

# **STORMWATER MANAGEMENT PLAN**

**1999 – 2004**



**1999**

**CONTRA COSTA CLEAN WATER PROGRAM**



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## **INTRODUCTION**

This Stormwater Management Plan (SWMP) serves as the basis for the Contra Costa Clean Water Program's National Pollutant Discharge Elimination System (NPDES) Permit application to the San Francisco Bay and Central Valley Regional Water Quality Control Boards. The San Francisco Bay Regional Water Quality Control Board initially issued its Joint Municipal NPDES Permit (CA0029912) for jurisdictions within its authority on September 15, 1993 and it will terminate in September, 1998. The Central Valley Regional Water Quality Control Board issued its Joint Municipal NPDES Permit (CA0083313) for jurisdictions within its authority on January 24, 1994 and it expires in January, 1999.

The Contra Costa Clean Water Program (Program) will consist of twenty (20) public agencies including Contra Costa County (unincorporated area), eighteen (18) of its incorporated cities and the Contra Costa County Flood Control & Water Conservation District. The City of Brentwood, which did not participate in the first Permit, will be joining the Program as recommended by the Central Valley Regional Water Quality Control Board.

This Stormwater Management Plan was written with the following objectives:

- 1. Be concise**
- 2. Be focused**
- 3. Be comprehensive**

The Management Committee directed Program staff to eliminate as much extraneous information as possible. The primary purpose of this Stormwater

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## INTRODUCTION

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Management Plan was not to be a replication of what has been thoroughly documented in the five (5) previous Annual Reports, but to provide a blueprint of activities for the next five year period.

The major difference between the first Stormwater Management Plan and this Plan is the creation of performance standards to be implemented comprehensively and consistently among all co-permittees. This Plan still provides the flexibility for co-permittees to address specific problems related to their community, but describes the type of activities to be performed by all co-permittees. The performance standards have been developed based on experience not only gained by the Contra Costa Clean Water Program, but from other programs throughout the Bay Area, the State and Nation.

The amended Federal Clean Water Act of 1987 required co-permittees to effectively prohibit non-stormwater discharges to municipal storm drain systems and to implement controls to reduce pollutants in stormwater to the maximum extent practicable.

The Management Committee created a Permit Reissuance Committee to draft this Stormwater Management Plan. This Committee has been meeting for the past two years to develop this Plan. The Committee has utilized the Santa Clara, Alameda and San Mateo Counties' Stormwater Management Plans as their guiding documents. The common denominator between these documents and the Program's proposed Stormwater Management Plan is consistency. The Management Committee believed this was important so the entire Bay Area can address stormwater pollution in a consistent, comprehensive manner. The development of this Plan has been painstakingly long, but it meets the needs of all co-permittees within Contra Costa County. Several sections – New



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Development and Construction Control; Public Education and Industrial Outreach; Municipal Maintenance, Inspection Activities; and, Illicit Discharge Control Activities, have detailed performance standards and recommended annual reporting forms. The purpose of providing both of these documents in the Stormwater Management Plan is to identify the Best Management Practices (BMPs) each co-permittee will implement during the five year Permit period and report progress made yearly in the Annual Reports to the Regional Water Quality Control Boards.

New to this Plan is the Watershed Management Activities section. This has been added to support the implementation of specific water quality and aquatic habitat protection and improvement of creeks throughout Contra Costa County.

Each of the Plan's sections contain components describing goals, existing conditions and planned activities. The background information is not intended to be comprehensive. Instead, this Plan is a continuation and enhancement of activities undertaken during the first Joint Municipal NPDES Permit period but, to adapt to changing conditions and directives, refinements and improvements to the Plan are anticipated during this next five year period.

An integral part of the development of this Stormwater Management Plan was soliciting comments from the general public and stakeholders within Contra Costa County and its surrounding areas. More than 700 notices were sent to known stakeholders and several quarter page newspaper advertisements were placed in all of Contra Costa County's newspapers notifying the general public of the draft Plan and its availability for review and comment (see Appendix "A"). A copy of the draft Plan was also available at each City Hall and all 23 County

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libraries. The Program also created a web site making the Plan available on the Internet.

Public comments were received from a variety of individuals and organizations by e-mail, mail and fax and are provided in Appendix "B". These comments were reviewed by the Permit Reissuance Ad-hoc Committee and the Program's Management Committee. Responses to these comments are provided in Appendix "C". Many of these comments were incorporated into the Stormwater Management Plan.

The San Francisco Regional Water Quality Board also provided comments in correspondence dated February 5, 1999 (see Appendix "B"). These comments have been reviewed; and, modifications have been made to the original draft Plan. All modifications have been agreed to between the San Francisco Bay Regional Water Quality Control Board and the Program.

### CONCLUSION

The Contra Costa Clean Water Program's twenty (20) participating public agencies are committed to meeting the requirements of the NPDES Permit regulations in a balanced, consistent and comprehensive manner. Best Management Practices (BMPs) will be implemented to the maximum extent practicable for each entity. The overall goal is to significantly reduce or prevent pollutants from entering stormwater discharges. The Contra Costa Clean Water Program believes it has established a solid foundation with its first Stormwater Management Plan and will continue to build upon its successes with this Stormwater Management Plan.

## PROGRAM MANAGEMENT

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### GOALS

The Contra Costa Clean Water Program came into existence as a result of the amended Federal Clean Water Act of 1987 pertaining to the establishment of stormwater discharge regulations under National Pollutant Discharge Eliminate System (NPDES) Permit requirements. Public agencies in Contra Costa County came together in February, 1991 to address these regulations and out of this process evolved the creation of the Contra Costa Clean Water Program (Program). The Program has been composed of nineteen (19) public agencies including Contra Costa County, seventeen (17) of its incorporated cities and the Contra Costa County Flood Control & Water Conservation District. The last remaining municipality in Contra Costa County has been the City of Brentwood which will be joining the Program under the reissued Permit. The Program's primary purpose is to coordinate specific activities on behalf of all of its co-permittees.

The primary goal of the Program is to be in compliance with its Joint Municipal NPDES Permits issued by the San Francisco Bay and Central Valley Regional Water Quality Control Boards. The Program assists all co-permittees to understand and comply with their NPDES Permit requirements. The Program also helps shape new proposed requirements that may affect co-permittees. If the Program fails to shape its own future, others will do so by default.

The three (3) primary goals of this section are as follows:

- ❖ Assist member agencies to meet their obligations under the stormwater NPDES Permits;

## **PROGRAM MANAGEMENT**

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- ❖ Help maximize regulatory certainty by participating in the regulatory planning process to make sure the perspectives of the Program are represented; and,
- ❖ Provide leadership and essential program management services to implement the Stormwater Management Plan (SWMP).

### **ROLES AND RESPONSIBILITIES**

The implementation of the Stormwater Management Plan requires specific tasks be individually undertaken by each municipality and some tasks be implemented in a cooperative fashion. These “joint” or “group” activities are administered by Program staff. Figure 2-1 provides an organizational chart of the Program staff.

The relationship between each municipality and the Program has been contained in a “Stormwater Utility Area and Program Group Cost Payment Agreement” between the Contra Costa County Flood Control & Water Conservation District and the affected party. This agreement covered the entire five (5) year permit period delineating the duties and responsibility between municipal and Program activities.

During the third year of the Permit, a situation developed that clearly illustrated the weakness of having nineteen (19) individual agreements between the Contra Costa County Flood Control & Water Conservation District and each co-permittee. The Program wrestled with this challenge. After consultation with the Contra Costa Cities/County Attorneys’ Association, it was recommended a new agreement be created binding all co-permittees in one contract.

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Negotiations lasted approximately 12 months among the co-permittees and the Contra Costa Cities/County Attorneys' Association. The result is a new Program Agreement which will cover the entire period of the second Joint Municipal NPDES Permit (see Appendix "D").

The new Program Agreement covers collective and individual duties and responsibilities, the Program's organizational structure, the cost-sharing mechanism for Program expenses among co-permittees and delineates a process establishing how and when a co-permittee can disengage from the Program. This new Program Agreement is viewed by co-permittees as an enormous improvement over the existing agreement. It will provide more stability and continue the concept of implementing a coordinated, comprehensive group Program.

### **PROGRAM STRUCTURE AND FUNCTION**

The Contra Costa Clean Water Program is managed by its Management Committee. This Committee is composed of representatives appointed by the governing body of each co-permittee and acts as the Program's decision-making body. The Committee's specific goal is to monitor the overall implementation of the Stormwater Management Plan among all co-permittees. Each agency must have at least one representative on the Management Committee and participate on one of its subcommittees.

The other committees include the Administrative Committee (AC) which is responsible for administrative and strategic planning activities; the Monitoring & Inspection Committee (MIC) which is responsible for monitoring, special studies and inspection activities; the Public Education & Industrial Outreach

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Committee (PEIO) which is responsible for all public/educational outreach activities; and, the New Development & Construction Controls (NDCC) Committee which is responsible for construction, development and erosion control activities. The major responsibility of these committees is to review various options available to co-permittees in carrying out the requirements delineated in the Stormwater Management Plans and to make recommendations to the Management Committee for decisions.

The present organizational structure has been extremely successful and it is anticipated it will essentially remain the same. Consideration is being given to the creation of a Public Agencies Maintenance Sub-Committee. Figure 2-2 provides the Program's organizational structure.

### **FISCAL RESOURCES**

The Contra Costa County Flood Control & Water Conservation District sponsored legislation referred to as Assembly Bill 2768 (AB 2768) that authorized the District to establish Stormwater Utility Areas within permit areas (i.e., cities and unincorporated county areas) and to impose an annual assessment to pay for the costs associated with the implementation of the NPDES Program and general maintenance activities. All municipalities have participated in this financing mechanism excluding the City of Richmond, which has its own Stormwater Utility Fee in place. The Stormwater Utility Assessments established in June, 1993 generated approximately \$8.5 million for Fiscal Year 1993/94, \$8.0 million for Fiscal Year 1994/95, \$8.1 million for Fiscal Year 1995/96, \$8.3 million for Fiscal Year 1996/97 and \$8.2 million for Fiscal Year 1997/98. Each municipality was responsible for establishing the recommended rate for the stormwater utility assessment, which was eventually

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approved by the Contra Costa County Board of Supervisors acting on behalf of the Contra Costa County Flood Control & Water Conservation District. Approximately 242,000 parcels were assessed. Stormwater utility assessments cannot pay for any debt financed capital improvements. Funds can only be used to pay for operation and maintenance expenses.

This financing mechanism has proven to be extraordinary successful for the Contra Costa Clean Water Program, particularly in light of the budgetary crisis facing all public agencies within the State of California. The stormwater utility assessments are a dedicated source of revenue for the implementation of the Joint Municipal NPDES Program. General Program and administrative costs to collect this assessment total approximately 14% of all generated revenues. This means 86% is returned to co-permittees to use to implement their local stormwater activities.

### **PLANNED ACTIVITIES**

#### *Regulatory Compliance*

The purpose of this task is to provide co-permittees with information and assistance to comply with their NPDES Permit and other related regulatory requirements, and to negotiate the NPDES Permit and any other subsequent changes to the Permit requirements. The activities included as part of this task include the following:

- ❖ Develop and provide deliverable forms to each co-permittee that streamlines the information that needs to be collected for reporting to the Regional

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Boards as part of the NPDES Permit. Each agency will complete and submit its reporting forms and other required information to the Program on time;

- ❖ Prepare the Annual Report covering progress on all activities as required by the Regional Boards. This includes preparing draft reports for agency review and comment prior to incorporating comments into the final report. The fiscal year-end reports contain an evaluation of each agency's work, including an assessment of compliance with applicable performance standards along with an evaluation of the effectiveness of the activities being undertaken. Each component of the SWMP includes a task to evaluate, as part of the annual report, the effectiveness of what that component is accomplishing;
- ❖ Provide additional assistance to member agencies, as requested, to comply with the NPDES Permit or other Program requirements;
- ❖ Coordinate with the Regional Boards during reissuance of the NPDES Permits and any subsequent amendments; and
- ❖ Continue to refine the division of responsibilities for implementing the Joint Municipal NPDES Permit between the Program and individual co-permittees.

### *Program Representation*

This task is to provide the necessary leadership by Program staff for implementing the Permit. This includes representing the Program whenever this participation is required by a co-permittee or is otherwise valuable to



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further the goals of the Program. Part of providing leadership is the ability to identify opportunities for collaborating with other agencies, to make sure the activities of the Program are known and recognized, and to anticipate regulatory initiatives that may affect co-permittees. The Program's Management Committee Chairperson or Program Manager usually serve as the Program representative.

Given the continual changes to regulatory requirements, it is essential the Program participate actively in these processes. The activities may include the following:

- ❖ Identify, evaluate and participate in regulatory initiatives and issues that may impact the Program. This includes identifying regulatory initiatives and issues that are essential to the interests of the Program;
- ❖ Prepare appropriate comments on essential regulatory initiatives and issues that represent the views of the co-permittees;
- ❖ Present the Program's agreed upon comments at public hearings and meetings, etc., as part of the public review process for regulatory initiatives and issues;
- ❖ Participate through BASMAA, the California Stormwater Quality Task Force, and other organizations, as appropriate, to identify new regulatory initiatives that the Program should participate in or sponsor.

## **PROGRAM MANAGEMENT**

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### *Continuous Improvement*

This task is to make sure the information and experience acquired by the Program is used to continuously improve the implementation of the Joint Municipal NPDES Permit. Having this type of process in place will help achieve cost-efficiencies and other benefits. The primary method used to improve the Program is to obtain suggestions from all co-permittees annually. These suggestions are considered and acted upon by the subcommittees and Management Committee.

### *Management Services*

The purpose of this task is to provide all of the needed financial management, contracting, program management, and administrative support needed for the General Program. Activities include providing assistance to the Management Committee and its subcommittees. This task also includes conducting fiscal analysis, tracking and reporting on budget expenditures and tasks' status, processing accounts receivable and payable, and assisting with the preparation of each year's General Program budget. Refer to Table 2-1 for a breakdown of the 1999/00 Fiscal Year Program Budget.

### *Maximize Regulatory Certainty*

The best way to minimize the uncertainties inherent in any regulatory compliance program is to anticipate possible problems and identify ways to prevent or correct them as quickly as possible. The General Program will continue to emphasize achieving open communication with the Regional Boards' staffs and with its member agencies to address new regulatory

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initiatives in a way that maximizes the degree of certainty associated with implementing this SWMP.

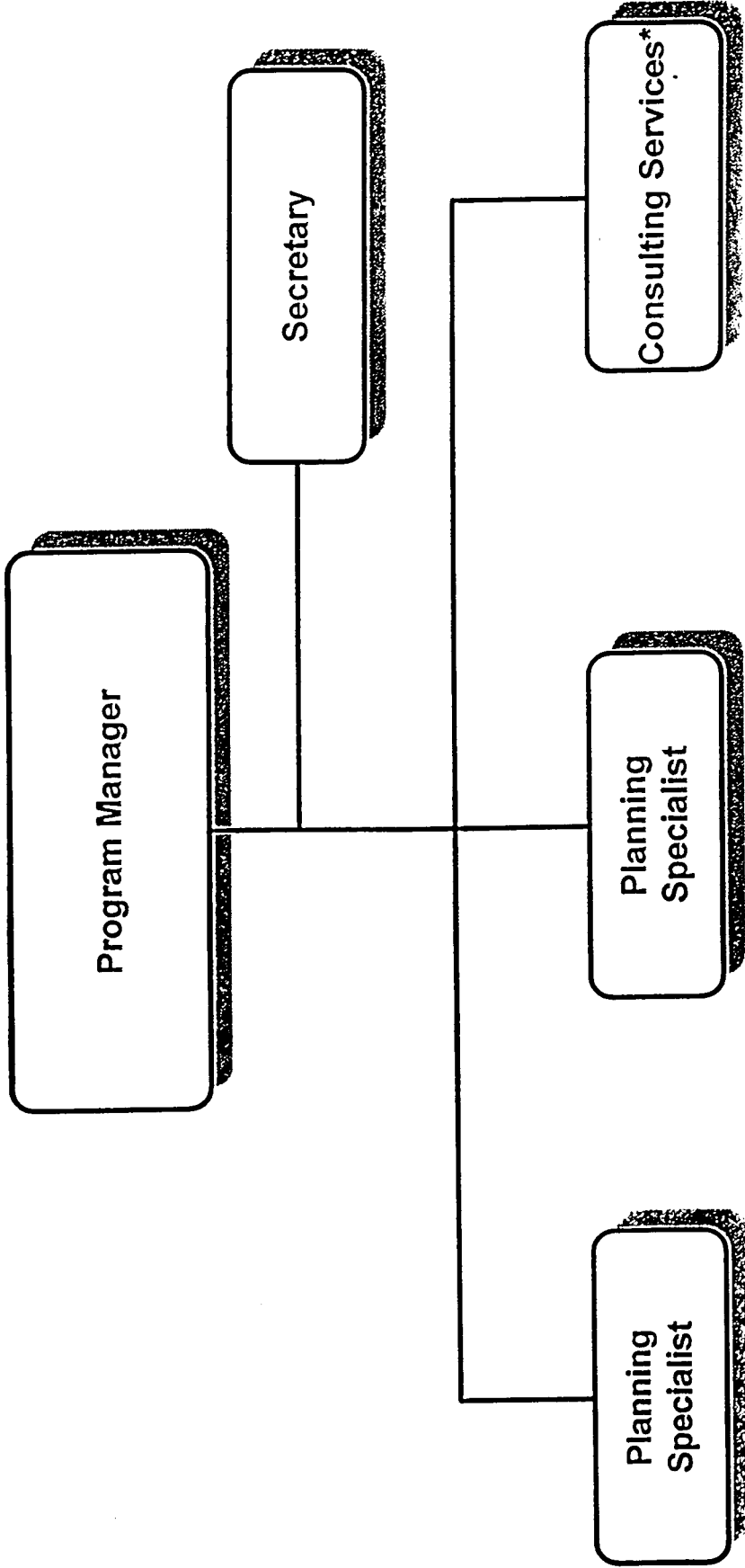
### *Minimize Costs*

The Program needs to continue to identify ways to make the General Program and co-permittees' programs more cost-effective. One of the strategies for doing this is to identify where each activity can be properly implemented. Some activities can be handled best at the regional level by working with other stormwater agencies, such as BASMAA, other activities are best conducted at the local level, and others are best done at the Program level.

One of the lessons learned with the previous SWMP is to take a flexible, but structured implementation approach. The entire five-year plan with annual work plans captures this approach for continuous improvement of this SWMP.

Figure 2-1

# CONTRA COSTA CLEAN WATER PROGRAM PROGRAM STAFF STRUCTURE



\*Woodward-Clyde Consultants, Inc.

\*Merritt Smith Consulting

**TABLE 2 – 1**  
**1999/2000 FISCAL YEAR**  
**PROGRAM BUDGET**

Item	DESCRIPTION	1999/2000 Budget
1	ADMINISTRATION	\$ 498,291
2	TECHNICAL SUPPORT SERVICES	\$ 15,000
3	PERMIT/COMPLIANCE ACTIVITIES	\$ 49,000
	PROGRAMS	
4	Monitoring Activities	\$ 230,000
5	Special Studies	\$ 175,000
7	Inspection Activities	\$ 45,000
8	Public Education & Industrial Outreach Activities	\$ 487,872
9	New Development & Construction Related Activities	\$ 15,000
10	Municipal Maintenance Activities	\$ 20,000
11	Industrial/Commercial Related Activities	\$ 43,000
11	GENERAL SERVICES & SUPPLIES	\$ 7,500
12	CONTINGENCY	\$ 14,763
	<b>TOTAL PROGRAM COSTS</b>	<b>\$1,600,426</b>



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## NEW DEVELOPMENT AND CONSTRUCTION CONTROLS

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### GOALS

Modifications of natural drainage systems associated with urbanization (e.g., engineering drainage ways to convey runoff quickly, and increasing impervious surfaces associated with construction of buildings and paved areas for roads and parking lots) may contribute significantly to stormwater pollution. These types of changes lead to increases in the volume, the rate of runoff and the discharge of pollutants. A large portion of the developable land in Contra Costa County is already urbanized. Current growth rates and strong economic conditions exist causing a continuing pressure for more development. Efforts are needed to control the impacts of development and construction projects on environmentally sensitive areas and local water bodies.

The primary goal of the New Development and Construction Controls component of the SWMP is to minimize adverse water quality impacts associated with development activities. Development and implementation of uniform standards will protect water quality and its beneficial uses<sup>1</sup>. Specific objectives to meet this goal include the following:

- ❖ Prohibit non-stormwater discharges from construction sites, and reduce stormwater pollutant discharges from development and construction activities to the maximum extent practicable;

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<sup>1</sup> "Beneficial use" is defined as those uses allowing the highest water quality consistent with maximum benefit to the people of California, including uses for recreation, preservation and enhancement of fish and wildlife use, agricultural supply, industrial service process supply, municipal and domestic supply, groundwater recharge, navigation, and ocean commercial and sport fishing. For a more detailed description, see: San Francisco Bay Regional Water Quality Control Board's *Water Quality Control Plan* (1995 *Basin Plan*), 1995 (Chapter II).

## **NEW DEVELOPMENT AND CONSTRUCTION CONTROLS**

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- ❖ Provide guidance to agencies on cost-effective stormwater quality controls for new and re-development projects, and communicate the information to developers, owner/builders, and contractors;
- ❖ Incorporate stormwater quality controls – including good planning practices to minimize increases in impervious cover – into development plan review and permitting, and gain internal acceptance and support for these policies;
- ❖ Require compliance with new development and construction site best management practices (BMPs);
- ❖ Promote implementation of performance standards for new development and construction control activities; and,
- ❖ Continually track, evaluate and improve efforts to control stormwater quality and beneficial use impacts of development. Evaluate local agency policies and practices, changes in public awareness and effectiveness of specific control measures; and use the results of these evaluations to improve related future activities.

### **PROGRAM ACCOMPLISHMENTS**

#### *New Development and Construction Controls Committee*

Since its inception in 1992, the New Development and Construction Controls Committee comprised representatives from agencies and the development community. Working cooperatively, these representatives assisted in the



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development and implementation of the Program's New Development and Construction Controls component of the SWMP.

The Program's strategy has been to integrate procedures for stormwater pollution prevention and control into existing agency review and inspection programs and to coordinate with new development programs being implemented as part of other Bay Area stormwater programs. The Program provides guidance to the local agency programs through its New Development and Construction Controls Committee. The committee meets monthly and has been a valuable means of communication and information sharing between agencies in the Program as well as with other BASMAA member agencies. Following is a summary of the Program's significant accomplishments:

### *Training, Education & Outreach*

Beginning in 1993, the committee has conducted annual educational workshops for municipal planners, engineers, and inspectors. Workshop topics have addressed the State's General Construction Activity NPDES permit and municipal NPDES permit requirements, the San Francisco Bay Regional Water Quality Control Board's Staff Recommendations; construction site erosion and sediment controls, construction site pollution prevention measures, construction site field inspections, and site planning and design guidance for new developments. The committee has also participated with BASMAA to develop and implement a regional construction education program.

The committee developed or adapted several educational/informational outreach materials for developers and contractors. For example, the committee

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adapted a series of eight brochures on BMPs for construction activities for agencies to hand out at planning and building department counters. The committee also assisted BASMAA in adapting the “Blueprint for a Clean Bay” booklet into a regional document to be used by all BASMAA member agencies. As part of this effort, the committee assisted in the development of a Bay Area “Recycler and Disposal Services for Construction Sites” list, which helps contractors properly dispose of construction wastes and to facilitate recycling of usable materials. In addition, the committee adapted a construction site pollution prevention plan sheet containing construction site best management practices. Agencies attached this plan sheet to approved plans and permits.

Representatives of the committee worked with BASMAA’s New Development Committee to develop guidance document entitled “*Start at the Source: Residential Site Planning and Design Guidance Manual for Stormwater Quality Protection*”. This document is being used by agencies to educate agency staff and the development community about ways to mitigate stormwater impacts of development through proper site design. Several committee members are currently preparing an expanded “Start at the Source” manual, which will contain guidance for commercial/industrial developments.

### *Model Grading Ordinance*

A key task during the development of our New Development and Construction Controls component was the development of a Model Grading Ordinance. The Model Grading Ordinance requires erosion and sediment control plans be prepared in accordance with the Association of Bay Area Governments’ 1995 Manual of Standards for Erosion and Sediment Control Measures and the

## **NEW DEVELOPMENT AND CONSTRUCTION CONTROLS**

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California Storm Water Best Management Practice Handbook for Construction Activity.

### *Guidelines for New Development*

The committee prepared recommended New Development Guidelines containing stormwater quality controls for all new development, including multi-family residential development and commercial/industrial development. The committee also provided guidance on alternative funding sources and maintenance responsibilities for implementing treatment controls in new developments.

### *Development Plan Review and Approval Procedures*

The committee developed several tools to assist agencies' efforts to review and revise, if necessary, their development plan review and approval procedures, such as:

- ❖ Revised CEQA initial study checklist – A revised CEQA checklist was developed for planners during the development plan review process to identify potential significant impacts to stormwater quality. This checklist is updated periodically.
- ❖ Model Conditions of Approval – Model conditions of approval were developed requiring applicants to show proof of coverage under the State's Construction Activity General Permit; and, to implement and maintain

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## NEW DEVELOPMENT AND CONSTRUCTION CONTROLS

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minimum construction site stormwater quality control measures. The minimum control measures vary based upon the size of the project.

- ❖ Planning Tools Binder – A binder titled “Planning Tools for Addressing Impacts to Stormwater from Construction and New Development Activities” was compiled and distributed to agencies and to BASMAA’s New Development Committee. The binder contains materials and information (e.g., general plan policies, ordinances, conditions of approval, etc). developed by regulatory agencies, stormwater programs, agencies, and consultants. The purpose of the binder is to provide agencies with example “planning tools” for addressing stormwater quality during the development plan review and approval process. This binder is updated periodically.
  
- ❖ Documentation of Test Cases – Several new development projects are being tracked through the plan review and approval process in order to identify practical, effective methods for mitigating stormwater quality impacts of development; to compile information on alternative methods for integrating stormwater quality considerations into existing project review and approval procedures; and, to identify potential conflicts and solutions for coordinating stormwater quality requirements with existing building standards and codes, and other agencies’ requirements.

### *Response to Construction Related Erosion Problems*

The Program has responded proactively with SFBRWQCB staff to address the construction-related erosion control problems observed throughout the Bay Area over the last couple of years. Significant progress has been made in

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addressing these problems through improved communication and coordination between Regional Board staff and agency representatives. Aggressive outreach and enforcement activities have also contributed to improved erosion control efforts. The Program continues to work cooperatively with Regional Board staff.

### *Local Efforts*

In general, agencies have made substantial progress incorporating stormwater pollution prevention requirements into their development plan review and construction site inspection procedures, and are continuing to review and improve their programs. During the term of the first NPDES permit, agencies' new development activities focused on:

- ❖ Adoption of stormwater discharge and erosion control ordinances;
- ❖ Development and implementation of construction site BMPs;
- ❖ Incorporation of stormwater pollution prevention measures into development plan reviews and construction inspections; and,
- ❖ Implementation of the Regional Board Staff's *Recommendations*.

Agencies have reported they are requiring construction BMPs as permit conditions for some or all projects; and, requiring copies of "Notices of Intent" (NOIs) and Stormwater Pollution Prevention Plans (SWPPPs) for projects required to be covered under the State's General Construction Activity Storm Water Permit.

## **NEW DEVELOPMENT AND CONSTRUCTION CONTROLS**

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### **PLANNED PROGRAM ACTIVITIES**

The following program activities will be conducted during the next five years.

#### *Implement and Improve Performance Standards*

Each of the agencies will implement the performance standards for control of stormwater pollutants from new development and construction activities as part of its compliance with the countywide stormwater NPDES permit. The New Development and Construction Controls Committee will review the performance standards annually and make any needed improvements. These improvements will be based on implementation experience, the measured effectiveness of the controls, and future guidance from Regional Board staff, BASMAA, and other groups as available.

#### *Assist with Implementing Stormwater Quality Controls*

- ❖ Increase Knowledge and Use of Appropriate Controls - The Program will track the implementation of stormwater controls in public and private projects. Tracking will primarily be conducted through discussion of municipal “case studies” at New Development and Construction Controls Committee meetings. The Committee will also continue to investigate and inform agencies about the effectiveness of individual structural controls (e.g., grass swales, inlet filters, etc.) and recommend BMP special studies to the Monitoring and Inspection Committee.

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- ❖ Control Discharges from Construction-Related Activities - The Program will support agencies' efforts to control pollutant discharges (including sediment) from construction sites, as described in the performance standards. The Program will also support outreach efforts to developers and contractors, including review and possible update of the Construction Activity BMPs brochures. In addition, the New Development and Construction Controls Committee will also track and inform agencies about changes to the State Board's General Construction Activity Stormwater NPDES Permit, which is scheduled for reissuance in 1999.
  
- ❖ Promote Outreach - The objectives of this activity are to continue and expand existing outreach programs and to prepare and distribute appropriate educational materials. Initial outreach efforts have focused on education of municipal planners and engineers through monthly meetings and annual workshops. These efforts will continue to ensure that stormwater quality controls are addressed during the planning and design phase for both private and public projects. The Program will conduct at least one workshop (or its equivalent) for agency staff each year.

Additional outreach is needed for educating contractors, developers and owner/builders, and elected officials such as Planning Commissions and City Councils. The committee will discuss methods for reaching these target audiences, and conduct at least one outreach effort or event each year for one or more of these groups. The Committee may coordinate its outreach to developers and contractors with efforts by BASMAA (e.g., the regional construction education program) and Regional Board staff (e.g., erosion control certification program).

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## **NEW DEVELOPMENT AND CONSTRUCTION CONTROLS**

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Outreach activities also include preparation and distribution of educational materials to promote awareness of appropriate stormwater controls and other issues of importance to the Committee. Outreach pieces will be designed based on the target audience and intended use, with assistance and review by the Public Education and Industrial Outreach Committee to ensure materials are consistent and user-friendly.

### *Assess the Effectiveness of Implemented Controls*

There are three main areas in which the effectiveness of agency programs will be assessed:

- ❖ Implementation of the performance standards;
- ❖ Enforcement of construction site BMPs, as documented in inspection reports (for sites inspected per the Performance Standards), notices of violation, and other documents; and,
- ❖ Requirements for appropriate stormwater controls for both private and public development projects, as demonstrated in conditions of approval, project plans and specifications, or other documents.

The New Development and Construction Controls Committee will develop methods for measuring effectiveness in these areas. This may include tracking new development case studies, using special reporting or inspection forms, or other means. Additionally, the Committee will continue to investigate the



## **NEW DEVELOPMENT AND CONSTRUCTION CONTROLS**

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effectiveness of individual structural controls and recommend BMP special studies to the Monitoring and Inspection Committee.

### *Assist with Regulatory Compliance and Planning*

The Program will conduct the following activities:

- ❖ Assist agencies to comply with the reporting and other requirements of the NPDES permit, track local program progress, and prepare the new development section of the Program's Annual Report;
- ❖ Continue to assist the New Development and Construction Controls Committee to conduct meetings and other activities; and,
- ❖ Develop a detailed work plan and schedule for Committee activities each fiscal year.

Agencies will be responsible for participating in the Committee as appropriate (see performance standards) and providing sufficient information on their local programs for the Annual Report.



**NEW DEVELOPMENT AND  
CONSTRUCTION CONTROLS**

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**PERFORMANCE STANDARDS**



**TABLE 3-1  
NEW DEVELOPMENT AND CONSTRUCTION CONTROLS  
PERFORMANCE STANDARDS  
Page 1 of 6**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MEASURES AND POLICIES TO CONTROL THE QUALITY OF STORMWATER RUNOFF</b>					
<b>NDCC-1:</b> Each agency will have adequate legal authority and will provide ongoing review of existing legal authorities provided in erosion control and stormwater management and discharge control ordinances to determine the ability to implement General Plan policies and authorize discretionary review of development projects. If necessary, the agency will amend existing ordinance(s) or develop and adopt new ordinances.	✓	✓	✓	✓	✓
<b>NDCC-2:</b> Each agency will incorporate policies and implementation measures when its General Plan is amended to help preserve and enhance water quality and protect sensitive areas <sup>1</sup> . Ordinances should be considered prior to General Plan Amendments.	✓	✓	✓	✓	✓
<b>NDCC-3:</b> All agencies will implement programs based on Regional Board's Staff Recommendations to the maximum extent practicable. Such programs are intended to achieve a similar or higher standard for protection of water quality including habitat protection in sensitive areas. All agencies must demonstrate alternative programs if municipalities disagree with the Regional Board's Staff Recommendations.	●	✓	✓	✓	✓
<b>NDCC-4:</b> All agencies will continue to improve performance standards within the permit period in response to upcoming Regional Board's Staff Recommendations and other relevant technical information to the maximum extent practicable.	●	✓	✓	✓	✓

<sup>1</sup> See Definitions – Attachment "B"

● Commence BMP Implementation

✓ Implemented and in Effect

**TABLE 3-1  
NEW DEVELOPMENT AND CONSTRUCTION CONTROLS  
PERFORMANCE STANDARDS  
Page 2 of 6**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>DEVELOPMENT PLAN REVIEW AND PERMITTING</b>					
<b>NDCC-5:</b> Each agency will evaluate the effect of development on stormwater runoff and wetlands in the California Environmental Quality Act (CEQA) process (e.g., use a revised checklist).	✓	✓	✓	✓	✓
<b>NDCD-6:</b> Each agency will require stormwater quality control measures during and after construction of municipal capital improvement projects, as appropriate. Each agency will also incorporate appropriate control measures in project documents, such as plans and contract specifications.	✓	✓	✓	✓	✓
<b>NDCC-7:</b> Each agency will require developers and owner/builders to control stormwater quality impacts of their projects using appropriate best management practices (BMPs). Appropriate BMPs shall be implemented by developers at all project sites during construction. Developers of projects with significant stormwater pollution potential <sup>1</sup> will also be required to mitigate impacts through site planning or design practices and/or installing stormwater treatment controls. See Attachment "A" for a list of resource documents.	✓	✓	✓	✓	✓
<b>NDCC-8:</b> Each agency will incorporate the Contra Costa Clean Water Program's model development conditions of approval into its standards for development to the maximum extent practicable.	✓	✓	✓	✓	✓
<b>NDCC-9:</b> Each agency will require developers and owner/builders of projects that include permanent structural stormwater controls to ensure ongoing operation and maintenance of such controls as part of project approval documents, as appropriate.	✓	✓	✓	✓	✓

<sup>1</sup> Conditions – Attachment "B"      ● Commence BMP Implementation      ✓ Implemented and in Effect

**TABLE 3-1  
NEW DEVELOPMENT AND CONSTRUCTION CONTROLS  
PERFORMANCE STANDARDS  
Page 3 of 6**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>NDCC-10:</b> Each agency will develop and implement appropriate design guidelines and practices (e.g., BASMAA's "Start at the Source" document), which incorporate water quality protection measures for both public and private projects. Development of these guidelines will occur in Fiscal Year 1998/99; and, implementation will occur in each succeeding fiscal year.	✓	✓	✓	✓	✓
<b>NDCC-11:</b> Each agency will require private and public development projects to include permanent stormwater quality controls, as appropriate, if sufficient site planning measures are not implemented or feasible.	✓	✓	✓	✓	✓
<b>EROSION AND SEDIMENT CONTROL</b>					
<b>NDCC-12:</b> Each agency will maintain an erosion control program that includes requirements for minimum BMPs, sufficient enforcement authority, training and tools for inspectors, and information for developers and contractors.	✓	✓	✓	✓	✓
<b>NDCC-13:</b> Prior to construction of any project needing permits, proof of coverage (General Construction Activity Storm Water Permit promulgated by the State Water Resources Control Board, Army Corps 404 Permit, Regional Water Quality Control Board's 401 Water Quality Certification, etc.) will be required. Each agency will require developers to prepare, submit to the agency for review and approval, and implement an effective erosion and sediment control plan or similar administrative document that contains erosion and sediment control provisions during the construction period.	✓	✓	✓	✓	✓

<sup>1</sup> See Definitions – Attachment "B"

**TABLE 3-1  
NEW DEVELOPMENT AND CONSTRUCTION CONTROLS  
PERFORMANCE STANDARDS  
Page 4 of 6**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>CONSTRUCTION SITE FIELD INSPECTIONS</b>					
<b>NDCC-14:</b> Each agency will inspect construction sites for adequacy of stormwater quality control measures on a regular basis. The frequency of inspections will be based on considerations such as the size of the project, its potential impact on stormwater quality, and the amount of construction activity.	✓	✓	✓	✓	✓
<b>NDCC-15:</b> For construction sites requiring erosion and/or sediment control plans, each agency will inspect sites prior to the beginning of the wet season <sup>1</sup> each year to ensure measures will be taken to prevent erosion and minimize discharges of sediment from disturbed areas. All agencies will submit documentation by October 15 of each year that all sites issued grading permits have been inspected by September 30 for compliance with erosion control best management practices.	✓	✓	✓	✓	✓
<b>NDCC-16:</b> Inspectors will review the Storm Water Pollution Prevention Plan, if applicable, prior to conducting the inspections.	✓	✓	✓	✓	✓
<b>NDCC-17:</b> During inspections, inspectors will: <ul style="list-style-type: none"> <li><b>A.</b> Inspect and prohibit non-stormwater discharges to the maximum extent practicable, except those discharges that contain no pollutants.</li> <li><b>B.</b> Whenever possible, visually observe the quality of stormwater runoff during and after a major storm event.</li> <li><b>C.</b> Require proper implementation and maintenance of erosion control and materials/waste management BMPs (e.g., covering stockpiled materials, and designating work and storage areas) to minimize the discharge of pollutants.</li> </ul>	✓	✓	✓	✓	✓

<sup>1</sup> Definitions – Attachment “B” ● Commence BMP Implementation



**TABLE 3-1  
NEW DEVELOPMENT AND CONSTRUCTION CONTROLS  
PERFORMANCE STANDARDS  
Page 5 of 6**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>NDCC-18:</b> If appropriate, inspectors will require problems be corrected and will document illicit discharges <sup>1</sup> (or contact their Illicit Discharge Coordinator) so that illicit discharges are reported in the Annual Report.	✓	✓	✓	✓	✓
<b>NDCC-19:</b> For construction sites requiring erosion control plans, each agency will ensure a self-inspection program by the developer is implemented or will inspect all priority construction sites within 7 days following each significant storm event <sup>1</sup> or series of events during the wet season <sup>1</sup> of each year to evaluate the effectiveness of erosion and sediment control measures, and if necessary, require additional erosion protection measures be implemented.	✓	✓	✓	✓	✓
<b>COORDINATION WITH THE CONTRA COSTA COUNTY FLOOD CONTROL &amp; WATER CONSERVATION DISTRICT (FCD)</b>					
<b>NDCC-20:</b> The New Development & Construction Controls Committee, on behalf of all co-permittees, will continue discussing with the FCD policies regarding the operation and maintenance of new flood control facilities to maximize stormwater quality control benefits.	✓	✓	✓	✓	✓
<b>NDCC-21:</b> Each agency will study and, if appropriate, implement operation and maintenance procedures for new flood control facilities which maximize stormwater quality controls. The studies shall initiate in Fiscal Year 2000/01; and, implementation will occur in each succeeding fiscal year.	●	✓	✓	✓	✓

<sup>1</sup> See Definitions -- Attachment "B"

● Commence BMP Implementation

✓ Implemented and in Effect

**TABLE 3-1  
NEW DEVELOPMENT AND CONSTRUCTION CONTROLS  
PERFORMANCE STANDARDS  
Page 6 of 6**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>EDUCATION ACTIVITIES</b>					
<b>NDCC-22:</b> Each agency will provide educational materials (BMP flyers, "Blueprint for a Clean Bay", "Start at the Source", construction site BMP plan sheet, etc.) to municipal staff, developers, contractors, construction site operators, and owner/builders, as appropriate.	✓	✓	✓	✓	✓
<b>NDCC-23:</b> Each agency will educate its staff responsible for development plan review and permitting of stormwater quality issues and controls.	✓	✓	✓	✓	✓
<b>NDCC-24:</b> Each agency will educate construction site inspectors on the proper implementation and maintenance of erosion and sediment controls and materials/waste management BMPs.	✓	✓	✓	✓	✓
<b>COMMITTEE MEETINGS AND WORKSHOPS</b>					
<b>NDCC-25:</b> At least one or more representative from each agency will attend CCCWP New Development and Construction Controls workshops.	✓	✓	✓	✓	✓
<b>NDCC-26:</b> In addition to the agency representative assigned to the CCCWP, each agency will designate a person responsible for implementing the New Development and Construction Controls component of the SWMP and for acting as a liaison with the New Development & Construction Controls Committee.	✓	✓	✓	✓	✓

# NEW DEVELOPMENT AND CONSTRUCTION SITE CONTROLS

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## ATTACHMENT A – RESOURCE DOCUMENTS

There are a number of guidance materials that agencies are using to identify and select appropriate BMPs. These include:

- The Regional Board *Staff Recommendations*;
- The *California Storm Water Best Management Practice Handbooks*;
- The *Bay Area Preamble to the California Storm Water Best Management Handbooks*;
- The Association of Bay Area Government's *Manual of Standards for Erosion and Sediment Control Measures*;
- The publication *Blueprint for a Clean Bay* (construction BMPs);
- A series of seven Construction BMP Flyers developed by the New Development & Construction Controls Committee; and
- Model "Conditions of Approval" developed by the New Development & Construction Controls Committee; and
- The BASMAA document *Start at the Source: Residential Site Planning and Design Guidance Manual for Stormwater Quality Protection*; and,
- Erosion and Sediment Control Field Manual by the California Regional Water Quality Control Board, San Francisco Bay Region.

Other applicable guidance materials will be used, as they become available.

# NEW DEVELOPMENT AND CONSTRUCTION SITE CONTROLS

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## ATTACHMENT B - DEFINITIONS

**Sensitive Area** - Any area in which plant or animal life or their habitats are rare or especially valuable, including any area in the following category:

1. habitats containing or supporting “rare and endangered” species as defined by the State Fish and Game Commission;
2. perennial and intermittent streams and their tributaries that support aquatic habitat;
3. riparian corridors
4. lakes, ponds, and adjacent shore habitat
5. wetlands, marshes, and coastal tide lands
6. coastal and offshore areas containing breeding or nesting sites or used by migratory and resident water-associated birds for resting areas and feeding;
7. areas used for scientific study and research concerning fish and wildlife;
8. existing game and wildlife refuges and reserves; and
9. sand dunes and sea cliffs.

**Projects with significant stormwater pollution potential** - A project which causes substantial or potentially substantial adverse change in the quantity and/or quality of stormwater runoff generated from the site. (Note: This is consistent with the CEQA definition of significance. Professional judgement will be required in evaluation of project impacts, until specific thresholds for significance have been adopted.) A project which is constructed in a “sensitive area” (see definition above) and/or is five acres or greater in disturbed area will be considered to have significant stormwater pollution potential.

**Wet Season** - October 15 to April 15 of each year or as defined by local ordinance.

**Illicit Discharge** - Any non-stormwater discharge to a storm drain or watercourse, except for those discharges allowed under the Program’s NPDES permit.

## NEW DEVELOPMENT AND CONSTRUCTION SITE CONTROLS

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**Significant Storm Event** – Rainfall resulting in 0.25 inches or more in depth within a 24 hour period.

**Redevelopment** – To develop again, or to restore to a better and/or new condition.

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## **PUBLIC EDUCATION AND INDUSTRIAL OUTREACH**

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### **GOALS**

Stormwater pollution results from small, seemingly inconsequential activities of people and businesses in Contra Costa County. The diffuse origins of the problem are often the result of unintended, unrecognized consequences of thousands of routine actions made daily. Public Education and Industrial Outreach (PEIO) activities are one of the keys for preventing stormwater pollution. The better everyone understands what causes stormwater pollution and the simple things that can be done to prevent it, the cleaner our local waterbodies and the San Francisco Bay – San Joaquin Delta will become.

The primary goals of this component include the following:

- ❖ Educate the general public and businesses about the causes and effects of stormwater pollution;
- ❖ Educate the general public and businesses about the differences between the sanitary sewer and storm drain system;
- ❖ Educate the general public and businesses about our local watersheds and solicit their participation for ongoing creek protection and restoration efforts; and,
- ❖ Educate and encourage residents and businesses to adopt less polluting and more environmentally sensitive practices.

## **PUBLIC EDUCATION AND INDUSTRIAL OUTREACH**

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### **PROGRAM ACCOMPLISHMENTS**

The Contra Costa Clean Water Program has invested enormous resources in their public education and industrial outreach activities. Annual expenditures have exceeded more than \$500,000 per year since the inception of the Program. The Program has been primarily responsible for the development of strategies, products and distribution of items. Each co-permittee has been responsible for supplementing these activities with their own local endeavors to ensure all targeted audiences are reached.

The Program's Public Education and Industrial Outreach (PEIO) Committee is responsible for directing activities on behalf of the Program. Their recommendations are ultimately approved by the Program's Management Committee. The Program Manager provides staff support to the PEIO Committee and represents the Contra Costa Clean Water Program at the BASMAA Public Information/Participation Committee and the California Stormwater Quality Task Force's Public Information/Participation Committee. The Manager acts as the official spokesperson for the Program for all media requests.

### **FIVE YEAR IMPLEMENTATION STRATEGY**

The PEIO Committee initially developed a five-year implementation strategy for all of the Program's outreach activities. This document is annually reviewed and updated based on information gleaned from the public opinion survey conducted annually and focus groups conducted throughout the five year Permit (i.e., Permit period years 1, 3 and 5).



## **PUBLIC EDUCATION AND INDUSTRIAL OUTREACH**

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### **COORDINATION**

The Contra Costa Clean Water Program helped establish the Contra Costa County Inter-Agency Community Outreach Coordination Committee. This association is composed of education representatives from various public agencies other than co-permittees in Contra Costa County (e.g., East Bay Municipal Utility District, Contra Costa Water District, Central Contra Costa Sanitary District, Lindsay Museum, Delta - Diablo Sanitary District, etc.).

The primary purpose of this organization is to foster communication among the various agencies delivering an environmental message to the general public. It seeks to reduce or eliminate duplication of efforts and create partnerships among the public agencies to more effectively target outreach activities.

An excellent sample of this collaborative effort is the Contra Costa County “Newspapers in Education” Program. Fourteen (14) Contra Costa public agencies have come together representing various environmental subjects such as recycling, household hazardous waste, stormwater pollution, waste prevention, solid waste, clean water, to create a “recycling/educational awareness” program through local newspapers to Contra Costa County’s public schools. The curriculum focuses on local issues linking the student population to the local community. It provides educational materials to educators and programs for students. It also contains resource information for public use. Hopefully, this collaborative effort can continue to be expanded and enhanced in subsequent years.

The Program also participated with BASMAA agencies to jointly finance a regional advertising campaign for several years to reach targeted audiences throughout the greater Bay Area. Primarily, television and radio were used

## **PUBLIC EDUCATION AND INDUSTRIAL OUTREACH**

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since it was more effective financially to jointly advertise than for each Program to individually purchase this type of outreach.

### **USED MOTOR OIL RECYCLING PROGRAM**

The California Integrated Waste Management annually provide funds to public agencies throughout Contra Costa County under their “Used Oil Recycling Block Grant” program. The primary purpose of this activity is to promote oil recycling among residents and businesses. The Contra Costa Clean Water Program on behalf of several co-permittees – Contra Costa County, Danville, Lafayette, Moraga, Orinda and Walnut Creek, have dedicated their allocations to create an oil recycling component for the Contra Costa Clean Water Program. The three primary objectives of the oil recycling program is to maintain and increase oil collection centers throughout Contra Costa County; to provide a school education program targeted to third, fourth and fifth graders; and, provide a public education program at events throughout the year. A character was specifically created for the school/public education activities. He is the “Captain of Water - Mr. Funnelhead”. Over \$100,000 a year is expended in these activities. Brochures in English and Spanish, coloring books in English and Spanish, magnets, public service announcements, information sheets advertising certified oil collection centers and many other activities are funded through this program. Annually, thousands of parents through their school children and residents are targeted with the message to recycle their used motor oil. A bumpersticker contest is held where children design a bumpersticker promoting the recycling of used motor oil. There is a grand prize winner whose design is refined by a graphic artist and 25,000 bumperstickers are produced for distribution. Children tend to be the Program’s best advocates to motivate their parents, family and neighbors about promoting the importance of recycling used motor oil.

## **PUBLIC EDUCATION AND INDUSTRIAL OUTREACH**

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### **TOLL FREE HOTLINE**

The Contra Costa Clean Water Program developed a toll-free number in its initial year for the general public to use to report illegal/illicit activities. The telephone number is 1-800-NO DUMPING. The general public can either be connected to the County Household Hazardous Waste Program, the Hazardous Materials Department or the Stormwater Program. The purpose of the 1-800 number is to make it convenient for the general public to participate by reporting inappropriate actions or to receive general information.

### **OUTREACH MATERIALS**

The Contra Costa Clean Water Program has developed or adapted numerous types of outreach materials including brochures, flyers, stencil kits, public service announcements for use on radio, television, cable, theater advertising, bus boards, Bay Area Rapid Transit (BART) advertising, give-away promotional items, guidance materials and other items.

Most outreach activities have been based on some level of research. This research has usually taken the form of surveys or focus groups. Outreach activities by their own diffuse nature are difficult to quantify. Therefore, the Program has been very careful to devote its resources to target specific audiences as much as possible.

### **POINT OF PURCHASE CAMPAIGNS**

Point Of Purchase campaigns are specifically targeted to the consumer. The Contra Costa Clean Water Program has had two very successful Point Of Purchase (POP) campaigns. The first campaign ran during the second and third

## **PUBLIC EDUCATION AND INDUSTRIAL OUTREACH**

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year of the Permit period. This was a campaign targeted to the proper handling and disposal of used motor oil. Cardboard displays were placed in 80 retail outlets throughout Contra Costa County providing the general public with free funnels imprinted with a recycle used motor message and brochures advocating the public do the environmentally correct thing by properly disposing of their used motor oil. Over 100,000 funnels and 25,000 brochures have been distributed throughout Contra Costa County.

The second POP campaign was coordinated with BASMAA's "Grow It" campaign seeking to reduce or eliminate the use of pesticides and herbicides. BASMAA advertised exclusively on the radio and the Contra Costa Clean Water Program supplemented it by having a \$125,000 local multi-media campaign. This included the use of billboard advertising, theater advertising, newspaper advertising, public agency newsletters, etc. We provided the toll free number for the public to contact the Program and receive a free "Grow It" guide. Over 4,000 telephone calls were received by the Program during the two year campaign. The Program was also able to measure the effectiveness of the different media vehicles. This will enable the Program to successfully target future POP campaigns.

### **STORM DRAIN STENCILING/MARKING**

All eighteen (18) co-permittees in the Contra Costa Clean Water Program have either completely marked their storm drains or are in the process of completing this task. Initially, catch basin marking was done by volunteers (e.g., Boy Scouts, Girl Scouts, etc.). Due to maintenance problems, this practice has been replaced by most co-permittees with the use of thermoplastic stencils on catch basins. The advantage is the stencil lasts indefinitely; but, the use of volunteers is essentially eliminated.

## **PUBLIC EDUCATION AND INDUSTRIAL OUTREACH**

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### **YOUTH ACTIVITIES/EDUCATION**

During the first two years of the Permit, the Contra Costa Clean Water Program distributed two different versions of computer games to public schools throughout Contra Costa County. They included “EcoMasters” and “Bayland Habitat”. They were generally well received by educators and students. The Program also contracted with “Boogie Down Jugglers” a unique “Vaudevillian” act which traveled throughout Contra Costa County to elementary and high schools delivering information regarding stormwater pollution to students. The Program found educational programs to high school students to be extremely difficult. A special study is being conducted during the fifth year of the Permit to determine how to best communicate with this audience in future endeavors.

Annually, the San Francisco Estuary Institute, now known as the Aquatic Outreach Institute (AOI), has conducted at least two “Kids in Creeks” workshops. These workshops have been extremely successful and during the five year Permit period have reached approximately 200 educators. The Contra Costa Clean Water Program provides \$25,000 annually for Teacher Action Grants. These funds are used by educators for environmental education/pollution prevention programs or activities. This has been very successful since it provides the necessary funds for teachers to purchase supplies and/or conduct activities in the classroom. AOI has now expanded their educational programs and the Program will be using them in the future (i.e., “Kids in Gardens”, “Kids in Marshes”, etc.).

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## **PUBLIC EDUCATION AND INDUSTRIAL OUTREACH**

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### **WORKSHOPS**

Various workshops to targeted audiences have been conducted throughout the five year Permit period. These have included several construction workshops to the public and private development communities; a vehicle service facilities workshop; an industrial workshop for non-filers; and, various workshops targeted to mobile cleaners. These workshops have been successful and the Program will continue to build and expand on these workshops to targeted audiences/businesses in the future.

### **HOUSEHOLD HAZARDOUS WASTE PROGRAM**

The Household Hazardous Waste Program (HHWP) has been extremely effective in preventing, removing and reducing pollutants from entering the storm drain system. Co-permittees reported over 257,000 gallons of household hazardous wastes were collected from County residents during the first four (4) years of our permit (i.e., 1993/94 through 1996/97). Co-permittees provide funds for conducting the HHWP. The Program, in coordination with co-permittees and other local governments (e.g., County Health Services Department, Contra Costa Solid Waste Authority, Central Contra Costa Sanitary District, etc.) has disseminated materials and information to the public informing them of HHWP activities (i.e., mobile collection events, permanent facilities, materials accepted, etc.). The Program has also assisted co-permittees in the collection and compilation of consistent data for reporting in the Annual Report.

## **PUBLIC EDUCATION AND INDUSTRIAL OUTREACH**

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### **TRANSPORTATION MANAGEMENT**

All co-permittees are actively involved in regional transportation management and planning. Co-permittees, both individually and collectively, support numerous transportation programs (e.g., Ride Share Week, transit ticket sales, Spare the Air Day, bike racks/lockers, etc.) and disseminate a variety of materials and information encouraging public transportation and other alternative modes of transportation. In fiscal year 1996-97, six (6) agencies reported to be using one or more non-polluting public vehicles and eighteen (18) co-permittees reported they actively encourage public employees to use public transportation. It is difficult to quantify the effectiveness of co-permittees public outreach efforts encouraging public transportation use. Nevertheless, a review of co-permittees transportation management activities (i.e., programs supported, materials distributed, non-polluting vehicles purchased and used, number of public employees carpooling or using public transportation, etc.) indicates transportation management outreach efforts are working.

### **PLANNED PROGRAM ACTIVITIES**

The Contra Costa Clean Water Program has based its public education and industrial outreach activities on research. This research has either taken the form of public opinion surveys and/or focus groups. The Public Education and Industrial Outreach (PEIO) Committee has developed a five year implementation strategy for the new Permit. This proved successful in the first Joint Municipal NPDES Permit and will be continued. The strategy will embrace the various performance standards outlined in this document.

## **PUBLIC EDUCATION AND INDUSTRIAL OUTREACH**

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### **REINFORCE EXISTING GENERAL OUTREACH MESSAGES**

Existing public education and industrial outreach materials will be evaluated for reuse. If the PEIO Committee determines materials can be reproduced then they will updated, reprinted and distributed to selected audiences.

### **EVALUATE EFFECTIVENESS**

The Contra Costa Clean Water Program has effectively used its annual public opinion survey and focus groups to evaluate all public education materials, strategies and distribution activities. The Program would continue using these tools to guide its activities throughout the Permit period.

### **COORDINATION**

Coordination with public and private entities has proven successful for the Contra Costa Clean Water Program. We would continue coordinating the Program's activities with other public agencies. During the next five year period, we will concentrate on building partnerships with private entities. This has proven successful with various stormwater programs across the nation and the Contra Costa Clean Water Program will be more aggressive with this endeavor in the future. Partnerships with private entities could prove critical when comprehensive watershed management activities are undertaken.



## **PUBLIC EDUCATION AND INDUSTRIAL OUTREACH**

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### **FLEXIBLE/CREATIVE APPROACH**

Public education and industrial outreach activities need to be flexible and creative. This is based on receiving new information or ideas throughout the Permit period. The performance standards advocate this approach and public education and industrial outreach activities will embrace this concept.

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**PUBLIC EDUCATION AND  
INDUSTRIAL OUTREACH (PEIO)**

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**PERFORMANCE STANDARDS**



**TABLE 4-1  
PUBLIC EDUCATION & INDUSTRIAL OUTREACH  
PERFORMANCE STANDARDS  
Page 1 of 9**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>PARTICIPATION IN PEIO SUBCOMMITTEE AND PROGRAM ACTIVITIES</b>					
PEIO-1: Each agency will designate a person who will implement its Public Education & Industrial Outreach (PEIO) activities in conjunction with Program activities and act as a liaison with the PEIO Subcommittee.	✓	✓	✓	✓	✓
<b>INTERNAL AGENCY COMMUNICATION AND TRAINING FOR AGENCY STAFF AND OFFICIALS</b>					
PEIO-2: Each agency is responsible for identifying, developing, and communicating information about their Stormwater Management Plan so that its designated clean water staff and governing officials will be informed about its requirements, their role in implementing the Stormwater Management Plan, and progress made in its annual report. This will include the adaptation and/or development and distribution of materials to all appropriate agency staff and officials involved with clean water activities including at least one information piece annually.	●	✓	✓	✓	✓
PEIO-3: New employees involved with clean water activities will be provided with information about the CCCWP.	●	✓	✓	✓	✓
<b>PROCEDURES AND TRAINING FOR HANDLING TELEPHONE CALLS</b>					
PEIO-4: Each agency will have a written procedure to follow for answering and efficiently routing stormwater related telephone calls to appropriate agency staff for handling.	✓	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and in Effect

**TABLE 4-1  
PUBLIC EDUCATION & INDUSTRIAL OUTREACH  
PERFORMANCE STANDARDS  
Page 2 of 9**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
PEIO-5: Agency staff assigned to answering or responding to telephone calls will be trained and familiar with the established written procedures.	✓	✓	✓	✓	✓
<b>DISTRIBUTION OF PROGRAM INFORMATION PIECES</b>					
PEIO-6: Prior to the commencement of the fiscal year (i.e., July 1), each agency will be responsible for identifying and implementing, a plan describing how it will distribute copies of Program informational materials to its targeted audiences (e.g., developers, general public, etc.).	●	✓	✓	✓	✓
PEIO-7: Each agency will put forth reasonable efforts to distribute Program materials to its targeted audiences. Approximately one-half or more of the materials should be distributed within twelve months of receipt.	●	✓	✓	✓	✓
PEIO-8: All reasonable attempts will be made by each agency to responsibly track the number of Program educational materials distributed, with sufficient accuracy and documentation to be able to demonstrate compliance with PEIO-9. Such documentation will be included in the agency's annual report.	●	✓	✓	✓	✓

**TABLE 4-1  
PUBLIC EDUCATION & INDUSTRIAL OUTREACH  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>STORM DRAIN INLET STENCILS/MARKINGS AND SIGNS</b>					
<b>PEIO-9:</b> Each agency will have stenciled/marked (e.g., paint, thermoplastics, plaques, etc.) ninety percent of its agency-owned storm drain inlets; or, conducted activities that are demonstrably equivalent in terms of achieving awareness by residents that pollutants should not be disposed down storm drains. "Demonstrably equivalent" means the agency will provide examples of comparable alternative activities or have available a statistically valid survey to show its residents are as knowledgeable about storm drain pollution as residents in comparable communities who use markings, stencils or signs. A description of the "demonstrably equivalent" activities must be submitted in writing and approved in advance by the Regional Board's Executive Officer. This approval will be presumed unless disapproved in writing within 45 days of its submittal.	✓	✓	✓	✓	✓
<b>PEIO-10:</b> As a goal, all installed stencils/markings and signs will be sufficiently maintained to be readable.	✓	✓	✓	✓	✓

TABLE 4-1  
PUBLIC EDUCATION & INDUSTRIAL OUTREACH  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>AGENCIES' COMMUNITY OUTREACH PROGRAM</b>					
<p><b>PEIO-11:</b> Agencies will participate in community outreach activities outlined in "A" through "F" for the purpose of communicating the general stormwater pollution prevention messages and complementing the Program's specific message(s) for its targeted audience(s). Annually, agencies will participate in activities in the following manner:</p> <ul style="list-style-type: none"> <li>• <u>Over 100,000 in population</u> each agency will participate in four activities;</li> <li>• <u>Between 50,000 and 100,000</u> each agency will participate in three activities</li> <li>• <u>Less than 50,000; and the Contra Costa County Flood Control &amp; Water Conservation District (District):</u> each agency will participate in two activities.</li> </ul> <p><b>A. Participate in Existing Community Events</b> - Distribute Program information by participating in existing community events (e.g., fairs, festivals, exhibits, etc.) held within its jurisdiction or nearby jurisdiction(s). This participation may include setting up of a booth, web page, kiosk display, or other creative means of communicating general stormwater pollution prevention messages, using a specific message to a target group, or making a presentation to a local community service group.</p>	●	✓	✓	✓	✓
	●	✓	✓	✓	✓
	●	✓	✓	✓	✓



**TABLE 4-1  
PUBLIC EDUCATION & INDUSTRIAL OUTREACH  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<p><b>B. Initiate New Community Events</b> - Play a major role in planning and staging a community or city-wide event. Examples include the following:</p> <ul style="list-style-type: none"> <li>• Earth Day or other festival or fair;</li> <li>• Business mixer;</li> <li>• Seminar or target group; and/or</li> <li>• Contest.</li> </ul> <p><b>C. Contact Media and Conduct Advertising</b> - Maintain local media contacts with local newspaper, radio, and television stations to communicate general stormwater pollution prevention messages, complement the Program's specific targeted audience(s) and message(s) and complement regional PEIO activities. Local media contact may include the adaptation and/or development and distribution of stormwater related press releases or the use of advertising in local publications.</p> <p><b>D. Provide Program Information Through Other Outreach Activities</b> - Other outreach activities which may include but not be limited to the following items:</p> <ul style="list-style-type: none"> <li>• Agency newsletter;</li> <li>• Other agency newsletter;</li> <li>• Local magazine;</li> <li>• Utility bill inserts;</li> <li>• Mailing to target group; and</li> <li>• Computer bulletin board or network.</li> </ul>					

**TABLE 4-1  
PUBLIC EDUCATION & INDUSTRIAL OUTREACH  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<p><b>E. Develop and Implement Integrated Outreach Activities</b> - Activities increasing the effectiveness of pollution prevention messages include but are not limited to the following items:</p> <ul style="list-style-type: none"> <li>• Point of Purchase display and giveaway;</li> <li>• Plan, create, and distribute videos;</li> <li>• Create and stage a play;</li> <li>• Develop special displays or kiosks for stormwater pollution related message(s) (e.g., interactive slides in movie theaters, etc);</li> <li>• Develop/implement program for school curriculum providing necessary equipment and/or supplies</li> <li>• Support and partner with other agencies to increase and/or improve pollution prevention capabilities (e.g., helping set up oil and/or antifreeze collection facilities);</li> <li>• Make and place signs on sweepers or other vehicles; and</li> <li>• Place messages on workers' tee shirts.</li> </ul> <p><b>F. Develop Watershed Awareness</b> - This area includes one or more of the following activities:</p> <ul style="list-style-type: none"> <li>• Identify and support a "Friends of a Watershed" group, encourage creek cleanups (or if this is infeasible, lagoon or shoreline cleanups) Adopt-a-creek or other volunteer monitoring and resource inventory activities.</li> <li>• Conduct a creek, lagoon, shoreline or wetland cleanup;</li> <li>• Participate in a local event in its jurisdiction or neighboring jurisdiction(s) which may include the Coastal Commission's Annual Coastal Clean-up Day or Earth Day activities;</li> <li>• Identify, support and implement educational programs (e.g., "Kids in Creeks" workshops, Environmental Action Challenge activities, etc.); and,</li> <li>• Identify, support and implement public awareness activities due to natural occurrences (e.g., El Niño landslides, earthquakes, etc.).</li> </ul>					

**TABLE 4-1  
PUBLIC EDUCATION & INDUSTRIAL OUTREACH  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<p><b>PEIO-12: Increased outreach activities will be implemented in the following manner.</b></p> <p><u>Over 100,000 in population</u></p> <ul style="list-style-type: none"> <li>• Each agency will participate in six activities during the third year of the Permit and eight activities in the fourth and fifth years of the Permit;</li> </ul> <p><u>Between 50,000 and 100,000</u></p> <ul style="list-style-type: none"> <li>• Each agency will participate in five activities during the third year of the Permit and six activities in the fourth and fifth years of the Permit;</li> </ul> <p><u>Less than 50,000; and the Contra Costa County Flood Control &amp; Water Conservation District (District).</u></p> <ul style="list-style-type: none"> <li>• Each agency will participate in three activities in the third year of the Permit and four activities in the fourth and fifth years of the Permit;</li> </ul> <p>Refer to PEIO-11, "A" to "F" for description of community outreach activities. Additionally, one of the increased activities must be from the "F" Category – "Develop Watershed Awareness" to be conducted in the third and fifth years of the Permit.</p>			●	✓	✓
<b>COORDINATION WITH PUBLIC SCHOOLS (K-12)</b>					
<p><b>PEIO-13:</b> Information provided by the Program about educational programs (e.g., Bay Saver Club, "Kids in Creeks" workshops, community stewardship grants), will be supported by each agency and promoted to the public schools within its jurisdiction.</p>	●	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and in Effect

**TABLE 4-1  
PUBLIC EDUCATION & INDUSTRIAL OUTREACH  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>PEIO-14:</b> Each agency will offer public schools within its jurisdiction computer programs, children's educational activity booklets, and other Program materials. This may include disseminating information on how to obtain copies of materials if this is a more efficient way to achieve distribution.	●	✓	✓	✓	✓
<b>PEIO-15:</b> The Program will develop educational materials for schools. The Program, in conjunction with each agency, will work with the agency's local school district to encourage appropriate stormwater pollution prevention and watershed resource information is taught to public school children within its jurisdiction.		●	✓	✓	✓
<b>NON-COMPLIANCE WITH PERFORMANCE STANDARDS</b>					
<b>PEIO-16:</b> Any agencies not meeting performance standards will notify the Regional Board and implement a plan to meet the standards as part of the annual report process.	●	✓	✓	✓	✓
<b>PEIO-17:</b> If the Program conducts or receives a statistically valid survey identifying an inadequate level of awareness of stormwater related pollution and/or watershed resource problems in one or more of its agencies when compared to surrounding agencies, then the affected agency(ies) will identify and implement a program within one year to improve its performance in order to attain a level of understanding equivalent to that being achieved in comparable communities.		●	✓	✓	✓

● mence BMP Implementation

✓ Implemented and in Effect

**TABLE 4-1  
PUBLIC EDUCATION & INDUSTRIAL OUTREACH  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>HOUSEHOLD HAZARDOUS WASTE PROGRAM</b>					
<b>PEIO-18:</b> Each agency will individually support the Household Hazardous Waste Programs.	✓	✓	✓	✓	✓
<b>PEIO-19:</b> Each agency will disseminate available materials and information encouraging County residents to properly dispose of their household hazardous wastes.	✓	✓	✓	✓	✓
<b>TRANSPORTATION STANDARDS</b>					
<b>PEIO-20:</b> Each agency will individually participate in regional efforts encouraging the use of public transportation and other alternative modes of transportation.	✓	✓	✓	✓	✓
<b>PEIO-21:</b> Each agency will demonstrate efforts to promote public transportation by public employees where available and feasible.	✓	✓	✓	✓	✓
<b>PEIO-22:</b> Each agency will evaluate the feasibility of using non-polluting fuels in public vehicles.			●	✓	✓
<b>PEIO-23:</b> Each agency will disseminate available materials and information to the public encouraging public transportation use and other alternative modes of transportation.	✓	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and in Effect



## **MUNICIPAL MAINTENANCE**

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### **GOALS**

This component describes municipal maintenance activities designed to maximize the removal of pollutants during routine maintenance. The goals of this component include:

- ❖ Optimizing pollutant removal during routine maintenance activities, such as, street sweeping and maintenance of storm drain facilities;
- ❖ Identifying ways to prevent or minimize discharges to storm drains and watercourses from road maintenance, parks, corporation yards and other publicly-owned facilities; and,
- ❖ Tracking and measuring the effectiveness of municipal maintenance performance standards.

### **ACCOMPLISHMENTS**

Significant municipal resources are spent on routine maintenance activities such as street sweeping and storm drain system maintenance for aesthetic purposes and flood control. These maintenance activities also remove pollutants that potentially could enter the storm drain system, local creeks, the San Joaquin Delta, and ultimately the San Francisco Bay.

Municipalities have been documenting and reporting their routine maintenance activities since 1993. Municipalities compile street sweeping and storm drain system maintenance data and report this information in the Annual Report. The street sweeping data include, but are not limited to, lane miles swept and

## **MUNICIPAL MAINTENANCE**

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the total volume of materials removed. For example, in fiscal year 1996-97, municipalities reported their street sweepers covered over 78,000 miles and removed over 18,000 cubic yards of material. The storm drain system maintenance data include, but are not limited to, the number of storm drain facilities (i.e., catch basins, inlets, outlets, etc.) inspected and cleaned, and the total volume of material removed. Over 6,270 cubic yards of materials were reported by municipalities to have been cleaned from storm drain facilities in fiscal year 1996-97.

A major task conducted during the initial NPDES permit period was to educate municipal employees about the Stormwater Program. This activity is ongoing and is primarily conducted through regular staff meetings and informal training sessions within each agency. Meeting topics over the initial NPDES permit period included the following subjects:

- ❖ General Program requirements and goals for municipal maintenance activities
- ❖ Presentations from equipment vendors
- ❖ Review of BMP implementation efforts
- ❖ Proper spill response and procedures
- ❖ Review of corporation yard BMPs

During the initial NPDES permit period, the Program also worked with municipalities to develop consistent data collection and reporting methods, and



## **MUNICIPAL MAINTENANCE**

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functioned as a clearinghouse for the transfer and sharing of information among co-permittees and other BASMAA members.

### **PLANNED ACTIVITIES**

The following activities will be conducted during the next five year period:

- ❖ Implement and Update Performance Standards – The goal of these performance standards is to maximize the removal of pollutants and/or minimize the discharge of pollutants to storm drain facilities. Agencies will continue to document their maintenance activities and report this information in their Annual Reports. Agencies will also annually review and update these performance standards, as appropriate.

Performance standards for municipal maintenance activities cover numerous routine maintenance practices conducted by agency staff, such as:

- Street Cleaning
- Storm Drain Facility Inspection, Maintenance and Cleaning
- Inspection, Maintenance and Cleaning of Watercourses
- Litter Control
- Road Repair and Maintenance
- Vehicle and Equipment Cleaning, Maintenance and Storage
- Pesticide and Herbicide Use
- Pest Management
- Fertilizer Use

## **MUNICIPAL MAINTENANCE**

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- ❖ Coordinate Municipal Maintenance Activities – Agencies will consider establishing a Maintenance Subcommittee to facilitate information sharing, development of guidance materials, employee training workshops, and/or other outreach efforts for employees and the general public.

Agencies may also propose special studies to evaluate the effectiveness of performance standards, new technologies and/or best management practices. For example, in response to questions raised by municipalities regarding the handling of municipal swimming pool and spa discharges, the Program will conduct a pool/spa discharge special study to develop technical data needed to support pool/spa discharge protocols and best management practices. Information gleaned from this study may also be used for the maintenance of public fountains, ponds, etc.

- ❖ Coordinate Data Collection and Reporting – The Program will continue to assist in the development and implementation of consistent data collection and reporting methods. This data is primarily the street sweeping and storm drain facility maintenance data described earlier. The Program may also review and evaluate the following subjects:
  - How reliable is the maintenance data reported by municipalities?
  - Have parking controls, increased frequency of sweeping and other efforts such as public information outreach efforts affected the volume of material removed?
  - Is the maintenance data being collected useful or should other types of data be collected and annually reported?

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>STREET CLEANING FREQUENCY</b>					
<b>MUNI-1:</b> Each agency will sweep curbed streets on at least a monthly average unless an alternative schedule is approved as described in MUNI-2. In calculating this average, the number of curb miles swept in a fiscal year divided by the number of curb miles within an agency will equal twelve or greater.	●	✓	✓	✓	✓
<b>MUNI-2:</b> If an agency chooses to sweep streets less than on a monthly average, the rationale for the alternative standard must be described in a written action plan. The rationale should demonstrate the alternative schedule is equivalent in terms of protecting water quality as the annual average sweeping. The action plan will be submitted to the Regional Board as part of the Annual Report. The alternative standard will not be effective until approved by the Regional Board's Executive Officer, and approval will be presumed unless it is rejected in writing within 90 days of its submittal.	●	✓	✓	✓	✓
<b>MUNI-3:</b> For agencies that do not sweep every street at least once a month, the street sweeping that is conducted to achieve the monthly average described in MUNI-1 above should be prioritized to sweep the streets that have been found to typically be the dirtiest and to conduct sweeping prior to the rainy season.	●	✓	✓	✓	✓
<b>MUNI-4:</b> Each agency will identify and target areas for more frequent sweeping throughout the year or just prior to the rainy season.	●	✓	✓	✓	✓

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>STREET CLEANING OPERATION TO MAXIMIZE POLLUTANT REMOVAL</b>					
<b>MUNI-5:</b> Each agency will check that street sweeping equipment is in proper adjustment.	✓	✓	✓	✓	✓
<b>MUNI-6:</b> Each agency should operate street sweeping equipment at the speed specified by the manufacturer.	✓	✓	✓	✓	✓
<b>MUNI-7:</b> When using broom sweepers, the operator will check that the proper weights on main and gutter brooms are used.	✓	✓	✓	✓	✓
<b>MUNI-8:</b> Each agency will discourage allowing residents to "opt out" of its street sweeping program.	✓	✓	✓	✓	✓
<b>MUNI-9:</b> When purchasing new sweepers, the agency will review alternative equipment and new technologies to maximize pollutant removal.	✓	✓	✓	✓	✓
<b>MUNI-10:</b> Each agency will provide operators with adequate resources to conveniently report trees interfering with street sweeping.	✓	✓	✓	✓	✓
<b>MUNI-11:</b> Each agency will track and report curbed miles swept in the Annual Report.	✓	✓	✓	✓	✓
<b>MUNI-12:</b> Each agency will track volume or weight of material removed in the Annual Report.	✓	✓	✓	✓	✓

● /      Implemented and In Effect

● /      mence BMP Implementation

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-13:</b> Each agency will identify and target areas for additional efforts to remove vehicles, as appropriate.	✓	✓	✓	✓	✓
<b>MUNI-14:</b> Each agency will specify in all new or re-bid contracts that in case of equipment failure, back up equipment must be available to ensure the route is completed and all information necessary for record keeping will be provided.	✓	✓	✓	✓	✓
<b>MUNI-15:</b> Each agency will maintain a consistent sweeping schedule to the maximum extent practicable (MEP). A copy of the street sweeping schedule shall be submitted with the Annual Report.	✓	✓	✓	✓	✓
<b>MUNI-16:</b> Each agency will take appropriate measures to keep curbed areas clear during street sweeping. Measures may include but are not limited to posting "no stopping," "no parking" signs in Business Districts, near large apartment complexes, etc.; posting street sweeping signs on streets where appropriate; and, distributing newsletters and other public education materials notifying residents and businesses of street sweeping schedules.	✓	✓	✓	✓	✓
<b>MUNI-17:</b> Schedule street sweeping activities when parked cars have minimal impact.	✓	✓	✓	✓	✓

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<p><b>MUNI-18:</b> Each agency will investigate and develop, if necessary, alternative methods of handling leaf fall and develop an appropriate leaf removal program, such as:</p> <ul style="list-style-type: none"> <li>• Operate street sweeping equipment in tandem;</li> <li>• Utilize a leaf removal machine just prior to street sweeping;</li> <li>• Utilize a front end loader with a dump truck just prior to sweeping; and/or</li> <li>• Encourage residents to collect and compost leaves or coordinate with a local composting program. If composting is infeasible, agencies may schedule removal of bagged leaves.</li> </ul>	●	✓	✓	✓	✓
<b>DISPOSAL OF STREET SWEEPING MATERIALS</b>					
<p><b>MUNI-19:</b> Each agency will ensure proper handling and disposal of materials removed from streets to prevent discharges of pollutants to surface waters or groundwater.</p>	✓	✓	✓	✓	✓
<p><b>MUNI-20:</b> Each agency will inspect, and clean as necessary, public storm drainage facilities (i.e., inlets, V-ditches, pump stations, open channels, and watercourses), once a year on average <i>unless an alternative schedule is approved as described in MUNI-21</i>. The inspections and needed sweeping will preferably occur prior to the rainy season. In calculating this average, some facilities may be inspected more than once per year and others less than once per year.</p>	✓	✓	✓	✓	✓

●      nence BMP Implementation

✓      Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<p><b>MUNI-21:</b> If an agency chooses to inspect, and clean as necessary, public storm drainage facilities (i.e., inlets, V-ditches, pump stations, open channels, and watercourses), less than an annual average, the rationale for the alternative standard must be described in a written action plan. The rationale should demonstrate the alternative schedule is equivalent in terms of protecting water quality as the annual average inspection. The action plan will be submitted to the Regional Board as part of the Annual Report. The alternative standard will not be effective until approved by the Regional Board's Executive Officer, and approval will be presumed unless it is rejected in writing within 90 days of its submittal.</p>	✓	✓	✓	✓	✓
<p><b>MUNI-22:</b> When cleaning storm drain inlets and lines, each agency will remove the maximum amount of material at the nearest access point to minimize discharges to watercourses.</p>	✓	✓	✓	✓	✓
<p><b>MUNI-23:</b> Each agency will develop and implement a storm drainage facility inspection and maintenance program. The written plan will be developed in FY 2000/01. The plan will include:</p> <ul style="list-style-type: none"> <li>A. Schedule for inspecting storm drainage facilities;</li> <li>B. Rationale for determining when to clean inlets, etc.;</li> <li>C. Identification of target areas that tend to accumulate excessive pollutants for cleaning; and</li> <li>D. Inventory of the major storm drain system.</li> </ul>	✓	✓	✓	✓	✓
<p><b>MUNI-24:</b> Unless provided for in an alternative plan approved by the Regional Board's Executive Officer, each agency will inspect and clean as needed public storm drainage facilities that have been identified to accumulate excessive pollutants twice a year. Preferably, inspections will occur prior to and after the rainy season to prevent flooding and discharge of pollutants.</p>	✓	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-25:</b> Each agency will inspect storm drain inlets monthly during the wet season in areas suspected of illegal dumping, and clean as necessary.	✓	✓	✓	✓	✓
<b>MUNI-26:</b> When sweeping over storm drain inlets, each agency will prevent pushing debris into the inlet.	✓	✓	✓	✓	✓
<b>RECORD KEEPING</b>					
<b>MUNI-27:</b> Each agency will report the amount of material removed when cleaning storm drainage facilities.	✓	✓	✓	✓	✓
<b>MUNI-28:</b> Each agency will document responses to spill incidents.	✓	✓	✓	✓	✓
<b>MUNI-29:</b> Each agency will track storm drain inlets which require more frequent cleaning.	✓	✓	✓	✓	✓



**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<p><b>MUNI-30:</b> Each agency will document and maintain the following records:</p> <ul style="list-style-type: none"> <li>A. Areas/sites inspected,</li> <li>B. Silt and vegetation quantities removed</li> <li>C. Man-made materials removed, and type and estimate of volume removed,</li> <li>D. Disposal practices and follow-up actions,</li> <li>E. Spill incidents and follow-up actions,</li> <li>F. Application of chemicals (type used, areas applied), and</li> <li>G. Areas for possible improvements</li> </ul>	✓	✓	✓	✓	✓
<b>DISPOSAL OF MATERIALS</b>					
<p><b>MUNI-31:</b> A plan for the storage, use and disposal of hazardous materials will be developed and implemented to ensure these materials are not allowed to enter the storm drain system. The plan will include employee training and spills management. Disposal of the material will be at an appropriate facility.</p>	✓	✓	✓	✓	✓

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>SPILL RESPONSE</b>					
<b>MUNI-32:</b> If the spill is suspected to be toxic or hazardous materials, maintenance staff will call the public safety dispatcher, 911, County Hazardous Materials Program and/or the appropriate designated personnel.	✓	✓	✓	✓	✓
<b>MUNI-33:</b> If non-hazardous materials are spilled, maintenance staff should contain the spill area immediately to prevent additional dumping and discharge of pollutants into the storm drain system and sweep as soon as practicable.	✓	✓	✓	✓	✓
<b>MUNI-34:</b> Each agency will establish response/removal procedures for spills after work hours with appropriately designated personnel.	✓	✓	✓	✓	✓
<b>MUNI-35:</b> Maintenance staff will report measurable spills to, and work with appropriately designated personnel to determine the proper follow-up response.	✓	✓	✓	✓	✓
<b>MUNI-36:</b> If appropriate, each agency's maintenance staff will notify appropriate designated personnel and agencies for possible future enforcement action.	●	✓	✓	✓	✓

● mence BMP Implementation

✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>GEOGRAPHICAL PROBLEM AREAS</b>					
<p><b>MUNI-37:</b> Instead of flushing streets and allowing water to drain into storm drain inlets when sweeping narrow streets where it is difficult to use a street sweeper or vacuum, each agency will:</p> <p>A. Encourage residents to maintain streets by removing leaves, litter, etc.,</p> <p>B. If flushing streets or sidewalks, the agency will protect the storm drain inlet, and remove materials using vacuum equipment or by some other appropriate means to remove residual material and water to the maximum extent practicable.</p>	●	✓	✓	✓	✓
<p><b>MUNI-38:</b> When cars are left on the street, each agency will:</p> <p>A. Consider posting restricted parking signs on sweeping days to increase accessibility;</p> <p>B. Post temporary signs to remove cars and sweep according to posted schedule;</p> <p>C. Protect the storm drain inlet, and remove material using vacuum equipment or by some other appropriate means to remove residual material and water.</p>	●	✓	✓	✓	✓
<b>INSPECTION AND MAINTENANCE OF STORMWATER FACILITIES</b>					
<p><b>MUNI-39:</b> Each agency will inspect pump stations after the wet season and develop a time schedule for maintenance activities prior to the next wet season.</p>	✓	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-40:</b> Each agency will inspect trash racks and/or oil absorbent booms after significant storms. Remove debris in trash racks and replace oil absorbent booms as needed.	✓	✓	✓	✓	✓
<b>PERMITS AND OTHER REGULATORY REQUIREMENTS</b>					
<b>MUNI-41:</b> Each agency will comply with regulatory requirements of the appropriate agencies (e.g., the California Department of Fish and Game, the U.S. Army Corps of Engineers, etc.).	✓	✓	✓	✓	✓
<b>TARGET AREAS FOR IMPROVEMENT</b>					
<b>MUNI-42:</b> Each agency will identify illegal dumping hot spots. Agencies will conduct regular inspections, posting and sweep-up to discourage additional dumping incidents. Each agency will consider appropriate actions to prevent illegal dumping.	✓	✓	✓	✓	✓
<b>MUNI-43:</b> Each agency will coordinate with appropriate personnel and agencies to enforce laws in targeted areas to prevent illegal dumping.	✓	✓	✓	✓	✓
<b>MUNI-44:</b> Each agency will evaluate additional areas for use of trash racks, oil absorbent booms, outlet protection etc. to reduce pollution to watercourses.	●	✓	✓	✓	✓

● Incomplete BMP Implementation

✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>DESILTING AND DISPOSAL</b>					
<b>MUNI-45:</b> Each agency will minimize desilting activities and disturbances of channel bottoms during the wet season.	●	✓	✓	✓	✓
<b>MUNI-46:</b> Each agency will dispose of desilted material properly and will not allow it to re-enter the watercourse after removal to the maximum extent practicable.	●	✓	✓	✓	✓
<b>VEGETATION</b>					
<b>MUNI-47:</b> Each agency will retain (design approved) low growing vegetation in channel bottoms and slopes to detain runoff, minimize erosion, trap sediment and enhance riparian habitat when evaluating the need to maintain channel design capacity, as appropriate.	●	✓	✓	✓	✓
<b>LITTER CONTROL</b>					
<b>MUNI-48:</b> Each agency will require an adequate number of litter receptacles in commercial areas and other litter source areas.	✓	✓	✓	✓	✓
<b>MUNI-49:</b> Each agency will require the pick-up of litter receptacles on a frequent basis to minimize or prevent spillage.	✓	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<p><b>MUNI-50:</b> Each agency will promote public education efforts to include an anti-littering message. The agency will specifically encourage: 1) residents to compost yard waste; 2) residents and businesses to remove litter from their property and properly contain waste; and 3) owners of loading docks, restaurants and other litter source areas to sweep outdoor areas daily and properly contain waste.</p>	●	✓	✓	✓	✓
<p><b>MUNI-51:</b> Each agency will encourage appropriate personnel and agencies to post signs and enforce anti-littering laws.</p>	●	✓	✓	✓	✓
<p><b>MUNI-52:</b> Each agency will document and maintain the following records:</p> <p style="margin-left: 20px;">A. Areas targeted for litter removal,</p> <p style="margin-left: 20px;">B. Total amount of material removed.</p>	●	✓	✓	✓	✓
<b>GRAFFITI ABATEMENT PRACTICES <sup>1</sup></b>					
<p><b>MUNI-53:</b> Each agency will take reasonable and practicable measures to protect (such as tarps in work areas, sand bags, booms or barriers around stormwater inlets) the storm drain inlets prior to removing graffiti from walls, signs, sidewalks, or other structures needing graffiti abatement. The agencies will sweep up afterwards by sweeping or vacuuming thoroughly, and/or by using oil absorbent and properly disposing of the absorbent.</p>	✓	✓	✓	✓	✓

<sup>1</sup> For the purposes of this performance standard, graffiti is defined as any unauthorized inscription of a word, symbol or design which is marked, etched, scratched, drawn or painted on any structural component of any public or private building, structure, or other facility.

● /      nence BMP Implementation

✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-54:</b> No agency will discharge debris, cleaning compound waste, paint waste, or wash water containing cleaning compounds to the storm drain.	✓	✓	✓	✓	✓
<b>MUNI-55:</b> Each agency will direct runoff from all types of sand blasting and high pressure water (no cleaning agents) washing activities into a landscaped or dirt area. If a landscaped area is not available, each agency will filter runoff through an appropriate filtering device (e.g., coarse sand bags or filter fabric to keep sand, particles, and debris out of storm drain).	✓	✓	✓	✓	✓
<b>MUNI-56:</b> Each agency will avoid conducting graffiti abatement activities during a rainstorm. If it rains during graffiti abatement activities unexpectedly, each agency will take appropriate action to minimize the impact on the quality of stormwater (e.g., divert runoff around work areas).	✓	✓	✓	✓	✓
<b>MUNI-57:</b> Each agency will train employees and volunteers conducting graffiti abatement in using these performance standards. Each agency will incorporate these performance standards into agency contract specifications. Each agency will provide volunteers and contractors conducting graffiti abatement with education material describing the graffiti abatement performance standards.	●	✓	✓	✓	✓
<b>MUNI-58:</b> It is recommended each agency assign one supervisor/management-level person the responsibility for ensuring these performance standards are implemented.	✓	✓	✓	✓	✓
<b>MUNI-59:</b> Each agency will clean equipment used for graffiti abatement activities in accordance with the performance standards.	✓	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-60:</b> Each agency will dispose of cleaning compounds in accordance with the corporation yard's Stormwater Pollution Prevention Plan (SWPPP).	✓	✓	✓	✓	✓
<b>MUNI-61:</b> Each agency should consider using a waterless chemical cleaning method for graffiti removal (e.g., gels or trigger spray compounds).	●	✓	✓	✓	✓
<b>MUNI-62:</b> Each agency choosing a graffiti abatement method that generates a wash water containing a cleaning compound (such as high pressure washing with a cleaning compound) will protect storm drains and dispose of materials properly.	●	✓	✓	✓	✓
<b>GENERAL PRACTICES FOR ROAD REPAIR &amp; MAINTENANCE</b>					
<b>MUNI-63:</b> Each agency will schedule excavation and road maintenance activities for dry weather, if feasible.	✓	✓	✓	✓	✓
<b>MUNI-64:</b> Each agency will perform major equipment repairs at the corporation yard, when practical.	✓	✓	✓	✓	✓
<b>MUNI-65:</b> When refueling or maintaining vehicles and equipment on-site, each agency will use a location away from storm drain inlets and creeks.	✓	✓	✓	✓	✓
<b>MUNI-66:</b> Each agency will recycle used motor oil, diesel oil, concrete, broken asphalt, etc., whenever possible.	✓	✓	✓	✓	✓



**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-67:</b> Each agency will provide proper containment of diesel fuel used to lubricate or clean equipment or parts.	✓	✓	✓	✓	✓
<b>MUNI-68:</b> Each agency will train employees in using these general practices for road repair and maintenance activities.	✓	✓	✓	✓	✓
<b>ASPHALT/CONCRETE REMOVAL</b>					
<b>MUNI-69:</b> Each agency will take measures to protect storm drain inlets prior to breaking up asphalt or concrete (e.g., cover inlets). The agencies will clean afterwards by sweeping all related materials.	✓	✓	✓	✓	✓
<b>MUNI-70:</b> After breaking up old pavement, each agency will remove and dispose properly.	✓	✓	✓	✓	✓
<b>MUNI-71:</b> During saw-cutting operations, each agency will block or berm around storm drain inlets using sand bags or an equivalent filter device, or absorbent materials such as pads, pillows and socks to contain slurry. If slurry enters the storm drain system, the agency will have the material removed to the maximum extent practicable.	✓	✓	✓	✓	✓
<b>MUNI-72:</b> Each agency will remove saw-cut slurry (e.g., with a shovel or vacuum) before leaving at the end of the day.	✓	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>PATCHING AND RESURFACING</b>					
<b>MUNI-73:</b> Agencies will not stockpile materials in streets, gutter areas or near storm drain inlets or creeks unless these areas are protected.	✓	✓	✓	✓	✓
<b>MUNI-74:</b> Each agency will protect storm drain openings before applying seal coat, slurry seal, etc. Agencies will prevent to the maximum extent practicable material from entering storm drain inlets and sweep them if needed.	✓	✓	✓	✓	✓
<b>MUNI-75:</b> Agencies will not wash excess material from exposed aggregate concrete or similar treatments into an unprotected street or storm drain inlet. Each agency will designate an unpaved area for sweeping up and proper disposal of excess materials.	✓	✓	✓	✓	✓
<b>MUNI-76:</b> Agencies will use only as much water as necessary for dust control to avoid runoff.	✓	✓	✓	✓	✓
<b>MUNI-77:</b> Each agency will sweep up as much material as possible and dispose of properly. Agencies will only wash down streets if runoff is controlled or contained.	✓	✓	✓	✓	✓
<b>MUNI-78:</b> Each agency will catch drips from parked paving equipment with pans or absorbent material placed under the machines or berm the area around them to the maximum extent practicable.	✓	✓	✓	✓	✓

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-79:</b> Each agency will clean up all spills and leaks from other equipment and work site areas using "dry" methods (absorbent materials and/or rags). The agency will properly dispose of absorbent materials and rags. If spills occur on dirt areas, the agency will dig up and remove contaminated soil properly in a timely basis.	✓	✓	✓	✓	✓
<b>MUNI-80:</b> Each agency will remove stockpiles (asphalt materials, sand, etc.) prior to the completion of the job.	✓	✓	✓	✓	✓
<b>MUNI-81:</b> If it rains unexpectedly, each agency will take appropriate action to prevent pollution of stormwater runoff (e.g., divert runoff around work areas).	✓	✓	✓	✓	✓
<b>SIGNING AND STRIPING</b>					
<b>MUNI-82:</b> Each agency will store spill absorbent materials on vehicles to be used in the event of a spill.	✓	✓	✓	✓	✓
<b>MUNI-83:</b> Each agency will contain and sweep up waste materials and dispose of them properly according to the Material Safety Data Sheet.	✓	✓	✓	✓	✓
<b>AGENCY EQUIPMENT CLEANUP &amp; STORAGE</b>					
<b>MUNI-84:</b> Each agency will flush sprayer paint supply lines at the corporation yard. Agencies will use approved collection methods and dispose of recycled waste materials at an appropriate waste facility.	✓	✓	✓	✓	✓

● Commence BMP Implementation      ✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-85:</b> Each agency will to the maximum extent practicable clean sprayers and patch paving equipment at the end of the day. Agencies will use approved collection methods and dispose or recycle waste materials at an approved facility.	✓	✓	✓	✓	✓
<b>MUNI-86:</b> Each agency will cover sprayers, patch and paving equipment to prevent rainfall from contacting pollutants (examples of cover include but are not limited to tarps, overhangs or inside of buildings).	✓	✓	✓	✓	✓
<b>GENERAL BMPs FOR MAINTENANCE FACILITIES</b>					
<b>MUNI-87:</b> Each agency will assign one person the primary responsibility for coordinating implementation of BMPs. This person will also be responsible for ensuring all individuals using the facility are aware of BMPs.	✓	✓	✓	✓	✓
<b>MUNI-88:</b> Each agency will prepare spill containment kits and store them in locations that have potential for spills (fueling areas, etc.).	✓	✓	✓	✓	✓
<b>MUNI-89:</b> Each agency will stencil/mark inlets to the storm drainage system within the facility with a message such as "No Dumping, Drains to Bay."	✓	✓	✓	✓	✓
<b>MUNI-90:</b> Each agency will refer to existing plans (e.g., Hazardous Materials Business Plans and/or Spill Prevention Control and Countermeasures Plan), incorporate stormwater BMPs in any updates, and periodically review with persons using the facility.	✓	✓	✓	✓	✓

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-91:</b> Each agency will conduct a facility inspection annually.	✓	✓	✓	✓	✓
<b>MUNI-92:</b> Each agency will prepare a Storm Water Pollution Prevention Plan (SWPPP) for each maintenance facility.	✓	✓	✓	✓	✓
<b>MUNI-93:</b> Each agency will develop and post BMPs for other public agencies that use its corporation yard.	●	✓	✓	✓	✓
<b>MUNI-94:</b> Each agency will distribute educational materials and post them in appropriate areas.	●	✓	✓	✓	✓
<b>WASHING VEHICLES/EQUIPMENT</b>					
<b>MUNI-95:</b> Each agency will clean all vehicles and equipment on designated wash pad areas.	✓	✓	✓	✓	✓
<b>MUNI-96:</b> Each agency will monitor wash pad areas to make sure they are consistently used.	✓	✓	✓	✓	✓
<b>MUNI-97:</b> Each agency will wash vehicles and equipment whether on-site or off-site so wash water drains to the sanitary sewer or is recycled. Each agency will ensure the on-site wash pad area and sump are large enough so that all wash water drains to the sanitary sewer or recycling system. The agency will re-grade the area, if necessary, or install dikes to control wash water.	✓	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>FUEL DISPENSING AREAS</b>					
<b>MUNI-98:</b> Each agency will development and implement a plan for the storage, use and disposal of hazardous materials ensure these materials are not allowed to enter the storm drain system. The plan will include employee training and spills management.	✓	✓	✓	✓	✓
<b>MUNI-99:</b> Each agency will store spill containment kits nearby. If spills occur, the agency will use dry methods to sweep the fueling area and follow procedures (e.g., the Hazardous Materials Business Plan (HMBP) and/or Spill Prevention Control and Countermeasure Plans).	✓	✓	✓	✓	✓
<b>MUNI-100:</b> Each agency will train employees in proper fueling and sweeping procedures.	✓	✓	✓	✓	✓
<b>MUNI-101:</b> The agency will not conduct fueling over open ground. The ground should be covered by concrete or asphalt protected with a sealant.	✓	✓	✓	✓	✓
<b>MUNI-102:</b> Each agency will install signs reminding people not to "top off" tanks.	✓	✓	✓	✓	✓
<b>MUNI-103:</b> Each agency will discourage mobile fueling. If equipment is fueled with a mobile fuel truck, the agency will establish designated areas for fueling.	✓	✓	✓	✓	✓
<b>MUNI-104:</b> Each agency will investigate covering existing liquid fuel dispensing areas and implement if financially feasible.	✓	✓	✓	✓	✓

● r mence BMP Implementation

✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-105:</b> Each agency will design new fueling areas to limit to the maximum extent practicable "runon" of stormwater and runoff of spills.	✓	✓	✓	✓	✓
<b>CHEMICAL STORAGE</b>					
<b>MUNI-106:</b> Each agency will store paint and other chemicals in an approved covered containment area. The agency will design the floor inside so that any spilled materials will be contained and easily removed. The agency will keep all containers with hazardous materials or waste closed when not filling or emptying. The agency will label the outside according to Department of Transportation regulations. The agency will also protect the area from vandalism.	✓	✓	✓	✓	✓
<b>MUNI-107:</b> If containers with hazardous materials or wastes are stored outside, each agency will keep containers in an approved containment area. Each agency will ensure all of the containers are closed with tight-fitting lids.	✓	✓	✓	✓	✓
<b>MUNI-108:</b> Each agency will annually review their appropriate plan for hazardous materials storage requirements.	✓	✓	✓	✓	✓
<b>MUNI-109:</b> Each agency will review Material Safety Data Sheets so incompatible materials have appropriate separation.	✓	✓	✓	✓	✓

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>CHEMICAL USAGE</b>					
<b>MUNI-110:</b> Each agency will make the necessary safety equipment and spill containment kits readily accessible in areas where chemicals are used. The agency will inspect safety equipment regularly so that they are operational.	✓	✓	✓	✓	✓
<b>MUNI-111:</b> Each agency will review Material Safety Data Sheets.	✓	✓	✓	✓	✓
<b>MUNI-112:</b> Each agency will minimize the use of chemicals. The agency will use water-based paints and non-toxic chemicals as much as possible.	✓	✓	✓	✓	✓
<b>MUNI-113:</b> Each agency will dispose of excess chemicals at an appropriate disposal location or recycle the chemical.	✓	✓	✓	✓	✓
<b>MUNI-114:</b> Each agency will wipe oil-based paint out of brushes. The agency will filter and reuse thinners. A plan for the storage, use and disposal of hazardous materials will be developed and implemented so that these materials are not allowed to enter the storm drain system. The plan will include employee training and spills management.	✓	✓	✓	✓	✓
<b>MUNI-115:</b> Each agency will rinse latex paint out of brushes and discharge rinse water to the sanitary sewer. The agency will dry excess paint in cans and dispose of the cans in the trash. A plan for the storage, use and disposal of hazardous materials will be developed and implemented to ensure these materials are not allowed to enter the storm drain system. The plan will include employee training and spills management.	✓	✓	✓	✓	✓

● /      mence BMP Implementation

✓ Implemented and In Effect



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PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-116:</b> Each agency will collect used automobile fluids and dispose of them at an appropriate facility or recycle them. A plan for the storage, use and disposal of hazardous materials will be developed and implemented to ensure these materials are not allowed to enter the storm drain system. The plan will include employee training and spills management.	✓	✓	✓	✓	✓
<b>MUNI-117:</b> Each agency will properly dispose of or recycle used solvents/chemicals. A plan for the storage, use and disposal of hazardous materials will be developed and implemented to ensure these materials are not allowed to enter the storm drain system. The plan will include employee training and spills management.	✓	✓	✓	✓	✓
<b>FLEET MAINTENANCE/VEHICLE PARKING AREAS</b>					
<b>MUNI-118:</b> Each agency will inspect equipment for leaks on a regular basis. The agency will use drip pans under leaky vehicles. The agency will repair vehicles with significant leaks.	✓	✓	✓	✓	✓
<b>MUNI-119:</b> Each agency will drain and replace motor oil and other fluids in a covered shop area. If fluids are changed outdoors, the agency will designate an area where there are no connections to storm drains or the sanitary sewer and where spills can be easily swept up.	✓	✓	✓	✓	✓
<b>MUNI-120:</b> Each agency will periodically dry sweep the area.	✓	✓	✓	✓	✓

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>GENERAL HOUSEKEEPING</b>					
<b>MUNI-121:</b> Each agency will inspect the yard routinely to ensure there are no illegal discharges to the storm drain system. During storms, pollutant discharges will be controlled to the maximum extent practicable.	✓	✓	✓	✓	✓
<b>MUNI-122:</b> Each agency will sweep the paved portion of the corporation yard(s). The agency will dispose of material removed from streets and storm drainage facilities regularly to eliminate exposure to rainwater and runoff to the storm drain system.	✓	✓	✓	✓	✓
<b>GENERAL BMPs FOR PESTICIDES (For the purposes of Performance Standards, pesticides include herbicides)</b>					
<b>MUNI-123:</b> Each agency will consider alternatives for pesticide/herbicide control including:  A. No controls, B. Physical/mechanical controls (hand labor, and county work furlough crews, etc.), C. Alternative vegetation controls (mulching, prescribed burns, etc.), D. Biological controls (predators, parasites, goats, etc.), E. Less toxic chemical controls (e.g., soaps and oils), and/or F. Hot water.	✓	✓	✓	✓	✓

● Implement BMP Implementation

✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-124:</b> Each agency will use the most effective, least toxic pesticides. The agency will take into consideration the LD50, overall risk to the applicator and impact to the environment.	✓	✓	✓	✓	✓
<b>MUNI-125:</b> Each agency will comply with all appropriate federal, state and local laws and regulations including the following directives: A. Federal: U.S. EPA Air and Toxics Division, Pesticides 415-744-1087 B. State: Cal-EPA Department of Pesticide Regulation 916-4445-4300 C. Local: Contra Costa County Agricultural Commissioner 925-3113-5250	✓	✓	✓	✓	✓
<b>MUNI-126:</b> Appropriate agency personnel will read and follow label instructions.	✓	✓	✓	✓	✓
<b>MUNI-127:</b> Each agency will encourage applicators to attend meetings and other professional avenues for continuing education (e.g., U.C. Cooperative Extension classes, Pesticide Applicator Professional Association).	✓	✓	✓	✓	✓
<b>MUNI-128:</b> Agencies may contact the U.C. Statewide IPM Project (916-752-7671), the U.C. Cooperative Extension Office (510-670-5200) as well as private consulting firms, and libraries for information on integrated pest management, as appropriate.	✓	✓	✓	✓	✓
<b>MUNI-129:</b> Each agency will use state-certified pesticide applicators.	✓	✓	✓	✓	✓

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>PESTICIDE USAGE</b>					
<b>MUNI-130:</b> Each agency will apply pesticides at the appropriate time to maximize their effectiveness and minimize the likelihood of discharging non-degraded pesticides in stormwater runoff.	✓	✓	✓	✓	✓
<b>MUNI-131:</b> Agencies will not mix or load pesticides adjacent to a storm drain inlet, culvert or watercourse.	✓	✓	✓	✓	✓
<b>MUNI-132:</b> Each agency will select pesticides and application techniques along road sides which will retain some vegetative cover to help prevent soil erosion, trap pollutants and slow the rate of stormwater runoff, where possible.	✓	✓	✓	✓	✓
<b>MUNI-133:</b> Each agency will calibrate field equipment prior to use to ensure desired application rate. Agencies will mix only as much material as necessary for treatment.	✓	✓	✓	✓	✓
<b>MUNI-134:</b> Each agency will follow all legal requirements for Pesticide Management Zones (defined as areas where specific pesticide residues have been detected in groundwater) in Section 6800, Title 3 of the California Code of Regulations.	✓	✓	✓	✓	✓
<b>MUNI-135:</b> Each agency will train applicators in the safe use of pesticides and proper inspection of applicator equipment to prevent accidental pesticide leaks, spills and hazards to applicators and the environment.	✓	✓	✓	✓	✓

● **Implementation**

✓ **Implemented and In Effect**

**TABLE 5-1  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-136:</b> If changing pesticides or sweeping spray tanks, the agency will use tank rinse water as product over a targeted area within the application site.	✓	✓	✓	✓	✓
<b>MUNI-137:</b> Each agency will maintain a record of all treatments including pesticide use for each site.	✓	✓	✓	✓	✓
<b>MUNI-138:</b> Each agency will reduce to the maximum extent practicable the use of algaecides containing copper as an active ingredient if discharges may ultimately reach water courses or the San Francisco Bay-San Joaquin Delta.	●	✓	✓	✓	✓
<b>COPPER AS AN ACTIVE INGREDIENT</b>					
<b>MUNI-139:</b> Each agency will reduce to the maximum extent practicable the use of copper-based pesticides. If applying copper as an algaecide, the agency will consider using a chelated form of copper for greater solubility (less settling to the bottom).	✓	✓	✓	✓	✓
<b>MUNI-140:</b> Each agency will summarize annual copper usage (including usage by contractors) and provide this information in the Program's Annual Report.	●	✓	✓	✓	✓
<b>MUNI-141:</b> Each agency will eliminate the use of copper-based pesticides (when a comparable alternative exists).	✓	✓	✓	✓	✓

● Commence BMP Implementation      ✓ Implemented and In Effect

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>DIAZINON AS AN ACTIVE INGREDIENT</b>					
<b>MUNI-142:</b> Each agency will explore the possibility of using alternative controls or less toxic chemicals before using Diazinon.	✓	✓	✓	✓	✓
<b>MUNI-143:</b> Each agency will promote public outreach efforts to educate homeowners about the effects of home use of Diazinon and other insecticides on aquatic life. The Program will contact the Department of Pesticide Regulation to elicit their assistance.	✓	✓	✓	✓	✓
<b>MUNI-144:</b> Each agency will reduce or eliminate its use of Diazinon when a comparable product exists.	✓	✓	✓	✓	✓
<b>PESTICIDE STORAGE</b>					
<b>MUNI-145:</b> Each agency will develop and implement a plan for the storage, use and disposal of hazardous materials so that these materials are not allowed to enter the storm drain system. The plan will include employee training and spills management.	✓	✓	✓	✓	✓
<b>MUNI-146:</b> Each agency will prepare spill kits, store the kits near pesticides, and train employees to use them.	✓	✓	✓	✓	✓
<b>MUNI-147:</b> Each agency will store pesticides and other chemicals indoors in a locked and posted storage unit.	✓	✓	✓	✓	✓

● / mence BMP Implementation

✓ Implemented and In Effect

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DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-148:</b> Each agency will store pesticides in labeled containers.	✓	✓	✓	✓	✓
<b>PESTICIDE DISPOSAL</b>					
<b>MUNI-149:</b> Each agency will rinse empty pesticide containers and dispose of rinse water per California Code of Regulations requirements.	✓	✓	✓	✓	✓
<b>MUNI-150:</b> Each agency will dispose of triple rinsed empty pesticide containers according to recommendations of the Contra Costa County Agricultural Commissioner and the manufacturer.	✓	✓	✓	✓	✓
<b>MUNI-151:</b> Each agency will attempt to find a qualified user for any unwanted pesticides, or will return it to the manufacturer if unopened.	✓	✓	✓	✓	✓
<b>MUNI-152:</b> Each agency will develop and implement a plan for the storage, use and disposal of hazardous materials so that these materials are not allowed to enter the storm drain system. The plan will include employee training and spills management.	✓	✓	✓	✓	✓
<b>FERTILIZER APPLICATION</b>					
<b>MUNI-153:</b> Each agency will avoid applications if runoff is probable. On hillsides, the agency will avoid applying more water than the soil can absorb.	✓	✓	✓	✓	✓

**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
Page 30 of 31**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-154:</b> Each agency will check irrigation equipment prior to applying fertilizer to determine if it is working properly. The agency will monitor irrigation systems to avoid over watering.	✓	✓	✓	✓	✓
<b>MUNI-155:</b> Each agency will confine fertilizer to targeted area. If fertilizer has been applied to hardscape areas (e.g., roadways, walkways, and paved surfaces), the agency will sweep, vacuum, or blow back fertilizer from these areas before irrigating and/or rainfall. Agencies will not wash down hardscape areas.	✓	✓	✓	✓	✓
<b>PARK AND GENERAL LANDSCAPE AREAS</b>					
<b>MUNI-156:</b> Each agency will select fertilizers to complement local soil conditions, climate and plant health.	✓	✓	✓	✓	✓
<b>MUNI-157:</b> Each agency will fertilize plants based on plant type, physical appearance, soil or foliage testing.	✓	✓	✓	✓	✓
<b>MUNI-158:</b> If over-application is suspected, each agency will test soil and/or plant tissue for nutrients and trace elements as needed prior to applying fertilizer. If copper is not needed, the agency will eliminate it from the micro-nutrient blend.	✓	✓	✓	✓	✓
<b>AGENCY OPERATED GOLF COURSES</b>					
<b>MUNI-159:</b> Each agency will distribute educational materials promoting the implementation of Best Management Practices to municipal golf course operators.	✓	✓	✓	✓	✓

● imence BMP Implementation

✓ Implemented and In Effect



**TABLE 5-1  
MUNICIPAL MAINTENANCE  
PERFORMANCE STANDARDS  
Page 31 of 31**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>MUNI-160:</b> Each agency will test well water or other irrigation source water (e.g., nitrates) to help determine fertilizer requirements, as needed.	✓	✓	✓	✓	✓
<b>MUNI-161:</b> Each agency will test soil and foliage on greens and tees, as needed, to determine need for applications. If copper is not needed, the agency will eliminate it from the micro-nutrient blend.	✓	✓	✓	✓	✓
<b>MUNI-162:</b> Each agency will design new golf courses to restore and/or maintain riparian areas/wetland and establish vegetation buffer zones along sensitive wetland areas to reduce runoff into waterways. Also, the agency will consider using detention ponds to control runoff and remove excess nutrients and/or divert excess irrigation water to areas where it can be used (e.g., roughs).	✓	✓	✓	✓	✓
<b>MUNI-163:</b> Each agency will prepare a management plan which includes: 1) a comprehensive review of existing practices; and 2) a plan for fertilizer (and pesticide) use to minimize the amount needed and to control runoff.	✓	✓	✓	✓	✓
<b>MUNI-164:</b> Each agency will test soil and foliage in fairways as necessary to determine need for applications. If copper is not needed, the agency will eliminate it from the micro-nutrient blend.	✓	✓	✓	✓	✓
<b>FERTILIZER STORAGE</b>					
<b>MUNI-165:</b> Each agency will store fertilizers indoors, in a shed or in a storage cabinet.	✓	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and In Effect



## INSPECTION ACTIVITIES

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### GOALS

The nature of activities conducted by industrial and commercial facilities result in the potential for pollutants to discharge to municipal storm drains or creeks.

The goals of this component are to:

- ❖ Reduce the amount of pollutants in stormwater runoff and eliminate non-stormwater discharges to municipal storm drains from industrial and commercial facilities; and,
- ❖ Identify and minimize potential stormwater pollution sources through facility inspections, educational outreach activities with businesses, and appropriate follow-up including enforcement.

### ACCOMPLISHMENTS

All co-permittees in the Contra Costa Clean Water Program participate in-group inspection activities. However, agencies use different mechanisms to conduct site inspections. Antioch, Contra Costa County, Danville, Hercules, Pittsburg, Richmond and San Pablo are responsible for conducting their own inspections. The remaining eleven (11) co-permittees have jointly contracted with two (2) sanitary districts (i.e., Central Contra Costa Sanitary District and West County Wastewater District) for inspection services. This is a unique collaboration between co-permittees and sanitary districts that combines pre-treatment inspections with stormwater inspections to provide a comprehensive approach to pollution prevention.

## 6

# **INSPECTION ACTIVITIES**

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Although agencies differ on the mechanisms used to conduct inspections, all co-permittees participate in group inspection activities, such as inspector training, enforcement procedures, and development and disbursement of educational materials. These group activities ensure inspections are conducted in a consistent and comprehensive manner. This also helps to ensure a level regulatory playing field for businesses on a countywide basis.

### **PLANNED PROGRAM ACTIVITIES**

It is important to note the difference between the Inspection Activities described in this component and the Illicit Discharge Control Activities described in Section 8. Inspection Activities involve inspecting businesses to prevent pollutant discharges to storm drains. Illicit Discharge Control Activities involve inspecting storm drains for illicit discharges, and tracing these discharges to their sources, which may or may not be a business facility. Planned inspection activities for the next five (5) year period are described below.

#### ❖ Develop an Inspection Plan

Each agency will describe its planned level of effort for conducting facility inspections for the coming year in an Inspection Plan (Plan). The Plan will describe agency-specific information including a list of priority facilities or business types and the number of facilities that will be inspected during the coming fiscal year. Information to adequately describe additional aspects of the agency's inspection program will also be included in the Plan, as described in the performance standards. Generally, the Plan describes how each agency will achieve the goals described in the performance standards.

## INSPECTION ACTIVITIES

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- ❖ Conduct Facility Inspections and Outreach Activities; Implement and Update Performance Standards

Each agency will continue to conduct facility inspections and business outreach to effectively reduce pollutant discharges to its municipal storm drains as described in this component. This includes annually reviewing and updating performance standards for the inspection activities, as needed. The Program will assist agencies with their annual assessment of the performance standards. As described below, inspection activities include facility inspections and outreach to businesses:

Facility Inspections – Conducting stormwater inspections at industrial and commercial businesses includes:

- Initial/regular site visits to assess the facility’s current impact to stormwater;
- Follow-up activities to ensure BMPs are effectively applied and pollutant discharges to storm drains are eliminated to the maximum extent practicable;
- Documentation and tracking; and,
- Enforcement when necessary.

The goal of the inspection program is for each agency to inspect high priority facilities (defined in the agency’s Inspection Plan) at least once every year, and other businesses/facilities, that have the potential to impact stormwater, at least once during the five (5) year NPDES permit period.

## **INSPECTION ACTIVITIES**

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Outreach to Businesses - This activity includes educating individual representatives during stormwater facility inspections as well as working with trade associations and business groups to achieve the inspection activity goals, and comply with relevant stormwater requirements, and to share and solicit ideas to solve general compliance issues.

❖ Document, Analyze and Report Inspection Findings

Information gleaned from inspections will be documented on the agency's facility inspection form. Agencies will annually review and assess the inspection results and update their Inspection Plan, as appropriate. The program will assist in coordinating the collection of consistent data countywide for inclusion in the Annual Report.

❖ Conduct Training For Facility Inspectors

The program will continue to coordinate training workshops for facility inspectors. The program will use information gathered from inspections to train inspectors on improved methods for identifying issues that affect stormwater quality. Facility inspectors will also be trained on the effectiveness of BMPs as they are refined and new guidelines are developed. This forum is important to help ensure the level of inspection and outreach efforts are consistent countywide.

**PERFORMANCE STANDARDS**





**TABLE 6-1**  
**INSPECTION ACTIVITIES**  
**PERFORMANCE STANDARDS**  
 Page 1 of 5

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>DEVELOP AN INSPECTION PLAN</b>					
<p><b>INSP-1:</b> Each agency will utilize a written inspection plan that outlines specific steps each agency will take to conduct effective facility inspections. The written inspection plan will consist of:</p> <p>A. A review of the types of businesses within its jurisdiction that account for the variability of business types, complexity, and number; a listing by category of business types that have greater potential to cause stormwater pollution;</p> <p>B. A priority list of businesses or business types that include the number of facilities that will be inspected during the fiscal year; and</p> <p>C. As appropriate, a summary of efforts to coordinate inter/intra-agency issues.</p>	✓	✓	✓	✓	✓
<p><b>INSP-2:</b> Each agency will adequately train facility inspectors. This includes the knowledge and skills necessary to conduct effective stormwater inspections, with coordination from the Program. This may include: stormwater regulations and requirements (including the agency's ordinance, municipal stormwater permit, and the industrial stormwater general permit); the impacts of non-stormwater discharges to the storm drains; inspection techniques and procedures; follow-up and enforcement procedures; and stormwater BMPs.</p>	✓	✓	✓	✓	✓
<p><b>INSP-3:</b> Each agency will conduct outreach in addition to inspection activities, to inform facility representative about appropriate stormwater BMP information. This may include responding to telephone calls from business representatives, making presentations to business groups, or participating in focused outreach efforts coordinated by the targeted business groups.</p>	✓	✓	✓	✓	✓

**TABLE 6-1  
INSPECTION ACTIVITIES  
PERFORMANCE STANDARDS  
Page 2 of 5**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>INSP-4:</b> Each agency will inspect priority facilities as defined in the inspection plan at least once per year. The goal is to inspect facilities that have the potential to impact stormwater quality, at least once during the five year permit period.	✓	✓	✓	✓	✓
<b>INSP-5:</b> Each agency will evaluate inspection results from the previous year to assess which industry types had the most impact on stormwater quality. Adjustments to the inspection plan will be made based on this assessment.	✓	✓	✓	✓	✓
<b>INSP-6:</b> Each agency will expand the inspection program to include additional types of outreach and inspection activities (e.g., public/private sector workshops, multi-lingual materials, etc.).	✓	✓	✓	✓	✓
<b>CONDUCTING AN INSPECTION</b>					
<b>INSP-7:</b> Each agency will respond to complaints or referrals from agencies concerning a facility. The response may include actions such as: interviewing the caller concerning the specific nature of the discharge; inspecting the site; locating any non-stormwater discharges to the storm drains; informing the facility representative of appropriate stormwater BMPs; and conducting follow-up measures to ensure compliance is achieved.	✓	✓	✓	✓	✓
<b>INSP-8:</b> Each agency will update their list of businesses from the following, as appropriate: inter/intra-agency referrals; other agency lists (e.g., Fire Department); business licenses; PG&E bills; water/utility bills; etc.	✓	✓	✓	✓	✓
<b>INSP-9:</b> Inspectors will review existing information on the site and its regulatory history.	✓	✓	✓	✓	✓

● r nence BMP Implementation

✓ Implemented and in Effect

**TABLE 6-1  
INSPECTION ACTIVITIES  
PERFORMANCE STANDARDS  
Page 3 of 5**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>INSP-10:</b> Notifying the facility prior to the inspection is discretionary.	✓	✓	✓	✓	✓
<b>INSP-11:</b> Inspectors will review the facility layout to locate the storm drain system and/or stormwater drainage path, storage areas, process areas, vehicle and heavy equipment wash and maintenance areas, and stormwater sampling locations, if applicable.	✓	✓	✓	✓	✓
<b>INSP-12:</b> Inspections for the potential discharges of pollutants may include, but are not limited to, the following areas and activities:  A. Outdoor process/manufacturing areas; B. Outdoor material storage areas; C. Outdoor waste storage and disposal areas; D. Outdoor vehicle and heavy equipment storage and maintenance areas; E. Outdoor parking areas and access roads; F. Rooftop down spouts G. Outdoor wash areas; H. Outdoor drainage from indoor areas, and I. Stormwater conveyance system maintenance and emergency response practices.	✓	✓	✓	✓	✓

**TABLE 6-1  
INSPECTION ACTIVITIES  
PERFORMANCE STANDARDS  
Page 4 of 5**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>INSP-13:</b> Inspectors will report the information on the agency's most recently adopted stormwater facility inspection report form.	✓	✓	✓	✓	✓
<b>INSP-14:</b> Inspectors will use the facility's SWPPP, if available, as a tool in assessing the facility's stormwater pollution control activities. This will not imply review or approval of the adequacy of the SWPPP.	✓	✓	✓	✓	✓
<b>INSP-15:</b> Inspectors will identify and inform the facility representative about problems and violation(s), if applicable. A schedule for correcting problems identified during the inspection and a means for verifying its implementation will be coordinated between the inspector and the facility representative. This information will also be noted on the inspection form.	✓	✓	✓	✓	✓
<b>INSP-16:</b> Inspectors will provide facility representatives with appropriate BMP information, education materials, and inter/intra-agency referrals as appropriate.	✓	✓	✓	✓	✓
<b>INSP-17:</b> Inspectors will obtain ongoing training to support inspection activities and to continue to improve program implementation. Inspector(s) representing each agency will attend Program inspector training workshops. The Program will annually assess inspector training needs.	✓	✓	✓	✓	✓
<b>EVALUATING FACILITY COMPLIANCE</b>					
<b>INSP-18:</b> The inspector will determine if the facility is in compliance with the agency's stormwater ordinance (i.e., there are no unpermitted non-stormwater discharges and pollutant exposure to rain is minimized).	✓	✓	✓	✓	✓

● imence BMP Implementation      ✓ Implemented and in Effect

**TABLE 6-1  
INSPECTION ACTIVITIES  
PERFORMANCE STANDARDS  
Page 5 of 5**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>INSP-19:</b> Inspectors will prioritize facilities for re-inspection. If a problem was identified during the inspection, inspectors will perform a follow-up inspection or initiate a self-certification process where the facility representative certifies in writing that the problem has been removed or corrected within the time specified by the inspector.	✓	✓	✓	✓	✓
<b>ENFORCEMENT</b>					
<b>INSP-20:</b> Inspectors will begin enforcement procedures, if appropriate, immediately.	✓	✓	✓	✓	✓
<b>INSP-21:</b> Agencies will conduct enforcement activities and report these activities as set forth in the Inspection Plan. These activities are set forth by the individual agency ordinances.	✓	✓	✓	✓	✓
<b>REPORTING</b>					
<b>INSP-22:</b> Each agency will annually review and assess the inspection plan and inspection results. This review will be incorporated into the Annual Report.	✓	✓	✓	✓	✓



# 7 ILLICIT DISCHARGE CONTROL ACTIVITIES

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## **GOALS**

Pollutants poured, spilled, dumped, or discharged through illicit connections to storm drains would often go undetected without an active illicit discharge control program to inspect stormwater conveyance structures. The goals of this component are to:

- ❖ Control illicit discharges by conducting field surveys of the storm drainage conveyance system and identifying and eliminating the sources of non-stormwater discharges;
- ❖ Analyze information illicit discharge inspectors have obtained to identify consistent methods for conducting field surveys countywide;
- ❖ Address discharges that may not be considered illicit if properly managed;
- ❖ Optimize activities through planning and prioritization; and
- ❖ Effectively coordinate spill response and clean up with existing programs.

## **ACCOMPLISHMENTS**

Most illicit discharge control activities are conducted by the co-permittees. A summary of their accomplishments during the initial NPDES permit period are as follows:

## ILLICIT DISCHARGE CONTROL ACTIVITIES

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### ❖ Storm Drain Inventory

An inventory of the storm drain system within each agency is essential to implementing an effective field survey program. Agencies have developed this information on hard copy maps, as well as electronic files.

### ❖ Field Surveys

Co-permittees use staff from various agencies to implement different methods for surveying the storm drain system (e.g., hazardous materials inspectors, Publicly Owned Treatment Works (POTW) pretreatment inspectors, municipal maintenance crews, etc). If a non-stormwater discharge is found, the appropriate field inspector tries to identify and eliminate the source. In fiscal year 1996/97 alone, co-permittees identified and effectively eliminated over 250 illicit connections and/or illegal discharges to the municipal storm drain system.

### ❖ Illicit Discharge Complaint Response/Source Identification Program

Since a network of spill response and clean up programs already exists, establishing a new and separate stormwater response program would duplicate many of the services already being provided by these programs. The approach of this component is to supplement these services and respond to spill incidents that are not under the purview of previously existing clean-up programs. Each agency tracks illicit discharge reports and, when necessary, conducts field investigations to attempt to identify



## **ILLICIT DISCHARGE CONTROL ACTIVITIES**

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and eliminate the source. Agencies also investigate complaints from residents and business owners about non-stormwater discharges. In fiscal year 1996/97, over 280 suspected or reported illicit connections/illegal discharges were received from the public and responded to by co-permittees. Many of these complaints or call-ins were confirmed and eliminated.

### ❖ Documentation and Reporting

As previously mentioned, most tasks associated with this component are conducted by the individual co-permittees. Co-permittees document and report their illicit discharge control activities in the Annual Report. The Program provides assistance only in areas that would benefit all co-permittees, such as, developing consistent data collection and reporting methods.

Although the Program's initial approach for eliminating non-stormwater discharges has been to educate the public, over 110 enforcement actions were taken by co-permittees in fiscal year 1996/97.

### **PLANNED PROGRAM ACTIVITIES**

Planned Program activities for the next five year period are described below.

### ❖ Develop an Annual Illicit Discharge Control Plan

## **ILLICIT DISCHARGE CONTROL ACTIVITIES**

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In the Illicit Discharge Control Plan (Plan), each agency will describe its planned level of effort for conducting field surveys and investigations for the coming year. The Plan will identify high priority screening areas, provide a schedule for inspecting high priority areas, and describe how the agency will coordinate information if field surveys and follow-up activities are conducted by different agencies. As described in the performance standards, other information to adequately describe additional aspects of the agency's illicit discharge control program will also be included in the Plan, including how each agency will achieve the goals described in the performance standards.

### ❖ Conduct Field Surveys

Each agency will continue to inspect its stormwater conveyance system for illicit connections and non-stormwater discharges. Inspection procedures include field surveys, follow-up activities to identify and eliminate the source of the discharge, and documentation for reporting in the Annual Report. Each agency will endeavor to survey high priority areas within its jurisdiction at least once every year, and survey medium and low priority areas at least once during the five year permit period.

### ❖ Investigate Illicit Discharge Reports/Complaints

Each agency will continue to investigate the source of illicit discharges and/or complaints within its jurisdiction, as appropriate. Each agency will conduct follow-up activities to identify the source of the spill and track these

## **ILLICIT DISCHARGE CONTROL ACTIVITIES**

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activities for prioritizing subsequent field surveys and reporting in the Annual Report.

### ❖ Effectively Eliminate Illicit Discharges/Implement and Update Performance Standards

Activities to identify the source of illicit discharges will be conducted by the appropriate illicit discharge inspector during field surveys, investigations, and/or conducted in response to spill reports/complaints. Once the source is identified, the illicit discharge inspector may require the responsible party use BMPs or other measures to effectively eliminate non-stormwater discharges to storm drains. The illicit discharge inspector may also decide to initiate enforcement actions depending on the impact of the discharge. Activities conducted by illicit discharge inspectors will be coordinated with the commercial and industrial facility inspection program if the discharge is traced to a facility. If the discharge is traced upstream to another jurisdiction, then the illicit discharge inspectors will coordinate activities with other appropriate agencies. Co-permittees will implement the illicit discharge control program performance standards contained in the component.

### ❖ Track and Analyze Illicit Discharge Control Program Findings

## ILLICIT DISCHARGE CONTROL ACTIVITIES

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Each agency will track and analyze its illicit discharge control findings in an effort to identify and effectively eliminate illicit discharge sources. This includes:

- Field surveys of its storm drains;
- Activities conducted in response to spill reports/complaints;
- The types of discharges that were identified;
- Follow-up that was conducted to identify source of the discharge;
- Activities conducted to eliminate the discharge to the storm drains (e.g., BMPs, enforcement); and
- Whether the discharge to the storm drains was eliminated.

Tracking information becomes especially important when more than one agency becomes involved in an investigation. Because illicit discharges are diffuse in nature, the illicit discharge inspector might be required to coordinate with other agencies if the discharge is traced to another jurisdiction.

### ❖ Sharing Illicit Discharge Control Information

Information from illicit discharge control activities will continue to be shared. This will help inspectors find easier or better ways of finding, tracking and eliminating illicit discharges, and to obtain a better understanding of pollutant sources so screening areas are effectively prioritized. Illicit Discharge Control information can also be useful to other Program components, such as Public Education and Industrial Outreach

## **ILLICIT DISCHARGE CONTROL ACTIVITIES**

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(PEIO) for identifying and targeting outreach efforts, or the Inspection Program and New Development and Construction Controls' Program for identifying needs for BMP guidance.

Sharing information will also help to streamline inspection procedures and reduce duplication in efforts and confusion. Effective communication among co-permittees and other agencies is vital to eliminating discharges that involve more than one jurisdiction. When appropriate, the Program will coordinate illicit discharge control activities among departments and agencies.

### ❖ Conduct Training for Illicit Discharge Inspectors

The Program will continue to coordinate training workshops for illicit discharge control inspectors. The Program will enhance its illicit discharge control program by using information gleaned from previous experiences to train inspectors on improved methods for conducting field surveys, investigating spills, applying BMPs and enforcement.

As people are made more aware of the illicit discharge control goals through outreach efforts and facility inspections, agencies can begin to step up their inspection and/or enforcement activities. However, it is important the Program first establish its credibility through consistent outreach, inspection and enforcement countywide. Training workshops will promote consistent practices and procedures and clarify roles and responsibilities of other agencies that respond to spill incidents.

## **ILLICIT DISCHARGE CONTROL ACTIVITIES**

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### ❖ Documentation and Reporting

The Program will assist co-permittees to develop a consistent reporting format for the Annual Illicit Discharge Control Plans. The Program will also assist in the collection of consistent data for reporting in the Annual Report.

**ILLICIT DISCHARGE  
CONTROL ACTIVITIES**

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**PERFORMANCE STANDARDS**





**TABLE 7-1  
ILLICIT DISCHARGE CONTROL ACTIVITIES  
PERFORMANCE STANDARDS  
Page 1 of 6**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>DEVELOP AN ILLICIT DISCHARGE CONTROL INSPECTION PROGRAM</b>					
<p><b>IDCA-1:</b> Each agency will prepare a written Illicit Discharge Control Plan (Plan) demonstrating the agency's commitment to conducting effective investigation, tracking, and elimination of illicit discharges and describes the level of effort for conducting these activities in the following fiscal year. The Plan will demonstrate that the agency has:</p> <ul style="list-style-type: none"> <li>A. Identified, verified and prioritized field screening areas for investigation and/or repeat inspections.</li> <li>B. Developed a schedule for conducting investigations of the high priority areas during the coming year.</li> <li>C. Selected which agency or group will conduct the field activities and estimated the number of labor hours required to implement the program.</li> <li>D. Determined how the illicit discharge investigations will be implemented.</li> <li>E. Established how activities will be documented (e.g., by including sample inspection forms).</li> <li>F. Adopted minimum enforcement procedures.</li> <li>G. Developed procedures for follow-up enforcement or referral to another agency, including appropriate time periods for action.</li> <li>H. Demonstrate proper legal authority.</li> </ul>	●	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and in Effect

**TABLE 7-1  
ILLICIT DISCHARGE CONTROL ACTIVITIES  
PERFORMANCE STANDARDS  
Page 2 of 6**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>IDCA-2:</b> Agencies will provide inspectors with the knowledge and skills necessary to conduct effective field investigations, with guidance from the Program and the Regional Board staff.	✓	✓	✓	✓	✓
<b>IDCA-3:</b> Each agency will develop or obtain accurate maps of the agency's storm drain system including major drain segments, reaches, and outfalls within the agency's jurisdiction.	✓	✓	✓	✓	✓
<b>IDCA-4:</b> Agencies will survey priority areas at least once per year.	●	✓	✓	✓	✓
<b>IDCA-5:</b> The Plan will include an evaluation of the illicit discharge inspection results from the previous year and an assessment of which types of non-stormwater discharges were most prevalent. Adjust plan, as appropriate.	●	✓	✓	✓	✓
<b>IDCA-6:</b> Expand the illicit discharge inspection program to include medium or low priority field screening sites until the entire drainage area of the agency has been inspected once.				●	✓
<b>IDCA-7:</b> Determine the appropriate frequency for repeat inspections of medium and low priority areas based on an investigation of the agency's entire drainage area.				●	✓
<b>IDCA-8:</b> Utilize electronic information where appropriate on significant storm drainage facilities and screening points to track illicit discharges from neighboring jurisdictions which may enter the agency's storm drain system.				●	✓

● Commence BMP Implementation

✓ Implemented and in Effect

**TABLE 7-1**  
**ILLICIT DISCHARGE CONTROL ACTIVITIES**  
**PERFORMANCE STANDARDS**  
 Page 3 of 6

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>CONDUCTING FIELD INVESTIGATIONS</b>					
<p><b>IDCA-9:</b> Each agency will conduct field investigations which include inspecting portions of the agency storm drain system for potential sources of illicit discharges. Inspectors will:</p> <p>A. Survey priority areas, make observations, record observed or suspected dry weather flows.</p> <p>B. When possible, attempt to determine the type of flow and try to trace the flow to its source by following storm drain maps, inspecting manholes, and making surface observations. Record findings.</p> <p>C. If the responsible party is identified, educate the party on the impacts of his or her actions, explain the stormwater requirements, and provide BMPs, as appropriate. Initiate follow-up and/or enforcement procedures, if applicable. Record activities.</p>	✓	✓	✓	✓	✓
<p><b>IDCA-10:</b> Each agency will send at least one representative to Program workshops to obtain additional training and share experiences with other agencies.</p>	✓	✓	✓	✓	✓

**TABLE 7-1  
ILLICIT DISCHARGE CONTROL ACTIVITIES  
PERFORMANCE STANDARDS  
Page 4 of 6**

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>EVALUATE COMPLIANCE OF NON-STORMWATER DISCHARGER (Follow-up Activities)</b>					
<p><b>IDCA-11:</b> If the discharge is traced to a residential source, inspectors will conduct or coordinate the following activities with the appropriate agency:</p> <p>A. Agency will continue inspection and follow-up activities until compliance is achieved. Record activities.</p> <p>B. Agency staff will meet with the responsible party to discuss methods of eliminating the illicit discharge, including disposal options, recycling and possible discharge to the sanitary sewer, as appropriate. Provide Program information to the responsible party.</p> <p>C. The appropriate agency will begin enforcement procedures, if appropriate.</p>	✓	✓	✓	✓	✓
<b>ENFORCEMENT</b>					
<b>IDCA-12:</b> Agencies will provide inspectors with sufficient authority to initiate enforcement procedures.	✓	✓	✓	✓	✓
<b>IDCA-13:</b> Agencies will develop criteria that would initiate enforcement actions. The criteria will be developed by individual agencies in conjunction with the Program to help ensure enforcement actions are conducted consistently throughout the county.	●	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and in Effect

**TABLE 7-1**  
**ILLICIT DISCHARGE CONTROL ACTIVITIES**  
**PERFORMANCE STANDARDS**  
 Page 5 of 6

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<b>INVESTIGATE SPILL REPORTS/COMPLAINTS</b>					
<b>IDCA-14:</b> Inspectors will investigate spill reports and/or complaints within their jurisdiction and record their activities.	✓	✓	✓	✓	✓
<b>IDCA-15:</b> Inspectors will become familiar with the existing spill response and clean-up programs that cover the agency's jurisdiction, and coordinate illicit discharge program activities with these existing programs.	✓	✓	✓	✓	✓
<b>IDCA-16:</b> Through internal communication and public education, agencies will encourage the use of "911" to report large or hazardous spills. If the use of the "911" is not appropriate in a particular agency, establish and publicize an alternative telephone number for reporting spills.	✓	✓	✓	✓	✓
<b>IDCA-17:</b> Each agency will establish a mechanism for obtaining information about spill incidents so that source identification and follow-up actions can be conducted.	✓	✓	✓	✓	✓
<b>IDCA-18:</b> Each agency will identify an appropriate role for its participation in spill response drills, and ensure that adequate spill response supplies are available to fulfill its role.	✓	✓	✓	✓	✓
<b>DOCUMENTATION AND REPORTING</b>					
<b>IDCA-19:</b> Each agency will summarize field investigations, and enforcement and follow-up activities in the Annual Report.	✓	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and in Effect

**TABLE 7-1**  
**ILLICIT DISCHARGE CONTROL ACTIVITIES**  
**PERFORMANCE STANDARDS**  
 Page 6 of 6

DESCRIPTION	99/00	00/01	01/02	02/03	03/04
<p><b>IDCA-20:</b> Each agency will document the number and types of spill incidents reported and responded to within the agency's jurisdiction. (Agencies do not need to document or report automotive fluid spills.) This information will be incorporated in the Annual Report to the Regional Board.</p>	✓	✓	✓	✓	✓
<p><b>IDCA-21:</b> Agencies may implement a pilot program of a computerized data management system for managing and tracking information collected during field investigations and follow-up activities. This information would be linked through a data management system to storm drain and area maps through a GIS or other system to improve coordination and efficiency of future activities.</p>	✓	✓	✓	✓	✓

● Commence BMP Implementation

✓ Implemented and in Effect

## **GOALS**

Monitoring and special studies play a major role in the development and implementation of a successful Stormwater Management Plan (SWMP). Stormwater regulations are relatively new. Therefore, understanding the exact nature of the problems caused by stormwater runoff and effective Best Management Practices (BMPs) to control suspected pollutants is evolving. The role of monitoring and special studies is to identify specific problems or concerns caused by stormwater runoff in order to better identify sources of specific pollutants and optimize BMPs for their control.

The primary goals of this component include the following:

- Identify problems in the San Francisco Bay – San Joaquin Delta and Contra Costa County creeks, lakes, and other receiving waters resulting from altered hydrology, loss of aquatic habitat, and stormwater runoff;
- Identify the sources of pollutants responsible for stormwater runoff related problems;
- Identify the effectiveness of BMPs and try to improve them;
- Integrate results of monitoring and special studies into BMP implementation;

## MONITORING AND SPECIAL STUDIES

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- Identify stormwater environmental indicators applicable for use in assessing stormwater impacts and evaluating management programs; and,
- Coordinate with BASMAA, the California Stormwater Quality Task Force, San Francisco Estuary Institute (SFEI), and others to develop equitable division of monitoring and special studies work.

### MONITORING ACTIVITIES

San Francisco Bay – San Joaquin Delta: The Regional Monitoring Program (RMP) conducted for the Regional Board by SFEI has indicated that concentrations of organochlorine pesticides (total DDT, chlordane, dieldrin) and polychlorinated biphenyls (PCBs) in water exceed water quality objectives designed to protect human health from possible contaminated fish consumption. In response to these data, the Regional Board conducted a study of chemical concentrations in fish tissues to determine if the exceedances of water quality objectives corresponded to a human health risk for the individuals consuming fish from the Bay. Results of the *Fish Tissue Study* indicated levels of PCBs, mercury and dioxin/furans often exceeded U.S. EPA screening values for protection of human health, and identified organochlorine pesticides as being of concern. As a result, the Department of Health Services issued a health advisory for San Francisco Bay recommending limited consumption of certain species of fish and recommending no consumption of sharks and specific species of fish over a certain period of time.



## 8 MONITORING AND SPECIAL STUDIES

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Wet Weather Monitoring: Three years of long-term water quality monitoring has been conducted by the Contra Costa Clean Water Program to fulfill the monitoring requirements of the Program's National Pollution Discharge Elimination System (NPDES) Joint Municipal Permit. Two stream stations, Rheem Creek and Walnut Creek, were selected for monitoring runoff, water quality and toxicity. Additionally, rainfall was monitored at eleven (11) rain gauges within or adjacent to the Rheem and Walnut Creek's watersheds. The purpose of monitoring was to meet the following objectives:

- ❖ Collect rainfall, runoff and water quality data to develop a long term hydrological and water quality record. The data was used to establish baseline conditions and assess the effectiveness of Program implementation through evaluation of long term trends in water quality.
  
- ❖ Evaluate if water quality in urban streams during storm events meet water quality and toxicity objectives.

Routine monitoring was conducted at two stream stations, Rheem and Walnut Creek over several storm events in each of the first three years of the Permit. Special studies focused on toxicity of water collected daily in a stream to *Ceriodaphnia* (water flea), and on comparisons of concentrations in samples obtained by a fixed point sampling method (automatic sampler) and by the equal discharge increment (EDI) method. Additionally, a special study was conducted to compare metal concentrations from open space in the upper Walnut Creek watershed with the metal concentrations at the Walnut Creek monitoring station which contained 46% urban land use.

BASMAA Regional Monitoring Strategy (BRMS): All wet weather activities were suspended in the fourth and fifth years of the Program's Joint Municipal NPDES Permit as requested by the San Francisco Bay and Central Valley Regional Water Quality Control Boards. The reason for the suspension of wet weather monitoring was to develop a Bay Area strategy for coordinating, targeting and implementing a monitoring strategy. One of the primary reasons for suspending the wet weather sampling activities was it was not providing information to help stormwater programs evaluate the effectiveness of their management programs. Therefore, techniques to measure the physical, biological and chemical indicators were needed and advocated by the RWQCBs. BASMAA completed the BRMS and the various programs have been jointly working with the Regional Water Quality Control Boards to begin implementation activities.

### **SPECIAL STUDIES**

Special studies have been undertaken by the Program to measure the effectiveness of Best Management Practices (BMPs). One of the frustrations of stormwater management programs is the inability to effectively advocate or mandate certain best management practices be implemented by public and private entities. These parties constantly challenge the effectiveness of BMPs. Therefore, special studies are undertaken to either prove or disprove the legitimacy of mandated BMPs. Several special studies have been or are continuing to be conducted for the Program. They are as follows:

Alternative Roadside Vegetation – The purpose of this study is to reduce erosion, sedimentation and herbicide use on roadside weed populations by establishing natural, perennial and annual grasses, herbs, shrubs and tree plantings along roadsides and the upslope of eroding areas.

Residential Structural Sedimentation/Filtration Controls – This special study was designed to test a new filtering control structure to radically reduce or eliminate pollutants from entering the municipal storm drain system. A component of this study was to determine the frequency of maintaining or replacing filters. This study is coming to a conclusion and its results will be known shortly.

Stormwater Interceptor – The installation of stormwater interceptors by developers have been promoted by public agencies but their effectiveness has not been adequately studied. The purpose of this study was to determine the performance level of Jensen Stormwater Interceptors. If the units are determined to function at an acceptable level, then an efficiency rating is to be established to guide their future use. This study is ongoing.

Marsh Creek Mercury Assessment – Mercury is leaching out of an abandoned mine in the Mt. Diablo foothills/Marsh Creek Watershed. The project scope was to determine if mercury contamination exists in Marsh Creek. Contra Costa County is continuing to monitor and mitigate the situation.

Orinda Septic Tank Study – The purpose of this study was to address surface water quality problems potentially related to the use of septic tanks in Contra Costa County. This study is ongoing.

Antioch Geographic Information System (GIS) – The purpose of this special study was to determine if it was cost-effective to utilize base map information produced by the Contra Costa County Public Works Department’s Mapping Section in a GIS format. This study has proven very successful and will be utilized in future GIS endeavors.

### **PLANNED ACTIVITIES**

The Program will continue to monitor and coordinate activities with the Regional Monitoring Plan (RMP), BASMAA and other monitoring programs being conducted in the Bay Area. Currently, the RMP conducts routine water, sediment and biological monitoring of San Francisco Bay. Additionally, the RMP also conducts special studies and pilot projects. The Program will coordinate with the RMP to ensure questions relevant to stormwater runoff and its effects on the San Francisco Bay – San Joaquin Delta are addressed.

The Program will also participate in BASMAA’s Monitoring Committee. The BASMAA Monitoring Committee is used to coordinate routine monitoring and special studies among other Bay Area programs and has been involved in the development of standardized monitoring protocols and compilation of special studies.

# 8 MONITORING AND SPECIAL STUDIES

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The goal of this task will be to ensure an equitable distribution of monitoring and special studies among all stormwater agencies in the Bay Area. One way this will be achieved will be by participating in the implementation of BASMAA's Regional Monitoring Strategy. This strategy is intended to optimize monitoring by identifying the best way to achieve stormwater monitoring goals.

## **SPECIAL STUDIES**

The Program will continue to finance special studies through two avenues. The Program is committed to implementing the BASMAA Regional Monitoring Strategy (BRMS). Therefore, the Program will contribute \$125,000 each year to achieve the goals and objectives in the BRMS. Additionally, the Program will appropriate funding for special studies not undertaken by the BRMS but of concern to the Program's co-permittees. The Regional Monitoring Program will continue to be financed by the Program at an appropriate level. The financial commitment by the Program for the aforementioned activities for the 1999/00 fiscal year totals \$405,000. Research needs to be done collectively and individually by stormwater management programs to effectively respond to the issue of mandating effective Best Management Practices (BMPs) by public and private entities to radically reduce or eliminate pollutants from stormwater to the maximum extent practicable.



# 9 WATERSHED MANAGEMENT ACTIVITIES

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## GOALS

The need to identify better ways to solve environmental problems than the traditional “command and control” regulatory approach is evident when dealing with diffuse sources of pollutants and environmental degradation, such as stormwater. These types of problems are difficult to correct given the numerous causes of the problems and the diverse interests that must be reconciled to achieve solutions.

The U.S. Environmental Protection Agency (EPA), the San Francisco Bay and Central Valley Regional Water Quality Control Boards, and others believe the watershed management approach provides a useful tool for solving environmental problems. The watershed management approach is defined by the U.S. EPA as having the following three major components:

1. Problem identification,
2. Stakeholder involvement, and
3. Integrated actions.

This approach is characterized by identifying and solving high priority problems in specific watersheds. In any given watershed, problems will vary and may involve stormwater to a lesser or greater extent. The watershed management approach is based on principles similar to the Coordinated Resources Management and Planning (CRMP) process successfully utilized by the Natural Resources Conservation Service for years.

# 9

## **WATERSHED MANAGEMENT ACTIVITIES**

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This section of the Stormwater Management Plan (SWMP) is new, but the previous SWMP and other sections of this Plan, constitute a watershed management approach.

The three primary goals of this component include the following:

- Develop tools and compile information needed to identify and help solve water quality and beneficial use impairment problems in specific creek drainage basins;
- Identify environmental assessment methods applicable for evaluating stormwater impacts and management programs; and,
- ! Build grass roots stewardship for local creeks, estuaries and lakes by supporting cleanup, aquatic habitat protection, and restoration projects.

### **PLANNED ACTIVITIES**

The following major tasks will be conducted during the next five years. Additionally, other parts of the SWMP contain watershed-related tasks that will be coordinated to achieve the goals of this and other sections of the SWMP.



# 9

## **WATERSHED MANAGEMENT ACTIVITIES**

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### **COORDINATION**

The Program will track watershed management projects conducted by other agencies and parties and participate when appropriate to represent the Program's perspective and interests. This participation will include such things as attending meetings, briefing the Program on pertinent issues, possible financial support, and soliciting direction through its Management Committee and Subcommittees.

One of the highest priorities for coordination is with the Santa Clara Valley Watershed Management Initiative. Program staff will track these activities and report its findings to the Program regarding the status of this project. Results gleaned from this project that are applicable to the Program will be assimilated and implemented.

The Program will also coordinate activities with the Alameda Countywide Clean Water Program pertaining to upper Alameda Creek whose watershed is found in both Contra Costa and Alameda Counties. Another watershed management activity occurring in Contra Costa County is the Alhambra Creek Watershed Coordinated Resources Management Plan (CRMP) process that has been in existence for the past 18 months. Again, results that are applicable to the Program will be assimilated and implemented.

# 9 WATERSHED MANAGEMENT ACTIVITIES

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## **PILOT PROJECT**

The Program will establish the Wildcat Creek Watershed as our initial Watershed Management Project. The San Francisco Estuary Institute (SFEI) has been studying Wildcat Creek from a scientific perspective. Their funding has been underwritten by the Packard Foundation and the Center for EcoLiteracy. SFEI has proposed and the Contra Costa Clean Water Program has accepted a plan during the first year of the Permit to complete its scientific assessment of the Wildcat Creek Watershed (see Appendix “E”). The Program could either initiate a public involvement/stakeholder process for Wildcat Creek and/or participate in some of the existing community organizations presently operating in the area, as appropriate. This could be similar to the Coordinated Resource Management Planned (CRMP) approach.

The Program believes the use of science and public participation will help define a model stormwater management approach in Contra Costa County. The Program believes the experiences learned from Wildcat Creek and other watershed management activities may be transferable to other watersheds within Contra Costa County. Ultimately, the Contra Costa Clean Water Program seeks to manage activities through a watershed management approach.

## **WATERSHED MANAGEMENT ACTIVITIES**

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### **CONTRA COSTA COUNTY CREEK INVENTORY**

The Program will do a special study that will inventory all Contra Costa County creeks and determine their “health”. The idea would be to do an inventory of creeks possibly using volunteer monitors to determine the “health” of creeks and prioritize future activities. The primary objective is to manage stormwater runoff and to ensure community characteristics and desires are considered in each watershed.

### **EVALUATION**

The watershed management approach has essentially been done in a piecemeal manner during the first SWMP. The coordinated, comprehensive approach to managing runoff by combining science and local participation is a major step forward for the Contra Costa Clean Water Program. The Program believes tangible results within Contra Costa County implemented in an incremental manner is the right approach. The Program simply assumes as it moves forward challenges and mistakes may inevitably be made, but as long as the Program endeavors to embrace the watershed management concept, then it will be able to achieve the ultimate goals and objectives.



## **APPENDICES**



**Your comments are welcomed !**



**THE CONTRA COSTA CLEAN WATER PROGRAM  
INVITES YOU TO REVIEW AND PROVIDE WRITTEN  
COMMENTS REGARDING THE NEXT  
JOINT MUNICIPAL NATIONAL POLLUTANT DISCHARGE  
ELIMINATION SYSTEM PERMIT (1998 – 2003)**

The Contra Costa Clean Water Program is composed of twenty public agencies including Contra Costa County, eighteen of its municipalities and the Contra Costa County Flood Control & Water Conservation District. It was created to comply with the Federal Clean Water Act requiring cities and the county to reduce stormwater pollution. The Contra Costa Clean Water Program strives to eliminate stormwater pollution through public education, inspection and enforcement activities, and industrial outreach.

A draft of the Joint Municipal National Pollutant Discharge Elimination System Permit describing actions during the next five years (1998 – 2003) is available for review at the following locations:

- ◆ All Contra Costa County Library Branches
- ◆ All City/Town Halls
- ◆ Contra Costa Clean Water Program  
255 Glacier Drive Martinez CA 94553
- ◆ Internet address: <http://www.co.contra-costa.ca.us/department/pw/npdes.htm>

**DEADLINE – All comments must be written and received by the Contra Costa Clean Water Program by 5:00 p.m., Monday, June 8, 1998. If you have any questions, please call (925) 313-2279.**





# **PUBLIC COMMENTS**

## **STORMWATER MANAGEMENT PLAN**

**(1998-2003)**

**CONTRA COSTA CLEAN WATER PROGRAM**



RECEIVED

JUN 8 1998

Alhambra Creek Watershed Planning Group

CC Clean Water Program

June 5, 1998

Contra Costa Clean Water Program  
 255 Glacier Drive  
 Martinez, CA 94553

RE: Joint Municipal National Pollutant Discharge Elimination System Permit

The Alhambra Creek Watershed Planning Group (ACWPG) has followed the work of the Clean Water Program and has recognized that we have many common interests. At the June 2, 1998 meeting of the ACWPG, we discussed the Draft NPDES Permit proposed for 1998-2003, and are offering comments on Section 9, Watershed Management activities.

As the Clean Water Program moves into the second five-year permit, we believe there should be far more emphasis on watershed management planning. This is a powerful unifying principle that can greatly strengthen our collective efforts to improve water quality. The Clean Water Program, because of its multi-jurisdictional composition, is one of the most appropriate entities to provide leadership and to initiate the support and development of voluntary, locally controlled watershed planning throughout the county.

As the only existing watershed management planning group in the county, the ACWPG is uniquely positioned to work with you to make this happen. We believe the strength and power derived from involving all stakeholders in a consensus-based process is the key to success. This approach succeeds because stakeholders participate in developing the plans and actively work to support the outcome. This is especially true for programs that rely heavily on voluntary compliance and support such as Watershed Management and the Clean Water Program.

We bring our first-hand experience and a body of stakeholders who are well versed in the consensus process as resources to help the countywide program get off to a good start. The consensus process is especially important to the success of the Program because each watershed has a unique set of resources and issues, and can be expected to require a specifically tailored plan. Plans developed for each watershed by its stakeholders can do this. A single mandated plan cannot. Our group would like to meet with the Program manager to identify common interests and determine ways to build additional partnerships.

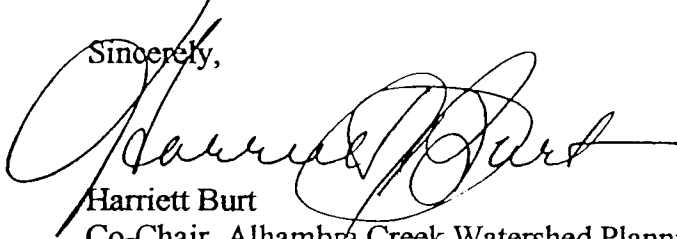
We would like to invite you to explore these possibilities at our meeting in July. The time and location is as follows:

Alhambra Creek Watershed Planning Group  
7:00 PM  
July 7, 1998  
City of Martinez – Hilson's Building  
610 Main Street  
Martinez, CA 94553

Please respond by calling the ACWPG Coordinator, Ms. Nancy Stein, at (925) 672-6522.

We look forward to meeting with you.

Sincerely,

A handwritten signature in cursive script, appearing to read "Harriett Burt". The signature is written in black ink and is positioned above the printed name and title.

Harriett Burt  
Co-Chair, Alhambra Creek Watershed Planning Group

## SO CALLED ALTERNATIVES

The San Joaquin River is one of the Nations 10 most endangered. Its one of the most abused Rivers in America do in part to Friant Dam and the SAN Joaquin valley farmers.

The decision to dewater the river was made about 60 ago years ago with the building of Friant Dam. Now the down steam people have had to pay for the rivers Contamination in are DRINKING WATER.

Now we in Northern California have a bigger problem. They call it CALFED. They have come up with Three Alternatives . All to drain are Rivers and cover are last good Delta farm land with surface storage water. Not for us. But to be pumped down to the Southern California Desert. Remember we are talking about the Sacramento , American and the Mokelumne Rivers . Some Deal. They already have the Joaquin River.

Hope all who read this letter will call your Representatives to VOICE your DISPLEASURE on how they will spend 3 to 11 BILLION DOLLARS of our money.

Thank You  
Joe Horn Member  
C.S.B.A.  
C.for S. D. Water

Once more in to the breach when it comes to water. Who can we trust.

In the hope of saving the Delta we are asked not only for the money to do it . But the last of the free flowing WATER shipped out. How many more area feet do they want of upper river water. Can you thrust people who are in the water sales business to save the Delta I think not .

Are these the same people trying to get two cycle outboards off the water because of M.T.B.E. in water. Take the M.T.B.E. out of the gas and it's out of the water. In the past we have had very small problems with two cycle engines and water.

I remember when CALFED had some of it's first meeting and said we are going to retire 800,000 acre of marginal land down south. Now they are taking about 200'000 Acre in the north . Is this flooded land to store water to be pumped down to the same land you where to retire three year's ago. Who can we thrust.

Joe Horn

California Striped Bass

Citizens for S. D. Water

Ps The CENTRAL VALLEY IMPROVEMENT ACT CVPIA was passed by Congress in Oct. 1992 too put fish and wildlife resources on par with agriculture in the state of California. Now the 800,000 acre feet of water dedicated to environmental is in jeopardy by a lawsuit from the same people who tryed pump there agricultural chemical salt born selenium in the river at Pittsburg. Thank you .

RECEIVED  
JUN 8 1998 3:45**Marcus O'Connell**3206 Esperanza Drive • Concord, CA 94519 • (510) 689-7881 • [marcus@value.net](mailto:marcus@value.net)

June 9, 1998

Mr. Donald Freitas  
Contra Costa Clean Water Program  
255 Glacier Drive  
Martinez, CA 94553

**Subject:** Review comments on the draft of the Stormwater Management Plan, 1998-2003

Dear Mr. Freitas:

Thank you for the opportunity to comment on the Joint Municipal National Pollutant Discharge Elimination System Permit (1998-2003). I am pleased with the overall document and offer my comments as a supporter of the objectives of the Clean Water Program. The comments are categorized by chapter headings with the exception of the General Comments.

General Comments

- In 2003, when the next permit is drafted, the review period should be thirty days. This year, I received notice on Saturday, May 30. On Monday, June 1, I requested a copy of the draft and was provided one on June 3, when I picked it up in person at the Contra Costa County Public Works Department. This left only five days for my review. I know of several people who were unable to procure and comment on the document because of the short notice.
- In 2003, the copies of the draft should be readily available at no charge. Given its size, the draft is not amenable to adequate review at libraries, city halls, or at the counter of the Public Works Department. And while posting it on the Internet is to be commended, only a small proportion of the public is currently hooked up. Therefore, a person desiring to review it should have a personal copy. My copy cost \$19.43, a price that may act as a barrier to many potential reviewers. If an individual is willing to invest the time required to review the document, it seems reasonable that the Clean Water Program should reciprocate by providing the document for free. Given the few people who submit review comments, the costs of doing so would be small in comparison to the benefits received.

- The draft contains a host of performance standards, reporting forms, and best management practices. However, the reader is given no sense of the Program's priorities. The draft Program's priorities should be clearly outlined.
- The draft would benefit from a detailed accounting of how Program funds are to be allocated between major activity headings (New Development and Construction Controls, Public Education and Industrial Outreach, etc.).
- The Stormwater Management Plan should provide guidance as to how stormwater funds are to be allocated by member agencies and exercise oversight on their spending. A review of the City of Concord's budgets for the last three years shows that roughly 60% of its stormwater funds are dedicated to administration. On the face of it, this does not seem appropriate.

#### Program Management Section

- Figure 2-1 is missing.

#### New Development and Construction Controls

- The cost of meeting requirements under this section should be borne by developer fees, not through parcel fees. That is, this part of the Clean Water Program should be self-funded by the users. The final document should describe this activity's source of funds.

#### Public Education and Industrial Outreach

- These activities should include public notice of Stormwater Program's meetings, including the Management Committee, etc. A subscription list should be maintained for persons requesting meeting agendas. Although not required by law, the benefits of public involvement warrant informing the public of all opportunities to learn more about the program's objectives, management, and progress.
- The Stormwater Program should consider maintaining a library of documents that can be easily accessed by the public on a walk-in basis. For instance, the many documents referenced in the Stormwater Management Plan, as well as an archive of the completed reporting forms, should be readily available for review and copying by agency members and the interested public.

#### Municipal Maintenance

- The Stormwater Plan should contain guidance concerning the allocation of funds to street sweeping. Motor vehicle pollution is supposed to be mitigated through taxes



collected on gasoline and vehicle sales. It is inappropriate to use only flood control/storm water fees for mitigating water pollution resulting from vehicles. Also, cities had street sweeping programs long before the Clean Water Program was instituted. The incremental increase in street sweeping required by the Program may appropriately be offset by taxes collected for clean water but not the entire cost of a city's street sweeping. The Clean Water Program should provide guidance in this matter.

### Inspection

- The Inspection activities should include water quality testing and the collection of other empirical benchmarking data.
- The draft states that in 1995/97, 280 suspected or reported illicit connections/illegal discharges were received for the public and responded to by co-permittees. In that same period, 250 illicit connection and/or illegal discharges to the municipal storm drain system were identified and effectively eliminated and 110 enforcement actions were taken. Although insufficient information is presented upon which to base a judgment, these numbers seem low for a county of the size of Contra Costa. In addition, the industrial infrastructure of Contra Costa is such that one would expect that many more enforcement actions would be necessary to ensure clean water.

### Monitoring

- This section should include a checklist of activities and reporting forms.
- There should be multiple monitoring stations on every major drainage in the County. Currently there are only two monitoring stations and eleven rain gauges. Daily monitoring at each station should include water quality testing and stream gauging. Rain gauges should be installed at strategic locations throughout each drainage. This system should be administered on a county wide level to take advantage of economies of scale and to ensure methodological consistency.
- It is imperative that a baseline set of data be established in order to determine the progress of the Clean Water Program and to guide it in the most productive directions. That this was not done in the first five years of the Program is surprising. The importance of doing so cannot be overemphasized.

### Watershed Management

- This section should include a checklist of activities and reporting forms.
- Volunteer efforts should be encouraged but not depended on to implement this program.



1192 Ridge Park Drive  
 Concord, CA 94518  
 June 7, 1998

The Contra Costa Clean Water Program  
Stormwater Management Plan 1998-2003

Mr. Donald Freitas  
 The Contra Costa Clean Water Program  
 55 Glacier Drive  
 Martinez, CA 94553

RECEIVED

JUN 8 1998

Dear Mr. Freitas,

I believe that the draft of the next five year plan for the Joint Municipal NPDES Permit has various deficiencies as follows:

Priorities:

The draft has long checklists of things to do to reduce pollution from non-point sources. Literally hundreds of items are on the lists. However, there is no priority attached to the items listed. Are they all equally important? My experience suggests that the eyes of the employees of our Municipalities will glaze over when faced with such a list of work items. And then, not knowing what is really important some of these employees may ignore many or most of the items that "pencil in" that they have accomplished everything.

Data and Progress:

After five years and \$40,000,000 cost, what progress has been made in reducing non-point source contamination to the bay? What chemicals or other contaminants are important to be removed from our urban storm sewers? How big is the problem? No data are presented and no data are required to be collected in the next five year, \$40,000,000, plan. What kind of a program is it that does not require accountability and progress reports based on data?

Distribution of funds to various Municipalities:

The draft plan states that over \$8,000,000 per year will be collected each year through parcel taxes and that most of that will be distributed to the Municipalities involved in the program. However, there is no breakdown of the distribution. In Exhibit B there is a distribution of some dollars based on census numbers but the total distributed is only about \$1,525,000. Where does the remainder of the money go? How much does the City of Concord receive, for instance?

What else needs to be done?

The draft states that only operations and maintenance items will be funded by this program. However, capital expenditures may be equally important or more important to reduce pollution of the Bay (eg. detention basins on urban creeks that serve as storm sewers). Shouldn't these other items be mentioned for consideration in Municipal budgets?

Thank you for the opportunity to comment on this draft proposal

Sincerely  
  
 Paul R. Larson



COMMENTS PREPARED BY  
 EDWARD PANCOAST, URBAN CREEKS COUNCIL REPRESENTATIVE :

FOR  
 CONTRA COSTA CLEAN WATER PROGRAM  
 1998-2003 STORMWATER MANAGEMENT PLAN

**R E C E I V E D**

JUN 8 1998

CC Clean Water Program

**SECTION 1: INTRODUCTION**

No specific comments.

**SECTION 2: PROGRAM MANAGEMENT**

**g.2.2** In general, binding all permittees in one contract will lead to a greater level of cooperation and sharing of information improving the effectiveness of various program activities implemented at the local level by individual permittees as well as the greater effectiveness of joint activities. This is particularly important to implementing standards that are consistent from one jurisdiction to another that will produce time and cost savings to both public and private sector professionals and their clients and will facilitate agency and public review.

**g.2.5** While clear and concise forms for regulatory compliance are necessary to avoid permittee confusion, essential information must not be omitted for the sake of "streamlining".

The challenge of continuous improvement in implementation suggests a greater openness to and involvement in more program activities by the general public and particularly local community groups dedicated to water quality and water related issues.

**g.2.9** The distinction is unclear. The distinctions are between 1) where the "details" of program activity are developed (such as BMP's developed thru BASMAA), 2) where those BMP's are implemented at the local level and 3) where they are enforced at the project specific level. The cumulative benefits can be measured or estimated at all levels. Flexibility is of high value when multiple alternative onsite BMPs and alternative site development plans are available to achieve objectives. Flexibility is of low value when it results in making offsite mitigations, paying into mitigation funds and privileged exceptions to achieving objectives that undermine the successful implementation and enforcement of beneficial practices at all levels..

Though it is beyond the responsibility of the program, regional level offsite mitigations for site specific impacts should be determined by jurisdiction's specific land use zoning policies (such as limiting additional regional offsite mitigations to growth of existing central business districts and transportation hubs) where greater benefits are realized from intense urban development, the loss of the natural resource function has already occurred and there are minimal opportunities to fully restore it. (This is not to say natural stream and floodplain restorations in CBDs do not have other social benefits).

**SECTION 3: NEW DEVELOPMENT AND CONSTRUCTION CONTROLS**

**g.3.2** The 'depth' of application of this program activity remains unclear. There remain holes in the regulatory system. A significant percentage of impervious surface is generated outside of the permit system by individual property owners. The cumulative impacts of these

activities is significant, particularly in existing urbanized areas where the problems of stormwater runoff from impervious surfaces are already greatest. A special study should look at ways to better inform real estate agencies, prospective buyers and new property owners about existing and future drainage requirements of a property. This can be done thru deed descriptions, tile reports, property inspection reports and code requirements to permanently display inside garages the drainage maintenance requirements of the property and any limitations on impervious site coverage.

pg.3.2 The concept of 'performance standards' applies to the design professional, the contractor, the property owner and the enforcement agencies as well as to the objective accomplishments of the project design and construction process itself. It is important to develop significant motivations for complying with regulations before construction ever begins. The availability of 'permit streamlining procedures' that depend on the past experience of an applicants full compliance with all regulatory controls is a very time and cost effective strategy that also produces the desired program results.

pg.3.3 The educational outreach to developers and contractors needs to be expanded to workshops with site visits and field demonstration of sediment and erosion control practices and should target inclusion of grading and landscape design/contractors. A future workshop for municipal planners should be focused on the design of the comprehensive stormwater management ordinance developed from proven effectiveness of a diverse range of performance standards and design guidelines. It should be expanded to include input from more private sector environmental designers, architects, landscape architects, planners and other specialists.

pg.3.4 All brochures, BASMAA booklets, guidelines and ordinance standards should be designed on standard letter sheet size so they can be included in the Planning Tools Binder and should be available on computer disks or CD ROM.(Odd size product literature usually gets thrown out). An objective should be to build up an organized standard binder of information with a complementary computer file from which specifications, details and instructions can be printed to anyones staff, employees and fieldworkers. Someday perhaps planning departments will simply provide general plan, zoning and public works specification, build-to design guidelines and detail standard sheets as part of all preapplication meetings on all projects. It certainly would take the guesswork out of much of the process. The initial BASMAA document was very good, but as I talked to various planning staff and design professionals around the Bay Area during the last four to five months, almost none had seen or heard of it.

pg.3.4 I do not know if the Model Grading Ordinance also addresses fundamental issues of grading design itself. Grading design or site planning and civil engineering addressing site drainage is very effective in addressing long term site contribution to stormwater runoff, sedimentation and erosion. The limited time frame of construction controls may generate less cumulative impacts than either site overdevelopment, excessive impervious surfaces or poor site grading and drainage design. Presumably these type of issues will continue to be addressed and integrated by the program as part of the more comprehensive watershed based science and management approach.

g.3.7 Despite the adoption of new stormwater and erosion control ordinances, BMPs and development plan review and inspections there will likely be ongoing enforcement problems only due to the very existence of new regulations that previous applicants did not have to comply with. Projects already in the permit loop or permitted should be conditioned to be reevaluated for compliance once a new ordinance is adopted.

g.3.9 Outreach can be more effective if written ordinances and standards are given pictorial and graphic based form. This visual technique is more easily and quickly absorbed and understood by the public and facilitates planning staffs working with applicants. People cannot be expected to follow regulations they are not adequately informed about in advance nor can they be expected to feel good about regulations they do not understand the purpose of, how it accomplishes the goal or objective and indeed why it is desirable and beneficial to them, their neighbors and the entire community. Both intentional and unintentional violations can be reduced through clearer review and permitting communications. Ordinance graphics should include minimum standards, 'build to lines' and 'no impact zones'. A single comprehensive ordinance will facilitate implementation and simplify any related adjustments by other public and private interests.

SECTION 4: PUBLIC EDUCATION AND INDUSTRIAL OUTREACH  
Did not review.

SECTION 5: MUNICIPAL MAINTENANCE  
Did not review.

SECTION 6: INSPECTION  
Did not review.

SECTION 7: ILLICIT DISCHARGE CONTROL  
Did not review.

SECTION 8: MONITORING AND SPECIAL STUDIES  
Did not review.

SECTION 9: WATERSHED MANAGEMENT ACTIVITIES

pg.9.2 To be more precise, there has been very little direct 'stakeholder' involvement to date in the Clean Water Program at any level. The term 'stakeholder' has been very narrowly defined to the overall detriment of the program and public awareness and there has been specific effort to resist more comprehensive and effective public participation. In addition, though this is not unique to this program, there have been significant areas of impacts to water quality that have been avoided altogether such as agricultural runoff. The result over the first five years of the program has been significant additional losses of valuable water quality resources and their beneficial uses to the community due to floodplain losses, stream losses, riparian habitat losses, inadequate stormwater runoff mitigations, poor site development approvals due to outdated

standards and guidelines, variances to permit development on parcels otherwise undevelopable, general plan amendments allowing development on valuable agricultural lands and a generally low level of public stewardship compared to other programs in the Bay Area, the state and nationwide. Many of the activities being considered for the next five years were developed and implemented in other parts of the U.S. prior to the passing of the Clean Water Act. In other words, the program has never addressed water quality issues from either a watershed management approach or from an ecosystem protection approach.

#### PILOT PROJECT/APPENDIX "B"

pg.9.4 While the SFEI effort will begin to quantify runoff coefficients, sediment storage, aggradation and degradation for a variety of differing types of existing subbasin landforms and land uses empirically based on field observations, their direct applicability to modifying specific existing site planning, grading and drainage design practices to achieve improved performance on a broad scale may be problematic as numerous other human values come into play. SFEI should be directly involved in designing as well as evaluating a series of detailed comparative special studies focused on alternative project site grading and drainage measures. These could be done within the Wildcat Creek Watershed.

The various recommendations and design guidelines being developed by BASMAA make certain assumptions and have individually limited application depending on typical individual site conditions and type of project. Each of these is essentially a simulation model that could become a design model with a measurable response. It would seem appropriate to coordinate these efforts to find accurate answers to a range of specific, local, individual site design approaches. Though it is beyond the program responsibility, hopefully some of these findings could lead to broader changes favoring more appropriate uses for specific resource lands.

An SFEI approach that assesses comparative contributions from natural lands and various human causes is essential but can be misleading. There are intrinsic values embodied in preserving natural ecosystem functions that embrace their own unique complex adaptive system, as efficient or inefficient as it may appear empirically. Scientific data and analysis still require an intuitive response to effectively evaluate long term benefits.

#### CREEK INVENTORY

pg.9.5 This effort was originally mandated by the Board of Supervisors many years ago and a preliminary study including a manual for doing stream assessments was done at that time by the Urban Creeks Council. Generalized stream and tributary storm drainage inventories have been developed from El Cerrito to Fremont in Alameda County by the Curator of Aquatic Biology at the Oakland Museum that provide the public and local stream interest groups with base information about the relative condition of their streams. While these efforts do not approach the scientific level of the work SFEI is now doing, it should be noted that they have resulted in a broad level of public awareness and stewardship, numerous successful preservation and restoration projects with national recognition and have facilitated considerable public and private financial support to and interest in SFEI.

Respectfully submitted,



**Sharon Leavens**

---

..... Nancy Stein [ccrcd@pacbell.net]  
 Sent: Monday, June 08, 1998 4:17 PM  
 To: cccwp@pw.co.contra-costa.ca.us  
 Subject: draft NPDES written comments

June 5, 1998

RE: Joint Municipal National Pollutant Discharge Elimination System Permit (1998-2003)

As an Executive Council member of the Soil and Water Conservation Society (SWCS) and a resident of Contra Costa County, I feel compelled to comment on the DRAFT NPDES Permit describing actions during the next five years.

The SWCS is concerned about proper stewardship of urban and other resources. Stormwater management programs must be developed on a watershed basis and need to consider watershed and receiving stream conditions as well as, goals and targets for the overall watershed.

Healthy watersheds provide a variety of values to communities and without intervention, watersheds will continue to deteriorate, will be perceived as community liabilities, and will be unable to support basic ecological and societal functions. Increased sedimentation in runoff from urbanization may degrade or destroy aquatic habitat. Many contaminants enter waterways attached to sediment. Sedimentation decreases the navigability of our Bay waters and adds to higher dredging costs.

An effective stormwater management approach requires a clear understanding of the watershed and use of that understanding to set specific targets, criteria, and policies that meet specific stormwater conveyance and environmental needs of the watershed and the community. SWCS advocates that stormwater management should be conducted at the watershed level since all residents of a watershed, both rural and urban, contribute to watershed health and can control its future.

Local watershed organizations are in the best position to balance ecological, economic and social concerns. SWCS encourages local jurisdictions, conservation districts, environmental groups to form local watershed management groups. SWCS recognizes that professional and public education is essential to build support for watershed activities including stormwater management and erosion and sediment control.

We need to educate our elected officials, planning department staffs, building and excavation contractors and the general public about the relationship of stormwater management and erosion and sediment control programs to healthy watersheds. Watershed plans must consider three key factors: environment, social conditions, and economic conditions. The development of stormwater management policies must reflect local economic conditions to ensure that the approach is affordable, effective and can be implemented.

On behalf of SWCS, I encourage you to implement stormwater management and erosion and sediment control programs to protect water resources and other natural resources before, during, and after construction, and to



Arnon Leavens

From: Igor Olegovich Skaredoff [skaredoff@california.com]  
 Date: Sunday, May 31, 1998 3:35 PM  
 To: cccwp@pw.co.contra-costa.ca.us  
 Subject: Draft of Pollutions Elimination System Permit (1998-2003)

Gentlemen, I have examined the draft Plan online and find much to support, especially the emphasis on Watershed-Wide planning. I am an active member of the Alhambra Creek Watershed Planning CRMP mentioned in your plan and look forward to working cooperatively with you to clean our streams. I have also stenciled several hundred storm drains.

I do find a significant gap, however, in the scope of the draft plan: pollution from sedimentation is not addressed. I can speak from personal, first-hand experience as an emergency responder during flood events that silt carried in runoff is THE major pollutant in storm waters. The silt comes primarily from caving in of streambanks, from erosion and gulying in the upper watershed and from runoff at construction sites.

This process causes loss of property to landowners along the creek, creates major cleanup challenges for flooded areas, and damages grazing range, parkland, and roads. Some of the silt fills the creek bed, obstructing the channel, making the flooding worse and clogging the salmon and steelhead spawning gravels.

For the plan, to be effective, must address pollution by sediment.

In addition to the CRMP, I am also a member of The Friends of Alhambra Creek, an established organization devoted to improving and protecting this waterway, also, the Environmental Alliance and we provide support to the Martinez Flooding Task Force. All of these organizations are working in ways complemented by your plan. We can all help each other achieve our common goals.

Please feel free to contact us for additional input and any help we are able to provide.

I can be reached by phone at (925) 229-1371.

Working together, we can accomplish many good things.





**CONTRA COSTA  
WATER DISTRICT**

1331 Concord Avenue  
P.O. Box H20  
Concord, CA 94524  
(510) 688-8000 FAX (510) 688-8122

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CC Water District

June 5, 1998

Directors  
John L. Campbell  
President

Thomas Pretti  
President

Joseph R. Anello  
Boatman  
Richard O. Elcenko, D.C.

Robert J. Bishop  
General Manager

Department of Public Works  
Contra Costa County  
255 Glacier Drive  
Martinez, CA 94553-4897

**Subject: Comments on Draft Stormwater Management Plan**

The Contra Costa Water District (District) supports the activities of the Contra Costa Clean Water Program. As you know, the Contra Costa Canal can be subject to contamination from non-point sources. The canal is undoubtedly the most sensitive receiving water of the county as it conveys the drinking water for 400,000 people.

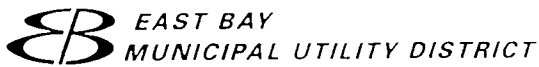
The activities of the Contra Costa Clean Water Program assist the District in protecting the water quality in the canal and, as such, deserve the District's support. The District suggests that areas identified as draining to the canal be included in the "high priority screening areas" of the "Illicit Discharge Control Activities" (page 7-4). The District would also like to offer its cooperation on "Monitoring and Special Studies" and "Watershed Management Activities" as appropriate.

If you have any questions or require further information, please do not hesitate to call Rolf Ohlemutz of our Planning Department at 688-8310.

Sincerely,

Greg Gartrell  
Planning Department





June 11, 1998

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JUN 15 1998

CONTRA COSTA COUNTY

Mr. Don Freitas  
 Contra Costa Clean Water Program  
 255 Glacier Drive  
 Martinez, CA 94553-4879

Subject: Comments on Contra Costa Clean Water Program's (CCCWP) NPDES Permit and Draft Stormwater Management Plan

Dear Mr. Freitas:

The East Bay Municipal Utility District (District) appreciates the opportunity to comment on the CCCWP's NPDES permit and Draft Stormwater Management Plan (Plan). The District is responsible for providing drinking water to 1.3 million customers in Contra Costa and Alameda Counties and the District's operations include two water supply reservoirs in Contra Costa County. The following comments are intended to improve the effectiveness of the permit and Plan thereby increasing the protections afforded to surface waters and drinking water.

Comments on NPDES permit

Non-stormwater discharges that are exempt from discharge prohibitions are currently listed on page 5 of the CCCWP NPDES permit number CA0029912 (Order No. 93-105). The following recommended changes would make the CCCWP NPDES permit consistent with language included in the Alameda Countywide Clean Water Program NPDES permit (No. CAS0029831, Order No. 97-030) and better reflect the range of low, or no, impact discharges to stormwater collection systems.

Municipalities and fire departments in Contra Costa regularly flush fire hydrants to ensure their ability to operate during emergencies. Water from these flushing exercises enters the stormwater collection system. It is recommended that the existing exempt discharge identified as item A.1.a. on page 5, be revised to read "water line *and hydrant* flushing."

Public works departments within the county frequently make planned and unplanned discharges of potable water during maintenance and repair of infrastructure. Planned discharges are typically sediment free. Unplanned discharges may occur when public works staff, contractors, or others damage water lines. During such events, sediments may be entrained into the stormwater collection system. Best Management Practices identified in the Plan can be used to control but not eliminate receiving water impacts. For this reason it is recommended that item A.1.a., on page 5, be revised to read "*planned and unplanned* discharges of potable water sources."



Comments on Draft Stormwater Management Plan

In general, the Contra Costa Clean Water Program (Program, including participating municipalities) should fund ongoing inspection of new construction, especially during periods of high rainfall, and include a list of Best Management Practice (BMP) resources in the Plan. Specific comments are as follows:

- New Development and Construction Controls BMP 14 (NDCC-14) should provide more detail to specify when inspections will be conducted (ex: prior to the onset of the rains and at least once during and after the first storm that generates off-site flow).
- NDCC-16, item B. should be modified to read, “Whenever possible, visually observe the quality of the stormwater runoff *during* and after a major storm event.” Monitoring solely after a storm event does not indicate the magnitude of sediment transport problems or allow those problems to be corrected.
- Public Education and Industrial Outreach BMP 20 (PEIO-20) should specify who will review the survey design and interpret the results.
- PEIO-24 should be modified to read, “Each agency will encourage public transportation by public employees *where available and feasible.*”
- Municipal BMP 27 (MUNI-27) should be modified to read, “Each agency will report the amount of material removed, *the location and manner of disposal of removed material*, when cleaning storm drainage facilities.” It is in the municipalities’ best interest to confirm the appropriateness of disposal locations to ensure no adverse environmental impacts.
- MUNI-30, item D. should be modified to read, “Disposal practices, *disposal location* and follow-up actions.”
- MUNI-32 and 33 should be modified to include adjacent landowner notification as part of spill response.
- MUNI-53 should include a new item C. which reads, “Personnel and agencies who were contacted and those who actually post signs and enforce anti-littering laws.”
- MUNI-58 should be modified to read “Each agency should avoid conducting graffiti abatement activities during, or *just prior*, to a rain storm.”
- MUNI-72 should include a new sentence. “*Use of asphalt “cut-back” will be avoided in drinking water watersheds due to the potential for hydrocarbon run-off.*”
- MUNI-123 should specify a frequency (weekly, monthly, etc.) for monitoring.



June 11, 1998


Page 3

- MUNI-137 should specify that, *"Each agency will prohibit pesticide application during rain or when rain could wash pesticide from vegetation."*
- MUNI-140 should be modified to read, *"Each agency will notify the public prior to spraying, by posting notices at reasonable intervals along area to be sprayed. Notices should specify date, time, and material to be sprayed."*

The District participated in a CCCWP funded project to demonstrate roadside maintenance practices to minimize herbicide use. As such herbicides have been detected in runoff entering our reservoirs from County sprayed watersheds, this is a matter of great concern to the District. The District requests that the County implement alternative practices to reduce roadside spraying.

All of the above comments have been recommended with the intention of improving the effectiveness of the permit and Plan while recognizing the realities of day-to-day field, maintenance, and construction activities. The District very much appreciates all the efforts of the CCCWP to protect receiving waters, including drinking water reservoirs, from potential adverse stormwater impacts. Please contact me at (510) 287-1663 if you or your staff wish to further discuss these comments.

Sincerely,



ALEXANDER R. COATE  
Manager of Regulatory Compliance

ARC:ms

cc: T. Mumley, RWQCB



# California Regional Water Quality Control Board

## San Francisco Bay Region



Gray Davis  
Governor

Internet Address: <http://www.swrcb.ca.gov>

1515 Clay Street, Suite 1400, Oakland, California 94612

Phone: (510) 622-2300 • FAX (510) 622-2460

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FEB 10 1999

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Date: FEB 05 1999  
File No.: 1538.01(MYM)

Mr. Donald P. Freitas  
Program Manager  
Contra Costa Clean Water Program  
255 Glacier Drive  
Martinez, CA 94553-4897

**SUBJECT:** Comments on the Contra Costa Clean Water Program's Application for Reissuance of its Joint Municipal NPDES Stormwater Permit No. CA00229912, Order No. 93-105

Dear Mr. Freitas:

We have reviewed the Contra Costa Clean Water Program's (hereinafter, Program) submittal for its joint municipal NPDES stormwater permit application. This application was reviewed concurrently with the 1997/98 annual report.

The annual report review included a driveby inspection of the various municipal jurisdictions. Street sweeping efforts and storm drain stenciling efforts were assessed. While it appears that agencies are sweeping regularly as reported, it appears that existing storm drain stencils are not being adequately maintained.

However, the annual report submittals and the results of the visual inspections indicate that the Program has made substantial progress towards implementing best management practices (BMPs) that were proposed as part of the stormwater Plan during the past 5-year permit.

The annual report format is excellent and should not be changed. In addition the various agency summaries should continue to be part of the annual report submittal.

The major difference between the old and new plans is the addition of performance standards in the new permit. We have noted that all BMPs have been listed as performance standards in the new Plan. These performance standards detail what each Co-Permittee is required to do to implement their stormwater management plan.

*California Environmental Protection Agency*

Mr. Freitas  
Page 2

Therefore, implementation of these performance standards will be a permit requirement and we expect the performance standards to be implemented.

Comments pertain mostly to performance standards within the various Plan components and are consistent with performance standards proposed by other stormwater Programs.

The following comments (Attachment) offer the Program additional directions towards incorporating performance standards into the Plan. In many instances, some language changes and additions have been made that we request be incorporated into the Plan for clarity and consistency with Plans from other Programs. In addition, comments on the Plan were made taking into consideration the fact that the Plan will include annual updates for the next five years.

We realize that the Program will need time to respond to our comments. However, once an agreement has been reached regarding the implementation time schedules and language for the performance standards, we expect that a Tentative Order for the NPDES permit can be considered by the Regional Board within about sixty days or less.

We appreciate the Program's efforts and hope that lessons learned in the past five years coupled with an increased level of pro-activeness will act as a catalyst for the next five years. Please contact Martin Musonge of my staff at (510) 622-2396 if you have any questions or concerns.

Sincerely,

Loretta K. Barsamian  
EXECUTIVE OFFICER



Teng-Chung Wu, Chief  
South Bay Watershed Division

cc: Jean McCue, Region 5

*San Francisco Bay Regional Water Quality Control Board*

**ATTACHMENT:**

**Staff Comments on the application  
for Reissuance of the Municipal NPDES Stormwater Permit  
for the Contra Costa Clean Water Program**

January 1999

Contents:

New Development and Construction Controls, p.1  
Public Education and Industrial Outreach , p.3  
Municipal Maintenance, p.4  
Inspection Activities, p.6  
Illicit Discharge Control Activities, p.6  
Monitoring and Special Studies, p.7  
Watershed Management Activities, p.7

*Comments on the Application for Resisuanace of the Municipal NPDES Permit for  
Contra Costa Clean Water Program*

**NEW DEVELOPMENT AND CONSTRUCTION CONTROLS**

**A. Measures and Policies to control the quality of stormwater runoff**

- NDCC-1: First sentence should read: *Each agency will have adequate legal authority and will provide ongoing review of existing legal .....*
- NDCC-2 A second sentence should be added: *City Council Ordinances should be considered prior to General Plan amendments. This Performance Standard (PS) should be implemented in fiscal year 1998/99.*

**B. Development Plan Review and Permitting**

- NDCC-4 Delete *address* replace with *require*.
- NDCC-5 Second sentence should read: *Appropriate BMPs shall be implemented by developers at all project sites during construction.*
- NDCC-6 This PS should read: *Each agency will incorporate the New Development and Construction Controls Committee's conditions of approval into its standards for development to the maximum extent practicable.*
- NDCC-9 This PS should read: *Each agency will require private and public development projects to include permanent stormwater quality controls, ....*

**C. Erosion and Sediment Control**

- NDCC-10 Consider Implementing NDCC-10 in fiscal year 1998/99

**D. Construction Site Field Inspections**

- NDCC-12 Please add a third sentence that should read: *All agencies will submit documentation by September 30 of each year that all sites for which grading permits were issued have been inspected for compliance with erosion control best management practices.*

NDCC-17 This PS should read: For construction sites requiring erosion control plans, each agency will *oversee* or inspect all construction sites within 7 days following each significant storm event ..... control measures, *and if necessary, require additional erosion protection measures be implemented.*

NDCC-23 Consider deleting *one* and replace with *two*.

NDCC-24 Add this at the beginning of the sentence: *In addition to the agency representative assigned to the CCCWP*, each agency will designate .....

**Foot Notes** All Performance Standards will be implemented in the fiscal year 1998/99 therefore, the footnote bullet – “commence BMP implementation” should follow all performance standards to reflect implementation in 1998/99. In addition, consider replacing “ongoing BMP implementation” with “*implemented and in effect*”. Ongoing BMP implementation does not specify an implementation time schedule.

**General Comment:** The Regional Board issued New Development and Construction Controls *Staff Recommendations* in 1994 and a two year time period was set for local programs to implement them. These staff recommendations were to be implemented consistent with the level of water quality protection described in the staff recommendations. However, it is not very clear that all municipalities in the Program are implementing programs consistent with these staff recommendations, therefore, we request addition of the following performance standards:

- \* All agencies will implement local programs based on the Regional Board staff recommendations. Such programs are intended to achieve a similar or higher standard for protection of water quality including habitat protection in sensitive areas.
- \* All agencies will continue to improve performance standards within the permit period in response to the upcoming revision of the Regional Board Staff Recommendations and other relevant technical information.

**Attachment A:** Under resource documents add: *Erosion and Sediment Control Field Manual by the California Regional Water Quality Control Board, San Francisco Bay Region.*

**Attachment B:** Please consider including the following definitions:

**Riparian corridor** - The contiguous area of vegetation adjacent to perennial and intermittent streams, lakes, and other water bodies, as determined by the association of plant species typically found in riparian areas. For streams, the riparian corridor includes any defined stream channels up to the bank full-flow line as well as adjacent upland vegetation. Riparian plant species may include the following: alder, jaumea, pickleweed, big leaf maple, cattail, willow, horsetail, dogwood, cottonwood, sycamore, oak, and box elder. The riparian corridor is limited to areas containing at least 50 percent cover of some combination of the plants listed.

**Significant Erosion Potential** - A substantial or potentially substantial adverse change in site conditions that could result in erosion and/or sedimentation of site soils.

## **PUBLIC EDUCATION AND INDUSTRIAL OUTREACH**

### **A. Storm Drain Inlet/Markings and Signs**

- PEIO-9      Implement this PS in 1998/99. It is our understanding that all storm drain inlets were to be stenciled by December 31, 1998.
- PEIO-10     Implement this PS in 1998/99
- PEIO-11     It is unclear how each municipality will optimize the use of local volunteers to assist with marking or signage activities in order to provide educational opportunities. For this performance to be acceptable a volunteer action plan should be submitted. Such a plan should include but need not be limited to availability of volunteer groups.
- PEIO-13     Footnote should read: "Refer to PEIO-13, "A" to "F"..... not ~~PEIO-14~~
- PEIO-18     To enable evaluation of the Program, this PS should be implemented now, i.e. in 1998/99. The results would be helpful in identifying problems now and correcting them in a timely manner.
- PEIO-25     Consider adding "PEIO-25" as follows: Each Agency shall demonstrate a reasonable effort to build "park-n-ride" facilities. A joint effort between Agencies would be acceptable.
- General  
comment:     All BMPs shall be implemented in fiscal year 1998/99 and in subsequent years, such BMPs would be shown as **"implemented and in effect"**.



## MUNICIPAL MAINTENANCE ACTIVITIES

### A. Street Sweeping Frequency

- MUNI-1        ...  
 MUNI-2        ...  
 MUNI-3        ...  
 MUNI-4        All of these PSs are a continuation of the last permit so it is not clear why they should not be implemented in fiscal year 1998/99. Please justify.
- MUNI-11        Should read: Each Agency will track *and report* curbed miles swept.
- MUNI-12        Should read: Each Agency will track *and report* volume .....
- MUNI-15        Add: *A copy of the street sweeping schedule shall be submitted along with the annual report summary.*

### B. Routine Inspection and Cleaning

- MUNI-23        This PS is ongoing, therefore by not implementing it in fiscal year 1998/99 appears as though this is a systematic "foot-dragging".
- MUNI-24        ...
- MUNI-25        ...
- MUNI-26        These PSs should be implemented in fiscal year 1998/99. These are ongoing activities, therefore, it is not clear why implementation should be delayed for 3 years.

### C. Target Areas for Improvements

- MUNI-42        Primary objective is to prevent illegal dumping. Please delete *minimize* and insert *prevent illegal*.....
- MUNI-47        Should read: Each Agency will retain (design approved) low growing .....  
 A consideration is generally not considered a performance standard.

### D. General Practices for Road Repair and Maintenance

- MUNI-67        Should read: Each Agency will train employees on how to use road and repair BMPs. As proposed, "these BMPs" are not specific.
- MUNI-68        It appears that MUNI-68 should come before MUNI-67. Therefore, the proposed MUNI-67 should be MUNI-68 and vice versa.

### E. Asphalt/Concrete Removal

MUNI-69 In the last sentence delete ~~as much material as possible~~ and replace with *all related material*.

### F. General BMPs for Maintenance Facilities

MUNI-93 This PS should read: *Each Agency will develop and post BMPs for other public agencies that use its corporation yard*. To consider implementing does not define a performance standard.

MUNI-97 MUNI-93, MUNI-94, MUNI-97 should all be implemented in 1998/99.

### G. Fuel Dispensing Areas

MUNI-104 This PS should read: Each agency will cover liquid fuel dispensing areas. Please note that to merely consider does not constitute a performance standard. In addition there is no justification why liquid fuel areas should not be covered now, therefore this performance standard should be implemented now i.e. in 1998/99.

MUNI-105 Delete ~~consider designing~~ and replace with *will design fueling areas ...*. In addition, this performance standard should be implemented now, i.e. 1998/99.

### H. General BMPs for Pesticides/herbicides

MUNI-137 Please elaborate on why each agency can not implement this PS now. Maintaining a record of all treatments including pesticide use for each site could be implemented now.

### I. Copper as an active ingredient

MUNI-141 There is no justification why implementation of this PS should be delayed. It should be implemented in 1998/99.

### J. Diazinon as an Active Ingredient

MUNI-144 There is no justification for projecting rather than implementing this PS. We therefore, expect that this PS will be implemented in 1998/99.

**K. Park and General Landscape Areas**

MUNI-158 As commented above, this PS should be implemented in 1998/99.

**L. Municipal Golf Courses**

MUNI-162 MUNI-162, 163, 164 should be implemented rather than projected. A projected activity is generally not considered to be a performance standard. Consider implementing these performance standards in 1998/99.

**General Comment:** The Program has done an exhaustive job by proposing up to 165 performance standards under the municipal maintenance best management practices. Thank you for your efforts. The proposed annual reporting forms will be helpful in evaluating progress in implementing all BMPs within this major program component.

**INSPECTION ACTIVITIES****A. Develop an Inspection Plan**

INSP-5 This PS pertains to an ongoing activity and there is no justification for not implementing the performance standard in 1998/99.

INSP-6 Please elaborate on what "additional types of outreach and inspection activities" would be. We believe this PS should be implemented now.

**General comment:** All performance standards are to be implemented in fiscal year 1998/99. In subsequent years performance standards would be considered to have been **implemented and in effect.**

**ILLCIT DISCHARGE CONTROL ACTIVITIES**

IDCA-1 This performance standard pertains to an ongoing activity and there is no justification for not implementing this performance standard in fiscal year 1998/99.

Consider adding : "H." Demonstrate proper legal authority. This would ensure that every agency has the proper legal authority necessary to take enforcement actions when necessary.

- IDCA-4 IDCA-4, IDCA-5, IDCA-6, IDCA-7, IDCA-8 should all be implemented now, i.e. in 1998/99 since these performance standards pertain to ongoing activities.
- IDCA-13 Enforcement is also an activity that is ongoing and as a result, this performance standard should be implemented in 1998/99.

## MONITORING AND SPECIAL STUDIES

### A. Special Studies

General comment: In view of the amount of resources that have been budgeted for special studies and the number of special studies that have been initiated to date, the Program should consider a special studies compilation. Such a compilation should contain a critical review and evaluation of all special studies including how results from completed special studies are being utilized to evaluate BMPs.

## WATERSHED MANAGEMENT ACTIVITIES

### A. Wildcat Creek Pilot Project

The Program's projected proposal to conduct a pilot study of Wildcat Creek is acknowledged. We believe that useful data will be generated from this project, however, no implementation and completion time schedules are proposed. The timing of the completion of the pilot project is critical because other future watershed projects could benefit from the results from this pilot project.

However, if the Program's monetary contribution to the Wildcat Creek pilot study is not sufficient to enable the San Francisco Estuary Institute complete the pilot study, what contingency plan will the Program implement to ensure completion of the pilot study? Please elaborate on this.

Also, on a broader watershed context, what other watersheds are targeted in the future?

Please submit an implementation and completion time schedule for the Wildcat Creek pilot project by February 26, 1999.

**B. Creek Inventory Project**

A creek inventory project is being considered by the Program. However, a projected or activity to be considered in the future does not constitute an acceptable work plan. In fact, the creek inventory project should be treated as a priority as opposed to being projected. Therefore, we strongly suggest that this project be initiated now. Results from this study could be very helpful in targeting other watersheds.

But what will a creek inventory project consist of? Please elaborate and submit a report by May 30, 1999 on existing efforts and plan to complete the creek inventory project.

In addition, we request that a complete creek inventory and characterization report be submitted by June 30, 2000.



# **RESPONSE TO COMMENTS**

## **STORMWATER MANAGEMENT PLAN**

**(1998-2003)**

**CONTRA COSTA CLEAN WATER PROGRAM**





**Comments to the Contra Costa Clean Water Program's Stormwater Management Plan, (1998-2003), dated May 27, 1998 were received from the following individuals/parties:**

- 1. Harriett Burt, Alhambra Creek Watershed Planning Group**
- 2. Joe Horn, California Striped Bass and Citizens for S.D. Water**
- 3. Marcus O'Connell, Individual**
- 4. Paul R. Larson, Individual**
- 5. Edward Pancoast, Urban Creeks Council Representative**
- 6. Nancy Stein, Soil and Water Conservation Society (SWCS). Executive Council Member**
- 7. Igor Olegovich Skaredoff, Individual**
- 8. Greg Gartrell, Contra Costa Water District (CCWD)**
- 9. Alexander R. Coate, East Bay Municipal Utility District (EBMUD)**

**The Program's responses are provided on the following pages.**



**Harriett Burt, Alhambra Creek Watershed Planning Group**

Program's Response - The Contra Costa Clean Water Program (Program) is interested in developing partnerships with public and private entities to expand and enhance the concept of watershed management. The Program Manager will meet with the group in the foreseeable future.

**Joe Horn, California Striped Bass and Citizens for S.D. Water**

Program's Response - As indicated in the above response, the Program is committed to the concept of watershed management. Hopefully, this approach will provide a more effective method for solving complex environmental problems. Given the numerous causes of environmental concerns and diverse interests, active participation by all interested stakeholder groups and individuals will be critical. The Program welcomes the California Striped Bass and Citizens for S.D. Water to actively participate in the Program's Watershed Management activities.

**Marcus O'Connell, Individual****Program's Responses:**

Public Review - The response period for the next Joint Municipal NPDES Permit will be a 30 to 45 day period. Public agencies normally charge individuals for copying materials to recover the cost of producing the document. The Program believes the document was readily available for review at the 23 Contra Costa Libraries, the 19 co-permittees' City Halls and on the Internet. This issue will be reviewed by the Program prior to promulgation of its draft Permit for the Third Joint Municipal NPDES Permit in fiscal year 2003.

Program Priorities - The Program establishes Best Management Practices (BMPs) for all co-permittees to implement during the five year Permit period. The reason priorities are not established is that all co-permittees are expected to completely implement the BMPs at the designated time intervals. Annually, the San Francisco Bay and Central Valley Regional Water Quality Control Boards (RWQCBs) review the work of all co-permittees and can establish priorities for the following fiscal year for implementation by the Program participants.

The 1998/99 Fiscal Year Program Budget is included as Table 2-1 in Section 2 of the Stormwater Management Plan.

Stormwater Fund Allocations - The Contra Costa County Flood Control & Water Conservation District and each co-permittee (excluding the cities of Richmond and Brentwood) have entered into a "Cost Payment Agreement" that clearly stipulates how stormwater utility fees are to be collected and spent. Annually, an accounting of these funds are provided to the Flood Control District. The City of Concord's administrative

budget includes Concord's group budget allocation, inspection services, etc. A detailed accounting can be obtained from each co-permittee.

Program Management Section – Figures 2-1 and 2-2 have been included in the Stormwater Management Plan.

New Development and Construction Controls – The costs of actually complying with requirements promulgated by the RWQCBs, the Program and co-permittees are borne by developers.

Public Education & Industrial Outreach – The Program provides meeting notices to any individual(s) requesting an agenda.

Library of Documents - A complete collection of documents can be found at the RWQCBs, the Bay Area Stormwater Management Agencies Association (BASMAA) and the Program offices. All of these documents are readily available for review by the general public.

Cost of Street Sweeping – The use of Stormwater Utility Assessment monies for street sweeping activities is a legitimate expenditure of funds and has helped municipalities maintain or expand their street sweeping activities. Each co-permittee determines how it will fund these activities, which may be financed from a different funding source.

Water Quality Testing – The Program has conducted extensive water quality testing as part of its wet weather monitoring program and conducts a variety of special studies to identify pollutant sources and identify pollutant elimination and/or reduction solutions.

Enforcement Actions – The Program's inspection program is in its infancy. The Program's initial approach has been to educate businesses and increase their awareness on the Program's goals and objectives. The Program intends to increase its enforcement activities in the future.

Monitoring – Since its inception, the Program has conducted or been involved in numerous monitoring activities; including but not limited to, the Program's Wet Weather Monitoring Program and Special Studies, the Regional Monitoring Program for Trace Substances, the Bay Protection and Toxic Cleanup Program, and BASMAA's Regional Monitoring Strategy. Over \$280,000 is spent annually on monitoring activities. Extensive baseline data has been collected as a result of the Program's wet weather monitoring program conducted at two stream stations during fiscal years 1993/94, 1994/95, and 1995/96. The Program, in coordination with several other Stormwater Programs in the Bay Area, ceased this type of monitoring in fiscal year 1996/97 and embarked on developing a comprehensive and cost-effective regional monitoring strategy. This activity is ongoing and is designed to direct money towards eliminating sources, evaluating progress, and identifying priorities.

Watershed Management – The Program is committed to the concept of Watershed Management. The Wildcat Creek Watershed pilot study is just one of several activities being undertaken by the Program.

### **Paul R. Larson, Individual**

#### **Program's Responses**

1. Priorities - Please refer to response under Marcus O'Connell regarding Program priorities.
2. Data and Progress - Extensive data exists regarding pollutants and the progress being made to address the reduction or elimination of these pollutants. The findings are contained in the previous five Annual Reports. Program staff will make the information available to Mr. Larson upon his request.
3. Distribution of Funds to Various Municipalities - The referenced Exhibit "B" relates to the 1998/99 Fiscal Year Group Program Budget. The remaining revenues from the Stormwater Utility Assessment are distributed to co-permittees to implement their local stormwater programs. Annually, an accounting of all funds for each co-permittee is reported to the Contra Costa County Flood Control & Water Conservation District. A detailed accounting can be obtained from each co-permittee.
4. What else needs to be done? - Stormwater utility assessment funds can be used for operation, maintenance and capital related items pertaining to the enhancement of water quality. The primary restriction for stormwater utility fees is that they cannot be used to debt finance capital projects.

### **Igor Olegovich Skaredoff, Individual**

**Program's Response** - Soil erosion and sedimentation are some of the major pollutants that the Program has been addressing during the past five year Permit period. Workshops, educational materials, field inspections and coordination activities between the RWQCBs, private developers and Program staff have been implemented to address these specific issues. Great strides have been made and are documented in the Program Annual Reports for the previous five years. Soil erosion and sedimentation will continue to be top priorities during the Second Joint Municipal NPDES Permit particularly as we implement Watershed Management activities.

### **Edward Pancoast, Urban Creeks Council Representative**

#### **Program's Responses**

Program Management – One of the Program's challenges is to develop public/private partnerships. The Program is open to involvement of the general public and local

community groups. Involvement will be particularly important as the Program pursues the implementation of Watershed Management activities.

The primary objective of the Joint Municipal NPDES Permit is to radically reduce or eliminate all pollutants from stormwater. Any mitigation needs to embrace this concept. When mitigation is considered, the cost and benefits need to be clearly articulated in order to achieve water quality enhancement.

New Development and Construction Controls – The suggested special study, to better inform real estate agencies, prospective buyers and new property owners about existing and future drainage requirements of a property is well taken and will be forwarded to the Public Education and Industrial Outreach Committee for consideration. Creating incentives to encourage “permit streamline procedures” is a concept worth further review and study, and will be forwarded to the New Development and Construction Controls Committee for consideration.

The Program has identified new development and construction related activities as one of its top priorities. Numerous workshops for developers, planners, engineers in both the public and private sectors have occurred and will continue in the Second Joint Municipal NPDES Permit. Recent workshops have included site visits and demonstrations.

The Program has provided the “Planning Tools” Binder as guidelines to municipalities. The New Development and Construction Controls Committee will explore the concept of putting this information on computer disk or CD-ROM. The Program is constantly reviewing all available resources to achieve its goals of radically reducing or eliminating pollutants from stormwater. The Model Grading Ordinance is only one tool that will be reviewed and used to address continuing issues of concern.

The issue regarding projects already approved and being re-evaluated for compliance may not be legally possible. Staff will discuss this issue with legal authorities.

Graphic representations for many of our materials, such as “Start at the Source”, have been provided. The Program is dedicated to disseminating information which is “user friendly”, understandable and encourages proper implementation.

Watershed Management Activities - The Program realizes that Watershed Management activities need to involve all stakeholders within the watershed. The Program will actively promote stakeholder involvement in watershed management planning activities.

Pilot Project/Appendix “B” – Once the watershed science plan has been developed by the San Francisco Estuary Institute, then an assessment will be made regarding the development of future activities. This will be done with stakeholders in the watershed.

Creek Inventory – All information readily available to the Program will be used regarding the establishment of a creek inventory.

**Nancy Stein, Soil and Water Conservation Society, Executive Council Member**

Program's Response - The Program has included activities related to the concept of Watershed Management. As a part of the watershed management activities, erosion and sedimentation control programs will be addressed.

**Greg Gartrell, Contra Costa Water District:**

Program's Response - The Contra Costa Water District has offered support to the Program with several of its activities including illicit discharge control activities, monitoring, special studies and watershed management activities. The Program welcomes their expertise and involvement.

Drainage into the Contra Costa Canal, water supply for 400,000 Contra Costans, will be considered high priority screening areas.

**Alexander R. Coate, East Bay Municipal Utility District (EBMUD)**

These comments were received after the comment deadline date and were not reviewed by the Program's Permit Re-issuance Ad Hoc Committee. Program staff responses are as follows:

**Program Staff Responses**

Discharge Prohibitions in NPDES Permit - EBMUD is recommending that the Second Joint Municipal NPDES permit include "water line and hydrant flushing" and "planned and unplanned discharges from potable water sources" as non-stormwater discharges that need not be prohibited. "Discharge prohibitions" and "exemptions" contained in the permit are under the purview of the RWQCBs; however, the Program has endeavored to reduce or eliminate all discharges of sediment to the municipal storm sewer system and has concerns regarding the exemption of any sediment laden discharge.

NDCC-14 (now NDCC-13) - Performance Standards NDCC 12, 13, 15 and 17 specifically address the scope and basis for determining the frequency of construction site inspections. Due to the significant number of ongoing construction activities, it is necessary for co-permittees to prioritize inspection activities. Inspection frequency is established by each co-permittee and is based upon several factors including the size of a project, its potential impact to stormwater quality, and the amount of construction activity.

NDCC-16 (now NDCC-15) - This comment has been incorporated into NDCCC-15.

PEIO-20 (now PEIO-18) - The Management Committee is the Program's decision making body and is responsible for directing all group activities. It is the role of the Program's sub-committees to review, research and make recommendations to the Management Committee. However, the Program has no established authority over local

agencies. Activities and programs conducted at the local level are determined by each agency, as appropriate.

PEIO-24 (now PEIO-22) - This comment has been incorporated into PEIO-22.

MUNI-27 - Co-permittees wish to avoid unnecessary documentation. MUNI-30(d) specifically requires agencies to document and maintain records regarding its "disposal practices and follow-up actions."

MUNI-30 - See response above.

MUNI-32 and 33 - It is up to the spill response team (e.g., Police, County Hazardous Materials Program, Public Safety Dispatcher, etc.) to determine appropriate notification.

MUNI-53 (now MUNI-52) - Co-permittees wish to avoid unnecessary documentation. Program staff believes MUNI-50, 51 and 52 adequately address this issue.

MUNI-58 (now MUNI 56) - Given the current ability to predict with certainty rain events, it is not practical to avoid graffiti abatement activities whenever there is a chance of rain. Co-permittees review weather conditions and make appropriate judgements. Should an unexpected rain event occur, co-permittees will respond in accordance with MUNI-56.

MUNI-72 (now MUNI 70) - Cold-mix asphalt ("cut back") as a temporary paving patch is employed by every trenching agency (including EBMUD) and is intended to be in place only while awaiting the scheduling of permanent paving. The typical alternative is a trench plate (the edges of which need to be ramped with "cut back"). Co-permittees' experience with trench plates is that they are rarely set properly and need constant monitoring due to traffic loads moving the plates out of place. This can be a significant traffic safety hazard. Another benefit of temporary paving is the settlement compaction that occurs from traffic loading. Effective compaction reduces the need for future repairs. Planned trenching activities are scheduled during dry weather. Provisions for trenching activities when an unexpected rain event occurs is addressed in MUNI-81. For these reasons, the Program believes avoiding "cut back" in drinking water watersheds is not practical and poses an unnecessary traffic safety hazard.

MUNI-123 (now MUNI-121) - The frequency for inspecting municipal corporation yards for illegal discharges is determined by each co-permittee. Frequency will vary based upon the size of the yard, activities conducted at the site, and the potential for impact to stormwater quality.

MUNI-137 (now MUNI-135) - The Program believes this issue is effectively addressed in MUNI-130 and 132.

MUNI-140 (now MUNI-137) - Each co-permittee is responsible for determining appropriate public notification practices and procedures. EBMUD's comment regarding "public notification" goes beyond the scope and intent of these performance standards.



The requirements contained in MUNI-137 address the issue of maintaining reports of all treatments.

Roadside Maintenance Practices - The purpose of the Program's Alternative Roadside Vegetation special study was to develop alternative roadside vegetation that requires less pesticides, reduces erosion and controls sediment, and reduces fire hazard. This special study is ongoing. Recommendations from this study are forthcoming and following review appropriate management practices will be implemented.



**APPENDIX “D”**

**CONTRA COSTA CLEAN WATER  
PROGRAM AGREEMENT  
(1998-2003)**



**Contra Costa Clean Water  
Program Agreement between  
The Contra Costa County Flood Control  
& Water Conservation District  
and**

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THIS AGREEMENT is jointly entered into by the Contra Costa County Flood Control and Water Conservation District and the cities of Antioch, Brentwood, Clayton, Concord, Danville, El Cerrito, Hercules, Lafayette, Martinez, Moraga, Orinda, Pinole, Pittsburg, Pleasant Hill, Richmond, San Pablo, San Ramon, Walnut Creek and County of Contra Costa (sometimes individually referred to herein as "co-permittee" or "agency"). It is dated for administrative convenience April 1, 1998.

**R e c i t a l s**

A. The parties are joint holders of National Pollution Discharge Elimination System ("NPDES") Permit, Nos. CA0029912 and CA0093313. The cities previously have entered into individual agreements with the Contra Costa County Flood Control and Water Conservation District ("District") for the first five-year NPDES permit. The parties now wish to enter into this joint agreement for the upcoming NPDES permit, 1998 - 2003.

B. The parties (except the City of Richmond) intend to enter into a separate cost payment agreement regarding the stormwater utility fee assessment financing.

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

**A. Group Activities Delineation.**

The Management Committee ("MC") is the decision-making body of the Contra Costa Clean Water Program. It shall be responsible for setting policies, providing directions and authorizing expenditures.

The second NPDES permit program, and the activities to be jointly carried out pursuant to this Agreement by the parties, shall include, but not be limited to, the following tasks:

1. Provide the necessary administrative, technical and clerical resources to implement all Program activities directed by the Management Committee in order to implement the second joint municipal NPDES permit (1998 - 2003). Administrative activities may include attending all Management and sub-committee meetings, preparing committee minutes and/or summaries of committee actions.
2. Administer all consulting services contracts (technical, legal, public relations and associated services) including the coordination, billing and monitoring of all such activities.
3. Represent the Program at federal, state, regional and local governmental, civic, professional and political organizations and agencies.
4. Coordinate the yearly compilation of the Annual Report to the appropriate Regional Water Quality Control Boards.
5. Conduct monitoring activities which may include the purchase, installation and testing of equipment at designated sites.
6. Ensure that all regulatory fees and assessments necessary to obtain and maintain the Joint Municipal NPDES Permits are appropriate and, if so, paid.
7. Ensure uniform implementation of a comprehensive stormwater management ordinance and its regulations between all co-permittees.
8. Implement a comprehensive public education and industrial outreach

## APPENDIX "D"

program on behalf of all co-permittees. The Public Education and Industrial Outreach Committee in the Program will be responsible for developing the original materials and co-permittees shall be responsible for producing and distributing these items.

9. Participate in special studies determined by the Program, the Regional Water Quality Control Boards, the Bay Area Stormwater Management Agencies Association (BASMAA) or other appropriate entities.

10. Ensure implementation of a comprehensive program for field inspection and investigation activities for unauthorized connections and illegal dumpings.

11. Ensure a comprehensive program for new development and construction activities specifically focusing on soil erosion and sedimentation practices, post-construction facilities and developing financial mechanisms needed to maintain such facilities.

### **B. Termination.**

Should a co-permittee want to stop participating in the group program and terminate its obligations under this Agreement, the following conditions must be met:

1. The co-permittee shall provide written notice of its intention to terminate its participation in the group program by no later than 5:00 p.m., December 31 prior to the commencement of the following fiscal year of which it is seeking to terminate its obligations (July 1 - June 30).

To ensure an orderly transition, the departing co-permittee shall also obtain written confirmation from the Regional Board's Executive Officer that an individual NPDES Municipal Stormwater Permit will be issued to the co-permittee and provide a copy to the Program with the notice of termination.

2. The co-permittee shall be committed to fulfill all of its financial obligations outlined in this Agreement to the end of the fiscal year (June 30).

### **C. Subcommittee Structures.**

The following subcommittees are hereby established, but may be changed by the Management Committee:

## APPENDIX "D"

1. Administrative Committee ("AC") is a sub-committee responsible for administration, strategic planning, personnel, budget recommendations and conflict resolution.

2. Monitoring and Inspection Committee ("MIC") is a sub-committee responsible for baseline monitoring, special study coordination, inspection activities, inspection training, volunteer monitoring and water quality analysis and evaluations.

3. New Development and Construction Controls Committee ("NDCCC") is a subcommittee responsible for erosion/sedimentation control measures, construction site management practices, new development guidelines and recommended planning procedures.

4. Public Education and Industrial Outreach Committee ("PEIO") is a subcommittee responsible for development of materials and products, information dissemination, technical workshops, marketing and public outreach.

### **D. Management Committee Representatives.**

1. The city/county manager, prior to May 1, 1998, shall designate Management Committee representatives which may be by job classifications rather than named individuals. The manager shall designate up to two (2) individuals who may vote on behalf of their agency at any Management Committee deliberation. Each co-permittee shall have one vote on the Management Committee. Co-permittees shall be permitted to send substitutes to any Management Committee meeting, permitting the individual to vote on behalf of the agency when the representative is absent. Written confirmation from the city/county manager indicating the identity of the substitute shall be provided to the Program prior to the meeting. The substitute's decisions shall be binding upon its agency.

2. Each Management Committee representative shall consist of an engineering representative or designated individual responsible for directly administering the stormwater management program for their agency.

3. Management Committee representatives shall continue for the entire term of the Agreement unless changed by the city/county manager by providing timely written notification to the Program.



**APPENDIX “D”**

4. Any decision made by the Management Committee shall be binding upon all co-permittees.

**E. Committee Membership.**

1. Each co-permittee shall have one representative on the Management Committee and at least one representative on either the Administrative Committee, Monitoring and Inspection Committee, New Development and Construction Committee, or the Public Education and Industrial Outreach Committee.

2. Co-permittees may have membership on any subcommittees as full voting members if approved by the Management Committee at its June meeting upon the recommendation of the Management Committee chairperson for the following year. Each co-permittee shall only be allowed one vote per committee. Participants at committee meetings, other than approved co-permittees, shall not be allowed to vote on any item under consideration.

3. Any co-permittee not designated as an approved voting member may participate in the discussions of any subcommittee but shall not be allowed to vote on recommendations. Co-permittees may participate on any committee.

4. Each sub-committee shall, at a minimum, consist of the following membership:

- Administrative Committee 7\*
- Monitoring and Inspection 5
- New Development and Construction 5
- Public Education and Industrial Outreach Committee 5

(\*Concord, Contra Costa County and Richmond shall be permanent members of the Administrative Committee, but shall also participate on at least one additional subcommittee.)

5. The Management Committee chairperson and vice-chairperson shall be chosen at the June Management Committee meeting for the following fiscal year.

## APPENDIX "D"

6. The Management Committee chairperson shall be chairperson of the Administrative Committee for one fiscal year (July 1 to June 30).

7. The Management Committee chairperson, in accordance with established guidelines, shall by May 31 of each fiscal year recommend, after consultation with all co-permittees, membership on all sub-committees effective July 1 of the next fiscal year. Recommendations shall be considered by the Management Committee at its June meeting. Sub-committee members shall be encouraged to rotate every two years.

8. The first order of business for each sub-committee at its July meeting is to choose a chairperson and vice chairperson for the remainder of the fiscal year and to establish the sub-committee's work plan for the fiscal year dealing with its goals, objectives, time lines and related items, as outlined under the Permit.

9. Attendance at all Management and sub-committee meetings shall be published monthly. Co-permittees are expected to attend at least 80% of the meetings. Two consecutive absences shall cause the Management or sub-committee chairperson to request new membership from the designated co-permittee by contacting either the Management Committee representative or the co-permittee's city/county manager. Attendance of all committees shall be added to the Annual Report provided to the Regional Water Quality Control Boards.

10. The Administrative Committee shall consist, at a minimum, of the following membership, conditions, and shall generally follow the rotations contained in **Exhibit "A"**:

**APPENDIX "D"**

a)	Management Committee chairperson	1**
b)	Concord, County and Richmond	3/2
c)	Other co-permittees	<u>3/4**</u>
	Total	7

- d) Geographical representation will be encouraged
- e) Administrative Committee vice-chairperson shall be selected at the first meeting in July of each fiscal year. The Management Committee vice-chairperson does not have to be the Administrative Committee vice-chairperson.

- \*\* (i) These designated co-permittees shall rotate annually.
- (ii) These co-permittees shall meet their sub-committee obligation by serving as designated representative for the fiscal year (see Section E1).
- (iii) Should the chairperson be from Concord, Contra Costa County or Richmond, then the "other co-permittees" category shall be increased to four members; and the "Concord, County and Richmond" category shall be decreased to two members.

11. Permanent sub-committee voting membership can only be changed by the Management Committee Chairperson following established guidelines (see following section).

12. The selection of permanent sub-committee voting membership shall consider the following guidelines:

- a) The minimum number of members per committee (see Section E4).
- b) Balance membership from large, medium and small jurisdictions.

## APPENDIX "D"

- c) Balance membership from geographical areas as follows:
  - (i) West County: El Cerrito, Richmond, San Pablo, Hercules, Pinole and unincorporated county.
  - (ii) East County: Antioch, Brentwood, Pittsburg, and unincorporated county.
  - (iii) Central/North County: Concord, Clayton, Pleasant Hill, Walnut Creek, Martinez, and unincorporated county.
  - (iv) Lamorinda/South County: Lafayette, Orinda, San Ramon, Danville, Moraga and unincorporated county.
- d) Attempt to have one sub-committee member represented on the Administrative Committee to act as a liaison.
- e) Rotation of sub-committee members shall be encouraged at least every two years.
- f) Membership shall be chosen to enhance the sub-committee's manageability and overall effectiveness of attaining goals and objectives.

13. A quorum for each committee or subcommittee shall consist of a majority of its members.

### **F. Program Costs Participation and Allocation.**

All program costs shall be allocated on population numbers annually obtained from the State of California's Department of Finance. The population data published in January of each year will be used to form the cost allocations of the following fiscal year. (See **Exhibit "B"** for the 1998/99 Fiscal Year Allocations.)

**G. Optional Services.**

Additional services requested by a co-permittee and consistent with carrying out tasks outlined in the Joint Permit may be provided by Program staff as long as it minimally impacts Program staffing and is approved by the Management Committee. Such requests shall be in writing and detail tasks to be accomplished. Such services shall be completely financed by the co-permittee.

**H. Contracting.**

1. All contracts shall initially be administered through the Flood Control District on behalf of the Program. Other co-permittees may be permitted to contract on behalf of the Program upon Management Committee approval. All contracts through the District shall strive to achieve a "good faith effort" as specified by Contra Costa County's Minority Business Enterprise/Women Business Enterprise guidelines, but shall not be bound by such guidelines.

2. All contracts shall include a provision allowing for one or two-year extensions based on satisfactory performance. The appropriate sub-committee shall recommend to the Management Committee when a consultant contract should be extended. The aforementioned contracts are for services, not products.

3. Procuring technical services shall be accomplished in the following manner:

a) A formal Request for Proposal ("RFP") shall be developed for all required technical services detailing goals, objectives, budget, tasks and time lines.

b) All co-permittee(s) will be asked if they wish to respond to the RFP. If so, the co-permittee(s) must respond in writing to the appropriate sub-committee.

c) The sub-committee can either recommend approval of the submitted co-permittee(s)' proposal to the Management Committee; or, may send the RFP to outside vendors and review all submittals before making a final determination to the Management Committee.

d) The appropriate sub-committee shall be responsible for recommending a consultant to the Management Committee.

**I. Staffing.**

1. Program staff are employees of Contra Costa County, employed on behalf of all co-permittees constituting the Clean Water Program. The Management Committee may contract for Program staff through another co-permittee, an institutional arrangement (such as joint powers agreements), or consultants.

2. The County shall obtain input from the Management Committee regarding staff evaluations, job classifications and salary ranges. The Administration Committee shall be responsible for soliciting input from the Management Committee members.

3. The Management Committee shall negotiate an administrative overhead rate with any appropriate agency providing services to the Program.

4. Program staff shall provide a written record of all policies, rules and regulations duly adopted by the Management Committee.

**J. Indemnity.**

Each party to this Agreement agrees to protect, indemnify and save harmless the other parties and their officers, officials, employees and volunteers from and against all claims, demands and causes of action by third parties on account of personal injuries or death or on account of property damages arising out of the work to be performed under this Agreement and resulting from the negligent act or omission of the party, its contractors, agents, employees or subcontractors.

Dated:

**CONTRA COSTA COUNTY  
FLOOD CONTROL & WATER  
CONSERVATION DISTRICT:**

By: \_\_\_\_\_

Its: \_\_\_\_\_

APPROVED AS TO FORM:

By: \_\_\_\_\_

Attorney

APPENDIX "D"

Dated: \_\_\_\_\_  
By: \_\_\_\_\_  
Its: \_\_\_\_\_  
APPROVED AS TO FORM:  
By: \_\_\_\_\_  
Attorney

CITY OF ANTIOCH

Dated: \_\_\_\_\_  
By: \_\_\_\_\_  
Its: \_\_\_\_\_  
APPROVED AS TO FORM:  
By: \_\_\_\_\_  
Attorney

CITY OF BRENTWOOD

Dated: \_\_\_\_\_  
By: \_\_\_\_\_  
Its: \_\_\_\_\_  
APPROVED AS TO FORM:  
By: \_\_\_\_\_  
Attorney

CITY OF CLAYTON

Dated: \_\_\_\_\_  
By: \_\_\_\_\_  
Its: \_\_\_\_\_  
APPROVED AS TO FORM:  
By: \_\_\_\_\_  
Attorney

CITY OF CONCORD

Dated: \_\_\_\_\_  
By: \_\_\_\_\_  
Its: \_\_\_\_\_  
APPROVED AS TO FORM:  
By: \_\_\_\_\_

COUNTY OF CONTRA COSTA

APPENDIX "D"

Attorney

Dated:

TOWN OF DANVILLE

By: \_\_\_\_\_

Its: \_\_\_\_\_

APPROVED AS TO FORM:

By: \_\_\_\_\_

Attorney

Dated:

CITY OF EL CERRITO

By: \_\_\_\_\_

Its: \_\_\_\_\_

APPROVED AS TO FORM:

By: \_\_\_\_\_

Attorney

Dated:

CITY OF HERCULES

By: \_\_\_\_\_

Its: \_\_\_\_\_

APPROVED AS TO FORM:

By: \_\_\_\_\_

Attorney

Dated:

CITY OF LAFAYETTE

By: \_\_\_\_\_

Its: \_\_\_\_\_

APPROVED AS TO FORM:

By: \_\_\_\_\_

Attorney



APPENDIX "D"

Dated: \_\_\_\_\_  
By: \_\_\_\_\_  
Its: \_\_\_\_\_  
APPROVED AS TO FORM:  
By: \_\_\_\_\_  
Attorney

CITY OF MARTINEZ

Dated: \_\_\_\_\_  
By: \_\_\_\_\_  
Its: \_\_\_\_\_  
APPROVED AS TO FORM:  
By: \_\_\_\_\_  
Attorney

TOWN OF MORAGA

Dated: \_\_\_\_\_  
By: \_\_\_\_\_  
Its: \_\_\_\_\_  
APPROVED AS TO FORM:  
By: \_\_\_\_\_  
Attorney

CITY OF ORINDA

Dated: \_\_\_\_\_  
By: \_\_\_\_\_  
Its: \_\_\_\_\_  
APPROVED AS TO FORM:  
By: \_\_\_\_\_  
Attorney

CITY OF PINOLE

APPENDIX "D"

Dated:

CITY OF PITTSBURG

By: \_\_\_\_\_

Its: \_\_\_\_\_

APPROVED AS TO FORM:

By: \_\_\_\_\_

Attorney

Dated:

CITY OF PLEASANT HILL

By: \_\_\_\_\_

Its: \_\_\_\_\_

APPROVED AS TO FORM:

By: \_\_\_\_\_

Attorney

Dated:

CITY OF RICHMOND

By: \_\_\_\_\_

Its: \_\_\_\_\_

APPROVED AS TO FORM:

By: \_\_\_\_\_

Attorney

Dated:

CITY OF SAN PABLO

By: \_\_\_\_\_

Its: \_\_\_\_\_

APPROVED AS TO FORM:

By: \_\_\_\_\_

Attorney

**APPENDIX "D"**

Dated:

**CITY OF SAN RAMON**

By: \_\_\_\_\_

Its: \_\_\_\_\_

APPROVED AS TO FORM:

By: \_\_\_\_\_

Attorney

Dated:

**CITY OF WALNUT CREEK**

By: \_\_\_\_\_

Its: \_\_\_\_\_

APPROVED AS TO FORM:

By: \_\_\_\_\_

Attorney

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07/06/98

## EXHIBIT "A"

# CONTRA COSTA CLEAN WATER PROGRAM ADMINISTRATIVE COMMITTEE\* PARTICIPATION GUIDELINE

Geographic Designation & Size (based on population)	Municipality	FY 1998/99	FY 1999/2000	FY 2000/01	FY 2000/02	FY 2002/03
<b>Large Municipalities</b>						
Countywide	Contra Costa County	X	X	X	X	X
Central/North County	Concord	X	X	X	X	X
West County	Richmond	X	X	X	X	X
East County	Antioch	X				X
Central/North County	Walnut Creek		X			
East County	Pittsburg			X		
<b>Medium Municipalities</b>						
Lamorinda/South County	San Ramon		X			
Lamorinda/South County	Danville				X	
Central/North County	Martinez				X	
Central/North County	Pleasant Hill			X		
West County	San Pablo	X				X
Lamorinda/South County	Lafayette			X		
<b>Small Municipalities</b>						
East County	Brentwood	X				X
West County	El Cerrito		X			
West County	Hercules			X		
West County	Pinole				X	
Lamorinda/South County	Orinda	X				
Lamorinda/South County	Moraga		X			
Lamorinda/South County	Clayton					X
Countywide	Flood Control District				X	

Minimum of seven members per fiscal year

EXHIBIT "B"

CONTRA COSTA CLEAN WATER PROGRAM  
GROUP COST METHODOLOGY & ALLOCATION  
FOR THE 1998/99 FISCAL YEAR

ENTITY	POPULATION <sup>(1)</sup>	PRORATA SHARE OF GROUP COSTS <sup>(2)</sup>	BUDGET ALLOCATION
Antioch	76,500	8.70%	\$ 132,730.89
Brentwood	14,500	1.65%	\$ 25,158.14
Clayton	10,050	1.14%	\$ 17,437.20
Concord	111,800	12.72%	\$ 193,977.96
Contra Costa County	172,200	19.59%	\$ 298,774.64
Contra Costa County Flood Control & Water Conservation District <sup>(3)</sup>	-0-	-0-	\$ -0-
Danville	38,100	4.33%	\$ 66,105.19
El Cerrito	23,300	2.65%	\$ 40,426.53
Emeryville	18,800	2.14%	\$ 32,618.83
Lafayette	23,600	2.68%	\$ 40,947.05
Martinez	35,350	4.02%	\$ 61,333.82
Moraga	16,350	1.86%	\$ 28,367.98
Orinda	16,900	1.92%	\$ 29,332.25
Pinole	18,150	2.06%	\$ 31,491.06
Pittsburg	50,800	5.78%	\$ 88,140.25
Pleasant Hill	31,450	3.58%	\$ 54,567.15
Richmond	91,300	10.38%	\$ 158,409.55
San Pablo	25,900	2.95%	\$ 44,937.65
San Ramon	41,950	4.77%	\$ 72,785.11
Walnut Creek	62,200	7.07%	\$ 107,919.76
	879,200	100.00%	\$ 1,525,451.00

Population figures based on State of California Department of Finance - January 1, 1997.  
Percentages based on prorata of population.  
Prorata share not based on population, but as a direct financial contribution.



## Scope of Work

**Application of the SFEI Watershed Science Approach  
to Wildcat Creek Watershed  
Contra Costa County**

Joshua N. Collins, Ph.D.  
28 May 1998

Introduction

*What follows is a one-year work plan for SFEI to complete a baseline scientific assessment of the Wildcat Creek watershed. The proposed study could begin this summer, and would build upon work that is already completed or is ongoing. The estimated cost of the proposed work is \$75,000.*

The Contra Costa Clean Water Program (Program) is seeking help to develop its approach to watershed assessment. The Program recognizes that SFEI has been developing a watershed science approach with pilot projects in watersheds throughout the Bay Area, including Wildcat Creek watershed in Contra Costa County. The Program has suggested that it could benefit from the watershed science being conducted by SFEI, and has asked SFEI to submit a work plan that the Clean could consider for funding.

SFEI appreciates being recognized by the Program as a source of watershed science. And SFEI suggests that the Wildcat Creek project presents itself as a very good opportunity for the Program and SFEI to work together in developing an approach to watershed assessment. SFEI welcomes this opportunity.

The proposed SFEI study is integrated with other work that SFEI is already conducting in the Wildcat Creek watershed. SFEI has been funded by Lucille and David Packard Foundation to compile existing data on hydrology and geomorphology, to conduct a scientific reconnaissance of the lower drainage network, and to produce a digital photographic base map showing the lower drainage network and basin topography. SFEI has been funded by the Center for EcoLiteracy to reconstruct the historical Wildcat Creek watershed in maps and text, and to work with local teachers to develop teaching aids based upon the historical reconstruction. SFEI has submitted a follow-up proposal to the Center for EcoLiteracy to translate more of the watershed assessment into educational materials for the larger community of the Wildcat Creek watershed.

### Background on the SFEI Watershed Science Approach

SFEI is a non-profit environmental science organization established through the San Francisco Estuary Project of the US EPA in 1995 to help provide the scientific understanding necessary to manage and protect the ecological resources of the San Francisco Estuary and its watersheds. SFEI undertakes this mission through regional coordination of environmental monitoring and research programs and projects.

SFEI began to develop a regional Watershed Science Program in 1995. The need for such a program was voiced by the US EPA, the California State Water Resources Control Board, and other SFEI partner agencies. The goal of the program is to help provide scientific support for watershed management in the Bay Area, through coordinated monitoring and research.

To meet this goal, the SFEI Committee of Science Advisors (CSA) has established a Watershed Subcommittee to help the scientific staff at SFEI develop a Bay Area Watershed Science Approach (WSA). Draft versions of the WSA were favorably received by the US EPA Region 9, the State Water Resources Control Board, and Regional Board in 1996 and 1997. SFEI intends to provide annual revisions of the written approach. A new version of the WSA will be available in 1998.

SFEI expects that the WSA can benefit a broad range of watershed engineering, planning, and management efforts, including flood control, pollution control, creek restoration, Coordinated Resource Management Plans (CRMP's), and public information campaigns. However, these are not the efforts of SFEI. The bylaws of SFEI preclude it from taking an active role in environmental management decisions. The role of SFEI is to help provide regionally coordinated scientific support for environmental management.

The SFEI watershed science program has focused on developing an approach to watershed science through pilot projects in the field. Since 1995, SFEI has participated in studies of Huichica Creek (Napa County), Napa Creek (Napa County), Sonoma Creek (Sonoma County), Muddy Hollow Creek (Marin County), Novato Creek (Marin County), Permanente Creek (Santa Clara County), Alameda Creek (Alameda County), and Wildcat Creek (Contra Costa County). SFEI has used these pilot projects to develop methodologies and partnerships. SFEI recognizes the potentially high value of volunteer help from local watershed residents, and has therefore included volunteer monitoring in



the WSA. SFEI scientists and research associates also participate in watershed science projects outside the Bay Area as field scientists and technical advisors.

Although the SFEI approach to watershed science will continue to evolve, some aspects have gained emphasis through the pilot projects. The following statements illustrate aspects of the approach that are unlikely to significantly change in the foreseeable future.

- The WSA should focus on the sources, transport, and storage of water and sediment within the drainage networks of local watersheds, rather than on watershed outputs. In the Bay Area, watershed outputs are also inputs to the Bay. Understanding watershed outputs will require unprecedented collaboration among estuarine scientists and watershed scientists to separate estuarine and watershed effects. Estuarine studies and watershed studies will eventually meet within the intertidal zone. But in the mean time there is a need to develop a basic understanding of the supplies of water and sediment within local watersheds, especially with regard to their intrinsic beneficial functions.
- There are four major aspects to a basic watershed assessment. First, there should be estimates of the proportions of sediment entering the drainage network from hillslopes, terraces, and banks. Second, there should be estimates of runoff coefficients for individual storms and sub-basins. Third, there should be estimates of sediment storage, aggradation, and degradation within the drainage network. And fourth, there should be estimates of the proportions of the runoff, sediment sources, storage, aggradation, and degradation that can be attributed to unnatural causes, such as land use or infrastructure. All of these estimates should be based upon empirical observations in the field.
- Watershed assessments should use methods of data collection and analysis that are standardized for the region, should involve local volunteers and in-kind services from cities and government agencies to help with baseline assessments and ongoing monitoring, and should use the Bay Area EcoAtlas to promote public understanding of the assessment process and the results.
- Application of the WSA in a local watershed should yield a public assessment of local sources and volumes of water and sediment supplies. Over time, the WSA should yield a regional assessment of local changes in these supplies, with an account of natural and

human causes. The WSA should also help grow a community of professionals and volunteers who can apply the WSA through their own efforts, with minimum dependency on SFEI.

It is clear that watershed management requires a steady flow of accurate information from the field to the office. Simply stated, watershed managers need to know what they are managing. The WSA will help provide this flow of basic, empirical information.

The SFEI focus on water and sediment supplies is warranted because they largely control the ecological and hydrological functions of watersheds but do not usually receive the assessment that is needed by watershed managers to protect these functions.

SFEI has also determined that the required level of understanding cannot be achieved except through empirical local studies. Although a phased approach to the studies is appropriate, leading from qualitative reconnaissance to quantitative measures, field work cannot be avoided. Existing simulation models need further development, and the emerging models will need to be calibrated and validated with empirical data.

For any given watershed, the first assessment of this kind provides a measure of the cumulative effects of past and present land uses. Repeated assessments will enable watershed managers to measure the efficacy of management practices as changes in the relative amounts of anthropogenic sediment or water supplies among the major parts of the watershed.

There are many other measurements that could be made, all of which are more specific descriptors of habitat. For example, measurements of water temperature and riparian plant architecture can be useful habitat descriptors for fish and birds. But the most fundamental factors that control the distribution and amount of habitat are the supplies of water and sediment. These are the factors that must be part of any basic watershed assessment.

This approach does not assume any problem exists, but it enables managers to define every problem in quantitative terms of watershed response to natural or anthropogenic changes in local supplies of water and sediment. It can be used, for example, to sort the effects of tectonics or seismicity from climate, climate from grazing, grazing from new construction, new construction from natural tree throw, tree throw from bridge backwaters, backwaters from grade control structures, and so forth.

This approach is pertinent to any set of watershed management objectives. Since the approach focuses on water and sediment supplies as the primary controls on watershed function, it pertains equally well to managing for natural resources, flood control, or pollution control.

The approach is applicable to any watershed. Although the overall work load and the amount of work per unit area of watershed might be affected by watershed size, aspect, geology, or amount of urbanization, the applicability of the approach is not affected.

There is enough experience with the WSA to increase its application now, but there is much that still needs to be learned about scientific watershed assessment. The applications should be regarded as learning opportunities. An open question is how much detail is needed about water and sediment supplies to improve watershed management decisions. This question is best answered through applications of the WSA that actively involve local watershed managers.

#### Background on the Wildcat Creek Pilot Project

The original purpose of the Wildcat Creek project was to develop an illustration of the WSA. SFEI was granted funds from the Lucille and David Packard Foundation to conduct the project for this purpose. Wildcat Creek was selected because it was already being studied by SFEI scientists and associates and because it is logistically convenient.

The Wildcat Creek project did not originate as an application of the WSA. The project was not originally designed as a watershed assessment, per se. However, as the project has progressed, it has drawn the attention of local residents and environmental organizations who have expressed their interest in a watershed assessment based upon the WSA.

There is a need to define the audience for a scientific assessment of the Wildcat Creek watershed. SFEI has come to appreciate that there are many people and organizations interested in the management of the watershed, and that there are some ongoing efforts to organize around these interests. In this regard, the Wildcat Creek watershed is like most other watersheds in the Bay Area. However, there seems to be many leaders and no clear organizational center. SFEI expects that a public watershed assessment could become a common focal point that might help to improve communications among local watershed interest groups.

SFEI anticipates a need to help the community of Wildcat Creek understand the watershed assessment. SFEI has accepted a grant from the Center for EcoLiteracy to help translate the findings into teaching materials for local public schools. SFEI has submitted a follow-up proposal to the Center for EcoLiteracy to help convey the meaning of the watershed assessment to the larger Wildcat Creek community.

#### Proposed Work Plan for Contra Costa Clean Water Program

This work plan is designed to "fill in the gaps" in the Wildcat Creek watershed assessment. The plan focuses on the collection and interpretation of data relating to sediment and water supplies, as discussed above.

This work plan builds on the substantial work that has already been conducted in Wildcat Creek watershed and other watersheds in the Bay Area. However, the proposed work would be part of a pilot project to field test the WSA, and would not comprise a routine application of a proven approach to watershed assessment. It is expected that the WSA will prove to be useful, and that the experience gained through the proposed work will lessen the cost of future applications of the WSA.

**Estimated total cost for the proposed work is \$75,000.00**

TASK	COST
1.0 <i>Water Supply</i>	Subtotal (for tasks 1.1-1.4) \$4,800.00
SFEI has completed most of the usual, basic summary computations of stream flow and runoff characteristics based upon the available professional rainfall and flow data. The following related tasks remain.	
1.1 <i>Final Analysis of Flow Characteristics</i>	\$1,000.00
The description of channel bank condition (see 2.2 below) will identify bankfull stage height for much of the mainstem channel and perennial tributaries. Bankfull stage is a critical hydrological datum for surveying stream condition. Knowing bankfull stage will permit local calibration of the existing "regional curves" that conveniently predict bankfull stage from upstream drainage area. This calibration will improve applications of the "regional curves" to other watersheds in Contra Costa County.	
1.2 <i>Effects of Dam Operation</i>	\$800.00
Lake Anza is managed for recreation. There are policies and procedures about the timing of water releases that can affect the hydrological characteristics of downstream reaches of the mainstem channel. There is	

a need to interpret the downstream flow characteristics in terms of Lake Anza management practices.

- 1.3 *Drainage Network Analysis* \$1,000.00  
 There is no accurate map of the drainage network. There is no map that shows the perennial and ephemeral or intermittent tributaries. Until such a map is produced, there can be no analysis of drainage density, stream order, or the relationship between order and drainage area. The drainage network map and analysis will be based on the existing photographic base  
  
 map and the new aerial photography and field reconnaissance as described below (see 2.1.1, 2.1.2, and 2.1.4).
- 1.4 *Storm Drain Mapping in GIS* \$2,000.00  
 It would be useful to know the contributions of storm drains to creek flow, and the area of drainage for these flow contributions. It is unlikely that the contributions can be measured during the proposed study, since the drains are not now gauged. However, if the drainage areas are known, then the flow contributions can be estimated, based upon existing storm drain capacities, rainfall records, and assumptions of runoff coefficients. This task assumes that the storm drain maps are available from the county in digital formats that are readily transferable to the EcoAtlas at SFEI, or that the estimates of drainage area for each storm drain can be provided by the County. The budget includes time to determine the availability of storm drain maps.
- 2.0 *Sediment Supply* Subtotal (for tasks 2.1-2.2.2) \$51,200.00  
 The tasks relating to sediment supply are separated between the hillslopes and the drainage network, including the terraces, banks, and the channel bed. The existing information about sediment supply is locally intensive but rather patchy, and needs to be updated to reflect the significant changes that have happened during the recent severe winters. To the extent possible, the existing and new data will be used to illustrate watershed processes through time. The Wildcat Creek watershed provides unusual opportunities of this kind, owing to the large amount of useful local data that have already been collected.
- 2.1 *Hillslope Sediment Sources* Subtotal (for tasks 2.1.1-2.1.4) \$22,200.00  
 To the extent possible, the examination hillslope sediment sources will include all basins within the watershed. The hillslope sediment sources will be classified in a variety of ways. They will be classified according to the type of landslide or surface erosion that they represent (e.g., earthflow, rotational slump, complex or simple, active or inactive, rills,

gullies, sheet wash erosion). The probable causes will be described and classified as either anthropogenic, natural, a combination of these, or unknown. Their connectedness to the drainage network will be estimated, based upon aerial photo interpretation and field reconnaissance. There will be an attempt to estimate the rate of landslide movement and rate of delivery of sediment to the drainage network, based upon historical aerial photo interpretation and field reconnaissance.

2.1.1 *Aerial Photography Acquisition* \$1,800.00

New photography is required to assess the effects of recent severe winters on hillslope processes. The existing photographic base map, which consists of the most recent (1985) Digital Ortho Quarter Quadrangles from the

USGS, are too old and coarse for this purpose. SFEI has learned that commercial providers of aerial photography in the Bay Area will fly the Wildcat Creek watershed this summer as a part of their regular, synoptic, Bay Area aerial surveys. This pre-planned survey accounts for the estimated low cost to acquire 1998 high-resolution photography (comprehensive black and white coverage at scale 1:24,000). The cost estimate also reflects the fact that SFEI has already acquired most of the historical aerial photography that might be needed to assess the historical chronology and rates of landsliding.

2.1.2 *Aerial Photography Preparation* \$2,400.00

In order to accurately map hillslope sediment sources and to estimate their volumes, the 1998 aerial photography must be geo-rectified and registered to standard geographic coordinates. SFEI has already assembled the software and digital terrain map that is required to prepare the photography for quantitative spatial analyses. The photography will be prepared as a digital coverage in the EcoAtlas, and then recreated as stereo pairs, scale 1:6,000 as needed for mapping.

2.1.3 *Aerial Photography Interpretation* \$7,000.00

To the extent possible, the hillslope sediment sources will be classified and mapped on the geo-rectified 1998 aerial photography (see 2.1 above) and subsequently quantified through the EcoAtlas. The procedure for mapping landslides and surface erosion will follow the protocols recently produced by SFEI and reviewed by EPA as part the EPA Quality Assurance Performance Plan for other watershed assessments in the Bay Area.