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# STORMWATER MANAGEMENT PLAN

**July 2004 – June 2009**

San Mateo Countywide
Stormwater Pollution
Prevention Program

**November 4, 2003**

*A Program of the City/County Association of Governments*

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# Acronyms

| | |
|---|---|
| ABAG | Association of Bay Area Governments |
| BASMAA | Bay Area Stormwater Management Agencies Association |
| BART | Bay Area Rapid Transit |
| BMPs | Best Management Practices |
| C/CAG | City/County Association of Governments |
| CCMP | Comprehensive Conservation and Management Plan |
| CEQA | California Environmental Quality Act |
| CII | Commercial/Industrial/Illicit Discharge (Subcommittee) |
| COGs | Community Outreach Grants |
| CRMP | Coordinated Resources Management and Planning |
| CZARA | Coastal Zone Act Reauthorization Amendments |
| EPA | Environmental Protection Agency |
| KMEL | (call letters for a radio station) |
| LUDA | Land Use Data |
| MEP | Maximum Extent Practicable |
| MOU | Memorandum of Understanding |
| NOI | Notice of Intent |
| NPDES | National Pollutant Discharge Elimination System |
| PIP | Public Information and Participation |
| POP | Point of Purchase (Campaign) |
| POTW | Publicly - Owned Treatment Works (sewage treatment plants) |
| RMP | Regional Monitoring Program |
| RNA | ribonucleic acid |
| SFEI | San Francisco Estuary Institute |

| | |
|---|---|
| STOPPP | San Mateo Countywide Stormwater Pollution Prevention Program |
| SWMP | Stormwater Management Plan |
| SWPPP | Stormwater Pollution Prevention Plan |
| TAC | Technical Advisory Committee |
| USGS | U.S. Geological Survey |
| WERF | Water Environment Research Foundation |

# Definitions

| | |
|---|---|
| BMPs | Practices which prevent or reduce stormwater pollution. |
| General Program | Activities implemented for the joint benefit of the member agencies of the San Mateo County STOPPP. |
| Member Agencies | San Mateo County and the 20 cities/towns in San Mateo County that participate in the San Mateo Countywide Stormwater Pollution Prevention Program. |
| Performance Standards | Pollution prevention practices the member agencies have made a commitment to implement. |

# Executive Summary

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## INTRODUCTION

The San Mateo Countywide Stormwater Pollution Prevention Program (STOPPP) is a consortium of all 20 cities located within San Mateo County and the county. As described further below, many of STOPPP's activities are coordinated through the City/County Association of Governments of San Mateo County. This partnership also relies on each of the municipalities to implement local stormwater pollution prevention and control activities for their local storm drain systems.

This Stormwater Management Plan (Plan) describes what STOPPP will be doing during the five-year period from July 2004 through June 2009 to prevent and control stormwater pollution in San Mateo County. The current Plan has evolved out of the experience developing and implementing two previous stormwater management plans that covered the preceding ten year period.

The Plan will serve as part of the basis of STOPPP's third National Pollutant Discharge Elimination System (NPDES) permit to be reissued by the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Board). As required by the current NPDES permit, the Plan will be submitted to the Regional Board, at least 180 days prior to the permit's expiration on July 21, 2004. The federal Clean Water Act requires stormwater dischargers to reduce pollutants to the maximum extent practicable (MEP) and to effectively eliminate most types of non-stormwater discharges to the storm drain system. The Plan, in conjunction with the reissued permit adopted by the Regional Board, is designed to enable STOPPP to meet these requirements.

## ORGANIZATION OF THE PLAN

The Plan is organized around the following five major stormwater pollution prevention and control components:

- Municipal Maintenance
- Industrial and Illicit Discharge Controls
- Public Information and Participation
- New Development and Construction Controls
- Watershed Assessment and Monitoring

Each of the Plan's five major components describes goals, recent achievements and tasks that will be completed over the five year period. The tasks are part of the General Program that will be implemented by STOPPP for the mutual benefit of the municipalities. The achievements portion of each section summarizes activities and progress during the 1999 - 2003 NPDES permit period in order to set the basis for STOPPP's future direction.

The appendices to the Plan include the General Program's work plan and budget for FYs 2003/04 and 2004/05 (Appendix A); performance standards that each of the municipalities has committed to implement

(Appendix B); and a list of municipal stormwater ordinances (Appendix C).

The General Program's two-year work plans and budgets will be updated annually to include the subsequent fiscal year and submitted as a draft to the Regional Board. Normally, STOPPP's Technical Advisory Committee approves these draft work plans and budgets around February, and C/CAG approves them around May or June of each year. Subsequent work plans and budgets will be added to Appendix A as they are developed and approved.

The performance standards are organized to correspond with each of the major components of the Plan except for the Watershed Assessment and Monitoring section. The performance standards help to define what the municipalities need to do to achieve the maximum extent practicable control of pollutants. Performance standards for monitoring are not included because it can be conducted more cost-effectively as a General Program activity rather than by having each member municipality conduct its own monitoring.

## COMPONENT GOALS AND MAJOR TASKS

The following reviews the goals and major tasks of each of these components, highlights the applicable performance standards (Appendix B), and describes the most significant changes from the previous plan.

### 2.0 Municipal Government Maintenance Activities

Municipal maintenance activities include street sweeping, storm drain cleaning, the maintenance of parks and corporation yards and other maintenance-related activities that may have an impact on stormwater quality.

The goal of this component is to continue to work with municipal public works, parks and recreation and other maintenance staff to identify ways to optimize the removal of pollutants and minimize discharges of pollutants during routine maintenance activities.

The two primary tasks include assisting with the implementation of the performance standards (Task 2.1) and conducting outreach and training (Task 2.2) for maintenance staff. The other two tasks in this component include the following: coordinating with other STOPPP subcommittees, other public agencies, and private industries with similar interests or who are potentially affected by municipal maintenance activities (Task 2.3); and assisting with regulatory compliance and planning (Task 2.4).

### 3.0 Industrial and Illicit Discharge Controls

The two primary goals of this component are to minimize or eliminate potential stormwater pollution sources at commercial and industrial facilities through inspection and educational outreach activities; and to effectively prohibit illicit discharges (such as oil, paint, or soapy washwaters) to the municipalities' storm drain systems.

The primary role of the General Program is to help municipalities implement a consistent countywide approach for meeting the performance standards (Task 3.1). This will be achieved in part by developing and implementing model materials to help the municipalities develop their Five-Year Illicit Discharge Control Action Plans and their Five-Year and Annual Inspection Plans for Businesses (Task 3.2), by assisting municipalities to comply with the requirements for discharges that are conditionally exempted from the NPDES

permit's non-stormwater discharge prohibition (Task 3.3), and by conducting outreach and training (Task 3.4). Lastly, this component includes Task 3.5 to assist the municipalities with NPDES permit compliance reporting, General Program work plans and budgets, and assessing effectiveness.

## 4.0 Public Information and Participation (PIP)

The primary goal of this component is to educate the public about the causes of stormwater pollution and its serious effects on the quality of waterways and neighborhoods, to encourage residents to adopt less polluting and more environmentally beneficial practices, and to increase residents' hands-on involvement in STOPPP activities.

The most important task under this component is to achieve public involvement through outreach and education (Task 4.3). The PIP component will continue to implement the Bay Area Wide Integrated Pest Management Point of Purchase Campaign at 20 hardware and nurseries located in San Mateo County. In addition, the PIP Subcommittee will select future stormwater pollution prevention topics for targeted outreach, conduct targeted campaigns, and evaluate the effectiveness of these activities.

The other tasks in this component include the following: implement the performance standards (Task 4.1); assist the municipalities to prepare NPDES permit compliance reports and develop the General Program's work plans and budgets (Task 4.2); train PIP staff (Task 4.4); and build partnerships with other agencies and companies and work with volunteer groups and other STOPPP subcommittees (Task 4.5).

## 5.0 New Development and Construction Controls

In February 2003 the Regional Board amended STOPPP's municipal stormwater permit to include extensive new requirements that affect this component of the Plan. The primary goal of this component, to minimize the water quality and beneficial use impacts of land development during and after construction, will be achieved in part by fulfilling the requirements of the permit amendment. This includes identifying and implementing appropriate site design, source control, and stormwater treatment measures, and managing increases in peak runoff flow and volume in order to prevent increased erosion of creek beds and banks and silt pollutant generation (termed hydrograph modification management in the permit amendment). During the construction phase the goal is achieved by prohibiting non-stormwater discharges from construction sites; reducing stormwater pollutant discharges from construction activities to the maximum extent practicable; and requiring compliance with stormwater best management practices and erosion/sedimentation control at construction sites.

The Subcommittee and the General Program will be conducting the following activities: implement and improve the performance standards (Task 5.1); assist with the implementation of the Provision C.3 requirements contained in the February 2003 permit amendment (Task 5.2); assist with the implementation of controls on peak runoff rates and volumes for appropriate projects (Task 5.3); assist with improving construction site stormwater controls (Task 5.4); and promote the outreach and training for municipal staff and builders and their consultants and contractors (Task 5.5). Lastly, this component includes Task 5.6 to

assist the municipalities with NPDES permit compliance reporting, General Program work plans and budgets, and assessing effectiveness.

### 6.0 Watershed Assessment and Monitoring

This component supports the implementation of other program components. The primary goals of the component include assessing water quality conditions in representative San Mateo County watersheds, determining whether specific pollutants are adversely affecting local waterways, and developing plans to address any pollutants of concern. In addition, one of the goals is to identify effective BMPs and to evaluate the overall effectiveness of STOPPP's activities.
In order to achieve these goals the General Program will continue to use environmental indicators to assess representative watersheds (Task 6.1); develop and implement pollutant-specific control programs for pollutants believed to be impairing local waterways (Task 6.2); participate in regional efforts to monitor and solve water quality impairment problems (Task 6.3); and prepare NPDES permit required reports, monitoring plans, budgets and reports, including annual assessments of the effectiveness of the component's activities (Task 6.4).

### Work Plans and Budgets (Appendix A)

As noted previously, the General Program's work plans and budgets for FY 2003/04 and FY 2004/05, the first year of the Plan's proposed implementation, are contained in Appendix A. It is estimated that the General Program costs for FY 2004/05 will be about $1.2 million. Draft work plans and budgets for the first two years of the Plan will be prepared for submittal to the Regional Board by March 1 as required by the NPDES permit.

### Performance Standards (Appendix B)

Performance standards to be implemented by member agencies have been reviewed and updated for the following five areas of the Plan:

- Municipal Maintenance Activities
- Industrial and Commercial Discharge Controls
- Illicit Discharge Controls
- Public Information/Participation
- New Development and Construction Controls

STOPPP developed performance standards as a tool to help STOPPP's municipalities comply with their NPDES permit. The Clean Water Act and STOPPP's stormwater NPDES discharge permit require STOPPP member agencies to control discharges of pollutants to the maximum extent practicable (MEP) and to effectively prohibit illicit discharges. STOPPP developed the performance standards to define the MEP level of effort that each member municipality will attain to control pollutants in stormwater.

In addition, the performance standards define the level of effort that each member municipality will attain to effectively prohibit illicit discharges[1] from entering its municipal storm drain conveyance system[2].

[1] Illicit discharges include non-stormwater discharges disallowed by the STOPPP NPDES permit.
[2] Municipal storm drain conveyance system includes roads with drainage systems, municipal streets, curbs, gutters, catch basins, storm drain inlets, ditches, man-made channels, or storm drains.

The performance standards provide an effective, consistent, and predictable countywide approach to minimizing water quality impacts. Having consistent countywide standards assures similar treatment for businesses, builders, contractors, and property owners. In addition, such standards assist STOPPP's municipalities with training and educational outreach.

These performance standards define the major portion of what each member agency will need to do to implement the Plan and comply with the NPDES permit. The implementation of these performance standards by member agencies is required by the Plan.

## CHANGES FROM PREVIOUS PLAN

While the majority of tasks and performance standards have been continued from the previous plan, there have been a number of changes. Some changes were made to respond to the February 2003 amendment of STOPPP's NPDES permit. This permit amendment added specific detailed requirements for stormwater pollution prevention and treatment at applicable new development and redevelopment projects

Other reasons why changes were made included: preparing for changes to the permit based on the requirements of recently reissued municipal stormwater permits in other counties; responding to constructive criticism from the regulatory agencies; incorporating new information and approaches based on experience with the previous plan; or revising outdated information.

### Performance Standards

The most significant changes to the performance standards include the following.

Municipal Maintenance

- Added a new performance standard that each of the municipalities that have a corporation yard will develop and implement a Stormwater Pollution Prevention Plan that describes how the performance standards for corporation yards will be addressed locally.

- Developed new performance standards for routine maintenance of creeks and channels to help municipalities obtain necessary environmental permits for this type of work.

- Updated the performance standards for pesticide usage and integrated pest management (IPM) to support the implementation of STOPPP's Pesticide Management Plan. One example is adding a requirement to implement each municipality's new IPM policy or ordinance. Another example is a new requirement to conduct periodic searches of municipal facilities to make sure pesticides that are no longer legal to use or that no longer are allowed based on municipal policy are found and properly disposed.

- Added previously agreed to performance standards for all lagoon management activities undertaken by the cities of Foster City, Redwood City and San Mateo.

- Added previously agreed to performance standards for rural public works maintenance activities that are

applicable to San Mateo County. In addition, the performance standards describe a process for the cities of Half Moon Bay, Menlo Park, Pacifica, Portola Valley and Woodside to identify appropriate performance standards for the rural public works maintenance activities that they implement.

Industrial and Commercial Discharge Controls and Illicit Discharge Controls

- Added new performance standards that require that each of the municipalities will develop written, 5-year implementation plans that describe how the municipality will meet the performance standards for finding and eliminating prohibited non-stormwater discharges to its storm drain and for conducting business inspections.

- Added a new performance standard that helps to implement the NPDES permit's prohibition against illicit discharges by clarifying that municipalities are responsible for cleaning up illicit discharges when a responsible party cannot be found.

- Added a new performance standard to achieve a more cost-effective business inspection compliance program by having the municipalities be responsible for inspecting facilities that have coverage under the California Industrial Stormwater NPDES General Permit, but referring most problems found to the Regional Board staff for correction.

New Development and Construction Controls

- Added new performance standards to help implement the amended NPDES permit's Provision C.3 requirements. This included: 1) a new performance standard to implement the amended NPDES permit's requirement (C.3.k) that source control measures are required for applicable projects; and 2) a new performance standard to implement the amended NPDES permit's requirement (C.3.e) to assure access permission for municipal, Regional Board, and local vector control staff for stormwater treatment measures.

- As part of implementing additional tasks to reduce the contamination of stormwater by mercury, a new performance standard was added to require that each municipality assure that when preparing for building demolition all mercury containing fluorescent tubes, thermostats and other devices are removed and disposed properly.

- Revised performance standards from the previous plan to incorporate the amended NPDES permit's Provision C.3's requirements. Examples include: 1) a performance standard that required the use of site design and stormwater treatment measures for projects with significant stormwater pollution potential was revised to also require the use of source control and hydrograph modification management measures for applicable projects; and 2) a performance standard for municipalities to require that owners/builders operate and maintain stormwater treatment measures was revised to add more specific requirements based on Provision C.3.e.

### Stormwater Management Plan Tasks

The most significant changes to the Plan's tasks include the following.

A greater emphasis has been placed on evaluating the effectiveness of the General Program's tasks in order to determine where to make future improvements. This process of measuring effectiveness is modeled after U.S. EPA's requirements for small municipal stormwater programs.

The approach for conducting watershed assessments has evolved. During the previous plan the emphasis was on delineating 17 watersheds and collecting data on imperviousness and channel modifications. The new Plan specifies preparing a new multi-year monitoring plan. The new monitoring plan is anticipated to take a more comprehensive approach by focusing on fewer watersheds. This would include compiling all existing data on a watershed, collecting biological data from creeks to assess problems, and conducting focused water quality monitoring where needed to help identify how to solve problems. At some point in the process the correction of specific problems would become the responsibility of the local municipality rather than the General Program.

The Plan has a greater emphasis on assisting STOPPP's municipalities to implement improved controls on pollutants of concern, such as, PCBs, mercury, pesticides, sediment, dioxins, and copper. STOPPP will continue to assist the Regional Board to develop Total Maximum Daily Loads to reduce the loading for a number of these pollutants through its continued participation in and funding of the Clean Estuary Partnership.

The Industrial and Illicit Discharge Controls section of the Plan contains a new task to assist the municipalities to comply with the NPDES permit's requirements for conditionally exempted discharges. This assistance has increased importance because of the State Water Resources Control Board's adoption of a new permit for low threat discharges to land and as previous Regional Board waivers for minor discharges may no longer be applicable.

The New Development and Construction Controls section of the Plan has two new tasks to assist the municipalities to implement the additional new and redevelopment related requirements contained in STOPPP's NPDES permit amendment. This permit amendment represents a significant amount of additional work for both the General Program and the municipalities, and the Plan reflects this change.