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MARIN COUNTY STORMWATER POLLUTION PREVENTION PROGRAM
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MARIN COUNTY
STORMWATER POLLUTION
PREVENTION PROGRAM

Stormwater Management
Plan

ACTION PLAN 2005

Fiscal Years 2000-2001 through 2004-2005

CREDITS

**This report is being submitted by the member agencies
of the**



City of Belvedere
Town of Corte Madera
County of Marin
Town of Fairfax
City of Larkspur
City of Mill Valley
City of Novato
Town of Ross
Town of San Anselmo
City of San Rafael
City of Sausalito
Town of Tiburon
Marin County Flood Control District

Implementation coordinated by:
Marin County Department of Public Works

**With input and direction from the Citizens Advisory
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ACRONYMS AND ABBREVIATIONS

ASC	Agency Staff Committee
Basin Plan	San Francisco Bay Water Quality Control Plan
BASMAA	Bay Area Stormwater Management Agencies Association
BMP	Best Management Plan
CAC	Citizens Advisory Committee
CMSA	Central Marin Sanitary Agency
CSAC	California State Association of Counties
CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
Flood Control District	Marin County Flood Control District
GIS	Geographic Information System
IPM	Integrated Pest Management
JPA	Marin Street Light Acquisition Joint Powers Authority
MCC	Marin Conservation Corp
MEP	maximum extent practicable
MCSTOPPP	Marin County Stormwater Pollution Prevention Program
MPWA	Marin Public Works Association
MSDS	Material Safety Data Sheet
NA or n/a	not applicable
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NSA	Novato Sanitary Agency
OPC	Operations Permit Committee
PIP	Public Information Participation
RCD	Resource Conservation District
Regional Board	San Francisco Bay Regional Water Quality Control Board
SEED	School Environmental Education Docent
State Board	California State Water Resource Control Board
Stormwater Task Force	California State Stormwater Quality Task Force
TMDL	Total Maximum Daily Load
U.S. EPA	United States Environmental Protection Agency

DEFINITIONS

BMPs	Practices implemented by private industry and public agencies which prevent or reduce water pollution.
Countywide Program Tasks	Activities conducted by Marin County Public Works Department staff and its consultants and contractors for the benefit of all MCSTOPPP agencies.
Local Program Tasks	Activities conducted by individual MCSTOPPP agencies.
MCSTOPPP	The combined entity of the Countywide Program and Local Programs.
Performance Standards	Pollution prevention practices MCSTOPPP agencies have made a commitment to implement.
Phase II regulations	Requirements adopted by U.S. EPA on October 29, 1999 and published in the Federal Regulations on December 8, 1999.
Tier I Performance Standards	Pollution prevention practices the MCSTOPPP agencies will implement by July 1, 2000.
Tier II Performance Standards	Pollution prevention practices the MCSTOPPP agencies will implement before July 1, 2003 as follows: Tier II(1) will be implemented by July 1, 2001. Tier II(2) will be implemented by July 1, 2002. Tier II(3) will be implemented by July 1, 2003.

Protecting and Enhancing Marin County's Watersheds

This Stormwater Management Plan – *Action Plan 2005*, will build on past successes by continuing to sharpen our focus on protecting and enhancing Marin's watersheds. During the next five years, Marin will also enter the next phase of federally mandated municipal stormwater permitting requirements (commonly referred to as Phase II stormwater regulations, adopted in October 1999). The activities described in this *Action Plan 2005*, as with the *Action Plan 2000* before it, are therefore based on U.S. Environmental Protection Agency's (EPA) stormwater regulations, precedents set by other countywide stormwater programs in the Bay Area, and negotiations with San Francisco Bay Regional Water Quality Control Board (Regional Board) staff.

Background

The Regional Board's December 1991 Water Quality Control Plan (Basin Plan) and the 1997 Basin Plan update state that Marin County and its cities and towns:

“Should develop and implement a baseline control program to prevent the increase in pollutants in [stormwater] discharges To the extent that voluntary implementation of baseline control programs is not realized, the

Board will act, where necessary, to require individual local agencies pursuant to Section 132225(c) of the California Water Code to investigate specific runoff discharges to quantify pollutant loads and to identify and implement control strategies for the control of pollutants in urban run-off.”

Through the leadership of the Public Works Directors in Marin County, Marin municipalities decided to pursue a countywide program to comply with the Basin Plan requirements. Initial reports submitted to Regional Board staff described sources of urban runoff pollution and on-going efforts in Marin County that could help prevent it (*Assessment of Existing Conditions*, July 1993) and Marin municipalities' joint, baseline urban runoff control program (*Baseline Action Plan*, December 1993). By late 1995, the Marin County Stormwater Pollution Prevention Program, or MCSTOPPP, began work on a new strategy that links Federal- and State-mandated municipal stormwater programs with locally popular efforts to preserve and enhance creek and wetland habitat. The first five-year *Action Plan 2000* (October 1996) described tasks for Local Programs and the Countywide Program to prevent pollutant discharges to the storm drains and thereby protect Marin's watersheds. Since the *Action Plan 2000* expired

on June 30, 2000, this *Action Plan 2005* describes MCSTOPPP activities for the next five years.

Program Structure

MCSTOPPP refers to the Countywide Program and Local Programs. Countywide Program activities are conducted for the benefit of all MCSTOPPP agencies. In addition to participating in Countywide Program planning activities, each MCSTOPPP agency must also implement a Local Program. The roles of the Countywide Program and Local Programs for each task are described at the end of each chapter. Local Program must also implement performance standards described in Appendix A. Performance standards define a large part of what each agency will need to do to implement this *Action Plan 2005*. The performance standards will define compliance (as measurable goals) when MCSTOPPP obtains a municipal stormwater permit in 2003.

Beginning with this *Action Plan 2005*, the Marin County Flood Control District will become a recognized member of MCSTOPPP. Though they have participated in the past as part of Marin County's Local Program, the Flood Control District will be named under the municipal stormwater permit in 2003 as a separate entity from Marin County.

Geographic Description

Bordering the Pacific Ocean on the west, and San Francisco Bay on the east, Marin County encompasses 520 square miles of land and has a total population of approximately 246,000. More than two-thirds of Marin has been preserved as park lands by Federal, State,

and local governments and can be described as three corridors: inland rural, coastal recreational, and urban. The coastal recreational corridor and most of the inland rural corridor lands drain to the Pacific Ocean. The urban corridor lands drain to San Pablo Bay, San Rafael Bay, Richardson Bay, and San Francisco Bay.

The inland rural corridor, located in the central and northwest part of the county, is designated for mainly agricultural and compatible uses. Many of the county's dairy farms, ranches, and a few small unincorporated communities are located here.

The coast recreation corridor follows the western edge of the county including Point Reyes National Seashore and Golden Gate National Recreation Area, which are both national park lands. This area is designated for parks, agriculture, and small rural communities.

Urban Marin runs along Highway 101 and is where most people live and work. This is where most of the activities described in this *Action Plan 2005* will take place. Figure 1-1 illustrates municipal jurisdictions and major watercourses and their watersheds in urban Marin.

Organization of the Action Plan 2005

To effectively implement a watershed focused and community based approach, Marin's cities, towns, and County governments must be in the "front line" of our efforts to preserve and enhance our environment, as the title of the first chapter sums up:

Local Government Leads the Way

The *Action Plan 2005* organizes the rest of MCSTOPPP's activities as follows:

Caring for Our Creeks and Waterways

This chapter describes watershed surveys, assessments, and monitoring to identify impacts to water quality and habitat, integral to MCSTOPPP's watershed approach. This chapter also contains two important elements of Federally mandated municipal stormwater programs: activities to prevent pollutant discharge from municipal maintenance activities, and activities to effectively eliminate non-stormwater discharges.

Building and Renewing

This chapter describes good site planning and development review practices to ensure new projects are designed with watershed protection in mind. This chapter also describes controls to minimize erosion and sedimentation from construction activities. An important element of this chapter is continuing education for municipal staff, contractors, and engineers.

Educating Ourselves at Work

This chapter describes how MCSTOPPP controls pollutant discharges from business activities through inspection and outreach. Continuing education for municipal staff, business owners, and their customers is also an important element in this chapter.

Educating Ourselves at Home and School

This chapter describes general public education and information dissemination, as well as targeted education efforts to residential neighborhoods and schools.

Protecting Our Future

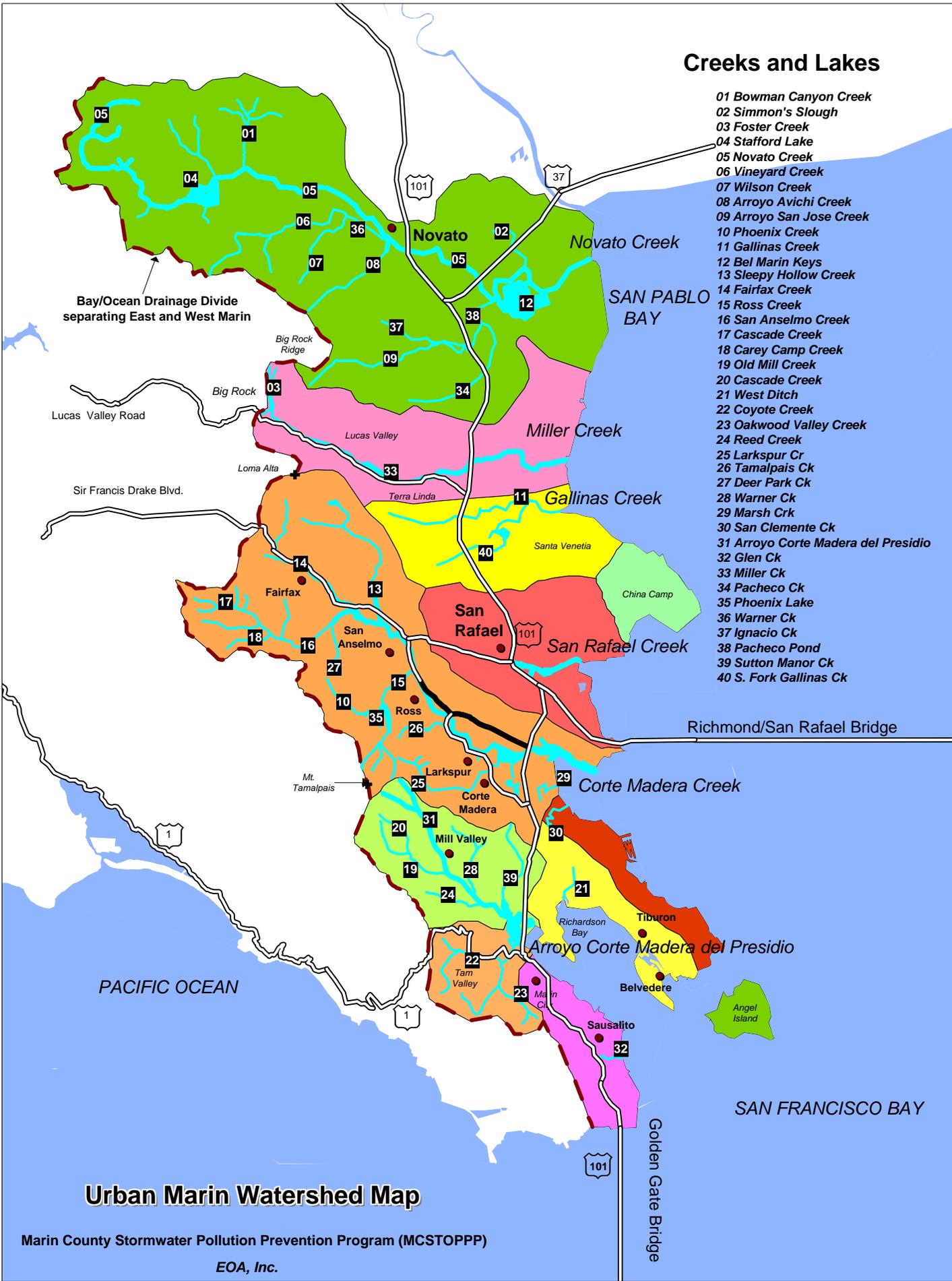
This final chapter describes how MCSTOPPP will work with the regulatory

community to obtain coverage under a municipal stormwater permit and influence other regulatory programs, such as total maximum daily load (TMDL) development and allocation. As part of the permit, Local Programs will need to implement the performance standards included in Appendix A. Performance standards have been developed for the following areas:

- ◇ Municipal Maintenance Activities (Caring for Our Creeks),
- ◇ Illicit Discharge Controls (Caring for Our Creeks),
- ◇ New Development, Redevelopment, and Construction Site Controls (Building and Renewing),
- ◇ Industrial and Commercial Discharge Controls (Educating Ourselves at Work), and
- ◇ Public Information and Participation (Educating Ourselves at Home and School).

Creeks and Lakes

- 01 Bowman Canyon Creek
- 02 Simmon's Slough
- 03 Foster Creek
- 04 Stafford Lake
- 05 Novato Creek
- 06 Vineyard Creek
- 07 Wilson Creek
- 08 Arroyo Avichi Creek
- 09 Arroyo San Jose Creek
- 10 Phoenix Creek
- 11 Gallinas Creek
- 12 Bel Marin Keys
- 13 Sleepy Hollow Creek
- 14 Fairfax Creek
- 15 Ross Creek
- 16 San Anselmo Creek
- 17 Cascade Creek
- 18 Carey Camp Creek
- 19 Old Mill Creek
- 20 Cascade Creek
- 21 West Ditch
- 22 Coyote Creek
- 23 Oakwood Valley Creek
- 24 Reed Creek
- 25 Larkspur Cr
- 26 Tamalpais Ck
- 27 Deer Park Ck
- 28 Warner Ck
- 29 Marsh Crk
- 30 San Clemente Ck
- 31 Arroyo Corte Madera del Presidio
- 32 Glen Ck
- 33 Miller Ck
- 34 Pacheco Ck
- 35 Phoenix Lake
- 36 Warner Ck
- 37 Ignacio Ck
- 38 Pacheco Pond
- 39 Sutton Manor Ck
- 40 S. Fork Gallinas Ck



Urban Marin Watershed Map

Marin County Stormwater Pollution Prevention Program (MCSTOPPP)
EOA, Inc.

Local Government Leads the Way

MCSTOPPP is a joint project of the Cities of Belvedere, Larkspur, Mill Valley, Novato, San Rafael, and Sausalito, the Towns of Corte Madera, Fairfax, Ross, San Anselmo, and Tiburon, the County of Marin, and the Marin County Flood Control District. Each agency¹ pursues its own local stormwater pollution prevention activities and also contributes financial and in-kind support to the Countywide Program. Public Works Directors continue to participate actively in discussions concerning the Countywide Program and the needs of the Local Programs through the Marin Public Works Association (MPWA).

Since 1993, Marin municipalities have shared the costs of the Countywide Program through contributions to the existing Marin Street Light Acquisition Joint Powers Authority (JPA), which has assumed fiscal responsibility for MCSTOPPP. Expenses are apportioned among the municipalities according to a formula based on area and population. Half of the municipalities pay for their portion of the Countywide Program, as well as implement their Local Program, from a stormwater fee (Fairfax, Larkspur, Mill Valley, Novato, San

Rafael, and Sausalito). The remainder of the municipalities use their General Fund.

Existing Conditions

Countywide Program Structure and Function

Resolutions adopted by the JPA and by each municipality provide that the County of Marin operate the Countywide Program. Within the County, Marin County Flood Control District (Flood Control) staff, which is a part of the Department of Public Works, implements the Countywide Program. Countywide Program staff includes the County Flood Control's Creek Naturalist, one full time public outreach coordinator, and an Engineering Technician. Other Flood Control staff are available to assist with the Countywide Program as needed.

The Countywide Program, jointly sponsored by the municipalities, conducts activities that benefit all Marin municipalities and coordinates the implementation of Local Program tasks. For example, the Countywide Program carries out public education targeted to all Marin County residents, coordinates with other countywide, regional, and state agencies, and assists municipalities to implement their Local Programs in compliance with water

¹ Except for the Marin County Flood Control District which is signatory only.

quality regulations. The Countywide Program also facilitates a consistent, cost-effective approach to stormwater pollution prevention throughout Marin jurisdictions.

Specific administrative and planning functions of the Countywide Program include:

- ◇ Coordinating with other countywide, regional and state agencies to stay abreast of stormwater technology and the development of stormwater regulations. Examples include the Regional Board, California State Water Resource Control Board (State Board), Bay Area Stormwater Management Agencies Association (BASMAA) and the California Stormwater Quality Task Force (Stormwater Task Force).
- ◇ Coordinating with Local Programs through the Agency Staff Committee (ASC). The ASC includes representatives from all MCSTOPPP agencies who meet monthly to discuss common issues and identify solutions. Ad-hoc work groups of the ASC have also been formed to address target issues (such as, wet season grading, consistent enforcement, and performance standards).
- ◇ Involving community representation and review through the Citizens Advisory Committee (CAC). The CAC, which consists of seven Marin residents selected by the JPA, was formulated to include perspectives of Marin businesses, Chamber of Commerce, and environmental advocates. Since October 1997, the CAC has met at least quarterly.

- ◇ Coordinating annual review meetings between Local Program and Regional Board staff.

Local Program Accomplishments

To implement their Local Program, each municipality has adopted a stormwater ordinance to clarify its authority to control what is discharged to the municipally owned storm drain system. In particular, the ordinance:

- ◇ Effectively prohibits the discharge of non-stormwater discharges to creeks and storm drains.
- ◇ Requires that persons engaged in activities that are potential sources of pollutants implement Best Management Practices (BMPs) to reduce pollutant discharges to the maximum extent practicable (MEP).
- ◇ Prohibits alterations to watercourses without municipal permission.
- ◇ Allows the Public Works Director to impose additional requirements on new developers to reduce peak flows and total runoff volume.

The ordinances were based on a model provided by the Countywide Program, and differ only slightly regarding specific prohibitions. All the ordinances' enforcement provisions are identical. Stormwater pollutant discharges are declared a public nuisance. A variety of civil and criminal penalties may be imposed for violations. Table 2-1 lists each municipality's stormwater ordinance code number.

Each municipality has a Stormwater Coordinator who is assigned to participate in the ASC and responsible for the daily implementation of the Local Program. The ASC also provides local staff with a forum for peers to share the difficulties, frustrations, and successes encountered in integrating stormwater pollution prevention and watershed protection into the everyday work of municipal departments.

Major Tasks and Schedule

Task 1. Administration

To help municipal staff implement their Local Programs, the ASC will continue to meet regularly (Task 1A). Other staff committees will be assembled on an ad-hoc basis as specific issues arise (Task 1B). MCSTOPPP will also continue to obtain community representation and program review through the CAC (Task 1C).

Task 2. Planning

Each year, the Countywide Program will work with the ASC to review *Action Plan 2005* tasks and set priorities for the coming year by drafting a Countywide Program task list (Task 2A). Similarly, each municipality will review its Local Program and evaluate any planning needs to improve the effectiveness of implementing the performance standards (Task 2B) and to respond to any priorities identified by Regional Board staff.

Task 3. Financing

As with the task list, the Countywide Program will work with the ASC to draft a Countywide Program budget (Task 3A) for submittal to the Regional Board as part of the *Annual Report*. Each Local Program will also

report stormwater pollution prevention expenditures for the current year, and projected budgets for the coming year (Task 3B) in the *Annual Report*.

Task 4. Reporting

At the end of each fiscal year, the Countywide Program will coordinate with Stormwater Coordinators to develop the *Annual Report*. The *Annual Report* will summarize MCSTOPPP's progress with implementing the *Action Plan 2005* and will be submitted to the Regional Board (Task 4A) for staff review and comment. Annual Local Program review meetings with Countywide Program and Regional Board staff have been extremely helpful for communicating 1) Regional Board staff's expectations to municipal staff and 2) Local Program accomplishments to Regional Board staff. MCSTOPPP will continue to conduct annual review meetings (Task 3B) to obtain Regional Board staff comments on the *Annual Report*.

Table 2-2 describes task schedules and milestones for this component; Table 2-3 describes the roles of Countywide Program staff, Local Program staff, and the CAC.

Table 2-1. Municipal Stormwater Ordinances	
Belvedere	14.16
Corte Madera	9.33
Fairfax	8.26
Larkspur	15.48
Marin County	23.18
Mill Valley	17.06.010
Novato	7 - 4.3
Ross	12.28
San Anselmo	5 - 8
San Rafael	1672
Sausalito	11.17
Tiburon	407

Table 2-3. Roles for Administration, Planning, and Financing Tasks

PROGRAM ROLES			∇ = Lead for this Task			
TASK	DESCRIPTION	Countywide Program	Local Program		Citizens Advisory Committee	
			Stormwater Coordinator	Municipal Staff		
1	Administration					
1A	Agency Staff Committee	∇ Facilitate	∇ Participate	Provide Info	Discuss	
1B	Facilitate/Coordinate Ad-Hoc Work Groups	∇ Facilitate	∇ Participate	Participate	Discuss	
1C	Citizens Advisory Committee	∇ Facilitate	Discuss		∇ Participate	
2	Planning					
2A	Countywide Activities for the Coming Year	∇ Propose	Review/Approve		Review/Discuss	
2B	Local Activities for the Coming Year		∇ Prepare	Provide Info	Discuss	
3	Financing					
3A	Countywide Program Budget	∇ Propose	Review/Approve		Review/Discuss	
3B	Local Budgets and Sources of Funds		∇ Prepare	Provide Info		
4	Reporting					
4A	Annual Program Updates	∇ Prepare	∇ Compile Info	Provide Info	Review/Discuss	
4B	Annual Local Program Review Meetings	∇ Facilitate	∇ Coordinate	Participate	Review/Discuss	

Caring for Our Creeks and Waterways

This chapter combines MCSTOPPP's creek and wetland-oriented approach with continued municipal maintenance pollution prevention activities (such as street and storm drain maintenance) and illicit discharge control activities (such as field surveys and spill response).

MCSTOPPP recognizes that the storm drain system – and stormwater pollution – begins with streets and gutters, whose drainage flows to ditches, to creeks and wetlands, and on to a bay or the Ocean. MCSTOPPP's approach is to identify pollution and creek health problems and to involve citizens and agency staff with finding the solution. The need to preserve and enhance downstream habitat values motivates and guides activities to control pollutant sources in the watershed. One of the goals for this chapter is for municipal staff to develop area-specific knowledge of local creek habitat priorities to help direct Local Program day-to-day efforts.

MCSTOPPP uses a watershed approach to eliminate illicit discharges to storm drains. The “upstream” element is to inspect businesses and other likely dumping locations to identify potential sources of pollutants before they enter the drainage system. This effort is

coordinated with MCSTOPPP's business inspection and outreach activities (Chapter 5) and public information and participation activities (Chapter 6). The “downstream” element is to inspect gutters, swales, ditches, storm drain inlets, and storm drain outfalls as part of ongoing monitoring and maintenance of the drainage system, as described in this chapter.

Existing Conditions

Countywide Program Accomplishments

The success of MCSTOPPP's watershed focused approach requires understanding pollutant sources, transport, and effects on habitat and water quality. This understanding is based on the Countywide Program conducting extensive studies and creek monitoring activities such as the following:

- ◇ Checks on the health of creeks by conducting surveys and habitat assessments, such as the pilot creek assessment for Miller Creek and sediment and erosion studies for Novato Creek and Corte Madera Creek.

- ◇ Conducts biological monitoring to determine baseline creek health using bio-assessment guidelines developed by the California Department of Fish and Game. Thirty sites in Corte Madera Creek, Arroyo Corte Madera Del Presidio Creek, Miller Creek, and Novato Creek are sampled by professional biologists. As part of its monitoring effort, Countywide Program staff also supports volunteer creek monitoring with community groups such as the Friends of Corte Madera Creek and the Mill Valley StreamKeepers. The Countywide Program also sponsors volunteer monitoring using biological indicators (aquatic insects) in Corte Madera Creek, Arroyo Corte Madera Del Presidio Creek, Miller Creek, and Novato Creek.
- ◇ Promotes homeowner stewardship of creeks through outreach and education by developing and disseminating informational material (examples include *Creek Care: A Guide for Urban Marin Residents*; *Repairing Streambank Erosion*; *Tips for the Week-end Warrior: Controlling Erosion*; and *Yard Clippings and Your Creek Bank*). Countywide Program staff also provides technical assistance to Marin residents on bank restoration and use of native plants.

Most urban creek reaches in Marin County are on private property and are therefore the responsibility of the property owner. The most flood prone areas are managed by the Flood Control District who maintains many miles of creeks. New Flood Control project planning also integrates principles that protect water quality. For existing facilities, the Flood Control District purchases thousands of hours

of labor each year to maintain creeks within its funded zones.² The work includes bank stabilization and debris removal. Vegetation management is mostly limited to the cutting of low-hanging branches and removing trash, which could obstruct flow or cause erosion. In the Flood Control District drainage areas, Flood Control District staff supervise and train Marin Conservation Corps (MCC) crews on how to remove tree branches and other obstacles to flow in such a way as to preserve the canopy cover and riparian habitat. Countywide Program staff provide similar assistance to Local Program staff as requested.

Because the majority of Marin's surface drainage occurs through ditches, swales, open channels, and creeks, these facilities require regular inspection and maintenance to remove debris that can cause local flooding. Therefore, Marin's surface drainage systems are visually monitored to a much greater degree than would be an underground storm drain system. The Countywide Program developed the following forms and guidance if a non-stormwater discharge is identified:

- ◇ "Report of Non-stormwater Discharge" form to report and track non-stormwater discharges.
- ◇ "Warning and Notice to Abate Pollution" form printed in triplicate to complement and/or be used in lieu of the previous form. With this form, the municipal inspector can provide the responsible party with a written warning and describe the necessary follow-up. This or the previous

² Funding for this maintenance is through watershed-associated flood-control zones. Not all zones have been funded since the passage of Proposition 13 in 1978.

form is filled out in response to municipal staff or citizen complaints. Summaries of these reports are included in Annual Reports.

- ◇ “Enforcement Options for Illicit Discharge and Industrial/Commercial Stormwater Pollution Violations” to provide countywide consistent guidance on enforcement actions commensurate with the severity of compliance violations.

These three enforcement tools have been incorporated into the performance standards in Appendix A.

In early 1997, Marin County in association with all eleven cities and towns obtained detailed, high-resolution digital orthophotographs. The County Department of Public Works has corrected the County’s Assessor’s parcel base maps to coincide with physical features and visible infrastructure on the ground. The County will place the orthophotographic and various base layers on a publicly accessible server by Spring 2001. These Geographic Information System (GIS) generated maps can be used by Local Programs to identify or track sensitive areas, storm drain inlets that have been stenciled, outfall monitoring, illicit discharges, construction sites, business inspections, or public outreach efforts. Several of the Local Programs are already using a GIS.

Local Program Accomplishments

Local Program activities to protect Marin creeks and waterways include municipal maintenance and illicit discharge controls. Local Programs perform at a minimum, scheduled street sweeping, storm drain

maintenance, and creek maintenance. Local Programs also conduct additional cleaning activities when an illicit discharge is identified to remove the pollutants that have been discharged. Local Programs report these discharges to the Countywide Program for tracking and submittal in *Annual Reports* to the Regional Board. Since July 1994, Local Programs have swept over 105 thousand miles, removing over 39 thousand cubic yards and over 450 tons of material. Over 42 thousand storm drain inlets and other facilities (such as culverts, pump stations, silt basins, lagoons, and detention ponds) were cleaned and almost 40 thousand cubic yards of material were removed.

One of the ways Local Programs actively work to eliminate illicit discharges is by surveying likely dumping locations to find potential sources of pollutants before they enter the drainage system. This information is also tracked and reported to the Regional Board.

Local Programs maintain some creek reaches, along with v-ditches and culverts, as funding is available. Fairfax, Mill Valley, Ross, San Anselmo, and the County work with local residents to actively maintain these reaches by involving volunteers in annual or semi-annual debris removal. These efforts offer opportunities to review the condition of creeks, to inspect outfalls, and to remove trash and other materials that may be harmful to wildlife and water quality. Table 3-1 summarizes creek clean-up and maintenance activities since 1995.

Belvedere and Tiburon manage no creeks within their boundaries; the municipal storm drains discharge directly into Richardson Bay. Sausalito has very little remaining open creeks

but also has a storm drain system that mainly discharges runoff directly into Richardson or San Francisco Bay.

Major Tasks and Schedules

Task 1. Creek Surveys and Habitat Assessments

During 1999, MCSTOPPP conducted a three-day workshop to train creek professionals and citizen volunteers on creek monitoring techniques using biological indicators. Creek monitoring began on a pilot scale along reaches of Arroyo Corte Madera del Presidio, Corte Madera Creek, Miller Creek, and Novato Creek. The next task will be to assess the pilot program's effectiveness and determine the potential for continuing these assessments on a larger scale (Task 1A). Through the Regional Board and the BASMAA Monitoring Committee, Countywide Program staff will coordinate these findings with regulators and other stormwater programs (Task 1B). If findings from the pilot assessment indicate implementation of the watershed assessments on a larger scale would be successful and beneficial, MCSTOPPP will conduct additional volunteer training workshops (Task 1C), coordinate the next phase of watershed assessments (Task 1D), and compile the data collected for reporting (Task 1E). These assessments would also fulfill watershed studies being requested by Regional Board staff.

Task 2. Volunteer Creek Monitoring and Homeowner Stewardship

Community volunteers are a valuable resource for MCSTOPPP. With support from Countywide Program staff, Local Program staff will continue to take the lead in reaching out to

community groups and volunteers about creek monitoring activities (Task 2A). Local Program staff is responsible for making sure the community knows what is - or is not - allowed to be discharged to storm drains, and who to contact to report a spill. Local Program staff will also follow-up on any illicit discharges reported by the community (Task 2B). The Countywide Program will continue to develop educational materials to assist Local Programs' outreach to community groups (Task 2C) or provide technical assistance on specific issues (Task 2D), as the need is identified.

There are several, well-organized creek groups in Marin that conduct their own watershed studies through funding from state agencies and/or MCSTOPPP. Countywide Program staff will continue to integrate information from creek surveys or habitat assessments conducted by community groups with studies conducted by MCSTOPPP (Task 2E).

Task 3. GIS/Mapping

By 2002, most Marin municipalities will have GIS capability. As municipalities obtain the hardware and software necessary to utilize GIS, MCSTOPPP will coordinate the interagency GIS ad-hoc work group (Task 3A) so that municipalities can share how they utilize GIS as a tool to support their Local Programs as appropriate (Task 3B).

Task 4. Municipal Maintenance Activities

To control pollutant discharges from municipal maintenance activities, municipalities will implement Tier I (Task 4A) and Tier II (Task 4B) performance standards as detailed in Appendix A. The Countywide

Program will develop guidance for implementing the performance standards (Task 4C) and/or educational materials for Marin residents (Task 4D) as needs are identified through the ASC or the CAC. One of the needs that have already been identified is to conduct pesticides reduction training for municipal staff, including staff from Parks and Recreation and School Districts (Task 4E).

The reduction of pesticides use will also coordinate well with the goals and objectives of TMDL requirements discussed in Chapter Seven. A workshop for pesticides reduction will be coordinated by the Countywide Program (Task 4F). Marin County Flood Control staff will also continue to participate in BASMAA's Operational Permits Committee (OPC) to share with the other MCSTOPPP

Table 3-1. Creek Cleanup and Maintenance Activities Between 1995 through 1999	
Municipality	Activities
Belvedere	NA- No creeks managed by the City,
Corte Madera	Roadside ditches, canals, levees and drainage easements were cleaned on an annual and an as needed basis. San Quentin crews and the Marin Conservation Crews cut back weeds and cleaned litter several times a year along the Bayside Trail, Shorebird Marsh, and the High and Low Canal. Additional contractors were hired to clean the regions along the canals.
Fairfax	Creek cleanups occurred annually, with assistance from local volunteers. Bridge cleanups were held at various sites which include graffiti and litter removal, brush clearing, etc.
Larkspur	Property owners received inspections/notices. San Quentin crews and City staff cleaned several regions adjacent to creek banks near Ward Street and Magnolia, from Doherty Bridge to Meadowood Bridge the bike path, and Larkspur Drive to Corte Madera Creek.
Marin County	Contracted with MCC for inspection and maintenance of creeks in flood zones 1,3,4, 6, 7,9, and 10. MCC also worked with local residents to conduct inspections and cleanup activities at Miller Creek and Sleepy Hollow Creek.
Mill Valley	City crews conducted semi-annual cleanups at various locations. Contracted with the MCC and San Quentin crews to clean debris/brush in various channels particularly Sutton Manor drainage system and Arroyo Corte Madera Del Presidio.
Novato	Flood Control District crews completed a full cleanup of all County facilities. The City contracted MCC crews and cleaned 1.5 miles of creek under the City's jurisdiction. The City provided trucks, tractors, etc. to assist the MCC crews.
Ross	City crews conducted annual creek cleanup and sediment removal, specifically under the bridge at Lagunitas Road. Volunteers also conduct an annual cleanup day.
San Anselmo	Public Works staff coordinated with Flood Control staff to plan annual volunteer cleanup of all creeks in October. Public Works staff performed maintenance prior to cleanup day. At Sleepy Hollow and Corte Madera Creeks, the town crews cut unwanted vegetation and fallen trees. The Volunteer and Community Resources Coordinator recruit volunteers to haul the cut debris to the curbside and pick up garbage found in the creek.
San Rafael	Contractors, San Quentin crews, and interns remove debris from creeks. San Quentin crews also cleaned creeks and culvert inlets.
Sausalito	City sponsored debris removal days. San Quentin crews cleaned about 25% of the City's creek areas. Public Works staff and San Quentin crews also cleaned the creek that runs behind the Corporation Yard, cleaned the storm drainage ditch at the Martin Luther King School, and cleared a felled tree from Toyon Creek.
Tiburon	No "creeks" in the incorporated area. A few large ravines are periodically cleaned and maintained.

agencies, information on ways to operate and maintain flood control channels that minimize impacts on water quality and riparian habitat (Task 4G). As requested by Regional Board staff, MCSTOPPP will also develop performance standards for activities conducted in open space areas (Task 4H).

Task 5. Illicit Discharge Control Activities

Appendix A details Tier I (Task 5A) and Tier II (Task 5B) performance standards that Local Programs will implement to control illicit discharges. These controls include both spill prevention (through inspection and outreach) and coordination with existing spill response programs to prevent non-stormwater discharges from reaching the storm drains. The Countywide Program will develop guidance for implementing the performance standards (Task 5C) and/or educational materials for Marin residents (Task 5D) as needs are identified through the ASC or the CAC. The Countywide Program will also conduct training workshops on the performance standards (Task 5E) as needed.

Table 3-2 describes task schedules and milestones for this component; Table 3-3 describes the roles of Countywide Program staff, Local Program staff, and the CAC.

Table 3-2. Schedule for Implementation of Municipal Maintenance and Illicit Discharge Control Tasks

TASKS AND SCHEDULE		Task Duration		Milestone				
		YEAR	1	2	3	4	5	
TASK	DESCRIPTION	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005		
1	Creek Surveys and Habitat Assessments							
	1A Assess Pilot Program Effectiveness	██████████	██████████	▼				
	1B BASMAA Monitoring Committee	██████████	██████████	██████████	██████████	██████████	██████████	▼
	1C Volunteer Training Workshops			██████████	██████████	██████████	██████████	██████████
	1D Conduct Watershed Assessments		██████████	██████████	██████████	██████████	██████████	██████████
	1E Reporting and Program Effectiveness					██████████	██████████	██████████
2	Volunteer Creek Monitoring and Homeowner Stewardship							
	2A Outreach to Community Groups and Volunteers	██████████	██████████	██████████	██████████	██████████	██████████	██████████
	2B Follow-up Illicit Discharge Reports from the Community	██████████	██████████	██████████	██████████	██████████	██████████	██████████
	2C* Develop Countywide Educational Materials	██████████	██████████	██████████	██████████	██████████	██████████	██████████
	2D* Provide Technical Assistance	██████████	██████████	██████████	██████████	██████████	██████████	██████████
	2E* Coordinate with Existing Community Activities Conducting Watershed Projects	██████████	██████████	██████████	██████████	██████████	██████████	██████████
3	GIS/Mapping							
	3A Interagency GIS AdHoc Work Group	██████████	██████████	██████████	██████████	██████████	██████████	██████████
	3B GIS to Facilitate Program Implementation			██████████	██████████	██████████	██████████	██████████
4	Municipal Maintenance Activities							
	4A Implement Tier I Performance Standards	██████████	██████████	██████████	██████████	██████████	██████████	██████████
	4B Implement Tier II Performance Standards				██████████	██████████	██████████	██████████
	4C* Develop Guidance on Implementation of Performance Standards	██████████	██████████	██████████	██████████	██████████	██████████	██████████
	4D* Develop Countywide Educational Materials	██████████	██████████	██████████	██████████	██████████	██████████	██████████
	4E Pesticides Reduction Training for Municipal Staff		▼					
	4F Annual Maintenance Staff Training Workshops			▼	▼	▼	▼	▼
	4G BASMAA Operations Permit Committee	██████████	██████████	██████████	██████████	██████████	██████████	██████████
	4H Develop Open Space Performance Standards			██████████	██████████	██████████	██████████	██████████

Table 3-2. Schedule for Implementation of Municipal Maintenance and Illicit Discharge Control Tasks

TASKS AND SCHEDULE		Task Duration		Milestone				
		YEAR	1	2	3	4	5	
TASK	DESCRIPTION	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005		
5	Illicit Discharge Control Activities							
	5A Implement Tier I Performance Standards							
	5B Implement Tier II Performance Standards							
	5C* Develop Guidance on Implementation of Performance Standards							
	5D* Develop Countywide Educational Materials							
	5E* Training Workshops on Performance Standards							
	* Milestones will depend on recommendations/requests from ASC, CAC, and/or community groups.							

Table 3-3. Roles for Municipal Maintenance and Illicit Discharge Controls Tasks

PROGRAM ROLES			∇ = Lead for this Task			
TASK		DESCRIPTION	Countywide Program	Local Program	Citizens Advisory Committee	Volunteers & Community
1	Creek Surveys and Habitat Assessments					
	1A	Assess Pilot Program Effectiveness	∇	Review/Comment	Review/Discuss	
	1B	BASMAA Monitoring Committee	∇	Discuss	Discuss	
	1C	Volunteer Training Workshops	∇ Facilitate	Participate	Participate	Participate
	1D	Conduct Watershed Assessments	∇ Facilitate	Roles will depend on type and location of study.		
	1E	Reporting and Program Effectiveness	∇ Coordinate	Discuss	Discuss	
2	Volunteer Creek Monitoring and Homeowner Stewardship					
	2A	Outreach to Community Groups and Volunteers	Facilitate	∇ Coordinate	Discuss	Participate
	2B	Follow-up Illicit Discharge Reports from the Community	Coordinate	∇ Follow-up Rpts.	Provide Info	Provide Info
	2C*	Develop Countywide Educational Materials	∇	Request/Review	Request/Comment	
	2D*	Provide Technical Assistance	∇ Facilitate	Request/Discuss	Request/Discuss	
	2E*	Coordinate with Existing Community Activities Conducting Watershed Projects	∇ Coordinate	Coordinate Info	Coordinate Info	Coordinate Info
3	GIS/Mapping					
	3A	Interagency GIS AdHoc Work Group	∇ Facilitate	Assess Opportunities	Discuss	
	3B	GIS to Facilitate Program Implementation		∇		
4	Municipal Maintenance Activities					
	4A	Implement Tier I Performance Standards	Review/Discuss	∇	Discuss	
	4B	Implement Tier II Performance Standards	Review/Discuss	∇	Discuss	
	4C*	Develop Guidance on Implementation of Performance Standards	∇	Request/Review		
	4D*	Develop Countywide Educational Materials	∇	Request/Review	Request/Comment	
	4E	Pesticides Reduction Training for Municipal Staff	∇ Facilitate	Participate	Discuss	
	4F	Annual Maintenance Staff Training Workshops	∇ Facilitate	Participate	Discuss	
	4G	BASMAA Operations Permit Committee	∇ Coordinate	Discuss	Discuss	
	4H	Develop Open Space Performance Standards	∇ Coordinate	Review/Comment	Discuss	

Table 3-3. Roles for Municipal Maintenance and Illicit Discharge Controls Tasks

PROGRAM ROLES			▼ = Lead for this Task			
TASK		DESCRIPTION	Countywide Program	Local Program	Citizens Advisory Committee	Volunteers & Community
5	Illicit Discharge Control Activities					
	5A	Implement Tier I Performance Standards	Review/Discuss	▼	Discuss	
	5B	Implement Tier II Performance Standards	Review/Discuss	▼	Discuss	
	5C*	Develop Guidance on Implementation of Performance Standards	▼	Request/Review		
	5D*	Develop Countywide Educational Materials	▼	Request/Review	Request/Comment	
	5E*	Training Workshops on Performance Standards	▼ Facilitate	Request/Participate	Discuss	
	* Milestones will depend on recommendations/requests from ASC, CAC, and/or community groups.					

Building and Renewing

Land disturbance leaves soils vulnerable to erosion. Sediment in runoff from construction sites, and wastes generated during construction, can pollute creeks and waterways. Long term, increases in the amount of paved and roofed areas cause increases in the volume and peak flow of runoff. Increased runoff then mobilizes and transports pollutants into storm drains, creeks, and waterways, which can permanently alter aquatic habitat. The Regional Board's Basin Plan requires that:

"Cities and counties should revise their planning procedures to develop or revise comprehensive master plans to assure that increases in pollutant loading associated with newly developed and significantly redeveloped areas are, to the maximum extent practicable, limited. Areas that are in the process of development, or redevelopment, offer the greatest potential for utilizing the full range of structural and non-structural control measures to limit increases in pollutant loads. Comprehensive planning must be used to incorporate these measures in the process of developing. Cities and counties should fully utilize their authority under California Environmental Quality Act (CEQA) to assure implementation of control measures at all

proposed development and significant redevelopment projects."

Existing Conditions

Countywide Program Accomplishments

Since 1994, the Countywide Program has assisted Local Programs to develop and implement additional controls into planning documentation and policies, such as the CEQA initial studies checklist, General Plan, and Zoning Ordinance. Such policies can help reduce the effects of development on aquatic resources. The Countywide Program also maintains a database of development projects, which expands on an existing database to track municipalities' application of stormwater quality control measures.

Other planning and coordination functions that the Countywide Program performs include working with BASMAA and Regional Board staff on developing guidance and setting policies. The Countywide Program plays a major role in providing outreach and education to the building industry. Some of the activities conducted by the Countywide Program include: advising municipal staff on

creek projects, conducting workshops for planners, engineers and contractors; making presentations to Planning Commissioners and other local officials; and engaging municipal planners to take a more active role in MCSTOPPP.

Local Program Accomplishments

Each Local Program conducts the following to control pollutant discharges from development activities:

- ◇ Develops and distributes handouts describing BMPs for the construction industry (such as the *Blueprint for a Clean Bay* booklet) which are often attached to, or placed as conditions on, building permits.
- ◇ Inspects and enforces requirements for construction projects to mitigate impacts to water quality and aquatic habitat.
- ◇ Restricts wet weather grading and requires effective implementation and maintenance of erosion and sediment controls.

Local Programs have also already begun to integrate stormwater controls into their planning process and are well on their way to achieving performance standards scheduled for implementation by 2003. (See Appendix A for details.)

Major Tasks and Schedules

Task 1. New Development and Redevelopment Controls

To control pollutant discharges from development, redevelopment, and construction activities, municipalities will implement Tier I (Task 1A) and Tier II (Task 1B) performance

standards as detailed in Appendix A. The Countywide Program will develop guidance for implementing the performance standards (Task 1C) as needs are identified through the ASC or the CAC. The Countywide Program will continue to participate in BASMAA's New Development Committee (Task 1D) to coordinate with other stormwater programs in the Bay Area and with Regional Board staff.

Task 2. Planning and Design

To assist Local Programs implement performance standards for planning and design activities, the Countywide Program will conduct training workshops for elected and other local officials, such as Flood Control Advisory Boards and Planning Commissions (Task 2A), planning staff (Task 2B), and architects, engineers, and designers (Task 2C) with assistance and direction from the ASC and CAC. The Countywide Program will also continue to conduct workshops on biotechnical bank stabilization techniques, as needed (Task 2D). In addition to conducting workshops, the Countywide Program will further assist Local Programs protect Marin's watersheds by:

- ◇ Adopting model ordinance language for stormwater controls on new development and redevelopment projects (Task 2E);
- ◇ Adopting model creek protection language for General Plans (Task 2F);
- ◇ Developing guidance on post construction stormwater quality controls, as needed (Task 2G);
- ◇ Incorporating findings from the watershed studies (described in Chapter Three) into the planning process when appropriate (Task 2H).

Task 3. Construction Site Controls

The MCSTOPPP will conduct training workshops to minimize the impact of construction activities on creeks and aquatic habitat. The Countywide Program will conduct workshops for engineers and building staff (Task 3A) and contractors (Task 3B). One of the workshops will specifically address the regulatory requirements involved when conducting work in or near creeks (Task 3C). As needed, the Countywide Program will develop guidance on construction BMPs (Task 3D).

Table 4-1 describes task schedules and milestones for this component; Table 4-2 describes the roles of Countywide Program staff, Local Program staff, and the CAC.

Table 4-1. Schedule for Implementation of New Development, Redevelopment, and Construction Controls Tasks

TASKS AND SCHEDULE		Task Duration		Milestone		
		1	2	3	4	5
TASK	DESCRIPTION	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
1	New Development and Redevelopment Controls					
	1A Implement Tier I Performance Standards	[Hatched bar]				
	1B Implement Tier II Performance Standards				[Hatched bar]	
	1C* Develop Guidance on Implementation of Performance Standards	[Hatched bar]				
	1D BASMAA New Development Committee	[Hatched bar]				
2	Planning and Design					
	2A Training Elected and Other Local Officials	▽		▽		▽
	2B Training Workshops for Planning Staff	▽		▽		▽
	2C Training Workshops for Architects, Engineers, & Designers		▽		▽	
	2D* Biotechnical Bank Stabilization Workshops	[Hatched bar]				
	2E Model Ordinance to Require Stormwater Quality Controls	[Hatched bar]		▽		
	2F Model Creek Protection Language for General Plans		[Hatched bar]		▽	
	2G* Develop Other Countywide Guidance on Post Construction Stormwater Quality Controls	[Hatched bar]				
	2H Incorporate Findings from Watershed Studies into Planning	[Hatched bar]				
3	Construction Site Controls					
	3A Training Workshops for Engineering and Building Staff			▽		▽
	3B Training Workshops for Contractors		▽		▽	
	3C Creek Permitting Workshops	▽				
	3D* Develop Other Countywide Guidance on Construction BMPs	[Hatched bar]				
* Milestones will depend on recommendations/requests from ASC and/or CAC.						

Table 4-2. Roles for New Development, Redevelopment, and Construction Controls Tasks

PROGRAM ROLES			∇ = Lead for this Task				
TASK	DESCRIPTION	Countywide Program	Local Program			Citizens Advisory Committee	
			Stormwater Coordinator	Engineering/ Building Staff	Planning Staff		
1	New Development and Redevelopment Controls						
1A	Implement Tier I Performance Standards		∇	∇	∇		
1B	Implement Tier II Performance Standards		∇	∇	∇		
1C*	Develop Guidance on Implementation of Performance Standards	∇	Request/Review	Request Info	Request Info		
1D	BASMAA New Development Committee	∇ Coordinate	Discuss	Discuss	Discuss	Discuss	
2	Planning and Design						
2A	Training Elected and Other Local Officials	∇ Facilitate	Coordinate			Discuss	
2B	Training Workshops for Planning Staff	∇ Facilitate	Coordinate		Participate	Discuss	
2C	Training Workshops for Architects, Engineers, & Designers	∇ Facilitate	Coordinate	Participate		Discuss	
2D*	Biotechnical Bank Stabilization Workshops	∇ Facilitate	Coordinate	Participate	Participate	Coordinate	
2E	Model Ordinance to Require Stormwater Quality Controls	∇	Review/Comment	Review/Comment	Review/Comment	Discuss	
2F	Model Creek Protection Language for General Plans	∇	Review/Comment		Review/Comment	Discuss	
2G*	Develop Other Countywide Guidance on Post Construction Stormwater Quality Controls	∇	Request/Review	Review	Review	Request/Discuss	
2H	Incorporate Findings from Watershed Studies into Planning	∇ Facilitate	Coordinate	Review	∇	Discuss	
3	Construction Site Controls						
3A	Training Workshops for Engineering and Building Staff	∇ Facilitate	Coordinate	Participate		Coordinate	
3B	Training Workshops for Contractors	∇ Facilitate	Coordinate	Participate		Coordinate	
3C	Creek Permitting Workshops	∇ Facilitate	Coordinate	Participate	Participate	Coordinate	
3D*	Develop Other Countywide Guidance on Construction BMPs	∇	Request/Review			Discuss	
* Milestones will depend on recommendations/requests from ASC and/or CAC.							

Educating Ourselves at Work

Though the urban corridor in Marin is largely residential, business activities (primarily commercial with only a few industrial) can also cause the discharge of pollutants to Marin creeks and waterways. Materials stored outdoors can pollute stormwater. Another source of pollutants is the discharge of washwaters (from cleaning windows and other surfaces, for example) and other wastewaters from business activities. To mitigate impacts from commercial and industrial activities, Local Programs inspect and conduct outreach to businesses. Business inspections are coordinated with existing fire, building, or pretreatment inspection programs and the County Environmental Health Department. This approach allows MCSTOPPP agencies to minimize inspection costs and disruptions to businesses.

Existing Conditions

Countywide Program Accomplishments

The Countywide Program has assisted Local Programs develop their stormwater inspection programs by sponsoring training workshops for business inspectors about identifying stormwater pollutant sources. The Countywide Program has developed several

outreach pieces that Local Programs use to educate businesses about stormwater pollution. The Countywide Program has also developed targeted BMP information for food handling facilities and gas stations and related businesses.

To further maximize resources by coordinating information among different inspection agencies, the County Environmental Health Department has agreed to notify Stormwater Coordinators of stormwater problems found during health inspections at retail food facilities. Local Program staff conduct all stormwater follow-up and enforcement. The County Environmental Health Department has also agreed to distribute MCSTOPPP BMP information to restaurants and other related businesses during its inspections.

When compliance cannot be achieved through outreach and inspection, enforcement may be necessary. To help ensure consistent enforcement countywide, an ad hoc Enforcement Work Group of the ASC developed several tools described previously in Chapter Three: “Report of Non-stormwater Discharge” form to report and track non-stormwater discharges; “Warning and Notice to

Abate Pollution” form printed in triplicate to provide the discharger written notification to cease pollutant discharge to the storm drains; and “Enforcement Options for Illicit Discharge and Industrial/Commercial Stormwater Pollution Violations” to provide guidance on enforcement actions commensurate with the severity of compliance violations.

Horse Facilities

Regional Board staff and the CAC have identified horse corrals as potential pollutant sources in Marin watersheds. Small horse stables and corrals within urbanized areas could, because of erosion and poor management of manure, contribute suspended solids, ammonia, and oxygen demand to local creeks and waterways. To better understand the scope of the problem in Marin, Countywide Program staff conducted a visual assessment of pollution potential from horses throughout the entire north portion of east Marin (primarily Indian Valley and Atherton) and provided BMP information to available horse owners. Figure 5-1 illustrates the locations of horse areas and density in east Marin. The Countywide Program has also participated in the development of a BMP brochure developed by the Bay Area Resource Conservation District (RCD) and has co-sponsored workshops for horse owners on manure management through the Marin Horse Council.

Local Program Accomplishments

MCSTOPPP’s primary strategy is to gain compliance through education. On this basis, outreach to businesses is an important part of each municipality’s Local Program. Several Local Programs mail stormwater information to

businesses within their jurisdiction. Many have also begun to distribute stormwater information with business license applications and annual renewals.

In 1998, each Local Program developed a Business Inspection Plan which evaluates the municipality’s business base; selects agencies to conduct inspections, stormwater follow-up and enforcement when necessary; and develops enforcement guidelines and procedures. Table 5-1 describes the agencies that conduct inspection, follow-up, and enforcement activities. In general, stormwater inspections are incorporated into existing fire, building, or pretreatment inspection programs. In most cases, the inspecting agency refers the stormwater problem to the local Stormwater Coordinator for follow-up. In some cases, the field inspector will be the one to do the follow-up where he or she has the authority to enforce the municipality’s Stormwater Ordinance. Follow-up includes educating the business about stormwater issues and recommending appropriate BMPs. Businesses are cited in violation of the Stormwater Ordinance if stormwater pollution is not reduced to the maximum extent practicable.

The County’s Local Program also reviews plans for horse stables coming into the Land Development Department. Most of the horse corrals and stables are located in Unincorporated County with a few located in Novato.

Major Tasks and Schedule

Task 1.0 Coordinated Inspections

To control pollutant discharges from business activities, municipalities will

Municipality	Inspections	Stormwater Follow-up	Enforcement
Belvedere	Stormwater Coordinator		
Corte Madera	Fire Dept., CMSA	Stormwater Coordinator	Code Enforcement Officer
Fairfax	Fire Dept., CMSA	Building Depart.	Stormwater Coordinator
Larkspur	CMSA., Building Dept.	Stormwater Coordinator	Code Enforcement Officer
Marin County	Fire Dept., Environmental Health Services, Waste Management	Public Works	County Sheriff
Mill Valley	Stormwater Coordinator		Code Enforcement Officer
Novato	Fire Dept., NSA	Community Development Dept.	Code Enforcement Officer
Ross	Fire Dept.		
San Anselmo	Fire Dept., Building Dept.	Building Dept.	
San Rafael	Fire Dept., CMSA	Fire Dept., CMSA, Stormwater Coordinator	Fire Dept., CMSA, Stormwater Coordinator
Sausalito	Fire Dept.	Stormwater Coordinator	Police Dept.
Tiburon	Public Works		Police Dept.

CMSA = Central Marin Sanitary Agency

NSA = Novato Sanitary Agency

implement Tier I (Task 1A) performance standards as detailed in Appendix A. The Countywide Program will develop guidance for implementing the performance standards (Task 1B) and inspection materials (Task 1C) as needs are identified through the ASC or the CAC.

Task 2.0 Outreach and Assistance to Businesses

Local Programs will continue to complement inspection programs by conducting general outreach to business owners and operators (Task 2A). The Countywide Program will assist Local Programs by developing countywide educational materials, as needed (Task 2B), identifying and conducting outreach to targeted businesses as identified by the ASC and CAC (Task 2C), and conducting training workshops for inspection staff (Task 2D) and business owners (Task 2E). The ASC and CAC have already identified the following businesses to target for outreach:

- ◇ Pesticides reduction training for pest control operators, pest control applicators, and landscapers;
- ◇ Integrated pest management (IPM) nursery training and outreach;
- ◇ Some marina coordinated through the Marin Conservation Corps's Dock Walkers Program; and
- ◇ Mobile Cleaners coordinated through BASMAA.

As possible, MCSTOPPP will coordinate with other regional outreach and education programs such as the Bay Area Green Business Program (Task 2F).

Task 3.0 Horse Corrals

MCSTOPPP will continue its outreach and educational activities with horse owners to mitigate impacts from horse corrals. Local Programs will identify and assist "problem" stables (Task 3A) while the Countywide Program will conduct training workshops about

BMPs for horse corral (Task 3B) and will coordinate outreach activities with the RCD (Task 3C) and Marin Horse Council (Task 3D).

Table 5-2 describes task schedules and milestones for this component; Table 5-3 describes the roles of Countywide Program staff, Local Program staff, and the CAC.

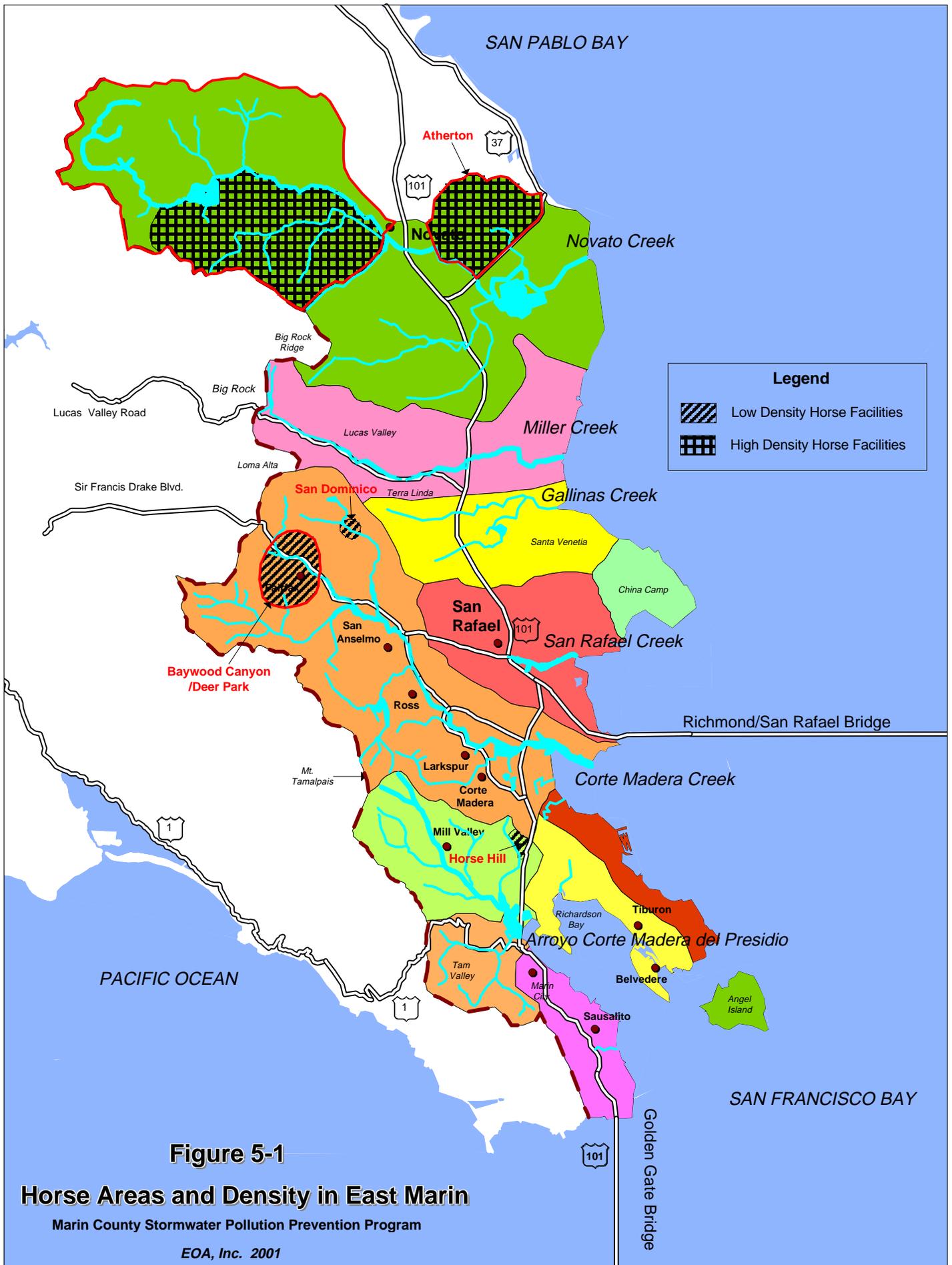


Table 5-2. Schedule for Implementation of Business Inspection and Outreach Tasks

TASKS AND SCHEDULE		Task Duration		Milestone		
		1	2	3	4	5
TASK	DESCRIPTION	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
1	Coordinated Inspections					
	1A Implement Tier I Performance Standards	[Task Duration: 2000-2001]				
	1B* Develop Guidance on Implementation of Performance Standards				[Task Duration: 2003-2004]	
	1C* Develop Countywide Inspection Materials	[Task Duration: 2000-2001]				
2	Outreach and Assistance to Businesses					
	2A Conduct General Outreach to Businesses	[Task Duration: 2000-2001]				
	2B* Develop Countywide Educational Materials	[Task Duration: 2000-2001]				
	2C* Identify and Conduct Outreach to Targeted Industries	[Task Duration: 2000-2001]				
	2D Training Workshops for Inspection Staff	▼		▼		▼
	2E Training Workshops for Business Owners		▼		▼	
	2F* Coordinate with Regional Outreach and Education to Businesses	[Task Duration: 2000-2001]				
3	Horse Corrals					
	3A Identify and Assist "Problem" Stables	[Task Duration: 2000-2001]				
	3B Training Workshops about BMPs for Horse Corrals	▼	▼	▼	▼	▼
	3C* Cooperate with RCD Outreach Activities to Horse Owners	[Task Duration: 2000-2001]				
	3D* Coordinate Outreach and Education through Marin Horse Council	[Task Duration: 2000-2001]				
* Milestones will depend on recommendations/requests from ASC and/or CAC.						

Table 5-3. Roles for Business Inspection and Outreach Tasks

PROGRAM ROLES			▽ = Lead for this Task		
TASK	DESCRIPTION	Countywide Program	Local Program		Citizens Advisory Committee
			Stormwater Coordinator	Inspecting Agency	
1	Coordinated Inspections				
	1A Implement Tier I Performance Standards		▽	▽	
	1B* Develop Guidance on Implementation of Performance Standards	▽	Request/Review	Request Info	
	1C* Develop Countywide Inspection Materials	▽	Request/Review	Request Info	
2	Outreach and Assistance to Businesses				
	2A Conduct General Outreach to Businesses		▽	▽	Discuss
	2B* Develop Countywide Educational Materials	▽	Request/Review	Request Info	Request/Discuss
	2C* Identify and Conduct Outreach to Targeted Industries	▽ Facilitate	▽ Coordinate	Participate	▽ Coordinate
	2D Training Workshops for Inspection Staff	▽ Facilitate	▽ Coordinate	Participate	Discuss
	2E Training Workshops for Business Owners	▽ Facilitate	▽ Coordinate	Participate	▽ Coordinate
	2F* Coordinate with Regional Outreach and Education to Businesses	▽ Coordinate	Coordinate	Discuss	Discuss
3	Horse Corrals				
	3A Identify and Assist "Problem" Stables	Coordinate	▽		Discuss
	3B Training Workshops about BMPs for Horse Corrals	▽ Facilitate	Coordinate		Discuss
	3C* Cooperate with RCD Outreach Activities to Horse Owners	▽	Discuss		Discuss
	3D* Coordinate Outreach and Education through Marin Horse Council	▽	Discuss		Discuss
	* Milestones will depend on recommendations/requests from ASC and/or CAC.				

Educating Ourselves at Home and School

Residential and school-based education and outreach activities have always been one of MCSTOPPP's strongest elements. As part of MCSTOPPP's public information and participation (PIP) activities, this element includes supporting Clean Water Stewardship Grants, school-based education, and other MCSTOPPP elements. In 1999, MCSTOPPP's school program was one of twelve winners of the 1999 California State Association of Counties (CSAC) Challenge Award (out of over one hundred and twenty applicants) for being one of the most creative county programs in the state.

Existing Conditions

Countywide Program Accomplishments

To increase visibility and awareness of Marin watersheds, the Countywide Program created, produced, and/or distributed various educational items and outreach materials such as:

- ◇ A watershed diorama used at educational events and in schools, which illustrates sources of pollution and how they get into waterways, bays, or the Ocean.
- ◇ Workshops for teachers on creating healthy school gardens and watersheds.

- ◇ Presentations to schools on "clean water" using magic.
- ◇ General awareness brochures such as *STOPPP the Flow of Stormwater Pollution* and posters such as "Your Storm Drain: Express Route to the Bay".
- ◇ Consumer and residential guidelines for using less toxic methods to control pests; improving creek health and managing woody debris; repairing streambank erosion; composting; and recycling used motor oil just to name a few.
- ◇ Novelty and collectible items with the message "Protect Our Water and Wildlife".
- ◇ BMP guidance for restaurants, gas stations, and construction activities.

Ongoing Countywide Programs also include:

- ◇ Maintaining a webpage. MCSTOPPP is available on-line at <http://www.mcstoppp.org>.
- ◇ Sponsoring several training workshops on IPM for nursery personnel and master gardeners and continuing to work with master gardeners to offer community workshops on less toxic pest management.
- ◇ Participating in regional activities such as BASMAA's regional advertising campaign

and Stormwater Pollution Prevention Hotline (1-888-BAY-WISE).

- ◇ Managing used oil block grant funds and opportunity grant funds from the California Integrated Waste Management Board and coordinating the stormwater pollution prevention message with used oil recycling.

Local Program Accomplishments

In recent years, Local Programs have become more and more active in raising watershed awareness in their neighborhoods. The role of the local Stormwater Coordinator has expanded beyond responding to inquiries from the public. Local Program staff have visited schools and worked with local volunteer groups and organizations.

All of the Local Programs have stenciled storm drains within their jurisdictions with “no dumping”, and many have re-stenciled fading messages. Some cities and towns organized volunteers to install the stencil, while others relied on their own public works crews.

Major Tasks and Schedule

Task 1.0 Public Information/Participation Activities

To control pollutant discharges from residential sources, municipalities will implement Tier I (Task 1A) and Tier II (Task 1B) performance standards as detailed in Appendix A. The Countywide Program will develop guidance for implementing the performance standards (Task 1C), reprint existing material (Task 1D) as needs are identified through the ASC or the CAC, and

continue to administer Used Oil Grants (Task 1E).

Task 2.0 Watershed Awareness at Home

MCSTOPPP will continue to raise watershed awareness among Marin residents (Task 2A). Examples include:

- ◇ Sponsoring community watershed groups through Clean Water Stewardship Grants (see Chapter Three for examples);
- ◇ Participating in BASMAA’s regional advertising campaign;
- ◇ Building and enhancing MCSTOPPP’s web page; and
- ◇ Supporting innovative methods to increase watershed awareness at home.

As the ASC and CAC identify additional home-based education and outreach needs (Task 2B), the Countywide Program will develop countywide educational items (Task 2C) and/or conduct workshops and special events or programs (Task 2D) for Marin residents.

Task 3.0 Watershed Awareness at School

MCSTOPPP will also continue to raise watershed awareness in schools (Task 3A) with activities such as:

- ◇ Making Clean Water Stewardship Grants available to local schools;
- ◇ Conducting school outreach/teacher workshops;
- ◇ Supporting School Environmental Education Docent (SEED) outreach activities; and

- ◇ Supporting other unique methods for learning about Marin's watersheds.

As the ASC and CAC identify additional school-based education and outreach needs (Task 3B), the Countywide Program will develop countywide school-based educational items (Task 3C) and/or conduct school-based workshops and special events (Task 3D).

Table 6-1 describes task schedules and milestones for this component; Table 6-2 describes the roles of Countywide Program staff, Local Program staff, and the CAC.

Table 6-2. Roles for Public Information Participation Tasks

PROGRAM ROLES			✓ = Lead for this Task		
TASK		DESCRIPTION	Countywide Program	Local Program	Citizens Advisory Committee
1	Public Information/Participation Activities				
	1A	Implement Tier I Performance Standards		✓	
	1B	Implement Tier II Performance Standards		✓	
	1C*	Develop Guidance on Implementation of Performance Standards	✓	Request/Review	
	1D*	Update/Reprint Existing Pamphlet/Brochure Material	✓	Request/Review	Request/Review
	1E	Administer Used Oil Grants	✓		
2	Watershed Awareness at Home				
	2A	Outreach and Education to Marin Residents	✓ Facilitate		
	2B	Identify Additional Residential Education and Outreach Needs	✓ Facilitate	✓ Request/Review	✓ Request/Review
	2C*	Develop Countywide Educational Materials for Marin Residents	✓ Facilitate	Request/Review	Request/Review
	2D*	Conduct Workshops and Special Events for Marin Residents	✓ Facilitate	Coordinate	Coordinate
3	Watershed Awareness at School				
	3A	Outreach and Education to Marin Schools	✓ Facilitate	Coordinate	Discuss
	3B	Identify Additional School-based Education and Outreach Needs	✓ Facilitate	✓ Request/Review	✓ Request/Review
	3C*	Develop Countywide School-based Educational Materials	✓ Facilitate	Request/Review	Request/Review
	3D*	Conduct School-based Workshops and Special Events	✓ Facilitate	Coordinate	Coordinate
	* Milestones will depend on recommendations/requests from ASC and/or CAC.				

Protecting the Future

One of the goals of this element is to facilitate a smooth transition to a municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit-based program during the five year period of this *Action Plan 2005*. MCSTOPPP's strategy is to participate in state and regional organizations that are helping to define the implementation of the Phase II NPDES permitting requirements. Another goal of this element would be to participate in the process for establishing and implementing total maximum daily loads (TMDLs). It is important that MCSTOPPP stays on top of new regulatory requirements and initiatives, thus playing an active role in shaping the future of Marin's watersheds

Regulatory Background

Municipal Stormwater Permit

Federal stormwater regulations require Marin municipalities to obtain permit coverage under the NPDES by 2003. For administrative efficiency and to reduce paperwork, the Regional Board is expected to adopt a NPDES general permit and specific instructions on how to obtain coverage under the general permit. Typically, the application requirements can be satisfied with the submission of a Notice of

Intent (NOI) to comply with the general permit.

The Phase II NPDES stormwater permitting regulations require that MCSTOPPP submit with its permit application "a list of best management practices that will be implemented for each minimum control measure in their storm water management program." MCSTOPPP must also submit, "measurable goals for the development and implementation of each BMP." The six minimum control measures described in the regulations are:

1. Public education and outreach on stormwater impacts.
2. Public involvement/participation.
3. Illicit discharge detection and elimination.
4. Construction site storm runoff control.
5. Post construction stormwater management in new development and redevelopment.
6. Pollution prevention/good housekeeping for municipal operations.

The activities described in this *Action Plan 2005* represent MCSTOPPP's BMPs to implement these minimum control measures. The performance standards detailed in

Appendix A represent MCSTOPPP's measurable goals.

The Phase II stormwater regulations require annual reporting, which will be incorporated into the reporting task (Task 4) of Chapter Two.

Total Maximum Daily Loads

Marin municipalities will also need to comply with federally mandated total maximum daily loads (TMDLs) assigned to stormwater discharges for certain pollutants. As an impaired water body, the San Francisco Bay can only assimilate certain amounts (or loads) of particular pollutants. The Regional Board is responsible for defining TMDL limits for each impairing pollutant and assigning load and waste load allocations to different discharges to the Bay, including stormwater.

During the five-year period of this *Action Plan 2005*, the Regional Board will be developing TMDLs and Implementation Plans for several pollutants in Marin watersheds. At the time this *Plan* is being written, the Regional Board is working on TMDLs for mercury in San Francisco Bay and anticipates completing the Implementation Plan in 2001. The Regional Board's work plan also calls for an urban creeks diazinon TMDL to be developed by June 2002, followed by an Implementation Plan by June 2003. The Regional Board staff's technical report and Implementation Plan for PCBs are expected to be completed in 2002 and 2003 respectively. Table 7-1 summarizes the Regional Board staff's schedule for TMDL development that impact Marin County watersheds.

Watershed Initiative

In their efforts to protect water resources, the State Water Resources Control Board and the Regional Water Quality Control Boards are guided by a five year *Strategic Plan* (updated in 1997) that incorporates a watershed management approach to water resources protection. To address the complex relationships among point and nonpoint source discharges, ground and surface water interactions, and water quality and water quantity relationships involved in using a watershed approach, the State and Regional Boards created the Watershed Management Initiative (WMI) to integrate various regulatory programs and to encourage cooperative, collaborative efforts within watersheds to promote protection.

Each Regional Board has identified the watersheds, prioritized water quality issues, and developed watershed management strategies in its region. As part of this effort, the San Francisco Bay Regional Board has listed significant issues addressing urban runoff, stream and wetland habitat protection and pollutant impacts for the Marin County Watershed Management Area. According to the Regional Board, significant water quality issues in west Marin County watersheds include hill and gully erosion and impacts to stream corridors, runoff from confined animal (dairy) waste, and coliform contamination of shellfish growing areas in Tomales Bay. In eastern Marin, water quality issues include significant wetland fill or creek modification issues with each of the following: three major proposed development projects in diked wetland areas, a proposed flood control project on Corte Madera Creek, and a major erosion control project on Novato Creek.

Two watersheds within Marin County were designated as having special significance as being vital to Coho salmon survival: Lagunitas Creek and Redwood Creek. Tomales Bay is also listed as having special significance as a relatively unpolluted coastal estuary, despite being impaired due to impacts from pathogens, sediment, and mercury. Other waterbodies on the 303(d) list for nutrients, pathogens, and siltation are Lagunitas Creek and Walker Creek.

The Regional Board has proposed a work plan that includes overseeing the countywide stormwater program and working with MCSTOPPP on pilot bioassessment and stream assessment projects. Since its inception, MCSTOPPP has taken an active watershed management approach to water resources protection.

Major Tasks and Schedule

Task 1.0 Municipal Stormwater NPDES Permitting

To ensure Marin’s unique needs are represented, the Countywide Program will participate in regional and statewide organizations providing input and comment to the State and Regional Boards as they develop and adopt the permitting mechanism for the San Francisco Bay Area (Task 1A). Depending on the final permitting mechanism that is adopted by the Regional Board, the Countywide Program will coordinate Marin municipalities’ permit application (Task 1B). Permit compliance will be the responsibility of both the Countywide Program and the Local Programs, as described in this *Action Plan 2005* and the municipal stormwater permit. The Countywide Program, will coordinate any

additional permitting or regulatory issues, as they come up (Task 1C).

Task 2.0 TMDL Implementation

The Countywide Program will participate in regional activities to provide input to the Regional Board as they develop their technical reports TMDLs (Task 2A). As requested by the Regional Board, the Countywide Program will coordinate with Local Programs to gather and/or develop information on existing conditions (Task 2B). After the problem has been defined, the Countywide Program will review and provide comments on the Regional Board’s Implementation Plans (Task 2C). The Countywide Program will coordinate any additional regulatory issues concerning TMDL development and implementation, as needed (Task 2D).

Task 3.0 Other Watershed Regulatory Initiatives

As indicated by the title of this chapter, MCSTOPPP is proactive in helping to shape the future of watershed protection and restoration. As identified by the ASC and CAC, the Countywide Program will continue to respond to regulatory initiatives that have impacts to Marin’s watershed (Task 3A).

Table 7-2 describes task schedules and milestones for this component; Table 7-3 describes the roles of Countywide Program staff, Local Program staff, and the CAC.

Table 7-1. TMDL Development Schedule for Marin Watershed Management Areas (projected schedule as of June 2000)			
Waterbody	Stressor(s)	Basin Plan Amendment	Comments
All San Francisco Bay Segments	Mercury	2002	TMDL Report due April 2000. TMDL and Implementation Plan due June 2001.
	Exotic Species	Unknown	TMDL Report due April 2002. No further work is scheduled at this time due to AB 703 constraints.
	Copper	2004	TMDL Report due June 2002. TMDL and Implementation Plan due June 2003.
	PCBs	2004	TMDL Report due June 2002. TMDL and Implementation Plan due June 2003.
	Nickel	2004	TMDL Report due June 2002. TMDL and Implementation Plan due June 2003.
	Diazinon	2006	TMDL Report due June 2004. TMDL and Implementation Plan due June 2005.
	Selenium	2010	TMDL Report due June 2008. TMDL and Implementation Plan due June 2009.
	Dioxin line compounds including Furans	Unknown	U.S. EPA currently developing strategy.
	Chlordane, DDT, Dieldrin	Unknown	U.S. EPA currently developing strategy.
Urban Creeks	Diazinon	2004	TMDL Report due June 2002. TMDL and Implementation Plan due June 2003.
Walker Creek/ Tomales Bay	Metals (Mercury)	2005	TMDL Report due June 2003. TMDL and Implementation Plan due June 2004.
	Siltation, Nutrients	2007	TMDL Report due June 2005. TMDL and Implementation Plan due June 2006.
Lagunitas Creek	Nutrients, Pathogens, Siltation	2007	TMDL Report due June 2005. TMDL and Implementation Plan due June 2006.
Richardson Bay	Pathogens	2008	TMDL Report due June 2006. TMDL and Implementation Plan due June 2007.

Table 7-3. Roles for NPDES Permitting and TMDL Compliance Tasks

PROGRAM ROLES			▽	= Lead for this Task	
TASK		DESCRIPTION	Countywide Program	Local Program	Citizens Advisory Committee
1	Municipal Stormwater NPDES Permitting				
	1A	Regional and Statewide Permit Planning	▽ Coordinate	Discuss	Discuss
	1B	Permit Application and Negotiations	▽ Coordinate	▽	Discuss
	1C	Additional Permitting Regulatory Issues	▽ Coordinate	Discuss	Discuss
2	TMDLs Implementation				
	2A	Regional Strategy Planning	▽ Coordinate	Discuss	Discuss
	2B	Gathering/Developing Information on Existing Conditions	▽ Coordinate	▽ Provide Info	Discuss
	2C	Developing the Implementation Plan	▽ Coordinate	Discuss	Discuss
	2E	Address Additional Regulatory Issues concerning TMDLs	▽ Coordinate	Discuss	Discuss
3	Other Watershed Regulatory Initiatives				
	3A	Respond to Initiatives	▽ Coordinate	Discuss	Discuss

Performance Standards

What are Performance Standards?

Performance standards define a large part of what each agency will need to do to implement the *Action Plan 2005*. The performance standards will also define compliance when MCSTOPPP obtains a municipal stormwater NPDES permit in 2003. The implementation of these performance standards by MCSTOPPP agencies is required by the *Action Plan 2005*.

Performance standards to be implemented by MCSTOPPP agencies have been developed for the following areas of the *Action Plan 2005*:

- ◇ Municipal Maintenance Activities (Caring for our Creeks)
- ◇ Illicit Discharge Controls (Caring for our Creeks)
- ◇ New Development, Redevelopment, and Construction Controls (Building and Renewing)
- ◇ Industrial and Commercial Discharge Controls (Educating Ourselves at Work)
- ◇ Public Information and Participation (Educating Ourselves at Home)

Performance standards describe *what* each agency is responsible for achieving. Each agency will decide *how* it achieves these

performance standards using its own staff, a contracted agency, or other arrangements.

MCSTOPPP agencies are required to start implementing these performance standards on July 1, 2000 unless otherwise noted as Tier II. Implementation schedules for the second tiers are described below.

Regulatory Background

The Regional Water Quality Control Board, San Francisco Bay Region's (Regional Board) *Water Quality Control Plan (Basin Plan)* requires Marin municipalities to develop a plan for protecting stormwater quality discharges to San Francisco Bay and the Pacific Ocean. MCSTOPPP represents the regional effort of Marin agencies to comply with these requirements. These performance standards are local program activities adopted by the Agency Staff Committee. Each agency is responsible for ensuring its local program meets the requirements of the Regional Board staff by implementing these performance standards; the role of the Countywide program is to provide guidance and assistance, as appropriate.

Federal stormwater regulations also require MCSTOPPP agencies to obtain a municipal stormwater permit by 2003. The Clean Water Act requires municipal stormwater programs to

control discharges of pollutants to the maximum extent practicable (MEP) and to effectively prohibit illicit discharges. These performance standards define the MEP level of effort that each MCSTOPPP agency will attain to control pollutant discharges to the storm drains.¹

In addition to the state and federal requirements described above, MCSTOPPP agencies will also need to comply with federally mandated total maximum daily loads (TMDLs) assigned to stormwater discharges for certain pollutants. As an impaired water body, the San Francisco Bay can only assimilate certain amounts (or loads) of particular pollutants. The Regional Board is responsible for defining TMDL limits for each impairing pollutant and assigning load and waste load allocations to different discharges to the Bay, including stormwater. These performance standards may be modified in the future to incorporate additional pollutant controls needed to comply with waste load allocations developed as part of the Regional Board's TMDLs.²

Performance Standards for Consistency

These performance standards provide an effective, consistent, and predictable countywide approach to minimizing water quality impacts. Having consistent countywide standards assures similar treatment to businesses, developers, contractors, and property owners. Such standards also assist MCSTOPPP agencies with training and educational outreach activities. These

performance standards will be used as benchmarks for measuring the effectiveness of each agency's municipal maintenance activities, planning and permitting procedures, inspection and enforcement activities, and education and outreach activities.

MCSTOPPP developed these performance standards based on:

- ◇ San Mateo Countywide Stormwater Pollution Prevention Program's Performance Standards, adopted by the Regional Board in July 1999;
- ◇ Alameda Countywide Clean Water Program's Performance Standards, adopted by the Regional Board in February 1997;
- ◇ Santa Clara Valley Urban Runoff Pollution Prevention Program's Performance Standards, which the Regional Board staff has agreed to; and
- ◇ the practical experience of staff within Marin County's agencies.

The Countywide Program has the role of 1) advising Local Programs on whether they are meeting the agreed upon performance standards and 2) providing requested assistance when performance standards are not being met. The status of each agency's implementation of the performance standards will be described in MCSTOPPP's annual reports to the Regional Board. The Agency Staff Committee is responsible for resolving general problems with interpreting and attaining the performance standards, and for reviewing and updating them as needed, at least every two years.

¹ See Chapter 7 for discussion of MCSTOPPP NPDES Permitting tasks.

² The Regional Board's schedule for developing TMDLs are described further in Chapter 7.

Implementation Schedule

As described above, MCSTOPPP agencies are required to start implementation of these performance standards on July 1, 2000. In fact, MCSTOPPP agencies began implementation of most of these performance standards during the first five years of the program as described in the *Action Plan 2000*. But these performance standards also demonstrate MCSTOPPP agencies' continuing commitment to improvement.

The performance standards are divided into two tiers. Tier I performance standards are those implemented on July 1, 2000. Tier II performance standards are those that will be implemented within the next three years and no later than July 1, 2003 as follows:

- ◇ Tier II(1) implemented by July 1, 2001.
- ◇ Tier II(2) implemented by July 1, 2002.
- ◇ Tier II(3) implemented by July 1, 2003.

Attachment A provides a summary of the performance standards and their respective implementation schedule.

MUNICIPAL MAINTENANCE

Street Sweeping

STREET SWEEPING FREQUENCY

Tier I

1. Clean streets according to Table 1.

II. PROBLEMS ASSOCIATED WITH EFFICIENT STREET CLEANING

Tier I

A. Getting Parked/Abandoned Vehicles Off Streets

1. Maintain a consistent sweeping schedule.
2. Take appropriate measures to keep curbed areas clear during street cleaning. Measures may include, but are not limited to, developing and distributing newsletters and other public education materials notifying residents and businesses of street sweeping schedules.

B. Removing Leaves During Leaf Season

1. Investigate alternative leaf handling methods and implement an appropriate leaf removal program. Leaf removal programs may include but are not limited to the following:
 - ◇ Operating street cleaning equipment in tandem; and/or
 - ◇ Using leaf removal machine prior to cleaning; and/or
 - ◇ Using a front end loader with a dump truck prior to cleaning.
2. Encourage residents to collect and compost leaves through green waste program or

coordinate with a local or regional composting program.

C. Trees Near Streets

1. Provide adequate staff for conveniently reporting trees interfering with street cleaning.

III. STREET CLEANING OPERATION TO MAXIMIZE POLLUTANT REMOVAL

Tier I

1. Provide a clean looking street, free of dirt tracks, trails, or debris.
2. Check street cleaning equipment for proper adjustment.
3. Operate street cleaning equipment at the speed specified by the manufacturer.

IV. STREET CLEANING MAINTENANCE TO MAXIMIZE POLLUTANT REMOVAL

Tier I

1. Regularly inspect and maintain street cleaning equipment.
2. Replace worn components as required to maximize efficiency.

SPILL RESPONSE

Tier I

1. Report spills observed on streets immediately for quick response by appropriate personnel.
2. Respond to spills in accordance with response procedures described in the Storm Drain Facility Performance Standards.

VI. RECORD KEEPING**Tier I**

1. Track miles swept using a broom odometer or by tracking mileage only when cleaning. Do not include driver mileage to or from an area.
2. Track volume or weight of material removed each for street cleaning day.
3. Report the number of curb miles swept in monthly record keeping forms.
4. As needed, identify and target areas for: 1) more frequent cleaning throughout the year or just prior to the rainy season; 2) additional efforts to remove vehicles; 3) distribution of public education materials to discourage illegal dumping, etc.
5. Document and track areas where spills were reported and coordinate with your agency's illicit discharge control field surveys.

VII. CONTRACT SWEEPERS**Tier I**

1. Specify in contracts that compliance with these performance standards will be achieved.
2. Specify in contracts that in case of equipment failure, back up equipment must be available to ensure that the route is completed.
3. Specify in contracts that all information necessary for record keeping is provided.

VIII. EDUCATION/TRAINING**Tier I**

1. Train annually, municipal staff and contract sweepers responsible for street sweeping to identify and report illicit

discharges, and to comply with the other street sweeping performance standards.

2. Train annually municipal staff and contract sweepers responsible for street sweeping to comply with street sweeping performance standards.

STORM DRAIN FACILITIES

I. ROUTINE INSPECTION AND CLEANING³**Tier I**

1. Inspect and clean as necessary, storm drain facilities (inlets, culverts, and v-ditches) according to Table 1. The inspections and needed cleaning will preferably occur prior to the rainy season.
2. When cleaning storm drain inlets and lines, remove the maximum amount of material at the nearest access point to minimize the potential for discharges to watercourses.

II. RECORD KEEPING**Tier I**

1. Report the amount of material removed when cleaning storm drainage facilities in monthly record keeping forms.
2. As needed, identify and target areas for: 1) more frequent cleaning throughout the year or just prior to the rainy season; and 2) distribution of public education materials to discourage illegal dumping, etc.

³ For open channels and other natural watercourses, other permits and approvals (401 water quality certification, 404 permit, stream alteration agreement) may be necessary for certain activities, that should be coordinated prior to start of work.

- Document and track areas where spills were reported and coordinate with your agency's illicit discharge control field surveys.

III. SPILL RESPONSE (MULTIPLE AGENCIES INVOLVED)

Tier I

- If non-hazardous materials are spilled, maintenance staff will contain the spill area immediately and clean when practical to prevent additional release and discharge of pollutants into the storm drain system.
- Maintenance staff will be aware and up to date on the agency's around-the-clock immediate response/removal procedure for hazardous or unknown materials.
- Maintenance staff will establish a response/removal procedure for non-

hazardous materials after work hours.

- Maintenance staff will coordinate with the Stormwater Coordinator to determine the most appropriate follow-up response (e.g., tracking the source of a spill, identifying product labels, contacting Building and Planning Departments, sending a clean-up bill to the responsible party, etc.).
- Work with local Fire and Police Departments to provide copies of spill reports to the Stormwater Coordinator.

Table 1. Summary Of Street Sweeping And Storm Drain Maintenance Practices

Municipality	Street Sweeping Frequency			Storm Drain Cleaning					
				Method			Frequency		
	R	C	I	H	V	SSA	R	C	I
Belvedere	1/wk	NA	NA	X	X	X	1/ yr	NA	NA
Corte Madera ^a	1/mo	1/ mo	1/ mo	X	X	X	1/ yr	1/ yr	1/ yr
Fairfax	1/mo	2/ wk	NA	X	X	X	^b	^b	NA
Larkspur	1/mo	1/ mo	1/ wk	X	X	X	1/ yr	1/ yr	1/ yr
Feb - Sep	2/mo	2/ mo	1/ wk						
Oct - Jan									
Marin County	4/yr	2/ yr	NA	X	X		3/ yr	1/ yr	NA
Mill Valley	1/mo	4/ mo	NA	X	X		1/ yr	1/ yr	1/ yr
Novato ^a	1/6 wk	1/ wk	1/ mo		X		1/ yr	1/ yr	1/ yr
Ross	2/6 mo	NA	NA	X	X	X	1/ yr	1/ yr	NA
Oct - Mar	1/6 mo								
Apr - Sept									
San Anselmo ^c	1/wk	2/ wk	NA	X			1/ yr	1/ yr	NA
San Rafael	1/wk	1/ wk	1/ wk	X	X	X	1/ yr	1/ yr	1/ yr
Sausalito	1/mo	3/ wk	1/ mo		X	X	1/ yr ^d	1/ yr ^d	1/ yr ^d
Tiburon	1/wk	1/ wk	1/ wk	X	X	X	2/ yr	2/ yr	2/ yr

R - Residential; C - Commercial; I - Industrial; H - by Hand; V - by Vactor; SSA - Street Sweeper Attachment

^a Additional storm drain cleaning is conducted as needed; storm patrol during rain storms.

^b As necessary/needed.

^c Whole town is swept; storm once in spring and summer; residential areas swept 1/ week during leaf season; storm drains are cleaned as necessary in winter months.

^d Storm drain cleaning as needed; some storm drains/inlets are cleaned several times per week during wet weather.

IV. DISPOSAL OF MATERIAL**Tier II(3)**

1. Store material removed from storm drainage facilities on a concrete pad or other type of impermeable material. During the rainy season, also cover with impermeable material. Drain wastewater to the sanitary sewer or allow to evaporate to prevent discharges to the storm drain system. Dispose of the material at an appropriate facility.

V. ALTERNATIVE APPROACHES**Tier I**

1. Any agency may develop and submit to the Regional Board a storm drainage facilities pollution control plan that proposes an alternative, but comparably effective approach, to these performance standards for controlling to the MEP, pollutants from storm drainage facilities maintenance. Any such plan containing alternative performance standards needs to obtain Regional Board staff approval prior to being implemented.

**OPERATIONS AND MAINTENANCE
OF STORMWATER
PUMP STATIONS**

Stormwater Pump Stations in Marin County

The Marin County Flood Control District and five of the municipalities in Marin County (Corte Madera, Mill Valley, Larkspur, Novato and San Rafael) operate and maintain stormwater pump stations. All stormwater pump stations ultimately discharge to San Francisco Bay.

I. VISUAL INSPECTIONS**Tier I**

1. Inspect wet wells or forebays once per month during the dry season, and once per week during the wet season, for oil spills or other noticeable pollutant discharge.

II. MAXIMIZE REMOVAL OF POLLUTANTS PRIOR TO DISCHARGE**Tier I**

1. Conduct at least one comprehensive cleaning of wet wells annually to remove sediment prior to the start of the rainy season to minimize discharge of sediment. Clean wet wells with a vacator, if possible.
2. If there is a large potential for pollutant discharge, have a spill kit readily available.
3. Contain lubricants, fuel, and batteries to prevent accidental spills to wet wells.
4. If any spill is reported or observed, try to remove the material at the nearest access point. As practical, shut down the pump station if the material may reach it. (A storm event may necessitate operation of the pump station.) As possible, prevent spill from discharging.
5. Track spills upstream to try and locate the source(s) of pollution. Document spill incidents as part of the illicit discharge program. Implement enforcement, as appropriate.
6. Store oil absorbent materials in appropriate maintenance vehicles.

III. DISPOSAL**Tier I**

1. Dispose of screenings at a landfill, sediment at a location which will not re-

enter the storm drain system or receiving waters through erosion, and oil-absorbed materials as hazardous waste.

IV. EDUCATION/TRAINING

Tier I

1. Educate all personnel responsible for maintaining stormwater pump stations about these performance standards. Each agency will conduct at least one meeting (e.g., tail gate meeting) annually to educate pump station personnel about these performance standards and illicit discharge identification and reporting.
2. Conduct drills as part of the training, as appropriate.

- b. Residents and businesses to remove litter from their property and properly containerize waste;
 - c. Owners of loading docks, restaurants, and other litter source areas to sweep outdoor areas daily and properly containerize waste; and
 - d. Municipalities provide a green waste program.
2. Encourage local law enforcement personnel to post signs and enforce anti-littering laws especially for owners of vacant lots where litter accumulates.
 3. Label litter receptacles with anti-littering messages when possible.
 4. Encourage participation in and assist with the litter removal activities associated with the California Coastal Commission's annual Coastal Clean-up Day.
 5. Encourage maintenance crews to report any privately-owned apparently abandoned vehicles that are leaking automotive fuels.

LITTER CONTROL

I. SERVICES

Tier I

1. Provide an adequate number of litter receptacles in commercial and other litter source areas. Agencies will make every effort to contain litter in receptacles.
2. Pick up litter receptacles on a frequent enough basis to minimize or prevent spillage.
3. Document and maintain the records monthly for 1) areas targeted for litter removal, and 2) total amount of material removed.

II. EDUCATION AND ENFORCEMENT

Tier I

1. Encourage public education efforts to include an anti-littering message, specifically:
 - a. Residents to compost yard waste;

III. ALTERNATIVE APPROACHES

Tier I

1. Any agency may develop and submit to the Regional Board a litter control plan that proposes an alternative, but comparably effective approach, to these performance standards for controlling to the MEP, pollutants from littering sources. Any such plan containing alternative performance standards needs to obtain Regional Board staff approval prior to being implemented.

CORPORATION YARDS

I. GENERAL STANDARDS/ TRAINING

Tier I

1. Prepare and maintain current a Stormwater Pollution Prevention Plan (SWPPP).
2. For each corporation yard, assign one person the primary responsibility for ensuring that performance standards are implemented. This person will also be responsible for ensuring that all persons using the facility are aware of these performance standards. If different from the Stormwater Coordinator, this person will be listed as a contact in the annual report.

Tier II(1)

1. Prepare spill containment kits and store them in locations that have potential for spills (e.g., fueling areas, etc.). Conduct drills annually on how to use the kits, or as appropriate.
2. Stencil inlets to the storm drainage system with a "no dumping" message.

Tier II(2)

1. Survey the facility annually for compliance with the performance standards. Any performance standard that has not been implemented will be identified in the annual report, along with a schedule for implementation.
2. Post educational materials about these performance standards and best management practices in appropriate areas.

Tier II(3)

1. Describe activities conducted to educate staff regarding the performance standards in the annual report.
2. Incorporate stormwater performance standards in annual updates of other environmental management plans (e.g., Hazardous Materials Business Plans, Spill Prevention Control and Countermeasure Plans, etc.). Periodically review these plans with persons using the facility.

II. GENERAL HOUSEKEEPING

Tier I

1. Dispose of often, material removed from streets and storm drainage facilities to eliminate exposure to rainwater and runoff to the storm drain system.
2. Sweep the corporation yard at least monthly.
3. Keep chemical storage areas neat and orderly.
4. Stockpile materials away from streets, gutters, storm drain inlets, or water channels when possible.

Tier II(2)

1. Inspect the yard at least monthly to ensure that there are no illicit discharges to the storm drain system. During rain events, inspect the yard to ensure pollutant discharges are controlled to the MEP.

III. REFUSE HOLDING AREAS

Tier II(1)

1. If materials removed from storm drainage facilities are stored on site, store the materials on a concrete pad or other type of impermeable material. During the rainy

season, also cover with an impermeable material. Drain wastewater to the sanitary sewer or allow to evaporate to prevent discharges to the storm drain system. Dispose of the material at an appropriate facility.

IV. AUXILIARY STORAGE

AREAS/YARDS

Tier I

1. Store chemicals in appropriate areas to prevent pollutant discharge to the storm drains.

V. CHEMICAL STORAGE

Tier II(1)

1. Store paint and other chemicals in an approved covered containment area. Design the floor so that spilled materials will be contained and easily removed. Keep all containers containing hazardous materials or waste closed when not filling or emptying. Label containers according to Department of Transportation regulations. Protect the area from vandalism.
2. If any material containers (not limited to hazardous material containers) are stored outside, keep the containers in a contained area that prevents discharge to the storm drain system from spills or exposure to rain. Ensure that all the containers are closed with tight-fitting lids. Design the area to prevent "run-on" of stormwater and runoff of spills.
3. Review the Material Safety Data Sheet (MSDS) to ensure that incompatible materials have the appropriate separation.

Tier II(2)

1. Review the Hazardous Material Business Plan for hazardous materials storage requirements.

VI. CHEMICAL USAGE

Tier I

1. Ensure that necessary safety equipment and spill containment kits are readily accessible in areas where chemicals are used. Inspect safety equipment (e.g., eye wash) regularly to ensure they are operational.
2. Review MSDSs.
3. Minimize use of chemicals. Use water-based paints and non-toxic chemicals as much as possible.
4. Recycle or dispose of excess chemicals at an approved local Household Hazardous Waste Facility or other approved location.
5. Ensure chemical containers have secure lids and are tied down properly to the vehicle during transport.
6. Properly remove any soils contaminated with spilled materials.

A. Oil-based Paints

1. Wipe paint out of brushes. Filter and reuse thinners or dispose of as hazardous waste. Dispose of the excess paint as hazardous waste or recycle. If there is too much paint to dry, recycle the paint or dispose as hazardous waste.

B. Water-based Paints

1. Rinse paint out of brushes and discharge rinse water to the sanitary sewer. Recycle or dry excess paint in cans and dispose of the cans in the trash. If there is too much

paint to dry, recycle the paint or dispose as hazardous waste.

C. Automotive Fluids

1. Collect used fluids and recycle or dispose at an appropriate facility.

D. Pesticides

1. Refer to the California Department of Pesticides Regulation for pesticide mixing, application, storage and disposal requirements.
2. Consider using integrated pest management methods. Given a choice, use the least toxic pesticides and herbicides that will accomplish the job. Avoid copper-based pesticides and diazinon, if possible.
3. Apply pesticides at appropriate times to maximize their effectiveness and minimize their potential to run off.
4. Mix only as much pesticide as needed. Do not mix or load pesticides next to storm drain inlets or watercourses.

E. Solvent/Cleaning Solutions

1. Properly recycle or dispose of used solvents/chemicals.

VII. WASHING VEHICLES / EQUIPMENT

Tier I

1. Clean all vehicles/equipment on designated wash areas that discharges washwater to the sanitary sewer or recycling system. (Wash areas might be off-site to ensure discharge to the sanitary sewer or recycling system.)
2. Ensure wash area and sump (if applicable) are large enough so that all washwater

drains to the sanitary sewer or recycling system. If necessary, re-grade area or install dikes to convey the washwater.

3. Visually monitor the wash area to make sure it is consistently used.
4. Consider assigning schedules for using the wash area, if appropriate.

VIII. FUEL DISPENSING AREAS

Tier I

1. Store spill containment kits nearby. If spill occurs, use dry methods to clean and follow procedures in the Hazardous Materials Business Plan and/or Spill Prevention Control and Countermeasure Plan.
2. Train employees in proper fueling, cleaning, and spill response procedures. Conduct annual drills, as appropriate.
3. Install signs reminding people not to "top off" tanks.
4. Discourage mobile fueling. If mobile equipment is fueled with a mobile fuel truck, establish designated areas for fueling.
5. Consider covering fuel dispensing areas. Prohibit fueling over open ground; ground should be covered by concrete or asphalt protected with a sealant. Implement the *Retail Gasoline Outlets Best Management Practices* prepared for the California Stormwater Quality Task Force (March 1997), as appropriate.
6. Design the fueling area to prevent "run-on" of stormwater and runoff of spills.

**IX. FLEET MAINTENANCE/VEHICLE
PARKING AREAS**

Tier I

1. Inspect equipment for leaks on a regular basis. Use drip pans under leaking vehicles. Repair vehicles with significant leaks.
2. Drain and replace motor oil and other fluids in a covered shop area. If fluids are changed outdoors, designate an area where there are no connections to the storm drains, watercourses, or the sanitary sewer. Select a designated area where spills can be easily cleaned up.
3. Periodically dry sweep the area.
4. Schedule outdoor repair activities for dry weather, if possible. Prevent repair supplies or work material from entering storm drains or watercourses.

Tier II(1)

1. Clean equipment regularly using proper collection and disposal methods when necessary.

X. ALTERNATIVE APPROACHES

Tier I

1. Any agency may develop and submit to the Regional Board a corporation yard pollution control plan that proposes an alternative, but comparably effective approach, to these performance standards for controlling to the maximum extent practicable (MEP), pollutants from municipal corporation yards. Any such plan containing performance standards needs to obtain Regional Board staff approval prior to being implemented.

ROAD REPAIR AND MAINTENANCE

**I. GENERAL PRACTICES/
TRAINING**

Tier I

1. Schedule excavation and road maintenance activities for dry weather, if feasible.
2. Equipment repairs and fueling or maintaining vehicles and equipment will be conducted in accordance with the Corporation Yard Performance Standards.
3. Recycle used motor oil, diesel oil, concrete, broken asphalt, etc. whenever possible.
4. Train annually municipal staff and contractors conducting road repair and maintenance to comply with these performance standards.
5. Distribute educational and outreach materials developed by the Regional Board or the Countywide Program, as appropriate, to those utility contractors (e.g., water supply, cable, phone, electrical, etc.) seeking encroachment and/or grading permits from the agency.

II. ASPHALT/CONCRETE REMOVAL

Tier I

1. After breaking up old pavement, remove and recycle as much as possible to avoid contact with rainfall and stormwater runoff.

Tier II(2)

1. Take measures to protect storm drain inlets prior to asphalt breaking or concrete sawing operations (e.g., place sand bags or filtering barrier around inlets). Clean afterwards by sweeping or removing as much material as possible.

2. During saw-cutting operations, block or berm around storm drain inlets using sand bags or an equivalent appropriate filter device, or absorbent materials such as pads, pillows, or socks to contain slurry. If slurry enters the storm drain system, remove the material immediately.
3. Remove saw-cut slurry (e.g., with a shovel or vacuum) before leaving at the end of the day.

III. PATCHING AND RESURFACING

Tier I

1. To minimize runoff from patching and resurfacing activities, materials will not be stockpiled in streets, gutter areas, or near storm drain inlets or creeks unless these areas are protected (i.e. stockpiled material should be covered to minimize stormwater runoff.)
2. Cover and seal manholes and storm drain inlets before applying seal coat, slurry seal, etc.
3. Never wash excess material from exposed aggregate concrete or similar treatments into a street or storm drain inlet. Designate an unpaved area for clean up and proper disposal of excess materials.
4. Use only as much water as necessary for dust control to avoid runoff.
5. Sweep up as much material as possible and dispose of properly. Wash down of streets is only permitted if runoff is controlled or contained.
6. Clean up spills and leaks from other equipment and work site areas using "dry" methods (absorbent materials and/or rags). Properly dispose of absorbent materials

and rags. If spills occur on dirt areas, the contaminated soil will be removed properly and on a timely basis.

7. After the job is complete, remove stockpiles (asphalt materials, sand, etc.) and other extra materials as soon as possible.

Tier II(2)

1. If it rains unexpectedly, take appropriate action to prevent pollution of stormwater runoff (e.g., divert runoff around work areas).

IV. SIGNING AND STRIPING

Tier I

1. Store spill absorbent materials on trucks to be used in the event of a spill.
2. Contain and clean up waste materials and dispose of them properly according to the MSDS.

V. EQUIPMENT CLEAN UP/STORAGE

Tier I

1. Clean sprayers, patch and paving equipment at the end of the day. Use approved collection methods and dispose or recycle waste materials at an approved facility.
2. If stored outdoors, cover sprayers, patch and paving equipment, if they contain pollutants, to prevent rainfall from transporting pollutants to the storm drain system.

Tier II(1)

3. Flush paint sprayer supply lines at the corporation yard. Use approved collection methods and dispose or recycle waste materials at an approved hazardous waste facility.

ILLICIT DISCHARGE CONTROL

I. PREPARE FOR ILLICIT DISCHARGE SCREENING AND INVESTIGATIONS
Tier I

1. Each agency's Stormwater Coordinator will either be responsible for conducting, or delegating, the following tasks:
 - a. Receive information on non-stormwater discharge reports;
 - b. Assure that needed follow-up, elimination, and clean up of illicit discharges are conducted;
 - c. Provide other staff in his or her agency with information about the status of illicit discharge source identification and elimination. In particular, staff who identify and illicit discharge will be informed about its outcome;
 - d. Make sure required reporting is completed;
 - e. Distribute information to the agency's management and elected officials, as requested, about the resources needed to implement these performance standards;
 - f. Facilitate the implementation of these performance standards; and
 - g. Be responsible for sharing local activities and findings with the Agency Staff Committee.
2. Train all agency staff who maintain and repair the municipal storm drain conveyance system, and other municipal staff who conduct field work where illicit

discharges are likely to occur, to recognize illicit discharges and the procedures for responding to these discharges. Train all new staff who fill positions as described above, about illicit discharge recognition and response procedures.

3. Train agency staff assigned to conduct illicit discharge investigations on the knowledge and skills necessary to be effective. They will be familiar with guidance developed by MCSTOPPP and Regional Board staff and these performance standards.

Tier II(2)

1. Develop maps of outfalls.

Tier II(3)

1. Develop maps of the complete municipal storm drain system sufficiently accurate to be used for tracing illicit discharges.

II. CONDUCT FIELD SCREENING
Tier I

1. Identify evidence of illicit discharges to the municipal storm drain conveyance system, using municipal maintenance and other local field staff while they are conducting other routine work. Illicit discharge field screening staff may include contracted staff or consultants working for the agency. Report any evidence of illicit discharges identified during these field screening activities to the Stormwater Coordinator.

III. CONDUCT FIELD INVESTIGATIONS
Tier I

1. Verify whether an illicit discharge has occurred, using information provided as part of field screening and complaints

- received from the public or other agencies. The goal will be to initiate follow-up activities within twenty-four hours from the time the Stormwater Coordinator receives the report.
2. When an illicit discharge has occurred, find the source and eliminate it, as possible. Trace the source(s) of the illicit discharge using storm drain maps, inspecting manholes, and making surface observations. Record and maintain findings, as appropriate.
 3. Continue to inspect and follow-up illicit discharges until:
 - a. The source of the illicit discharge is found and eliminated⁴; or
 - b. The discharge has stopped and cannot be traced to a source.

Tier II(3)

1. If an agency identifies three or more illicit discharges in a fiscal year within an area served by any major outfall⁵, additional illicit discharge investigations will be conducted in the area(s) served by the major outfall(s) during the subsequent fiscal year or sooner. These additional investigations will include one or more of the following, as appropriate:
 - a. Periodic above ground surveillance of the area for visual evidence of illicit discharges;

⁴ Elimination means that the discharge is no longer occurring, has been diverted to the sanitary sewer, or continues to discharge to the municipal storm drain system under an NPDES permit.

⁵ Major outfalls are greater than twelve inches in diameter for outfalls serving industrial areas, and thirty-six inches in diameter for outfalls serving all other areas.

- b. Additional inspections of businesses;
- c. Additional periodic investigations of outfalls, creeks, and open channels for evidence of illicit discharges; and/or
- d. Additional targeted educational outreach in the area which is coordinated appropriately with the local Public Information/Participation activities.

IV. FOLLOW-UP TO FIELD SCREENING AND INVESTIGATIONS

Tier I

1. When a party responsible for an illicit discharge is found, provide the responsible party with
 - a. educational information about the impacts of his or her actions,
 - b. the requirements of the local stormwater ordinance,
 - c. options for proper discharge or disposal, and
 - d. educational materials describing BMPs.

When the source of an illicit discharge has not been found, distribute educational outreach materials to residents and/or businesses located in the immediate vicinity of the illicit discharge.

2. If the discharge is traced to a business, the Stormwater Coordinator, or delegated staff, will distribute appropriate educational and BMP information.
3. Begin enforcement procedures, if appropriate, as described in Attachment B – *Enforcement Options for Illicit Discharges and Industrial/Commercial Stormwater Pollution Violations*.

4. The goal of follow-up investigations will be to stop the illicit discharge(s) as soon as practicable.

V. PROCEDURES FOR SPILL PREVENTION, CONTAINMENT, AND RESPONSE

Since a network of spill prevention, containment, response, and clean up programs already exists, the approach of the MCSTOPPP illicit discharge control program is to supplement these services and respond to spill incidents that are not already under the purview of previously existing clean-up programs. Within this context, each municipality will assure that the following occurs.

Tier I

1. Each agency's Stormwater Coordinator will either be responsible for conducting, or delegating, the following tasks:
 - a. Investigate and record spill reports and/or complaints about incidents within the agency's jurisdiction.
 - b. Become familiar with existing spill prevention, containment, response, and clean-up programs that cover the agency's jurisdiction.
 - c. Coordinate illicit discharge prevention, elimination, and clean-up activities with existing programs listed in b.
 - d. Establish a mechanism for obtaining information about spill incidents from other agencies and departments within the municipality so that source identification and follow-up activities can be coordinated.

VI. DOCUMENT AND REPORT COMPLETION

Tier I

1. Document the number and types of illicit discharge incidents reported and follow-up investigations conducted within the agency's jurisdiction. (This does not include information from fluid spills from automobile accidents.)
2. Submit complete reports to the Countywide Program including:
 - a. Number of screening points monitored;
 - b. Number of illicit discharges identified as part of outfall monitoring activities;
 - c. Number of illicit discharge reported by other agency staff and the public; and
 - d. Follow-up activities, as described in the "Report of Non-stormwater Discharge" and "Warning and Order to Abate Pollution" forms (Attachment C).

(This information is compiled by the Countywide Program as part of the "Public Works Maintenance Activities Monthly Reports" for submittal to the Regional Board as part of annual reports.)

VII. ALTERNATIVE APPROACHES

Tier I

1. Although not a preferred alternative, any agency may develop and submit to the Regional Board an illicit discharge control and elimination plan that proposes an alternative, but comparably effective approach, to these performance standards for effectively identifying and eliminating illicit discharges. Any such illicit discharge control and elimination plan containing alternative performance standards needs to

obtain Regional Board staff approval prior to being implemented.

**NEW DEVELOPMENT,
REDEVELOPMENT,
AND CONSTRUCTION SITE
CONTROLS**

The performance standards for controlling pollutants in stormwater from development, redevelopment, and construction activities are based primarily on the Regional Board's April 1994 *Staff Recommendations for New and Redevelopment Controls for Stormwater Programs (Staff Recommendations)*. The *Staff Recommendations* incorporate the requirements of U.S. EPA's stormwater regulations as well as the *Coastal Zone Act Reauthorization Amendments*.

These performance standards are intended to achieve a level of water quality protection equivalent to that achieved by the measures described in the *Staff Recommendations*. Agency staff will continue to improve, as appropriate, the performance standards in response to new technical information on effectiveness of control measures, or the update of the *Staff Recommendations*.⁶ Implementation of the performance standards and incremental program improvements will be demonstrated in annual report submittals.

**I. DEVELOPMENT PLAN REVIEW
AND PERMITTING**

The performance standards described under this section refer to activities performed by Local Programs during an application's plan review and permitting process.

⁶ Regional Board staff indicate updates to the 1994 *Staff Recommendations* may be completed in 2001.

Tier I

1. Obtain adequate legal authority to implement stormwater quality control measures for development, redevelopment, and construction activities as part of the development plan review and approval process.
2. Incorporate policies and implementation measures into the General Plan to help preserve and enhance water quality and protect sensitive areas. General Plan amendments will be adopted as part of the agency's next General Plan review cycle.
3. Require environmental documents for projects under the California Environmental Quality Act (CEQA) or National Environmental Policy Act (NEPA) review to address stormwater quality impacts during the life of the project (both significant and cumulative) and specific mitigation measures. These documents include initial study checklists, Environmental Impact Reports (EIRs), negative declarations, and mitigation monitoring plans. Mitigation measures must address both construction stage and post-construction impacts.
4. Require developers and owner/builders to control stormwater quality impacts of their projects by using appropriate BMPs. Require projects with significant stormwater pollution potential to mitigate impacts through site planning or design practices and/or post construction controls. For such projects, the developer and owner/builder will avoid, minimize, and mitigate, in that order, the potential adverse impacts to water quality. Require developers and owner/builders of projects

that include permanent structural stormwater controls to ensure ongoing operation and maintenance of the controls, as part of project approval documents.

5. Require developers and owner/builders to control stormwater quality impacts of their projects by using appropriate BMPs during construction activities.
6. Require developers and owner/builders of projects with potential for significant erosion⁷ and planned construction activity during the wet season⁸ to prepare and implement an effective erosion and sediment control plan, or similar document, prior to the start of the wet season.
7. Require developers and owner/builders of projects that disturb a land area of five acres or more to demonstrate coverage under the State Construction Activity Stormwater General Permit.
8. Ensure municipal capital improvement projects also include stormwater quality control measures during and after construction, as appropriate for each project.
9. Require developers and owner/builders of projects that disturb a land area of one acre

⁷ Significant erosion potential is a substantial or potentially substantial adverse change in site conditions that could result in erosion and/or sedimentation of site soils. This is consistent with the CEQA definition of significant. Conditions created by land disturbance activities which require a grading permit, as defined by local ordinance, can be used as a threshold for significance.

⁸ The wet season is defined as October 15 to April 15, or as defined by local ordinance.

or more to demonstrate coverage under the State permitting program.⁹

Tier II(3)

1. Consider adopting a model ordinance that would require site planning or design practices and/or post construction controls to protect water quality, such as the controls described in the *Start at the Source* (BASMAA, 1999) manual.

II. ADDITIONAL EROSION AND SEDIMENT CONTROL

Tier I

1. Maintain an erosion and sediment control program that includes requirements for minimum BMPs, sufficient enforcement authority, training and tools for inspectors, and information for developers and contractors.
2. As a condition for issuing a grading permit, require developers and owner/builders to prepare, submit for review and approval, and implement an effective erosion and sediment control plan, or similar administrative document that contains erosion and sediment control measures.

III. CONSTRUCTION INSPECTION

Tier I

1. Through a construction inspection process, require that construction contractors properly store, use, and dispose of construction materials, chemicals, and wastes from construction sites and prevent illicit discharges to the storm drains and watercourses.

⁹ The State Board is expected to have developed its permitting program for construction activities that disturb one acre or more in 2003.

2. For development projects with significant erosion potential, require that erosion and sediment control measures are implemented through a construction inspection process. Measures will be implemented in accordance with local ordinances and project conditions of approval, including the approved erosion and sediment control plan. Measures will also be maintained as needed during construction.
3. Oversee the inspection of construction sites for adequacy of stormwater quality control measures on a regular basis. This includes inspection of permanent structural control measures, if any. The frequency of inspections will be based on the following criteria:
 - a. Project's potential impact on stormwater quality;
 - b. Size of the project;
 - c. Site topography and soil characteristics;
 - d. Season in which the construction phase occurs; and
 - e. Nature of the construction activity.
4. Prior to the beginning of the wet season, require that each active construction site be stabilized to minimize erosion and discharges of sediment from disturbed areas. Oversee the inspection of these sites to make sure these requirements are being met.
5. During the wet season, oversee the inspection of all construction sites with

erosion and sediment controls following each major storm event.¹⁰

IV. EDUCATION AND OUTREACH

Tier I

1. Train, at least annually, staff from planning, building, and other public works staff on planning procedures, policies, design guidelines, and BMPs for stormwater pollution prevention and control.
2. Train, at least annually, construction inspection staff on inspection procedures, documentation, and enforcement related to stormwater pollution prevention.
3. Distribute appropriate educational and training materials to agency staff, contractors, construction site operators, developers, and owner/builders such as:
 - a. Construction BMPs including erosion and sediment controls;
 - b. Available guidance on the State Construction Activity Stormwater General Permit, if applicable;
 - c. Site planning or design measures and post construction controls; and
 - d. Information provided by Regional Board staff regarding State and Federal permit and approval requirements for project activities in wetlands and stream channels.

¹⁰ A storm or series of storms of such intensity or duration as to create significant quantities of runoff and potential for erosion. A series of storms will be considered one major storm event if there is less than seventy-two hours of dry weather between storms.

Agencies will distribute this information and guidance materials to developers and owner/builders early in the application or design review process, as appropriate for the type of project.

4. Distribute appropriate educational and outreach materials provided by the Regional Board to those utility contractors (water supply, cable, phone, electrical, etc.) seeking encroachment and/or grading permits from the municipality.

**INDUSTRIAL AND COMMERCIAL
DISCHARGE CONTROLS**

**I. TARGETING INSPECTIONS TO
ACHIEVE THE MOST BENEFIT**

Tier I

1. Develop and update as needed, a business inspection plan that describes the following:
 - a. The inspecting agency/department.
 - b. If different from the inspecting agency/department, the agency/department that will conduct the stormwater follow-up and/or enforcement.
 - c. How information will be coordinated among agencies/departments.
 - d. Priorities for inspecting businesses. Identify target businesses, if any, with high potential to discharge pollutants to the municipal storm drains.
2. Inspect and distribute appropriate BMP information to all businesses within the agency's jurisdiction that impact stormwater quality, at least once during the five year *Action Plan* period.
3. Inspect and distribute appropriate BMP information to target businesses within your jurisdiction. Frequency of inspection should be commensurate to the businesses' potential to discharge pollutants.
4. Educate business owners and operators about stormwater pollution prevention, separate from the inspection program.
5. Respond to complaints or referrals from other agencies about a facility. The response may include actions such as:

- a. Interviewing the caller concerning the specific nature of the problem;
- b. Referring the caller to the Regional Board staff for compliance questions concerning the State Industrial Activities Stormwater General Permit.
- c. Referring the caller to another agency if the facility is outside your jurisdiction;
- d. Calling the facility and providing appropriate BMP information.

For substantive complaints not covered above, schedule a facility inspection or site visit as soon as possible.

Tier II(3)

1. Re-evaluate your agency's priorities for inspecting businesses. Update your agency's business inspection plan as needed.

III. PREPARING FOR INSPECTIONS

Tier I

1. Train facility inspectors so that each inspector possesses the knowledge and skill necessary to conduct effective stormwater inspections. This includes identifying potential pollutant sources that may be exposed to stormwater runoff and non-stormwater discharges to the storm drains.
2. Each agency's Stormwater Coordinator will be responsible for being familiar with the following:
 - a. Stormwater regulations and requirements, including the agency's ordinance and the State Industrial Activities Stormwater General Permit;
 - b. Impacts of non-stormwater discharges to creeks, bay, and ocean;

- c. Inspection techniques and procedures;
- d. Follow-up and enforcement procedures; and
- e. Stormwater BMPs.

The Stormwater Coordinator will obtain ongoing training to support inspection activities and to continue to improve program implementation.

IV. CONDUCTING INSPECTIONS

Tier I

1. Inspectors will review the facility layout to locate the storm drain system and/or stormwater drainage path.
2. Inspectors will review/inspect the following areas, if access to the area is safe.
 - a. Outdoor process/manufacturing areas;
 - b. Outdoor material storage areas;
 - c. Outdoor waste storage/disposal areas;
 - d. Outdoor vehicle and heavy equipment storage and maintenance areas;
 - e. Outdoor parking areas and access roads;
 - f. Outdoor wash areas;
 - g. Surface discharge outlets from rooftop equipment; and
 - h. Outdoor drainage from indoor areas.

These areas will be inspected for 1) their potential to discharge pollutants from non-stormwater discharges, and 2) pollutant exposure to stormwater.
3. Inspectors will notify the Stormwater Coordinator of potential to discharge pollutants from non-stormwater discharges,

and pollutant exposure to stormwater from a business.

4. When a business that impacts stormwater quality is identified, each agency's Stormwater Coordinator will either be responsible for conducting, or delegating the following:
 - a. Communicate stormwater requirements.
 - b. Distribute facility representatives with appropriate stormwater BMP¹¹ information, educational materials, and inter/intra-agency referrals as needed. Ask the facility representative whether employees have been trained about how to prevent stormwater pollution.
 - c. Inform the facility representative of any problems or violations found. A schedule for correcting problems identified during the inspection, and a means for verifying their implementation will be discussed with the facility representative. This information will be noted and tracked.
 - d. Document and track inspection activities, follow-up, and enforcement activities for reporting to the Regional Board in annual reports.
5. The Stormwater Coordinator will be responsible for either conducting, or delegating regular inspections of businesses with historical stormwater issues, to ensure the continued and effective implementation of stormwater BMPs.

¹¹ Stormwater BMPs will effectively eliminate non-stormwater discharges to the storm drains, and reduce pollutant exposure to stormwater to the maximum extent practicable.

**V. ACHIEVING FACILITY
COMPLIANCE**

Tier I

1. If a problem is identified during an inspection, the Stormwater Coordinator will either be responsible for performing, or delegating a follow-up site visit or initiating a self-certification process where the facility representative certifies in writing that the problem has been remedied within the time specified by the Stormwater Coordinator.
2. Begin enforcement procedures, if appropriate, as described in Attachment B – *Enforcement Options for Illicit Discharges and Industrial/Commercial Stormwater Pollution Violations*. Enforcement authorities are set forth in the individual municipal ordinances.

VI. ALTERNATIVE APPROACH

Tier I

1. Although not a preferred alternative, any agency may develop and submit to the Regional Board an industrial/commercial business inspection plan that proposes an alternative, but comparably effective approach, to these performance standards for controlling to the maximum extent practicable (MEP) stormwater pollutants from businesses. Any such inspection plan containing alternative performance standards needs to obtain Regional Board staff approval prior to being implemented.

**PUBLIC INFORMATION AND
PARTICIPATION**

The MCSTOPPP has a very active program to develop outreach and educational materials for distribution by Countywide and Local Program staff. MCSTOPPP will continue to use this approach to develop materials regionally. The following performance standards describe the Local Program's role in disseminating this information and conducting outreach and educational activities at the local level.

**I. COORDINATION WITH
COUNTYWIDE PROGRAM ACTIVITIES**

Tier I

1. The Stormwater Coordinator will be responsible for either conducting, or delegating the following activities:
 - a. Stay sufficiently informed about the programs and materials being developed by the Countywide Program by regularly attending Agency Staff Committee meetings.
 - b. Distribute outreach and educational materials to appropriate audiences within the agency's jurisdictions. This includes, but is not limited to schools, volunteer committees, neighborhood community groups, and creek monitoring and other environmental groups.

**II. INTERNAL COMMUNICATION
AND TRAINING**

Tier I

A. City Staff and Officials

1. Identify, develop, and communicate at least annually, information about MCSTOPPP to stormwater staff and elected officials so that they are well informed about the requirements, their role in implementing the local stormwater program, and the progress of the Local and Countywide Programs.
2. Train new employees involved with MCSTOPPP activities on their role in implementing the local stormwater program.

**B. Procedures and Training
for Handling Telephone Calls
from the Public About
Stormwater Pollution
Prevention**

1. Establish procedures for answering, tracking, and efficiently routing stormwater-related telephone calls to the appropriate staff for handling.
2. Train local agency staff assigned to answering or responding to telephone calls on the established procedures.
3. Promote the use of one of the agency's telephone numbers to facilitate public reporting of illicit discharges.

**III. STORM DRAIN INLET
STENCILS AND SIGNS**

Tier II(3)

1. Each agency will have an active program to install stencils/signs on publicly owned

storm drain inlets. This includes installation by municipal staff, contractors, and community groups.

2. As a goal, all stencils and signs will be maintained sufficiently to be legible.

V. COORDINATION WITH PUBLIC SCHOOLS (K-12)

Tier I

1. The Stormwater Coordinator will either be responsible for distributing, or delegating the distribution of, information about school based outreach and educational materials developed by the Countywide Program to public schools within the agency's jurisdiction. This may include disseminating information on how to obtain copies of materials.

VI. LOCAL COMMUNITY OUTREACH PROGRAM

Tier I

1. Agencies will participate in community outreach activities from the areas listed below for the purpose of communicating the general stormwater pollution prevention message, complementing the Countywide Program's specific message for target audiences, and facilitating the proper management and disposal of used oil and toxic materials. Each agency will participate in a prescribed number of activities annually, based on the following criteria:

- ◇ Over 50,000 population – each agency participates in at least three activities annually.

- ◇ Between 5,000 and 50,000 – each agency participates in at least two activities annually.
- ◇ Less than 5,000 population – each agency participates in at least one activity annually.

Community outreach activities conducted by Local Programs will include any combination of the following:

- a. Distributing Countywide Program information through other venues (e.g., local newsletter, local magazine, mailing to target group, computer web site or network, local telephone directories, etc.).
- b. Participating in existing community events such as fairs, festivals, exhibits, etc. This participation may include setting up a booth, kiosk display, or other creative means for communicating the general stormwater pollution prevention message; using a specific message to a target group; or making a presentation at a local community service group.
- c. Initiating new community events. Play a major role in planning and staging a community or city-wide event. Examples include, but are not limited to, Earth Day, California Coastal Cleanup Day, or other festival or fair, business mixer, seminar or workshop for a target group, or contest.
- d. Developing and raising watershed awareness.
- e. Coordinating with local volunteer groups to conduct outreach.

2. Agencies will consider initiating and supporting a community outreach program.
3. Agencies that have creeks will support their local "friends" of the creek group or conduct an equivalent outreach program.

Attachment A

MARIN COUNTY STORMWATER POLLUTION PREVENTION PROGRAM

PERFORMANCE STANDARDS IMPLEMENTATION SCHEDULE				
	Tier I	Tier II(1)	Tier II(2)	Tier II(3)
Municipal Maintenance				
Street Sweeping				
I. Street Sweeping Frequency	X			
II. Problems Associated with Efficient Street Cleaning	X			
A. Getting Parked/Abandoned Vehicles off Streets				
B. Removing Leaves During Leaf Season				
C. Trees Near Streets				
III. Street Cleaning Operation to Maximize Pollutant Removal	X			
IV. Street Cleaning Maintenance to Maximize Pollutant Removal	X			
V. Spill Response	X			
VI. Record Keeping	X			
VII. Contract Sweepers	X			
VIII. Education/Training	X			
Storm Drain Facilities				
I. Routine Inspection and Cleaning	X			
II. Record Keeping	X			
III. Spill Response (Multiple Agencies Involved)	X			
IV. Disposal of Material				X
V. Alternative Approaches	X			
Operations and Maintenance of Stormwater Pump Stations				
I. Visual Inspections	X			
II. Maximize Removal of Pollutants Prior to Discharge	X			
III. Disposal	X			
IV. Education/Training	X			
Litter Control				
I. Services	X			
II. Education and Enforcement	X			
III. Alternative Approaches	X			
Corporation Yards				
I. General Standards Training	X	X	X	X
II. General Housekeeping	X	X		
III. Refuse Holding Areas		X		
IV. Auxiliary Storage Areas/Yards	X			
V. Chemical Storage		X	X	
VI. Chemical Usage	X			
A. Oil-based Paints				
B. Water-based Paints				
C. Automotive Fluids				
D. Pesticides				
E. Solvent/Cleaning Solutions				
VII. Washing Vehicles/Equipment	X			
VIII. Fuel Dispensing Areas	X			
IX. Fleet Maintenance/Vehicle Parking Areas	X	X		
X. Alternative Approaches	X			
Road Repair and Maintenance				
I. General Practices/Training	X			
II. Asphalt/Concrete Removal	X		X	
III. Patching and Resurfacing	X		X	
IV. Signing and Striping	X			
V. Equipment Clean Up/Storage	X	X		

PERFORMANCE STANDARDS IMPLEMENTATION SCHEDULE				
	Tier I	Tier II(1)	Tier II(2)	Tier II(3)
Illicit Discharge Control				
I. Preparing for Illicit Discharge Screening and Investigations	X		X	X
II. Conduct Field Screening	X			
III. Conduct Field Investigations	X			X
IV. Follow-up to Field Screening and Investigations	X			
V. Procedures for Spill Prevention, Containment, and Response	X			
VI. Document and Report Completion	X			
VII. Alternative Approaches	X			
New Development, Redevelopment, and Construction Site Controls				
I. Development Plan Review and Permitting	X			X
II. Additional Erosion and Sediment Control	X			
III. Construction Inspection	X			
IV. Education and Outreach	X			
Industrial and Commercial Discharge Controls				
I. Targeting Inspections to Achieve the Most Benefit	X			X
II. Preparing for Inspections	X			
III. Conducting Inspections	X			
IV. Achieving Facility Compliance	X			
V. Alternative Approaches				
Public Information and Participation				
I. Coordination with Countywide Program Activities	X			
II. Internal Communication and Training	X			
A. City Staff and Officials				
B. Procedures and Training for Handling Telephone Calls from the Public about Stormwater Pollution Prevention				
III. Storm Drain Inlet Stencils and Signs				X
IV. Coordination with Public Schools (K-12)	X			
V. Local Community Outreach Program	X			

Tier I – implemented by July 1, 2000

Tier II(1) – implemented by July 1, 2001

Tier II(2) – implemented by July 1, 2002

Tier II(3) – implemented by July 1, 2003

Attachment B

Enforcement Options for Illicit Discharges and Industrial/Commercial Stormwater Pollution Violations	
I Warning and Order to Abate Pollution	<p>Issued for:</p> <ul style="list-style-type: none"> • Minor, one-time discharges. • Potential discharges/need to implement BMPs. <p>Purposes:</p> <ul style="list-style-type: none"> • Inform responsible party (RP) of ordinance. • Identify appropriate BMPs or disposal method. • Document incident and clean-up. • Note costs to municipality. • Provide formal notice to abate. • Obtain acknowledgement (signature) of RP.
II Warning with Requirement to Submit a Written Report within 14 days	<p>Issued for:</p> <ul style="list-style-type: none"> • Serious discharges (e.g. toxic materials, or sufficient quantity to reach a creek or other water body). • Discharges that result from a repeated process or business practice (e.g. daily washdown). • Failure to implement BMPs or comply with initial warning. <p>Purposes:</p> <ul style="list-style-type: none"> • In addition to above purposes, to confirm that the RP understands that a violation has occurred and has a plan and schedule for abating the source of pollutants.
III Formal Violation/Citation	<p>Issued for:</p> <ul style="list-style-type: none"> • Serious discharges caused by negligence, or accompanied by failure to take reasonable steps to minimize the effects of the discharge. • Major discharges (e.g. noticeable or significant deleterious effects on a water body). • Failure to comply with an initial warning or to submit a required report. <p>Purposes:</p> <ul style="list-style-type: none"> • Levy fines. • Compel RP to abate the nuisance, under threat of further legal action. • Require a plan and schedule for compliance.
IV Legal Action	<p>Issued for:</p> <ul style="list-style-type: none"> • Failure to respond to previous violation notices or citations. <p>Purposes:</p> <ul style="list-style-type: none"> • Refer to city attorney or county district attorney. • Formally document evidence of violation. • Refer to appropriate agencies for possible violations of laws pertaining to environmental health, waste management or wildlife protection.

Attachment C

MARIN COUNTY STORMWATER POLLUTION PREVENTION PROGRAM

REPORT OF NON-STORMWATER DISCHARGE

Municipality:

Date:

Completed by:

Agency/Dept:

Use this form to document your response to each incident of illicit discharge or other non-stormwater discharge to streets, gutters, ditches, storm drains, or creeks (including excessive litter or debris found in catchbasins or storm drain inlets). Return copy to local public works department. Public works should compile and submit completed forms along with monthly street sweeping/storm drain cleaning reports.

Evidence of non-stormwater discharge was found:

- During street sweeping and storm drain maintenance.
- During inspection or patrol of the storm drain system.
- In response to notification by another agency or department (specify):
- In response to a citizen complaint.

Discharge was found in or around:

- storm drain inlet
- street
- gutter or concrete swale
- ditch or culvert
- manhole
- pump station
- creek, pond, wetland or other waterway
- other (specify):

Approximate location:

Describe substance or material found:

Investigation:

- Source unknown
- Source identified as:

Name and address of potentially responsible party (if known):

Coordination: (agencies notified):

- Water District
- Sanitary District
- County Health Department
- Other:
- Fire Prevention Bureau
- HAZMAT Responder
- Police Department
- Local Code Enforcement Officer

Clean Up:

Performed by • Municipal Maintenance Crews • Other:

Describe how material was removed, where material was disposed and final condition of site:

Follow Up:

- Contacted potentially responsible party. Action taken:
- Distributed door hangers or other educational materials in the area.
- Other follow-up action recommended:
 - Warning and Order to Abate Pollution
 - Warning with Requirements to submit a written Report by 14 days
 - Formal Violation, Citation
 - Legal Action

WARNING AND ORDER TO ABATE POLLUTION

<ul style="list-style-type: none"> ● Source unknown <p>Name _____</p>	<ul style="list-style-type: none"> ● Property Owner or person responsible: <p>Date _____</p>
<p>Address _____</p>	<p>Telephone _____</p>
<ul style="list-style-type: none"> ● Discharge or ● Potential discharge to: ● gutter ● storm drain inlet ● street ● ditch, culvert or swale ● creek, pond, wetland or other waterway ● ● manhole ● pump station ● other (specify location if different from above) 	
<p>Substance or material discharged:</p>	
<p>Cause of discharge or potential discharge:</p> <ul style="list-style-type: none"> ● Dumping ● Washing to drain ● Materials or equipment exposed ● Poor housekeeping ● Failure to implement BMPs ● Other: 	
<p>Appropriate disposal methods or best management practices (BMPs):</p>	
<p>Coordination: (agencies mobilized or consulted):</p> <ul style="list-style-type: none"> ● Fire Dept. ● County Flood Control ● Police or Sheriff ● Fish & Game ● County Health ● Sanitary District ● Water District ● Other: 	
<ul style="list-style-type: none"> ● Clean up/Cost Recovery: Clean up by: ● Owner/Responsible Party ● Public Works ● Agency Contractor ● Other: <p>Estimated staff hours, equipment, direct costs:</p> <p>Clean up method and disposal location:</p>	
<ul style="list-style-type: none"> ● I acknowledge receipt of this warning and agree to abate the actual or potential discharge of pollutants to the storm drain system. ● I will submit a written report within 14 days (see reverse). <p><i>Signature of Property Owner or Responsible Party:</i></p>	
<p>See reverse side for where to get assistance and potential penalties for noncompliance.</p>	

Warning and Order to Abate Pollution

The condition noted on the reverse is a violation of the City (Town, County) of _____ stormwater pollution prevention ordinance, and may also violate the California Water Code and Federal Clean Water Act.

By complying with these laws, you can help protect our local creek and wetland habitat, and San Francisco Bay, from pollutants in runoff.

The ordinance prohibits the discharge of anything except rain runoff into streets, gutters, swales, storm drain inlets, swales, ditches, or creeks. You may not place loose or unconsolidated material adjacent to or within a watercourse. In addition, all persons engaged in activities that may be a source of stormwater pollutants are required to implement best management practices (BMPs) to minimize the quantity of pollutants in runoff. You must obtain written permission from the City (Town, County) Director of Public Works before you modify flow in a watercourse, deposit or remove anything, (except as required for necessary maintenance) construct, alter, enlarge, change or remove any structure.

The City (Town, County) of _____ will assist you to find the appropriate disposal option or management practice for your activities. This assistance is available by calling xxx-xxxx. You may also request a copy, or a summary, of the ordinance.

You are warned that violations of the ordinance constitute a public nuisance and may be considered an infraction, or a misdemeanor. The City (Town, County) of _____ may abate the nuisance and place a lien on the subject property. Civil remedies include injunctions, compensatory damages, costs of investigation, lawsuit, and remediation.

If indicated on the reverse, you must respond to this warning, in writing, within 14 days. Your response must indicate the cause of the violation, corrective actions being taken, and the date you anticipate that the corrective action will be completed. Address your response to:

In the event of failure to respond, this matter will be referred to ____

Do the right thing.
Protect our creeks, wetlands and San Francisco Bay.

Creeks and Lakes

- 01 Bowman Canyon Creek
- 02 Simmon's Slough
- 03 Foster Creek
- 04 Stafford Lake
- 05 Novato Creek
- 06 Vineyard Creek
- 07 Wilson Creek
- 08 Arroyo Avichi Creek
- 09 Arroyo San Jose Creek
- 10 Phoenix Creek
- 11 Gallinas Creek
- 12 Bel Marin Keys
- 13 Sleepy Hollow Creek
- 14 Fairfax Creek
- 15 Ross Creek
- 16 San Anselmo Creek
- 17 Cascade Creek
- 18 Carey Camp Creek
- 19 Old Mill Creek
- 20 Cascade Creek
- 21 West Ditch
- 22 Coyote Creek
- 23 Oakwood Valley Creek
- 24 Reed Creek
- 25 Larkspur Cr
- 26 Tamalpais Ck
- 27 Deer Park Ck
- 28 Warner Ck
- 29 Marsh Crk
- 30 San Clemente Ck
- 31 Arroyo Corte Madera del Presidio
- 32 Glen Ck
- 33 Miller Ck
- 34 Pacheco Ck
- 35 Phoenix Lake
- 36 Warner Ck
- 37 Ignacio Ck
- 38 Pacheco Pond
- 39 Sutton Manor Ck
- 40 S. Fork Gallinas Ck



Urban Marin Watershed Map

Marin County Stormwater Pollution Prevention Program (MCSTOPPP)
EOA, Inc.