springs</i>
<i>Hot Springs</i>	<i>Montecito</i>	<i>Montecito</i>	<i>La Vereda</i>
<i>Hot Springs</i>	<i>Oak</i>	<i>Oak</i>	<i>Lagunitas</i>
<i>La Vereda</i>	<i>Padero ditch</i>	<i>Padero ditch</i>	<i>Las Vegas</i>
<i>Lagunitas</i>	<i>Pila</i>	<i>Pila</i>	<i>Mission</i>
<i>Las Palmas</i>	<i>Pine</i>	<i>Pine</i>	<i>Montecito</i>
<i>Las Positas</i>	<i>Refugio</i>	<i>Refugio</i>	<i>Oak</i>
<i>Las Vegas</i>	<i>Rincon</i>	<i>Rincon</i>	<i>Padero ditch</i>
<i>Maria Ygnacio</i>	<i>Rodeo/San Pasqual</i>	<i>Rodeo/San Pasqual</i>	<i>Pila</i>
<i>Mission</i>	<i>Romero</i>	<i>San Antonia Los Alamos</i>	<i>Pine</i>
<i>Montecito</i>	<i>San Antonio Los Alamos</i>	<i>San Jose</i>	<i>Refugio</i>
<i>Oak</i>	<i>San Antonio</i>	<i>San Pedro</i>	<i>Rodeo/San Pasqual</i>
<i>Padero ditch</i>	<i>San Jose</i>	<i>San Roque</i>	<i>Romero</i>
<i>Picay</i>	<i>San Pedro</i>	<i>Santa Maria River</i>	<i>San Antonio Los Alamos</i>
<i>Pila</i>	<i>San Roque</i>	<i>Santa Monica</i>	<i>San Antonio</i>
<i>Pine</i>	<i>San Ysidro</i>	<i>Santa Ynez River</i>	<i>San Pedro</i>
<i>Refugio</i>	<i>Santa Maria River</i>	<i>SM Airport</i>	<i>San Roque</i>
<i>Rincon</i>	<i>Santa Monica</i>	<i>Solomon</i>	<i>San Ysidro</i>
<i>Rodeo/San Pasqual</i>	<i>Santa Ynez River</i>	<i>Sycamore</i>	<i>Santa Maria River</i>

2001	2002	2003	2004
Romero	<i>SM Airport</i>	<i>Tanglewood</i>	Santa Monica
<i>San Antonio Los Alamos</i>	<i>Solomon</i>	<i>Tecolotito</i>	<i>Santa Ynez River</i>
San Antonio	<i>Sycamore</i>	<i>West Main (SM)</i>	<i>SM Airport</i>
San Jose	<i>Tanglewood</i>	<i>Winchester</i>	<i>Solomon</i>
San Jose West	<i>Tecolotito</i>	<i>Zaca</i>	<i>Sycamore</i>
San Pedro	Toro	<i>Zanja de Cota</i>	<i>Tanglewood</i>
<i>San Roque</i>	<i>West Main (SM)</i>		<i>Tecolotito</i>
San Ysidro	<i>Winchester</i>		<i>West Main (SM)</i>
<i>Santa Maria River</i>	<i>Zaca</i>		<i>Winchester</i>
Santa Monica	<i>Zanja de Cota</i>		<i>Zaca</i>
<i>Santa Ynez River</i>			<i>Zanja de Cota</i>
<i>SM Airport</i>			
<i>Solomon</i>			
<i>Sycamore</i>			
<i>Tanglewood</i>			
Tecolote			
<i>Tecolotito</i>			
Toro			
<i>West Main (SM)</i>			
<i>Winchester</i>			
<i>Zaca</i>			
<i>Zanja de Cota</i>			

2. Monitoring Projects Undertaken by Other Organizations

MONITORING OF THE SANTA YNEZ RIVER

Surface- and ground-water monitoring in the Santa Ynez River watershed has occurred for decades. Currently Surface flow, groundwater levels and water quality are monitored by several local agencies and the USGS. Current monitoring includes:

- Stream gauging by the USGS;
- Water quality measurement by the USGS;
- Ground Water levels measured by local agencies including the County and water Purveyors;
- Flow and water quality measurements as part of steelhead trout studies;
- Stream and ground water monitoring as part of water rights orders;
- Monitoring by operators of public water supply systems; and
- Monitoring by operators of sewage treatment plants.

These monitoring efforts are briefly described below.

Stream Gauging by the USGS

The USGS operates several stream gages on the Santa Ynez River. Data collected is available from the USGS website and is used for several purposes. High flow data are used for public safety purposes including winter storm operations at Bradbury Dam. Low flow data are used for managing the river-flow to meet water right requirements and fish protection objectives. The program relies on both federal agencies and local cooperators for funding; County Flood Control District and Water Agency are both major participants.

Water Quality Measurement by the USGS

Water quality measurements are made by the USGS as part of stream gauging and ground-water monitoring. Data collected is available from the USGS website and is used for several purposes including monitoring suitability of water quality for beneficial uses, monitoring success of management of the water rights releases and habitat suitability for fish habitat. In addition, ground water quality monitoring in the Lompoc Plain area would provide early warning of potential sea-water or brackish water intrusion from the coast.

Ground Water Levels Measured by Local Agencies including the County and Water Purveyors

In conjunction with the USGS monitoring program, local agencies such as County Water Agency monitor ground water levels in several hundred wells and water quality in approximately 100 wells. These data are available directly from the agencies involved and in addition the County Water Agency summarizes this information in an annual report available on its website

(<http://www.countyofsb.org/pwd/water/downloads.htm>).

Flow and Water Quality Measurements as Part of Steelhead Trout Studies

Since 1994 Federal, state and local agencies have monitored conditions in the Santa Ynez River to develop a plan for protecting and enhancing the local steelhead trout population. Water quality monitoring includes field measurements of temperature, specific conductance and oxygen levels. These measurements are summarized in annual reports prepared by the Cachuma Conservation Release Board on behalf of the Santa Ynez River Adaptive Management Committee (formerly the Santa Ynez River Consensus Committee).

Stream and Ground Water Monitoring as Part of Water Rights Orders

Streamflow and releases from the three reservoirs on the Santa Ynez River are monitored pursuant to orders of the State Water Resources Control Board to be certain that water of sufficient quantity and quality is available to all users. This monitoring is done by the USGS, the US Bureau of Reclamation and the Santa Ynez River Water conservation District. A summary and interpretation of the monitoring is provided in the "Annual Engineering and Survey Report on Water Supply Conditions of the Santa Ynez River Water Conservation District" which is available from the District.

Monitoring by Operators of Public Water Supply Systems

Water quality monitoring is required of each operator of a public water supply system. The Cities of Lompoc, Buellton and Solvang and the Santa Ynez River Water Conservation District, Improvement District Number 1 each may operate wells close to the Santa Ynez River such that their water quality is influenced by the river. The water quality monitoring results from these wells may be obtained from the respective entity owning the well.

Monitoring by Operators of Sewage Treatment Plants

Water quality monitoring of discharge is required of each sanitary treatment plant operator that discharges to surface water. Records of such discharges are submitted to the Central cost Regional Water Quality Control Board and may be obtained from that agency.

CENTRAL COAST AMBIENT MONITORING PROGRAM (CCAMP)

The Central Coast Ambient Monitoring Program (CCAMP) is the Central Coast Regional Water Quality Control Board's regionally scaled water quality monitoring and assessment program. The purpose of the program is to provide scientific information to Regional Board staff and the public, to protect, restore, and enhance the quality of the waters of central California.

The CCAMP monitoring strategy for watershed characterization calls for dividing the Central Coast Region into five watershed rotation areas and conducting synoptic, tributary based sampling each year in one of the areas. Over a five year period all of the Hydrologic Units in the Region are monitored and evaluated. In addition to the synoptic site selection approach, additional monitoring sites are established in each area to provide focused attention on watersheds and water bodies of special concern.

CCAMP uses a variety of monitoring approaches to characterize the status and trends of coastal watersheds, including:

- Rapid Bioassessment using benthic invertebrates;
- Conventional water quality parameter analysis;
- Chemical analysis of tissue, water, and sediment;
- Toxicity evaluations;
- Habitat assessments; and
- Sedimentation evaluations.

Data are available on the organization's website (<http://www.ccamp.org/ccamp/ccamp.htm>).

LONG TERM ECOLOGICAL RESEARCH (LTER) PROJECT

The Santa Barbara Coastal LTER Project is focused on investigating the relative importance of land and ocean processes in structuring giant kelp forest ecosystems. As a component of this project, several researchers are focusing on characterizing nutrient loading and developing a model to predict future nutrient export from these watersheds resulting from projected changes in land use. Bi-weekly base flow and storm water are sampled from Gaviota, Refugio, Arroyo Hondo, Arroyo Burro, Mission, Santa Monica, Franklin and Carpinteria creeks (2003-04 program). Data are available through the group's website (<http://sbc.lternet.edu/catalog/style/skins/sbclter/index.jsp>).

SANTA BARBARA CHANNELKEEPER

ChannelKeeper has established stream teams in both the Ventura and Santa Barbara area. The purpose of these teams are to monitor water quality and involve citizen volunteers in the protection of their local watershed while providing educational opportunities and fostering environmental stewardship. The ChannelKeeper's Goleta Stream Team collects data at 11 sites throughout the Goleta Slough watershed on a monthly basis. Parameters measured by these teams of volunteers include dissolved oxygen, pH, conductivity, turbidity, temperature, flow, nitrate, orthophosphate, and indicator bacteria. Data and analysis are disseminated through the organization's website (www.stream-team.org) as well as a quarterly newsletter.

UNITED STATES GEOLOGICAL SURVEY

The Santa Barbara County Department of Public Works, Flood Control and Water Conservation District (FC&WCD) and Water Agency (WA) partially fund several water resources programs run by the USGS. This includes the following:

USGS Program (# of stations)	Funding Source	Cost (11/1/004 – 10/31/05)
Surface Water Streamgaging Stations – O&M (9)	FC&WCD	\$72,150
Surface Water Streamgaging Stations – O&M (9)	WA	\$67,985
Santa Ynez Fish Management Plan – O&M, weekly discharge measurements, water quality data (5)	WA	\$46,370
Ground Water Monitoring – water levels, water quality, seawater encroachment (~275)	WA	\$25,000
Surface Water Quality Monitoring – water quality data (11)	WA	\$32,725
Total		\$244,230

Notes: Data are available at the USGS website (www.usgs.gov).