
FISCAL YEAR 2007/08
ANNUAL REPORT



SAN MATEO COUNTYWIDE
**Water Pollution
Prevention Program**

Clean Water. Healthy Community.

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*July 2007 through June 2008
Volume I of V
August 29, 2008*

A Program of the City/County Association of Governments

Credits

This report is being submitted by the participating agencies in the



City of Atherton
City of Belmont
City of Brisbane
City of Burlingame
Town of Colma
City of Daly City
City of East Palo Alto

City of Foster City
City of Half Moon Bay
Town of Hillsborough
City of Menlo Park
City of Millbrae
City of Pacifica
Town of Portola Valley

City of Redwood City
City of San Bruno
City of San Carlos
City of San Mateo
County of San Mateo
City of South San Francisco
Town of Woodside

Implementation of the Program Coordinated by:
San Mateo Countywide Water Pollution Prevention Program
555 County Center
Redwood City, California, 94063
A Program of the City/County Association of Governments
(C/CAG)

Report Prepared by:
County Environmental Health and
EOA, Inc.

Table of Contents

Page

VOLUME I

List of Tables and Figures.....	ii
List of Acronyms	vii
1 Executive Summary	1-1
Introduction.....	1-1
Summary of Progress in Each Plan Component	1-3
2 Municipal Government Maintenance Activities	2-1
Introduction.....	2-1
Accomplishments	2-1
Assessment of Effectiveness.....	2-6
Future Actions	2-7
3 Industrial and Illicit Discharge Controls	3-1
Introduction.....	3-1
Accomplishments	3-2
Assessment of Effectiveness.....	3-6
Future Actions	3-8
4 Public Information and Participation.....	4-1
Introduction.....	4-1
Accomplishments	4-1
Assessment of Effectiveness.....	4-12
Future Actions	4-13
5 New Development and Construction Controls	5-1
Introduction.....	5-1
Accomplishments	5-2
Assessment of Effectiveness.....	5-4
Future Actions	5-5
6 Watershed and Monitoring	6-1
Introduction.....	6-1
Accomplishments	6-1
Assessment of Effectiveness.....	6-12
Future Actions	6-13

Table of Contents

List of Figures and Tables

	Page
Figure 1-1 San Mateo Countywide Water Pollution Prevention Program Organizational Structure and Meetings	1-13
Figure 4-1 Coastal Cleanup Day Volunteers in San Mateo County, 2005-2007.....	4-14
Figure 4-2 Total Debris Removed on Coastal Cleanup Days in San Mateo County, 2005-2007	4-14
Table 1-1 SMCWPPP Submittals for the FY 2007/08 Annual Report	1-14
Table 2-1 Summary of FY 2007/08 Leaf Removal and Litter Control.....	2-8
Table 2-2 Summary of FY 2007/08 Material Removed from Municipal Storm Drainage Facilities	2-9
Table 2-3 Summary of FY 2007/08 Street Sweeping Activities	2-10
Table 2-4 Trends in Reported Amounts of Litter Removed	2-7
Table 3-1 Trends in Total Number of Inspections and Violations Found.....	3-4
Table 3-2 Summary of Commercial and Industrial Business Component Activities by Municipalities	3-9
Table 3-3 Illicit Discharge Field Surveys Conducted	3-11
Table 3-4 How Illicit Discharges Detected Were Found	3-12
Table 3-5 Illicit Discharge Materials Identified	3-13
Table 3-6 Number of Reported Illicit Discharges	3-7
Table 3-7 Illicit Discharges: Follow-up Activities.....	3-14
Table 4-1 Municipal FY 2007/08 Public Information and Participation Activities	4-15
Table 4-2 Amounts of Top 5 Debris Items Removed at 2007 Coastal Cleanup Day.....	4-9
Table 4-3 Monthly Website Views in FY 2007/08.....	4-10
Table 4-4 Website Pages Viewed and Documents Downloaded in FY 2007/08.....	4-17
Table 5-1 List of Significant New and Redevelopment Projects Reviewed	5-6

Table of Contents

Table 5-2	New Development and Redevelopment Projects that Use Vegetated Swales and/or Detention Basins: FY 2001/02 to FY 2007/08	5-43
Table 5-3	New Development and Redevelopment Projects that Use Inlet Filters: FY 2001/02 to FY 2007/08	5-43

Table of Contents

Appendices

VOLUME I (Continued)

APPENDIX A Municipal Government Maintenance Activities

- *Attendance List for FY 2007/08 Municipal Maintenance Subcommittee Meetings*
- *Attendance List for FY 2007/08 Parks Maintenance and IPM Work Group Meetings*
- *2008 Parks Maintenance and Integrated Pest Management Workshop*
 - *Agenda*
 - *Attendance list*
 - *Summary of evaluation forms*
- *15th Annual Municipal Maintenance Training Workshop*
 - *Agenda*
 - *Attendance list*
 - *Summary of evaluation forms*

APPENDIX B Industrial and Illicit Discharge Controls

- *Attendance List for FY 2007/08 CI/I Subcommittee Meetings*
- *Fact Sheet: Successes in Fiscal Year 2006/07*
- *Stormwater Orientation for Municipal Staff*
 - *Agenda*
 - *Flyer*
 - *Evaluation Summary*
 - *Sign-in Sheet*
 - *Workshop Binder Table of Contents*
- *Excerpt from Stormwater Program Funding Options Final Report*
- *Tips for a Cleaner Bay (English)*
- *Tips for a Cleaner Bay (Spanish)*

APPENDIX C Public Information and Participation

- *PIP Subcommittee Attendance Record – FY 2007/08*
- *Zun Zun School Assembly Schedule*
- *Zun Zun School Assembly Announcement Fax*
- *Healthy Schools Inside and Out Workshop Flyer*
- *School Janitorial Less Toxic Products Brochure*
- *2008 Pollution Prevention Calendar*
- *Our Water, Our World Partnering Retail Stores*
- *Master Gardeners Presentation, “Reducing Pollutants in our Watersheds”*
- *Coastal Cleanup Day Reporting Form*
- *Reusable Bag Commitment Form*
- *CASQA Award Presentation*
- *Retail Take-Back Flyer*
- *2007 County Fair Booth Contacts*
- *Homepage for Redesigned Website*

APPENDIX D New Development and Construction Controls

- *New Development Subcommittee FY 2007/08 Meeting Attendance*

Table of Contents

VOLUME I (Continued)

- *Updated Project Applicant Checklist for NPDES Permit Requirements*
- *Appendix I of C.3 Technical Guidance – Operation and Maintenance Document Templates (cover sheet)*
- *Soil Guidelines for Stormwater Treatment Measures*
- *New Development Subcommittee Report for April 1 field trip*
- *2008 New Development Workshop: “Implementing Permanent Stormwater Controls:*
 - *Agenda*
 - *Attendance list*
 - *Summary of evaluation forms*
- *Construction Site Compliance Workshop for Local Government Inspectors:*
 - *Agenda*
 - *Summary of evaluation forms*

APPENDIX E Watershed and Monitoring

- *Watershed Assessment and Monitoring Subcommittee Attendance – FY 2007/08*
- *Unified Stream Assessment in Seven Watersheds in San Mateo County, California, August 2008 (cover page and summary).*
- *The Unified Stream Assessment: Potential Uses for Stormwater Programs, San Francisco Bay Area Examples, July 2008 (cover page and summary).*
- *FY 2007/08 Trash Assessments in Urban Creeks in San Mateo County, California, August 2008.*
- *Review of San Francisquito Creek Sediment TMDL Preliminary Project Report, August 2008.*

APPENDIX F Template of Deliverables

- *Template for First Half-Year Deliverables FY 2007/08*
- *Template for Second Half-Year Deliverables FY 2007/08*

Table of Contents

Deliverables submitted by SMCWPPP Municipalities are located in the following volumes:

VOLUME II

- Atherton
- Belmont
- Brisbane
- Burlingame
- Colma
- Daly City

VOLUME III

- East Palo Alto
- Foster City
- Half Moon Bay
- Hillsborough
- Menlo Park
- Millbrae

VOLUME IV

- Pacifica
- Portola Valley
- Redwood City
- San Bruno
- San Carlos
- San Mateo (City of)

VOLUME V

- San Mateo County
- South San Francisco
- Woodside

Table of Contents

List of Acronyms

BAMBI:	Bay Area Macroinvertebrate Bioassessment Information Network
BASMAA:	Bay Area Stormwater Management Agencies Association
BMPs:	Best Management Practices
CEP:	Clean Estuary Partnership
CEQA:	California Environmental Quality Act
C/CAG:	City/County Association of Governments of San Mateo County
CII:	Commercial/Industrial/Illicit (Subcommittee)
CIPs:	Capital Improvement Projects
COAs:	Conditions of Approval
HMP:	Hydromodification Management Plan
IPM:	Integrated Pest Management
MRP:	Municipal Regional Stormwater Permit
NDS:	New Development Subcommittee
NEPA:	National Environmental Policy Act
NPDES:	National Pollutant Discharge Elimination System
PIP:	Public Information and Participation
POP:	Point of Purchase (PIP campaign)
POTW:	Publicly-Owned Treatment Works (sewage treatment plants)
RGO:	Retail Gasoline Outlets
RMP:	Regional Monitoring Program
SMCWPPP:	San Mateo Countywide Water Pollution Prevention Program
SWMP:	Stormwater Management Plan
TAC:	Technical Advisory Committee

1 EXECUTIVE SUMMARY

INTRODUCTION

This report summarizes the San Mateo Countywide Water Pollution Prevention Program's (SMCWPPP) stormwater pollution prevention and control activities in FY 2007/08. This report was developed to comply with SMCWPPP's municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit adopted in July 1999 and amended in 2003, twice in 2004, and again in 2007. The San Francisco Bay Regional Water Quality Control Board (Regional Water Board) staff has administratively extended the permit beyond its normal five-year expiration period while it continues to prepare a municipal regional stormwater permit that will provide permit coverage for a majority of the municipalities located in the Bay Area.

This report summarizes progress in implementing the following five major components of the SMCWPPP:

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



Information summarized in this report originated from work completed by the General Program and semiannual deliverable reports prepared by SMCWPPP's member agencies (Volumes II-V). Each municipality's two semiannual reports are located together within one of these volumes. Table 1-1 summarizes the submittals received from each of the municipalities.

The NPDES Program Coordinator, County Environmental Health or consultants conduct General Program activities for the benefit of all municipalities. Copies of General Program materials are contained in Appendices A-E including workshop training materials, summaries from reports, and BMP educational outreach materials.

The following describes the organizational structure of SMCWPPP and funding information

that is not contained elsewhere.

Organizational Structure

The current organizational structure of SMCWPPP is illustrated in Figure 1-1. The City/County Association of Governments (C/CAG) of San Mateo County, comprised of local elected city council representatives from each municipality, a member of the County Board of Supervisors, and representatives from the transit district and transportation authority, is the administrative and policy making body for SMCWPPP. C/CAG operates as a joint powers authority on issues of regional importance to San Mateo County jurisdictions. Administrative and policy making responsibilities were assumed under Amendment No. 3 to the Joint Powers Authority Agreement issued on April 22, 1993. This agreement makes C/CAG responsible for assisting with the Stormwater Management Plan's implementation and for assisting the municipalities' compliance with the NPDES permit. C/CAG has established an NPDES Subcommittee whose members are appointed by the C/CAG Chair.

C/CAG's deliberations are assisted by the NPDES Technical Advisory Committee (TAC), which is comprised of municipal representatives in the fields of engineering, planning, environmental health, wastewater treatment, source control inspection, and public works administration. The TAC has established five subcommittees to implement the five major program components. The names of subcommittee chairs, typical meeting dates, and meeting times are also shown in Figure 1-1.

General Program Financing Mechanism

During the 1992 California Legislative Session, AB 2635 (Chapter 1208, Statutes of 1992) extended the authority of the San Mateo County Flood Control District Act. As a result, the Board of Supervisors, acting in its capacity as the Flood Control District Board of Directors, upon a two-thirds vote, may adopt an ordinance to impose charges in any zone or subzone. These charges may be used for the specific purposes of funding flood control, storm drainage, water conservation or supply, or water pollution abatement projects or programs. This ability to impose fees provided a central revenue source for General Program activities that can also be used by local municipal programs to finance local NPDES permit program activities.

In FY 2000/01 C/CAG established a Task Force to evaluate a possible fee increase for supporting the General Program. This process included notifying each property owner and it culminated in the County Board of Supervisors approving an additional fee in July 2001.

The charges appear on the property tax rolls and are imposed as a separate line item on the property tax bill. The approved FY 2007/08 C/CAG budget was \$1,479,994. Generally, fees to fund the General Program were applied according to land use area as follows:

- \$3.44 residential parcel – basic fee;
\$2.86 – additional fee.

- \$1.72 condominium, agriculture and vacant parcel – basic fee;
\$1.42 – additional fee.
- \$3.44 all other uses for first 11,000 square feet, plus \$0.32 per 1,000 additional square feet of parcel area – basic fee;
\$2.86 for first 11,000 square feet plus \$0.26 per 1,000 additional square feet of parcel area - additional fee.

All of the municipalities except Woodside rely on the countywide collection of the basic fee to support their contribution to the General Program. The Town of Woodside uses an alternative source of funding to pay its General Program cost share.

The Cities of Brisbane, Colma, and San Mateo participated in the collection of the basic fee, but not the additional fee for supporting the General Program.

The Cities of Belmont, Brisbane, Colma, Daly City, East Palo Alto, Hillsborough, Menlo Park, Millbrae, Pacifica, and South San Francisco also have established local fees to fund municipality-specific activities.

Bay Area-Wide Collaboration

SMCWPPP has continued to be an active participant in several region-wide collaborative pollution prevention and control efforts and in planning for Total Maximum Daily Loads (TMDLs). Notable among these is its continued support for BASMAA at both the Directors' level and at the committees' level during the past year. This support included contributing \$40,000 to BASMAA's Regional Advertising campaign that focused on watersheds. In addition, SMCWPPP has so far contributed \$22,000 towards the development of BASMAA's Treatment Measure Design Tool.

SMCWPPP has actively supported the San Francisco Estuary Project's Implementation Committee. Lastly, SMCWPPP has participated in the Water Board's Mercury Watershed Council since it was initiated in 1999.

SMCWPPP is also supporting the maintenance of the Bay Area Hydrology Model (BAHM), along with the Santa Clara Valley Urban Runoff Pollution Prevention Program and the Alameda Countywide Clean Water Program. The BAHM was adapted from the Western Washington Hydrology Model to help local agencies and development community engineers to design correctly Flow Duration Control measures that comply with SMCWPPP's 2007 hydromodification provisions permit amendment.

SUMMARY OF PROGRESS IN EACH PLAN COMPONENT

A summary of FY 2007/08 major accomplishments is described below, along with a discussion of the goals of each component

Municipal Government Maintenance Activities

The goals of this component are:

- To maximize the removal of pollutants while sweeping streets, cleaning storm drain inlets, and conducting other routine maintenance activities.
- To minimize non-stormwater discharges to storm drains and watercourses from maintenance-related activities.

Outreach to local maintenance staff is conducted primarily through regular Public Works Supervisors/Municipal Maintenance Subcommittee meetings, Parks Maintenance and Integrated Pest Management Work Group meetings, and two annual training workshops for supervisors and field staff. One of these annual workshops focused on parks maintenance and the use of integrated pest management techniques.

Major accomplishments during the past fiscal year include the following:

- Facilitated four San Mateo Public Works Supervisors/Municipal Maintenance Subcommittee meetings and three Parks Maintenance and Integrated Pest Management (IPM) Work Group meetings.
- Conducted the 15th Annual Maintenance Workshop that was attended by 75 public works, facilities, and parks maintenance supervisors and field staff. Based on an evaluation survey completed by attendees, all 49 respondents indicated that the workshop met their expectations.
- Conducted the 8th Annual Parks Maintenance and IPM Workshop attended by 67 people. Most of the workshop's attendees reported that the workshop met their expectations.
- Tracked records for street sweeping, maintenance of storm drainage facilities, and removal of leaf and litter in order to evaluate effectiveness and document improvements in best management practices (BMPs).

Industrial and Illicit Discharge Controls

The primary goals of this component parallel the requirements of the Clean Water Act as follows:

- To effectively prohibit the discharge of non-stormwater (illicit) discharges to the municipal storm drain system.
- To control the discharge of pollutants in stormwater from commercial and industrial businesses to the maximum extent practicable.



The following major accomplishments were achieved last fiscal year:

- Adapted for Program use ACCWP's *Tips for a Cleaner Bay* best management practices (BMPs) booklet that is applicable to any business. Copies of the booklet were printed in English and Spanish, and this booklet is a feature topic on the Program's website (www.flowstobay.org).
- Held stormwater orientation training for 27 municipal staff members.
- Prepared orientation materials in a binder for participants in the orientation training. These training materials are also available on the Program's website, www.flowstobay.org.
- Prepared a four-page fact sheet that summarizes the Program's successes in FY 2006/07. The fact sheet summarizes concisely what the Program does and what it is accomplishing. The fact sheet has been used to provide educational outreach to the public and elected officials.
- Evaluated potential stormwater funding options by contracting with HF&H Consultants to prepare a report that reviews funding sources that may be available to municipalities. The report describes existing and potential funding sources for municipal stormwater activities, restrictions, and specific examples of use of these funding sources by other agencies.
- Continued to conduct stormwater inspections and provide educational outreach to businesses in FY 2007/08, as part of the effort to re-inspect high priority businesses annually and inspect other businesses that impact stormwater quality at least once every five years. The total number of inspections in FY 2007/08 (2,332) was a little higher than the average number of annual inspections (2,124) reported during the five years preceding last fiscal year. The total number of inspections conducted during the last six years (12,951) is about one-third higher than the total number inspected during the preceding six-year period (9,488).
- Approximately 10 percent of the businesses inspected in FY 2007/08 (224) had a municipal stormwater violation. The percentage of violations found last fiscal year is the same as the percent violations found during the five-year period between FYs 2002/03 through 2006/07. For reporting purposes, the CII Subcommittee defines the term violation as either the discharge of pollutants to the storm drain system because pollutants are exposed to stormwater runoff or there was a discharge to the storm drain system of non-stormwater disallowed by the NPDES permit. All of the violations except one were reportedly corrected by June 30, 2008.
- Found more illicit discharges (454) than have been found annually since FY 1997/98. There was only one illicit discharge that was reported as continuing on June 30, 2008.

Public Information and Participation

The primary goals of SMCWPPP's Public Information and Participation (PIP) component are:



- To educate the public about the causes of stormwater pollution and its serious effect on the quality of local creeks, lagoons, shorelines, and neighborhoods;
- To encourage residents to adopt less polluting and more environmentally beneficial practices; and
- To increase residents' hands-on involvement in SMCWPPP's activities.

PIP is essential for controlling pollution at the source because most pollutants originate from preventable, everyday activities. Pollutants in stormwater may be reduced by educating residents about the benefits of preventing stormwater pollution and motivating them to do their share to reduce pollution.

This approach is recognized as being both cost-effective and efficient in meeting the goal of reducing pollutants in stormwater to the maximum extent practicable.

The PIP Subcommittee met six times in FY 2007/08 to oversee the development of educational materials and to guide the implementation of countywide PIP activities.

SMCWPPP accomplished the following major public information and participation tasks during FY 2007/08:

- Continued to conduct school outreach to schools, reaching over 8,266 students through "The Water Beat" Zun Zun assembly program.
- Held a workshop for School Maintenance Supervisors and staff on reducing pollution at schools. Part of the training focused on learning about environmentally friendly cleaning and pest control products for use around schools.
- Continued the Community Action Grant Program.
- Continued to participate in the region-wide Integrated Pest Management "Our Water Our World" campaign by working with local retail stores.
- Continued to coordinate the California Coastal Cleanup Day event in collaboration with the California Coastal Commission.



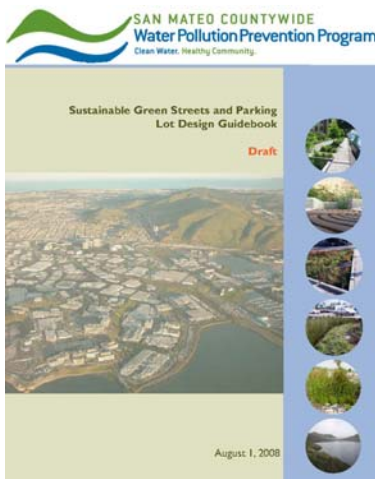
- Hosted an educational booth at the County Fair.
- Redesigned SMCWPPP's website, www.flowstobay.org, by making it more user friendly and appealing. All of the brochures are available online and monthly updates were maintained. The educational outreach provided by the website is supplemented by using public service announcements on cable television.
- Continued collaborative outreach with the Used Oil Block Grant Program and the Retail-Take Back Program of the County Household Hazardous Waste Program in Environmental Health.
- Implemented the municipalities' community outreach programs.

New Development and Construction Controls

The goal of this component is to assist municipalities in developing and adopting procedures to ensure that appropriate measures are implemented to control stormwater pollution associated with new development and significant redevelopment projects. These measures may include site planning and design techniques to mitigate stormwater impacts, BMPs and controls during construction, and BMPs and stormwater treatment measures to reduce stormwater pollutants over the life of the project.

SMCWPPP's strategies are to integrate procedures for stormwater pollution prevention and control into existing municipal review and inspection programs and to coordinate with other Bay Area programs.

SMCWPPP's primary accomplishments related to new development and construction controls during the past fiscal year included:



- The City/County Association of Governments of San Mateo County solicited a call for projects for municipalities to apply for grant funds to construct sustainable green streets and parking lot demonstration projects. Five grant recipients were selected. C/CAG also executed a contract with Nevue Ngan Associates teamed with Sherwood Design Engineers to prepare a Sustainable Green Streets and Parking Lot Design Guidebook.
- Held construction site stormwater management training workshops in collaboration with the San Francisco Estuary Project and the Santa Clara Valley Urban Runoff Pollution Prevention Program.
- Sponsored the 2008 New Development Workshop, featuring the new C.3 Technical Guidance document prepared in FY 2006/07.

- Updated an appendix to the C.3 Technical Guidance to include nine maintenance plan templates for use by project applicants that use stormwater treatment measures in their projects. The cover page of the applicable C.3 Technical Guidance appendix is included in Appendix D.
- Updated the Project Applicant Checklist for NPDES Permit requirements to include information on hydromodification management (HM) requirements, which began to be implemented in June 2007. The updated checklist is included in Appendix D.
- Reviewed two draft HM worksheets. The HM Applicability Workshop will assist municipal staff in determining whether a project needs to comply with HM requirements. The Flow Duration Control Review Worksheet will help municipal staff review submittals for projects that incorporate flow duration controls, pursuant to the HM requirements. These forms, which were based on worksheets prepared by the Alameda Countywide Clean Water Program, will be finalized in FY 2008/09.
- Coordinated with Regional Water Board staff to include an update to the HM Control Area Map in the draft municipal regional stormwater permit, for approval by the Regional Water Board. The map update incorporates newly available digitized map data that will allow the HM control area boundary to follow Assessors parcel boundaries.
- Prepared soil guidelines for landscape-based treatment measures, based on soil specification prepared by the Alameda Countywide Clean Water Program. The soil guidelines are included in Appendix D.
- Provided input to the redesign of SMCWPPP's website to improve the organization of materials related to new development, redevelopment and construction. Christina Horrisberger of Pacifica represented the NDS on the website redesign work group.
- Updated frequently used documents and forms with SMCWPPP's new name and logo.
- The NDS took a field trip in April to view stormwater treatment measures at two projects in San Francisco. A summary of the field trip is included in Appendix D.
- The following municipalities reported approximately 74 projects that created and or replaced 10,000 square feet or more of impervious surface, triggering the amended NPDES permit's Provision C.3 requirements: Belmont, Brisbane, Burlingame, Colma, Daly City, Menlo Park, Millbrae, Pacifica, Redwood City, San Carlos, San Mateo, San Mateo County, and South San Francisco. These projects incorporated a variety of BMPs.
- Approximately 64 projects incorporated vegetated swales and/or detention basins. These projects represent approximately 660 acres of new and redevelopment projects.
- SMCWPPP's municipalities are continuing to verify the operation and maintenance of stormwater treatment measures as required by the amended NPDES permit's Provision C.3.e.
- Municipalities have continued to use the Summary of Pre-Wet Season Erosion Control

Inspections Form to document the basis of the annual certification letter's determination that each active construction site has been stabilized to minimize erosion and the discharge of sediment from disturbed areas prior to the wet season. These forms can be found as Attachment E to the first half-year deliverable forms submitted by the municipalities.

- SMCWPPP continued to coordinate with the San Mateo County Mosquito Abatement District by providing information on new development projects.

Watershed Assessment and Monitoring

The goals of SMCWPPP's Watershed Assessment and Monitoring (WAM) component include:

- Characterizing creek function, health and water quality conditions in representative watersheds in San Mateo County and evaluating potential stormwater runoff impacts;
- Developing plans to address specific pollutants of concern associated with stormwater runoff, such as mercury and polychlorinated biphenyls (PCBs), and performing related special studies (e.g., to identify pollutant sources); and
- Evaluating long-term trends in water quality and thereby informing the SMCWPPP's efforts to improve the effectiveness of its BMPs to prevent or reduce stormwater runoff impacts.



SMCWPPP focuses on using integrative tools such as creek walks and bioassessments to characterize creek condition. The monitored creeks are typically receiving waters for stormwater discharges from municipal storm drain systems in watersheds with significant urban land uses. The Program also participates in regional collaborative efforts that develop information needed to improve water quality in San Francisco Bay and local watersheds in San Mateo County and throughout the Bay Area. SMCWPPP's WAM component accomplishments during FY 2007/08 are summarized below.

- Performed creek walks during fall 2007 in seven watersheds in San Mateo County – the Atherton, Redwood, Burlingame, Sanchez, Easton, Mills, and Millbrae Creek watersheds. The primary objective was to characterize physical conditions and features of creek channels and riparian corridors in the study watersheds. The creek walks were conducted using the Unified Stream Assessment (USA) protocol developed by the Center for Watershed Protection. The USA is a rapid assessment tool used to collect data on instream and riparian habitat conditions and identify possible influencing factors and opportunities for improvement.
- Prepared a guidance document for municipal stormwater programs and other interested agencies on the potential uses of the USA based on recent experience in the

Bay Area. This effort was performed in collaboration with the Santa Clara Valley Urban Runoff Pollution Prevention Program. The guidance document shows how data generated through USA surveys can address multiple stormwater program monitoring-related objectives. These include establishing baseline data, identifying the types and locations of potential impacts to water quality, identifying potential beneficial uses to protect and threats to such uses, and refining monitoring program objectives and design. USA survey data can also assist in the interpretation of existing monitoring data and the identification of appropriate stormwater BMPs and potential restoration activities.

- As a follow-up to some of the issues documented during the USA creek walks (e.g., erosion and unsound erosion control practices), SMCWPPP began to explore the potential for developing a program in San Mateo County modeled after Contra Costa County's Stream Management Program for Landowners (SMPL). Many of the impacts observed during SMCWPPP's USA creek walk surveys are associated with efforts by individual private property owners to control bank instability on their properties. Education and outreach through a program similar to SMPL could help landowners understand the impacts of such actions on creeks and potentially lead to the use of better practices in the future. One difficulty is that the activities implemented by the SMPL program are not specifically required by any of the provisions in the draft municipal regional stormwater permit. The best opportunity to fund a program similar to SMPL in San Mateo County may be to apply for grant funding.
- Used the Urban Rapid Trash Assessment (URTA) protocol to further characterize trash conditions at some of the trash accumulation sites identified during the fall 2007 USA creek walks. URTAs were performed at a total of seven of the 27 trash accumulation sites identified during the creek walks. The URTA was conducted twice at each site, once during fall 2007 and a second time during spring 2008, for a total of 14 assessments. Trash sources identified during the study included littering, dumping and accumulation from upstream sources.
- Developed a draft fact sheet that describes typical trash management activities conducted by SMCWPPP's municipalities and SMCWPPP's multi-faceted program-wide efforts to characterize trash and reduce trash levels in urban creeks.
- Reviewed the Regional Water Board's June 30, 2007 San Francisquito Creek Sediment Total Maximum Daily Load (TMDL) and Habitat Enhancement Plan Preliminary Project Report and prepared a comment letter.
- Continued to coordinate its WAM component activities with other Bay Area stormwater management agencies through the Bay Area Stormwater Management Agencies Association (BASMAA).
- Continued to provide in-kind assistance to the Bay Area Macroinvertebrate Bioassessment Information Network (BAMBI). BAMBI is developing a regional Index of Biological Integrity (IBI), which will help with classifying creek condition,



Figure 1: Watersheds and creeks identified during the USA creek walk surveys using the USA survey data.

evaluating attainment of beneficial uses in creeks, identifying stressors to creeks, and establishing water quality goals.

- Continued to participate in the San Francisco Estuary Regional Monitoring Program (RMP) by providing funding to the RMP in FY 2007/08. General Program staff also continued to represent BASMAA on the RMP Sources, Pathways and Loadings Work Group and advocated for stormwater program interests during study design, implementation and reporting. General Program staff also reviewed the RMP's draft report on 2006 fish tissue contaminant data and prepared comments and co-authored a RMP Pulse of the Estuary article on contaminant loading to Bay from local watersheds.
- Assisted Regional Water Board staff to compile selected data on San Mateo County stormwater pump stations as part of a regional data collection effort.
- Continued assisting BASMAA to participate in a Proposition 50 grant-funded project (Taking Action for Clean Water) that will develop Bay Area-specific BMPs to prevent release of PCBs from building materials into urban runoff during renovation, maintenance and demolition of structures.
- Continued to help represent BASMAA during development of the San Francisco Bay PCBs TMDL cleanup program. This included reviewing the December 2007 revised PCBs TMDL Regional Water Board staff report and Basin Plan Amendment and assisting BASMAA to prepare comments. SMCWPPP General Program staff also testified on behalf of BASMAA at Regional Water Board hearings on the PCB TMDL in September 2007 and February 2008.
- SMCWPPP's WAM Subcommittee met regularly during FY 2007/08 to oversee the WAM component's activities. The subcommittee also took a field trip to San Mateo Creek in June 2008 to observe and discuss typical trash impacts to urban creeks.

The effectiveness of WAM component efforts during FY 2007/08 should be assessed in the context of the WAM component goals described earlier. SMCWPPP's bioassessments, USA creek walks, and trash assessments in urban creeks in San Mateo County have helped define baseline water quality conditions. These data will facilitate future evaluations of long-term trends and thereby inform efforts to evaluate the overall effectiveness of SMCWPPP's stormwater pollution prevention and control BMPs. These data also potentially help identify impairment problems and pollutant sources, a first step in selecting new BMPs to prevent or reduce stormwater runoff impacts throughout San Mateo County. For example, SMCWPPP's trash assessments help identify sources of trash at accumulation sites in urban creeks, and therefore will inform the development of new or improved BMPs to address trash in urban creeks. In addition, SMCWPPP's participation in regional monitoring efforts (e.g., the RMP) assists TMDL development, especially those TMDLs focusing on improving water quality in San Francisco Bay.

SMCWPPP's WAM component will continue to focus on watershed-related activities, specific pollutants of concern such as trash, and regional collaboration during FY 2008/09. A principle

focus next year will be to conduct pilot work to evaluate potential sources of trash to urban creeks and control measures. This increased emphasis on developing trash and litter BMPs is intended to assure continued compliance with Provision C.1 of SMCWPPP's NPDES permit and to respond to the high priority that Bay Area communities place on addressing trash and litter in creeks and other waterways.

To the extent possible, all WAM component activities will be planned and conducted in coordination with the ongoing development of the municipal regional stormwater permit. In preparation for implementing this permit, SMCWPPP will continue to support and participate in development of a regional monitoring collaborative among Bay Area stormwater agencies. SMCWPPP will also continue to participate in existing regional collaborative monitoring programs in the Bay Area such as BAMBI and the RMP.

**FIGURE 1-1: SAN MATEO COUNTYWIDE WATER POLLUTION PREVENTION PROGRAM
ORGANIZATIONAL STRUCTURE AND MEETINGS**

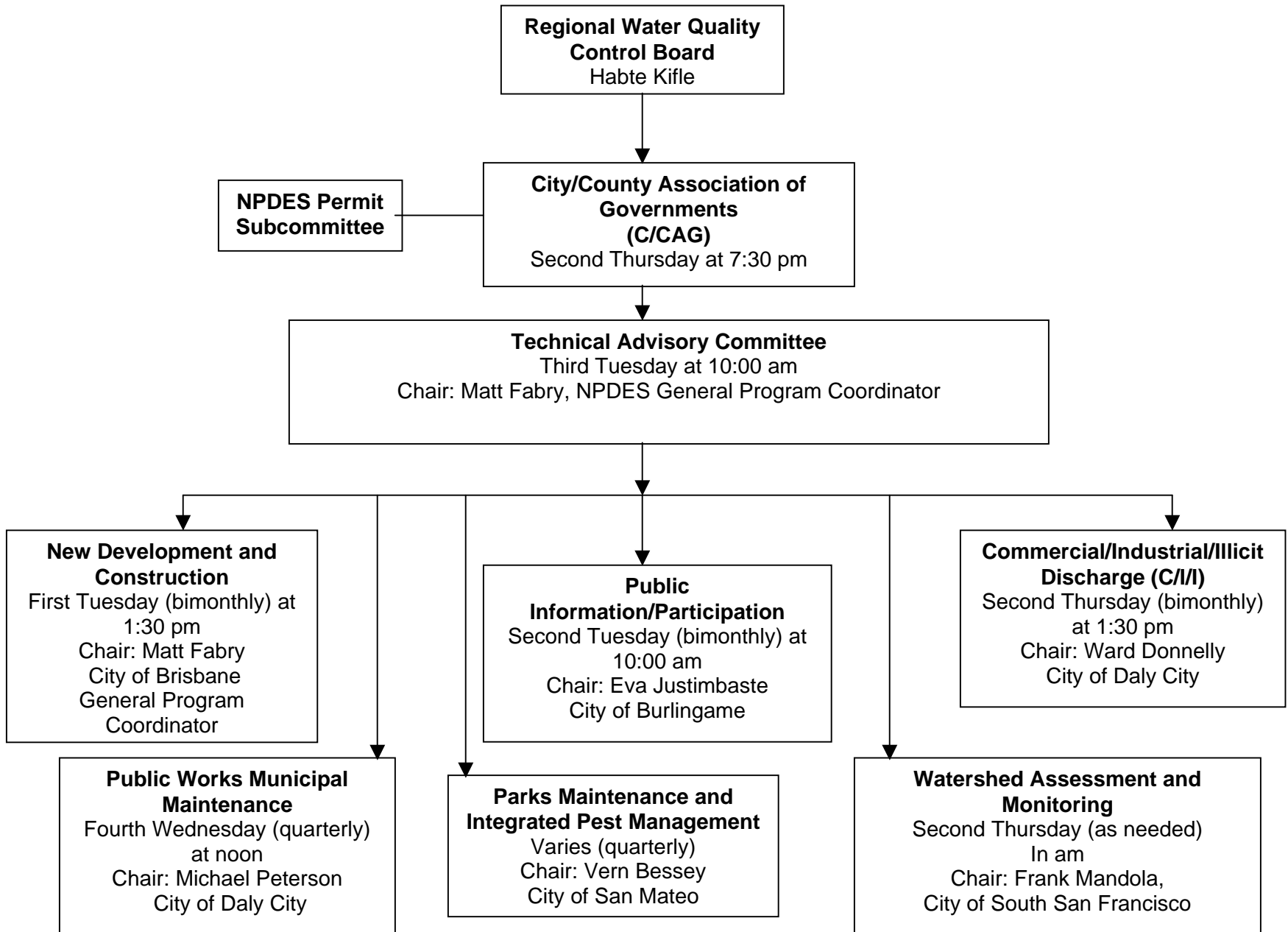


Table 1-1. SMCWPPP Submittals for the FY 2007/08 Annual Report

Agency	Deliverable Report Forms		Certification Letter*	Monthly Maintenance Forms		Illicit Discharge Quarterly Reports	
	1 st Half	2 nd Half		1 st Half	2 nd Half	1 st Half	2 nd Half
Atherton	✓	✓	Duncan Jones	✓	✓	✓	✓
Belmont	✓	✓	Karen Borrmann	✓	✓	✓	✓
Brisbane	✓	✓	Matthew Fabry	✓	✓	✓	✓
Burlingame	✓	✓	Syed Murtuza	✓	✓	✓	✓
Colma	✓	✓	Phil Scramaglia Muneer Ahmed	✓	✓	✓	✓
Daly City	✓	✓	Patrick Sweetland	✓	✓	✓	✓
East Palo Alto	✓	✓	Lucy Chen	✓	✓	✓	✓
Foster City	✓	✓	Norman Dorais	✓	✓	✓	✓
Half Moon Bay	✓	✓	Charles Voos	✓	✓	✓	✓
Hillsborough	✓	✓	Dave Bishop	✓	✓	✓	✓
Menlo Park	✓	✓	Jennifer Ng	✓	✓	✓	✓
Millbrae	✓	✓	Khee Lim	✓	✓	✓	✓
Pacifica	✓	✓	Van Dominic Ocampo	✓	✓	✓	✓
Portola Valley	✓	✓	Howard Young	✓	✓	✓	✓
Redwood City	✓	✓	Larry Barwacz	✓	✓	✓	✓
San Bruno	✓	✓	Jane Chambers Steven Davis	✓	✓	✓	✓
San Carlos	✓	✓	Mark Weiss	✓	✓	✓	✓
San Mateo, City of	✓	✓	Vern Bessey Larry Patterson	✓	✓	✓	✓
San Mateo County	✓	✓	Dean Peterson	✓	✓	✓	✓
South San Francisco	✓	✓	Cassie Prudhel	✓	✓	✓	✓
Woodside	✓	✓	Gratien Etchebehere	✓	✓	✓	✓

✓ = Municipality submitted all or most of the forms.

N/A = Not applicable.

* Construction certification letters are typically signed by different staff than the person responsible for certifying overall deliverable reports. Refer to each municipality's deliverables for information about construction certification letters.

2

MUNICIPAL GOVERNMENT MAINTENANCE ACTIVITIES

INTRODUCTION

The goals of this component are:

- To maximize the removal of pollutants while sweeping streets, cleaning storm drain inlets, and conducting other routine maintenance activities.
- To minimize non-stormwater discharges to storm drains and watercourses from maintenance-related activities.

Educational outreach to local maintenance staff is conducted primarily through regular public works and parks supervisors meetings and two annual training workshops for supervisors and field staff. One of these annual workshops is focused on park maintenance and the use of integrated pest management.

ACCOMPLISHMENTS

Major accomplishments during the past fiscal year include the following:

- Facilitated four San Mateo Public Works Supervisors/Municipal Maintenance Subcommittee meetings and three Parks Maintenance and Integrated Pest Management (IPM) Work Group meetings.
- Conducted the 15th Annual Maintenance Workshop that was attended by 75 public works, facilities, and parks maintenance supervisors and field staff. Based on an evaluation survey completed by attendees, all 49 respondents indicated that the workshop met their expectations.
- Conducted the 8th Annual Parks Maintenance and IPM Workshop attended by 67 people. Most of the workshop's attendees reported that the workshop met their expectations.
- Tracked records for street sweeping, maintenance of storm drainage facilities, and removal of leaf and litter in order to evaluate effectiveness and document improvements in BMPs.

Participation and Coordination with the Municipal Maintenance Subcommittee

The San Mateo Public Works Supervisors/Municipal Maintenance Subcommittee (Municipal Maintenance Subcommittee) held its regular meetings to share information about current maintenance activities, methods to optimize pollutant removal, and BMPs to minimize non-stormwater discharges to storm drains.

Craig Centis from Millbrae presided as chair during the first half of FY 2007/08 and Daly City's Michael Peterson has chaired the subcommittee since January 2008. Most municipalities (see Appendix A) routinely participated in these subcommittee meetings.

Fifteenth Annual Maintenance Workshop

The Fifteenth Annual Maintenance Workshop was held at the Green Business Exchange in Redwood City on June 26, 2008. A planning work group comprised of Daly City's Michael Peterson; Craig Centis, City of Millbrae; James Hardie, City of South San Francisco; and Louis Gotelli, City of Colma, helped to plan this training. This planning work group assisted with developing the agenda, contacting speakers, and identifying equipment vendors.

Seventy-five municipal maintenance supervisors and field staff attended the workshop. Attendees identified the following categories of maintenance work as their responsibility:

1. Storm drain system maintenance (32 responses);
2. Sanitary sewer maintenance (23 responses);

3. Paving and road repair (22 responses);
4. Litter pick-up (17 responses);
5. Facilities maintenance (8 responses);
6. Maintenance supervisor (8 responses);
7. Sweeper operators (6 responses); and
8. Parks maintenance (5 responses).

All of SMCWPPP's municipalities, except four, were represented at the workshop. Based on an evaluation survey, 49 respondents reported that the workshop met their expectations and three did not respond to this question. In addition, almost all of the attendees who completed the survey reported that they would be interested in attending a similar workshop next year. Appendix A contains a copy the workshop agenda, list of attendees, and a summary of the evaluation forms.

The following summarizes some of information presented at the workshop.

City of Long Beach's Trash and Litter Control Program

One of the key speakers at the workshop was Tom Leary, Stormwater Program Officer from the City of Long Beach. The city has an award-winning litter abatement program. The City of Long Beach's Parks, Recreation, and Marine Department cleans up about 4,500 tons of trash per year from its four miles of beach. Most of this material comes from the Los Angeles River. About 60 percent is composed of green wastes and the rest includes a lot of plastics and Styrofoam. The city uses education, source control, and structural controls to limit the amount of trash, and

Mr. Leary believes that they need to be doing more enforcement.

The city spent \$841,000 to install 1,904 inserts on 529 of its 3,872 storm drain inlets. One product used is the “Smart Sponge©” manufactured by Ab Tech Industries. The basket like device kills some bacteria and collects trash, and it takes about 45 minutes to install. The installed inserts have been capturing about 90,000 lbs per year of trash, litter, and sediment. The city’s public works webpage contains a study on the effectiveness of these inserts. Another structural control used is Vortex Separation systems that are installed under streets. At the city’s five stormwater pump stations the city installed trash net collection systems that cost about \$2,300,000. The city also installed a boom across part of the Los Angeles River, and this boom collects about 100 tons of trash per year.

The city has also undertaken projects to try to change litter and trash generating behavior. It is important to make polluting Long Beach socially unacceptable. One of these projects is called EcoZone, which includes installing signs in the public right of way about not polluting. In addition, the signs generate advertising revenue for the city’s environmental projects.

Oakland’s Garbage Cops

The City of Oakland’s litter enforcement officers (“garbage cops”) discussed their formation in 2001 to handle the out of control illegal dumping in Oakland.

There are eight officers who work in two shifts. The city’s ordinance allows prosecution against an illegal dumper if three addressed letters are found in the illegally dumped material.

The officers have also cracked down on illegal haulers of trash, people that are paid to remove trash, but do not have a contractor’s license. If you hire someone to haul trash and the trash is disposed illegally, you are responsible.

The officers also spend time educating the public, and there has been an increase in the public’s reporting of illegal dumping.

New Sewer Spill Reporting and Remediation Requirements

Gary Batis from the City of South San Francisco provided information about the new requirements for reporting sanitary sewer overflows. Municipal staff has up to two hours to report any sanitary sewer spill that reaches a waterway or is over 1,000 gallons. The report must go to the Office of Emergency Services, the Regional Water Quality Control Board, and the Department of Environmental Health. Spills that are less than 1,000 gallons and do not reach waterways must be reported electronically within 24 hours.

Cities need to contain and clean up spills as much as possible. Municipal staff needs to have training on spill response and have spill control materials readily available. He believes that reporting requirements similar to sanitary sewer spill reporting requirements will also eventually apply to stormwater.

Facilitated Parks Maintenance and IPM Work Group

The work group, which was chaired by the City of San Mateo’s Vern Bessey, met three times. Participation on the work group declined during last year. In FY 2007/08 only ten agencies attended one or more work group meetings

(Appendix A) compared with 17 in FY 2006/07 and 18 in FY 2005/06.

Discussion topics were broadened two years ago to include parks maintenance as well as IPM methods. One of the recurring topics has been the proposed requirements contained in the draft municipal regional stormwater permit. In addition, the subcommittee provided suggestions on possible locations of a bayside, countywide demonstration project for sustainable, green streets and parking lots. Staff from the County's Agriculture Department continued to provide regulatory guidance on pesticide use and safe application practices.

Eighth Annual Park Maintenance and Integrated Pest Management Workshop

SMCWPPP's annual Park Maintenance and IPM workshop was held on February 28, 2008 at the Green Building Exchange in Redwood City. Sixty-seven people representing 14 municipalities attended the workshop. The 2008 workshop showed a decline in participation compared with the 91 attendees from 18 municipalities who attended in 2007 and the 94 attendees from 20 municipalities who attended in 2006.

Among the 39 workshop attendees who completed an evaluation form, 31 indicated that the workshop met their expectations; two indicated that it "kind of" met their expectations; one reported that it did not, and six did not respond. One of the complaints about the workshop is that the number of credit hours for pesticide applicators was reduced from 3 to 2 hours as the workshop attempted to deal with a broader range of park maintenance topics than previous workshops.

Appendix A contains a copy of the workshop agenda, attendance list, and a summary of the evaluation forms.

The following summarizes briefly some of the information presented at the workshop.

Aquatic Vegetation Management

Dave Najera from Aquatic Environments and the maintenance contractor for the City of San Mateo's Marina Lagoon described their multifaceted biological approach to managing excessive aquatic vegetation. He does not believe in trying to create sterile aquatic systems with chemicals.

Part of his approach is to harvest aquatic plants that grow excessively. In local lagoons this requires harvesting two to four times during a three-month period each year. They also need to start treating Marina Lagoon with chemicals in April. The location of herbicide applications is tracked using GPS.

The biggest nuisances are caused by non-native aquatic weeds. Widgeon grass likes brackish water, and it can help to promote good water quality when it does not proliferate to nuisance levels. Mr. Najera believes that aquatic vegetation can be managed correctly with a minimal amount of chemical use.

In Alameda County Aquatic Environments used tilling to destroy the root crown of tules so that the county could then establish a regular maintenance program. To control *Arundo donax* the first step is to mow this giant reed and the second step is to apply a small amount of herbicide.

Mr. Najera emphasized the need to be proactive instead of reactive in

managing aquatic vegetation. There will be less vegetation to control if preventative measures are used. In some freshwater situations *Nytella* can be encouraged to grow, and it dominates other types of aquatic vegetation and provides clean water.

Creek Maintenance

Julie Casagrande from San Mateo County's Public Works Department provided information about how the county maintains creeks that often contain endangered species. Generally, the county does not apply herbicides for vegetation control on the coastside because of the prevalence of endangered species. It has used mechanical methods to control cattails in some channels, and nonviolent criminal offenders have helped to provide the labor needed to implement these controls. It can take up to two years to obtain the necessary permits to remove excessive vegetation and sediment from flood control channels. The county believes it would be more efficient to obtain a programmatic permit instead of individual permits for each project.

The county has created a maintenance standards manual, and this year it is completing a report on goals for fish habitat restoration. One of the challenges is enhancing fish habitat while protecting county roads. The county has installed a fish friendly culvert in a county park in Woodside.

Enforcement Response Policy

Jerry Ade from the County Agricultural Commissioner's Office provided information about their pesticide use violations' enforcement response plan that they follow. The plan requires progressively more severe enforcement for repeat violations. The question and

answer portion of the presentation was particularly helpful to parks maintenance staff that are responsible for the safe use of pesticides.

Use of Synthetic Sports Fields

Peter Vorametsanti from the City of Redwood City provided information about the pros and cons of using synthetic sports fields. The city uses synthetic turf to save on water and allow more usage. His experience is that the amount of soccer play that can be accommodated on synthetic fields is two to three times greater than what natural turf fields can handle. This increase in usage has been accompanied by an approximately two to three-fold increase in the amount of trash and litter generated. Another downside to using synthetic fields is that they are hotter.

The backing of the synthetic turf allows rainwater to pass through the turf. One of the problems they have experienced is that glued seams came apart sooner than stitched seams. At one of their facilities it will be costing \$1.5 million to replace the top layer of synthetic turf after six years of use.

Coordination with Maintenance Related Activities by Others

The Municipal Maintenance Subcommittee tries to improve communication and coordination with other agencies responsible for maintenance. During FY 2007/08 the San Francisco International Airport's maintenance staff was the focus of increased communication. San Francisco International Airport's Bay Area Pollution Prevention Compliance Manager, Charlie Freas, presented information at the January 2008 Municipal Maintenance Subcommittee meeting about the challenges posed in

preventing pollution at the airport.

One of the unique aspects of the airport is that dry weather runoff and first flush stormwater that is collected around the terminal areas flows to detention basins and then is treated at the airport's industrial wastewater treatment plant prior to being discharged to the bay. Stormwater from the eastern runways flows directly to the bay without treatment.

Street Sweeping and Maintenance of Storm Drainage Facility Records

The municipalities provided information on their Municipal Government Maintenance Activities Monthly Record Keeping Forms on street sweeping and maintenance of storm drainage facilities and watercourses. Municipalities continued to use the agreed upon monthly maintenance forms to provide the information.

Leaf Removal and Litter Control

Table 2-1 summarizes the volume of leaves and litter removed from each municipality. Municipal personnel collected about 15,700 cubic yards and 77 tons of litter and about 5,800 cubic yards and 210 tons of leaves. Documentation of the amount of leaves removed is challenging because leaves are generally mixed with debris from street sweeping and storm drain system cleaning or with turf clippings, tree pruning and other green wastes. A large amount of leaf and other green wastes that are collected by the local waste pick up and recycling companies is not reported by the municipalities.

Storm Drainage Facilities and Watercourses

Information on the municipalities' inspecting and cleaning of storm drain

inlets, V-ditches, drain lines, channels, creeks, culverts, junction boxes and pump stations is summarized in Table 2-2. Other storm drainage facilities were also inspected and/or cleaned. Overall, approximately 5,500 cubic yards and about 140 tons of material were cleaned from storm drainage facilities.

Street Sweeping

A summary of street sweeping data, including the volume of material removed and miles swept by each municipality in FY 2007/08, is provided in Table 2-3. About 148,000 curb miles were swept, removing about 26,000 cubic yards and about 840 tons of material.

ASSESSMENT OF EFFECTIVENESS

Completion of SWMP Tasks

The General Program has completed all of the municipal maintenance tasks scheduled for FY 2007/08.

Effectiveness

Municipal maintenance staff help reduce litter, trash, leaves, and other pollutants by sweeping streets, cleaning storm drain conveyances, and implementing stormwater pollution prevention BMPs while performing routine maintenance, such as road repair and maintaining storm drains.

As mentioned above, maintenance crews removed about 26,000 cubic yards and 840 tons of material during street sweeping and about 5,500 cubic yards and 140 tons during storm drain cleaning that otherwise would have had an opportunity to be discharged to local creeks and the bay or ocean.

Trash and litter collection yielded about

15,700 cubic yards and 77 tons of trash and litter and about 5,800 cubic yards and 210 tons of leaves. The volume of trash and litter reportedly collected last fiscal year was the highest since FY 1998/99. There does not appear to be any overall trend in the amount of cubic yards of trash and litter reportedly collected during the past ten years considering the large amount of variability in the data.

Trends in Reported Amounts of Litter Removed
Table 2-4

Fiscal Year	Trash and Litter	
	Cubic yards	tons
2007/08	15,733	77
2006/07	13,712	41
2005/06	13,572	62
2004/05	10,478	51
2003/04	14,774	42
2002/03	14,868	85
2001/02	5,579	13
2000/01	9,102	0
1999/00	9,753	0
1998/99	16,064	7

A municipality's ability to increase the amount of pollutants removed depends partially on factors that it controls, such as the frequency of storm drain inlet inspection/cleaning and targeting of sweeping/litter removal efforts in areas that generate a high pollutant load.

Other factors that influence the effectiveness of pollutant removal are not under a jurisdiction's control, such as when and how much it will rain. Although maintenance activities can be effective at removing pollutants, the costs and timing of these activities are practical considerations. In some instances, pollution prevention alternatives may be more cost effective.

FUTURE ACTIONS

- Meet up to four times with the Municipal Maintenance Subcommittee and up to four times with Parks Maintenance and IPM Work Group to share information and disseminate material to field staff regarding stormwater pollution prevention and control.
- Assist municipal maintenance staff to understand and participate in the process for commenting on the municipal maintenance requirements that will be included in the revised draft, municipal regional stormwater permit.
- If the municipal regional stormwater permit is adopted this fiscal year, the Program will initiate the process for helping municipalities to comply with new maintenance-related permit requirements.
- Hold the municipal maintenance and the Parks Maintenance and IPM training workshops.
- Continue to coordinate with maintenance related activities conducted by other agencies, such as the San Francisco Public Utilities Commission, the San Francisco International Airport, and Caltrans.

Table 2-1. FY 2007/08 Summary of Leaf Removal and Litter Control

Municipality	Leaf Removal		Litter Control			
Atherton	74	yd ³	0	bags	144	yd ³
Belmont	0	yd ³	0	bags	37	tons
Brisbane	8	yd ³	0	bags	539	yd ³
Burlingame*	332	yd ³	0	bags	914	yd ³
Colma	45	yd ³	23.5	bags	244	yd ³
Daly City	0	yd ³	0	bags	1,004	yd ³
East Palo Alto	155	tons	0	bags	0	yd ³
Foster City	69	yd ³	0	bags	0	yd ³
Half Moon Bay	612	yd ³	0	bags	45	yd ³
Hillsborough	148	yd ³	0	bags	540	yd ³
Menlo Park	0	yd ³	0	bags	1,283	yd ³
Millbrae	30	yd ³	0	bags	162	yd ³
Pacifica	0	yd ³	0	bags	3,460	yd ³
Portola Valley	0	yd ³	0	bags	1,039	yd ³
Redwood City	1,124	yd ³	0	bags	1,796	yd ³
San Bruno	1,017	yd ³	0	bags	66	yd ³
San Carlos	73	yd ³	0	bags	41	tons
San Mateo, City of	57	tons	0	bags	1,645	yd ³
San Mateo County	2,291	yd ³	1	bags	1,304	yd ³
South San Francisco	0	yd ³	0	bags	1,550	yd ³
Woodside	0	yd ³	0	bags	0	yd ³
TOTAL	5,822	yd³	25	bags	15,733	yd³
	212	tons			77	tons

Notes:

Some municipalities include leaf debris and/or litter in their street sweeping debris total. Portola Valley figures include residential curb-side pickup of green waste for recycling.

The amount of leaves collected by municipal staff and reported in Table 2-1 is only a tiny portion of the total volume being collected. Allied Waste collects green yard wastes, including grass clippings, brush prunings, and leaves, for the eleven municipalities who are members of South Bayside Waste Management Authority (Atherton, Belmont, Burlingame, East Palo Alto, Foster City, Hillsborough, Menlo Park, Redwood City, San Carlos, and San Mateo County).

*In FY 2007/08 Burlingame hired a full-time maintenance worker to pick up litter and do other cleaning in its downtown area.

Table 2-2. FY 2007/08 Summary of Material Removed From Municipal Storm Drainage Facilities

Municipality	No. of Storm Drain Inlets in Municipality	No. of Inlets ¹ Inspected	No. of Inlets ¹ Cleaned	Other Facilities Inspected and/or Cleaned							Total Volume Removed	
				V-Ditch	Storm Drain Lines	Channels	Creeks	Culverts ²	Junction Boxes	Pump Stations	(yd ³)	(tons)
				(miles)	(miles)	(miles)	(miles)	(linear feet)	(no.)	(no.)		
Atherton	198	695	340	---	---	33.8	---	528	---	---	138	0
Belmont	1,410	2,605	615	46.5	25.3	0.4	7.5	800	4.0	52	132	0
Brisbane	410	795	660	0.2	---	0.1	---	1300	1.0	---	100	138
Burlingame	1,100	953	833	0.9	---	0.8	0.1	---	---	60	431	0
Colma	185	31	31	---	---	---	---	---	---	---	1	0
Daly City	1,850	1,923	230	---	---	1.4	---	---	---	---	250	0
East Palo Alto	437	0	0	---	---	---	---	---	---	---	0	0
Foster City	1,275	0	0	---	---	---	---	814	---	---	30	0
Half Moon Bay	70	621	94	16.0	6.0	---	10.0	380	---	---	29	0
Hillsborough	646	341	341	0.2	0.4	---	---	---	190.0	---	125	0
Menlo Park	704	1,483	386	---	2.0	0.0	2.9	---	25.0	20	69	0
Millbrae	623	2,352	2,110	12.8	2.6	14.2	17.9	10,351	10.0	29	1,023	0
Pacifica	986	1,717	1,717	---	---	1.3	---	---	---	---	629	0
Portola Valley	264	293	108	28.9	---	---	---	207	---	---	32	0
Redwood City ³	2,685	1,153	2,765	0.1	2.6	---	2.6	4,800	---	204	1,205	0
San Bruno	950	1,194	1,194	---	3.8	---	---	---	2.0	2	74	0
San Carlos	701	4,120	1,680	0.9	3.6	1.9	0.4	2	---	19	322	0
San Mateo, City of	5,000	0	2,909	---	3.5	---	13.5	---	---	37	98	0
San Mateo County	1,136	2,488	1,442	31.7	24.8	13.0	45.1	7,478	121.0	14	591	0
South San Francisco	1,500	10,477	4,014	60.0	24.5	---	4.8	39,600	40.0	105	250	0
Woodside	350	60	51	8.8	---	---	---	---	---	---	0	0
TOTAL	22,480	33,301	21,520	207	99.0	66.8	104.7	66,260	393	542	5,527	138

NOTES:

1. Inlets include conduits, curb inlets/outlets (convey stormwater around street corners), as well as storm drain inlets.
2. Culverts include cross-culverts and pipes.

Table 2-3. FY 2007/08 Summary of Street Sweeping Activities

Municipality	Curb Miles of Street In Municipality	Material Removed		Curb Miles Swept (miles)	Removal Rate (yd ³ /miles swept)
		(yd ³)	(tons)		
Atherton	10	111	0	724	0.15
Belmont	162	419	0	4,750	0.09
Brisbane	48	144	26	901	0.16
Burlingame	140	3,645	0	13,120	0.28
Colma	14	253	0	327	0.77
Daly City	374	2,456	0	19,628	0.13
East Palo Alto	76	0	406	9,119	0.00
Foster City	109	593	0	4,567	0.13
Half Moon Bay	68	414	0	2,583	0.16
Hillsborough ¹	140	0	0	0	0.00
Menlo Park	140	3,813	0	5,753	0.66
Millbrae	110	1,215	0	7,020	0.17
Pacifica	178	1,212	0	8,575	0.14
Portola Valley	43	141	0	216	0.65
Redwood City	350	2,202	405	9,003	0.24
San Bruno	176	1,860	0	4,304	0.43
San Carlos	166	635	0	4,900	0.13
San Mateo, City of	570	2,386	0	16,499	0.14
San Mateo County	640	3,315	0	13,631	0.24
South San Francisco	252	1,633	0	21,941	0.07
Woodside	86	0	0	0	#DIV/0!
TOTAL	3,852	26,444	836	147,563	

Notes:

¹ The rural nature of Hillsborough precludes street sweeping.

3

INDUSTRIAL AND ILLICIT DISCHARGE CONTROLS

INTRODUCTION

The primary goals of this component parallel the requirements of the federal Clean Water Act as follows:

- To effectively prohibit the discharge of illicit, non-stormwater discharges to the municipal storm drain system.
- To control the discharge of pollutants in stormwater from commercial and industrial businesses to the maximum extent practicable.

General Program and municipality-specific accomplishments under the "Industrial and Illicit Discharge Controls" section of the SWMP are described in this section of the annual report. The Commercial/Industrial/Illicit Discharge (CII) Subcommittee guides SMCWPPP's implementation of this component.

Ward Donnelly from the City of Daly City continued to preside as chair of the CII Subcommittee during FY 2007/08. The municipalities that attended the majority of the subcommittee's meetings include staff from the Cities of Belmont,

Brisbane, Burlingame, Daly City, Menlo Park, Millbrae, San Mateo and South San Francisco and the unincorporated San Mateo County. Dermot Casey from the County of San Mateo Health Services Agency, Environmental Health Services Division (County Environmental Health), represented San Mateo County and most of the cities for which the county conducts business inspections. A complete list of subcommittee attendees is contained in Appendix B.

The CII Subcommittee's Training Work Group developed educational outreach materials. This work group included the following members:

1. Eva Justimbaste, City of Burlingame;
2. Catherine Allin, City of Millbrae;
3. Dermot Casey, County of San Mateo.
4. Sarah Pratt, County of San Mateo and the Program's public information and participation consultant.

ACCOMPLISHMENTS

The following major accomplishments were achieved last fiscal year:

- Adapted for Program use ACCWP's *Tips for a Cleaner Bay* best management practices (BMPs) booklet that is applicable to any business. Copies of the booklet were printed in English and Spanish, and this booklet is a feature topic on the Program's website www.flowstobay.org.
- Held stormwater orientation training for 27 municipal staff members.
- Prepared orientation materials that were distributed in a binder to participants in the orientation training. These training materials have also been added to the Program's website.
- Prepared a four-page fact sheet that summarizes the Program's successes in FY 2006/07. The fact sheet summarizes concisely what the Program does and what it is accomplishing. The fact sheet has been used to provide educational outreach to the public and elected officials.
- Evaluated potential stormwater funding options by contracting with HF&H Consultants to prepare a report that reviews funding sources that may be available to municipalities. The report describes existing and potential funding sources, restrictions, and specific examples of use of these funding sources by other agencies.
- Continued to conduct stormwater inspections and provide educational outreach to businesses in FY 2007/08, as part of the effort to re-

inspect high priority businesses annually and inspect other businesses that impact stormwater quality at least once every five years. The total number of inspections in FY 2007/08 (2,332) was a little higher than the average number of annual inspections (2,124) reported during the five years preceding last fiscal year. The total number of inspections conducted during the last six years (12,951) is about one-third higher than the total number inspected during the preceding six-year period (9,488).

- Approximately 10 percent of the businesses (224) inspected in FY 2007/08 had a municipal stormwater violation. The percentage of violations found last fiscal year is the same as the percent violations found during the five-year period between FYs 2002/03 through 2006/07. For reporting purposes, the CII Subcommittee defines the term violation as either the discharge of pollutants to the storm drain system because pollutants are exposed to stormwater runoff or there was a discharge to the storm drain system of non-stormwater disallowed by the NPDES permit. All of the violations except one were reportedly corrected by June 30, 2008.
- Found more illicit discharges (454) than have been found annually since FY 1997/98. There was only one illicit discharge that was reported as continuing on June 30, 2008.

Tips for a Cleaner Bay BMPs Booklet

SMCWPPP obtained permission from ACCWP to adapt the ACCWP's new *Tips for a Cleaner Bay* BMPs booklet for local use. The CII Subcommittee's

Training Work Group coordinated with the Program's Public Information and Participation Subcommittee to tailor this booklet.

The purpose of this booklet is to provide businesses with basic information about stormwater pollution prevention practices and BMPs. Business inspectors like having user-friendly booklets describing BMPs that can be distributed to business owners and operators. The booklet presents information about BMPs using simple illustrations and concise text.

Tips for a Cleaner Bay also includes BMPs for controlling the release of mercury from fluorescent lamps, manometers, switches, and batteries, and BMPs for controlling trash and litter. This emphasis on implementing better controls on trash and litter reflects the increased emphasis the Program and its municipalities have placed during the past two years on better controlling trash and litter. The increased emphasis on trash and litter BMPs is intended to assure continued compliance with the NPDES permit's Provision C.1 and to respond to the importance placed by the community in controlling trash and litter that ends up in waterways.

Similar to the *Vehicle Service Facilities* BMPs booklet produced in FY 2006/07, the *Tips for a Cleaner Bay* includes a comprehensive list of local telephone numbers for contacting stormwater business inspectors, the Certified Unified Program Agency (CUPA), and local sanitary sewer treatment authorities. In addition, the booklet includes County Environmental Health's new telephone number.

Four thousand copies of the *Tips for a Cleaner Bay* were printed in English and

2,000 in Spanish. This number was based on an estimate of the amount needed to be able to distribute the booklet to businesses for at least two years.

In June 2008 copies of the booklet were divvied up among the municipalities for business inspectors to distribute to business owners and operators during inspections. In addition, this booklet is a featured topic on the Program's website.

Lastly, the booklet was printed using a green business, and the booklet encourages businesses to consider becoming a green business.

Orientation Training

For the second year in a row the Program sponsored a stormwater orientation training workshop for new staff and existing staff that need a basic primer on stormwater pollution prevention and control. The training included information about the materials and procedures that the Program has developed with the municipalities to help achieve permit compliance. The FY 2007/08 training attracted 27 municipal staff (Appendix B).

Fact Sheet Describing Program's Successes

The Program prepared a fact sheet (Appendix B) that summarizes the Program's successes in FY 2006/07. The fact sheet is intended to give the public and elected officials a concise summary about what the Program is and what it is accomplishing. The CII Subcommittee's Training Work Group developed the fact sheet with input from the Public Information and Participation Subcommittee. The Technical Advisory Committee approved the fact sheet for

distribution and posting on the Program's website, www.flowstobay.org.

Prepared Stormwater Program Funding Options Report

The Program contracted with HF&H Consultants to evaluate potential stormwater funding options. This work included HF&H Consultants' preparation of a report completed in June 2008 that describes existing and potential funding sources, restrictions, and specific examples of other agencies' use of these funding sources. The report (excerpts included in Appendix B) concludes, in part, the following: "Surveys indicate the public is unwilling to pay fees directly for stormwater requirements. Significant lead time (i.e., multiple years rather than months) is required to try to secure these funds with no guarantee of success. In the current economic environment and given the recent results of public surveys, success will probably be minimal."

Inspections and Educational Outreach to Businesses

SMCWPPP has continued to conduct stormwater inspections of businesses as part of other business inspections, such as hazardous waste storage or generation. To this end, 2,332 inspections were completed in FY 2007/08 (Table 3-1). The number of inspections conducted was a little higher than the average number of annual inspections (2,124) reported during the five years preceding last fiscal year.

Trends in Total Number of Inspections & Violations Found
Table 3-1

Fiscal Year	No. Inspections	No. Violations
2007/08	2,332	224
2006/07	2,059	238
2005/06	2,513	169
2004/05	1,906	227
2003/04	2,137	253
2002/03	2,004	198
2001/02	1,849	Not reported
2000/01	1,109	Not reported
1999/00	1,142	Not reported
1998/99	1,079	Not reported
1997/98	1,500	Not reported
1996/97	2,809	Not reported
1995/96	1,699	Not reported
1994/95	918	Not reported

The number of inspections conducted annually during the last six years (2,159 inspections per year average) is about one-third higher than the 1,581 inspections per year average conducted during the preceding six-year period from FYs 1996/97 to 2001/02. Most of the increase in the number of inspections is attributable to increases accomplished by the County Environmental Health's food facility inspectors. Due to the efforts of County Environmental Health staff during the last six years, stormwater compliance was more routinely integrated into food facility inspections than in previous years.

The number of violations found during business inspections has been tracked for the last six years. For reporting purposes the CII Subcommittee agreed that the term violation would be defined as either the discharge of pollutants to the storm drain system because pollutants are exposed to stormwater runoff or a discharge to the storm drain system of non-stormwater disallowed by

SMCWPPP's NPDES permit. During this five year period about 10% of the businesses inspected had at least one violation. About 10% of the businesses inspected in FY 2007/08 showed a violation. The percentage of businesses with violations has varied annually between 7% in FY 2005/06 to 12% in FYs 2002/03, 2004/05, and 2006/07.

Similar to previous years, County Environmental Health and municipal inspectors continued to provide educational outreach during stormwater inspections by discussing the Program's requirements with each facility's representative and by distributing a variety of BMP materials, including the recently adapted *Tips for a Cleaner Bay* and the *Vehicle Service Facilities* BMP booklets.

Identification and Elimination of Illicit Discharges

More illicit discharges (454) were found in FY 2007/08 than had been found since FY 1997/98. The annual average number of illicit discharges found during the nine years preceding last fiscal year was 285.

As shown in Table 3-3, many municipalities conducted field investigations of their storm drainage system to look for illicit discharges. This proactive, field surveying approach to detect and eliminate illicit discharges complements the business inspections because some of the illicit discharges originate from mobile sources, residents, and businesses that are not inspected or are inspected infrequently as part of the business inspection program. In addition to municipality-led field surveys, another source of information about illicit discharges is reports from the public and other

agencies.

Field Surveys

In FY 2007/08 SMCWPPP's municipalities inspected a combined total of about 17,800 established locations. This is about 92 percent of average number reported (19,337) during the five years preceding last fiscal year.

Similar to previous years, the majority of both the established locations visited (77%) and the channel miles surveyed (77%) were located in residential areas. Of the established locations visited, approximately 87% were inlets, 4% were manholes and the rest were composed of a mix of outfalls, pump stations, junction boxes, and other locations.

Investigation of Illicit Discharge Reports and Complaints

In addition to looking for illicit discharges by conducting field surveys, member agencies also responded to reports and complaints from:

- Maintenance crews
- Other agencies
- The public

Table 3-4 summarizes the number of illicit discharge incidents found either through field surveys or by responding to calls reporting illicit discharges. Of the 454 illicit discharge incidents reported, 53% were found during field surveys, and the rest were reported through calls. During field surveys, illicit discharge inspectors found about 40% of the illicit discharges. During field surveys and as referrals, maintenance crews accounted for finding about 31% of the incidents. The public called in about 23% of the illicit discharges and 6% of the illicit discharges were reported

by other agencies.

Identification of Illicit Discharge

Materials

Table 3-5 shows that of the 454 illicit discharge incidents reported, 480 illicit discharge materials were identified. Illicit discharges sometimes consist of more than one type of material. Of the 480 illicit discharge materials identified, the most commonly found categories included:

1. washwaters (31%);
2. automotive fluids (12%);
3. sewage (11%);
4. construction materials (10%);
5. food wastes (8%);
6. paint (7%); and
7. sediment and/or silt (6%).

These seven categories account for 85% of the illicit discharge materials identified. Tracking of information on sediment and silt was initiated in FY 2006/07 as a separate category. The six categories of illicit discharges other than sediment/silt have been the most commonly found types of illicit discharges during the previous six years. Over the last six years there are also similarities in the frequency of occurrence of these different types of illicit discharge materials.

Elimination and Enforcement of Illicit Discharges

Of the 454 illicit discharges, Table 3-7 shows that 377 sources were identified. Note that an illicit discharge is often a one-time incident, and a source and responsible party cannot always be found. There was only one continuing discharge as of the June 30, 2008 time of reporting.

The municipalities reported conducting 269 enforcement activities last fiscal year to correct illicit discharges.

Approximately 44% of the enforcement activities conducted consisted simply of verbal warning notices. About 48% were informal violations, while 8% resulted in a formal violation. There was one legal action taken.

San Mateo County's Activities

The County Environmental Health's Household Hazardous Waste and Very Small Quantity Generator Programs assist residents and businesses to dispose properly their unwanted household hazardous wastes and business small quantity generator wastes.

Another important way that San Mateo County Environmental Health continues to help to prevent future illicit discharges is in its requirements for remodeling retail food facilities or constructing new retail food facilities. Environmental Health Consumer Protection Program staff review submitted plans to make sure that any stormwater BMP deficiencies are corrected. For example, storm drain inlets are not allowed near outside trash storage areas.

ASSESSMENT OF EFFECTIVENESS

Completion of SWMP Tasks

The General Program has completed all of the Industrial and Illicit Discharge Control tasks scheduled for FY 2007/08.

Effectiveness

Business Inspections

One measure of an improvement in effectiveness is the approximately one-third increase in the number of stormwater inspections of businesses completed in FYs 2002/03 through 2007/08 compared to the preceding six year period. As mentioned above, this

increase has been attributed largely to the routine integration of stormwater compliance in the food facility inspections conducted by County Environmental Health. The county uses its Food Program Official Inspection Report forms for these inspections, which are different from the Standard Stormwater Facility Inspection Report Forms.

Another measure of effectiveness of the inspection program is its ability to identify and correct stormwater violations. As described above, approximately 10% of the business inspections in FY 2007/08 found a stormwater violation. This is similar to the 12% rate of violations found in FYs 2006/07, 2004/05, and 2003/04 and identical to the 10% rate of compliance reported in FY 2002/03. In addition, in FY 2007/08 all of the violations except one were reported to have been corrected by June 30, 2008. This rate of correction of violations is similar to FYs 2006/07 (100%); 2005/06 (97%), and 2004/05 (96%). This is an improvement over the 91% violations reportedly corrected in FY 2003/04 and the 90% in FY 2002/03 with the remaining violations pending correction at the time of reporting.

Illicit Discharge Elimination

The effectiveness of the illicit discharge field investigations may be measured by the overall decline in the number of illicit discharges found over time. The number of illicit discharges found in FY 2007/08 (454) is the highest reported during the past ten years. The increase in the number of illicit discharges is partly attributable to the 141 illicit discharges reported by the City of San Mateo's illicit discharge inspectors compared to an average of 10 per year found during the

preceding 10-year period. San Mateo County staff also reported a higher number of illicit discharges last fiscal year (90) compared to its average of about 32 per year reported during the preceding 10-year period.

Number of Reported Illicit Discharges
Table 3-6

Fiscal Year	No. Illicit Discharges	Screening Point Visits
2007/08	454	16,460
2006/07	279	13,803
2005/06	244	17,607
2004/05	352	24,373
2003/04	246	17,433
2002/03	271	23,323
2001/02	249	24,913
2000/01	327	12,155
1999/00	306	7,211
1998/99	294	6,650
1997/98	511	4,217
1996/97	463	2,416
1995/96	303	2,045
1994/95	46	Not available

There does not appear to be a discernible relationship between the reported number of field surveys conducted and the number of illicit discharges detected. One possible explanation for this is that the reported number of screening points visited increased starting around FYs 2000/01 and 2001/02 as municipal staff increased its familiarity with how to use the reporting forms. The number of reported screening points visited over the years is probably an inaccurate way to evaluate the actual effort to find illicit discharges. Information collected on the reporting forms should be revised to reflect this type of information once the municipal regional stormwater permit is adopted in FY 2008/09.

The information on the most commonly found types of illicit discharges will be

used to evaluate effective methods for targeting their elimination. For example, the relatively large number of construction related materials being found as illicit discharges helped some of the Program's municipalities to decide three years ago to participate in the reprinting of BASMAA informational cards about construction-related illicit discharges.

stormwater permit's adoption, consider the possibility of offering some countywide training for inspectors responsible for identifying, responding to, and controlling illicit discharges.

FUTURE ACTIONS

The activities anticipated in FY 2008/09 include the following:

1. Develop stormwater related training materials for municipal staff that will need to become familiar with the new, regional municipal stormwater permit that is expected to be adopted this fiscal year.
2. Conduct a training workshop for municipal staff about the new, regional municipal stormwater permit, if the permit is adopted by March 2009.
3. Assist with the development of additional materials, guidelines, and templates, such as a one-page Enforcement Response Plan, and assist municipalities to begin implementing the following permit sections: Industrial and Commercial Site Controls; Illicit Discharge Detection and Elimination; and Exempted and Conditionally Exempted Discharges.
4. Collaborate with the Bay Area Pollution Prevention Group by providing input on its planned educational outreach materials, such as with the flyer that describes BMPs to control pollutants in runoff from metal finishers and electroplaters.
5. Following the municipal regional

Table 3-3. Illicit Discharge Field Surveys Conducted

Municipality	Number of Visits to Established Locations												Channel Miles Surveyed			
	Industrial				Commercial				Residential				Industrial	Commercial	Residential	
	outfalls	inlets	manholes	other	outfalls	inlets	manholes	other	outfalls	inlets	manholes	other				
Atherton																
Belmont	2	107	16		2	460	18		8	4175	145			2		30
Brisbane																
Burlingame*		501.3		30		501.3		30		501.3			0.30	0.30		0.30
Colma										31						
Daly City						14				1965		1				4.7
East Palo Alto																
Foster City																
Half Moon Bay**																
Hillsborough										1830		596				0.3
Menlo Park	4	96			24	291			6	1211			1	1.864		0.6
Millbrae								88								40
Pacifica						1	2	4				7	14			0.05
Portola Valley						9			28	26						12
Redwood City					34	968	302		20	1972	300	20		9.69		1.35
San Bruno																
San Carlos***																
San Mateo, City of	2	12			2	17			2	8				2		8
San Mateo County****	172.3	121			172.3	132			172.3	531		81				
So. San Francisco		3				9				4						
Woodside - no rept.																
Total	180.3	840.3	16	30	234.3	2402	322	122	236.3	12254	452	752	1.30	15.85		57.30
	1066.7				3080.7				13694.7				74.45			
	17,842															

* reported inlets are combined for industrial, commercial, and residential areas. Amounts are split evenly among three areas. Pump stations are reported under other and are considered evenly divided between commercial and industrial areas.

** Half Moon Bay reports: "NO ILLICIT DISCHARGES TO REPORT" for both halves of fiscal year.

***San Carlos states in Second Half-Year Deliverables: "Paul Baker, Public Works Superintendent reported no illicit discharge reports for this period."

****San Mateo County unincorporated creek outfall surveys were not reported by landuse, and on this table were divided evenly among landuses.

Table 3-4. How Illicit Discharges Detected Were Found

Municipality	Illicit Discharges Incidents Found During Field Surveys -- Conducted By:		Illicit Discharges Incidents Reported Through Calls From:		
	Maintenance Crews	Illicit Discharge Inspectors	Maintenance Crews	Other Agencies	Public
Atherton					
Belmont				2	2
Brisbane	0	0	3	1	0
Burlingame	0	4	2	0	2
Colma	1				
Daly City		11	35	1	10
East Palo Alto	1				
Foster City					
Half Moon Bay					
Hillsborough		2			
Menlo Park					6
Millbrae		3	3	0	2
Pacifica	4		6	4	14
Portola Valley	0	0	0	0	0
Redwood City	8				
San Bruno		2	17	4	
San Carlos					
San Mateo, City of	2	141	10	10	25
San Mateo County	43			4	36
So. San Francisco	1	19	4	1	8
Woodside					
Totals	60	182	80	27	105
	242		212		
Total Illicit Discharges Reported	454				

Table 3-5. Illicit Discharge Materials Identified

Municipality	Sewage	Automotive Fluids			Paint	Construction Materials			Food Wastes	Yard Wastes	Sediment and/or Silt	Washwaters				Industrial Wastes	Other ¹
		Used Motor Oil	Anti-freeze	Fuels		Concrete	Construction Debris	Wall Compound				Concrete Cutting Slurry/Washwaters	Vehicle Cleaning Washwaters	Building/Sidewalk Washwaters	Other Washwaters		
Atherton																	
Belmont		3	1		7	2	2	2		6		2					
Brisbane					1								1				2
Burlingame									2				1		3		1
Colma					1												
Daly City	3	2			3	8	1	2	3	1	5	11	1		10		8
East Palo Alto																	1
Foster City																	
Half Moon Bay																	
Hillsborough											1						1
Menlo Park	2	1			1								1	1			2
Millbrae									5								2
Pacifica	13					1	2					2			1		2
Portola Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Redwood City	7	1							4								
San Bruno	17				3				2		1						
San Carlos																	
San Mateo, City	6	11	1		10	5	5	2	19	3	3	7	31	27	34	5	19
San Mateo, Co.		32	5		8	3	10	2	1	4	13		2			5	5
S. San Francisco	3	2			1	1			4	1	7	2	4	3	3	1	1
Woodside																	
Total	51	52	7	0	35	20	20	8	40	15	30	24	41	31	51	11	44
		59				48						147					
Percent of Total	11%	11%	1%	0%	7%	4%	4%	2%	8%	3%	6%	5%	9%	6%	11%	2%	9%
		12%				10%						31%					

Total Illicit Discharge Materials Found = 480

Other includes:

- | | | | | | |
|-----------------------------------|--------------|----------------------|-------------------------|-------------------------------|---------------------------|
| unknown milky, white discharge 2x | stucco 2x | sand 1x | hydrocarbon soil 2x | used cooking oil 1x | loading dock discharge 1x |
| unknown liquid 1x | Styrofoam 1x | underground water 1x | Powder Release paint 1x | olive grey water 1x | car batteries 4x |
| granite slurry 1x | bird seed 1x | plaster 1x | Interceptor contents 1x | residual from water heater 1x | household garbage 1x |

Table 3-7. Illicit Discharges: Follow-up Activities

Municipality	If Source Identified ¹		If Discharge Eliminated ¹			Enforcement Activities			
	Number of Sources Identified	Discharges Where No Source Was Identified	Eliminated Discharges	Continuing Discharges (reported once)	Continuing Discharges (reported more than once)	Warning Notice (verbal)	Informal Violation	Formal Violation	Legal Action
Atherton									
Belmont	3		3			3	3		1
Brisbane	2	2	4			2			
Burlingame	7	0	7			7			
Colma	1		1					1	
Daly City	56	1	57			33	15	2	
East Palo Alto	1					1			
Foster City									
Half Moon Bay									
Hillsborough	2		2			1	1		
Menlo Park	3	0	3			1	1		
Millbrae	8	0	8	0	0	3	0	5	0
Pacifica	24	2	25	1			4	1	
Portola Valley	0	0	0	0	0	0	0	0	0
Redwood City	8		8						
San Bruno	23	0	23	0	0	3		3	
San Carlos									
San Mateo, City	159	29	188			51	105	3	
San Mateo, Co.	47	36	83						
S. San Francisco	33		33			13		6	
Woodside									
Totals	377	70	445	1	0	118	129	21	1
						269			

4

PUBLIC INFORMATION AND PARTICIPATION

INTRODUCTION

The primary goals of SMCWPPP's Public Information and Participation (PIP) component are:

- To educate the public about the causes of stormwater pollution and its serious effects on the quality of local creeks, lagoons, shorelines, and neighborhoods;
- To encourage residents to adopt less polluting and more environmentally beneficial practices; and
- To increase residents' hands-on involvement in SMCWPPP activities.

PIP is essential for controlling pollution at the source because most pollutants originate from preventable, everyday activities. Pollutants in stormwater may be reduced by educating residents about the benefits of preventing stormwater pollution and motivating them to do their share to reduce pollution.

This approach is recognized as being both cost-effective and efficient in meeting the goal of reducing pollutants

in stormwater to the maximum extent practicable.

This section describes SMCWPPP's PIP accomplishments, assesses the effectiveness of the PIP activities completed in 2007/08 and presents the PIP activities planned for FY 2008/09.

Eva Justimbaste from Burlingame served as the PIP subcommittee's chairperson this fiscal year.

ACCOMPLISHMENTS

The PIP Subcommittee met six times in FY 2007/08 to oversee the development of educational materials and to guide the implementation of the PIP component.

SMCWPPP accomplished the following major public information and participation tasks during FY 2007/08:

- Conducted school outreach to schools, reaching over 8,266 students through "The Water Beat" Zun Zun assembly program.

- Held a workshop for School Maintenance Supervisors and staff on reducing pollution at schools by learning about the products used in and around school for cleaning and pest control.
- Continued the Community Action Grant Program.
- Continued to participate in the region-wide Integrated Pest Management “Our Water Our World” campaign by working with local retail stores.
- Continued to coordinate the California Coastal Cleanup Day event in collaboration with the California Coastal Commission.
- Hosted an educational booth at the County Fair.
- Redesigned SMCWPPP’s website, www.flowstobay.org, by making it more user friendly and appealing. All of the brochures are available online and monthly updates were maintained. The educational outreach provided by the website is supplemented by using public service announcements on Cable Television.
- Continued collaborative outreach with the Used Oil Block Grant Program and the Retail-Take Back Program of the County Household Hazardous Waste Program in Environmental Health.
- Implemented the municipalities’ community outreach programs.

The following is a description of each area of accomplishment.

School Outreach

School Assembly Program

Contracted with ZunZun (a two-person musical theatrical team that specializes in school assemblies) to develop and present interactive, multicultural shows about stormwater and Household Hazardous Waste, in English and Spanish. The show provides information about storm drains, recycling used motor oil, keeping water clean, while highlighting the connection of the audience to their watershed. They use a variety of instruments (many of Latin American origin) incorporating audience participation and humor into each show.

In FY 2007/08 Zun Zun performed at 43 elementary schools and public libraries, with a total of 8,266 students who saw the “Water Beat” Assembly. To date Zun Zun has reached approximately 103,766 students in San Mateo County.

The shows are funded jointly as a cost-effective collaboration between the Used Oil Program and SMCWPPP. Each student who attends the assembly receives the 12-month Pollution Prevention Calendar. On average the program costs about \$2.42 per student.

San Mateo County Used Oil Program and SMCWPPP will continue their collaboration this fiscal year to fund school outreach assemblies using Zun Zun.

Science Fair Project

SMCWPPP presented an award to the science project that demonstrated water quality protection at the 2008 San Mateo County Science, Mathematics and Technology Fair. The Fair features student projects from grades 5 through high school, from over 37 different schools within San Mateo County.

SMCWPPP's Certificate of Recognition went to the "Some Butte-Y Cares" project done by Halie Michaels, an 8th Grader from Redwood City. Her experiment was to grow plants in both fresh water and water with cigarette butts submerged in it and examine the differences in plant health. She concluded that cigarette butts negatively affect water quality, and was presented with a \$50 Discover Store.com Gift Certificate by the PIP Chair, Eva Justimbaste.

Healthy Schools Inside and Out Workshop

Contracted with The Watershed Project to conduct the "Healthy Schools Inside & Out" workshop held on Saturday, October 20, 2007 for School Maintenance Supervisors who make purchasing decisions regarding cleaners and pest control products and for the staff who use them. This half-day workshop focused on reducing pollution at school by learning about the products used in and around school for cleaning and pest control. Participants learned about risks to human health and the environment from common household hazardous waste, ways to compare less-toxic products, and how to understand the Healthy Schools Act. Each attendee received a green clean kit with recipes and free samples, plus an activity binder.

School Janitorial Less Toxic Products Brochure

Contracted with The Watershed Project to create a brochure for school janitorial and maintenance staff on the health, safety, and environmental impacts of cleaning products used in schools. The brochure featured easy to read charts on high-risk ingredients and the significance of signal words to help janitors and school staff assess

products and active ingredients on toxicity and potential risks. Information about resources on this topic and how to properly dispose of hazardous waste in the schools was placed on the back of the brochure.

Brochures were distributed to each school district Director of Maintenance and Operations, the San Mateo County Office of Education, and the President of the San Mateo County Parent Teacher Association (PTA).

Pollution Prevention Calendar 2008

The Environmental Health Pollution Prevention group produced and distributed 30,000 pollution prevention calendars for students and county residents. The 2008 calendar includes full color photos and monthly articles on how residents can prevent pollution. It also incorporates dates and locations of Household Hazardous Waste events and a back cover recycling matrix that lists all oil collection centers in the county including places to recycle common household hazardous waste products like paint, batteries, and fluorescent lights.

The Community Action Grant Program

Community Action Grants have been awarded to volunteer groups, teachers, environmental organizations, and other local, not-for-profit associations interested in implementing projects that improve the quality of local creeks, the bay or the Pacific Ocean.

As in previous years, the Community Action Grant application and information was available on SMCWPPP's website including descriptions of previous projects that received funding. Six grant

recipients received a total of \$15,000 in funding.

The following projects were awarded grants:

1. **Half Moon Bay Riparian Restoration Project.** San Mateo Coast Natural History Association, Half Moon Bay. Restore native riparian areas at various locations within Half Moon Bay State Beach. Includes removal of non-native vegetation, planting native riparian plants, and removing trash.
2. **San Francisquito Creek Stewardship Project.** San Francisquito Creek Watershed Council, Palo Alto. Enlist community in reestablishing healthy native creek-side habitat at nine long-term sites in the watershed, including removal of debris and non-native species, and planting of native vegetation.
3. **Notre Dame High School Creek Restoration Project.** Notre Dame High School, Belmont. Restore the Notre Dame Creek native riparian ecosystem located on school campus. Includes native plant restoration, litter cleanup, water quality monitoring, public access nature trail, and pollution prevention outreach.
4. **Cordilleras Creek Native Plant Project.** Redwood High School, Redwood City. Restore a portion of Cordilleras Creek riparian habitat located on school campus. Proposes to restore vegetation, eliminate non-native species, increase natural riparian habitat. The project will be incorporated into the science curriculum.
5. **"Hey! No Trash in the Bay" Campaign.** Marine Science

Institute, Redwood City. Promotes litter prevention through installation of signage for gathering area at the Marine Science Institute facility located on the Bay across from Bair Island, and purchase of "green bags" for Earth Day outreach event.

Integrated Pest Management

This fiscal year's *Our Water Our World* (OWOW) partnership continued with participation from 22 San Mateo County stores, with the addition of Golden Nursery in San Mateo as a new partnership store.

San Mateo County staff visited each store twice during the year, once in the fall and again in the spring. During each visit, communication with the Store Managers and employees was maintained, store displays were updated, and fact sheets restocked. Staff also noted any new less toxic products to report to BASMAA for investigation and inclusion on the master products list.

County staff attended all IPM partnership meetings with BASMAA and participating jurisdictions to coordinate the program in San Mateo County.

OWOW Outreach Events

Staffed a booth at:

- Half Moon Bay Flower Market on July 21, 2007.
- NorCal Spring Trade Show, January 31, 2008 at the San Mateo Event Center: This is a horticultural trade show with Professional Landscapers and Retail Nursery owners and staff in attendance.

Presentations

- San Mateo/San Francisco University of California Cooperative Extension completed its second Master Gardener Training Program in November 2007. County staff conducted an hour-long training class on “Reducing Pollutants in Our Watersheds” on September 19, 2007 to the Master Gardener’s Class.
- Healthy Home workshop in Millbrae for residents, September 29. Presentation covered IPM techniques for ants, fleas, and spiders.

Regional Presentations

- Green-Blue Summit: Clean Water through Residential Integrated Pest Management (July 2007)
- Southern California Academy of Sciences Symposium Controlling Runoff Pollution (May 2008)
- Pesticides and the Chesapeake Bay Watershed Project (June 2008)

Regional Advertising

- Regional effort in Bay Area to continue to brand the *Our Water, Our World* logo, website, and flower head. Placed print ads as Movie Theater flash animation ads from August 17-September 5 (including Labor Day weekend). Print ads were also placed on transit buses including SamTrans and on BART from August 27-September 23.
- San Francisco KRON 4 News recorded the show “Henry’s Garden” on August 22 at Orchard Supply Hardware in Foster City. The two-minute segment featured information about the *Our Water, Our World* and the in-store

elements: fact sheets, shelf talkers, and less toxic products. The show was aired Saturday, September 1 between 10-10:30am.

- Green Zebra 2008 Savings Coupon Guide for the Peninsula featured one “coupon” page article on the program titled, “Avoid Pesticides to Save the Bay.” IPM tips, the *Our Water, Our World* logo and website were featured.
- Bay Nature magazine, one-half page Ad for Spring 2008 Issue (April –June).

Regional Event Sponsorships

- [EcoWise Certified / UP3 Integrated Pest Management Contracting Workshop](#) (November 2007)
- [2008 Bay-Friendly Landscaping & Gardening Conference](#) (February 2008)

New materials

SMCWPP ordered the following for distribution through the IPM partnership stores, outreach tabling events, residential and organization requests, and through the cities:

- 2,000 Pocket Product Guides “Pests Bugging You? A Pocket Guide for Choosing Less Toxic to People and Pets”
- 14,800 *Our Water, Our World* Fact Sheets
- *Our Water, Our World* Rack Headers with new graphics, 22 pieces
- 2,000 Bay Friendly Garden Guides, with custom back page
- Pest or Pal Activity Guide, 1,000 pieces
- Beneficial Bug Brochure, 1,000 pieces

Bay Friendly Gardening/Landscaping

County staff attended the Bay Area Coalition for Sustainable Landscaping Meetings hosted by Stopwaste.org on September 26 in Novato and February 29 in San Jose. Participants include solid waste, water agencies, storm water, non-profits, water conservation, green business and planning; with the goal of supporting a Bay Area effort to educate landscapers and home gardeners about bay friendly gardening.

On February 29, 2008 the first Bay Friendly Landscaping Conference was held in Berkeley. SMCWPPP organized a printing for postcards sent to Landscape Professionals in San Mateo County, notifying them of the Conference. Over 300 Bay Area Landscapers and Municipal staff attended the Conference.

In addition, Blue Sky Farms in Half Moon Bay planned classes that will be for the public on the principles of Bay Friendly Gardening; along with the opening of a California Native plant nursery. SMCWPPP provided the nursery with Our Water, Our World fact sheets, a literature rack, and Bay Friendly Gardening and Landscaping Guides for use at the nursery and classes located at 3068 N Hwy 1 in Half Moon Bay.

California Coastal Cleanup Day and Litter Reduction Outreach

California Coastal Cleanup Day, held each year on the third Saturday in September, is the largest volunteer event in the state. The California Coastal Commission sponsors the event with the support of County and Regional Coordinators. SMCWPPP coordinated the event for the second year because it recognizes that this event is a great

opportunity to get many residents of all ages actively involved in a way that fosters an understanding of the problems associated with litter.

To promote the event, the continuation of the reusable bag outreach from last year was continued at supermarkets, colleges, and the County Fair. Two thousand (2,000) reusable, foldable-compact "Chico" bags were given out at nine (9) outreach tabling events, with information that plastic bags are the number one most dangerous debris item to aquatic wildlife, as well as one of the most common items picked up at the cleanups.

From poster distribution, to outreach tabling events, to press releases and word of mouth, our outreach resulted in an increase in the number of volunteers within San Mateo County who turned up to volunteer. Two thousand, one hundred eighty-three volunteers turned up at the 31 site locations, picking up a total of 24,633 pounds of debris (trash and recyclables). Last year 1,644 volunteers cleaned up 21,162 pounds of debris. That is a 33% increase in volunteers and additional 3,471 pounds of debris picked up from last year (see Figure 4.2).

California Coastal Cleanup Coordination

SMCWPP coordinated and publicized the 31 beach and creek cleanup locations. Major tasks included the following:

- Recruit cleanup captains for specific sites.
- Arrange for cleanup sites with beach property owners.
- Coordinate with the California Coastal Commission.
- Order publicity supplies.

- Organize cleanup logistics in cooperation with cleanup site captains:
 1. Hold site captain meeting with captains to clarify procedures.
 2. Arrange for trash hauling and recycling.
 3. Distribute cleanup supplies and promotional items to cleanup captains.
- Act as the central contact point for volunteers from San Mateo County. The California Coastal Commission's statewide brochure and the state web site list SMCWPPP as a local contact for all prospective volunteers.
- Assign volunteer groups to specific cleanup sites.
- Get local press and event publicity by placing posters, distributing brochures and flyers, arrange and staff tabling events, issue press release, and secure County proclamation.
- Collect and report results of the cleanup to the California Coastal Commission on the cleanup day. Arrange collection of cleanup data cards from cleanup captains.

Outreach Tabling Events

County staff researched and ordered reusable shopping bags to use at nine tabling events throughout the County. The Program ordered 2,000 "Chico Bags" that fold-up to an easy to carry pouch. A postcard commitment form was developed and given out; the postcard describes the problems with plastic bags and offers tips to remember the reusable bag when going to the store. Each bag recipient was asked to make and sign a commitment to bring a

reusable bag to the store. Outreach events were held at community colleges and supermarkets in the county:

- Community Colleges: College of San Mateo, Skyline College, and Canada College; for two hours each, giving out 43-76 bags per event.
- Grocery Stores: Safeway's (Half Moon Bay, Pacifica, and South San Francisco), Lunardi's of Burlingame, and Whole Foods (Redwood City, and San Mateo). Gave out between 70-100 bags at each two-hour event.

Local Publicity and Media

- Telephone interviews were giving to five local newspapers following the distribution of a press release on the event: Half Moon Bay Review, Pacifica Tribune, Daily News, Peninsula Examiner, and San Mateo County Times.
- Coastal Cleanup Day slide show was developed and aired on local community television stations, including Peninsula TV.

California Stormwater Quality Association (CASQA) Award

The 2007 Outstanding Stormwater News, Information, Outreach and Media Award was presented to SMCWPPP for the "Eliminating Trash in Our Waterways" Project, which incorporated Coastal Cleanup Day Coordination that increased volunteer participation by over 60 percent combined with our successful outreach with reusable shopping bags. The award was presented to Matthew Fabry at the 3rd Annual Stormwater Conference awards luncheon Tuesday, September 11, 2007 at the Hilton Hotel in Costa Mesa. The CASQA awards identify and recognize exemplary leadership, outstanding projects, activities and contributors in

the field of stormwater quality management

site list, and “10 Things You Can Do to Stop Marine Debris.”

California Coastal Cleanup Day Material Distribution

Results

- 1000 Posters: all County public schools, libraries, community centers, and for Site Captain’s.
- 6000 Brochures: sent to youth organizations; including Boys and Girls clubs, YMCAs, and Boy and Girl Scouts, and given out at Reusable Bag tabling events (farmers markets/grocery stores), County Fair booth, OWOW partnership stores, Environmental Health’s front table, and the County Courthouse building’s information booth, as well as libraries and community centers.
- 1000 Postcards: Sent to 96 local organizations, churches, youth groups in the county. Given out at reusable bag tabling events (farmers markets/grocery stores), County Fair SMCWPPP booth, and the office of Environmental Health’s front table.
- Location List Handout: The location list included the date and time of the clean up, cleanup sites with directions, and contact information including the phone number and website. Listed on our website www.flowstobay.org with Site Captain Contact information. Given out at Reusable Bag tabling events (farmers markets/grocery stores), the County Fair SMCWPPP booth, and the office of Environmental Health’s front table. Posted on the Craigslist website under the “volunteers” and “events” sections.
- Newsletter Articles for the Environmental Health’s Pollution Prevention Post on the “23rd Annual California Coastal Cleanup Day” with

On California Coastal Cleanup Day, volunteers who served as Site Captains for 31 Clean-up Sites, both coastal and inland, signed in gave out supplies and safety talks to 2,183 volunteers. Twenty-one of the sites were located on the beach and 10 were located at inland creeks and the Bay, for a total of 63.75 miles of shoreline cleaned.

Volunteers diligently cleaned up litter, keeping track of the type of trash that they picked up on a data card. The data cards were turned in to SMCWPPP and entered in a spreadsheet, in order to assess the type, amount and source of litter in San Mateo County. The data cards were then sent on to the Ocean Conservancy where it is included with the statewide data in order to better understand the litter problem: what is found? Where does it come from? How would the information be used to implement further outreach and regulation?

In San Mateo County, the majority (four out of the top five) of litter picked up during Coastal Clean-up Day originates from shoreline and recreational activities including urban runoff.

The top three debris items picked up were cigarette/cigarette filters, food wrappers/containers, and bags. Cigarettes outnumbered all other debris items, with a total of 25,565 picked up, followed by single-use plastic items: 6,855 food wrappers and containers, and 4,363 plastic bags.

**Amounts of Top 5 Debris Items
Removed at 2007 Coastal Cleanup
Day in San Mateo County**

Table 4.2

Top 5 Debris Items	Amount
Cigarettes/Cigarette Filters	25,565
Food Wrappers/Containers	6,855
Bags	4,353
Caps, Lids	3,271
Beverage Bottles (Plastic)	1,908

By evaluating and characterizing the specific items flowing from inland areas to the ocean, we can use the data to further our goals of education and source reduction by targeting the specific litter activities, people, and business groups for our program.

Mercury Campaign: Fluorescent Lamp Collection Strategy

As part of this fiscal year’s SMCWPPP Mercury Campaign, County Environmental Health secured additional funding to implement public outreach on mercury containing products through a Household Hazardous Waste Grant from the California Integrated Waste Management Board. This allowed County staff in collaboration with SMCWPPP to initiate take-back programs with local retail stores in San Mateo County, in order to provide additional disposal options for residents. In FY 2007/2008 County staff researched retail take-back models for household batteries and fluorescent lights and developed a marketing and information package for retail take-back. Starting January 2008, store managers were able to collect customers’ bulbs and batteries and transport them to the County Household Hazardous Waste Program, without being charged a fee for disposal (normally assessed to

businesses for waste generated as part of their own operations). Staff signed up the first retail take-back partners, and received first delivery of customer bulbs and batteries this fiscal year. In FY 2008/09 county staff will continue to sign up retail stores as take-back partners.

County Fair Educational Booth

For the fifteenth year in a row, SMCWPPP hosted a booth at the San Mateo County Fair. Thousands of visitors obtained SMCWPPP information, such as the IPM fact sheets, Coastal Cleanup Day information, and other giveaways, and interacted with SMCWPPP staff who answered questions from the public regarding stormwater pollution prevention and hazardous waste recycling. Stormwater pollution was demonstrated on a watershed model. Six hundred reusable “Chico Bags” were given away and were extremely successful in attracting fair-goers to our booth. Volunteers from all of the municipalities staffed the booth. The total number of contacts with fair goers was up 50% over last year to 4,060!

Website, Cable Television, and Newspapers

Website

During FY 2007/08 San Mateo County continued to update SMCWPPP’s website (www.flowstobay.org). A contractor, Ikorb, Inc., was hired to redesign the website to make it more visually appealing, and user friendly for community members, businesses, and municipalities. A website working group made up of representatives from each subcommittee worked together with Ikorb to provide guidance, edits, and to approve home page and secondary page graphics. The new website will

debut in July 2008 and feature three sections: "Community", "Business", and "Municipalities;" 45-content pages; and three dynamic features including a Calendar of Events, Videos Page, and Password Protected area for Program use.

The website address is included on all residential and business outreach materials. The website was visited an average of 8,896 times each month in FY 2007/08, up from 7,000 visits per month in FY 2006/07.

Monthly Website Views in FY 07-08
Table 4.3

Website Views	
Month	Visits
Jul-07	10,819
Aug-07	8,657
Sep-07	7,126
Oct-07	7,161
Nov-07	7,766
Dec-07	7,404
Jan-08	8,298
Feb-08	7,888
Mar-08	9,642
Apr-08	11,209
May-08	12,757
Jun-08	8,027

Cable Television

A new Program public service announcement, the "Water Spot Sweeper," was produced in English and Spanish and began airing on Cable Television in 2008. This most recent commercial is animated and informs viewers that storm drains lead directly to local waterways. It also advertises the new Program logo and name.

- The commercial ran on Comcast and Viamedia (Astound) from April through June with a total of 1,221

spots airing on Comcast and 880 spots on Viamedia.

- On the following networks: AMC (American Movie Channel), Black Entertainment, CNN, E! TV(Entertainment), ESPN, Family, Food Network, Fox, Fox-Sports, Galavision (Spanish), Golf, MTV, Oxygen Network, Spike TV, TBS, TLC, TNT, TRU TV, and VH-1

Newsletter

Issues of the "P3: Pollution Prevention Post" newsletter were published in September and April to coincide with Pollution Prevention Week and Earth Day, respectively. A total of 6,000 hard copies were distributed at libraries, city halls, community centers, organizations, and outreach events. It is also available on the website with total downloads totaling:

- 374 for Fall 2007 issue
- 1,443 for Spring 2008 issue

Currently there are 153 residents that receive the newsletter by mail, and 563 residents that receive it by email. Spanish newsletters were distributed through the local newspaper, "El Mensajero" with a distribution of 20,000. 3,000 hard copies were also distributed at libraries, city halls, community centers, organizations, outreach events, laundromats, and ethnic supermarkets.

Continued Collaborative Efforts with the Used Oil Program

Used Oil Collection

There are currently 67 used oil collection centers in San Mateo County. Out of these, 45 are state certified used oil collection centers and 22 are county certified. In addition to used motor oil,

used oil filters are collected at 52 of these centers as part of the county's used oil filter collection program.

Total gallons of oil collected for FY 2007/08 = 112,109

Number of oil filters collected FY 2007/08= 22,758

Marinas

The Environmental Health Used Oil Block Grant Program continues to reduce the potential for illicit discharges at the Pillar Point, Oyster Cover, Brisbane and Coyote Point marinas by collecting used motor oil, oil filters, and sponsoring the oil absorbent pad exchange program.

The Used Oil Program applied for and was awarded a 9th cycle Used Oil Opportunity Grant from CIWMB. This grant will pay for the installation of a new permanent oil collection facility at Pillar Point Marina and incorporate a boater education program in FY 2008/09.

Implemented Municipalities' Community Outreach Program

SMCWPPP's Public Information and Participation performance standards describe a number of different types of community outreach events that each municipality may choose to implement locally. In addition, the annual number of community outreach activities that each municipality is responsible for completing varies from three (for towns less than 5,000 in population) to five (for municipalities that are over 50,000 in population).

As summarized in Table 4-1, most municipalities met or surpassed the performance standard for community outreach. Community outreach has included mailing educational information

to targeted groups, such as creekside property owners, property owners and contractors with active building permits, shopping mall property managers, and schools. Other methods of distributing stormwater pollution prevention information include the following: as part of local utility and garbage bills; municipal counters and displays; and local fairs. Information is posted on websites and is also mailed out in response to telephone and written inquiries.

In FY 2007/08 the Cities of Burlingame, Daly City and South San Francisco conducted outreach to schools. Burlingame and South San Francisco taught sewer science courses at Burlingame High School and El Camino High School, respectively, and South San Francisco staff conducted pollution prevention classes for twelve, 4th grade classes. Daly City staff demonstrated street sweepers and Vac-Cons at two elementary schools for Public Works Week.

The Cities of Belmont, Brisbane, Burlingame, Daly City, East Palo Alto, Hillsborough, Redwood City, San Mateo and South San Francisco held or participated in local creek or bayfront clean up events in their cities. The Cities of Daly City and Pacifica led shoreline cleanups.

Promotion of IPM concepts is widely supported, and IPM fact sheets were distributed at many of the events that municipalities participated in. These sheets were also available to all interested residents. In addition to distributing IPM educational materials, Redwood City offered a series of spring gardening workshops, including Irrigation Basics for Homeowners, Drought Tolerant Plants, Smart

Gardening and Garden Design Concepts. The City of Daly City hosted a water-wise and smart gardening workshop for residents. Pacifica partnered with the San Pedro Creek Watershed Coalition for a Wet and Wild Water Camp Watershed Tour and Education Day in July and the Capistrano Fish Passage Restoration Project and Non-Native Invasive Plant Species Removal Event in October. The Cities of Burlingame, Hillsborough and Redwood City held compost giveaway events.

The Cities of Menlo Park, Redwood City, and San Bruno and the Towns of Hillsborough and Portola Valley held HHW and e-waste collection events. Millbrae and South San Francisco offered thermometer exchanges. Redwood City also offered an event where residents could recycle old tires free of charge.

Many of the municipalities have also remained active in maintaining their storm drain inlet signage (Table 4-1). Most municipalities prefer using the thermoplastic stencils because they are more durable than the painted stencils. The City of Brisbane has an "Adopt-a-Drain" program where residents and middle school students can stencil and maintain a storm drain for a year.

ASSESSMENT OF EFFECTIVENESS

Completion of SWMP Tasks

The General Program has completed all of the Public Information and Participation tasks scheduled for FY 2007/08.

Effectiveness

Municipality Participation

A majority of the municipalities participated in the PIP Subcommittee, reviewed Subcommittee materials, and kept current on other subcommittees' activities through the TAC meeting reports. The municipalities that took an active role in the PIP Subcommittee by participating in a majority of the six meetings held during FY 2007/08 were Atherton, Belmont, Brisbane, Burlingame, Daly City, East Palo Alto, Hillsborough, Menlo Park, Millbrae, Pacifica, Redwood City, San Bruno, San Carlos, San Mateo, San Mateo County and South San Francisco. Atherton, Belmont, Daly City, Millbrae, Redwood City, San Carlos, South San Francisco and San Mateo County had perfect attendance.

Evidence of Effectiveness

There were no specific SMCWPPP surveys conducted during FY 2007/08 to measure the effectiveness of the public information and outreach activities implemented by the municipalities and County Environmental Health. However there are specific project indications that show evidence that more and more residents are being engaged and educated about stormwater pollution prevention and about the Program:

1. Coastal Cleanup Day Participation – the number of volunteers participating in Coastal Cleanup Day has increased by 127% in just two years (961 volunteers in 2005 compared to 2,183 volunteers in 2007). By engaging the public in clean-up efforts, awareness is raised about the problems with trash in and near waterways.
2. Website - the number of people visiting our website each month on

average has increased by 78% in two years (5,000 visits per month in 2005 compared to 8,896 visits per month in 2007).

3. County Fair – the number of fair contacts has increased by 62% in two years (2,500 people visiting our booth in 2005 compared to 4,060 contacts in 2007) despite the overall decline in Fair attendance.

In FY 2008/09 the Program will evaluate the effectiveness of outreach activities by conducting a public awareness survey to measure progress and effectiveness of the program since the last survey in 2001.

FUTURE ACTIONS

The following PIP activities are planned or being considered for FY 2008/09:

- Continue to hold PIP Subcommittee meetings;
- Continue the IPM “Our Water Our World” partnership campaign;
- Continue the mercury public awareness campaign initiating fluorescent lamp take-back programs with local retail stores;
- Continue the Community Action Grant Program;
- Continue to coordinate the annual California Coastal Cleanup Day event in San Mateo County;
- Continue to update and create new materials with the new Program name and logo.
- Initiate a Trash Marketing Campaign focused on cigarette butt litter; and
- Evaluate Program effectiveness with a residential telephone survey.

Figure 4.1. Coastal Cleanup Day Volunteers in San Mateo County, 2005-2007

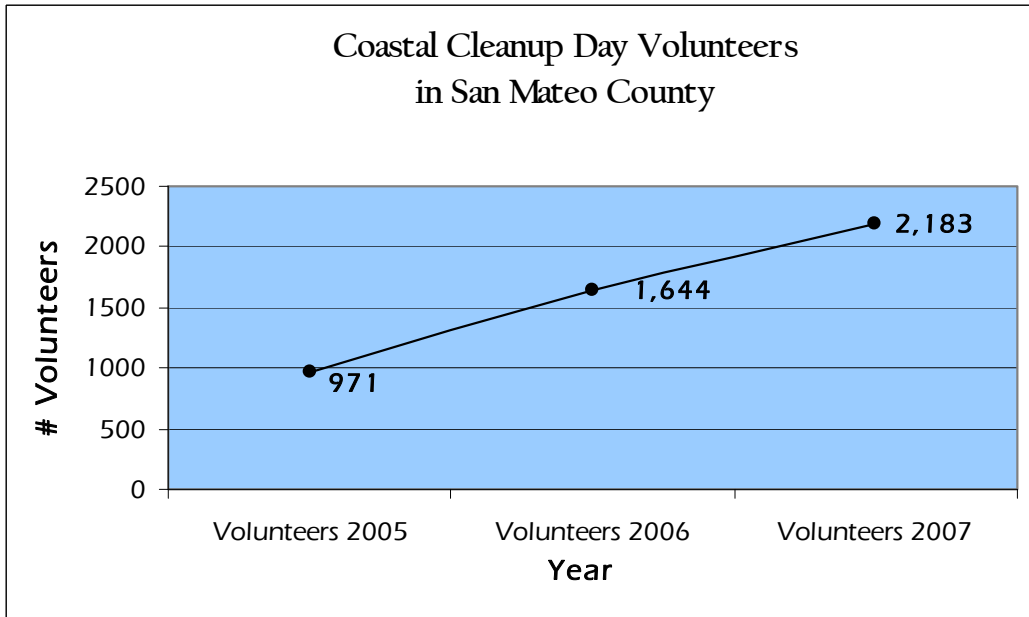


Figure 4.2. Total Debris Removed on Coastal Cleanup Days in San Mateo County, 2005-2007

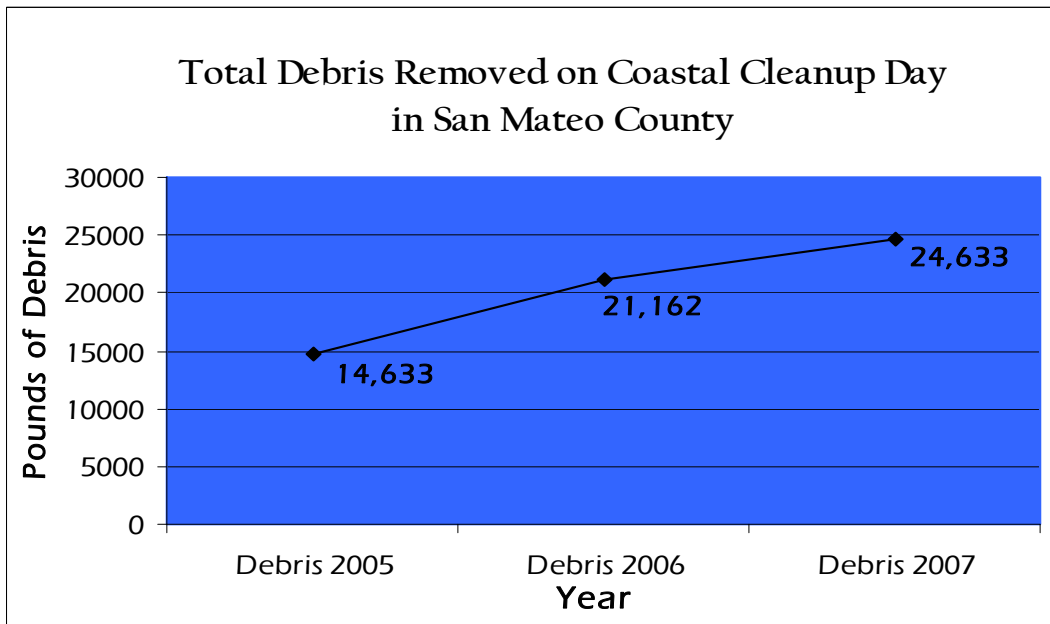


Table 4-1. Municipal Public Information and Participation (PIP) Activities for FY 2007/08

The table on the next page summarizes outreach activities reported by each agency in FY 2007/08. It provides a concise overview of the following activities:

1. Stenciling and Signage:
Includes numbers of stencils installed and/or replaced. If no numbers have been reported but stenciling and signage was conducted, it is mentioned as *on going*.
2. Number of Implemented Community Outreach Events:
Reported outreach activities have been categorized into activity areas as described in the PIP Performance Standards listed in the 1998 Stormwater Management Plan.
3. Educational Material:
Shows agencies' development of new educational materials and distribution of SMCWPPP's outreach materials.
4. PIP Subcommittee Participation
Indicates the number of PIP meetings attended by agencies and additional participation such as work group activities, chairing the Subcommittee, etc.

Details of the reported outreach activities can be found in Section four of the deliverable forms submitted by each agency. The forms are included in Volumes II to V of this Annual Report.

Table Legend

1. Stenciling and Signage
OG = on going (stenciling conducted as needed)
PR = stencils/signage provided to local Home Owner Associations, businesses, and/or schools
NC = not conducted or temporarily suspended due to budget restrictions
2. Community Outreach Events
 - a) Other venues include disseminating information via utility inserts, agency newsletters, local magazines, mailings to target group, web site.
 - b) Existing community events include county fairs, festivals, compost give away events, mercury thermometer exchange events, and other events held within agency's jurisdiction.
 - c) New community events include pharmaceutical take back events.
 - d) Media outreach activities include development and/or distribution of stormwater related press releases or public service announcements to local media.
 - e) Integrated outreaches include conducting a point of purchase display and giveaway program, distributing videos to local libraries, providing outreach to schools, developing/maintaining special displays (i.e., IPM garden) and other programs such as gardening or composting seminars, holding stormwater presentations at City Services Academy, etc.
 - f) Watershed awareness includes creek, lagoon, shoreline cleanup, or Earth Day activities.
 - g) Coordination with local volunteer group to conduct outreach includes school outreach, stenciling, or creek cleanup activities.
3. Educational Material
 - a) Checkmark indicates development of new materials.
 - b) Checkmark indicates distribution of SMCWPPP's outreach material.
4. PIP Subcommittee Participation
 - a) Shows PIP meeting attendance.
 - b) Check mark indicates work group participation or other additional involvement in subcommittee activities.

Table 4-1: Municipal PIP Activities for FY 2007/08

OUTREACH ACTIVITIES	NAME OF MUNICIPALITIES																					
	Town of Atherton	City of Belmont	City of Brisbane	City of Burlingame	Town of Colma	City of Daly City	City of East Palo Alto	City of Foster City	City of Half Moon Bay	Town of Hillsborough	City of Menlo Park	City of Millbrae	City of Pacifica	Town of Portola Valley	City of Redwood City	City of San Bruno	City of San Carlos	City of San Mateo	County of San Mateo	City of South San Francisco	Town of Woodside	
1. Stenciling & Signage																						
a) Number of stencils installed/ replaced:	25	OG	OG	OG	OG	477	NC	OG	155	OG	192	OG	OG	NC	OG	OG	NC	NC	OG	158	NR	
2. Number of Implemented Community Outreach Events																						
a) Provide General Program information through other venues:	2	1	1	2	1	10		1		2	6	9	2		5	1		1	64	22		
b) Participate in existing community events:	1	2	3	14	2	21	2	3	2	7	6	16	5	4	11	4		2	28	5		
c) Initiate new community events:		1		1		1	1					4	2		4				2			
d) Contact media and conduct advertising:						6					2	2							7			
e) Coordinate with local volunteer groups to conduct outreach:			1	2		1						6	2		2					✓		
3. Educational Material																						
a) Developed educational materials:	✓	✓				✓	✓			✓	✓	✓	✓		✓				✓			
b) Distributed educational materials:	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
4. PIP Subcommittee Participation																						
a) Number of PIP meetings attended:	6	6	5	5	3	6	5	1	1	4	5	6	4	1	6	5	6	5	6	6	1	
b) Other participation:	✓	✓	✓	✓*		✓				✓	✓		✓		✓			✓	✓			

* Burlingame chairs the subcommittee.

Table 4.4. Website Pages Viewed and Documents Downloaded in FY 2007/08

Website Pages Viewed and Documents Downloaded		
Month	Most Viewed Page	Most Downloaded
Jul-07	About Pollution Program	ReNews Spring 2007
Aug-07	Coastal Cleanup	Construction Site Design
Sep-07	Coastal Cleanup	ReNews Spring 2007
Oct-07	About Pollution Program	Ch 5 General Technical Guidance for Treatment Measures
Nov-07	Additional Information	Hydromodification Management Plan
Dec-07	Additional Information	Mercury Brochure and Construction Site Design Guidebook
Jan-08	Additional Information	06/07 Annual Report
Feb-08	C3 Stormwater Tech Guide	SMCWPPP FY06-07 Annual Report FINAL
Mar-08	Community Events	SMCWPPP FY06-07 Annual Report FINAL
Apr-08	Community Events	Too Toxic To Trash Poster
May-08	Community Events	Too Toxic To Trash Poster
Jun-08	Community Events	Too Toxic To Trash Poster

5

NEW DEVELOPMENT AND CONSTRUCTION CONTROLS

INTRODUCTION

The primary goal of this component is to minimize the adverse impacts on water quality and beneficial uses of land development, both during and after construction. To reach this goal, SMCWPPP assists municipalities in developing and adopting procedures for the control of stormwater pollution from new development and significant redevelopment projects. This includes site design and source control to prevent stormwater pollution, post-construction stormwater treatment for projects that result in the addition and/or replacement of 10,000 square feet or more of impervious surface, and (since June 12, 2007) hydromodification management measures for projects that create and/or replace one acre or more of impervious surface and are located in areas susceptible to development-induced erosion of creek beds or banks. Another area of emphasis is on the implementation of BMPs during construction.

SMCWPPP's strategy is to integrate procedures for stormwater pollution prevention and control into existing municipal review and inspection processes,

and to coordinate with other Bay Area stormwater programs that are implementing the same NPDES permit requirements. SMCWPPP provides guidance to the local municipal programs through its New Development Subcommittee (NDS) meetings.

Since the start of the second NPDES permit period in July 1999, the municipalities have continued to improve their plan review, erosion control, and inspection programs; have expanded the use of stormwater treatment control measures; and have continued to implement performance standards for new development and construction activities. Since the adoption of the Provision C.3 amendment to SMCWPPP's NPDES permit in February 2003, the NDS's emphasis has been on assisting the municipalities to comply with these more prescriptive requirements for new and redevelopment projects.

Matthew Fabry from the City of Brisbane and SMCWPPP Coordinator continued to serve as chair of the New Development Subcommittee. The subcommittee enjoyed good participation. Appendix D contains the subcommittee's attendance

sheet for FY 2007/08 with representatives from the following municipalities showing perfect attendance: Brisbane, Burlingame, South San Francisco, and San Mateo County. Representatives of Belmont, Menlo Park, and Pacifica attended five of the six meetings.

ACCOMPLISHMENTS

SMCWPPP's primary accomplishments related to new development and construction controls during the past fiscal year included:

- The City/County Association of Governments of San Mateo County solicited a call for projects for municipalities to apply for grant funds to construct sustainable green streets and parking lot demonstration projects. Five grant recipients were selected. C/CAG also executed a contract with Nevue Ngan Associates teamed with Sherwood Design Engineers to prepare a Sustainable Green Streets and Parking Lot Design Guidebook.
- Held construction site stormwater management training workshops in collaboration with the San Francisco Estuary Project and the Santa Clara Valley Urban Runoff Pollution Prevention Program.
- Sponsored the 2008 New Development Workshop, featuring the new C.3 Technical Guidance document prepared in FY 2006/07.
- Updated an appendix to the C.3 Technical Guidance to include nine maintenance plan templates for use by project applicants that use stormwater treatment measures in their projects. The cover page of the applicable C.3 Technical Guidance appendix is included in Appendix D.
- Updated the Project Applicant

Checklist for NPDES Permit requirements to include information on hydromodification management (HM) requirements, which began to be implemented in June 2007. The updated checklist is included in Appendix D.

- Reviewed two draft HM worksheets. The HM Applicability Workshop will assist municipal staff in determining whether a project needs to comply with HM requirements. The Flow Duration Control Review Worksheet will help municipal staff review submittals for projects that incorporate flow duration controls, pursuant to the HM requirements. These forms, which were based on worksheets prepared by the Alameda Countywide Clean Water Program, will be finalized in FY 2008/09.
- Coordinated with Regional Water Board staff to include an update to the HM Control Area Map in the draft municipal regional stormwater permit, for approval by the Regional Water Board. The map update incorporates newly available digitized map data that will allow the HM control area boundary to follow Assessors parcel boundaries.
- Prepared soil guidelines for landscape-based treatment measures, based on soil specification prepared by the Alameda Countywide Clean Water Program. The soil guidelines are included in Appendix D.
- Provided input to the redesign of SMCWPPP's website to improve the organization of materials related to new development, redevelopment and construction. Christina Horrisberger of Pacifica represented the NDS on the website redesign work group.
- Updated frequently used documents

and forms with SMCWPPP's new name and logo.

- The NDS took a field trip in April to view stormwater treatment measures at two projects in San Francisco. A summary of the field trip is included in Appendix D.
- The following municipalities reported approximately 74 projects that created and or replaced 10,000 square feet or more of impervious surface, triggering the amended NPDES permit's Provision C.3 requirements: Belmont, Brisbane, Burlingame, Colma, Daly City, Menlo Park, Millbrae, Pacifica, Redwood City, San Carlos, San Mateo, San Mateo County, and South San Francisco. These projects incorporated a variety of BMPs.
- Approximately 64 projects incorporated vegetated swales and/or detention basins. These projects represent approximately 660 acres of new and redevelopment projects.
- SMCWPPP's municipalities are continuing to verify the operation and maintenance of stormwater treatment measures as required by the amended NPDES permit's Provision C.3.e.
- Municipalities have continued to use the Summary of Pre-Wet Season Erosion Control Inspections Form to document the basis of the annual certification letter's determination that each active construction site has been stabilized to minimize erosion and the discharge of sediment from disturbed areas prior to the wet season. These forms can be found as Attachment E to the first half-year deliverable forms submitted by the municipalities.
- SMCWPPP continued to coordinate

with the San Mateo County Mosquito Abatement District by providing information on new development projects.

Sustainable, Green Streets and Parking Lots Program

The Sustainable, Green Streets and Parking Lots Program is funded by a countywide vehicle registration fee under Assembly Bill (AB) 1546, which went into effect on July 1, 2005. The fee will terminate at the end of 2008 unless extended. Senate Bill (SB) 613 has been introduced to extend the fee for an additional four years. The NDS's Green, Sustainable Streets and Parking Lots Work Group is guiding the development and implementation of this program, which will fund demonstration projects and create a design guidebook for incorporating post-construction stormwater green BMPs in street and parking lot projects. The program awarded five competitive grants to the following municipalities: Belmont, Brisbane, Burlingame, Daly City and San Bruno. In the previous fiscal year, one non-competitive grant was awarded to the Fitzgerald Marine Reserve, on the coastside, to include stormwater BMPs in its new parking lot.

The consultant team of Nevue Ngan Associates, of Portland, Oregon, and Sherwood Design Engineers, of San Francisco was selected to prepare the Sustainable Green Streets and Parking Lot Design Guidebook. A draft was under preparation in June, and a final version is anticipated to be complete in early FY 2008/09.

2008 New Development Workshop

The NDS conducted a New Development Workshop in May, focusing on the

Program's C.3 Technical Guidance, which was prepared in 2007. Sessions included an overview of the C.3 Technical Guidance and presentations on site designs and low-impact development, stormwater treatment measures, HM measures, planting guidance, and operations and maintenance. The workshop was held at the Green Building Exchange in Redwood City, and had 39 people in attendance (not including staff and guest speakers). The agenda, attendance list and workshop evaluation summary are included in Appendix D.

Construction Site Stormwater Compliance Training

SMCWPPP coordinated with the San Francisco Estuary Project (SFEP) to offer construction site management training in San Mateo County this fiscal year. The workshop was offered on October 31 and November 1 at the Green Building Exchange in Redwood City. SMCWPPP sponsored the October 31 session for municipal staff, and SFEP conducted the November 1 session for contractors and developers. In order to accommodate municipal staff's schedules, SMCWPPP coordinated with SFEP and the Santa Clara Valley Urban Run-off Pollution Prevention Program to allow staff from municipalities in San Mateo County to attend the SFEP's session on November 1 or the SCVURPPP-sponsored session on December 3. The workshop in Redwood City had 33 people in attendance. The agenda, attendance list and workshop evaluation summary are included in Appendix D.

ASSESSMENT OF EFFECTIVENESS

Completion of SWMP Tasks

The General Program has completed all of the New Development and Construction Controls tasks scheduled for FY 2007/08.

Effectiveness

Through continued education and local implementation efforts, SMCWPPP is continuing to reduce the discharge of pollutants from development and construction activities. The effectiveness of stormwater pollution prevention efforts during FY 2007/08 can be assessed in the following areas:

- Participation in General Program efforts, such as the NDS.
- Implementation of the performance standards.
- Enforcement of construction site BMPs, including erosion and sediment and general pollution prevention controls.
- Demonstration of the use of appropriate construction and post-construction stormwater controls in conditions of approval for development projects.

Development projects under review by the municipalities in FY 2007/08 are listed in Table 5-1, and Appendix D includes the NDS attendance list.

Information summarizing each municipality's efforts during FY 2007/08 to implement the NPDES permit requirements for new development is contained in the completed deliverable forms. Municipalities prepare annually certification letters that each active site has been stabilized (see Municipal Submittals). Table 5-1, along with Appendix D and the completed deliverable forms, indicate that, in general, most municipalities continue to make progress in incorporat-

ing stormwater pollution prevention requirements into their development plan review and construction inspection procedures, and are continuing to review and improve their programs especially with respect to incorporating post construction controls.

A comparison of development projects incorporating vegetated swales and/or detention basins between the current and five previous fiscal years can be found in Table 5-2. The table shows that the use of detention basins and vegetative swales, while down from FY 2005/07, is still much higher than in years 2005/06 and earlier. Table 5-3 lists the development projects using inlet filters (by themselves and also with other treatment measures) during the last and six fiscal years.

Projects using inlet filters by themselves are down by half over FY 2006/07. Projects using inlet filters as part of a "treatment train" are slightly up from FY 2006/07. Additional information on the municipalities' efforts can be found in their individual half-yearly deliverable forms.

FUTURE ACTIONS

General Program activities during FY 2008/09 will continue to focus on supporting the municipalities' efforts to implement the Provision C.3 NPDES permit amendment requirements, and to work with the Water Board staff to adopt the proposed municipal regional stormwater permit.

Major tasks will include the following:

- Continue to exchange information with the municipalities through bi-monthly NDS meetings, and at the next new development workshop.

- Continue participation in the development of the municipal regional stormwater permit as it pertains to Provision C.3, construction inspections, and other aspects of the New Development and Construction Controls component of SMCWPPP.
- Conduct round table discussions, and/or project review presentations, to assess and/or track effectiveness.
- Prepare a flyer on Provision C.3 compliance for projects that create and/or replace less than 10,000 square feet of impervious surface.
- Conduct a survey of the member municipalities regarding how they are implementing new development- and construction-related inspections, and whether they are using design specifications for post-construction stormwater controls.
- Update SMCWPPP's Guidebook of Site Design Examples.
- Continue to prepare for the adoption and implementation of the municipal regional stormwater permit.

5-1: Table of New Development Projects¹

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Project Name; Location (cross streets); Street Address	Name of Developer; Project Phase No. ² ; Project Description	Status of Project	Project Type ³	Site Area	New or Replaced Impervious Surface Area	Source Control Measure BMPs	Site Design Measure BMPs	Post-Construction Treatment BMPs				Pesticide Reduction Measures Included in Project	Alternative Compliance ⁴		HMP ⁶	
								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracticability	Alternative Compliance Measures		
ATHERTON																
NO PROJECTS MEET GROUP 2 CRITERIA																
BELMONT																
873/877 Ralston Avenue; one block west of El Camino Real	Ralston Assoc.; reconstruction of parking lot and remodeling a commercial building	Design Review approved in 2006. Building permits applied for in December 2007. Project is in plan check.	Commercial	15,000 sq. ft.	Replace 8,000 sq. ft. parking lot	Roofed trash enclosure; sweeping parking lot	Pervious pavement for parking lot area	Pervious pavement	WEF method	Owner's responsibility	Yes	Condition for pesticide reduction, pervious paving to reduce impervious surface	N/A	N/A	N/A	
1300 El Camino Real at O'Neill Ave.	Parvis Kamanagar; apartment building and commercial restaurants on ground floor	Project in design review stage. Construction may begin in summer 2008.	Mixed-Use	10,000 sq. ft.	Replace demolished building	Oil & grease interceptor at underground garage	Oil & grease interceptor at underground garage	Oil interceptor	WEF method	Owner's responsibility	Yes	Landscaping is minimal. Condition for reduced pesticide use.	N/A	N/A	N/A	
Ralston Ranch Subdivision	4 lots subdivision	Tentative map	Residential	4 acres	paved long driveway	Bioswale	Retention pond, swale	Bioswale	WEF method	Owner's responsibility	Yes	Condition for pesticide reduction	N/A	N/A	N/A	
1000 South Condo	24 Condo units conversion	Tentative map	Residential	1 acre	paved parking area	Fossil filters, landscape swale	Roofed trash enclosure	Swale and filters	WEF method	Owner's responsibility	Yes	Condition for pesticide reduction	N/A	N/A	N/A	
BRISBANE																
Southeasterly corner of Sierra Point at Sierra Point Parkway and Shoreline Court	Slough Estates International, Biotech complex encompassing 540,185 sq. ft. of office, 15,000 sq. ft. of retail, and 1,801 parking spaces (961 in 5-level garage). 487,490 sq. ft. of landscaping.	Development agreement approved by City Council 6/16/08, EIR certified, and approved design and use permits. Grading and building permits pending	Commercial	22.8 acres	Will be >1 acre, but still to be determined	To be determined (TBD) during grading / building permit process	Still being finalized, but minimize impervious area, use of multistory parking garage, many self-treating areas	Vegetated swales, bioretention areas, and underground vaults	TBD, still being designed	TBD	TBD	TBD	TBD	TBD	TBD	N/A, direct discharge to SF Bay.

5-1: Table of New Development Projects¹

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								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracti-cability	Alternative Compliance Measures	
325 Valley Drive	International Airport Carriers, redevelopment of existing 5.1 acre site with new 90,000 sq. ft. building, asphalt paved parking, concrete walkways, landscaping, and driveway areas.	Design and use permits conditionally approved by Planning Commission, as of June 30 2008, under appeal to City Council.	Commercial	5.1 acres	4.25 acres	Loading dock seals, bermed trash enclosure, stenciled drain inlets, water conserving and pest-resistant landscaping	Entire site being redeveloped, cannot maintain any existing vegetation, building footprint reduced but paved area increased to accommodate truck traffic, self treating area on east side	Bioretention area, vegetated swale, and CDS media filter	Simplified 4% volume-based sizing for bioretention area, 0.2 inches per hour for flow based swale and media filter.	Applicant required to enter into O&M agreement with City and record maintenance responsibilities on property deed prior to issuance of a certificate of occupancy. Agreement pending.	Not approved for construction yet. Pending.	Applicant required to incorporate Bay Friendly Landscaping designs in project. Planting selections for treatment measures taken from SMCWPPP's C.3 Technical Guidance manual.	N/A	N/A	N/A
Northwesterly corner of Sierra Point off of Marina Boulevard and adjacent to Highway 101 (3000-3500 Marina Blvd.)	Opus West Office Center, 8.87 acre site on top of Class III Landfill, construction of two office buildings totaling 445,500 sq. ft., five level parking garage (1,175 spaces), 214 surface parking spaces, landscape improvements	Environmental review underway	Commercial	8.87 acres	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	N/A

5-1: Table of New Development Projects¹

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								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracti-cability	Alternative Compliance Measures	
BURLINGAME															
Sunrise of Burlingame; 1818 Trousdale Avenue	Sunrise Assisted Living; 79-unit assisted living development and underground parking garage	Planning approval: July 06, building permit issued June 2007	Multi-family residential	1 acre	28,055 sq. ft. +/-	Beneficial landscaping; Outdoor material storage protection; Maintenance (sweeping, catch basin cleaning)	Minimized land disturbance; Underground parking to reduce impervious surface; Disconnected downspouts; Preserve open space	Hydrodynamic device	N/A	N/A	N/A	Yes-landscaping measures	N/A	N/A	
Chateau Bellevue; 1441 & 1445 Bellevue Avenue	Bellevue Associates, LLC c/o Litke Properties	Planning approval: November 05	17-unit residential condominium building and below grade parking garage	24,637 sq. ft. or .56 acre	Less than 1 acre; Approved before August 15, 2006	Landscaped areas designed to reduce excess runoff; subsurface drainage system	Large open space area at rear with softscape around creek bed (5,222 sq. ft.); Underground parking to reduce impervious surface.	Drainage from parking garage designed to drain to sewer system; Floodwalls to prevent contamination of creek	N/A	N/A	N/A	Yes-landscaping measures	N/A	N/A	

5-1: Table of New Development Projects¹

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								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracticability	Alternative Compliance Measures	
Residential Condominium; 1226 El Camino Real	1226 El Camino LLC	Planning approval: May 08	9-unit residential condominium building with below-grade parking	12,874 SF or .30 acre	Less than 1 acre; approved May 27, 2008	Beneficial landscaping, sediment basins, silt fences, and storm drain inlet protection shall be maintained until permanent erosion controls are established.	945 SF of open space area at grade, 85% of which shall be landscaped. Underground pkg to reduce impervious surface.	Common open space designed to reduce excess irrigation runoff and promote surface infiltration.	N/A	N/A	N/A	Yes-landscaping measures	N/A	N/A	
Burlingame Hills Manor; 1840 Ogden Drive	Burlingame Hills Manor, LLC; 17-unit residential condominium building and below grade parking garage	Planning approval: July 06	Multi-family residential	38,905 sq. ft. or .89 acre	Less than 1 acre; Approved before August 15, 2006	Beneficial landscaping; Outdoor material storage protection; Maintenance (sweeping, catch basin cleaning)	Large open space area with substantial softscape (8,762 sq. ft.); Underground pkg to reduce impervious surface.	Open space areas designed to reduce excess irrigation runoff	N/A	N/A	N/A	Yes-landscaping measures	N/A	N/A	
Peninsula Humane Society; 1450 Rollins Road / 20 Edwards Court	Peninsula Humane Society; Animal shelter and rescue facility; pet adoption center	Planning approval: June 07	Animal shelter	1.18 acres	Less than 1 acre; approved before June 12, 2007	Maintenance (sweeping, catch basin cleaning); material storage protection	On-site filtration system; procedures for proper disposal of pet waste	Unpaved open space (dog run) area to reduce impervious area; landscaping to reduce excess runoff	N/A	N/A	N/A	Yes-landscaping measures	N/A	N/A	

5-1: Table of New Development Projects¹

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								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracticability	Alternative Compliance Measures	
Residential Condominium; 1800 Trousdale Drive	25-unit residential condominium building and below grade parking garage	Planning approval: April 07	Multi-family residential	0.5 acre	Less than 1 acre; approved before June 12, 2007	Beneficial landscaping; Outdoor material storage protection; Maintenance (sweeping, catch basin cleaning)	Large open space area with substantial softscape; underground parking to reduce impervious area	Open space areas designed to reduce excess irrigation run-off	N/A	N/A	N/A	Yes-landscaping measures	N/A	N/A	
Office Building, 1427 Chapin	Office	Planning approval: April 2006; Building permits issued April 2007	Office	0.43 acre	Less than 1 acre; approved before June 12, 2007	Beneficial landscaping; material storage protection	Side and rear pathways made of pervious material	N/A	N/A	N/A	N/A	Yes-landscaping measures	N/A	N/A	
Peninsula Hospital Replacement Project; 1783 El Camino Real		Planning approval: November 04; Building Permits issued: April 05, September 05 and February 06.	Hospital Replacement and multi level parking garage	25.9 acres	18.59 acres	Beneficial landscaping; Material storage protection	Multi-level garage structure to reduce impervious surface; Preserved 8.1 acres open space	Vegetated swale	N/A	N/A	N/A	Yes-landscaping measures	N/A	N/A	

5-1: Table of New Development Projects¹

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								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracti- cability	Alternative Compliance Measures	
COLMA															
Serra Station, 990 Serramonte Blvd, Colma, CA	Dean Najdawi; Commercial redevelopment: retail and office space	Plan check	Commercial	0.8 acres	0.65 acres	Stenciled inlets, trash enclosure connected to sanitary sewer, pervious asphalt	Bioswale, detention basin, pervious asphalt	Bioswale, detention basin, pervious asphalt	WEF method	O&M Agreement will be recorded with County. Annual O&M report will be submitted to City. Followup inspections will be conducted by PW staff	N/A Project in design stages	N/A	N/A	N/A	N/A
Lexus Dealership; 700 Serramonte Blvd.	Sonic Automotive Group	Grading began 06/30/08	Commercial	4.2 acres	4.13 acres	Stenciled inlets, covered parking, trash enclosure and service areas drain to sanitary sewer	bioswale, detention basin	Media filter, bioswale, detention basin	Flow-based method	O&M Agreement will be recorded with County. Annual O&M report will be submitted to City. Followup inspections will be conducted by PW staff	N/A Project under construc-tion	N/A	N/A	N/A	N/A

5-1: Table of New Development Projects¹

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Project Name; Location (cross streets); Street Address	Name of Developer; Project Phase No. ² ; Project Description	Status of Project	Project Type ³	Site Area	New or Replaced ImperVIOUS Surface Area	Source Control Measure BMPs	Site Design Measure BMPs	Post-Construction Treatment BMPs				Pesticide Reduction Measures Included in Project	Alternative Compliance ⁴		HMP ⁶	
								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracticability	Alternative Compliance Measures		
DALY CITY																
Mixed-Use / Jiffy Lube Oil Change Center; 1000 King Drive	John Tealdi; two commercial buildings (office building 4.824 sq. ft. / oil change center 4.445 sq. ft)	Application submitted 1/03 and approved in 9/06; City Council approved 8/28/06; building permits issued 1/17/07 and 11/19/07; construction currently underway	Commercial	19,000 sq. ft.	19,000 sq. ft.	Trash enclosure, the drainage system for the oil change station shall include approved oil/grease interceptor; prevent pollutants from entering the storm drain system	Provide as much soil infiltration as possible	Provide detention for the increase of drainage flow for a 10-year/2 hour frequency storm event			Annual O&M		Integrated Pest Management for landscaping, including pest-resistant landscaping, diversity of native plants, and utilizing plants that attract beneficial insects.			
Five-lot subdivision; 1616 Annie Street	Creation of five lots ranging in size from 2,550 sq. ft. to 3,835 sq. ft. and construction of a new single family residence on each lot	Application submitted 12/12/06; Planning Commission approved 6/5/07; City Council approved 6/25/07; Design review approved 8/23/07; permits issued 9/21/07; construction underway	Residential	15,000 sq. ft.	7,500 sq. ft.	Covered parking required	Pervious pavers required for all paved areas at front of each five lots, including walkways and driveways.	Onsite detention required to limit drainage rate of flow to the predevelopment rate, based on a 10-year frequency and 2-hour storm event.								

5-1: Table of New Development Projects¹

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								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracticability	Alternative Compliance Measures	
Twelve-lot subdivision; Accacia Street south of Velasco Street	Creation of twelve 2,916.7 sq. ft. lots and construction of a new single family residence on each lot	Planning Commission approved on 7/3/07	Residential	35,000 sq. ft.	19,250 sq. ft.		Maximized on-site filtration	Provide detention capacity to accommodate drainage flow in excess of the pre-existing conditions for a 10-year/2-hour design frequency storm.		Annual O&M reporting; agreement binding on all future owners					
36 Condominium units over podium parking; 7555 Mission Street	Construction of 36 condominium units over 57-space podium parking garage	Application submitted on 6/25/07; Planning Commission approved 12/4/07; City Council review 2/11/08	Residential	30,046 sq. ft.	16,398 sq. ft.	Trash enclosure, recycling area drains to sanitary sewer	IPM for landscaping	Onsite detention required to limit drainage flow in excess of the pre-existing conditions for a 10-year/2-hour design frequency storm.				IPM practices for landscaping			
EAST PALO ALTO															
151 Tara Road	3 commercial buildings	rough grading	Commercial												
264 Tara Road	Industrial parking	grading, almost finished	Industrial												
872 Runnymede St.	7 SF	Framing	Residential												

5-1: Table of New Development Projects¹

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								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracticability	Alternative Compliance Measures	
Cumming's Park	55 Condos, retail	Finished	Mixed-Use												
Pulgas DKB Commercial		Reviewing map	Commercial												
Pulgas DKB Residential	T homes and condos	Reviewing map	Residential												
University Plaza	Office and retail	Reviewing plan	Mixed-Use												
Edison School Parking Lot	Parking lot	Finished	Parking lot												
Bay Road Phase 1, University and Clarke Avenue	J.J. Abenies	Advised the project on 8/23/07. Begin construction on 1/7/08. Proposed completion on 7/30/08	Capital improvement: street repaving, sidewalk, drainage systems												
FOSTER CITY															
NO PROJECTS MEET GROUP 2 CRITERIA															
HALF MOON BAY															
PDP-015-06; 2805 Pullman Ave	1 single-family home	Building permit issued 7/30/07. Under construction	Residential	7,498 sq. ft.	2,986 sq. ft.	N/A	Vegetated swale through landscape and downpouts hardpiped to drywells	Vegetated swales and drywells	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracti- cability	Alternative Compliance Measures	
PDP 019-06; 663 Seymour St.	1 single-family home	Building permit issued 8/3/07	Residential	7,267 sq. ft.	3,058 sq. ft.	N/A	Vegetated swale through landscape and downpouts hardpiped to drywells	Vegetated swales and drywells	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PDP 019-07; 552 Filbert St.	1 single-family home	Building permit issued 8/24/07	Residential	7,361 sq. ft.	2,132 sq. ft.	N/A	Vegetated swale through landscape and downpouts hardpiped to drywells	Vegetated swales and drywells	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PDP 073-06; 225 Miramontes Ave.	1 single-family home	Building permit issued 11/1/07	Residential	7,500 sq. ft.	3,697 sq. ft.	N/A	Vegetated swale through landscape and downpouts hardpiped to drywells	Vegetated swales and drywells	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PDP-078-05; 640 Purissima St.	1 single-family home upstairs with commercial office downstairs	Building permit issued 10/11/07	Mixed use: residential and commercial	5,079 sq. ft.	3,487 sq. ft.	N/A	Parking lot is pervious pavement with vegetated swales and downspouts hardpiped to drywells	Vegetated swales, pervious pavement and drywells	N/A	N/A	N/A	N/A	N/A	N/A	N/A

5-1: Table of New Development Projects¹

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								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracticability	Alternative Compliance Measures	
HILLSBOROUGH															
NO PROJECTS MEET GROUP 2 CRITERIA															
MENLO PARK															
100-190 Independence Dr	Hotel, restaurants, health club	1/14/08 Early development review, no applications rec'd	Commercial	7.11 acres	approx 7 acres	awaiting hydrology report	awaiting checklist and plans	Awaiting hydrology report	Awaiting hydrology report	City will propose O&M Agreement	not built yet	Awaiting checklist and plans	n/a	n/a	n/a
101-135 Constitution Dr	David Bohannon, Office space and commercial condos	Gen'l Plan and Zoning Ordinance amendment under review.	Commercial	10.98 acres	approx 9-10 acres	roofed trash enclosures, pest-resis-tant land-scaping	disconnected downspouts	vegetated swales, bioretention	Flow-based method	City will propose O&M Agreement	not built yet	Awaiting checklist and plans	n/a	n/a	n/a
1300 El Camino Real	Mixed Use Condos, retail	Planning permit under review. Preliminary design started.	Commercial	3.4 acres	3.4 acres	roofed trash enclosures, pest-resis-tant land-scaping	disconnected downspouts	flow-through planters	Flow-based method	City will propose O&M Agreement	not built yet	"	n/a	n/a	n/a
1460 El Camino Real (Beltramos)	Major Subdivision, condos	10/14/06 Applied for planning permit. Preliminary design started.	Residential	0.9 acres	0.9 acres	roofed trash enclosures, pest-resis-tant land-scaping	awaiting plans	vegetated swales, bio-retention	"	City will propose O&M Agreement	not built yet	"	n/a	n/a	n/a
2825 Sand Hill Rd	Rosewood Hotel	7/10/07 construction in process	Commercial, Residential	21.3 acres	21.3 acres	review checklist & plans	swales & detention basins	pervious pavement, veg swales, bioretention	Flow-based method	City is currently negotiating O&M Agreement	not built yet	"	n/a	n/a	n/a
525 El Camino Real	Grocery Store (Safeway) renovation	Construction almost complete. Building permit for on-site improvements issued 11/06.	Commercial	3.86 acres	3.86 acres	review checklist & plans	downspouts to impervious areas	veg swales, bioretention	Flow-based method	O&M agreement executed	yes	yes	n/a	n/a	n/a

5-1: Table of New Development Projects¹

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								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracti- cability	Alternative Compliance Measures	
580 Oak Grove (Derry Ln)	Mixed Use Condos retail	Revised planning permit under review. Application received 06/07.	Commercial, Residential	4.1 acres	4.1 acres	pervious pavement	downspouts to pervious pipe	vegetated swales, bio- retention	Flow-based method	City will propose O&M Agreement	not built yet	not built yet	n/a	n/a	n/a
8 Homewood Pl. (301, 303, 305, 307, 309, 311, 313 Homewood Pl)	Kenneth Namimatsu for HKN, II, LLC, Major Subdivision, 37 Homes	1/14/07 none issued yet. 8/27/07 through 2/8/2005 Bldg permit application rec'd	Residential Subdivision	2.0 acres	2.0 acres	"	"	"	"	City will propose deed restriction	not built yet	yes	n/a	n/a	n/a
507-595 Hamilton Ave. Clarum Homes and Hamilton Park	Clarum Homes & City Redevelopment funds	completed	Residential subdiv (47 lots + new city park)	6.2 acres	approx 5 acres	pest-resis-tant land-scaping	review checklist and plans	closed pipe detention system	Flow-based method	Deed restrictions were completed in March 2007	Yes	yes	n/a	n/a	n/a
75 Willow Rd.	Major Subdivision, 33 homes	on-site construction permit issued 11/07.	Residential	4.50 acres	4.5 acres (16% decrease in imp surface)	roof leaders to spashblocks	several driveways are pavers	grassy swales	Flow-based method	O&M agreement and deed restrictions executed	not built yet	yes	n/a	n/a	n/a
64 Willow Place	office bldg (group II)	Under construction. Demolition permit issued 5/07, on- site building permit issued 8/07.	Commercial	2.46 acres	approx 1.6 acres	roofed trash enclosures, pest-resis-tant land-scaping	review checklist and plans	review checklist & plans	Review hydrology report	City will propose O&M Agreement	Yes	"	n/a	n/a	n/a
996-1002 Willow Rd	Major Subdivision (group II)	completed	Residential	0.95 acres	0.95 acres	roofed trash enclosures, pest-resis-tant land-scaping	disconnected downspouts	pervious pavement, veg swales, bioretention	Flow-based method	deed restrictions executed	yes	yes	n/a	n/a	n/a

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								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracti-cability	Alternative Compliance Measures	
321 Middlefield	Pollock Financial Group, converting a 48,200 SF office building into Medical Office Bldg.	7/9/07 seismic upgrade bldg permit issued. Hydrology & engr plan review in process	Commercial	3.1 acres	2 acres	roofed trash enclosures, pest-resis-tant land-scaping	reduced impervious surfaces, downspouts to pervious areas, use of land-scaping as drainage and treatment	pervious pavement, bioswales	flow based method	O&M agreement executed	Yes	yes	n/a	n/a	n/a
110 & 175 Linfield	Major Subdivision, 56 detached, single family, 2 & 3 story homes	on-site construction permit issued 2/07.	Residential	5.36 acres	5.36 acres	pervious pavement	disconnected downspouts	veg swales, bioretention	Flow-based method	Deed restrictions executed	Yes- partial buildout achieved	pest-resis-tant land-scaping	n/a	n/a	n/a
1001 Santa Cruz	1001 Santa Cruz LLC, 3 new single family homes (after demolition of one single family home)	Under construction. Building permit for on-site work issued 10/07.	residential	0.28 acres	0.28 acres	review checklist & plans	review checklist and plans	review checklist & plans	Review hydrology report	City will propose deed restriction	not built yet	review checklist and plans	n/a	n/a	n/a
1204 N. Lemon Ave	NOLL, subdivide one parcel into two lots	Planning review application received 09/07.	residential	0.54	review checklist	review checklist & plans	review checklist and plans	review checklist & plans	Review hydrology report	City will propose deed restriction	not built yet	review checklist and plans	n/a	n/a	n/a
1250 Laurel St	Nativity School (demolish existing & bld new 14,016 SF multi-use bldg and 1321 SF kindergarten)	Under construction. Building permit for on-site work issued 07/07.	School	4.96 acres	0.35 acres	roofed trash enclosures, pest-resis-tant land-scaping	on-site retention "eggcrates"	bioswales	Flow-based method	City negotiating O&M Agreement			n/a	n/a	n/a
1275 El Camino Real	PARK THEATER, renovate historic theater	Planning review application received 07/07.	commercial	0.41	0.41		none, site is completely covered by bldg	none	none	none	na/	n/a	n/a	n/a	n/a

5-1: Table of New Development Projects¹

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								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracti- cability	Alternative Compliance Measures				
2122 Santa Cruz	Royal Oak Ct Homes subdivision	Under construction. Grading permit issued 09/06.	Residential	2.0 acres	0.88 acres	review checklist & plans	disconnected downspouts	bioretention basins and Filtera Units	Review hydrology report	deed restrictions executed	not built yet	review checklist and plans	n/a	n/a	n/a			
2245 Avy Philips Brooks School	Philip Brooks School, school addition	1/14/07 under construction	School	7.84 acres	review checklist	review checklist & plans	review checklist & plans	closed pipe detention system	Flow-based method	City is currently negotiating O&M Agreement	not built yet	yes	N/A	N/A	N			
66 Willow Pl.	Frykberg, demo old commercial building and construct new with site improvements	3/07 planning review application received	Commercial	2.66 acres	1.13 acres	pervious pavement	disconnected downspouts	vegetated swales, bioretention	Flow-based method	City will propose O&M Agreement	not built yet	yes	N/A	N/A				
2199 Clayton Dr.	Cupertino Development Corp. minor subdivision, create 4 from one parcel	5/23/07 engineering review of hydrology report and plans	Residential	1.02 acres	0.40 acre	gravel basin, storage pipe	disconnected downspouts	vegetated swales, on- site pipe detention	Flow-based method	City will propose deed restriction	not built yet	Awaiting checklist and plans	N/A	N/A				
1906 El Camino Real	1906 ECR LLC, demo office building and install new 10,000 sq ft., 2-story office building and commercial condos	Planning application received 8/30/06. In preliminary design.	Commercial	0.42 acre	0.40 acre	roofed trash enclosures, pest-resis-tant land-scaping	pervious pavement, disconnected downspouts	CDS unit	Flow-based method	City will propose O&M Agreement	not built yet	yes	N/A	N/A				

5-1: Table of New Development Projects¹

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4040 Campbell Ave.	T.J. Bianchi, demo office & R&D building and replace with smaller, 41,284 sq. ft. same	Under construction. Building permit for on-site improvements issued 10/07.	Limited industrial	2.11 acres	1.11 acres	pervious pavement	disconnected downspouts	bioswales	Flow-based method	O&M agreement executed	not built yet	yes	N/A	N/A	
737 Fremont St.	4 condominium units	planning permit submitted	Residential	0.41 acre	awaiting hydrology report	awaiting hydrology report	pervious pavement, disconnected downspouts	vegetated swales, bioretention	Flow-based method	City will propose O&M Agreement	not built yet	will require	N/A	N/A	
MILLBRAE															
Park Broadway 1355 El Camino Real AKA 1388 Broadway cross street ludeman	Silverstone Development - 116 unit residential with 13 work loft units	2/23/06 submitted for permits. 5/16/06 approved plan submittals, permit issued and construction began 9/19/06, work not yet complete	Mixed-use	2 acres	2 acres	Stenciled inlets, street sweeping	On site storm water retention / cleaning	Landscape filtering, drain inlet sand /oil separation	WEF Method	Home Owner's Association	No	Pesticide reduction	N/A	N/A	N/A
88 South Broadway	Glenborough Pauls LLC - 110-unit residential and commercial building	2/7/03 plans submitted for building permit, 8/18/03 plans approved, 8/23/03 construction begins, work 6/20/08 project completed.	Mixed-use	2 acres	2 acres	Stenciled inlets, street sweeping	On site storm water retention / cleaning	Landscape filtering, drain inlet sand /oil separation	WEF Method	Home Owner's Association	No	Pesticide reduction	N/A	N/A	N/A

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151 El Camino Real	L.F. George - construction of 142 residential and commercial shops, underground parking	6/27/07 submitted for permit; 6/20/08 parking structure substantially complete, building finishing structure plancheck	Mixed-use	1.7 acres	1.7 acres	Stenciled inlets, street sweeping	On site storm water retention / cleaning	Landscape filtering, drain inlet sand /oil separation	WEF Method	Home Owner's Association	No	Pesticide reduction	N/A	N/A	N/A
1 Alp Way	Braddock and Logan Properties 37 home subdivision	10/16/07 utility plan check submitted, 12/18/07 home model plan check submitted, 5/6/08 grading permits issued, grading underway	Single family homes	10.5 acres	6.4 acres	Stenciled inlets, street sweeping	Down spouts connected to landscaping	Landscape filtering	WEF Method	Home Owner's Association	No	Pesticide reduction	N/A	N/A	N/A
Friendship Plaza, 45 & 135 South El Camino Real	Friendship Plaza - new Walgreens commercial building and a 4-unit commercial building	2/2/06 plans submitted for permit, 6/25/06 plans approved, 6/29/06 grading and building permits issued, work not yet complete	Commercial	1 acre	1 acre	Stenciled inlets, street sweeping	On site storm water retention / cleaning	Landscape filtering, drain inlet sand /oil separation	WEF Method	Property Owner	No	Pesticide reduction	N/A	N/A	N/A

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PACIFICA															
100 Juanita	Kevin Russell	Approved by Planning Commission and awaiting issuance of a building permit	New single-family residence	28 acres	23,300 sq. ft.	Stormwater BMPs required as part of mitigation measures	Multi-story building to offset building footprint	Stormwater to be collected and routed through landscape to drainage swale	N/A	N/A	N/A	Native and pest-resistant plants			N/A
McDonald's, 125 Monterey	RHL Design Group	Approved and pending building permits	Commercial	29,476 sq. ft.	22,796 sq. ft.	Covered trash areas, wastewater will not drain to storm drain, streets or gutters	Minimized impervious surfaces, drought-tolerant landscaping	Unknown at this time	N/A	N/A	N/A	Native, non-invasive and pest-resistant plants			
Harmony @ 1; Fassler @ Robert's Road	Taiten Cowan and Stuart Newton	Planning approved but pending final map / building permit	Residential subdivision	67 acres	>10,000 sq. ft.	Unknown at this time but will apply all relevant source control measures as conditions of approval	Unknown at this time	Detention ponds	Unknown at this time	N/A	not yet	Unknown at this time			
The Bowl, North End of Palmetto Avenue	North Pacifica LLC; 19 detached condos and 24 attached condos	Application approved by City but pending Coastal Commission Approvals	Residential subdivision	4.2 acres	Unknown	Stenciled inlets and covered trash areas	Clustering to reduce impervious surfaces	not required	N/A	N/A	N/A	Native and pest resistant plants			

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Pacifica View LLC	Legacy Quest; 17 single-family detached units	Application incomplete - no recent progress	Residential subdivision	5.6 acres	Unknown	Unknown at this time but will apply all relevant source control measures as conditions of approval	Unknown at this time	Unknown at this time	Unknown at this time	Unknown at this time	Unknown at this time	not yet	Unknown at this time		
Vistamar Development, 503-511 Monterey	Javier Chavarria; 8 townhome condominiums	Application incomplete - no recent progress	Residential subdivision	1 acre	Unknown	Unknown at this time but will apply all relevant source control measures as conditions of approval	Unknown at this time	Unknown at this time	Unknown at this time	Unknown at this time	Unknown at this time	not yet	Unknown at this time		
Sunset Estates, 500 block of Palmetto Avenue	Jack Lowe; 7-lot residential subdivision	Application incomplete - no recent progress	Residential subdivision	8 acres	Unknown	Unknown at this time but will apply all relevant source control measures as conditions of approval	Unknown at this time	Unknown at this time	Unknown at this time	Unknown at this time	Unknown at this time	not yet	Unknown at this time		N/A
Westview School Site; Cypress Walk; 367 Glen Court Way	Joe Bradford of the Olson Company; 92 single-family residential	Under construction	Residential subdivision	10.5 acres	3.6 acres	Stenciled inlets, covered trash areas, wastewater will not drain to stormdrain, streets or gutters	Multi-story dwellings, common landscaped areas	Detention pond	CASQA BMP Handbook	O&M agreement	not yet	No invasive plants permitted			N/a

5-1: Table of New Development Projects¹

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Lorry Lane	Carlos Dominguez; 7 detached single-family homes	Application incomplete - no recent progress	Residential subdivision	53,418 sq. ft.	21, 367 sq. ft.	Unknown at this time but will apply all relevant source control measures as conditions of approval	Unknown at this time	Unknown at this time	Unknown at this time	Unknown at this time	Unknown at this time	not yet	Unknown at this time			
The Prospects; 801 Fassier Avenue	Rick Lee; 34 attached and detached residential units	Planning application is incomplete	Residential subdivision	11.2 acres	60,840 sq. ft.	enclosed trash / recycling areas, on-site stormwater collection - reuse for irrigation	Multi-story, clustered structures, pervious roadways, living roofs	Detention ponds, retention basin, swales, rain gardens, cistern	Unknown at this time	Unknown at this time	Unknown at this time	not yet	Native, non-invasive and pest-resistant plants			
Gypsy Hill and Clarendon Road	JC Engineering, subdivision	Application incomplete-no recent activity	8-lot subdivision for future residential use	13.9 acres	unknown	Unknown at this time but will apply all relevant source control measures as conditions of approval	Unknown at this time	Unknown at this time	Unknown at this time	N/A	not yet	N/A				
Walgreen's, 520 Palmetto Ave.	John Pechnica, Tecta; Commercial	Under construction	Retail space with drive-through	15,600 sq. ft.	15,000 sq. ft.	oil and grease filters, enclosed trash and recycling areas	No wastewater to flow to storm drain, street and/or gutters	Unknown at this time	Unknown at this time	N/A	not yet	Native and pest-resistant plants				

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270 Old County Road	JC Engineering, office/retail	Approved by Planning Commission and awaiting approval by City Council and Coastal Commission	Mixed commercial and office uses	14,070 sq. ft.	>10,000 sq. ft.	Unknown at this time but will apply all relevant source control measures as conditions of approval	Unknown at this time	Unknown at this time	Unknown at this time	N/A	not yet	Appropriate landscaping condition will apply			
4545 Coast Highway	Guru Thalapaneni, mixed-use	Application incomplete - no recent progress	Mixed-Use	2.873 acres	unknown	Unknown at this time but will apply all relevant source control measures as conditions of approval	Unknown at this time	Unknown at this time	Unknown at this time	N/A	not yet	Appropriate landscaping condition will apply			
Beach Boulevard	Legacy Quest, 9 condos	Project approved but no building permit application has been filed	Residential subdivision	17,962 sq. ft.	10, 575 sq. ft.	Enclosed trash and recycling areas, wastewater will not drain to storm drain streets or gutters	Unknown at this time	stormwater directed away from impervious surfaces, possible detention pond (depend on practicality)	Unknown at this time	N/A	not yet	Pest resistant, noninvasive plants			
Waterford @ Monterey	Miramar development	Approved, pending issuance of building permit	mixed-use, commercial and 5 residential units	9,597 sq. ft.	8,155 sq. ft.	Enclosed trash and recycling areas, wastewater will not drain to storm drain streets or gutters	N/A	N/A	N/A	N/A	N/A	native and pest and drought-tolerant plants			N/A

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Lower Miagra Ridge; Connemara; 900 Oceana Blvd.	Jim Poliart; mixed-use project	Under construction	25 residential units and 10,000 sq. ft. of commercial	40+ acres	95,830 sq. ft.	Stenciled inlets and covered trash areas	Multi-story dwellings, common landscaped areas	None - project deemed complete prior to 2/15/05	CASQA BMP Handbook	O&M agreement not approved by City Council yet	not yet	Native and pest resistant plants			
PORTOLA VALLEY															
Barratt/Oakley 348 Westridge Drive	New single-family residence	Design review approval October 2006. Project is under construction.	single-family residential	2.5 acres	>10,000 sq. ft.	Covered stock piles, jute netting, silt fencing, straw wattles, protected entrance, concrete wash out station	Retained existing landscape and trees	N/A	N/A	N/A	N/A	The Town's Conservation Committee requires native landscape plantings as selected from the Town's Design Guidelines.			N/A
Holland/Yates 170 Mapache Drive	Demo existing residence and build new, also new guest house, garage, sport storage cellar, sports court and swimming pool	Application approved in April 2007. Construction anticipated to start Spring 2008	single-family residential	2.5 acres	>10,000 sq. ft.			constructed wetlands				pest-resistant and native plants proposed			
Town of Portola Valley 765 Portola Road	Phase II New Community Hall, Library and Town Hall project	Project approved subject to EIR and mitigation monitoring program 08/05. Construction began May 2007 and completion is expected by Fall 2008	Redevelopment of Town Center Property	11 acres	>10,000 sq. ft.	roofed trash enclosures, covered stock piles, jute netting, silt fencing, straw wattles, protected entrance, concrete wash out station						Native, pest-resistant landscaping required			

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Corman 120 Golden Hills Drive	New single-family residence	Design review approval September 2006.	single-family residential	2.1 acres	3,867 sq. ft.	Covered stock piles, jute netting, silt fencing, straw wattles, protected entrance, concrete wash out station	Minimized grading, retained existing landscape and trees	N/A	N/A	N/A	No	Native, pest- resistant landscaping required			N/A
REDWOOD CITY															
Westpoint Marinia - 1529 Seaport Blvd.	Mark Sanders Phase 1A	Building permit pending	Commercial	5 acres	5 acres	Bioswales	Landscaping	Vegetated swale	Flow based	O&M agreement with City Engineer	Yes	N/A	N/A		
1703 East Bayshore Road	David Brett and Lisa Casentini	Approved August 31, 2007	Commercial	4.4 acres	0.78 acres	Label inlets	Landscaping	Flow-thru planters	Flow based	O&M agreement with City Engineer	Yes	N/A	N/A		
1616 Gordon Street	Zenaida Mallari	Approved September 25, 2007	Commercial	2.16 acres	0.36 acres	Pesticide reduction	Landscaping	Vegetated swale	Flow based	O&M agreement with City Engineer	Yes	pest-resistant landscaping	N/A		
420-450 Broadway	Stanford Hospital Clinics	Approved August 29, 2007	Commercial	11.5 acres	4.3 acres	Label inlets	Landscaping	Media filter, bioswales, vegetated strip and swale	HEC-1 program	O&M agreement with City Engineer	Yes	Stormwater detention	N/A		HEC-1 program

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71 & 77 Oakwood	Curtis Peterson	Approved August 17, 2007	Residential	0.36 acre	0.24 acre	Pesticide reduction	Landscaping	Bioretention	Volume based	O&M agreement with City Engineer	Yes	pest-resistant landscaping	N/A		exempt area
Lincoln Townhomes	Peninsula Habitat for Humanity, Inc.	Approved February 19, 2008	Residential	0.3 acre	0.26 acre	Reduce pesticides and label inlets	Landscaping	Media filter system	Flow based	O&M agreement with City	Yes	pest-resistant landscaping			exempt area
Costco 2300 Middlefield	Costco Wholesale	Approved June 20, 2008	Commercial	13.65 acres	12.78 acres	Reduce pesticides, label inlets, follow guidelines in Redwood City's Local Source Control Measures List for fuel dispensing area, loading docks, refuse areas, parking facilities, outdoor storage and food service facilities	Bay-friendly landscaping	Media filter system, oil/water separator, vegetated buffer strips	Flow based	O&M agreement with City	Yes	pest-resistant landscaping			exempt area

5-1: Table of New Development Projects¹

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Project Name; Location (cross streets); Street Address	Name of Developer; Project Phase No. ² ; Project Description	Status of Project	Project Type ³	Site Area	New or Replaced ImperVIOUS Surface Area	Source Control Measure BMPs	Site Design Measure BMPs	Post-Construction Treatment BMPs				Pesticide Reduction Measures Included in Project	Alternative Compliance ⁴		HMP ⁶
								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracticability	Alternative Compliance Measures	
718 Canyon Road	Gary Ernst	Approved May 19, 2008. Building permit pending	Residential	0.8 acre	.33 acre	Landscaping	Landscaping	Vegetated swale and detention pipe	Flow based	O&M agreement with City	Building permit pending	None	N/A		BAHM
SAN BRUNO															
Skycrest Homes. Glenview Drive & San Bruno Avenue. 200' south of intersection	Kenmark Realty. Development of 24 single-family homes on former shopping center site.	Project approved 4/18/06. Building permits issued 6/28/07 and construction is underway	Single-family design, with medium-density site plan.	3 acres		Stenciled inlets, SWPPP required, increased landscaping, require post-construction BMP plan during improvement plan stage	Increased landscaping with native plants	Vegetated swales, detention basins			HOA is required to maintain onsite facilities per conditions and CC&Rs.	N	N/A		
Glenview Terrace Condos. NE Corner of Glenview Drive @ San Bruno Avenue.	Panko Architects. Development of 16 townhomes.	Project approved 6/27/06. Plans are currently being reviewed by our Building Division. Postponed by applicant.	Medium density townhomes development	1.1 acres		Stenciled inlets, SWPPP required, increased landscaping, require post-construction BMP plan during improvement plan stage	Increased landscaping with native plants	Vegetated swales, detention basins			HOA is required to maintain onsite facilities per conditions and CC&Rs.	N	N/A		

5-1: Table of New Development Projects¹

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Merrimont Homes. Evergreen Drive at Maywood Drive	Summerhill Homes. Development of 70 single-family homes on former school site.	Project Approved 11.28.06. Currently under construction.	Low-density single-family home site plan	10.3		Stenciled inlets, SWPPP required, onsite detention required, increased landscaping, require post-construction BMP plan during improvement plan stage	Increased landscaping with native plants	Vegetated swales, detention basins			HOA is required to maintain onsite facilities per conditions and CC&Rs.	N	N/A		
599 Cedar Ave. at Pepper. Former church site.	Tyger Construction. Development of 14 clustered single-family homes	Project approved 6/17/08. Applicant developing construction documents.	Residential: medium density clustered single-family development	1.9 acres		Stenciled inlets, SWPPP required, onsite detention required, increased landscaping, require post-construction BMP plan during improvement plan stage	Cluster buildings to minimize impervious surfaces. Increased landscaping. Pervious paving used for driveways.	detention basins			HOA is required to maintain onsite facilities per conditions and CC&Rs.				
400-418 San Mateo Ave. at El Camino Real	Conceptual Investment and Mangement, Inc. Demolition of commercial buildings and construction of mixed-use building.	Application submitted, under review.	Residential medium density and commercial	0.95 acre		TBD	Compact, mixed-use building. Parking integrated into building	TBD			TBD but anticipated that a maintenance agreement will be executed				

5-1: Table of New Development Projects¹

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Treetops Apartments Skyline Blvd at Sharp Park Road	0	0	Residential: medium density apartments	1.9 acres		TBD	TBD	TBD	TBD	TBD	TBD	TBD			
The Crossing Specific Plan Area	SNK Development; 350 condominiums	Project approved 6/20/06. Plans currently under review by Building Division	High-density apartments	7 acres		Stenciled inlets, SWPPP required, increased landscaping, onsite detention required, require post- construction BMP plan during improvement plan stage	Increased landscaping with native plants	Vegetated swales, detention basins		HOA is required to maintain onsite facilities per conditions and CC&Rs.	N	N/A			
SAN CARLOS															
San Carlos Marketplace 1133 Industrial Road	SPI Holdings, Inc. Construct new shopping mall	application received 1/26/06, approved 1/23/07, construction began 5/2/07 and project completed 7/14/08	Commercial	6.5 acres	3.1 acres	Stenciled inlets, street sweeping, CDS units on drainage system	None	2 CDS units PMSU 20-15- 5		Stormwater system maintenance agreement signed with owner		No			
Palo Alto Medical Foundation, 301 Industrial Road	Palo Alto Medical Foundation new medical facility with clinics	Began demolition and limited grading to remove contaminated soil	Institutional	17.86 acres	~12.5 acres										

5-1: Table of New Development Projects¹

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SAN MATEO															
501 Edgewood (x Midway Ave)	Mark Strambi, SFD	Application submitted 01.2007 and approved 06/2007; grading began 06/2007; construction TBD.	Residential	21,683 sq. ft.	5,000 sq. ft.	Covered garage	Pervious pavement for driveway	Vegetated swales, detention basins	C.3 design guidelines	Conditions of approval	Yes	Pest-resistant landscaping; pervious paving to reduce impervious surface.			N/A
493 Edgewood (x Midway Ave)	Craig Suhi, SFD	Application submitted 01.2007 and approved 06/2007; grading began 06/2007; construction TBD.	Residential	21,683 sq. ft.	5,000 sq. ft.	Covered garage	Pervious pavement for driveway	Vegetated swales, detention basins	C.3 design guidelines	Conditions of approval	Yes	Pest-resistant landscaping; pervious paving to reduce impervious surface.			N/A
602 E. 4th Avenue (X S. Eldorado)	ASI Construction, 5 commercial spaces	Application submitted 11/2006 and approved 1/2007, construction 5/2007	Commercial	11,800 sq. ft.	9,000 sq. ft.	Covered trash enclosure	Landscaping along building edge	Vegetated swale	C.3 design guidelines, rational formula	Conditions of approval	Yes	Pest-resistant landscaping			N/A
613 & 701 2nd Avenue (x S. Delaware St.)	ASI Construction, 8-unit residential complex	Application submitted 08/2006 and approved 03/2007, construction TBD	Residential	12,050 sq. ft.	10,000 sq. ft.	Covered garage, enclosed trash area	Pervious pavement for driveway	Storage detention and filtration basin	C.3 design guidelines, rational formula	Conditions of approval	Yes	Pest-resistant landscaping			N/A
50-100 Barneson Avenue (x. Jasmine St.)	Fairrock Development, 10- unit residential complex	Application submitted 08/2006 and approved 01/2007, construction 05/2007	Residential	20,610 sq. ft.	11,119 sq. ft.	Covered garage, enclosed trash area	Permeable pavers	Vegetated bioswale	C.3 design guidelines, rational formula	Conditions of approval	Yes	Pest-resistant landscaping			N/A

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San Mateo Executive Park, 3000 Clearview Way (x Hillsdale Blvd.)	Lowe Enterprises Real Estate Group	Application submitted 09/07, approval 1/14/08, construction 2/13/08	Office space	22 acres	~50,000 sq. ft.	N/A	More landscape	Vegetated bioswale	C.3 design guidelines, rational formula	Conditions of approval	Yes	Pest-resistant landscaping			N/A
Police Station, 200 Franklin Parkway (x Saratoga Blvd.)	City of San Mateo, construction of new Police Station	Application submitted 2005 and approved 06/2006; grading begin 05/2006	Public facility	2.2 acres	1.9 acres	Enclosed trash area, covered parking, delivery area drains to sanitary sewer	Landscaping surrounding structure	Bioswales and media filter	C.3 design guidelines	Conditions of approval	Yes	Pest-resistant landscaping, pervious paving to reduce impervious surface	High groundwater table	vortex media filter	N/A
Verona Ridge, property bounded by Hillsdale Blvd. Between State Route 92 and the Peninsula Golf and Country Club	Taylor Woodrow Company; construction of a 34 single-family homes and a private street system	Project approved may 27, 2003, Construction began June 2007. Project is still ongoing	Residential	12.5 acres	4.5 acres	Small footprint homes	Narrow street and only one sided sidewalks	Storm detention system	Rational method	HOA	Yes	Native plants			N/A

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SAN MATEO COUNTY															
New Commercial Building, 866 Warrington Avenue, Redwood City	Gary Ernst, New Commercial Building	Building permit application received 5/3/07. Building permit and stormwater treatment plan are under review.	Commercial	12,375 sq. ft.	11,885 sq. ft.	TBD	TBD	Flow-based treatment	TBD	TBD	TBD	TBD	TBD	TBD	TBD
101 5th Avenue	Randy Blair, 2-5- unit buildings on an 18,000 sq. ft. common parcel	Subdivision approved 1/2007; buildings in building permit review	Residential	18,000 sq. ft.	~15,000 sq. ft.	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Brasher Properties	Ned Brasher, COC Type A, CDP, RM and grading permit to allow construction of a new 3,284 sq. ft. residence, driveway, and construction of Bay View Rd.	Planning application is incomplete	Residential	3.2 acres	Unknown	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

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Brasher Properties	Ned Brasher, RM permit, CD permit and grading permit for a 3,294 sq. ft. residence with approx. 1,100 cy of cut and 1,100 cy of fill	Planning application is incomplete	Residential	1.7 acres	Unknown	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Highlands Estates Major Subdivision, San Mateo Highlands	Jack Chamberlain, 9 lot subdivision	Application received 8/22/06; project not yet approved	Residential	99 acres	TBD	N/A	Vegetated swale	N/A	CASQA Method	O&M agreement required for final permit	TBD	TBD	TBD	TBD	TBD
Palomar Oaks Major Subdivision, 1520 Edgewood Road, Redwood City	A/CF Redwood I LLC (Builder), 12- lot subdivision	Application received 10/18/00 (Group 1); Parcel Map recorded 1/10/06; building permits issued of SFDs on 4 of 12 lots between 10/06- 1/07	Residential	Appx. 7 acres	Varies by lot	Varies by lot	Varies by lot	Varies by lot	Varies by lot	CASQA method	O&M agreement executed on 9/6/07	Varies by lot	N/A	N/A	Varies by lot

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Rathgar Estates Major Subdivision, 1718 Edgewood Road, Redwood City	Patrick Fellows, Subdivision & grading permit to create 5 lots	Approved 2/4/03 and grading permit issued (Group 2); final map recorded. Building permits applied for 6/13/08	Residential	Appx. 1.5 acres	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	N/A	N/A	TBD
Minor subdivision at 317 6th Avenue, Menlo Park	Abdel Ismail, subdivision and re- zoning for a condominium	Approved 9/28/05, grading permit and recordation of final map pending	Residential	12,000 sq. ft.	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	N/A	N/A	TBD
Highland Estates Major Subdivision, San Mateo Highlands	Jack Chamberlain, subdivision to create 9 new lots	Application received 8/22/06; project has not been approved.	Residential	99 acres	TBD	N/A	Vegetated swale	N/A	CASQA Method	An O&M agreement required for final permit	TBD	TBD	N/A	N/A	TBD
Ascension Heights Major Subdivision, San Mateo Highlands	Dennis Thomas, subdivision & grading permit to create 25 new lots	Application received 8/28/05; project has not yet been deemed complete	Residential	13.25 acres	TBD	TBD	Vegetated swale	CDS Unit, hydrodyna- mic device	CASQA Method	An O&M agreement required for final permit	TBD	TBD	N/A	N/A	TBD

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Big Wave Office and Housing Project, Pillar Point Marsh, Princeton	Big Wave LLC, Major subdivision into 5 lots for 4 office buildings and housing units for disabled adults	Application received 10/18/05; project has not yet been deemed complete	Residential and Commercial Office	14.88 acres	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	N/A	N/A	TBD
Bridge Housing Transit Village, 7880 El Camino Real	Bridge Housing, Major Subdivision including 158-unit multifamily residential development and day care center	Application received 8/24/06 (Group 2). Approved by Board of Supervisors on 1/23/07. Map recorded 3/26/07. Building Permits have been applied for.	Residential with Day Care Center	Appx. 3 acres	TBD	Inlet stenciling / employee education; maintenance (street seeping, catch basin cleaning)	Vegetated swale	CDS Unit, hydrodynamic device	TBD	An O&M agreement required for final permit	TBD	TBD	N/A	N/A	TBD
YMCA's Camp Jones Gulch, 11000 Pescadero Rd., La Honda	Peter Jones (applicant); use permit amendment to make modifications to YMCA's existing camp facilities as a part of the Master Plan	Application received on 7/2/03 (C3 not required). Zoning Hearing Officer approved 3/29/07. No building permit received yet (Master Plan put on hold due to funding issues).	Significant redevelopment	Appx. 100 acres	Appx. 65,000 sq. ft.	TBD	TBD	Vegetated swale	TBD	TBD	TBD	None	N/A	N/A	TBD

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Eternal Gardens Burial Section at Skylawn Memorial Park, 10600 Skyline Blvd.; Half Moon Bay	Stephen Elliott, Skylawn Corporation; 1250 sq. ft. garden mausoleum, 9 acre cemetery section with road, retaining walls, sidewalks, plazas, and water fountain and pond	Application for RM permit, Use Permit and grading permit received on 11/12/03 (C.3 not required). Building Permit was revised / downscaled and issued on 10/17/06. Public Works has approved SWMP.	Significant redevelopment	9 acres	97,405 sq. ft.	Inlet stenciling / employee education; maintenance (street sweeping, catch basin cleaning)	Min. impervious surface, min.-impact street or parking lot design, min. change in runoff hydrograph, erosion control and site stabilization	Infiltration trench	CASQA Method	Applicant is to execute O&M agreement prior to final by DPW on all 3 building permits	Future	Native landscaping	N/A	N/A	TBD
Extra Space Storage, 477 Harbor Blvd., Belmont	Michael Bassilios / Kier & Wright; new storage building	Applications received for four buildings on 1/12/05 (group 1); building permits issued 4/20/06. Building permits have been finalled.	Significant redevelopment	1.65 acres	100% replacement			CDS unit; hydrodynamic device	CASQA method	A maintenance agreement was executed on 6/19/07	Future	None	N/A	N/A	N/A
South San Francisco															
Malcolm Bldg., 200 Oyster Point Blvd.	Malcolm Bldg. LLC, Biotech facility	60% complete	Industrial, R&D labs and offices	1.9 acres	1.77 acres	Stabilized entrance, tire wash area, concrete wash out area, inlet filters, fiber roll	None	Inlet filters, bioswales, hydro-seeding, jute mat, hydrodynamic separator	Unknown	Property owner	Yes	N/A			
Marbella (City Lights), NW corner of Gellert Blvd. and Westborough Blvd., SSF, CA	Watt Communities, residential	Completed	Residential condos	14.9 acres	5.7 acres	Catch basin cleaning, tire wash area, street sweeping	None	Inlet filter, straw wattles, hydro-seeding, jute mat	Unknown	Property owner currently; HOA after completion	Yes	N/A			

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West Building (Alexandria Real Estate), 249 E. Grand	Alexandria Real Estate Equities, Inc., 4-story office and R&D facility	Completed	Office and R&D	7.41 acres	6.91 acres	Street sweeping, beneficial landscaping, tire wash area	None	Inlet filters, straw wattles, bioswales	WEF Method	Property owner	Yes	Yes			
Genentech Child Care Center, 444 Allerton Ave.	SL Construction, construction of child care facilities (6 new structures)	Completion by Fall 2008	Child Care	5.6 acres	2.52 acres	Fiber roll, stabilize construction entrance, street sweeping, vacuuming, tire wash area, inlet protection	Minimize impervious surfaces, minimum impact parking lot design	bioswale, storm water inlet filter insets, straw wattles	WEF Method	Property owner	Yes	N/A			
Kaiser SSF Cancer Treatment Facility, 220 Oyster Pt. Blvd.	Rudolph & Sletten Cancer Treatment Facility	Completion by Winter 2009	Construction of cancer treatment clinic and parking	1.6 acres	1.3 acres	Fiber roll, stabilize construction entrance, street sweeping, vacuuming, tire wash area, inlet protection, cover soil stockpiles	Preservation of existing vegetation	Hydrodynamic separator, hydro-seeding and planting, drainage swales	WEF Method	Property owner	Yes	N/A			

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Home Depot, 900 Dubuque	Home Depot USA, Inc., Demo existing building, construction of warehouse hardware store	Project discontinued	Retail	7.62 acres	7.62 acres	Street sweeping, tire wash area, stabilized construction entrance, dissipation devices, check dams, interceptor swale, silt fence, maintain existing vegetation, gravel bag berms	Storm water detention ponds, permanent vegetation, permanent diversion dike, hydroseed	Flow attenuation by use of open vegetated swales and natural depressions, storm water detention structures (including wet ponds)	WEF	Property owner	Yes	N/A			
Brittannia Oyster Point II, 333 Oyster Point Blvd.	Hathaway Dinwiddie, demolition of existing building, construction of new office and lab buildings with parking underneath	Completed	Office, R&D	8.84 acres	6.54 acres	Roofed dumpster area, covers for loading dock drains, street sweeping, catch basin cleaning	Minimize impervious surfaces, disconnect downspouts	Biofilters, media filters, hydrodyna- mic device (in-line treatment unit)	WEF	Property owner	Yes	N/A			

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Brittannia East Grand Phase II, 620, 625, 640, 645, 660 East Grand	Hathaway Dinwiddie, demolition of existing building, construction of new office, lab and parking structures	Completed	Office, R&D	27 acres	13.5 acres	Beneficial landscaping, outdoor material storage protection, covers for loading docks, street sweeping, catch basin cleaning	Minimum- impact street and parking lot design, protect riparian and wetland areas	Biofilter, media filters, inlet filters	WEF	Property owner	Yes	N/A							
East Jamie Court Tech Center, E. Jamie Court @ Haskins Way	BNB Builders, construction of new office and lab buildings with parking underneath	Completed	Office, R&D	6.83 acres	5.12 acres	Catch basin cleaning, street sweeping	Minimize land disturbance, minimize impervious surfaces, native plants	Inlet filters	WEF	Property owner	Yes	Yes							
Park Station, 1488 El Camino Real	Summerhill Homes; 99 residential units	90% complete	Multi-family residential	2.04 acres	1.47 acres	Fiber roll, catch basin cleaning, street sweeping, tire wash area, sediment trap	None	Inlet filters	Unknown	Property owner	Yes	N/A							

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Lowe's of SSF, 600-790 Dubuque Avenue, SSF, CA	Lowe's HIW, Inc.; Demo 3 buildings and construct warehouse hardware store	Completed	Retail	10.89 Acres	10.1 acres	Fiber roll, catch basin cleaning, street sweeping, tire wash area, sediment trap	Minimum-impact street or parking lot design	CDS units, biofilters	WEF	Property owner	Yes	N/A			
Mandalay Terrace, Airport Blvd. and Sister Cities Blvd.	Hathaway Dinwiddie, Inc.; mass grading and construction of two office towers and parking structure	50% complete	Construction of two high-rise office towers and parking structure	11.9 acres	5.95 acres	Silt fencing, fiber roll, catch basin cleaning, street sweeping and vacuuming, inlet protection, gravel bag berms, check dams, stabilize entrances, tire wash area	Preservation of existing vegetation, hydro-seeding, earth dikes, geotextiles and mats	Drainage swales, velocity dissipation devices, hydrodynamic separator	WEF	Property owner	Yes	N/A			

WOODSIDE

Not reported

¹ Projects that create at least 10,000 square feet but less than 1 acre of impervious surface are required to report information in columns 1 through 15 only.
² If a project is being constructed in Phases, each Phase should have a separate entry.
³ Indicate project type, based on NPDES Permit Provision C.3.c categories: Commercial, Industrial, Residential, Streets/Road/Highways/Freeways, Significant Redevelopment.
⁴ If a project was granted Alternative Compliance (Provision C.3.g), report required information on the Interim Alternative Compliance Form (Attachment __).
⁵ If hydromodification (HM) control is not required, state why not. If HM control is required, describe the control method used and attach the pre- and post-project hydrographs.

TABLE 5-2. NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS THAT USE VEGETATED SWALES AND/OR DETENTION BASINS: FY 2001/02 TO FY 2007/08

Fiscal Year	Reported Projects Incorporating Swales and/or Detention Basins	
	Approximate Number of Projects	Approximate Acres Represented
2001/02	38	452
2002/03	25	303
2003/04	23	441
2004/05	22	312
2005/06	38	302
2006/07	72	447
2007/08	64	660

Sources: Annual Reports for fiscal years 2001/02 through 2004/05, Second Half Year deliverable forms for FY 2005/06 and First and Second Half Year deliverable forms for FYs 2006/07 and 2007/08.

TABLE 5-3. NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS THAT USE INLET FILTERS: FY 2001/02 TO FY 2007/08

Fiscal Year	Reported Projects with Inlet Filters and ...		Total Reported Projects with Inlet Filters
	NO Other Treatment Measure in Project	Other Treatment Measure Included in Project	
2001/02	9	3	12
2002/03	4	4	8
2003/04	4	9	13
2004/05	5	6	11
2005/06	2	6	8
2006/07	6	14	20
2007/08	3	17	20

Sources: Annual Reports for fiscal years 2001/02 through 2005/06, Second Half Year deliverable forms for FY 2005/06 and First and Second Half Year deliverable forms for FYs 2006/07 and 2007/08.

6

WATERSHED ASSESSMENT AND MONITORING

INTRODUCTION

Watershed Assessment and Monitoring (WAM) is one of SMCWPPP's key components. The current emphasis is on characterizing representative watersheds in San Mateo County and addressing pollutants of concern that may impair water quality. More specifically, the goals of the WAM component include:

- Characterizing creek function, health and water quality conditions in representative watersheds in San Mateo County and evaluating potential stormwater runoff impacts;
- Developing plans to address specific pollutants of concern associated with stormwater runoff such as mercury and polychlorinated biphenyls (PCBs) and performing related special studies (e.g., to identify pollutant sources); and
- Evaluating long-term trends in water quality and thereby informing SMCWPPP's efforts to improve the effectiveness of its BMPs to prevent or reduce stormwater runoff impacts.

SMCWPPP focuses on using integrative tools such as creek walks and bioassessments to characterize creek condition. The monitored creeks are typically receiving waters for stormwater discharges from municipal storm drain systems in watersheds with significant urban land uses. SMCWPPP also participates in regional collaborative efforts that develop information needed to improve water quality in San Francisco Bay and local watersheds in San Mateo County and throughout the Bay Area.

ACCOMPLISHMENTS

SMCWPPP's WAM component accomplishments during FY 2007/08 are summarized below. The accomplishments fall under three general categories:

1. Watershed-related Activities;
2. Regional Collaborative Efforts; and
3. Regulatory Compliance, Coordination and Planning.

Watershed-related Activities

- SMCWPPP performed creek walks in seven watersheds in San Mateo County using the Unified Stream Assessment (USA) protocol and completed a report on this work.
- SMCWPPP, in collaboration with the Santa Clara Valley Urban Runoff Pollution Prevention Program, prepared a guidance document for municipal stormwater programs and other interested agencies on the potential uses of the USA based on recent experience in the Bay Area.
- As a follow-up to the USA creek walks, SMCWPPP began to explore potentially developing a program in San Mateo County similar to Contra Costa County's Stream Management Program for Landowners (SMPL).
- SMCWPPP performed trash assessments at seven urban creek sites in San Mateo County and completed a report on this work.
- SMCWPPP prepared a draft fact sheet that describes typical trash management activities conducted by SMCWPPP's municipalities and SMCWPPP's multi-faceted program-wide efforts to characterize trash and reduce trash levels in urban creeks.
- SMCWPPP reviewed the Regional Water Board's June 30, 2007 San Francisquito Creek Sediment Total Maximum Daily Load (TMDL) and Habitat Enhancement Plan Preliminary Project Report and prepared a comment letter.

Regional Collaborative Efforts

- SMCWPPP continued to coordinate its WAM component activities with

other Bay Area stormwater management agencies through the Bay Area Stormwater Management Agencies Association (BASMAA).

- SMCWPPP continued to provide in-kind assistance to the Bay Area Macroinvertebrate Bioassessment Information Network (BAMBI).
- SMCWPPP continued to participate in the San Francisco Estuary Regional Monitoring Program (RMP).
- SMCWPPP assisted Regional Water Board staff to compile selected data on San Mateo County stormwater pump stations as part of a regional data collection effort.
- SMCWPPP General Program staff continued to assist BASMAA to participate in a Proposition 50 grant-funded project (Taking Action for Clean Water) that will develop Bay Area-specific BMPs to prevent release of PCBs from building materials into urban runoff during renovation, maintenance and demolition of structures.
- SMCWPPP General Program staff continued to help represent BASMAA'S interests during development of the San Francisco Bay PCBs TMDL cleanup program.

Regulatory Compliance, Coordination and Planning

- SMCWPPP's WAM Subcommittee met regularly during FY 2007/08 to oversee the WAM component's activities.
- SMCWPPP prepared the WAM component section of SMCWPPP's annual report and work plans.

DESCRIPTIONS OF ACCOMPLISHMENTS

SMCWPPP's accomplishments are described in more detail below.

Watershed-related Activities

During FY 2007/08, SMCWPPP continued to perform creek walks and trash assessments in representative urban watersheds in San Mateo County. These data help characterize aquatic ecosystem health and water quality conditions in local creeks.

Unified Stream Assessment Creek Walks

During fall 2007, SMCWPPP performed creek walks in seven watersheds in San Mateo County – the Atherton, Redwood, Burlingame, Sanchez, Easton, Mills, and Millbrae Creek watersheds (*Unified Stream Assessment in Seven Watersheds in San Mateo County, California, August 2008*). Appendix E contains a copy of the cover and summary of this report. The primary objective was to characterize physical conditions and features of creek channels and riparian corridors in the study watersheds. A few potential illicit discharges were also observed and reported to the appropriate municipal illicit discharge coordinator.

The creek walks were conducted using the Unified Stream Assessment (USA) protocol developed by the Center for Watershed Protection. The USA is a rapid assessment tool used to collect data on instream and riparian habitat conditions and identify possible influencing factors and opportunities for improvement. Each study creek was delineated into reaches. Each reach represented a relatively uniform set of conditions within the creek corridor.

Factors that contributed to delineating a reach included land use in the immediate vicinity, elevation, creek order, access, and total length. The study reaches were typically less than one mile long, began and ended at major creek crossings or grade changes, and reflected the general condition of the area adjacent to the creek. Tributaries were generally considered separate reaches. Creek sections were not assessed if inaccessible (e.g., due to culverts or dense vegetation) or if little apparent urban influence was present.

A single overall "reach level assessment" was conducted for each reach. This reach level assessment qualitatively evaluated characteristics such as base flow, dominant substrate, water clarity, biota, shading, and active channel dynamics. Each reach was ranked for overall stream condition and overall buffer and floodplain condition based on eight subcategories: in-stream habitat, vegetative protection, bank erosion, floodplain connection, vegetated buffer width, floodplain vegetation, floodplain habitat, and floodplain encroachment. Each subcategory was given a score on a 20-point scale (in general, a score of zero to 5 is designated as poor condition, 6 to 10 is marginal, 11 to 15 is suboptimal and 16 to 20 is optimal). The subcategory scores were summed to give a total reach score ranging from zero to 160.

The USA protocol was also used to identify eight potential creek impacts: channel modification, erosion, utilities, outfalls, creek crossings, trash/debris, recreation sites, and miscellaneous features. The location, extent and general characteristics of each impact were documented.

Reach Level Assessment

In the larger study watersheds (i.e., Atherton and Redwood Creek), overall creek condition scores generally increased in the upstream direction as urbanization decreased. The scores were largely driven by improved instream habitat and increased buffer widths and floodplain connection in the upper parts of the larger watersheds. In the smaller study watersheds (i.e., Burlingame, Sanchez, Easton and Mills Creek), overall creek condition was generally marginal or suboptimal in all reaches due to extensive urbanization throughout the watershed. Impacts were typically associated with low buffer widths (e.g., homes constructed very close to the creek) or highly impacted riparian corridor due to culverting beneath roads and driveways and extensive channel armoring, often to protect the backyards of residential properties.

Channel Modification

Construction of bank revetments along homes and yards was the most common type of channel modification observed. Culverted sections of creek, typically below roads or driveways, were also common. Some of the channel modifications identified appeared to be failing and/or causing erosion. Older revetments were especially vulnerable to scour and undercutting by increased peak flows associated with urbanization.

Erosion

The majority of erosion observed was in the form of bank scour, especially at meander bends and revetments. Bank failure was also common, especially the failure of steep banks within highly incised channels. Channel incision in the study watersheds generally

appeared to be associated with historical land use changes and may no longer be active (i.e., the watersheds have likely been developed for a long enough period of time for the channel to have adjusted to change in the hydrograph and reached a new equilibrium). The channel bed in many of the reaches appeared to be clay, which is relatively resistant to erosion. In some cases grade control structures appeared to further stabilize the channel bed.

Utilities

In most cases, utilities in the study watersheds did not appear to have much impact on the creeks. The majority of utilities observed consisted of small pipes crossing over the creek high above the channel bed without any apparent impact on the creek. In some cases, utilities were located near the channel bed and were associated with bank erosion, apparently during high flow events. In areas that had major utilities, such as a San Francisco Public Utilities Commission water supply pipeline, grade control structures and bank armoring had often been constructed to protect the facility.

Outfalls

The assessments were carried out during the dry season and few dry weather flows were observed. Only a small fraction of the outfalls with discharge showed any indications of illicit discharge (e.g., discoloration, odor). All suspicious discharges were reported to a municipal illicit discharge coordinator. Some outfall pipes were associated with erosion, either immediately downstream from the outfall or at head cuts perpendicular to the creek.

Creek Crossings

The most common type of creek crossing observed was road crossings. Other types of crossings identified include houses, yards and driveways. In addition to habitat alteration impacts, creek crossings can potentially impact upstream passage for fish. The study watersheds are not expected to support anadromous fish (e.g., steelhead); however, native warm water fish, primarily stickleback, were observed in several reaches. These fish need to migrate to search for spawning habitat and refuge during summer low flow conditions. Conversely, creek crossings can be beneficial by serving as grade controls. When the bottoms of creek crossings are hardened, creek bed erosion may be prevented from migrating upstream.

Trash/Debris

Trash is deposited in urban creeks in several different ways including illegal dumping and/or littering at the site, windborne transport from adjacent land uses, and waterborne transport from upstream sources. Littering and illegal dumping are typically problematic when urban creeks are adjacent to areas that receive high vehicle and/or foot traffic (e.g., shopping centers) or locations with good public access (e.g., parks and schools). The study area was predominately comprised of residential land uses west of major transportation corridors, such as El Camino Real or Alameda de las Pulgas. As a result, littering or dumping in creeks occurred in only a limited number of locations.

Trash impacts in the study area were often associated with the dumping of yard waste into creek channels behind residential properties. Impacted sites also included areas where trash

accumulated due to obstructions in the channel, such as dense vegetation or utilities. Other impacted sites occurred where creeks passed through parks or vacant lands that were in close proximity to schools.

Recreation

Evidence of recreation was limited to two sites located within one creek reach in a public park (Stulsaft Park in Redwood City). Both of these sites had rope swings over the creek with excellent public access. However, the potential for water contact recreation appeared limited at the time of the assessment due to low flow conditions and the lack of deep-water pools.

Guidance Document on the Potential Uses of the USA

During FY 2007/08 SMCWPPP prepared a guidance document for municipal stormwater programs and other interested agencies on the potential uses of the USA based on recent experience in the Bay Area (*The Unified Stream Assessment: Potential Uses for Stormwater Programs, San Francisco Bay Area Examples, July 2008*). Appendix E contains a copy of the cover and summary of this report. This effort was performed in collaboration with the Santa Clara Valley Urban Runoff Pollution Prevention Program.

The guidance document shows how data generated through USA surveys can address multiple stormwater program monitoring-related objectives. These include establishing baseline data, identifying the types and locations of potential impacts to water quality, identifying potential beneficial uses to protect and threats to such uses, and refining monitoring program objectives

and design. USA survey data can also assist stormwater programs to better understand creek conditions and threats to water quality upstream and downstream of existing monitoring sites, thereby assisting in the interpretation of existing monitoring data and the identification of appropriate stormwater BMPs and potential restoration activities.

Stream Management Program for Landowners

As a follow-up to some of the issues documented during the USA creek walks (e.g., erosion and unsound erosion control practices), SMCWPPP began to explore the potential for developing a program in San Mateo County modeled after Contra Costa County's Stream Management Program for Landowners (SMPL).

Many of the impacts observed during SMCWPPP's USA creek walk surveys are associated with efforts by individual private property owners to control bank instability on their properties. An education, outreach and support program similar to SMPL could help landowners understand the impacts of such actions on creeks and potentially lead to the use of better practices in the future.

SMPL is administered by the Urban Creeks Council (UCC), a 501(c) Non-profit organization in Berkeley. The UCC gave a presentation to SMCWPPP's WAM Subcommittee in November 2007. SMPL was initiated in the year 2000 and is funded by the Contra Costa Clean Water Program. It provides free advice about creek care to Contra Costa County property owners. Services include free site visits and consultations on creek restoration techniques and associated permitting,

including how to address issues such as bank failure, erosion, and flooding using low-cost, environmentally sensitive creek-side management practices. The program promotes ecologically sensitive restoration and bank stabilization methods that improve habitat, riparian vegetation and biodiversity. UCC staff works with property owners one-on-one and also coordinates hands-on neighborhood workshops to train landowners and encourage them to work together to solve shared problems along creek reaches. UCC also assists landowners with the permitting/regulatory process and can provide referrals to qualified professionals and contractors when needed for restoration work. The current level of funding in Contra Costa County allows about 40 to 50 site visits and five to seven workshops and presentations per year. Surveys of property owners that have used the SMPL program have been very positive.

One challenge is that SMPL is currently a reactive program and demand varies seasonally and with the amount of rainfall. A more proactive program might have some advantages, especially for addressing impacts on the reach scale rather than just at individual properties. The data from SMCWPPP's USA creek walk surveys could potentially provide the basis for a more proactive creek management program in San Mateo County by informing efforts to target and optimize creek management and restoration efforts.

Currently a funding source to implement a program similar to SMPL in San Mateo County has not been identified. One difficulty is that the activities implemented by the SMPL program are not specifically required by any of the provisions in the municipal regional

stormwater permit. While some of the outreach actions associated with SMPL could fit under the Public Information and Outreach provision of the permit, these actions are not a direct requirement. This makes funding the SMPL program difficult at the current time, since the limited resources available to implement the municipal regional stormwater permit will likely be dedicated to performing actions specifically required by the permit. The best opportunity to fund a program similar to SMPL in San Mateo County may be to apply for grant funding. The Urban Creek Council has already taken some initial steps towards applying for grant funds to develop a program similar to the SMPL in several Bay Area counties.

Trash Assessments

SMCWPPP completed a report on trash assessments conducted at seven urban creek sites in San Mateo County during FY 2007/08 (*FY 2007/08 Trash Assessments in Urban Creeks in San Mateo County, California, August 2008*). Appendix E contains a copy of this report. The primary objectives of this study were to:

- Evaluate the status and condition of selected trash accumulation sites in urban creeks, including establishing a baseline against which to track future trends; and
- Collect data that will help identify primary trash sources and transport pathways associated with the selected trash accumulation sites and inform development of BMPs to address trash in urban creeks.

The Urban Rapid Trash Assessment (URTA)¹ protocol (Version 1.0) was used to further characterize trash conditions at a subset of the trash accumulation sites identified during the fall 2007 USA creek walks. URTAs were performed at a total of seven of the 27 trash accumulation sites identified during the creek walks - two sites in the Redwood Creek watershed, two sites in the Mills Creek watershed, two sites in the Millbrae Creek watershed and one site in the Burlingame Creek watershed. The URTA was conducted twice at each site, once during fall 2007 and a second time during spring 2008, for a total of 14 assessments.

Trash sources identified during the study included littering, dumping and accumulation from upstream sources. Yard waste was the most common type of trash at sites with illegal dumping. All seven URTA sites had fewer trash items during the spring 2008 assessments compared to the fall 2007 assessments. However, URTA scores did not increase greatly at four of the sites, suggesting persistent ongoing sources of trash, since trash was removed during the fall assessment. Plastic was the most common item collected during the URTA assessments, representing over 60% of all trash. Miscellaneous, glass, biodegradable and metal items were the next most common trash items, representing about 33% of the trash observed. Approximately 13 percent of

¹During FY 2005/06, the Santa Clara Valley Urban Runoff Pollution Prevention Program revised the Regional Water Board's Rapid Trash Assessment protocol to increase its utility in evaluating trash conditions at typical impacted sites in urban watersheds. The revisions were intended to enhance the utility of this tool in assisting municipal staff to identify, prioritize and evaluate trash management activities in urban creeks. The revised protocol is referred to as the Urban Rapid Trash Assessment (URTA).

the trash that was identified during the URTAs was categorized as hazardous (biohazard, toxic, or sharp). Most items in this category were glass and metal objects; biohazardous items were not observed and toxic items were relatively uncommon. Most sites with hazardous trash had limited public access.

The trash observed during the 14 URTAs typically originated from upstream sources and accumulated at the assessment sites due to dense vegetation or instream structures (e.g., a pipeline) that captured it during conveyance downstream. Litter was an important source of trash at sites in or near parks, schools and roadways.

Trash Fact Sheet

SMCWPPP has initiated a program to begin identifying and addressing trash accumulation areas in urban waterways in San Mateo County. During FY 2007/08 SMCWPPP prepared a draft fact sheet that describes typical trash management activities conducted by SMCWPPP's municipalities and SMCWPPP's multi-faceted program-wide efforts to characterize and reduce trash levels. Highlights of SMCWPPP's trash program during the past several years have included:

- Surveying San Mateo County municipalities regarding their existing municipal trash management efforts and known trash accumulation/dumping areas. The survey revealed that SMCWPPP's municipalities typically perform a wide variety of trash management efforts that include trash collection and cleanup (e.g., street sweeping, stormwater conveyance facility maintenance), use of enforcement to discourage littering, dumping, and discharge of

trash, and use of incentive and education programs (e.g., anti-littering campaigns).

- Performing an initial pilot study to identify trash sources and management measures at a selected in-stream trash accumulation area (Gateway Park in San Mateo Creek).
- Coordinating and publicizing creek and beach cleanups in San Mateo County as part of the California Coastal Commission's annual "California Coastal Cleanup Day" in September 2006 and 2007. This effort appeared successful in that volunteer participation in the cleanups increased each of these years in comparison to the proceeding year.
- Pilot-testing Regional Water Board staff's Rapid Trash Assessment (RTA) protocol as a tool to monitor the amount and types of trash in creeks and inform efforts to identify sources and controls.
- Assessing most of the major urban creeks on the Bay-side of San Mateo County for trash accumulation areas (and other impacts) using the USA creek walk protocol.
- Using the URTA to further evaluate a subset of the trash accumulation sites identified during the USA creek walks. The information collected is establishing a baseline against which to track future trends and will assist with efforts to identify trash sources and transport pathways. A total of 46 urban creek trash accumulation sites have been identified to-date within 13 San Mateo County watersheds. Detailed assessments have been performed twice (during the fall and spring

seasons) at 19 of these sites using the URTA.

San Francisquito Creek Watershed Sediment TMDL

SMCWPPP reviewed the Regional Water Board's June 30, 2007 San Francisquito Creek Sediment Total Maximum Daily Load (TMDL) and Habitat Enhancement Plan Preliminary Project Report and prepared a comment letter (*Review of San Francisquito Creek Sediment TMDL and Habitat Enhancement Plan Preliminary Project Report, August 2008*). Appendix E contains a copy of the letter. SMCWPPP's primary comments included the following:

- The project should clearly separate pollutant-based TMDL requirements (i.e., sediment load allocation and targets) from habitat enhancement requirements (i.e., non-pollutant based);
- The targets/allocations and source areas should be linked, i.e., the targets/allocations should be applied to specific impacted habitat areas at or downstream of the anthropogenic sediment source areas. The TMDL should clearly identify these specific areas where targets/allocations are applicable;
- The project should clearly identify the responsible party and regulatory tool or authority for each sediment source category;
- Any actions specified in the TMDL's implementation plan that would be regulated under a municipal stormwater NPDES permit should be consistent with the municipal regional stormwater permit, once it is adopted; and

- As with the implementation of other TMDLs, it is important to maintain a reasonable balance between resources expended on monitoring activities and those expended for actual pollutant control measures.

Regional Collaborative Programs

An important aspect of SMCWPPP's WAM component is participating in regional collaborative programs that monitor San Francisco Bay and help coordinate monitoring in Bay Area watersheds. During FY 2007/08, SMCWPPP continued to participate in the Bay Area Stormwater Management Agencies Association (BASMAA), the Bay Area Macroinvertebrate Bioassessment Information Network (BAMBI), the San Francisco Estuary Regional Monitoring Program (RMP), and the Taking Action for Clean Water grant-funded project, as described below. SMCWPPP also assisted Regional Water Board staff to compile selected data on San Mateo County stormwater pump stations as part of a regional data collection effort and represented BASMAA'S interests during development of the PCBs TMDL in San Francisco Bay cleanup program.

BASMAA

During FY 2007/08, SMCWPPP continued to coordinate its WAM component activities with other Bay Area stormwater management agencies through the BASMAA Monitoring Committee.

BAMBI

BAMBI is a regional program that helps coordinate Bay Area benthic macroinvertebrate bioassessment efforts such as those performed by

SMCWPPP's WAM component during previous years. SMCWPPP continued to provide in-kind staff support to BAMBI during FY 2007/08. BAMBI will help Bay Area stormwater management agencies interpret local bioassessment data and use the results to inform development of urban runoff pollution prevention and control strategies. BAMBI's specific goals include:

- Standardizing rapid bioassessment protocols in the Bay Area, including quality assurance and control in field sampling and laboratory analyses;
- Establishing reference conditions for Bay Area creeks;
- Facilitating regional coordination and data management and sharing;
- Refining physical habitat assessment protocols; and
- Developing a regional Index of Biological Integrity (IBI), which will help with classifying creek condition, evaluating attainment of beneficial uses in creeks, identifying stressors to creeks, and establishing water quality goals.

RMP

SMCWPPP continued to participate in the RMP in FY 2007/08. The RMP is administered by the San Francisco Estuary Institute, and monitors pollutant concentrations in water, sediments, and fish and shellfish tissue in San Francisco Bay and Delta, together known as the San Francisco Estuary. A major goal of the RMP is to provide information on how pollutant concentrations in the Estuary are responding to pollution prevention and control measures. Thus the RMP aims to help determine whether efforts by Bay Area stormwater management agencies such as SMCWPPP and others are

helping to improve water quality in the Estuary. In recent years the RMP has also begun to measure pollutant loadings to the Bay from selected local watersheds, an important type of information needed in development and implementation of TMDL cleanup programs for pollutants such as mercury and PCBs. SMCWPPP continued to provide funding to the RMP in FY 2007/08. General Program staff also continued to represent BASMAA on the RMP Sources, Pathways and Loadings Work Group and advocated for stormwater program interests during study design, implementation and reporting. General Program staff also reviewed the RMP's draft report on 2006 fish tissue contaminant data and prepared comments and co-authored a RMP Pulse of the Estuary article on contaminant loading to Bay from local watersheds.

Stormwater Pump Station Data

During FY 2007/08, Regional Water Board staff compiled selected data on stormwater pump stations throughout the Bay Area region. Data types collected included the agency that maintains and operates each pump station, location (including coordinates), number of pumps at a station, catchment area, dominant land uses in a catchment, the receiving water body, maximum capacity per pump, wet and dry weather discharge rates, storage capacity of sumps or wet wells, and a description of any trash control measures. Regional Water Board staff envision that these data will inform planning and prioritizing pump station monitoring, implementing pollutant controls (e.g., trash), and studying the feasibility of diverting flows to wastewater treatment plants. SMCWPPP General Program staff worked with municipal staff to compile

the specific pump station data requested. This included reviewing the data request and initial information provided by municipal staff, identifying data gaps, assisting municipal staff with understanding the request, extensive follow-up with municipal staff to obtain all of the requested data, and compiling the data into one countywide spreadsheet.

Taking Action for Clean Water Grant

In November 2006, the State Water Resources Control Board awarded the San Francisco Estuary Project a Proposition 50 Coastal Nonpoint Source Pollution grant for a project called "Taking Action for Clean Water." The project includes several tasks to further implementation of Bay Area TMDLs, including a task that involves the historic use of PCBs in building materials. The primary goal of this task is to develop Bay Area-specific BMPs to prevent release of PCBs from building materials into urban runoff during renovation, maintenance and demolition of structures. Bay Area-specific information about the presence of PCBs in building materials will also be obtained through a field sampling program, so that management actions can be targeted specifically to the structures most likely to contain PCBs that threaten water quality. During FY 2007/08, General Program staff continued to assist BASMAA to participate in the project as a stakeholder and project partner.

PCB TMDL

SMCWPPP General Program staff continued to help represent BASMAA'S interests during development of the San Francisco Bay PCBs TMDL cleanup program. This included reviewing the December 2007 revised PCBs TMDL

Regional Water Board staff report and Basin Plan Amendment and assisting BASMAA to prepare comments. SMCWPPP General Program staff also testified on behalf of BASMAA at Regional Water Board hearings on the PCB TMDL in September 2007 and February 2008.

Regulatory Compliance, Coordination and Planning

SMCWPPP's WAM Subcommittee met regularly during FY 2007/08 to oversee component activities. Frank Mandola from the City of South San Francisco continued to preside as chair of the subcommittee. Municipalities that were active subcommittee participants included Belmont, Brisbane, Burlingame, Daly City, Pacifica, City of San Mateo, San Mateo County and South San Francisco. A complete record of meeting attendees is contained in Appendix E.

The subcommittee also took a field trip to San Mateo Creek in June 2008 to observe and discuss typical trash impacts to urban creeks. The WAM Subcommittee is planning on conducting pilot work during FY 2008/09 in San Mateo Creek and possibly other locations to evaluate potential trash sources and control measures. The field trip was part of the planning process for this pilot work. Attendees included WAM Subcommittee members and municipal maintenance staff from the City of San Mateo. The group visited two creek sites along San Mateo Creek that were previously assessed for trash: 1) the Caltrain station crossing in downtown San Mateo and 2) the Claremont Avenue crossing in a residential area approximately two blocks further downstream. EOA staff presented a summary of the methods

and approach currently being used by the SMCWPPP to identify and characterize trash accumulation areas in urban creeks. USA creek walks are used to identify accumulation areas and the URTA protocol is used to further characterize selected areas with higher levels of trash. Information was provided to the field trip participants showing the location of all documented trash accumulation sites in San Mateo Creek. URTA scores and photographs from each site were also provided to the group and discussed. The group discussed the two basic ways we are using the URTA: 1) to record baseline conditions for the trash accumulation areas we have identified in urban creeks, and 2) to collect data that will help identify sources of trash to these accumulation areas. EOA summarized the major types of trash items documented at the two assessment locations, as well as potential trash sources and pathways associated with each site. These include 1) littering from pedestrians, primarily at bridges; 2) illegal dumping at bridges; 3) illegal dumping behind private residences, primarily apartment complexes; 4) homeless encampments under bridges; and 5) transport and deposition of trash from upstream sources, including storm drain catchments draining commercial areas along major transportation corridors such as El Camino Real. It was noted that relatively little trash has been found above El Camino Real in most creeks.

The WAM Subcommittee also oversaw preparation of the WAM component section of SMCWPPP's annual report and mid-fiscal year work plans.

ASSESSMENT OF EFFECTIVENESS

The effectiveness of WAM component efforts during FY 2007/08 should be assessed in the context of the WAM component goals described earlier. These goals include 1) characterizing creek function, health and water quality conditions in representative watersheds in San Mateo County and evaluating potential stormwater runoff impacts; 2) developing plans to address specific pollutants of concern associated with stormwater runoff such as mercury and PCBs and performing related special studies (e.g., to identify pollutant sources); and 3) evaluating long-term trends in water quality and thereby informing the SMCWPPP's efforts to improve the effectiveness of its BMPs to prevent or reduce stormwater runoff impacts. SMCWPPP's bioassessments, USA creek walks, and trash assessments in urban creeks in San Mateo County have helped define baseline water quality conditions. These data will facilitate future evaluations of long-term trends and thereby inform efforts to evaluate the overall effectiveness of SMCWPPP's stormwater pollution prevention and control BMPs. These data also potentially help identify impairment problems and pollutant sources, a first step in selecting new BMPs to prevent or reduce stormwater runoff impacts throughout San Mateo County. For example, as mentioned above, SMCWPPP is assisting with development of a regional Index of Biologic Integrity (IBI) based on SMCWPPP's bioassessment data and other Bay Area data. The IBI will potentially help SMCWPPP to evaluate attainment of creek beneficial uses and identify stressors to creeks, and thereby inform management actions. In another example, SMCWPPP's trash

assessments help identify sources of trash to accumulation sites in urban creeks, and therefore will inform the development of new or improved BMPs to address trash in urban creeks. In addition, SMCWPPP's participation in regional monitoring efforts (e.g., the RMP) assists TMDL development, especially those TMDLs focusing on improving water quality in San Francisco Bay.

FUTURE ACTIONS

SMCWPPP's WAM component will continue to focus on watershed-related activities, specific pollutants of concern such as trash, and regional collaboration during FY 2008/09. A principle focus will be to conduct pilot work to evaluate potential sources of trash to urban creeks and control measures. This increased emphasis on developing trash and litter BMPs is intended to assure continued compliance with Provision C.1 of SMCWPPP's NPDES permit and to respond to the high priority that Bay Area communities place on addressing trash and litter in creeks and other waterways.

To the extent possible, all WAM component activities will be planned and conducted in coordination with the ongoing development of the municipal regional stormwater permit. In preparation for implementing this permit, SMCWPPP will continue to support and participate in development of a regional monitoring collaborative among Bay Area stormwater agencies. SMCWPPP will also continue to participate in existing regional collaborative monitoring programs in the Bay Area such as BAMBI and the RMP.

APPENDIX A: TABLE OF CONTENTS

Municipal Maintenance Subcommittee Attendance List FY 2007/08

Parks Maintenance and IPM Work Group Attendance List FY 2007/08

2008 Parks Maintenance and Integrated Pest Management Workshop

- *Agenda*
- *Flyer*
- *Evaluation Summary*

15th Annual Municipal Maintenance Training Workshop

- *Agenda*
- *Flyer*
- *Evaluation Summary*

**San Mateo Countywide Water Pollution Prevention Program
Municipal Maintenance Subcommittee Attendance List
FY 2007/08**

MUNICIPALITY	REPRESENTATIVE	PHONE FAX EMAIL	22-Aug	24-Oct	23-Jan	26-Mar	June Trng Workshop
Atherton	Steve Tyler	650/576-1655	X	X	X		3
	Troy Henderson	650/752-0551	X		X	X	
	Bill Butler	650/743-3028	X	X		X	
	Eddie Lopez Jr.	650/743-3032	X	X			
	Javier Andrade		X	X		X	
Belmont	Randy Ferrando	650/595-7464	X	X		X	13
	Tim Murray				X		
Brisbane	Walt Peters	415/508-2135			X	X	3
	Matt Fabry	see below					
Burlingame	John Baack	558-7674		X	X		0
	Stephen McDonnell			X	X		
	Vincent Falzon						
	Les Priest						
	Orlando La Rosa						
	Rick Horne						
Colma	Vicente Gonzalez	650/333-0550	X	X			3
	Louis Gotelli	650/757-8888	X			X	
	Brian Dossey					X	
	Ryan Rodriguez			X			
Daly City	Mike Peterson	650/991-8097	X	X	X	X	4
	John Peterson	650/991-8097	X		X	X	
	Ryan Fernandez	650/991-8097					
	Joe Stabile					X	
East Palo Alto	Ray Lopez	650/280-1945	X	X	X	X	1
	Emmanuel Funches	650/280-0741					
	Mae Pugh		X	X	X	X	
Foster City	Mike Mattias	650/286-7502					9
	Mike McElligott	286-3546				X	
	John Schulze	286-8140					

Half Moon Bay	Tony Moorhouse	50/726-4283 or -8264	X				0
Hillsborough	Gary Francis	650/375-7444	X	X	X	X	1
	Frank Henwood	650/375-7444					
	Clay Dahl						
	John Paulino	650/375-7444					
Menlo Park	Julie Robinson				X	X	
	Joe Pimentel	330-6780 or -6317					1
	Nelson Gutierrez	330-6780	X				
	Larry D. Gorman					X	
	Ruben Nino	330-6780					
	Randy Dwight						
	Dulani Spencer		X				
Millbrae	Martin Crean	650/259-2374					1
	Craig Centis	650/259-2374	X	X	X	X	
	R. Clark					X	
	Ray Mendez	650/259-2374					
	Linda Harrington			X			
	Florian Ebo		X				
	Russ Clark		X	X			
	Anthony Riddell		X				
	R. Cuarn						
	Mike Riddell		X				
Pacifica	Todd Estrada						2
	Eric Steele	650/738-3775		X	X	X	
Portola Valley	Josh Maierle	650/851-1700 x21					0
Redwood City	Rich Del Ben	650/780-7464	X	X		X	6
	Eddie Lopez	650/740-7473	X	X	X	X	
	Victor Casteneda	650/780-7473	X	X	X	X	
	Sione Tu'uhoko	650/780-7473	X		X	X	
	Albert Murguiz	650/780-7473	X	X	X	X	
	Teli Tan	650/780-7473					
	Latu Taufalele	650/780-7473	X	X	X	X	
San Bruno	Gino Quinn	616-7160	X	X	X	X	3
	Dennis Bosch		X	X			
	Cliff Vanuver	616-7160					
	Jim Evangelist				X		

	Mike Lysak	616-7160					
San Carlos	Chris Zanoni	650/802-4140	X	X	X	X	9
	Paul Baker	650/802-4143	X	X	X		
San Mateo	Ray Fitch	650/522-7354					1
	Bob Correa						
	Vern Bessey						
San Mateo Co.	Chris Porter	650/599-7281	X				12
	Katie Beltrano						
	Brian Gatt	650/573-2591					
	Dermott Casey						
	Dewayne Johnson			X			
	Sarah Pratt				X		
South San Francisco	Mike Aquilina	650/877-8553	X		X	X	2
	James Hardie		X		X	X	
	Michael Charan	650/877-8552					
	Jim Bombaci	650/877-8552					
	Keith Potter					X	
	Gary Batis					X	
SMCWPPP	Matt Fabry	415/508-2134		X		X	
Woodside	Richard Chiu	650/851-6790	X	X			0
EOA	Fred Jarvis	510/832-2852 x11	X	X	X	X	
Water Board	Habte Kifle		X				0
Caltrans	John Michels	510/622-5996					
	Ray Fox						
Oakland	Markley Bavinger	510/238-6266		X			1
San Francisco International Airport	Charlie Freas	650/821-7749			X		
Notes:			36	32	28	33	

**San Mateo Countywide Water Pollution Prevention Program
Parks Maintenance & IPM Work Group Attendance List FY 2007/08**

MUNICIPALITY	REPRESENTATIVE	Contact Information		Attendance			
		Email	Phone	28-Aug	30-Oct	Feb Training Workshop ¹	29-Apr
Atherton	Mike Anderson	manderson@ci.atherton.ca.us	650/752-0541			1	
Belmont	Henry Ruspil	hiruspil@ci.belmont.ca.us	650/595-7441			0	
Brisbane	Don McClymond	dmcclymond@brisbane.ca.us	415/716-0105	√	√	6	√
Burlingame	Tim Richmond	trichmond@burlingame.org	650/558-7333	√	√	5	√
Colma	Phil Scramaglia	phil@csgengr.com				3	
	Bill Segale, Segale & Cerini Inc.	segcerbill@aol.com	650/755-7343				
Daly City	Paul Thompson	pthompson@dalycity.org	650/991-8006	√	√	2	√
East Palo Alto	Fernando Bravo	Fernando Bravo<FBravo@cityofepa.org>				0	
Foster City	Bill Gomba	bgomba@fostercity.org	650/286-8140			3	
	Dorte Drastrup	ddrastrup@fostercity.org			√		√
Half Moon Bay	Tony Moorhouse	tmoorhouse@ci.half-moon-bay.ca.us	650/726-8260			0	
Hillsborough	Gary Francis	gfrancis@hillsca.org	650/375-7506			1	
Menlo Park	David Mooney	damooney@menlopark.org	650/330-6794			1	
Millbrae	Russell Clark		650/259-2481			1	
Pacifica	Ron Fascenda	fascendar@ci.pacifica.ca.us ?	650-738-3760	√		0	
	Tom Lessa						
Portola Valley	Josh Maierle	JMaierle@portolavalley.net	650/851-1700, Ext.21			0	
Redwood City	Valerie Matonis	vmatonis@redwoodcity.org	650/780-7280	√	√	10	√
San Bruno	David Perazzo	dperazzo@ci.sanbruno.ca.us	650/616-7193			3	
San Carlos	Guy Wallace	guywallace@cityofsancarlos.org				0	
	Frank Rivera						
San Mateo	Vern Bessey	vbyssey@cityofsanmateo.org	650/522-7342		√	7	√
San Mateo Co. Parks	William Crawford	brcrawford@co.sanmateo.ca.us	650/573-2591 Fax-347-8276	√	√	5	√
	Sheila Gostisha						
Agriculture Weights and Measures	Ronald Pummer	rpummer@co.sanmateo.ca.us	650/363-4700		√		
	Jeremy Eide						
	Koren Widdel						√
Public Wks	Tsutomu Imamura	timamura@co.sanmateo.ca.us	650/363-4149	√			√
	Jeff Pacini	JPacini@rcn.com			√		
South San Francisco	David Venturini	david.venturini@ssf.net	650/829-3834			4	
	Norman Gok						√
	Brian Brunelli			√			
Woodside	Eunejune Kim	EKim@woodsidetown.org	650/851-6790			0	
Regional Bd	Habte Kifle	HK@rb2.swrcb.ca.gov	510/622-2371			0	
EOA	Fred Jarvis	fejarvis@eoainc.com	510/832-2852 x111	√	√	2	√
	Vishakha Atre	vatre@eoainc.com	408/720-8811				
Program	Matt Fabry	mfabry@ci.brisbane.ca.us	415/508-2134	√	√	1	√

Notes:

¹ Number indicates number of attendees from jurisdiction at the workshop.



AGENDA
Integrated Pest Management Workshop
SMCWPPP Parks Maintenance and IPM
Green Building Exchange
February 28, 2008
11:00 a.m. – 3:00 p.m.

Lunch <i>Registration</i>	11:00 - 11:30
Welcoming Remarks	11:30 - 11:40
Aquatic Vegetation Management <i>Dave Najera, Aquatic Environments</i>	11:40 - 12:20
Creek Maintenance <i>Julie Casagrande, San Mateo County Public Works</i>	12:20 - 12:50
Pesticide Use Enforcement Update <i>Representative from San Mateo County Agricultural Weights and Measures</i>	12:50 – 1:35
Break	1:35 – 1:50
NEW Pros and Cons of Using Artificial Sports Fields <i>Peter Vorametsanti, City of Redwood City</i>	1:50 – 2:20
Maintenance of Landscape-Based Stormwater Treatment Control Measures <i>Ed Boscacci, BKF Engineers</i>	2:20 – 2:50
Closing Remarks	2:50 – 3:00

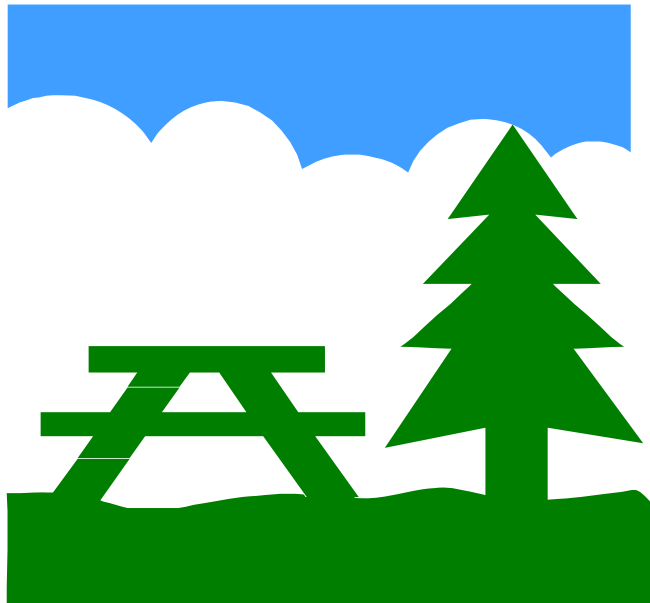


**Integrated Pest Management Workshop
Green Building Exchange
305 Main Street, Redwood City**

**Thursday, February 28, 2008
11:00 a.m. – 3:00 p.m.**

Sponsored by the SMCWPPP Parks Maintenance and IPM Work Group

This is a free workshop and will be eligible for Department of Pesticide Regulations Continuing Education Credits.



Workshop Highlights:

- **Creeks Maintenance**
- **Aquatic Vegetation Management**
- **Pesticide Use Violations and Penalties**
- **More Artificial Sports Fields Pros and Cons**
- **Maintenance of Landscape-Based Stormwater Treatment Controls**

RSVP

Please complete the attached RSVP form to let us know that you will be attending. If you have any questions or would like additional information please contact Christina Hovland at (510)-832-2852 ext. 126 or chovland@eoainc.com. We look forward to seeing you at the workshop!

The San Mateo Countywide Water Pollution Prevention Program is a consortium of the following local agencies: Atherton, Belmont, Brisbane, Burlingame, Colma, Daly City, East Palo Alto, Foster City, Half Moon Bay, Hillsborough, Menlo Park, Millbrae, Pacifica, Portola Valley, Redwood City, San Bruno, San Carlos, San Mateo, San Mateo County, and South San Francisco. The program is part of the National Pollutant Discharge Elimination System (NPDES) permit issued to the City/County Association of Governments (C/CAG), each incorporated city and town in the county, and the County of San Mateo.



**2008 Integrated Pest Management Workshop
February 28, 2008**

SUMMARY OF WORKSHOP EVALUATIONS

Total Number of Evaluations: 39 (68% response)

Total Number of Attendees: 57

What did you think of the following presentations?

Aquatic Vegetation Management–

Dave Najera

18-Very helpful	15-Somewhat helpful	6-Not helpful	0-No answer
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Creeks Maintenance –

Julie Casagrande

21-Very helpful	18-Somewhat helpful	0-Not helpful	0-No answer
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Pesticide Use Enforcement Update–

Jeremy Eide

29-Very helpful	10-Somewhat helpful	0-Not helpful	0-No answer
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Artificial Sports Fields –

Peter Vorametsanti

24-Very helpful	13-Somewhat helpful	1-Not helpful	1-No answer
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Maintenance of Landscape-Based Stormwater Treatment Control Measures –

Ed Boscacci

16-Very helpful	17-Somewhat helpful	0-Not helpful	6-No answer
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Did this workshop meet your expectations?

Yes: 31

No: 1 (2 credit hours vs. 3 in other years)

Kind of: 2

No Answer: 6

Suggestions for future workshop topics

More credit hours (2)

Gophers (1)

Emergency spill response / hazardous materials (2)

Use of recycled water (1)

Row weed control (1)

Organic fertilizers – their use and cost to public agencies (1)
More local data on artificial turf projects (1)
Marsh filtering (1)
Control of invasive plants (1)
Discussion on local implementation of IPM programs (1)

General Comments

Great workshop / Keep up the good work (8)
Good location (7)
Good lunch (7)
Good speakers / varied topics / useful information (4)
More IPM in grounds/park maintenance (1)
More energy from some of the speakers (1)
Poor audio (1)
Pesticide enforcement info very beneficial (1)
Liked Ed Boscacci's presentation best (1)
First two speakers were fantastic – good information (1)



15TH ANNUAL MAINTENANCE WORKSHOP
Green Building Exchange
305 Main Street, Redwood City
June 26, 2008
8:00 a.m. – 1:30 p.m.

Coffee and Pastries <i>Registration for workshop participants</i>	8:00 – 8:30
Welcome Mike Peterson, <i>City of Daly City Street Supervisor, Municipal Maintenance Subcommittee Chair</i>	8:30 – 8:35
Stormwater BMPs and Trash Control in the City of Long Beach Tom Leary, <i>City of Long Beach Stormwater Management Program Officer</i>	8:35 – 9:50
City of Oakland Trash Control Program Markley Bavinger, <i>City of Oakland Watershed Program Specialist</i>	9:50 – 10:05
City of Oakland Illegal Dumping Program Richard Wright, <i>City of Oakland Litter Enforcement Officer</i>	10:05 – 10:20
Break	10:20 – 10:35
Sanitary Sewer Spills Gary Batis, <i>City of South San Francisco Public Works Superintendent</i>	10:35 – 11:10
Creek Maintenance and Permitting Darcy Aston, <i>FishNet 4C Program Director</i>	11:10 – 11:55
Introduction of Vendors	11:55 – 12:15 (Time will depend on number of vendors)
Lunch and Product Show	12:15 – 1:25
Closing Remarks	1:25 – 1:30

Training participants complete evaluation forms and receive workshop souvenirs

15th ANNUAL MUNICIPAL MAINTENANCE TRAINING



June 26, 2008

8:00 a.m. to 2:00 p.m.

Location: Green Building Exchange
305 Main Street, Redwood City, CA 94063

Sponsored by the San Mateo Countywide Water Pollution Prevention Program's
Municipal Maintenance Subcommittee

Workshop Highlights:

- ☂ Structural trash controls – the different types available and lessons learned by the City of Long Beach's staff
- ☂ How to respond to sanitary sewer spills
- ☂ Creek maintenance dos and don'ts and the permits that may be required
- ☂ Trash Control and Litter Enforcement in Oakland
- ☂ Vendor display

RSVP

Please complete the attached RSVP form to let us know that you will be attending. If you have any questions, contact Christina Hovland at (510) 832-2852 ext. 126. We look forward to seeing you at the workshop!

**San Mateo Countywide Water Pollution Prevention Program
15th Annual Municipal Maintenance Workshop – June 26, 2008
Evaluation Summary**

94 Attendees (including staff, speakers and vendors)
75 Attendees (not including staff, speakers and vendors)
52 Evaluations (69% response)

Presentation	Very helpful	Somewhat helpful	Not helpful	No Answer	Comments
Trash Control in the City of Long Beach Tom Leary	30	22	0	0	<ul style="list-style-type: none"> • Great presentation, very informative • Two different situations – they have more money, less water
Oakland's Trash Control Program Markley Bavinger	29	23	0	0	
Oakland's Illegal Dumping Program German Gella and Bobby McConnell	32	20	0	0	<ul style="list-style-type: none"> • Least helpful but still interesting
Sanitary Sewer Spills Gary Batis	33	17	2	0	<ul style="list-style-type: none"> • Good continued exposure to regulations • Poor outline, not focused
Creek Maintenance and Permitting Darcy Aston	26	19	0	7	
Introduction of Vendors and Product Show	14	21	1	16	

Did the workshop meet your expectations?

Yes- 49 No- 0 No response-3

Which topics were most beneficial?

Sanitary Sewer Spills – 15
Oakland's Illegal Dumping Program – 12
Trash Control – 11
All beneficial – 7
Stormwater BMPs and Trash Control in the City of Long Beach – 6
Oakland's Trash Control Program – 2
Creek Maintenance and Permitting – 1
No answer - 9

Which topics were the least beneficial?

None / All beneficial - 13

Creek Maintenance and Permitting - 7
Sanitary Sewer Spills – 3
Oakland’s Illegal Dumping Program – 3
Oakland’s Trash Control Program – 2
Stormwater BMPs and Trash Control in Long Beach – 2
Trash Control - 1

How many previous workshops have you attended?

Zero- 9 Five- 6 Ten- 2
One- 5 Six- 2 Eleven- 1
Two- 2 Seven- 5 Twelve+- 4
Three- 4 Eight- 4
Four- 6 Nine- 1

Would you be interested in attending a workshop next year?

Yes-48 No-1 No response-3

How will your work procedures change as a result of this workshop?

- More awareness of issues/more knowledge always helps – 9
- Look more closely at my city’s trash control program – 6
- Always try to improve - 5
- Increased knowledge of reporting requirements for sanitary sewer spills - 5
- Try to implement an Illegal Dumping Enforcement Program in my city – 4
- Share information with coworkers – 3
- Increase trash/litter awareness amongst the public - 3
- If budget allows – 2
- If supervisor gets on board– 2
- Already meeting all procedures – 1
- Not sure – 1
- Still trying to find a balance – 1

Suggestions for future workshop topics:

- Local cities introduce themselves and their procedures; how they’re implementing BMPs – 2
- Compare city-to-city policies for overflows / SSI’s
- More info on spill or overflow response
- Increasing public awareness
- Different catch basin design
- Illicit waste
- Proper use of hydro-vac equipment
- Permitting
- Local projects and how they were completed
- Lagoon maintenance programs
- Street sweeping
- Grant funding towards storm maintenance activities
- Any new information

What are your duties?

Sweeper operator-6; Paving and road repair-22; Litter pick-up-17; Storm drain system maintenance-32; sanitary sewer maintenance-23; Parks maintenance-5; Facilities maintenance-8; Maintenance

supervisor-8; Other –7 (road maintenance manager, electrician, creek maintenance, mechanic, open area cleanup, CCTV, Deputy PW Director,)

General comments/suggestions:

- Very good workshop overall / great job – 7
- Appreciate food and drinks – 3
- Very informative presentations - 3
- Thank you – 2
- More handouts
- Make the workshop longer/ all day
- Two screens needed – hard to see from the back of the room
- Love the veggie dishes, keep them up.
- It's amazing how much trash builds up and ends up in the bay.
- Best seminar to date. Looking forward to next year's.

APPENDIX B: TABLE OF CONTENTS

CII Subcommittee Attendance List FY 2007/08

Fact Sheet: Successes in Fiscal Year 2006/07

Stormwater Orientation for Municipal Staff

- *Agenda*
- *Flyer*
- *Evaluation Summary*
- *Sign-in Sheet*
- *Workshop Binder Table of Contents*

Excerpt from Stormwater Program Funding Options Final Report

Tips for a Cleaner Bay

Sugerencias para una Bahía mas Limpia

CII Subcommittee Attendance List – FY 2007/08

Name	Agency	PHONE	FAX No.	E-Mail	Aug.	Oct.	Dec	Feb	April	June
	City of Atherton									
Bozhena Palatnik Gilbert Yau	City of Belmont	659 593-7463		Bpalatnik@ci.Belmont.ca.us	√	√	√	√	√	√
Matt Fabry	City of Brisbane	415 508-2134	415 467-5547	mfabry@ci.brisbane.ca.		√	√	√		√
Eva Justimbaste	City of Burlingame	342-3727	342-3712	eva.justimbaste@veoliawaterna.com	√	√	√	√	√	√
Muneer Ahmed	City of Colma	757-8888	757-8890	Muneer.ahmed@colma.ca.us						
Ward Donnelly	City of Daly City	991-8208	991-8220	wdonnelly@dalcycity.org	√	√	√	√	√	√
Cynthia Royer	City of Daly City	991-8203	991-8220	Croyer@dalcycity.org		√				
John Latu	City of East Palo	853-3165		jlatu@cityofepa.org						
Norm Dorais	City of Foster City	286-3279	349-7204	ndorais@fostercity.org						
Gary Whelen/ Tom Jahns	City of Half Moon	726-88260								
Jen Chen	Town of Hillsborough									
John Simonetti	City of Menlo Park	321-0384	321-4265							
Virginia Parks/ Jennifer Ng	City of Menlo Park	330-6752 330-6743		vkfparks@menlopark.org	√		√	√	√	
Catherine Allin	City of Millbrae	259-2470	259-2398	callin@ci.millbrae.ca.us	√	√		√	√	√
David Ocampo	City of Millbrae	259-2392	259-2398	docampo@ci.millbrae.ca.us			√	√		
Raymund Donguines	City of Pacifica	738-3767	738-3003	donguinesr@ci.pacifica.ca.us	√		√		√	
	Town of Portola Valley									
Gary Lepori	City of Redwood	780-7472		glepori@redwoodcity.org						
Ray Bartolo	City of Redwood			rbartolo@redwoodcity.org						
Gino Quinn	City of San Bruno									
	City of San Carlos									
Vern Bessey	City of San Mateo	522-7342	522-7341	vbessey@cityofsanmateo.org	√	√	√			
Alan Atwater	City of San Mateo	522-7343	522-7341	AAtwater@cityofsanmateo.org				√		√
Rob Lecel	City of San Mateo	522-7344	522-7341	RLecel@cityofsanmateo.org		√	√	√		√
Craig Lustenberger	City of So. San	829-3882	829-3855	Clustenberger@wqcp.ci.ssf.ca.us	√		√	√	√	√
Frank Mandola	City of So. San	829-3880	829-3855	Fmandola@wqcp.ci.ssf.ca.us						
Cassie Prudhel	City of So. San Fran	829-3840	829-3855	Cassie.prudhel@ssf.net						
	Town of Woodside									
Dermot Casey	County of San Mateo	363-4957	363-7337	dicasey@co.sanmateo.ca.us	√	√	√	√	√	√
Matt Fabry	SMCWPPP Coordinator	415 508-2134	415 467-5547	mfabry@ci.brisbane.ca.		√	√	√		√
Michael Li	SBSA	594-8411 Ext. 139	591-7122	mli@sbsa.org			√		√	
Norm Domingo	SBSA	650 594-8411		ndomingo@sbsa.com		√				
Habte Kifle	Water Board	510 622-2371		hk@waterboards.ca.gov				√		
Cecil Felix	Water Board	510 622-2343		CFelix@waterboards.ca.gov		√		√		
Fred Jarvis	EOA, Inc.	510 832-2852	510 832-2856	Fejarvis@eoainc.com	√	√	√	√	√	√
No. Attending					10	12	13	14	10	11

Successes in Fiscal Year 2006/07

The City/County Association of Governments of San Mateo County created the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) in 1993 to coordinate countywide efforts to prevent stormwater pollution. Stormwater runoff is the biggest transporter of pollutants to the bay and a major pathway for contaminants to reach local coastal beaches. Common pollutants found in stormwater runoff from public streets and storm drains include silt, litter, pesticides, bacteria, oil, and metals. During the last couple of decades the U.S Environmental Protection Agency and the San Francisco Bay Regional Water Quality Control Board have recognized the need to control stormwater pollutants by adopting regulations and increasingly stringent permits that municipalities must follow to discharge stormwater into creeks, the bay and ocean.

Each municipality in San Mateo County is responsible for complying with the municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit requirements for stormwater runoff from its streets and local storm drain system. The permit prescribes how each local municipality will regulate new and redevelopment projects, conduct its municipal maintenance activities, eliminate non-stormwater discharges, inspect businesses to control stormwater pollutants, and encourage the public's help in preventing pollution.

Last fiscal year SMCWPPP successfully assisted its member agencies (20 cities and the county) to protect stormwater quality by complying with the countywide municipal stormwater NPDES permit. This information sheet highlights examples of last year's successes, followed by a description of accomplishments in several areas: achieving permit compliance, conducting community information outreach and school programs, building cost-effective partnerships, and measuring progress.



Matt Fabry, SMCWPPP Coordinator,
 receiving CASQA award in September
 2007

Example of Successes

- Received an "Outstanding Stormwater News, Information, Outreach, and Media category" award from the California Stormwater Quality Association for SMCWPPP's Plastic Bag Outreach/Coastal Cleanup Day project. One of the results of this outreach was Whole Foods Market volunteering to be the primary sponsor of the fall 2007 Cleanup Day.
- Completed technical guidance (<http://www.flowstobay.org/p2business/C3stormwatertechguide.html>) for developers, builders and permit applicants. This guidance shows how to comply with the NPDES permit's extensive requirements for new and redevelopment projects.
- Worked with Alameda and Santa Clara Counties to cost-effectively develop the Bay Area Hydrology Model (www.bayareahydrologymodel.org) software for use in designing controls that limit the quantity of stormwater runoff from development projects. The Bay Area Hydrology Model allows users to design flow duration detention facilities to prevent erosion of creek channels and banks.

- Conducted nine training workshops on a wide range of topics that targeted various groups. For example, SMCWPPP helped educators to train students on environmentally friendly practices, and it trained municipal planning and engineering staff, project builders, and the building community on the stormwater requirements for new and redevelopment projects. Eighty-nine municipal staff responsible for maintaining streets, storm drains, and roads attended the annual stormwater maintenance workshop and product exposition. In addition, San Mateo County Agricultural Commissioner's staff helped to train 91 parks maintenance staff on less toxic ways to control pests.
- Inspected over 2,000 businesses for compliance with stormwater requirements. About 12 percent of the inspections identified a violation that was subsequently corrected.
- Found and stopped the discharge of about 280 illicit, non-stormwater discharges. About three-quarters of the illicit discharges consisted of one of the following: washwaters, sewage, construction materials, or vehicle fluids.
- Monitored a number of representative creeks in San Mateo County to assess aquatic life and pollutant levels, including the amounts of trash and litter on creek banks. This monitoring provides information on creek health and helps to identify ways to improve creek and bay water quality.



Ward Donnelly, City of Daly City, inspecting vehicle service facility.

Achieving Permit Compliance

Each fiscal year SMCWPPP and its municipalities submit an annual report to the San Francisco Bay Regional Water Quality Control Board to demonstrate compliance with the municipal stormwater permit. The Fiscal Year 2006/07 Annual Report is on SMCWPPP's website at www.flowstobay.org (click on "Additional Information").

The last time that the San Francisco Bay Regional Water Quality Control Board staff assessed the status of permit compliance was in 2005. At that time it concluded that SMCWPPP "is generally in compliance with its permit." The level of effort to achieve permit compliance has been similar since this last evaluation.

Conducting Community Information Outreach and School Programs



California Coastal Cleanup Day Volunteers in San Mateo County, September 2006

In FY 2006/07 SMCWPPP continued to implement an extensive program of community outreach and school education. One award-winning aspect of this program was the promotion of an alternative to using disposable plastic bags and coordinating the annual California Coastal Cleanup Day described above. Attendance at the California Coastal Cleanup Day in 2006 increased by about 60 percent (1,644 volunteers) and the amount of trash and litter removed from beaches and other waterways increased by about 45 percent (21,000 lbs.) compared to 2005. A plastic bag educational outreach tabling event at the Whole Foods Market in Redwood City inspired Whole Foods to become the main sponsor for the 2007 statewide California Coastal Cleanup Day. Information on the importance of controlling trash and

litter and the California Coastal Cleanup Day was published in Environmental Health's newsletter, "ReNews" that has a circulation of 220,000 and is distributed in local newspapers.

SMCWPPP and the county's Used Oil Program funded ZunZun, a two-person municipal theatrical team that presents school assemblies on stormwater and household hazardous wastes. The assemblies reached about 12,000 elementary school students at 51 schools last fiscal year.

Additional school outreach included providing one-day teacher training workshops on environmentally friendly ways to manage pests and protect the health of families, pets, and the environment.



ZunZun performing its new "The Water Beat" pollution prevention school assembly program

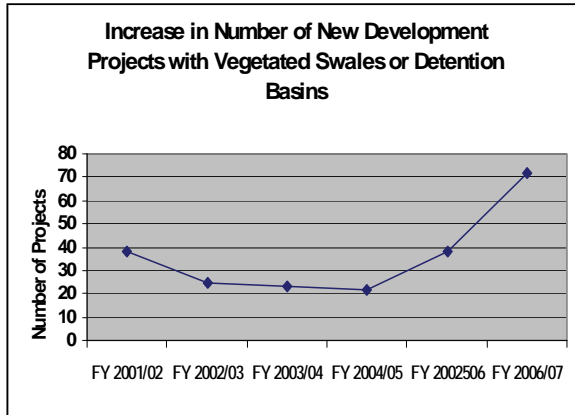
Building Cost-Effective Partnerships

SMCWPPP seeks opportunities for cost-effective collaboration with other pollution prevention programs. The Program participated in the following beneficial partnerships last fiscal year:

- SMCWPPP continued to participate in the Our Water Our World (OWOW) program that assists consumers to manage pests using non-toxic or less toxic methods by making alternative pest control products available in retail stores and by promoting their use. Last fiscal year twenty-one stores in San Mateo County participated in OWOW. The original costs for developing OWOW was supported by a grant from U.S. EPA, and the State Water Resources Control Board provided a subsequent grant to help it expand beyond the Bay Area.
- The majority of municipalities in San Mateo County have an agreement with the San Mateo County Environmental Health that allows the county staff to conduct stormwater inspections of businesses while staff is conducting its regular inspections of retail food facilities, hazardous waste generators, and hazardous materials users. This combining of inspections minimizes the intrusion on businesses and is a cost-effective way to inspect businesses for compliance with stormwater requirements and make sure business owners have up-to-date information on stormwater pollution prevention practices.
- SMCWPPP continued to participate in regional efforts to monitor San Francisco Bay and Bay Area watersheds. Along with about 70 other dischargers SMCWPPP continued to help fund the Regional Monitoring Program. This program is designed to assess long-term pollutant levels in water, sediment, fish, and shellfish in the bay and delta. SMCWPPP has also supported ways to assess the health of creeks by standardizing how data is collected and helping to develop a regional index to gauge creek health.
- SMCWPPP is an active participant, along with other countywide municipal stormwater programs, in the Bay Area Stormwater Management Agencies Association (BASMAA). BASMAA provides input on the Water Board staff's development of the next municipal stormwater permit. This permit will be regionwide and apply to 76 municipalities and flood control districts. In addition, BASMAA has provided SMCWPPP an opportunity to coordinate its comments on the various total maximum daily loads that the Water Board staff has been developing for high priority pollutants, such as mercury and polychlorinated biphenyls, which impair the bay.

Measuring Progress

SMCWPPP measured its progress last fiscal year in various ways.



New development. Last fiscal year there were 72 new and redevelopment projects on over 400 acres that used vegetated swales or detention basins to treat pollutants found in stormwater runoff. As shown in the graph, this represents an approximately two-fold increase in the number of projects using these methods to treat stormwater compared to previous years.

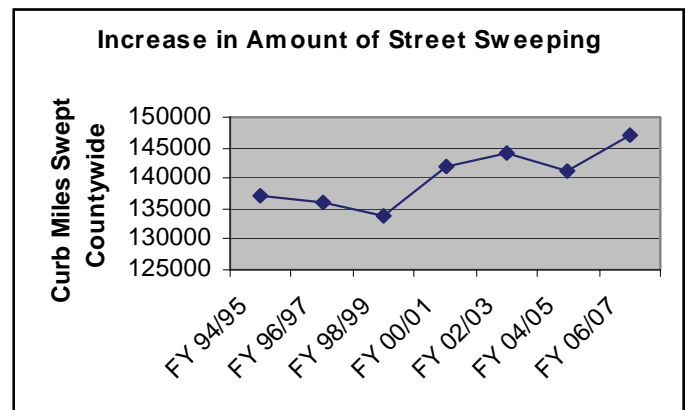
Municipal Maintenance. Last fiscal year municipalities swept about 147,000 curb miles of streets and removed about 29,000 cubic yards of material. The amount of curb miles swept has increased about 7 percent in the last twelve years. There has been no measurable change in the amount of material being

removed by sweeping, which may indicate progress in educating residents and businesses not to dispose of litter, leaves, and other materials in streets.

Public Information and Participation. The amount of waste oil recycled increased by about 25 percent last fiscal year and 63 percent over the last two years. The large increase in recycling reflects the success of joint efforts by SMCWPPP and the county's Household Hazardous Waste and Small Quantity Generator Programs, using funds from the California Integrated Waste Management Board.

4

Illicit discharges. The number of illicit discharges eliminated last fiscal year is close to the average found during the last nine years. The number of illicit discharges found and eliminated during this period represents a 40 percent decline from what was found around ten years ago when SMCWPPP initiated efforts to stop these types of discharges. The approach taken has been to increase people's awareness that these non-stormwater discharges are untreated and are illegal under local municipal ordinances.



SMCWPPP is a program of the City/County Association of Governments of San Mateo County. Created to coordinate cost-effective implementation of the municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit, it consists of twenty cities and towns and San Mateo County.



AGENDA

Stormwater Orientation for Municipal Staff

May 21, 2008, 8:00 AM – 12:00 Noon
Checuti Room
450 Poplar Avenue, Millbrae

Registration and Refreshments	8:00 – 8:30
Introductions and Request Questions that People Want Answered <i>Matt Fabry, Program Coordinator, San Mateo Countywide Water Pollution Prevention Program</i>	8:30 – 8:45
Regulatory Background, Overview of Stormwater Permit Requirements, and Upcoming Municipal Regional Permit <i>Fred Jarvis, EOA, Inc.</i>	8:45 - 9:05
San Mateo Countywide Water Pollution Prevention Program Organization, Decision-Making, and Funding <i>Matt Fabry</i>	9:05 – 9:25
Specific Requirements of the Municipal Stormwater Permit and Compliance Resources <ul style="list-style-type: none">▪ Municipal Maintenance, <i>Fred Jarvis</i>▪ Industrial and Illicit Discharge Controls, <i>Fred Jarvis</i>	9:25 – 10:10
BREAK	10:10 – 10:25
More Specific Requirements of the Municipal Stormwater Permit and Compliance Resources <ul style="list-style-type: none">▪ New Development and Construction Controls <i>Laura Prickett, EOA, Inc.</i>▪ Public Information and Participation <i>Sarah Pratt, San Mateo County</i>	10:25 – 11:15

<i>Organizations, Training, and Useful Websites Matt Fabry</i>	11:15 – 11:30
<i>Regional Water Quality Control Board Staff Availability for Assistance Habte Kifle, Regional Water Quality Board Staff</i>	11:30 – 11:45
<i>Questions and Answers and Closing Remarks Matt Fabry</i>	11:45 – 12:00



Announcing the 2008 Countywide:

Stormwater Orientation for Municipal Staff

Attention!

- Do you have **stormwater responsibilities** for your municipality?
- Do you **need an introduction** to stormwater requirements and resources?

Don't miss this event!

Wednesday, May 21, 2008

**8:00 am to 12:00 Noon
Checuti Room
450 Poplar Avenue
Millbrae**

Come learn about municipal stormwater requirements, and how the San Mateo Countywide Water Pollution Prevention Program can help you keep your municipality in compliance. Sessions will be led by countywide program staff and consultants directly involved in developing program guidance and supporting the program's subcommittees. This workshop is for new employees and others who need introductory information. Sessions will:

- ✓ Answer your questions about municipal **stormwater permit requirements** (municipal maintenance, new development, public information/participation, commercial and industrial businesses, illicit discharge controls, and more)
- ✓ Update you on the upcoming **municipal regional stormwater permit**,
- ✓ Describe the **countywide stormwater program's** organization and decision-making process,
- ✓ Describe what assistance is available from **Regional Water Board** staff,
- ✓ Show you available **tools for implementation** of the municipal stormwater permit.

∞ There is no fee for this event ∞

Please pass this flyer to appropriate staff in your organization!

Fill out the attached registration form - Registration questions? Call Melissa at (510) 832.2852 x 101

Evaluation Summary Stormwater Orientation Workshop for Municipal Staff

May 21, 2008

Summary of Workshop Evaluations

Total Number of Evaluations: 26 (% Response) Total Number of Attendees:

I. Regulatory Background, Overview of Stormwater Permit Requirements, and Upcoming Municipal Regional Permit

Fred Jarvis, EOA, Inc.

11-Very Useful 6-Useful 0-Not Useful 0-No Answer

II. San Mateo Countywide Water Pollution Prevention Program Organization, Decision-Making, and Funding

Matt Fabry, San Mateo Countywide Water Pollution Prevention Program

8-Very Useful 9-Useful 1-Not Useful 0-No Answer

III. Specific Requirements of the Stormwater Permit: Municipal Maintenance and Industrial and Illicit Discharge Controls

Fred Jarvis, EOA, Inc.

11-Very Useful 5-Useful 0-Not Useful 1-No Answer

IV. Specific Requirements of the Stormwater Permit: New Development and Construction Controls

Laura Prickett, EOA, Inc.

10-Very Useful 7-Useful 0-Not Useful 0-No Answer

V. Specific Requirements of the Stormwater Permit: Public Information and Participation

Sarah Pratt, San Mateo County

10-Very Useful 7-Useful 0-Not useful 0-No Answer

Evaluation Summary Stormwater Orientation Workshop for Municipal Staff

May 21, 2008

VI. Organizations, Training and Useful Websites

Matt Fabry, San Mateo Countywide Water Pollution Prevention Program

8-Very Useful

9-Useful

0-Not useful

0-No Answer

1. Which Topics were most beneficial?

I – 7

II – 7

III – 6

IV- 8

V – 7

VI- 5

2. Which Topics were the least beneficial?

IV – 1

V – 1

Habte but wonderful that he came.

History of permit.

Heirarchy of Board.

Public Participation

Way too many acronyms

3. Would you be interested in attending another workshop on construction site management?

12 - Yes

4. Suggestion for future topics?

New Erosion Control Measures

More focus on Construction Site Practice and Post Construction

Single Family Dwelling < 20,000 Stormwater Control

Educating decision makers on Permit and Funding to meet requirements

Types of pollution control equipment. Large and small, simple and complex.

Practical implementation techniques to get compliance with smaller project.

As discussed, perhaps a more general section or what NPDES is, more layman.

How to do Municipal Inspections on post-construction BMPs.

We never hear about mechanical choices. Are these allowed in SMC?

Evaluation Summary Stormwater Orientation Workshop for Municipal Staff

May 21, 2008

Diversion of Stormwater to Treatment Plant.

Field Operations applicable in reducing waste into storm drain system.

Enforcement during construction that inspectors are authorized to perform.

5. **Comments?**

Very informative workshop

Thank you all

Nice Introduction Topic

Nice pace-great materials! Well organized – clear and concise presenters, great location, room a little too cool. Expand on WAM.

Thank you!

Could the C.3 Technical guidance be modified. Provide information as to appropriate C-values?(for day soils, for bay mud, for permeable pavers, for green roofs?)

It's hard to know exactly what is required for small cities to comply with new requirements.

Excellent workshop!!

Maintenance is seemingly to be an issue for us to be in compliance- possibly providing training for maintenance staff/making it mandatory/evaluation

End of Evaluations

SIGN-IN SHEET
 Stormwater Orientation for Municipal Staff
 Wednesday, May 21, 2008

Date	Last Name	First Name	Agency	Sign-In
5/19/2008	Allén	Catherine	City of Millbrae	<i>C. Allen</i>
5/13/2008	Atwater	Alan	City of San Mateo	<i>Alan Atwater</i>
4/7/2008	Bell	Doug	City of Burlingame	<i>Doug Bell</i>
4/7/2008	Benedik	Tanya	City of Millbrae	<i>Tanya Benedik</i>
5/19/2008	Cesar	Kevin	City of Millbrae	<i>Kevin Cesar</i>
4/7/2008	Chan	Catherine	Hillsborough	<i>Catherine Chan</i>
4/7/2008	Chen	Jen	Hillsborough	
5/13/2008	DeMeo	Sarah	City of San Mateo	<i>Sarah DeMeo</i>
5/20/2008	Dennis	Jeremy	Redwood City <small>County of SAN MATEO</small>	<i>Jeremy Dennis</i>
4/7/2008	Disco	Bob	City of Burlingame	
4/7/2008	Ebo	Florian	City of Millbrae	<i>Florian Ebo</i>
4/10/2008	Etchebehere	Gratien	Town of Woodside	<i>Gratien Etchebehere</i>
	Fabry	Matt	City of Brisbane	
4/9/2008	Falzon	Vincent	City of Burlingame	<i>Vincent Falzon</i>
5/12/2008	Fulford	Daniel	City of South San Francisco	<i>Daniel Fulford</i>
5/14/2008	Gallegos	Sean	City of Half Moon Bay	<i>Sean Gallegos</i>
5/20/2008	Gourley	Heather	City of Santa Rosa	<i>Heather Gourley</i>
5/20/2008	Gundy	Renae	City of Santa Rosa	<i>Renae Gundy</i>
4/7/2008	Hirsch	Rick	City of Millbrae	
	Jarvis	Fred	EOA, Inc.	
	Kifle	Habte	Water Board	
5/13/2008	Lecel	Rob	City of San Mateo	<i>Rob Lecel</i>
4/7/2008	Mallick	Rob	City of Burlingame	<i>Rob Mallick</i>
4/7/2008	Moynahan	Gavin	San Carlos Planning	<i>Gavin Moynahan</i>
4/7/2008	Mullins	John	Town of Hillsborough	<i>John Mullins</i>
5/13/2008	Ng	Jennifer	City of Menlo Park	<i>Jennifer Ng</i>
4/10/2008	O'Dea	Kelly	City of Millbrae	<i>Kelly O'Dea</i>
	Pratt	Sarah	San Mateo County	<i>Sarah Pratt</i>
	Prickett	Laura	EOA, Inc.	<i>Laura Prickett</i>
4/7/2008	Rawley	Joshua	Town of Colma	<i>Joshua Rawley</i>
4/7/2008	Schwartz	Randy	City of Burlingame	
4/7/2008	Voong	Victor	City of Burlingame	

5/21/08 WEST CHRISTINE CITY OF HALFMOON BAY *Christine West* chris@hmbcm.com
 5/21/08 ANDERSON TIM TOWN OF HILLSBOROUGH *Tim Anderson*
 5/21/08 BRACK JOHN C. ty of Burl *John Brack*

Stormwater Orientation for Municipal Staff

Workshop Binder

Table of Contents

Section 1.0 Introduction

1. Workshop Agenda
2. PowerPoint Presentation: Overview of NPDES Requirements
3. Orientation Information: NPDES Permit Requirements
4. Orientation Information: Countywide Program
5. SMCWPPP Organizational Chart
6. List of Stormwater-Related Acronyms
7. Annual Report Deliverable Forms (First Half of FY 2007/08)
8. Useful Websites for Information
9. Fact Sheet of FY 2006/07 Accomplishments

Section 2.0 New Development and Construction Controls

10. PowerPoint Presentation: New Development/Construction
11. Orientation Information: New Development and Construction Requirements
12. List of New Development Subcommittee Members
13. Flyer on Stormwater Quality Control Requirements
14. Flyer on Hydromodification Management (HM) Requirements
15. Project Applicant Checklist for NPDES Permit Requirements
16. Impervious Surface Data Collection Worksheet
17. Cover and Table of Contents for C.3 Stormwater Technical Guidance
18. Source Control Model List (Page 1, with downloading information)
19. Operation and Maintenance Form
20. Model Maintenance Agreement
21. Soil Guidelines (Page 1, with downloading information)
22. Construction BMP Flyer: General Construction and Site Supervision
23. Checklist for Construction Site Inspections

Section 3.0 Public Information/Participation

24. PowerPoint Presentation: Public Information/Participation
25. Orientation Information: Public Information/Participation
26. List of PIP Subcommittee members
27. Our Water Our World Store List
28. Outreach Materials Request Form

Section 4.0 Commercial, Industrial and Illicit Discharge Controls

29. Overview of CII Requirements
30. List of CII Subcommittee Members
31. List of Educational Outreach Materials
32. BMPs and Implementation Procedures for Conditionally Exempted Discharges
33. Facility Inspection Form
34. Stormwater Inspections and Violations Summary Form

Section 5.0 Municipal Maintenance, Parks Maintenance and Integrated Pest Management

35. PowerPoint Presentation: Municipal Maintenance and Commercial, Industrial and Illicit Discharge Control
36. Overview of Municipal Maintenance Requirements
37. List of Municipal Maintenance Subcommittee Members
38. List of Parks Maintenance & IPM Work Group Members
39. Model Stormwater Pollution Prevention Plan for Corporation Yards
40. Storm Drain Facilities Performance Standards (from Storm Water Management Plan)

Section 6.0 Watershed Assessment and Monitoring

41. Overview of WAM Requirements
42. List of WAM Subcommittee Members

**SAN MATEO COUNTYWIDE
WATER POLLUTION PREVENTION PROGRAM**

STORMWATER PROGRAM FUNDING OPTIONS

HF&H CONSULTANTS, LLC



June 10, 2008

FINAL REPORT

.

TABLE OF CONTENTS

I. FUNDING STORMWATER PROGRAMS.....	1
Introduction	1
Proposition 218 Compliance.....	2
Stormwater Program Functions and Funding.....	3
II. POTENTIAL FUNDING OPTIONS	5
Funding Sources Exempt From Voter Approval Under Proposition 218	5
Wastewater Fees.....	5
Refuse Collection (Solid Waste) Fees	7
Water Fees.....	9
Other Fees	10
Development Impact Fees/Capital Contributions	11
Grants.....	12
Funding Sources Requiring Voter Approval.....	12
Stormwater Fees.....	12
Taxes and Assessments	15
III. POTENTIAL FUNDING STRATEGIES.....	17
Legal Requirements, Political Challenges, and Implementation Logistics	17
Funding Strategies	18
Category 1. Fund Stormwater From Related Services.....	19
Category 2. Realign Funding for the General Fund/Public Works	19
Category 3. Recover the Full Cost of Services and Facilities	20
Category 4. Apply for Grant Funding	21
Category 5. Implement Stormwater Fees	22
Category 6. Implement Taxes/Assessments.....	22
Conclusion	22

LIST OF FIGURES

Figure 1. Contra Costa County Stormwater Fee Survey	13
Figure 2. Stockton Stormwater Fee Survey	14
Figure 3. Manteca Stormwater Fee Survey	14
Figure 4. Stormwater Funding Options.....	24

Category 5. Implement Stormwater Fees

Because of the need for voter approval, creating new or increasing existing stormwater fees has been challenging since the passage of Proposition 218. A few communities with heightened public awareness of the problems posed by stormwater pollution or flooding have been successful. At that, however, provisions such as sunset clauses have limited the duration of the fees and the public's willingness to pay has limited the amount of the fees.

It is unlikely that very many agencies will succeed in creating new or increasing existing stormwater fees given the current voter approval requirement. As a result, agencies will struggle to fund stormwater programs, which may lead to deteriorating conditions. Deteriorating conditions may improve the chances of achieving voter approval for stormwater fees, although surveys indicate that the public's unwillingness to pay much.

If SCA 12 passes, creating new or increasing existing stormwater fees will become as easy as it currently is to set rates for water, sewer, and refuse services. SCA 12 is the latest attempt to remove the voter approval requirement. Prior attempts, such as ACA 10 failed. Agencies should not plan on SCA 12 passing soon or at all. If and when SCA 12 or successor legislation passes, agencies should not hesitate to enact stormwater fees.

Category 6. Implement Taxes/Assessments

Implementing taxes or assessments to cover the cost of O&M or capital improvements is comparable in difficulty to creating new or increasing existing stormwater fees: both require voter approval. The results can yield substantial funding to construct and operate facilities. The success of the City of Los Angeles in establishing a tax to fund a \$500 million bond is a noteworthy lesson. The public appreciated the need for the funding and perceived the value in the cost and, as a result, the tax passed. When those circumstances exist, the chances of achieving voter approval greatly increase. Agencies considering taxation as part of their funding strategy should pay attention to the Los Angeles example.

CONCLUSION

Agencies can develop an appropriate funding strategy from the preceding categories. Stormwater programs have for the most part prioritized and institutionalized certain key program functions over the roughly past 15 years of operation. Most agencies may have already implemented some of the options, particularly those with fewer legal, political, and implementation challenges. Some options may now be within reach while others may never be realistic. For the most part, whatever is done requires that the public pay more. Surveys indicate the public is unwilling to pay fees directly for stormwater requirements. Significant lead time (i.e., multiple years rather than months

is required to try and secure these funds with no guarantee of success. In the current economic environment and given the recent results of public surveys, success will probably be minimal.

Even the best funding strategies are limited, leading agencies to seek legal remedies. The ever increasing cost of regulatory compliance has led to court cases²⁷ concerning the reimbursement of unfunded State mandates. The cities in Los Angeles County have established their right in court to have the Commission on State Mandates review their MS4 permits to determine if any aspects fall within the scope of unfunded mandates that would require the State to either fund the permit requirements or suspend or delete them. Because federal mandates are exempt, the next step will be to determine whether the MS4 permits contain any additional State mandates. Guidance from the Commission's forthcoming actions will no doubt play a part in shaping stormwater funding strategies.

²⁷ *County of Los Angeles v. Commission on State Mandates.*

Tips for a Cleaner Bay

HOW YOUR BUSINESS CAN
PREVENT STORMWATER POLLUTION



These guidelines cover the following topics:

General Stormwater Pollution Prevention Practices and
Good Housekeeping • Outdoor Storage of Materials and Wastes
Equipment and Vehicle Washing • Landscape Maintenance • Mercury and Litter
Additional Information and Local Agency Contacts

YOU CAN PREVENT WATER POLLUTION!

Storm drains lead directly to creeks, the Bay, and Pacific Ocean!

The following pollution prevention practices for rainfall runoff (stormwater) will help you comply with laws that protect stormwater and the environment. Stormwater can easily cause pollution because it typically flows directly to creeks and the Bay without any treatment. **You may have to pay for clean up costs and fines, have permits revoked, or even go to jail for stormwater pollution**, such as spilling chemicals and/or discharging other wastes and washwaters to streets, storm drains, creeks, and the Bay.



Polluting stormwater is against the law!

Consider Becoming a Green Business

Green Businesses must comply with environmental laws plus meet established standards for conserving natural resources, preventing pollution, and reducing wastes. The Bay Area Green Business Program certifies businesses as green and promotes *Green Business* use and recognition. For more information visit www.greenbiz.ca.gov/index.html.

Hosing dirt, soap, litter and other pollutants down a storm drain is illegal. Unlike flows from building interior fixtures (sinks, toilets, etc.) that are treated at wastewater treatment plants, outdoor washwaters and rainfall runoff flow directly to creeks and the Bay typically without treatment of any kind.

GENERAL POLLUTION PREVENTION PRACTICES

These good housekeeping practices are required and critical to protecting our environment.

Five Important Things to Remember:

1. Keep your business neat and clean – it saves time and money and prevents pollution.
2. Protect your storm drain inlets from pollution of any kind.
3. **Be prepared!** Keep spill cleanup materials easily accessible.
4. Use dry methods to clean up spills whenever possible. Never wash spills down the storm drain.
5. Train staff regularly on these practices.

- **Label/stencil each storm drain inlet** to remind workers and customers that no dumping is allowed.
- **Routinely inspect and clean:**
 - ✓ Storm drain inlets (grates and sumps)
 - ✓ Loading docks and shipping/receiving areas
 - ✓ Work areas
 - ✓ Chemical storage areas
 - ✓ Waste storage and recycling areas
 - ✓ Treatment devices for proper functioning
- **Keep surfaces clean** by sweeping, vacuuming or mopping – never wash down surfaces to gutter, storm drain inlet, street, or waterway. For pressure washing of pavement or other surfaces hire a cleaning contractor trained to use pollution prevention practices (see Bay Area Stormwater Management Agencies Association's list of recognized surface cleaners at www.basmaa.org/recognition/). Make sure all wash water is collected and disposed properly as described at website.
- **Sweep parking areas and gutters** at least monthly and before it rains and pick up litter and trash daily.
- **Prevent spills** when transferring liquids by using drip pans, secondary containment, and absorbents.
- **Clean up spills** immediately with rags, absorbents*, or wet/dry vacuum. Do not allow fluids to accumulate or run across surfaces. Never wash spills down or allow spills to flow into a storm or sanitary sewer drain inlet. Clean up absorbents immediately following their use.
- **Perform work indoors or under cover**, whenever possible, to avoid exposure to rainfall, runoff, and wind. If outdoor work generates small particles or dust, the particles must be contained and vacuumed up.

**Absorbent that was used on a small spill is being swept up for disposal. Used absorbents may be hazardous waste and must be properly disposed.*

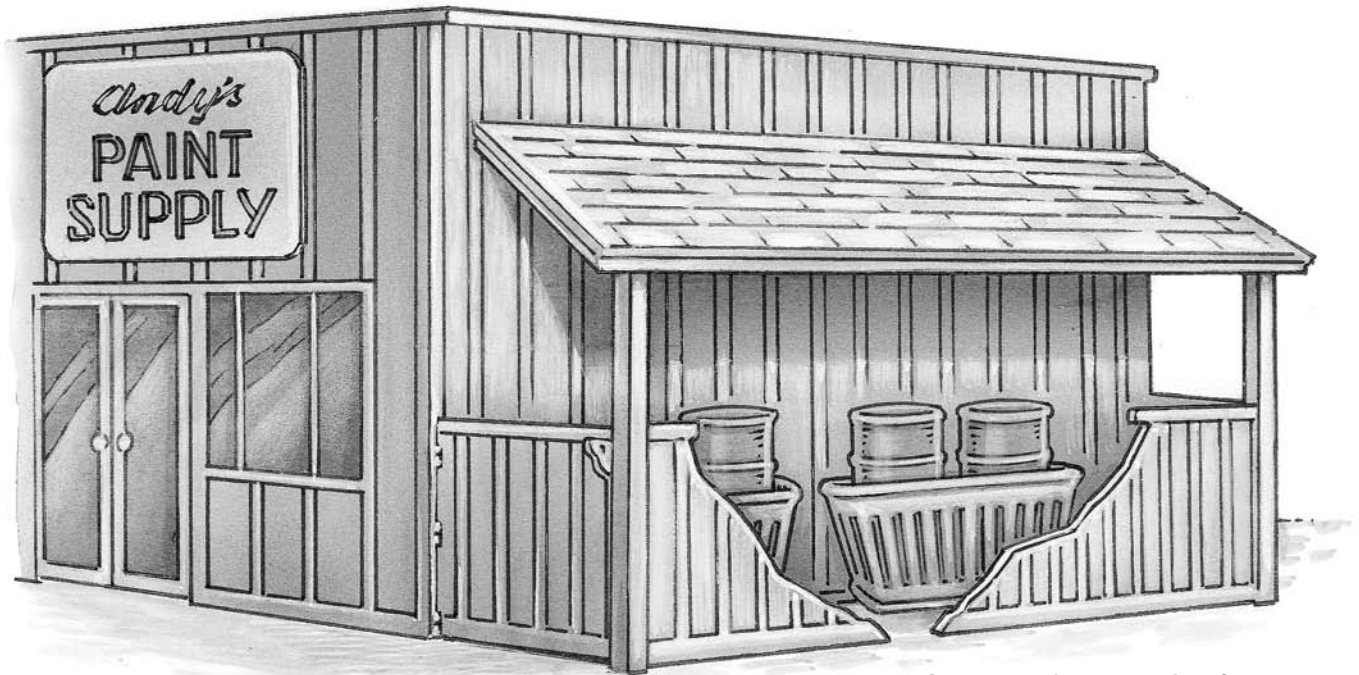


OUTDOOR MATERIALS STORAGE

- Store materials on a **paved surface** and **under a roof**, in a fully enclosed container, or under a temporary waterproof covering to prevent contact with rainfall and runoff.
- Store fluids within **secondary containment** to prevent accidental release. **Keep container lids, caps, and openings closed** when not in use. Keep containers out of pooled or standing water. Regularly inspect containers for cracks, corrosion, or leaky seams.
- Apply **caution and control when transferring liquids** to minimize spill potential.
- Have **cleanup materials** easily accessible. Regularly train employees on spill clean up procedures.
- Store all items **as far as possible from storm drain inlets**.
- Use **drip pans** under outdoor work or storage areas where there is the potential for spills and leaks.

If You Must Store Materials Outdoors:

1. Protect from rain and runoff.
2. Place primary containers of liquids within secondary containment.
3. Do not place near storm drain inlets.
4. Check with Fire Department if sprinklers may be required under roof/cover.
5. Keep spill cleanup materials in easily accessible areas.



Paints stored on a paved surface, under a roof, and within secondary containment to catch spills.



Education and Training

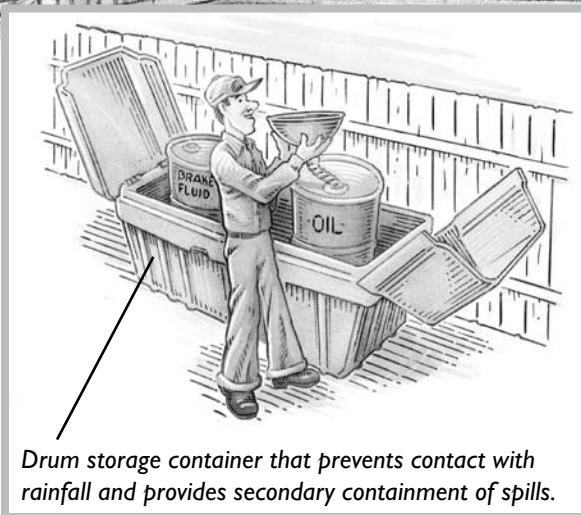
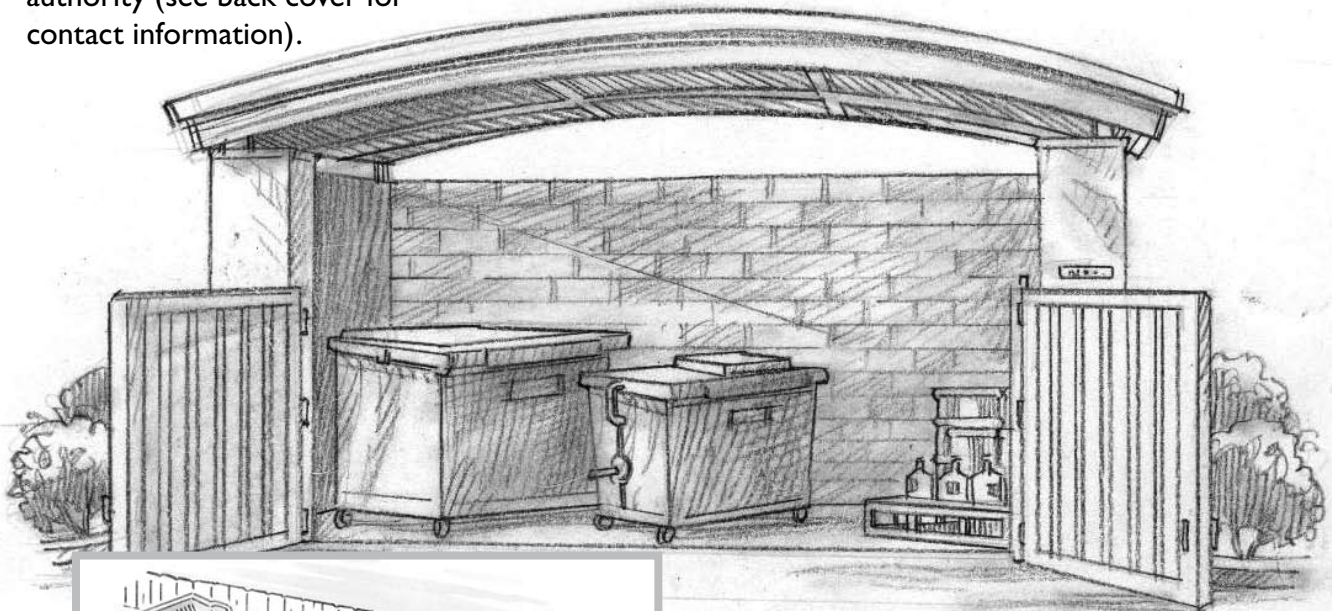
Train new employees and remind existing ones to use these stormwater pollution prevention practices.

OUTDOOR WASTE STORAGE

- **Inspect dumpsters and waste recycling area daily.** Pick up dropped wastes and sweep area. Make sure dumpsters are not overfilled and lids are kept closed. Dumpsters without tight lids or that leak must be replaced or repaired. Some dumpsters have plugs that need to be in place. Contact your service provider.
- **Prevent and clean up any trash compactor leachate** drippings or direct to sanitary sewer with approval of your local sanitary sewer treatment authority (see back cover for contact information).
- Use separate, appropriate, clean, sealed, and secondarily **contained storage device** for recyclable fluids and hazardous wastes. Label containers as required by hazardous waste regulations.
- Use a licensed company to haul and recycle or dispose of wastes.
- Do not rinse waste containers or areas to storm drain.

Waste Disposal and Recycling:

1. Don't dispose to storm drain. Recycle whenever possible.
2. Divide wastes by types and store separately in sealed containers.
3. Use a big enough dumpster so you can keep the lids closed.
4. Replace leaking dumpsters.



Drum storage container that prevents contact with rainfall and provides secondary containment of spills.

Dumpster, tallow bin, and materials for recycling stored on a paved surface, under a roof, protected from rainfall runoff.



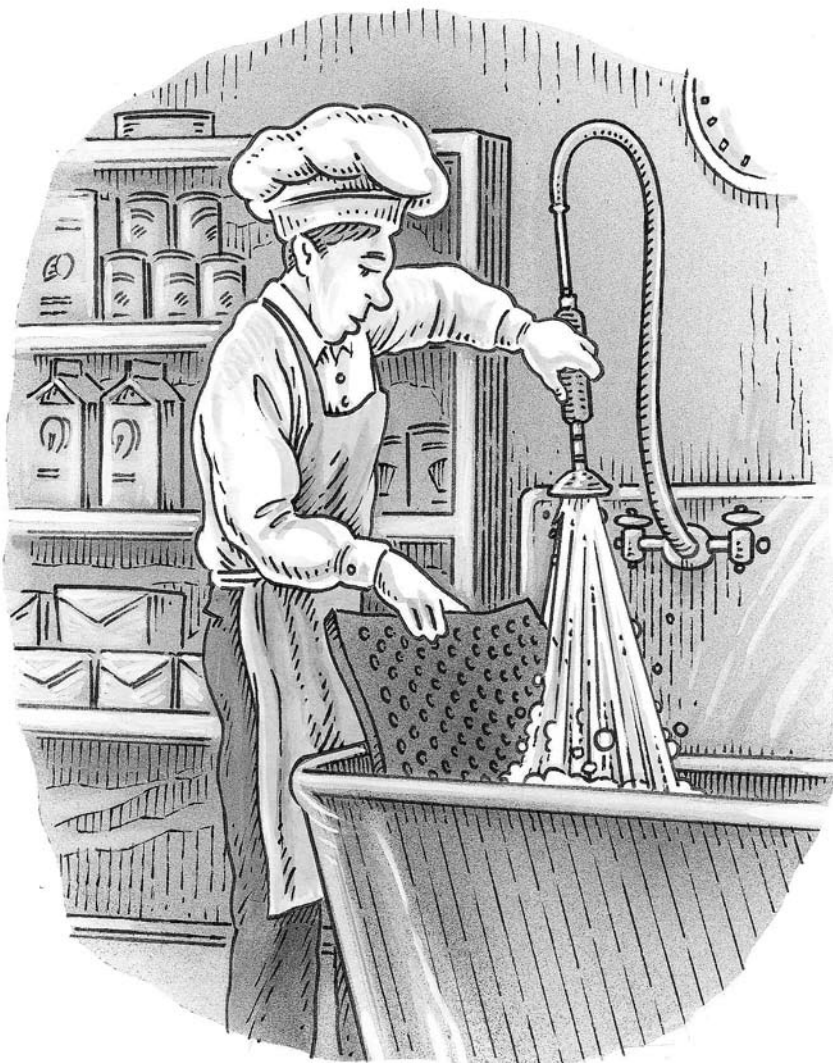
Consult your local hazardous waste regulator about hazardous materials disposal and handling. See back page for contact information.

EQUIPMENT AND VEHICLE WASHING

- If possible, **wash equipment indoors**, at a utility sink or location where washwaters drain to the sanitary sewer. Contact your local sanitary sewer treatment authority for approval (See back page).
- Alternatively, **wash equipment or vehicles** on an adequately-sized, wash pad that is roofed, bermed, and connected to a washwater treatment system and the sanitary sewer.
- Connection to the sanitary sewer may also require a plumbing permit from your local jurisdiction. Contact your City.
- All grease traps and interceptors and vehicle washing systems **shall be maintained and cleaned out** on a regular schedule. Collected solids must be disposed using a licensed waste hauler.
- Mobile washing of some types of equipment, such as roof exhaust equipment or shopping carts, is acceptable if all washwater is contained, vacuumed up, and disposed to sanitary sewer.

Equipment Washing:

1. Direct all washwaters to the sanitary sewer.
2. Maintain any required treatment system.
3. Don't direct any wash or rinse water to gutter, street, or storm drain.
4. Clean equipment or vehicles off site, if other options are unavailable.



Kitchen floor mat washing in a janitorial/mop sink.



Consult your local sanitary sewer treatment authority for approval regarding any equipment or vehicle washing system. See back page for contact information.

LANDSCAPING AND SAFER ALTERNATIVES TO PESTICIDES

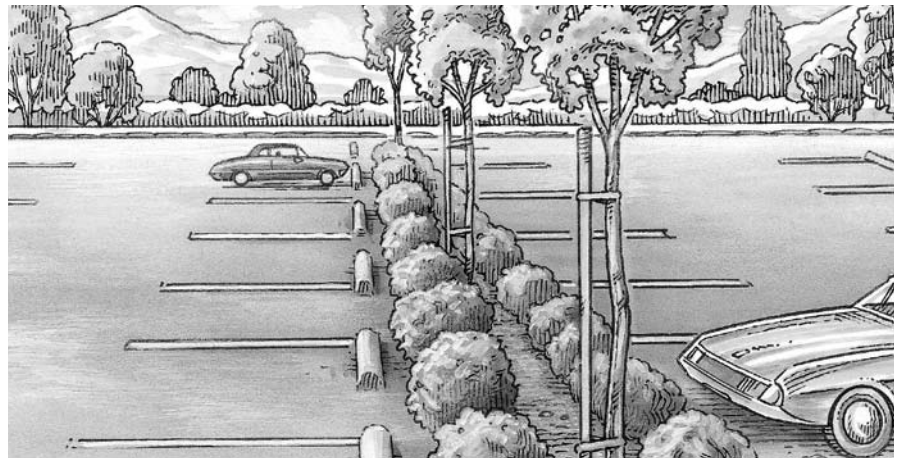
- Stormwater pollution prevention and treatment systems are being increasingly included in landscaping. Know whether your landscaping is specifically designed to minimize and treat stormwater runoff, and, if it is, make sure it is maintained as designed.
- Follow Bay-Friendly Landscaping and Gardening Program practices. Visit www.bayfriendly.org.
- Use less toxic alternatives to pesticides. For more information on integrated pest management, visit www.ourwaterourworld.org.
- **Do not overwater**

– maintain sprinklers to avoid pavement watering.

- **Clean up fallen leaves** and remove prunings for composting or disposal with green wastes. Don't dispose in street, storm drain, or creek.

Landscape Maintenance:

1. Follow maintenance plan for any landscape-based stormwater treatment system.
2. Use least toxic pest control methods.
3. Minimize use of fertilizer.



Here is an example of a vegetated swale used for treating stormwater drainage from a parking lot. Swales allow stormwater pollutants a chance to settle and, where soils are sandy, to recharge groundwater aquifers.

MERCURY AND LITTER

MERCURY

Mercury contaminates fish making them unsafe to eat. The state health agency has issued detailed health advisories that are available at www.oehha.ca.gov/fish/general/sfbaydelta.html.

- Properly **dispose** as hazardous waste **or recycle** all mercury-containing products, including **fluorescent** lamps light bulbs, manometers, thermostats, switches, and batteries. **In order to prevent contamination of fish, it is no longer legal**

to dispose any of these wastes as trash with your regular garbage.

- Consult the California Department of Toxic Substances Control's website www.dtsc.ca.gov/HazardousWaste/UniversalWaste/index.cfm for detailed information on how to dispose of mercury-containing and other universal hazardous wastes. Don't throw in the trash – it is illegal!

LITTER

Litter and trash are bad for

business and harm the health of creeks and the Bay.

- **Provide enough trash receptacles** for customers and employees. All outdoor receptacles must be covered.
- **Pick up litter daily.** Maintain the sidewalk in front of your business so that it is free of litter and dirt. Don't wash into street or storm drain.
- Any **creek** passing through or next to your property **must be maintained free of trash and debris.**

LOCAL AGENCY CONTACTS

Local Stormwater Inspectors

City	Phone Number
Atherton.....	(650) 372-6200
Belmont.....	(650) 372-6200
Brisbane.....	(650) 372-6200
Burlingame.....	(650) 342-3727 and (650) 372-6200
Colma.....	(650) 372-6200
Daly City.....	(650) 991-8208
East Palo Alto.....	(650) 372-6200
Foster City.....	(650) 522-7300
Half Moon Bay.....	(650) 372-6200
Hillsborough.....	(650) 372-6200
Menlo Park.....	(650) 372-6200
Millbrae.....	(650) 372-6200
Pacifica.....	(650) 372-6200
Portola Valley.....	(650) 372-6200
Redwood City.....	(650) 372-6200
San Bruno.....	(650) 372-6200
San Carlos.....	(650) 372-6200
San Mateo.....	(650) 522-7300
South San Francisco.....	(650) 829-3848
Unincorporated San Mateo County.....	(650) 372-6200
Woodside.....	(650) 372-6200

Local Hazardous Waste Regulator Phone Number

(Certified Unified Program Agency – CUPA)
 The San Mateo County Environmental Health Division
 is the CUPA for all areas of San Mateo County (650) 372-6200

Local Sanitary Sewer Treatment Authorities Phone Number

- Burlingame Waste Water Treatment Facility..... (650) 342-3727
(Serves Burlingame, Hillsborough, and Burlingame Hills)
- Millbrae Water Pollution Control Plant..... (650) 259-2388
- North San Mateo County Sanitation District (650) 991-8200
*Wastewater Treatment Plant
(Serves Daly City and parts of Westborough)*
- Pacifica’s Calera Creek Water Recycling Plant(650) 738-4660
- San Mateo Waste Water Treatment Plant..... (650) 522-7300
(Serves Foster City and San Mateo)
- Sewer Authority Mid Coasts Wastewater (650) 726-0124
*Treatment Facility
(Serves Half Moon Bay, Granada, Moss Beach,
and Montara)*
- South Bayside System Authority.....(650) 594-8411 ext.140
*(Serves Atherton, Belmont, Menlo Park, Portola Valley,
Redwood City, San Carlos, and Woodside)*
- South San Francisco/San Bruno Water..... (650) 877-8555
*Quality Control Plant
(Serves Colma, San Bruno, South San Francisco,
and southern part of Daly City)*
- Palo Alto Regional Water Quality Control Plant.....(650) 329-2598
*(Serves East Palo Alto, Los Altos, Los Altos Hills,
Mountain View, Palo Alto, and Stanford)*
- San Francisco’s Southeast Treatment Plant..... (415) 648-6882
(Serves Brisbane and east side of San Francisco)

Version dated May 2008

Your business may be regulated by several State and Local agencies for environmental compliance. In addition to what is listed, you may need to obtain coverage under the State Water Resources Control Board’s Stormwater Industrial General Permit. Call: (916) 341-5538 for more information.



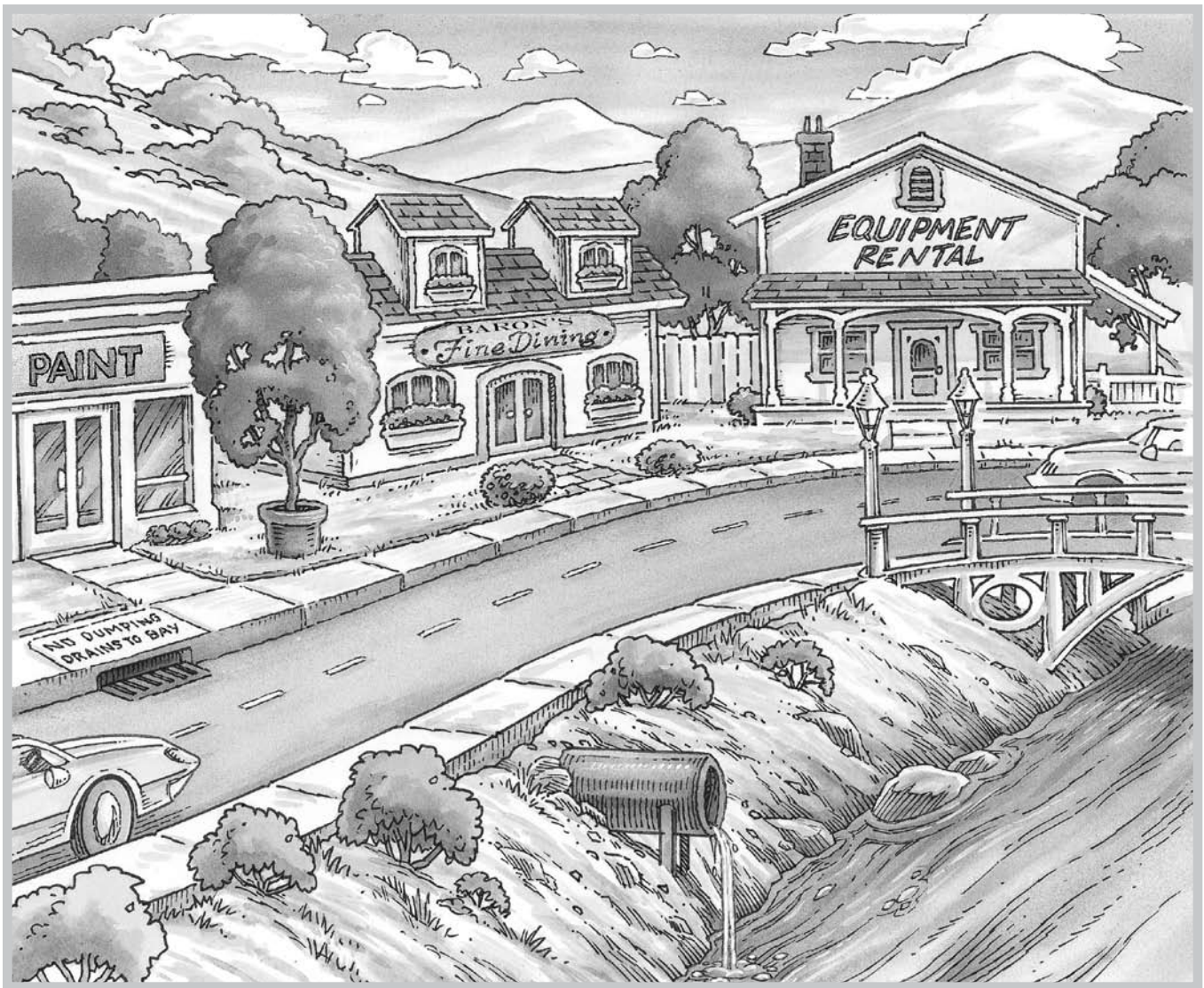
All discharges to sanitary sewer must be approved by your local sanitary sewer treatment authority. See list of contacts to the left. Never discharge into a storm drain.

The Program gratefully acknowledges the Alameda Countywide Clean Water Program for allowing the adaptation of its booklet.

♻️ Printed on 50% recycled paper with 30% Post Consumer Waste (PCW), utilizing soy-based inks.

Sugerencias para una Bahía más Limpia

CÓMO PUEDE SU NEGOCIO PREVENIR LA CONTAMINACIÓN DEL AGUA PLUVIAL



Estos principios cubren los siguientes temas:

Prácticas Generales para la Prevención de la Contaminación del Agua Pluvial y Limpieza Adecuada del Negocio • Almacenamiento Externo de Materiales y Desechos
Lavado de Equipo y Vehículos • Mantenimiento de Áreas Verdes • Mercurio y Basura
Información Adicional y Contacto con Agencias Locales

¡USTED PUEDE PREVENIR LA CONTAMINACIÓN DEL AGUA!

¡El sistema de alcantarillado de agua pluvial fluye directamente a los arroyos, a la bahía, y el Océano Pacífico!

Las siguientes prácticas de prevención de la contaminación del escurrimiento generado por la precipitación pluvial le ayudarán a cumplir las leyes que protegen el agua pluvial y el medio ambiente. El agua pluvial que fluye al sistema de alcantarillado puede causar contaminación fácilmente porque por lo regular desemboca directamente en los riachuelos y en la bahía sin recibir tratamiento alguno.

Usted podría tener que pagar el costo de las actividades de limpieza y multas, ser sometido a la revocación de sus permisos o, inclusive, ir a la cárcel por contaminar las aguas pluviales, así como por verter sustancias químicas y/o otras descargas de desechos y agua resultante de actividades de lavado a las calles, sistema de alcantarillado de agua pluvial, arroyos y la bahía.

Considere Convertirse en un Negocio Verde

Los negocios verdes deben cumplir con las leyes medio ambientales además de adherirse a los estándares establecidos para la conservación de recursos naturales, la prevención de la contaminación así como la reducción de desechos. El programa de negocio verde *Bay Area Green Business Program* certifica a las compañías con la denominación de verde y promueve el uso y reconocimiento del término *Green Business*. Si desea mayor información, visite www.greenbiz.ca.gov/index.html.

Es en contra de la ley limpiar con el chorro de la manguera suciedad, basura, residuos de jabón, y otros contaminantes que fluyan hacia el sistema de alcantarillado de agua pluvial. A diferencia de los flujos de lavaderos, inodoros etc. interiores de los edificios que son procesados en las plantas de tratamiento de agua residual, el agua resultante de actividades de lavado en exteriores y el agua de la precipitación pluvial fluyen directamente a los arroyos y a la bahía generalmente sin recibir tratamiento alguno.



¡La contaminación de las aguas pluviales es contra la ley!

PRÁCTICAS GENERALES PARA LA PREVENCIÓN DE LA CONTAMINACIÓN

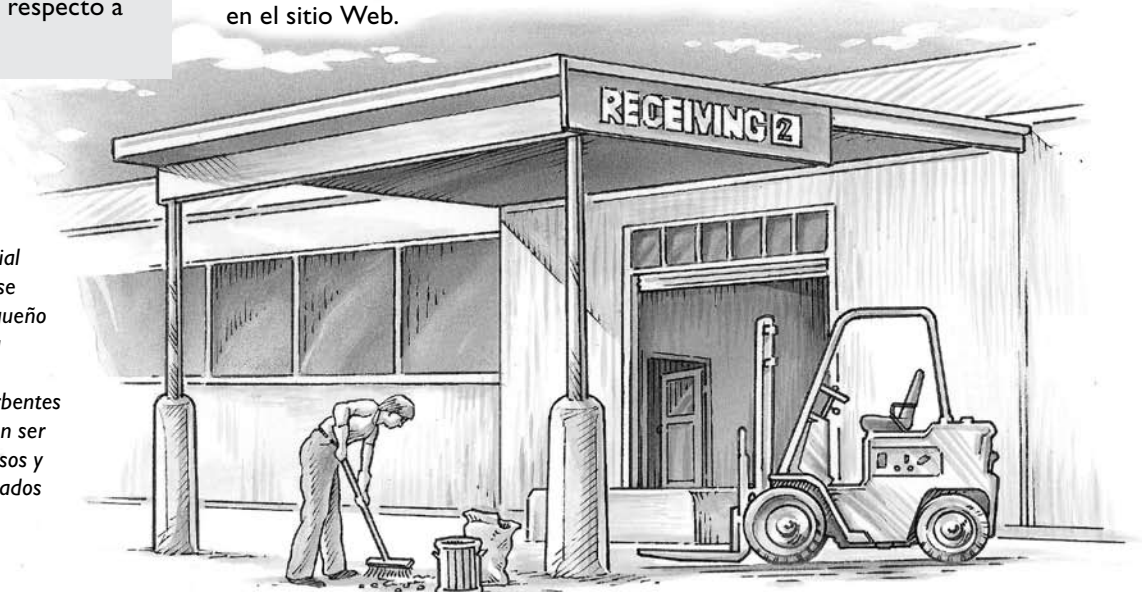
Las siguientes son buenas prácticas de limpieza de su negocio que se requieren y son de vital importancia para proteger nuestro medio ambiente.

Cinco cosas importantes que debe recordar:

1. Conserve su negocio limpio y ordenado – le ahorra dinero y evita la contaminación.
2. Proteja los desagües de las alcantarillas de agua pluvial contra todo tipo de contaminación.
3. **¡Prepárese!** Tenga los materiales de limpieza a la mano.
4. Siempre que sea posible use métodos secos de limpieza para eliminar los derrames. Nunca enjuague los derrames de forma que el agua contaminada vaya a dar al sistema de alcantarillado pluvial.
5. Capacite al personal periódicamente respecto a estas prácticas.

- **Identifique/indique cada alcantarilla de agua pluvial** a fin de recordarles a sus trabajadores y clientes que no se permite desechar aguas residuales.
- **Inspeccione y limpie regularmente:**
 - ✓ las alcantarillas de agua pluvial (las parrillas y los sumideros),
 - ✓ las plataformas de carga y las áreas de envío y recepción
 - ✓ las áreas de trabajo
 - ✓ las áreas de almacenamiento de sustancias químicas
 - ✓ las áreas de almacenamiento de desechos y de reciclaje
 - ✓ los dispositivos de tratamiento para obtener un funcionamiento adecuado.
- **Conserve limpias las superficies** barriendo, aspirando o pasando el trapeador – nunca lave las superficies dirigiendo el agua hacia la cuneta, las alcantarillas de agua pluvial, la calle o vía de agua. Para lavar a presión el pavimento u otras superficies, solicite los servicios de un contratista en limpieza capacitado para seguir las prácticas de la prevención de la contaminación (consulte la lista de la asociación de agencias para el manejo del agua pluvial *Bay Area Stormwater Management Agencies Association* de reconocidas empresas dedicadas a la limpieza de superficies en www.basmaa.org/recognition/). Cerciérese de que toda el agua de lavado sea recolectada y desechada adecuadamente tal y como se describe en el sitio Web.
- **Barra las áreas de estacionamiento y las cunetas** al menos mensualmente y antes de que llueva. Recoja la basura diariamente.
- **Prevenga los derrames** cuando esté transfiriendo líquidos utilizando colectores de aceite, contención secundaria y absorbentes.
- **Limpie los derrames** de inmediato con trapos, materiales absorbentes* o métodos de aspiración húmeda o seca. No permita que los líquidos se acumulen o se derramen por la superficie. Nunca utilice agua para eliminar derrames ni permita que los derrames fluyan hacia las alcantarillas pluviales ni a los drenajes sanitarios. Limpie los absorbentes inmediatamente después de su uso.
- **Realice las labores en interiores o bajo techo** cuando sea posible, a fin de evitar la exposición a la precipitación pluvial, el escurrimiento de agua y el viento. Si el trabajo externo genera pequeñas partículas o polvo, las partículas deberán ser contenidas y aspiradas.

**Se retira material absorbente que se utilizó en un pequeño derrame para su eliminación. Los materiales absorbentes utilizados podrían ser desechos peligrosos y deben ser eliminados adecuadamente.*

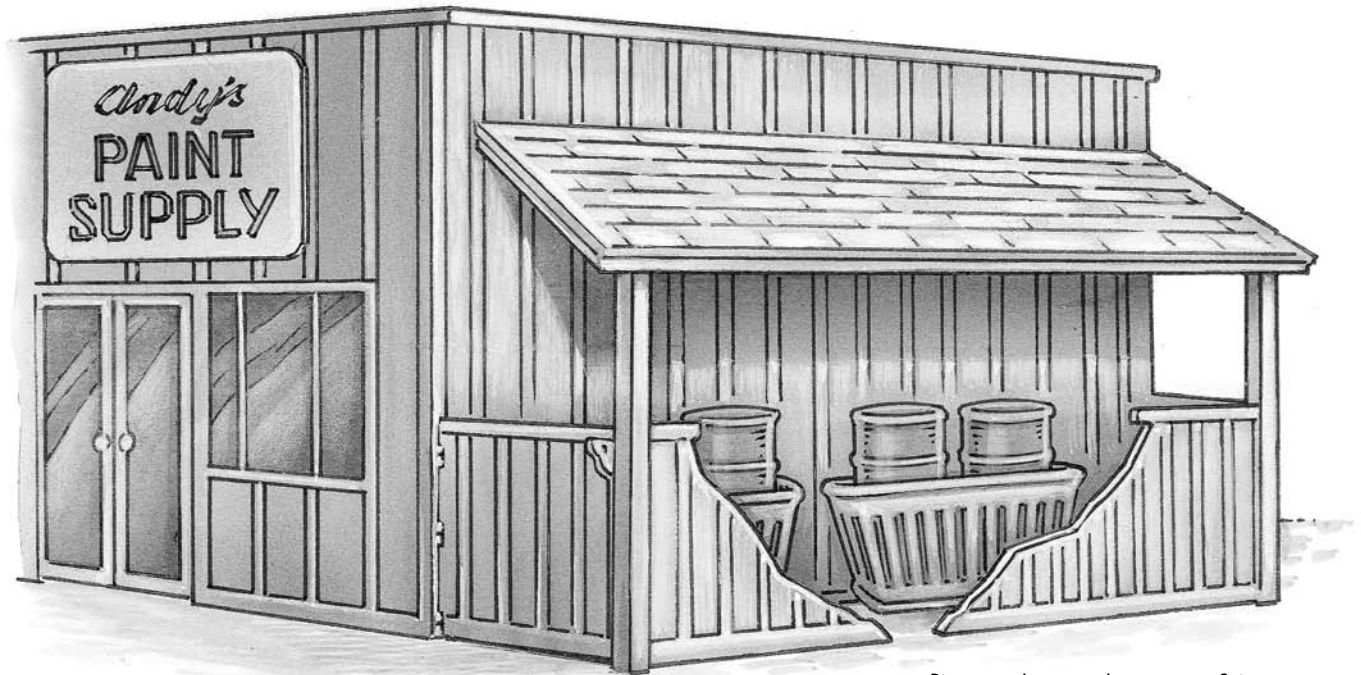


ALMACENAMIENTO DE MATERIALES EN EXTERIORES

- Guarde los materiales en una **superficie pavimentada y bajo techo**, en un recipiente completamente cerrado, o debajo de una cubierta temporal a prueba de agua a fin de prevenir el contacto con el agua pluvial y el escurrimiento.
- Guarde los líquidos dentro de una **contención secundaria** con objeto de prevenir su fuga accidental. **Mantenga cerradas las tapas y las aberturas de los recipientes** cuando no se estén utilizando. Mantenga los recipientes lejos del agua estancada. Inspeccione periódicamente los recipientes para detectar cuarteaduras, corrosión o uniones que tengan fugas.
- Ejerza la **precaución y el control al transferir líquidos** para minimizar un derrame potencial.
- Tenga siempre a la mano **materiales de limpieza**. Capacite periódicamente a los empleados respecto a los procedimientos de limpieza para eliminar derrames.
- Almacene todos los materiales **lo más lejos posible de las alcantarillas de agua pluvial**.
- Coloque **colectores de derrames** debajo de las labores que se realicen en exteriores o áreas de almacenamiento en donde exista potencial de derrames y fugas.

Si es necesario almacenar materiales en el exterior:

1. Protéjalos de la lluvia y el escurrimiento.
2. Coloque recipientes primarios de líquidos dentro de la contención secundaria.
3. No los coloque cerca de las alcantarillas de agua pluvial.
4. Consulte con el Departamento de Bomberos si podrían requerirse rociadores bajo techos/cubiertas.
5. Conserve los materiales de limpieza de derrames en lugares de fácil acceso.



Pinturas almacenadas en superficie pavimentada, bajo techo y dentro de contención secundaria para atrapar derrames.



Educación y Capacitación

Capacite a los nuevos empleados y recuérdelos a los existentes utilizar estas prácticas de prevención de la contaminación del agua pluvial.

ALMACENAMIENTO DE DESECHOS EN EXTERIORES

- **Inspeccione los contenedores de basura y el área de reciclaje de desechos diariamente.**

Recoja los desechos tirados y barra el área. Cerciórese de que los contenedores de basura no estén excesivamente llenos y que las tapas estén siempre cerradas. Los contenedores de basura sin tapas bien colocadas o que tengan fugas deberán ser reemplazados o reparados. Algunos contenedores tienen taponeros que deben estar colocados. Comuníquese con su proveedor de servicio.

- **Prevenga y limpie todo goteo o escurrimiento proveniente del compactador de basura o canalículo hacia el drenaje sanitario con la aprobación de la autoridad local para el tratamiento del sistema de drenaje sanitario (consulte la contraportada para obtener información sobre con quién comunicarse).**

- Use un **dispositivo de almacenamiento de contención secundaria** por separado,

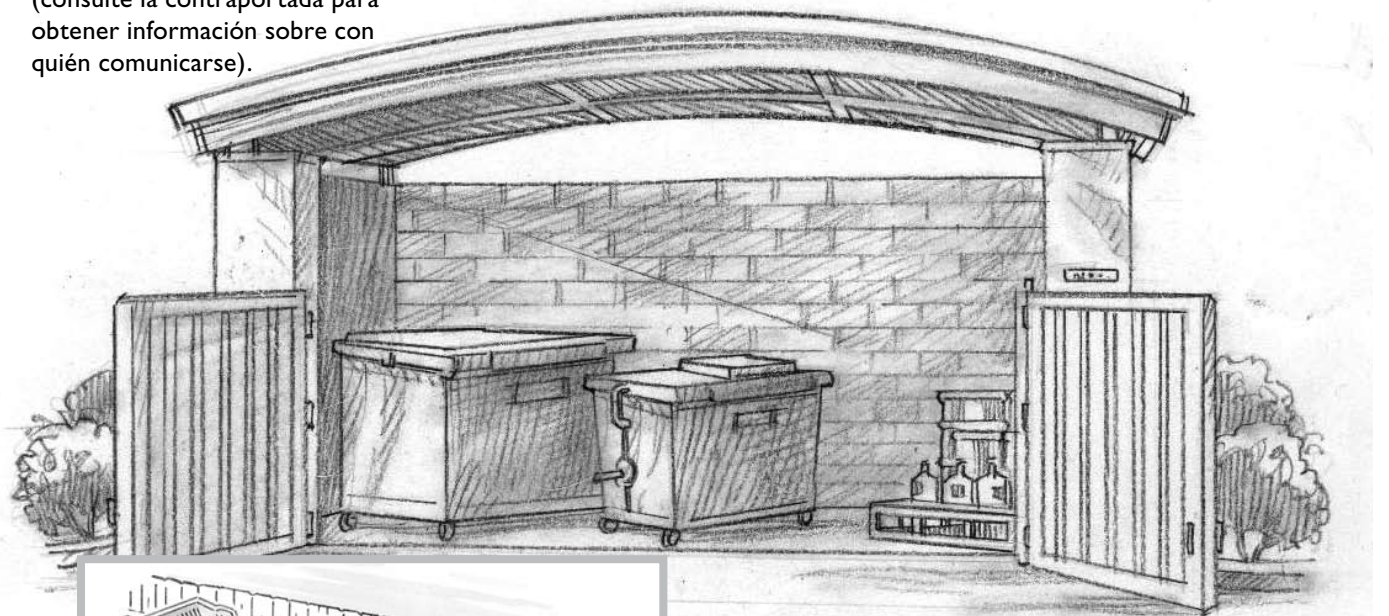
apropiado, limpio, herméticamente cerrado para los líquidos reciclables y los desechos peligrosos. Identifique los recipientes conforme a los reglamentos que rigen a los desechos peligrosos.

- Contrate a una empresa transportista acreditada para acarrear y reciclar o tirar los desechos.

- No permita que el agua para enjuagar recipientes de desechos o áreas fluya hacia el sistema de alcantarillado de agua pluvial.

Eliminación de Desechos y Reciclaje:

1. No deseche nada a través del sistema de alcantarillado de agua pluvial. Recicle siempre que sea posible hacerlo.
2. Divida los desechos según su tipo y almacénelos por separado en recipientes herméticamente cerrados.
3. Use un contenedor de basura lo suficientemente grande de manera que pueda mantener cerradas las tapas.
4. Reemplace los contenedores de basura que estén goteando.



Recipiente de almacenamiento de tambores que evita el contacto con el agua pluvial y proporciona contención secundaria en contra de los derrames.

Contenedor de basura, recipiente de grasa, y materiales de reciclaje almacenados en una superficie pavimentada, bajo techo, protegidos del escurrimiento del agua pluvial.



Consulte a la agencia de reglamentación sobre desechos peligrosos de su localidad acerca de los medios apropiados de desecho y manejo de materiales peligrosos. Consulte la información de contacto en la contraportada.

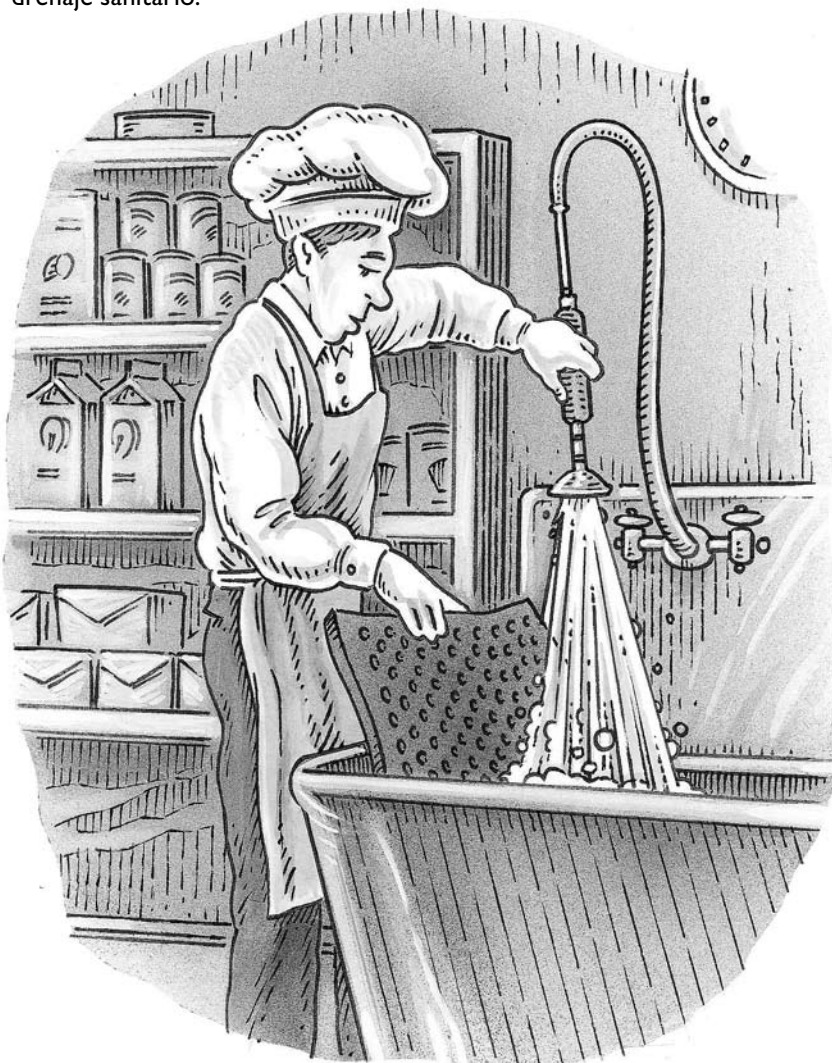
LAVADO DE EQUIPO Y VEHÍCULOS

- De ser posible, **lave el equipo en interiores**, en un lavadero industrial o en un lugar en donde el agua resultante de actividades de lavado fluya hacia el sistema de drenaje sanitario. Comuníquese con la autoridad encargada del tratamiento del agua del sistema de drenaje sanitario de su localidad a fin de obtener su autorización (Consulte la contraportada).
- Alternativamente, **lave el equipo o los vehículos** sobre una superficie de lavado de tamaño adecuada, techada, elevada y rodeada por un canal, y que esté conectada a un sistema de tratamiento de agua resultante de actividades de lavado y al sistema de drenaje sanitario.
- La conexión al sistema de drenaje sanitario también podría requerir un permiso de plomería por parte de la agencia pertinente de su jurisdicción. Comuníquese con su Ayuntamiento.
- Todos los colectores de grasa e interceptores y sistemas de lavado de vehículos **deberán recibir mantenimiento y ser limpiados** siguiendo un programa regular. Los sólidos que sean recolectados deberán ser desechados a través del uso de un transportista de desechos que posea la licencia correspondiente.

- El lavado móvil de algunos tipos de equipo, tal como equipo de extracción de techo o carritos para hacer compras, es aceptable si toda el agua resultante de actividades de lavado es contenida, aspirada y eliminada en el sistema de drenaje sanitario.

Lavado de Equipo:

1. Desvíe toda el agua resultante de actividades de lavado al sistema de drenaje sanitario.
2. Dele mantenimiento a cualquier sistema de tratamiento que posea.
3. No dirija el agua resultante del lavado o enjuagado a la cuneta, la calle, o el sistema de alcantarillado de agua pluvial.
4. Limpie el equipo o los vehículos fuera de las instalaciones, si no cuenta con otras opciones.



Tapete de piso de cocina en un lavadero de limpieza/trapeado.



Consulte a la autoridad de tratamiento de drenajes sanitarios de su localidad para obtener la autorización de su equipo o sistema de lavado de vehículos. Consulte la información de contacto en la contraportada.

ÁREAS VERDES Y ALTERNATIVAS MÁS SEGURAS A LOS PESTICIDAS

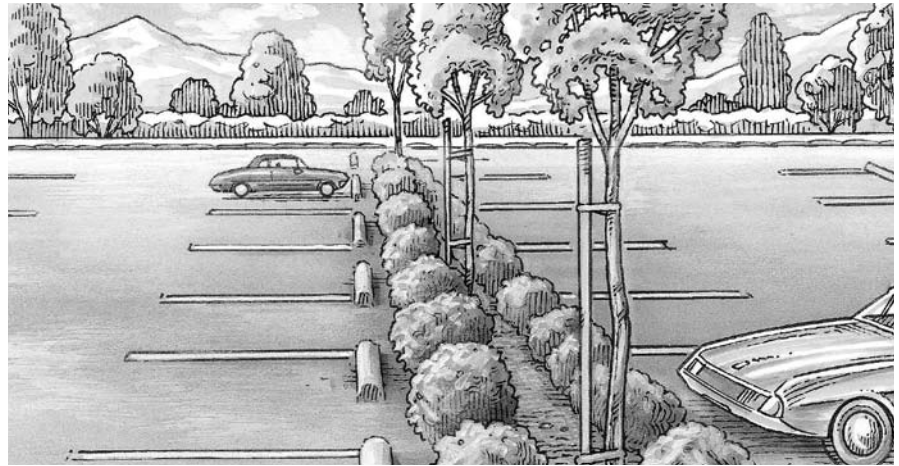
- Las medidas para la prevención de la contaminación y los sistemas de tratamiento del agua pluvial forman cada vez más parte de la jardinería ornamental. Debe saber si sus áreas verdes están diseñadas específicamente para minimizar y tratar el escurrimiento del agua pluvial, y, de ser así, cerciórese de que reciba el mantenimiento adecuado tal y como fue diseñado.
- Siga las prácticas ecológicas del programa de jardinería ornamental *Bay-Friendly Landscaping and Gardening Program*. Visite www.bayfriendly.org.
- Use alternativas menos tóxicas a los pesticidas. Si desea mayor información sobre la administración integrada de plagas, visite www.ourwaterourworld.org.
- **No riegue de más** – dé

mantenimiento a los rociadores a fin de evitar mojar el pavimento.

- **Quite las hojas caídas** y retire los recortes para convertirlos en composta o ser eliminados junto con los desechos verdes. No deseché nada en la calle, sistema de alcantarillado de agua pluvial o arroyo.

Mantenimiento de Áreas Verdes:

1. Siga el plan de mantenimiento del sistema de tratamiento de agua pluvial basado en áreas verdes que posea.
2. Use métodos para el control de plagas menos tóxicos.
3. Minimice el uso de fertilizantes.



Este es un ejemplo de un terreno pantanoso con vegetación utilizado para dar tratamiento al drenaje del agua pluvial de un estacionamiento. Los terrenos pantanosos le dan a los contaminantes del agua pluvial la oportunidad de asentarse y, cuando el suelo es arenoso, cargar nuevamente los acuíferos de agua subterránea.

MERCURIO Y BASURA

MERCURIO

El mercurio contamina a los peces, provocando que su consumo sea dañino. La agencia estatal de salud ha emitido una serie de recomendaciones detalladas de salud, las cuales están disponibles en www.oehha.ca.gov/fish/general/sfbaydelta.html.

- **Deseche** correctamente los desperdicios peligrosos o **recicle** todos los productos que contengan mercurio, incluyendo focos (bombillas) de lámparas **fluorescentes**, manómetros, termómetros, interruptores y baterías. **A fin de evitar la contaminación de los peces, ahora es ilegal desechar cualquiera de estos residuos en**

la basura junto con el resto de sus desechos comunes.

- Consulte el sitio web del departamento de control de sustancias tóxicas *California Department of Toxic Substances Control* www.dtsc.ca.gov/HazardousWaste/UniversalWaste/index.cfm para obtener información detallada sobre cómo deshacerse de los desechos que contienen mercurio y otros desechos peligrosos. No lo tire a la basura – ¡es ilegal!

BASURA

La basura es mala para las ventas y hace daño a la salud de los arroyos y de la bahía.

- **Proporcione suficientes receptáculos de basura** para los clientes y empleados. Todos los receptáculos exteriores deben estar cubiertos.
- **Recoja la basura diariamente.** Mantenga la acera en frente de su negocio libre de basura y suciedad. No limpie los derrames utilizando agua que fluya hacia la calle o el sistema de alcantarillado de agua pluvial.
- Todo **arroyo** que pase a través de su propiedad o junto a ella **deberá mantenerse libre de basura y desechos.**

CONTACTO CON AGENCIAS LOCALES

Inspectores locales del sistema de alcantarillas pluviales

Ciudad	Número telefónico
Atherton	(650) 372-6200
Belmont.....	(650) 372-6200
Brisbane.....	(650) 372-6200
Burlingame.....	(650) 342-3727 y (650) 372-6200
Colma	(650) 372-6200
Daly City.....	(650) 991-8208
East Palo Alto.....	(650) 372-6200
Foster City.....	(650) 522-7300
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Hillsborough.....	(650) 372-6200
Menlo Park.....	(650) 372-6200
Millbrae.....	(650) 372-6200
Pacifica.....	(650) 372-6200
Portola Valley.....	(650) 372-6200
Redwood City.....	(650) 372-6200
San Bruno.....	(650) 372-6200
San Carlos.....	(650) 372-6200
San Mateo.....	(650) 522-7300
South San Francisco.....	(650) 829-3848
Área no Incorporada del Condado de San Mateo.....	(650) 372-6200
Woodside.....	(650) 372-6200

Regulador local de desechos peligrosos **Número telefónico**
(Agencia Certificada del Programa Unificado-CUPA)
 La División de Salud Ambiental del Condado de San Mateo
 (San Mateo County Environmental Health Division) es la
 CUPA de todas las áreas del Condado de San Mateo..... (650) 372-6200

Autoridades locales del sistema de drenaje sanitario **Número telefónico**

- Instalaciones de Tratamiento de Aguas Residuales de Burlingame..... (650) 342-3727
(Brinda servicio a Burlingame, Hillsborough y Burlingame Hills)
- Planta de Control de la Contaminación del Agua de Millbrae..... (650) 259-2388
- Distrito Sanitario del Norte del Condado de San Mateo (650) 991-8200
- Planta de Tratamiento de Aguas Residuales
(Brinda servicio a Daly City y partes de Westborough)
- Planta de Reciclaje de Aguas Calera Creek de Pacifica.....(650) 738-4660
- Planta de Tratamiento de Aguas Residuales de San Mateo..... (650) 522-7300
(Brinda servicio a Foster City y San Mateo)
- Instalaciones de Tratamiento de Aguas Residuales de la Autoridad de Alcantarillas del Centro de la Costa..... (650) 726-0124
(Brinda servicio a Half Moon Bay, Granada, Moss Beach y Montara)
- Autoridad del Sistema del Sur de la Bahía..... (650) 594-8411 ext.140
(Brinda servicio a Atherton, Belmont, Menlo Park, Portola Valley, Redwood City, San Carlos y Woodside)
- Planta de Control de la Calidad del Agua de South San Francisco/ San Bruno..... (650) 877-8555
(Brinda servicio a Colma, San Bruno, South San Francisco, y la parte sur de Daly City)
- Planta Regional de Control de la Calidad del Agua de Palo Alto... (650) 329-2598
(Brinda servicio a East Palo Alto, Los Altos, Los Altos Hills, Mountain View, Palo Alto y Stanford)
- Planta de Tratamiento del Sudeste de San Francisco (415) 648-6882
(Brinda servicio a Brisbane y al este de San Francisco)

Versión fechada mayo de 2008

Su negocio podría tener que ser reglamentado por varias agencias estatales y locales en lo que respecta al cumplimiento de las disposiciones ambientales. Además de seguir estas prácticas para la prevención de la contaminación del agua pluvial, es posible que tenga que obtener la cobertura de un Permiso Industrial General sobre Aguas que Fluyen al Sistema de Alcantarillado (Stormwater Industrial General Permit) de la Junta Estatal de Control de Recursos de Agua (State Water Resources Control Board). Llame al: (916) 341-5538 si desea obtener información adicional.



Todo flujo de aguas residuales hacia el sistema de drenaje sanitario deberá estar autorizado por la autoridad de tratamiento del drenaje sanitario de su localidad. Consulte la lista de contactos que se incluye a la izquierda. Nunca deseche aguas residuales a través del sistema de alcantarillado pluvial.

El programa le extiende su gratitud al Programa para Mantener el Agua Limpia del Condado de Alameda (Alameda Countywide Clean Water Program) por permitirnos la adaptación de este folleto.

♻️ Impreso en 50% de papel reciclado con 30% de desechos post-consumidor (PCW), utilizando tintas a base de soya.

APPENDIX C: TABLE OF CONTENTS

PIP Subcommittee Attendance Record – FY 2007/08

Zun Zun School Assembly Schedule

Zun Zun School Assembly Announcement Fax

Healthy Schools Inside and Out Workshop Flyer

School Janitorial Less Toxic Products Brochure

2008 Pollution Prevention Calendar

Our Water, Our World Partnering Retail Stores

Master Gardeners Presentation, “Reducing Pollutants in our Watersheds”

Coastal Cleanup Day Reporting Form

Reusable Bag Commitment Form

CASQA Award Presentation

Retail Take-Back Flyer

2007 County Fair Booth Contacts

Homepage for Redesigned Website

ATTENDANCE ROSTER
PUBLIC INFORMATION PARTICIPATION SUBCOMMITTEE
SAN MATEO COUNTYWIDE WATER POLLUTION PREVENTION PROGRAM

FY 2007-2008

AGENCY	NAME	ALTERNATE / PHONE #	PHONE	1st Half Year				2nd Half Year		
				Jul-07	Aug-07	Sep-07	Nov-07	Jan-08	Mar-08	May-08
Atherton	Kathy Hughes Anderson		752-0526	1	**	1				
Atherton	Andrea Mardesich	GM	752-0544				1	1	1	1
Belmont	Jozi Plut		595-7425	1	**	1	1	1	1	1
Brisbane	Matthew Fabry		415-508-2134	1	**		1	1	1	1
Burlingame	Eva C. Justimbaste		342-3727		**	1	1	1	1	1
Colma	Muneer Ahmed	Daniel Gonzalez 757-8888	757-8888	1	**	1		1		
Daly City	Ward Donnelly		991-8200	1	**	1	1	1	1	1
East Palo Alto	John Latu	Jaime Camacho 444-0476	853-3165	1	**	1	1		1	1
Foster City	Mike McElligot		286-3279		**					1
Half Moon Bay	Tony Moorhouse		726-7177		**	1				
Hillsborough	Rachelle Ungaretti		375-7444	1	**	1	1		1	
Menlo Park	Dianne Dryer		330-6764	1	**	1	1	1	1	
Millbrae	Shelly Reider	Krista Kuehnhackl	259-2444	1	**	1	1	1	1	1
Pacifica	Lizzy Claycomb	Christina Horrisberger	738-7361	1	**		1		1	1
Portola Valley	Howard Young		851-1700 x 14		**					
Portola Valley	Josh Maierle		851-1700 x 20						1	
Redwood City	Marilyn Harang	Kathy Hunter	780-7477	1	**	1	1	1	1	1
San Bruno	Jim Shannon		616-7046	1	**	1	1	1		1
San Carlos	Michael Fossati	Gavin Moynahan	802-4361	1	**	1				1
San Carlos	Andrea Mardesich		802-4263				1	1	1	
San Mateo City	Vern Bessey		522-7342		**	1	1	1	1	1
San Mateo County	Sarah Pratt		599-1325	1	**	1	1	1	1	1
San Mateo County	Ana Clayton		599-1514	1	**	1			1	1
San Mateo County	Mary Bell Austin		599-1549		**		1	1		1
San Mateo County	Dermot Casey		363-4957		**					
San Mateo County	Julie Colvin		599-1634	1	**	1	1	1		
South San Francisco	Cassie Prudhel	Daniel Fulford	829-3840	1	**			1	1	1
South San Francisco	Frank Mandola				**	1				
South San Francisco	Janice Peregrino						1			
Woodside	EJ Kim			1	**					
E.O.A. Inc.	Fred Jarvis		510-832-2852							
RWQCB, Oakland	Habte Kifle		510-622-2371							
SMCWPPP Prgm. Coord.	Matt Fabry		415-508-2134	1			1	1	1	1
Mosquito Abatement	Chindi Peavey		650-344-8592			1				
Public:						1				
1 - Attendance										
*No Meeting										
**No Meeting (County Fair)										

Zun Zun School Assembly Schedule - 2007/2008

School Name/Venue	City	Month	Day	shows	Price	# Students
Atherton Library	Atherton	July		2	1	40
Millbrae Library	Millbrae	July		10	1	40
Foster City Library	Foster City	July		11	1	40
Baywood Elem	San Mateo	July		12	1	490
Brisbane Library	Brisbane	July		12	1	40
Belmont Library	Belmont	July		18	1	40
Sanchez Library	Pacifica	July		24	1	40
E.Palo Alto Library	EPA	July		24	1	40
Portola Valley	Portola	July		26	1	40
San Carlos Library	San Carlos	July		31	1	40
Half Moon Bay Libr	HMB	August		8	1	40
Woodrow Wilson	Daly City	Sept		19	2	400
Nesbit Elem	Belmont	Sept		20	2	360
S. SF Library	SSF	Sept		25	1	40
Thomas Edison	Daly City	October		12	2	500
Pescadero	Pescadero	October		18	1	200
La Honda	La Honda	October		18	1	200
Edison Brentwood		October		26	1	500
Lomita Park	San Bruno	October		10	1	250
SanMateo/Foster City Childrens Annex		October		12	1	30
Borel	San Mateo	October		17	1	915
Westlake	Daly City	November		20	2	360
Medows	Millbrae	December		18	2	310
Highlands	San Mateo	December		12	2	400
Daniel Webster	Daly City	December		13	2	455
Trinity School	Menlo Park	January		8	1	150
Laurel Elementary	Atherton	February		6	2	487
Washington Elementary	Burlingame	February		5	1	234
Millbrae	Millbrae	February		28	2	315
Audobon	Foster City	April		25	1	547
Cabrillo	Pacifica	June		5	2	558
Panorama	Daly City	June		11	2	165
Totals				43	19250	8266



FREE ASSEMBLY

The Water Beat

Attention Principal or Assembly Coordinator: A musical adventure about storm drains, recycling, and keeping our water clean is available for FREE.

Book NOW for 2007-2008 School Year!

San Mateo County Pollution Prevention Program is thrilled to invite you to enjoy a **FREE** 45-minute assembly*.

Through the use of over 25 instruments from North, Central, and South America, ZunZun will provide an interactive, educational, multicultural, and environmentally focused show. ZunZun's participatory shows promise to engage audiences and provide your school with an assembly to remember.

Topics covered include water pollution, recycling, watershed ecology, storm-drain runoff, ways to save water, and how we are all connected to our waterways. Students will learn water facts and things they can do now to help protect and preserve this vital resource. The shows are lively, fun, funny, and keep children and adults entertained! Shows can be in Spanish, English, or bilingual.

If you have questions about the program, call Ana Clayton at (650) 599-1514.

Book Now!

831-426-0684 or zunzun@zunzuntunes.com

***The Pollution Prevention Program will cover the cost of each show contingent upon grant funding.
www.flowstobay.org**

Healthy Schools Inside & Out



Saturday, October 20, 2007, 9AM-2:30PM

SAN MATEO COUNTY OFFICE OF EDUCATION, 101 TWIN DOLPHIN DRIVE, REDWOOD CITY



**A WORKSHOP
FOR TEACHERS,
ADMINISTRATORS,
MAINTENANCE STAFF,
PARENTS, AND ANYONE
INTERESTED IN LESS
TOXIC PRODUCTS**

Make the right choices to protect children's health and the environment!

Find out what's in the many products used in and around your school—and home—for cleaning and pest control. • Learn about risks to human health and the environment from common hazardous household waste • compare less-toxic products • understand the Healthy Schools Act • reduce pollution at school and beyond.

Includes green clean kit with recipes and free samples, plus activity binder for K-12 educators. Cost \$30.
Register at **510.665.3430** or **www.theWatershedProject.org**. Academic credit available through CSU East Bay.

Registration Form

NAME _____

HOME ADDRESS _____ CITY _____ ZIP _____

HOME PHONE _____ EMAIL *(If provided, confirmation of registration will be sent via email.)* _____

WORK/SCHOOL _____

WORK ADDRESS _____ CITY _____ ZIP _____

WORK PHONE _____ GRADES TAUGHT _____

- YES, I've taken one of your workshops before.
- YES, you may give out my email/phone number to class participants for carpooling.
- YES, I teach at a school where at least half the students are eligible for free or reduced-price lunch.



This workshop is funded with support from the San Mateo Countywide Water Pollution Prevention Program and sponsored by the Watershed Project. The mission of the Watershed Project is to educate and inspire communities to protect their local watersheds.

Mail your completed registration form, with your non-refundable payment to:
the Watershed Project
1327 South 46th Street
155 Richmond Field Station
Richmond, CA 94804
Make checks payable to:
the Watershed Project

Leading the way to...

Healthy Schools.®



*... less toxic alternatives for
school maintenance*

Funded by:



SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
Clean Water. Healthy Community. www.flowstobay.org

Produced by: the
watershed
project



WHY *Should you be concerned?*

Safety was cited as the #1 concern among many janitors and building maintenance workers.

Health & Safety

- ▶ Many cleaning products contain **carcinogens, asthmagens** and substances associated with damage to reproductive organs, birth defects, kidney failure, blindness and other health effects. Substances not only can be inhaled, but also absorbed through the skin to damage organs.
- ▶ Recent worker's compensation data shows that approximately **6% of janitors have lost-time injuries** per year.
- ▶ EPA ranks indoor air quality as one of the **top 5 environmental risks**, partially due to the use of conventional cleaning products.
- ▶ **12% of asthma** cases were from exposure to cleaning products at work.
- ▶ Bleaches that contain chlorine become **extremely toxic** when mixed in any wastewater that contain ammonia.

Cleaning products also contribute to environmental pollution by making their way to our creeks and the bay, and are toxic to aquatic organisms.

Environmental Impact

- ▶ In California, nearly **10%** of all non-vehicular VOCs (Volatile Organic Compounds) released to the outdoor environment, come from cleaning products.
- ▶ Cleaners containing phosphate **kill marine life** by causing excess algae blooms that rob water of oxygen and block sunlight.
- ▶ Ingredients, such as alkylphenol ethoxylate surfactants, do not break down easily in the environment and may interfere with the hormonal system of exposed organisms.

How Toxic is My Product?

Look for **Signal Words** (Keywords that warn of the potential *immediate* danger level, as tested on a *180lb male*)

SIGNAL WORDS

WARNING or CAUTION

Substance may pose a lesser degree of hazard, even though they may still be flammable, combustible, corrosive, or have harmful vapors.

DANGER

Substance is extremely toxic or highly flammable or corrosive.

POISON

Substance is most toxic and can kill.

Avoid ingredients that pose the **greatest** health hazard.

HIGH RISK INGREDIENTS

<i>Class</i>	<i>Ingredient</i>	<i>Health Hazard</i>
Acids	Hydrochloric Acid Phosphoric Acid	Corrosive. Causes blindness and damages skin.
Caustic	Sodium Hydroxide Sodium Metasilicate Potassium Hydroxide	Corrosive. Causes blindness and can cause severe skin damage.
Solvents	Perchloroethylene Butoxyethanol Ethanamine Toluene	Causes cancer. Absorbs through skin & poisons liver, kidneys, and fetuses.
Disinfectants	Alkyl Phenol Ethoxylates	Persists in the environment and affects animal hormone systems.
Surfactants	Bleach Urinal Blocks Quaternary-Ammonium Chloride	Corrosive. Bleach mixes with ammonia or acid and causes poisonous gas. Can cause cancer.

What can I do and where can I find out more?

Resources

Fact Sheet: *Environmentally Preferable Janitorial Cleaning Products*

http://www.stopwaste.org/docs/janitorial_cleaning_products.pdf

For a guide to buying green cleaning products, go to:

http://www.responsiblepurchasing.org/purchasing_guides/cleaners/products

To buy green janitorial products online:

<http://www.all-greenjanitorialproducts.com/>

Green Janitorial Service in San Mateo area:

Phone: (415) 642-2100

<http://www.gmgjani.com/>

The Green Cleaning Pollution Prevention Calculator:

<http://www.ofee.gov/janitor/index.asp>

Proper Disposal

Unused portions of cleaning supplies must be dealt with as household hazardous waste!

Household Hazardous Waste Program (San Mateo County):

Very Small Quantity Generator Program: (650) 363-4607

<http://www.smhealth.org/vsqq>

Schools Hazardous Waste Collection, Consolidation, and Accumulation Facility:

More info: <http://www.calcupa.net/programs/hazwaste/FS-02-030.pdf>

Implementation questions: <http://www.desc.ca.gov>

Recycle Works: A Program of San Mateo County

Recycle Works Hotline: 1-888-442-2666

<http://www.recycleworks.org/index.html>



A scenic photograph of a forest stream flowing over mossy rocks. The water is clear and creates small white rapids as it flows over the dark, wet stones. The surrounding forest is lush with green foliage, including ferns and large trees with thick trunks. The overall atmosphere is peaceful and natural.

San Mateo County Pollution Prevention Calendar 2008

KIDS ACTIVITY GUIDE INSIDE



Funded by a Grant
from the California
Integrated Waste
Management Board

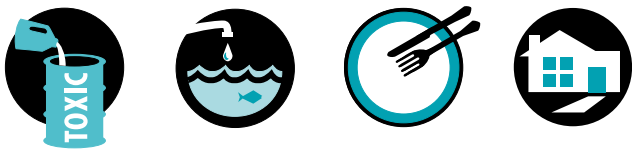
San Mateo County POLLUTION PREVENTION PROGRAM

WHO WE ARE

San Mateo County Environmental Health works to ensure a safe and healthful environment for residents through education, monitoring, and enforcement.

The Pollution Prevention Program focus is on recycling used oil, reducing and properly disposing of household hazardous waste, and storm water pollution prevention. This calendar can be used as a tool for pollution prevention and a resource for discovering the natural beauty of San Mateo County.

ENVIRONMENTAL HEALTH SAN MATEO COUNTY



Protecting Our Health and Environment

CONVENIENT, SAFE DISPOSAL OF HOUSEHOLD HAZARDOUS WASTE (HHW)

We collect paints, pesticides, thinners, pool chemicals, cleaners, and other toxics at collection events held throughout the year. San Mateo County residents may use any of the dates shown on the calendar by the HHW icon. An appointment must be made to dispose of toxics. Call (650) 363-4718 or go to www.smhealth.org/hhw



USED OIL RECYCLING

Used motor oil is a large portion of the pollution in our waterways. Oil is sometimes dumped or leaks from cars or other mechanical equipment. Do the right thing—keep your car in tune, if you change your own oil, take the oil and filter to one of the collection centers listed on the back of the calendar.



WATER POLLUTION PREVENTION

The storm drain system channels rainwater from streets and landscaping into creeks that flow to the Bay or the Pacific Ocean. The water is not treated at a sewage treatment plant, and can be contaminated by oil, pesticides, litter and other contaminants that run off pavement and yards. Learn about preventing pollution and best management practices at www.flowstobay.org



SIMPLE THINGS YOU CAN DO TO BE EARTH FRIENDLY

Make conscious choices.

1. Reduce the amount of stuff you buy and look for things that are sold in recyclable packaging.
2. Recycle everything you can, reuse the things you can't.
3. Replace the light bulbs in your house with energy efficient bulbs.
4. Bring your own bags to the grocery store so you don't have to use new plastic or paper bags.
5. Buy and use rechargeable batteries. They last longer and pollute less.

Reduce, Reuse, and Recycle.

Are you looking for other alternatives to reduce, reuse, and recycle products that go beyond what municipal recyclers and compost bins can handle? Let's **Reduce, Reuse, and Recycle** the following:

1. **Appliances:** Goodwill accepts working appliances, www.goodwill.org, or you can contact the Steel Recycling Institute to recycle them, www.recycle-steel.org.
2. **Clothes:** Wearable clothes can go to your local Goodwill outlet or shelter. Consider holding a clothes swap at your office, school, faith congregation or community center. Swap clothes with friends and colleagues, and save money on a fall wardrobe and back-to-school clothes.
3. **Computers and electronics:** Find the most responsible recyclers, local and national, at rethinkwaste.org or mygreenelectronics.org.
4. **Ink/toner cartridges:** Recycleplace.com pays \$1/each or more.
5. **Miscellaneous:** Get your unwanted items into the hands of people who can use them. Offer them up on your local Craigslis.org listserv, or try giving them away in your local community.

Vote with your dollars.

You can make a difference. Let companies know that you won't accept toxic and over packaged products into your home. Get more information about the companies who produce and sell the products you use at www.responsibleshopper.org. Choose less toxic and buy less!



WEB RESOURCES

Web resources are incorporated throughout the calendar to enhance the text provided with each month. Listed below are a few general websites that list information about the environment, pollution prevention and conservation.

San Mateo Countywide Water Pollution Prevention Program

www.flowstobay.org

Solutions to help control water pollution.

San Mateo County Environmental Health

www.smhealth.org

Link to Environmental Health Department Programs—food, toxics, housing, solid waste, and water.

San Mateo County Recycleworks

www.recycleworks.org

Reuse, recycling, composting, sustainable living and green building information.

Earth 911

www.earth911.org

National hotline with local information on recycling, green shopping, energy conservation, household hazardous waste, environmental education, and more.

California Integrated Waste Management Board

www.ciwmb.ca.gov

State agency that oversees all statewide recycling requirements.

U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics

www.epa.gov/p2

Pollution prevention information for businesses and residents.

Newsletters

Lighter Foot Step: www.lighterfootstep.com

Treehugger: www.treehugger.com

Environmental Health News:

www.environmentalhealthnews.org

Other

Cosmetic Safety Database

www.cosmeticsdatabase.com

Surf Your Watershed

www.epa.gov/surf

Green TV www.green.tv

FROM THE PHOTOGRAPHER



Photo by Bev Baldwin



I would like to thank my colleagues for their work in producing the 2008 Pollution Prevention Calendar. Their subject ideas, text writing, photo selection, technical and graphic support, and project management make this yearly project a pleasure.

PETE SMITH

(650) 599-1600

pasmith@co.sanmateo.ca.us

This calendar is printed on recycled paper.

ENVIRONMENTAL BENEFITS STATEMENT				
 San Mateo County saved the following resources by using New Leaf Primavera, made with 80% recycled fiber, 40% post-consumer waste, and processed chlorine free.				
trees	water	energy	solid waste	greenhouse gases
89 fully grown	54,809 gallons	65 million BTUs	4,399 pounds	11,446 pounds
<small>Calculations based on research by Environmental Defense and other members of the Paper Task Force.</small>				
 ©2006 New Leaf Paper www.newleafpaper.com				

A San Mateo County Health Department Program • Funded by a grant from the California Integrated Waste Management Board • Project Manager/Editor: Ana Clayton • Project Staff: Sarah Pratt, Mary Bell Austin and Julie Colvin • Design and Production: Schmidt Creative



Least Sandpiper

The least sandpiper is the smallest shorebird in the world. Shorebirds like the least sandpiper aren't hurt just by ecological disasters like large oil tanker spills. Small amounts of motor oil from cars, trucks, and busses can also find their way through the storm drains onto these birds' feeding grounds.

Tiny creatures living in the banks and mudflats absorb the petroleum. Some die, depriving the birds of a food source. Others survive, and pass on the contamination to the birds that eat them.

The least sandpiper and similar shorebirds forage on the mudflats for food, eating mainly small crustaceans, insects, and snails. When birds eat foods contaminated by petroleum, it hurts their health in a number of ways. Effects range from weakness to illnesses like pneumonia and liver failure, to problems creating healthy eggs that will survive.

You can help protect the least sandpiper and other shorebirds by keeping your car leak-free and making sure its motor oil and filter gets recycled.

Resources:
www.ciwmb.ca.gov/UsedOil

JANUARY 2008

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<p>DECEMBER 2007</p> <table border="1"> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td></tr> <tr><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td></tr> <tr><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr> <tr><td>30</td><td>31</td><td></td><td></td><td></td><td></td><td></td></tr> </table>	S	M	T	W	T	F	S						1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						<p>FEBRUARY 2008</p> <table border="1"> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td></tr> <tr><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td></td></tr> </table>	S	M	T	W	T	F	S						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		1 New Year's Day	2	3	4 HHW San Mateo	5 HHW San Carlos San Mateo
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27	28 Martin Luther King, Jr. Day	29	30 ◐	31	<p><i>"We need to push ourselves to make as many reductions as possible in our own energy use first...and that takes time. But we must do this quickly...the climate will not wait for us."</i> —RUPERT MURDOCH</p>																																																																																												



Recycle Used Oil
 Call 1-800-CLEANUP

See the back of this calendar to find more information on where to dispose of used oil and other hazardous materials.



Household Hazardous Waste Event

Call 650-363-4718 or visit www.smhealth.org/hhw to make an HHW appointment.



1948 International

Americans express their fondness for motor vehicles in many ways. One is to hold on to a car or truck long after others would have parted ways. Some restore their automobile for car shows, others might use them to go for rides on weekends, and some, like the the owner of the truck above, might use them to perform the occasional chore around the ranch.

One thing that automobile collectors have in common is that they are more likely to be do-it-yourself oil changers. If you change your own oil on your car or truck, work carefully and dispose of the used motor oil and filters at one of the free collection centers in San Mateo County. Look for the "oil drop" symbol in the window of local stores.

Tips for Changing Your Own Oil:

- Drain used oil into a clean non-breakable container that has a screw on cap.
- Do not mix used oil with any other materials, not even water.
- Place your used oil filter in a sealed plastic bag. Take it to a collection center that accepts oil filters.
- Take the container of used oil to your nearest free used oil collection site. (If your trash company offers curbside pickup, you can place it next to your trash can instead.)

To Find a Free Collection Center:

- Call 1-800-CLEANUP or
- Look on the back of this calendar



Recycle Used Oil
Call 1-800-CLEANUP

FEBRUARY 2008

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		<p><i>"Quality means doing it right when no one is looking." —HENRY FORD</i></p>				
3	4	5	6	7	<p>HHW</p> <p>San Mateo</p> <p>8</p>	<p>HHW</p> <p>Menlo Park</p> <p>San Mateo</p> <p>9</p>
			Ash Wednesday	Chinese New Year		Groundhog Day
10	11	12	13	<p>HHW</p> <p>San Bruno</p> <p>14</p>	<p>HHW</p> <p>San Mateo</p> <p>15</p>	16
		Lincoln's Birthday		Valentine's Day		
17	18	19	20	21	<p>HHW</p> <p>San Mateo</p> <p>22</p>	<p>HHW</p> <p>San Mateo</p> <p>23</p>
	Presidents' Day (observed)				Washington's Birthday	
24	25	26	27	<p>HHW</p> <p>So San Francisco</p> <p>28</p>	<p>HHW</p> <p>San Mateo</p> <p>29</p>	



Corte de Madera Open Space

El Corte de Madera Creek Open Space Preserve encompasses 2,817 acres in the upper headwaters of the San Gregorio Creek watershed.

A watershed is an area of land that water flows across on its way to creeks, rivers, streams, and finally into the bay and ocean. Humans use our watersheds for drinking water, recreation, food production, and for many other activities. Healthy watersheds are vital for a healthy environment and economy.

So the next time you think about washing your car in your driveway or using pesticides in your yard, remember water that falls on streets, yards, and sidewalks can carry pollutants and litter into storm drains. This water does not go to the sewer or water treatment plant; it flows untreated straight to the nearest creek, river, estuary, bay, or ocean.

Help protect our watershed:

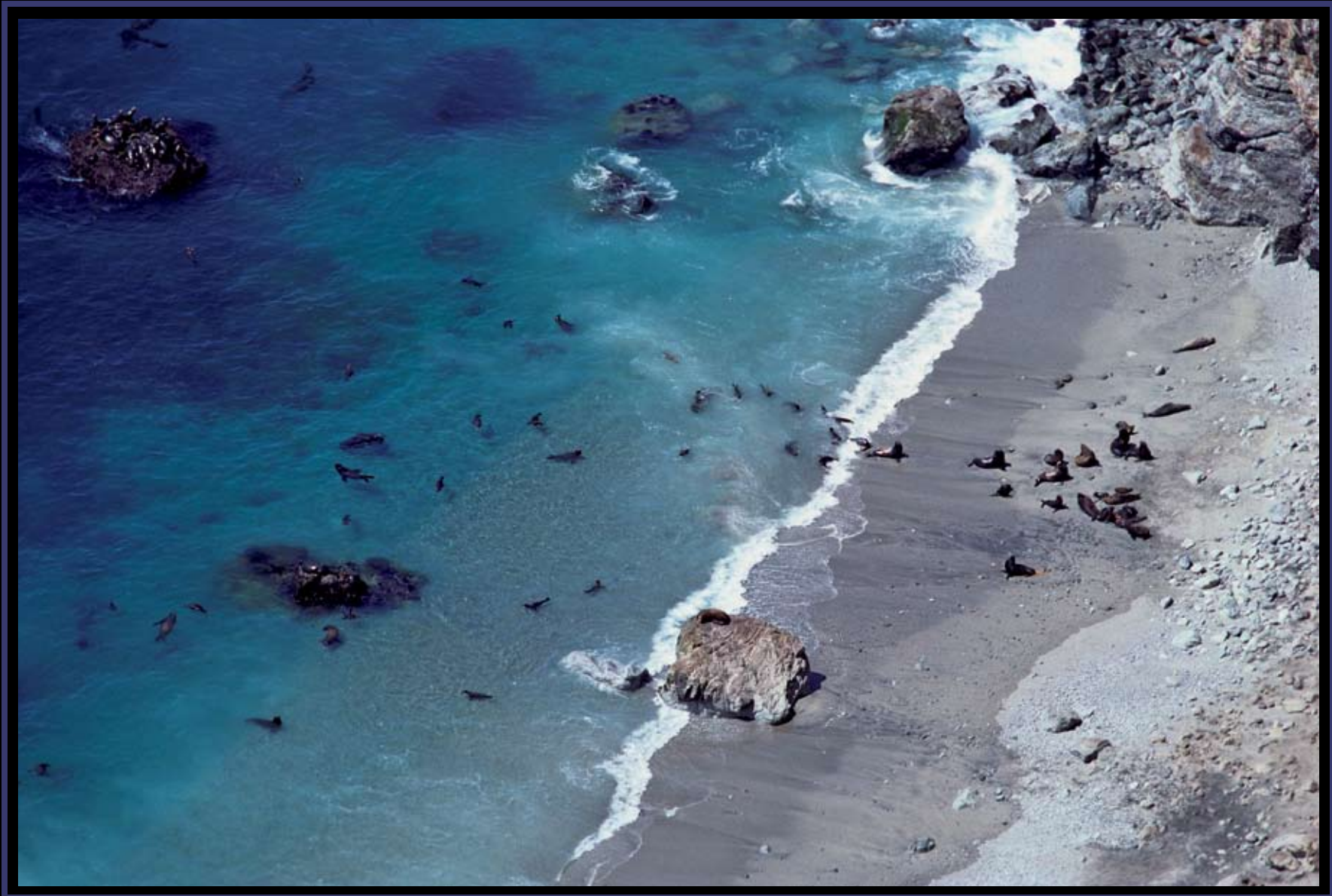
- Take your vehicle to a commercial car wash. If you choose to wash your car use biodegradable, phosphate-free, water based cleaners and wash on an area that absorbs water, such as gravel or grass.
- Do not use pesticides. Allow insect- and pest-eating birds to eat the pests in your backyard. Go to www.ourwaterourworld.org for information on pesticide alternatives.
- Properly dispose of household hazardous waste: paints, pesticides, cleaners and other toxics. Call 650-363-4718 to make an appointment.



Recycle Used Oil
Call 1-800-CLEANUP

MARCH 2008

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<p><i>"A journey of a thousand miles must begin with a single step."</i> —LAO-TSU</p>	<p>FEBRUARY 2008</p> <table border="1"> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td></tr> <tr><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td></td></tr> </table>		S	M	T	W	T	F	S						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		<p>APRIL 2008</p> <table border="1"> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td></td><td></td><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> <tr><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td></tr> <tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td><td>29</td><td>30</td><td></td><td></td><td></td></tr> </table>		S	M	T	W	T	F	S				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						<p>HHW San Carlos San Mateo</p> <p>1</p>
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California Sea Lions

California sea lions are known for their intelligence, playfulness, and noisy barking. They are very social animals that feed on squid, octopus, herring, rockfish, mackerel, and small sharks. Sea lions, as well as other animals, are affected by oil contamination and plastic debris.

If the sea lions get oil on their coats, their natural insulation can be reduced, leading to body temperature fluctuations and hypothermia. They also ingest the oil as they clean themselves – causing kidney damage, altered liver function and digestive tract irritation.

Animals are also greatly affected by marine debris. In the sea, big pieces of plastic look like jellyfish or squid, while small pieces look like fish eggs. When plastic debris is swallowed it may remain in the animal's stomach, blocking digestion and even causing starvation.

Remember, April 22, 2007 is Earth Day!

Take these simple measures to ensure every day is Earth Day:

- Pick up litter around your neighborhoods and beaches.
- Do not dump ANYTHING into storm drains.
- Properly dispose of household toxics, used oil, and boating wastes.
- Reduce, Reuse, and Recycle.



Recycle Used Oil
Call 1-800-CLEANUP

APRIL 2008

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<p><i>"It is a curious situation that the sea, from which life first arose should now be threatened by the activities of one form of that life. But the sea, though changed in a sinister way, will continue to exist; the threat is rather to life itself."</i></p> <p>—RACHEL CARSON</p>	1	2	3	4	5	<p>April Fool's Day</p>																																																																																												
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Bike to Work Day

Never used your bike to commute to work? National Bike to Work Day is a great time to start! Local groups like the Peninsula Bicycle and Pedestrian Network can provide you with a biking buddy, a bike tune-up clinic, or snacks and encouragement.

A bike commute lets you:

- Improve your health. Why drive to the gym?
- Save money on auto gas, maintenance, parking, and tickets.
- Reduce air, water and noise pollution. Be part of the solution!
- Reduce traffic congestion.
- Explore your community, and have FUN.












You can use your bike for in-town errands, too – most trips the average person makes by car are less than two miles. In addition, San Mateo County has hundreds of miles of scenic roads and trails for bikers.

To make biking in San Mateo County easier and more enjoyable, pick up the new, updated map of bike routes in the County.

Resources:

www.bayareabikes.org
www.penbiped.net
www.sfbike.org

MAY 2008

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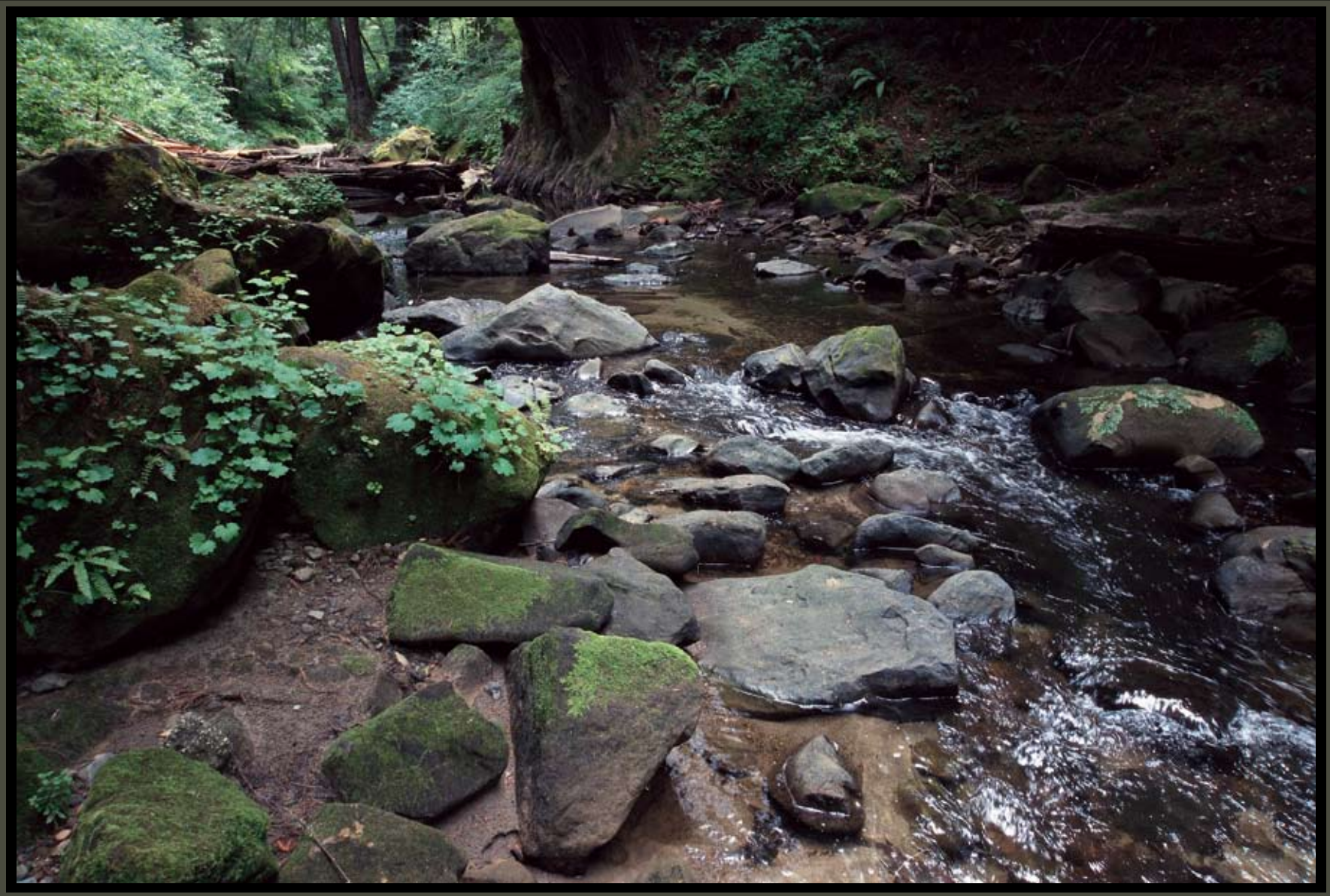
Recycle Used Oil
Call 1-800-CLEANUP

See the back of this calendar to find more information on where to dispose of used oil and other hazardous materials.



Household Hazardous Waste Event

Call 650-363-4718 or visit www.smhealth.org/hhw to make an HHW appointment.



Pescadero Creek

Pescadero Creek begins near Skyline Blvd. and runs through woods and neighborhoods to the Pacific Ocean. It flows all year round, and is home to steelhead trout and silver salmon. Both types of fish spawn in the stream, are endangered species, and are affected by the pesticides that end up in the creek.

Pesticides end up in our local waterways when rain or over watering carries them from lawns and gardens through the storm drain system to local waterways. Currently the synthetic form of a pesticide made from chrysanthemum flowers, known as "pyrethroids" are the most common pesticides used in urban areas and are extremely toxic to fish. They are designed to kill a wide variety of insect pests, including ants, cockroaches, and lawn grubs. However, they are also highly toxic to fish, aquatic insects, crustaceans, and the beneficial insects. These beneficial insects such as ladybugs, lacewings, and earthworms naturally keep pest populations low.

It only takes a little pollution to affect an aquatic ecosystem, destroy a habitat, and kill wildlife. When less-toxic alternatives are selected wisely, used in combination with other pest control measures (known as Integrated Pest Management – IPM), and applied safely, the contamination of our surface waters and aquatic life can be prevented.

To learn more about IPM & less toxic pesticides: www.ourwaterourworld.org



Recycle Used Oil
Call 1-800-CLEANUP

See the back of this calendar to find more information on where to dispose of used oil and other hazardous materials.

JUNE 2008

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1	2	3 ●	4	5	6 HHW San Mateo	7 HHW San Carlos San Mateo
8	9	10 ●	11	12 HHW San Bruno	13 HHW San Mateo	14 HHW Daly City San Mateo
15	16	17	18 ○	19	20 HHW San Mateo	21 HHW Pacifica San Mateo
22 Father's Day	23	24	25	26 HHW So San Francisco ●	27 HHW San Mateo	28 HHW San Mateo
29	30	MAY 2008 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		JULY 2008 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		<i>"There is a way that nature speaks, that land speaks. Most of the time we are simply not patient enough, quiet enough, to pay attention to the story." —LINDA HOGAN</i>



Pillar Point Harbor

Home to nine marinas, San Mateo County is an excellent place for boating. However, being so close to the habitat of water birds, fish and mammals, boaters must take special care to prevent pollution from their activities.

Key things you can do:

- Place an absorbent pad in the bilge to prevent discharge of oily water. Dispose of the pad in an oil collection bin, or at a hazardous waste collection center.
- Never apply detergent to an oil sheen on the water. Use absorbent pads or booms instead.
- Prevent leaks and spills from the engine by proper maintenance of lines and hoses.
- Prevent fueling spills. Don't let the tank overflow, and use an absorbent pad for drips.
- Recycle your oil, oil filters, paint, batteries, and other chemicals at an official collection center.
- Never discharge sewage overboard. Use pump-outs instead.
- Use only bio-degradable, phosphate-free cleaning products.
- Secure plastics, styrofoam, and trash on board and recycle or dispose of it at shore-side.

Resources:

www.coastal.ca.gov
www.americanboating.org/clean.asp



Recycle Used Oil
Call 1-800-CLEANUP

JULY 2008

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See the back of this calendar to find more information on where to dispose of used oil and other hazardous materials.



Household Hazardous Waste Event

Call 650-363-4718 or visit www.smhealth.org/hhw to make an HHW appointment.



Horse, Cañada Road

Long before the automobile was invented, horse-drawn vehicles were used throughout the world for all kinds of transportation and farming. While they are still needed in parts of the world for these purposes, most horses today are used for recreation.

Although most of us can't ride a horse for our current transportation needs, we can choose the best vehicle available and maintain it properly. Remember:

- Choose a clean, fuel efficient vehicle.**
 The more efficient the engine, the cleaner it burns fuel, reducing a variety of air pollutants. The better the gas mileage, the less fuel burned. And when you burn less fuel, you not only cut emissions, but also save all the resources related to making and transporting it.
- Drive fewer miles.**
 Whenever possible, take public transportation, carpool, and combine activities into one trip.
- Maintain your vehicle properly.**
 A poorly tuned vehicle pollutes significantly more than one that is well-maintained.
- Refuel wisely.**
 When the weather is warm, try to refuel early in the morning or late in the evening to reduce the amount of fuel vapors that escape during the heat of the day. And never top off your tank beyond the automatic shutoff point.

Resources:
<http://www.fueleconomy.gov>



Recycle Used Oil
 Call 1-800-CLEANUP

AUGUST 2008

SUN	MON	TUE	WED	THU	FRI	SAT
<p><i>"Everywhere is within walking distance if you have the time."</i> —STEVEN WRIGHT</p>	JULY 2008 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		SEPTEMBER 2008 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		1 ●	2
	3	4	5	6	7	8 ●
10	11	12	13	14	15	16 ○
17	18	19	20	21	22	23 ●
24	25	26	27	28	29	30 ●
31						



Surfers, Linda Mar Beach

San Mateo County has 54 miles of spectacular coastline bluffs and beaches. Unfortunately, trash from houses, stores, restaurants, roadsides, schools and parks routinely ends up in our coastal waterways and the ocean.

All types of trash imaginable – cigarette filters and cigar tips, beverage bottles and cans, straws, six-pack rings and plastic bags, fishing line, and more – work their way into our waterways. When mishandled, these discarded packaging materials and products harm our environment. Trash and pollution from parking lots and roadways often wind up in storm drains that flow directly into our creeks, bay, and ocean.

California Coastal Cleanup Day is the largest water quality-related volunteer event in California. Each year, thousands of volunteers turn out to California's beaches, lakes, and waterways to help remove hundreds of thousands of pounds of accumulated debris. In 2007, 2,017 volunteers collected 24,033 pounds of trash and recyclables in San Mateo County.

On Saturday, September 20th from 9 am to noon volunteer and join your friends, family, and neighbors to take care of your own environment, show community support, learn the impacts of trash, and have fun.

Trash Facts

- Most trash that collects on California's beaches comes from inland sources.
- 60-80% of what volunteers remove is plastic, which never decomposes in the environment.

Resources:

www.flowstobay.org
www.coastal.ca.gov
www.algalita.org



Recycle Used Oil
Call 1-800-CLEANUP

SEPTEMBER 2008

SUN	MON	TUE	WED	THU	FRI	SAT	
	1 Labor Day (observed)	2 Ramadan	3	4	5 HHW San Mateo	6 HHW San Carlos San Mateo	
7 ☾	8	9	10	11 HHW San Bruno	12 HHW San Mateo	13 HHW Portola Valley San Mateo	
Grandparent's Day	14	15 ○	16	17	18	19	
	POLLUTION PREVENTION WEEK					20 HHW Pacifica San Mateo	California Coastal Cleanup Day
21	22 ☾	23	24	25 HHW So San Francisco	26 HHW San Mateo	27 HHW San Mateo	
	First Day of Autumn						
28	29 ●	30	AUGUST 2008 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		OCTOBER 2008 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		
	Rosh Hashanah Begins at Sundown		<i>"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has." —Margaret Mead</i>				

See the back of this calendar to find more information on where to dispose of used oil and other hazardous materials.



Household Hazardous Waste Event

Call 650-363-4718 or visit www.smhealth.org/hhw to make an HHW appointment.



Lesser Yellowlegs

The lesser yellowlegs (*Tringa flavipes*) is a medium-sized shore bird that is known for its bright yellow legs and fairly long, thin, straight bill. They appear along the coast of California in the early wintertime and feed on insects and small fish and crustaceans.

This yellow-legged bird prefers to live in wetland areas such as coastal mudflats, lagoons, inland lakes, ponds, rivers, and flooded grasslands. These habitats are crucial for providing food, shelter and nesting grounds. Wetlands also act as a filter for contaminants from polluted runoff.

When water runoff flows along the ground, it can pick up contaminants such as mercury. Mercury is harmful to creatures that ingest it. As larger animals eat smaller animals contaminated by it, the mercury continues to increase in concentration and toxicity.

If you have mercury in your household never throw it away. Properly dispose of it through the County's Household, Hazardous Waste program, for free.

Products that contain mercury:

- Fluorescent lamps
- Household batteries
- Non-digital thermometers
- Barometers and gas meters
- Musical greeting cards
- Children's shoes that light up



Recycle Used Oil
Call 1-800-CLEANUP

OCTOBER 2008

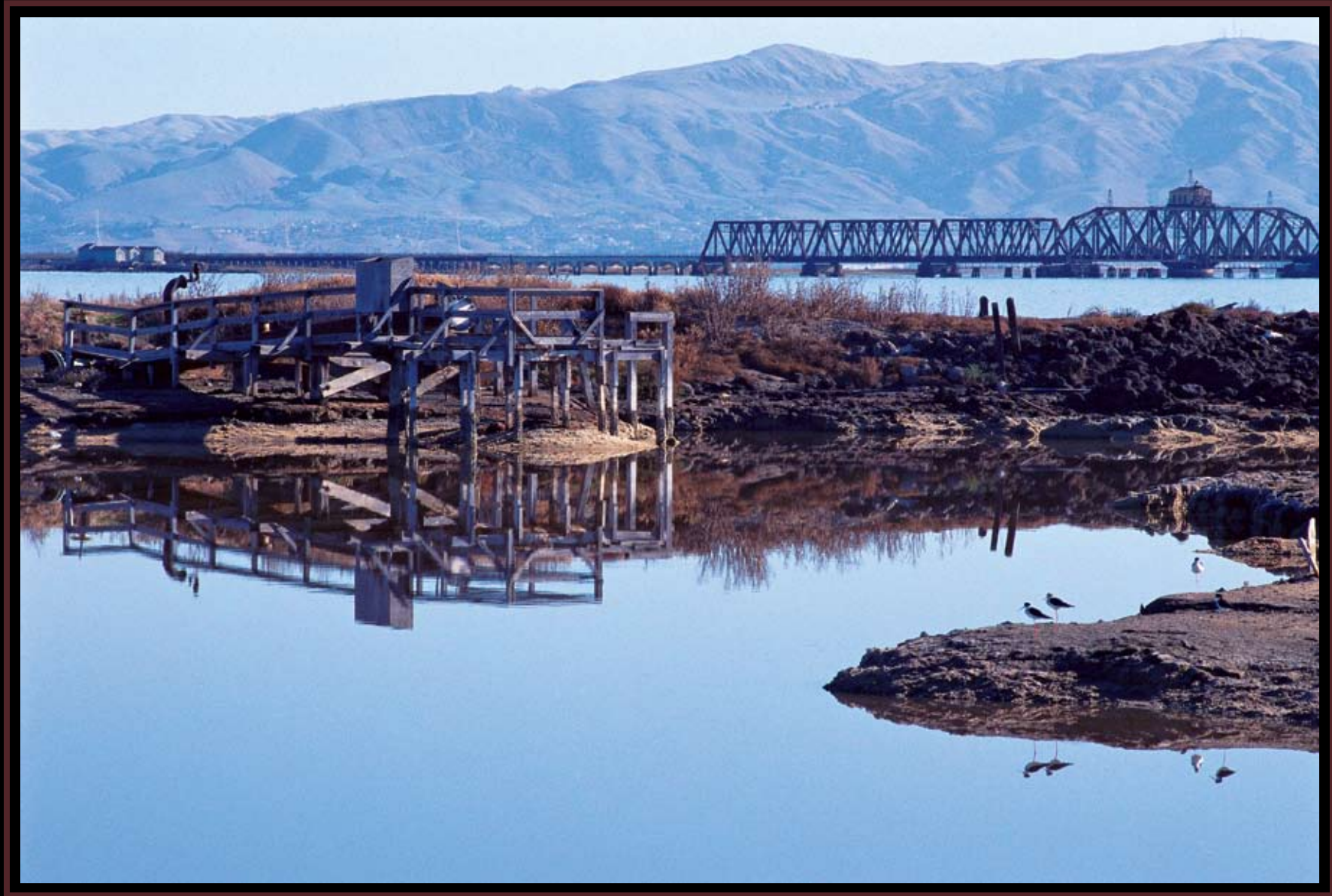
SUN	MON	TUE	WED	THU	FRI	SAT
<p>SEPTEMBER 2008</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6</p> <p>7 8 9 10 11 12 13</p> <p>14 15 16 17 18 19 20</p> <p>21 22 23 24 25 26 27</p> <p>28 29 30</p>	<p>1</p> <p><i>"Environmental protection doesn't happen in a vacuum. You can't separate the impact on the environment from the impact on our families and communities."</i></p> <p>—JIM CLYBURN</p>	<p>2</p>	<p>3</p>	<p>4</p>	<p>5</p>	<p>6</p>
<p>5</p>	<p>6</p>	<p>7</p> <p>☾</p>	<p>8</p>	<p>9</p> <p>HHW San Bruno</p>	<p>10</p> <p>HHW San Mateo</p>	<p>11</p> <p>HHW Redwood City San Mateo</p>
<p>12</p>	<p>13</p> <p>Columbus Day (observed)</p>	<p>14</p> <p>☉</p>	<p>15</p> <p>Yom Kippur begins at sundown</p>	<p>16</p>	<p>17</p> <p>HHW San Mateo</p>	<p>18</p> <p>HHW Pacifica San Mateo</p>
<p>19</p>	<p>20</p>	<p>21</p> <p>☾</p>	<p>22</p>	<p>23</p> <p>HHW So. San Francisco</p>	<p>24</p> <p>HHW San Mateo</p> <p>United Nations Day</p>	<p>25</p> <p>HHW Half Moon Bay San Mateo</p>
<p>26</p> <p>Mother-in-law-Day</p>	<p>27</p>	<p>28</p> <p>●</p>	<p>29</p>	<p>30</p>	<p>31</p> <p>HHW San Mateo</p> <p>Halloween</p>	<p>NOVEMBER 2008</p> <p>S M T W T F S</p> <p>1</p> <p>2 3 4 5 6 7 8</p> <p>9 10 11 12 13 14 15</p> <p>16 17 18 19 20 21 22</p> <p>23 24 25 26 27 28 29</p> <p>30</p>

See the back of this calendar to find more information on where to dispose of used oil and other hazardous materials.



Household Hazardous Waste Event

Call 650-363-4718 or visit www.smhealth.org/hhw to make an HHW appointment.



Ravenswood

Built in 1910, the Dumbarton Rail Bridge can be seen in the background of the photo above. It carried freight trains for over 70 years. Since 1982, the rail bridge has been unused; however, there are plans for a new bridge and commuter rail service connecting the East Bay to the Peninsula.

This renovation could dramatically reduce the current 81,000 cars that pass through the bridge daily – clearing up some road congestion and making the commute less stressful for commuters and the environment.

By taking the train, you join a giant carpool! Like carpooling, riding the train reduces dependence on petroleum, harmful carbon emissions, and your daily expenses on gas.








Remember there are alternatives to driving that can be convenient and reliable. With a little planning and commitment, you can help to reduce your individual impact on the environment. Relax. Take the train!

Resources:

<http://caltrain.com/commutecalculator.html>

NOVEMBER 2008

SUN MON TUE WED THU FRI SAT

SUN		MON		TUE		WED		THU		FRI		SAT	
<p><i>"Our personal consumer choices have ecological, social, and spiritual consequences. It is time to re-examine some of our deeply held notions that underlie our lifestyles."</i></p> <p>—DAVID SUZUKI</p>						<p>OCTOBER 2008</p> <p>S M T W T F S</p> <p>1 2 3 4</p> <p>5 6 7 8 9 10 11</p> <p>12 13 14 15 16 17 18</p> <p>19 20 21 22 23 24 25</p> <p>26 27 28 29 30 31</p>		<p>DECEMBER 2008</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6</p> <p>7 8 9 10 11 12 13</p> <p>14 15 16 17 18 19 20</p> <p>21 22 23 24 25 26 27</p> <p>28 29 30 31</p>				<p> 1</p> <p>San Carlos San Mateo</p>	
						2	3	4	5	6 	<p> 7</p> <p>San Mateo</p>	8	<p> Daly City San Mateo</p>
Daylight Savings Time Ends				Election Day									
9	10	11	12	<p> 13</p> <p>San Bruno</p>	<p>13</p> <p></p>	<p> 14</p> <p>San Mateo</p>	15	<p> Pacifica San Mateo</p>					
				Veterans Day (observed)								America Recycles Day	
16	17	18	19 	20	<p> 21</p> <p>San Mateo</p>	22	<p> San Mateo</p>						
23	24	25	26	27 			28			29			
30					Thanksgiving		Buy Nothing Day						



Recycle Used Oil
Call 1-800-CLEANUP

See the back of this calendar to find more information on where to dispose of used oil and other hazardous materials.



Household Hazardous Waste Event

Call 650-363-4718 or visit www.smhealth.org/hhw to make an HHW appointment.



Suburban Garden

A garden provides us with a good example of the remarkable balance of life in an ecosystem and the interactions between the creatures that share habitat. Every garden needs “good” bugs in it that will feed on the “bad” bugs or garden pests. These garden pests are the ones that are responsible for eating your plants and flowers.

When gardeners use pesticides to control garden pests, the chemicals don't just kill the pests; they kill the “good bugs” or beneficial insects too. Encouraging a natural balance in the garden eliminates the need for garden chemicals.

One way to protect the natural balance is to choose plants for the garden that will attract beneficial insects. Plants in the carrot family (*Apiaceae*), the sunflower or daisy family (*Asteraceae*), the mustard family (*Brassicaceae*), and many mints (*Lamiaceae*) are good choices for attracting beneficial insects to your garden. December is a great month to begin planning for your spring garden.

Garden Tasks for December:

- Prune fruit trees and grapevines.
- Fill bird feeders and birdbaths.
- Harvest any winter crops that are ready.
- Monitor the garden to check for pests.
- Check any cuttings you made and maintain even watering.
- Look over seed catalogs to plan for your spring garden.

Resources:

www.groworganic.com
www.buginfo.com



Recycle Used Oil
Call 1-800-CLEANUP

DECEMBER 2008

SUN	MON	TUE	WED	THU	FRI	SAT
<p>NOVEMBER 2008</p> <p>S M T W T F S</p> <p>1</p> <p>2 3 4 5 6 7 8</p> <p>9 10 11 12 13 14 15</p> <p>16 17 18 19 20 21 22</p> <p>23 24 25 26 27 28 29</p> <p>30</p>	1	2	3	4	5 ☾	6
7	8	9	10	11	12 ○	13
Pearl Harbor Day			Human Right's Day			
14	15	16	17	18	19 ☾	20
21	22	23	24	25	26	27 ●
First Day of Winter Hanukkah begins at sundwn				Christmas	Kwanzaa	
28	29	30	31			
			New Year's Eve	<p>JANUARY 2009</p> <p>S M T W T F S</p> <p>1 2 3</p> <p>4 5 6 7 8 9 10</p> <p>11 12 13 14 15 16 17</p> <p>18 19 20 21 22 23 24</p> <p>25 26 27 28 29 30 31</p>	<p>"Earth laughs in Flower." —RALPH WALDO EMERSON</p>	



Recycle your used motor oil, oil filters, antifreeze, car batteries, latex paint, fluorescent lamps¹, and household batteries²

San Mateo County has compiled this list as a reference. If you have any questions about proper disposal of other household chemicals, please call 650-363-4305. To dispose of other household waste at a collection event call **363-4718** or visit smhealth.org/hhw to make an appointment.

Site	Address	Phone	Automotive				Household				
Atherton⁴											
Town Hall	91 Ashfield Rd.	325-4457							H		
Permit Center	83 Station Lane	752-0560							H		
Belmont⁴											
Carlmont Village Shell ³	2000 Ralston Ave.	592-3637		O		T					
Brisbane⁴											
Brisbane City Hall	50 Park Place	415-508-2130							H		
Burlingame⁴											
Burlingame City Hall	501 Primrose Rd.	558-7200							H		
Burlingame Valero	601 California Dr.	347-0486		O	F						
Curries Chevron ³	260 El Camino Real	344-6120		O	F						
Lithia Chrysler Jeep Dodge ³	1025 Rollins Rd.	342-2120		O							
Daly City											
Allied Waste	1680 Edgeworth Ave.	756-1130							H		C
Bayshore Chevron ³	2690 Bayshore Blvd.	415-330-9888		B	O	F					
Bayshore Library Third Floor	460 Martin St.	991-8074							H		
BFI Mussel Rock T.S.	Westline & Skyline Dr.	755-7068	A		O	F	T				
City Hall Main Lobby	333 90th St.	991-8038							H		
Firestone Store ³	4 Serramonte Center	994-1500	A	B	O	F	T				
Kragen Auto Parts ³	5 Skyline Plaza	994-2650		B	O	F					
Kragen Auto Parts ³	7283 Mission St.	755-8890		B	O						
Serramonte Library	40 Wembley Dr.	991-8023							H		
Speedee Oil Change ³	1600 Sullivan Ave.	755-8777			O						
Westlake Library	275 Southgate Ave.	991-8071							H		
East Palo Alto⁴											
Auto Zone ³	2160 University Ave.	321-7221	A	B	O				H		
Corporation Yard ³	150 Tara Street	853-5916			O	F					
IKEA	1700 East Bayshore Rd.	323-4532							H	L	
Foster City⁴											
AM/PM Hillsdale Arco	880 E. Hillsdale Blvd.	349-1849			O						
City Hall	610 Foster City Blvd.	286-3200							H		
Valero	501 Foster City Blvd.	345-6500			O	F					
Half Moon Bay⁴											
Ocean Shore Hardware	111 Main St.	726-5505							H	L	P
Ox Mountain Landfill ³	12310 Highway 92	726-1819	A	B	O	F	T				C
Menlo Park⁴											
Belle Haven Child Development Center	410 Ivy Drive	330-2270							H		
M&R Automotive ³	1281 El Camino Real	325-3900			O	F					
Menlo Park Library	800 Alma St.	330-2500							H		
Oil Changer ³	944 Willow Rd.	321-9047			O	F					
Onetta Harris Community Center	100 Terminal Ave.	330-2250							H		
Sharon Heights Shell	125 Sharon Park Dr.	854-3400			O	F					
Millbrae⁴											
Auto Zone ³	320 El Comino Real	697-3504			O						
Firestone Store ³	1201 El Camino Real	871-9096	A	B	O	F	T		H		
Kragen Auto Parts ³	1145 El Camino Real	583-0443		B	O	F					
Millbrae Library	1 Library Ave.	697-7607							H		
Millbrae Square Chevron	501 El Camino Real	697-3275	A	B	O	F	T				
Speedee Oil Change ³	390 El Camino Real	692-6740			O	F					
Pacifica⁴											
Coastside Scavenger	1046 Palmetto Ave.	355-9000	A	B	O	F	T		H	L	P
Oil Changer ³	2880 Skyline Blvd.	355-7233			O						
Sanford Firestone	705 Hickey Blvd.	355-1154		B	O	F	T				

1. Both fluorescent tubes and compact fluorescents are recyclable
2. Alkaline, NiCd, Li, NiMH

3. State Certified Collection Centers
4. Household batteries are collected curbside at single-family dwellings

AUTOMOTIVE
A—antifreeze O—used motor oil T—tires (fee)
B—car batteries F—oil filters

HOUSEHOLD
H—household batteries L—fluorescent lamps
P—latex paint C—computers, TVs (fee)

Oil and oil filters are accepted free of charge at all locations. State Certified Collection Centers will pay 16 cents per gallon for used oil upon request. A fee may apply for antifreeze, tires, and batteries. Call before visiting collection centers. Used oil and antifreeze must not be mixed with any other automotive products. No broken batteries can be accepted. **Do not leave your oil at an unattended station.**

Site	Address	Phone	Automotive				Household				
Pescadero											
BFI Waste Systems	Bean Hollow Rd.	879-0729		B	O	F	T				
Portola Valley											
Ladera Autoworks	104 La Mesa Dr.	854-4522			O	F					
Redwood City⁴											
Boardwalk Auto Center ³	1 Bair Island Rd.	364-0100			O						
Chanique's Auto Repair	425 Dumbarton St.	365-1322		B	O	F					
County Government Center	455 County Center, 1st Floor	363-4957								H	
Firestone Store ³	1458 El Camino Real	364-1900	A	B	O	F	T				
Jiffy Lube ³	640 Whipple Ave.	369-8067			O	F					
Kings Union 76 ³	975 Woodside Rd	364-9620	A	B	O	F	T				
Kragen Auto Parts ³	2411 El Camino Real	368-2831		B	O	F					
Oil Changer ³	2762 El Camino Real	366-5394			O	F					
Roosevelt Shell	2108 Roosevelt Ave.	366-1886			O	F	T				
Silver Auto Services	1603 Broadway	245-5783			O	F					
Towne Ford Sales ³	1601 El Camino Real	366-5744			O						
Veterans Blvd Shell	690 Veterans Blvd.	369-6675			O	F					
San Bruno⁴											
Jiffy Lube ³	1580 El Camino Real	588-3970			O	F					
San Bruno Garbage Company	101 Tanforan Ave.	583-8536	A	B	O	F		H	L	P	C
Sharma Auto Repair ³	1089 Montgomery Ave.	872-9600			O						
Skyline College	3300 College Dr.	738-4126			O	F					
Speedee Oil Change ³	801 El Camino Real	952-5178			O	F					
San Carlos⁴											
Allied Waste	333 Shoreway Rd .	592-2411	A		O	F	T	H	L	P	C
City Hall	600 Elm St.	743-2974							H		
Jiffy Lube ³	1030 El Camino Real	594-1688			O	F					
Kragen Auto Parts ³	1272 El Camino Real	595-5112		B	O	F					
Oil Changer ³	1188 El Camino Real	591-0695			O	F					
Pep Boys ³	1087 Old County Road	632-1522			O	F					
Quality Tune Up ³	400 El Camino Real	593-7873			O	F					
San Mateo⁴											
Auto Zone ³	3880 S. El Camino Real	372-0535		B	O						
Chevron Oil Stop ³	2009 El Camino Real	572-8000			O	F					
Firestone Store ³	2180 S. El Camino Real	345-3535			O	F					
Jiffy Lube ³	2517 S. El Camino Real	349-7222			O	F					
Jiffy Lube ³	407 S. Delaware St.	344-8242			O	F					
Kragen Auto Parts ³	2640 S. El Camino Real	349-1275		B	O	F					
Kragen Auto Parts ³	400 S. Norfolk St.	344-2448			B	O					
Mark Morris Tires ³	2160 El Camino Real	341-8225	A		O	F					
Reed's Service Center	1641 Palm Ave.	341-6675	A	B	O	F					
San Mateo Auto Care	1471 E. Third St.	343-6651			O						
San Mateo City Hall	330 W. 20th Ave.	522-7346							H		
So. San Francisco⁴											
Blueline Transfer	500 E. Jamie Ct.	589-5511	A	B	O	F	T	H	L	P	C
Firestone Store ³	190 El Camino Real	583-2848	A	B	O	F	T				
First Automotive Distrib. ³	273 E. Harris Ave.	333-8871			O						
Kragen Auto Parts ³	1059 El Camino Real	589-8102		B	O	F					
Kragen Auto Parts ³	3541 Callan Blvd.	827-9081			O	F					
Meehan Battery	1139 Airport Blvd.	583-6735		B							
Shiva Auto Repair	118 S. Spruce Ave.	225-0600		B	O	F					
Stevens Bay Area Diesel ³	480 Littlefield Ave.	872-3656			O						
Woodside											
Skylonda Fire Station	17290 Skyline Blvd.	851-1860			O	F			H		

2007-2008**IPM STORES - 22 stores**

Store Name	Contact	Address	City	08 Spring visit	07 Fall visit
Ace Hardware	Oras	700 Santa Cruz Ave.	Menlo Park	6/20/2008	10/18/2007
Al's Nursery (closed wed.)	John Wu	900 Portola Rd	Portola Valley	4/1/2008	10/25/2007
Brisbane Hardware	Bill Del Chiaco	1 Visitacion Av	Brisbane	5/25/2008	10/5/2007
Carlmont Ace Hardware	Cliff Walters/Ron Baum	1029 Alameda De Las Pulgas	Belmont	6/5/2008	10/11/2007
Carlmont Nursery	Ray Tyler	2029 Ralston	Belmont	6/4/2008	10/11/2007
Golden Nursery	Chris and George	1122 2nd Ave	San Mateo	4/7/2008	2/26/2008
Half Moon Bay Nursery	Brad Kuhlman (Chris & Ron owners)	11691 San Mateo Rd.	HMB	5/8/2008	10/22/2007
Home Depot	Gloria/ Flash	2 Colma Blvd	Colma	5/25/2008	10/31/2007
Home Depot	Roberto Alvarado	303 E. Lake Merced Blvd.	Daly City	5/26/2008	10/30/2007
Home Depot	Alec Gonzales & Daneil Rwas	1781 East Bayshore Road	East Palo Alto	5/30/2008	10/24/2007
Home Depot	Scott Kubiak	1125 Old County Rd	San Carlos	5/5/2008	10/18/2007
Home Depot	Derrik	2001 Chess Drive	San Mateo	4/29/2008	10/25/2007
Linda Mar Hardware	Dave Reed or Kate Romero	560 San Pedro Ave	Pacifica	5/26/2008	10/22/2007
Ocean Shore Hardware	Betsy Marstall	111 Main Street	HMB	5/8/2008	10/23/2007
Orchard Supply Hardware	Jeffrey	1010 Metro Center Blvd	Foster City	4/7/2008	8/21/2007
Orchard Supply Hardware	Joseph Conroy or Bill in Gardening	900 El Camino Real	Millbrae	5/1/2008	10/9/2007
Orchard Supply Hardware	Kirk Anderson	2110 Middlefield Road	Redwood City	6/24/2008	10/24/2007
Orchard Supply Hardware	Ray Martinez/Ruben Chang	2245 Gellert Blvd	SSF	5/26/2008	10/29/2007
Roger Reynolds Nursery	Dwayne	133 Encinal Ave	Menlo Park	6/20/2008	10/16/2007
Sloats Garden Center	Charlie Paulson	675 El Camino Real	San Bruno	4/3/2008	10/29/2007
The Garden Shed	Daniel Yoshida	1136 El Camino Real	San Carlos	6/24/2008	10/16/2007
Wegman's Nursery	Marc and Erhard Wegman	492 Woodside Rd	Redwood City	6/24/2008	10/11/2007

San Mateo Countywide Water Pollution Prevention Program

Reducing Pollutants in our Watersheds

Sarah Pratt
Environmental Health
Phone: 650-599-1325
Email: spratt@co.sanmateo.ca.us



Water Pollution Prevention

San Mateo County Water Pollution Prevention Program (SMCWPPP) is a program that aims to partner with the county's residents and businesses to prevent pollution of our local water bodies; such as creeks, the San Francisco Bay and the Pacific Ocean.

www.flowstobay.org

We All Live Downstream: Watersheds

- ☛ A watershed is the area of land that water flows across on its way to a creek, river, lake, bay, or ocean.
- ☛ In urban settings water travels more quickly across pavement than in a natural setting.
- ☛ Rain and hosing down carries pollutants into local waterways.

The Quality of Our Local Creeks is Linked to Land Cover

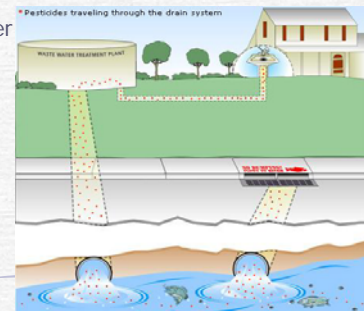
- ☛ In a forest, rain soaks into the ground where it is either taken up by tree roots or continues to move down through the soil and into the groundwater.
- ☛ When rain falls on impervious cover, rain cannot soak into the ground and becomes stormwater runoff
- ☛ Impervious cover produces 16 times more stormwater runoff than forest.

"First Flush"



Down the Drain: Where Your Water Goes

- ☛ Sanitary Sewer
- ☛ Stormdrain



Urban runoff pollution

- 1987 amendments to Clean Water Act
- Regional Water Quality Control Boards enforce clean water laws
- San Francisco Bay Regional Water Quality Control Board issue NPDES permit to San Mateo Countywide Water Pollution Prevention Program's agencies

The Solution To Pollution

The best solution to pollution is to keep it out of our water in the first place!



Pollutants of Concern in our Water Bodies

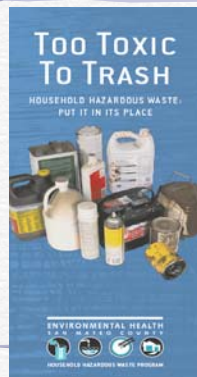
- Mercury
- Automotive: leaking motor oil, gasoline, and antifreeze, copper dust from brake pads, rubber tire dust.
- Trash
- Pesticides

Mercury Containing Items

- Thermometer Exchange & Fluorescent Tube Retail Take-Back



Household Hazardous Waste and Used Motor Oil/Filters



Best Management Practices Business Pollution Prevention

- Food Facilities
- Construction Industry
- Automotive Maintenance
- Industrial
- Mobile Cleaner & Power Washing
- Municipal
- Storm Drain Stenciling

Litter Reduction & Education



The Journey from Garden to Waterways



- ☛ Pesticides runoff lawns and gardens.
- ☛ Improper disposal through sanitary sewer
- ☛ Treated wastewater doesn't remove all pesticides

Our Water Our World Less Toxic Pest control



Diazinon and chlorpyrifos

- ☛ 1990s most commonly used pesticides
- ☛ Organophosphates
- ☛ Killing water creatures at bottom of food chain.
- ☛ Bay area creeks found to be "Impaired"
- ☛ Taken off store shelves



Pyrethroids: New Threat to Water Quality

- ☛ Ant sprays, Termiticides
- ☛ Insect foggers and sprays
- ☛ Flea dips and sprays for cats and dogs
- ☛ Ornamental garden & turf products
- ☛ Lice shampoos
- ☛ Mosquito coils

Ingredient name end in "thrin"

Exception is "Pyrethrin" natural pesticide

Bay Friendly Gardening



Alternatives to Toxic Pesticides: The "Our Water Our World" program



The OWOW Program Uses Integrated Pest Management Concepts



Examples of how to control
pests the less toxic way...

Snails and Slugs



Physical Controls...



Ants...



Aphids...



Biological Control: Beneficial Insects are your Allies



In Store Help for Gardeners



Resources

- Water Pollution Prevention
www.flowstobay.org
- IPM Websites: www.ourwaterourworld.org & www.ipm.ucdavis.edu & www.epa.gov/greenscapes
- Ask The Expert
- Bay-Friendly Gardening guidelines, and UC Statewide IPM Project books
- Fact sheets
- Less Toxic Product lists

2007 California Coastal Cleanup Day

CCD Coordinator Report Form

People, Pounds, and Miles

Please return completed form to **Eben Schwartz** at the California Coastal Commission NO LATER THAN October 31, 2007.
 California Coastal Commission, 45 Fremont Street, Suite 2000, San Francisco, CA 94105, (415) 904-5210, (415) 904-5216 FAX, eschwartz@coastal.ca.gov

State/County or Region: San Mateo County

Coordinator Name: Sarah Pratt

Site Name	Coastal or Inland?	Site Captain	Phone/E-mail Address	Cleanup Information			
				Number of People	Weight of Trash Collected	Weight of Recyclables Collected	Distance Cleaned
Belmont Creek	Inland	Jozi Plut	650) 595-7425 jplut@belmont.gov	30	197	65	4
Brisbane Lagoon	Inland	Russ Carmick	(415) 508-2143 rcarmick@ci.brisbane.ca.us	71	2000	20	4
Burlingame Bayfront and Mills Creek, Millbrae	Inland	Donna Allen	(650) 342-3727 Donna.Allen@veoliawaterna.com	232	2100	500	8
Laurel Creek	Inland	Dirk Jensen	(650) 4962 DJensen@co.sanmateo.ca.us	3	180	0	1
Thornton State Beach	Coastal	David & Shelly Sondergeld	(650) 756-4530 dsonder@mindspring.com	100	800	250	5.5
San Francisquito Creek	Inland	Ryan Navratil	(650) 961-1035 x310 Ryan@SanFrancisquito.org	79	900	550	1.25
Pillar Point Harbor	Coastal	Aaron Tinker	364-2760x16, Aaron@sfbaymsi.org	42	50	35	2.5
Shelter Cove	Coastal	Aaron Tinker	364-2760x16, Aaron@sfbaymsi.org	8	10	5	1
San Gregorio State Beach	Coastal	Neil Panton	(650) 726-2499 Sgerc@sanmateo.org	127	272	119	4
Pomponio State Beach	Coastal	Neil Panton	(650) 726-2499 Sgerc@sanmateo.org	8	32	5	1.5
Roosevelt / Dunes State Beach	Coastal	Jennifer Bueno	(650) 404-3301 jbueno@kpmg.com	130	336	150	1
Francis State Beach	Coastal	Jenine Beecher	(650) 508-2330 jbeeche@rei.com	181	200	220	3
Pistachio Beach	Coastal	Rose Blackburn	650-726-8804 x 4 rblackburn@parks.ca.gov	14	245	19	1
Tunitas Creek	Coastal	Steve Harman	650-291-9428, Steven.Harman@surfriderSMC.org	31	610	28	2
Mirada Surf West	Coastal	Park Ranger Steve Kraemer	(650) 879-0238 Skraemer@co.sanmateo.ca.us	120	650	50	2

Site Name	Coastal or Inland?	Site Captain	Phone/E-mail Address	Cleanup Information			
				Number of People	Weight of Trash Collected	Weight of Recyclables Collected	Distance Cleaned
Montara State Beach	Coastal	Kevin & Wendy Stokes	Kevin@montarabeach.com	42	500	120	4
Esplanade Beach	Coastal	Lynn Adams	(650) 355-1668 Lynn4promos@aol.com	33	420	450	1
Lake Side Way	Coastal	Lynn Adams	(650) 355-1668 Lynn4promos@aol.com	5	175	0	1
Sharp Park Beach	Coastal	Lynn Adams	(650) 355-1668 Lynn4promos@aol.com	77	700	30	2.5
Pacifica State Beach/ Linda	Coastal	Lynn Adams	(650) 355-1668 Lynn4promos@aol.com	107	315	45	2.5
Rockaway Beach	Coastal	Lynn Adams	(650) 355-1668 Lynn4promos@aol.com	33	270	75	3
San Pedro Creek Watershed	Coastal	Lynn Adams	(650) 355-1668 Lynn4promos@aol.com	42	980	210	1
West Sharp Park	Coastal	Lynn Adams	(650) 355-1668 Lynn4promos@aol.com	77	345	105	1
Vallemar Beach	Coastal	Lynn Adams	(650) 355-1668 Lynn4promos@aol.com	1	40	0	1
Mussel Rock Beach	Coastal	Lynn Adams	(650) 355-1668 Lynn4promos@aol.com	33	954	450	1
Pescadero State Beach	Coastal	Gregory Bahr	(650) 879-0299, Gbahr@sjcoe.net	30	88	22	1
Bair Island	Inland	Jocelyn Gretz	(510) 452-9261 x119 or 109 jgretz@savesfbay.org	12	196	32	2
Cordilleras Creek	Inland	Barbara Patterson	(650) 701-0630 babaloupat@yahoo.com	10	200	20	0.5
Pulgas Creek and Brittain C	Inland	Barbara Patterson	(650) 701-0630 babaloupat@yahoo.com	17	250	30	0.5
San Mateo Bayfront & San	Inland	Roxanne Murray	(650) 522-7346 RMurray@cityofsanmateo.org	330	6000	450	1
South San Francisco Bayfront	Inland	Gus Vellis	(650) 875-6973 gus.vellis@ssf.net	158	500	100	0.5
			Totals	2,183	20,483	4,150	63.75



CALIFORNIA COASTAL CLEANUP DAY

When? Sat. September 15th, 2007
9am—12pm

Where? 27 beach & creek locations
in San Mateo County

What? Pick a site. Show up. Clean
up your watershed.
(All materials are supplied)

Visit www.flowstobay.org for a list
of beach and creek locations

The Benefits are in the Bag!

The Plastic Problem:

- Most plastics are made from petroleum—a non-renewable resource.
- Plastics are everywhere! The average consumer uses 300 plastic bags per year.
- Plastics create litter problems—easily blowing out of the trash and into parks, yards, and waterways.
- Plastics never biodegrade. They just break down into smaller pieces.
- Plastics in our waterways & oceans kill 100,000 marine animals each year.

Alternatives:

- Bring your own *reusable* bag when you shop!
- Reuse your old plastic and paper bags as trash liners or car litter bags.
- Recycle clean plastic bags at local grocery stores.
- Use no bags! Do not take a bag for fruits or veggies or for a few small items.

Remember your bags!

- Store your bags in your car.
- Hang them around your front or garage door knob.
- Leave them near your keys.

www.flowstobay.org

CASQA 2007 Awards

***Outstanding Stormwater
News, Information, Outreach, and Media
Project Award***

CASQA 2007 Awards

This is CASQA's award for outstanding stormwater quality news, information, outreach, or media project. Projects may be either public or private and must have been released to the public or published prior to the deadline for submittal of nominations.

**2007
OUTSTANDING
STORMWATER
NEWS, INFORMATION,
OUTREACH, AND
MEDIA PROJECT
AWARD**



**PRESENTED TO
SAN MATEO COUNTYWIDE
WATER POLLUTION
PREVENTION PROGRAM
FOR THE
ELIMINATING TRASH
IN OUR
WATERWAYS PROJECT:
COASTAL CLEANUP DAY IN
SAN MATEO COUNTY - 2006**

Project Objectives

- *Get residents directly involved in cleanup efforts by organizing beach & creek clean-ups as part of the CA Coastal Cleanup Day, 3rd Saturday in September*
- *Educate residents on the source and type of trash that ends up in waterways: 80% of marine debris comes from land based sources.*
- *Implement social marketing campaign, promoting reusable shopping bags, to reduce the use of disposable plastic. Plastics are a major pollutant in waterways.*

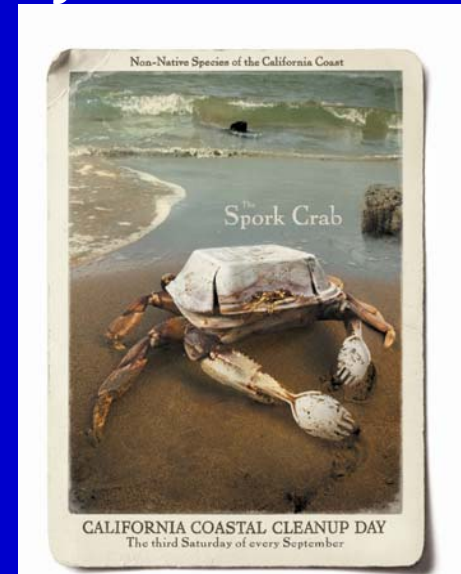
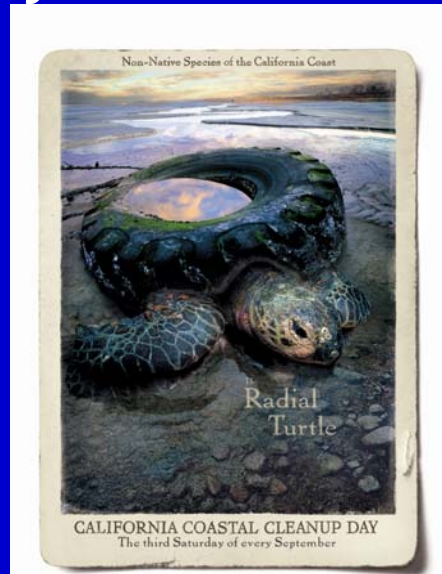
Outstanding Project Features

- 3000 Reusable Recycled-Plastic Bottle Mesh Bags given out with a signed commitment form at supermarkets, farmers markets, and the county fair.



Outstanding Project Features

Publicity efforts included poster, brochure, and postcard distribution. Creation of a page on our website with information on all aspects of the cleanup, including a cleanup location list. Print articles, a press release, and a Proclamation by the Board of Supervisors, all helped to publicize Coastal Cleanup Day in San Mateo County.



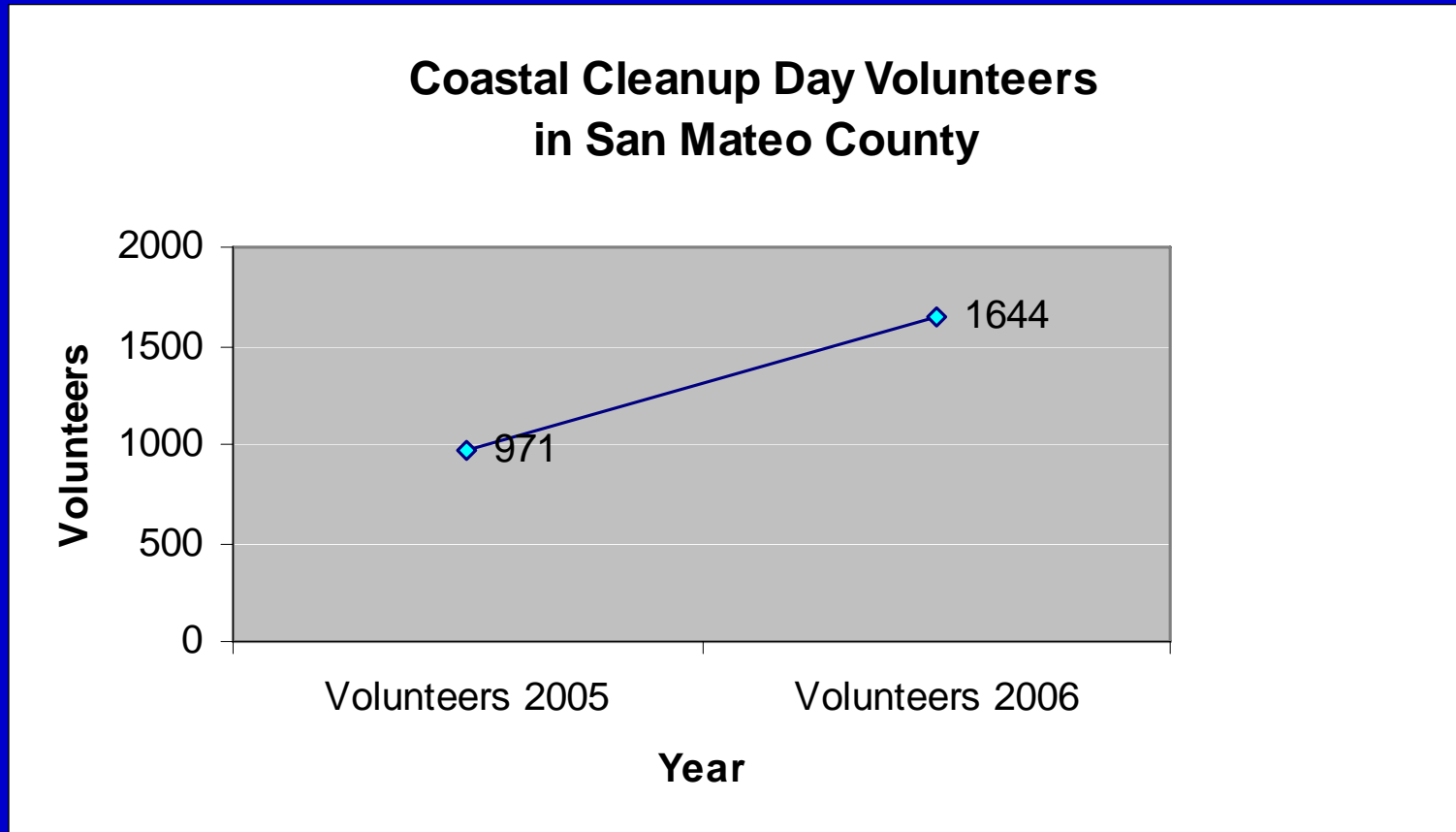
Outstanding Project Features

- Coordinated 27 beach & creek cleanups; recruiting site captains and volunteers.



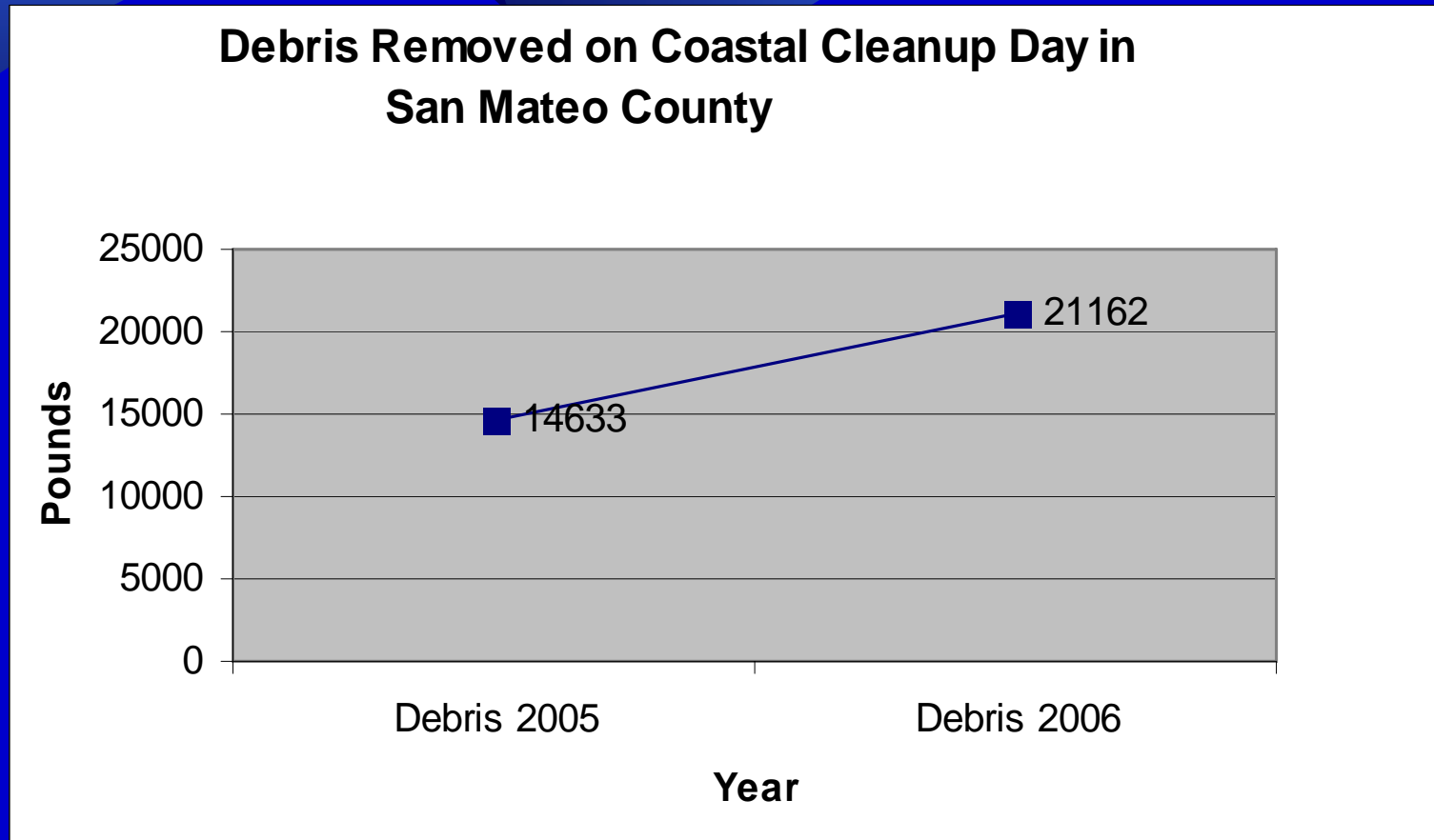
Project Results

- *Increased Volunteer Participation by 60%*
2005: 971 Volunteers
2006: 1644 Volunteers



Project Results

- *Debris Diverted from Waterways: 21,162 lbs of trash & recyclables picked up*



Project Results

- *Reusable Bag outreach events in San Mateo County Whole Foods Stores led to Whole Foods becoming the main Sponsor for 2007 California Coastal Cleanup Day*
- *5% Day at Whole Foods statewide contributed one day's net sales were donated.*



CASQA 2007 Awards

***Outstanding Stormwater
News, Information, Outreach, and Media Project
Presented to***

***San Mateo Countywide
Water Pollution Prevention Program
Insert Name of Person Accepting Award
Insert Title of Person Accepting Award***

Project Contributors

- *Environmental Health, San Mateo County*
- *California Coastal Commission*
- *RecycleWorks, San Mateo County*



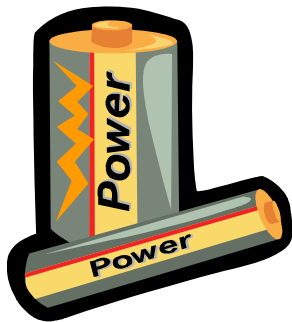
Boost Your Business by becoming a Take Back Partner

Free Benefits for Your Business:

- In store promotional materials
- Listings to help eco-minded customers find you on-line
- Recognition through press releases, County website, and more
- Handy information for customers seeking to recycle or dispose of other materials
- Extra points on your Green Business application
- Personalized assistance with take-back issues at your site
- Increased foot traffic and associated sales

For Your Customers :

- A convenient, “drop-while-you-shop” location for their household batteries and fluorescent bulbs.
- A local business that shares their values and concerns.
- A new reason to walk through your door.



Your Contribution:

- Storage of your customers’ returned materials.
- Periodic delivery of collected materials to the County HHW facility.



Why Do Customers Want to Bring Used-Up Fluorescent Bulbs and Household Batteries Back to their Retailers?

- They know that the California Universal Waste Rule prohibits anyone from putting these materials in the trash.
- They care about their communities, and want to make sure these recyclable materials are handled safely and properly.
- Bringing them to local stores while they shop is much more convenient than taking them to an HHW site.

SAN MATEO COUNTY

Take Back Coordinator

Mary Bell Austin
650-599-1549
maustin@co.sanmateo.ca.us

**COUNTY FAIR COUNT COMPARISONS
CONTACTS AT SMCWPPP BOOTH**

2005 SAN MATEO COUNTY FAIR STORMWATER BOOTH AUGUST 12 - 21, 2005		Participating Co-Permittees & Contractor	2006 SAN MATEO COUNTY FAIR STORMWATER BOOTH AUGUST 11 - 20, 2006		Participating Co-Permittees	2007 SAN MATEO COUNTY FAIR STORMWATER BOOTH AUGUST 10 - 19, 2007		Participating Co-Permittees
Friday 12	98	CCC	FRIDAY - 11	170	<i>Redwood City San Mateo County</i>	FRIDAY - 10	209	<i>Redwood City San Mateo County</i>
Saturday 13	236	San Carlos Redwood City/Parks CCC	SATURDAY - 12	284	<i>San Carlos Redwood City</i>	SATURDAY - 11	634	<i>San Carlos Redwood City</i>
Sunday 14	326	Redwood City CCC	SUNDAY - 13	417	<i>Redwood City Belmont</i>	SUNDAY - 12	665	<i>Redwood City Belmont</i>
Monday 15	232	Pacifica County of San Mateo Atherton	MONDAY - 14	267	<i>Pacifica San Mateo County Redwood City</i>	MONDAY - 13	605	<i>Pacifica San Mateo County Atherton</i>
Tuesday 16	292	Hillsborough Foster City City of San Mateo	TUESDAY - 15	202	<i>Hillsborough Foster City San Mateo</i>	TUESDAY - 14	303	<i>Hillsborough Portola Valley San Mateo</i>
Wednesday 17	159	East Palo Alto Burlingame Brisbane	WEDNESDAY - 16	244	<i>East Palo Alto Burlingame Brisbane</i>	WEDNESDAY - 15	399	<i>East Palo Alto Burlingame Brisbane</i>
Thursday 18	345	Millbrae* Daly City Colma	THURSDAY - 17	294	<i>Millbrae Daly City Colma Atherton</i>	THURSDAY - 16	377	<i>Millbrae Daly City Colma</i>
Friday 19	106	Half Moon Bay San Bruno Portola Valley	FRIDAY - 18	103	<i>Half Moon Bay Menlo Park San Bruno Portola Valley Atherton</i>	*FRIDAY - 17	85	<i>Half Moon Bay San Bruno Foster City</i>
Saturday 20	287	So San Francisco Redwood City CCC	SATURDAY - 20	406	<i>South San Francisco Redwood City Menlo Park</i>	SATURDAY - 18	402	<i>South San Francisco Redwood City</i>
Sunday 21	244	Belmont CCC Redwood City/Parks	SUNDAY - 21	410	<i>Atherton Woodside Redwood City</i>	SUNDAY - 19	381	<i>Woodside Redwood City</i>
TOTAL CONTACTS	2,325		TOTAL CONTACTS	2,797		TOTAL CONTACTS	4,060	
<i>*Free entry to Fair until 3pm</i>			<i>Percentage Change from 2005</i>	20.3%		<i>Percentage Change from 2006</i>	45.2%	
			<i>No of Contacts over/(under) 2005</i>	472		<i>No of Contacts over/(under) 2006</i>	1,263	
						<i>Average Daily Attendance</i>	406	

*Footnote: *Appears that Half Moon Bay & San Bruno did not report contacts,
figure shown is for Foster City only*



SAN MATEO COUNTYWIDE Water Pollution Prevention Program

New Information

Aliquam erat volutpat. Proin consequat, leo vitae condimentum convallis, diam diam ullamcorper tellus, eu pulvinar est mi a justo. Vivamus in est iaculis justo tincidunt posuere.

Nullam a tellus non dui pretium rhoncus. Praesent ut nibh. Nulla et lorem. Morbi ligula quam, gravida et, lacinia at, iaculis sit amet, enim. Sed semper, neque

Eget commodo volutpat, tellus nulla rhoncus mi, sit amet volutpat leo mi sit amet enim. Aenean a felis ac velit fermentum dignissim.

Nullam a tellus non dui pretium rhoncus. Praesent ut nibh. Nulla et lorem.

[MORE...](#)

Community



Find all the information you need for both in the house and around the neighborhood.

Business



Access all regulations and forms water use in the county, as well as useful resource listings.

Municipalities



Access all important policy documents and links to state and federal information.

Calendar

- Wednesday June 25** Aliquam erat volutpat. Proin consequat, leo vitae condimentum convallis, diam diam ullamcorper tellus, eu pulvinar est mi a justo.
- Friday June 27** Nullam a tellus non dui pretium rhoncus. Praesent ut nibh. Nulla et lorem. Morbi ligula quam, gravida et, lacinia at.
- Monday June 30** Eget commodo volutpat, tellus nulla rhoncus mi, sit amet volutpat leo mi sit amet enim.



Clean Water. Healthy Community.

Welcome to the San Mateo County Anti Water Pollution Website. Aliquam erat volutpat. Proin consequat, leo vitae condimentum convallis, diam diam ullamcorper tellus, eu pulvinar est mi a justo. Vivamus in est iaculis justo tincidunt posuere. Nullam a tellus non dui pretium rhoncus.

FEATURE TOPIC



Spring has Sprung in San Mateo County

Aliquam erat volutpat .Proin consequat, leo vitae condimentum convallis, diam diam ullamcorper tellus, eu pulvinar est mi a justo. Vivamus in est iaculis justo tincidunt posuere. Proin consequa, leo vitae condimentum convallis, diam diam ullamcorper tellus, eu pulvinar est mi a justo. Vivamus in est iaculis justo tincidunt posuere.

[MORE...](#)

[SEARCH](#)



APPENDIX D: TABLE OF CONTENTS

New Development Subcommittee FY 2007/08 Meeting Attendance

Updated Project Applicant Checklist for NPDES Permit Requirements

*Appendix I of C.3 Technical Guidance – Operation and Maintenance Document Templates
(cover sheet)*

Soil Guidelines for Stormwater Treatment Measures

New Development Subcommittee Report for April 1 field trip

2008 New Development Workshop: “Implementing Permanent Stormwater Controls”

- *Agenda*
- *Attendance list*
- *Summary of evaluation forms*

Construction Site Compliance Workshop for Local Government Inspectors:

- *Agenda*
- *Summary of evaluation forms*

SAN MATEO COUNTYWIDE
WATER POLLUTION PREVENTION PROGRAM

New Development Subcommittee
FY 2007/08 Meeting Attendance

Representing	Name	Phone Number	Meetings Attended					
			Aug	Oct	Dec	Feb	Apr ¹	June
Atherton	Michael Wasmann	650/752-0518	✓					
Belmont	Gilbert Yau	650/595-7467	✓	✓	✓	✓		✓
Brisbane	Matt Fabry (Program Coordinator)	415/508-2134	✓	✓	✓	✓	✓	✓
Burlingame	Eva Justimbaste	650/342-3727	✓	✓	✓	✓	✓	✓
	Lisa Whitman	650/558-7257	✓		✓	✓		✓
Colma	Muneer Ahmed	650/757-8894		✓	✓	✓		
	Joshua Rawley						✓	
Daly City	Jeanne Naughton	650/991-8033	✓	✓		✓		✓
East Palo Alto	Brad Tarr	650/853-3100						
EOA	Laura Prickett	510/832-2852 x 123	✓		✓	✓	✓	✓
	Fred Jarvis	510/832-2852 x 111		✓			✓	
	Christina Hovland	510/832-2852 x 126						✓
Foster City	Norm Dorais	650/286-3279						✓
	Elena Lee (resigned)		✓					
Half Moon Bay	Michelle Tangunan	650/726-8253						
Hillsborough	Jen Chen	650/375-7488				✓		✓
	Catherine Chan	650/579-3353						✓
	Maggie Cmejla (resigned)		✓		✓			
Menlo Park	Jennifer Ng	650/330-6743		✓	✓	✓		✓
	Virginia Parks		✓					
Millbrae	Khee Lim							
	Florian Ebo	650/259-2446	✓	✓			✓	
Pacifica	Lizzie Claycomb	650/738-7361						✓
	Christina Horrisberger	650/738-7444	✓	✓	✓	✓		✓
Portola Valley	Leslie Lambert	650/851-1700 x12	✓		✓	✓		✓
Redwood City	Jon Lynch	650/780-7371	✓		✓	✓		
	Susan Wheeler	650/780-7245				✓		✓
San Bruno	Laura Russell	650/616-7038	✓		✓	✓		✓
San Carlos	Serena Ponzo	650/802-4267		✓	✓	✓		
San Mateo	Martin Quan	650/522-7330			✓	✓		
County of San Mateo	Camille Leung	650/353-1826		✓	✓			✓
	Joe Camicia	650/599-1537	✓			✓	✓	✓
	Melissa Ross	650/599-1559						
South S.F.	Cassie Prudhel	650/829-3840	✓	✓		✓		
	Craig Lustenberger							✓
	Daniel Fulford							✓
	Frank Mandola	650/829-3880			✓		✓	
Woodside	Eunejune Kim	650/851-6790		✓	✓	✓		

¹ The April meeting was a field trip to view stormwater treatment measures in San Francisco.

**Project Applicant Checklist for NPDES Permit Requirements
SAN MATEO COUNTYWIDE WATER POLLUTION PREVENTION PROGRAM**

I. PROJECT DATA

Project Name _____ Project Address _____

APN _____ - _____ - _____

Applicant Name _____ Applicant Phone _____

Applicant Address _____

Type of Development

- Residential
- Commercial
- Industrial
- Mixed-Use
- Streets, Roads, Highways, Freeways, etc.
- Significant Redevelopment Project (as defined by SMCWPPP's NPDES permit Provision C.3.c.i.3)

- Site Area _____ (sq. ft.)
- Disturbed Area _____ (sq. ft.)*
- Existing Impervious Surface _____ (sq. ft.)
- New Impervious Surface (created, added and/or replaced) _____ (sq. ft.)**

* If ≥ 1 acre (43,560 sq. ft.) of soil disturbance, please refer to Section III.

** If ≥ 1 acre (43,560 sq. ft.) of impervious surface is added and/or replaced, please refer to Sections IV and V. (This threshold is reduced to projects that are 10,000 sq. ft. or larger starting August 15, 2006.)

II. MINIMUM REQUIREMENTS FOR ALL PROJECTS – All projects must incorporate as many of the following measures as practical (check boxes that apply).

A. SITE DESIGN MEASURES. Project must incorporate the following measures to the maximum extent practicable:

- Protect sensitive areas and minimize changes to the natural topography.
- Minimize impervious surface areas.
- Minimize impervious areas from being directly connected to the storm drain system (e.g. direct roof downspouts to vegetated areas where feasible).
- Maximize permeability by preserving open space.
- Use permeable pavement surfaces where feasible.
- Use landscaping to treat stormwater.
- Use "Bay Friendly" landscape design, as indicated in "Bay-Friendly Landscape Guidelines - Sustainable Practices for the Landscape Professional".

B. SOURCE CONTROL MEASURES.

- Incorporate all applicable source control measures in [enter municipality name] Local Source Control Measures List.

C. PERMANENT STORMWATER TREATMENT CONTROL MEASURES. Project must consider incorporating the following measures:

- | | |
|---|---|
| <ul style="list-style-type: none"> <input type="checkbox"/> Vegetated swale <input type="checkbox"/> Extended detention basin (dry) <input type="checkbox"/> Wet pond <input type="checkbox"/> Media filter (sand, organic matter) <input type="checkbox"/> Vortex separator (commercially available in-line treatment unit) <input type="checkbox"/> Bioretention area | <ul style="list-style-type: none"> <input type="checkbox"/> Vegetated buffer strip <input type="checkbox"/> Constructed wetland <input type="checkbox"/> Manufactured drain insert (may not be used unless part of a multi-step treatment process) <input type="checkbox"/> Infiltration trench <input type="checkbox"/> Other _____ |
|---|---|

Continued ⇒

D. EROSION and SEDIMENTATION CONTROL. *If the project involves any land disturbance, project plans must incorporate all of the following requirements:*

1. Stabilize all denuded areas and install and maintain all temporary erosion and sediment controls continuously between October 15th and April 15th of each year, until permanent erosion control have been established.
2. Provisions for diverting on-site runoff around exposed areas and diverting off-site runoff around the site (e.g., swales and dikes).
3. Provisions for preventing erosion and trapping sediment on-site, such as sediment basins or traps, earthen dikes or berms, silt fences, check dams, storm drain inlet protection, soil blankets or mats, covers for soil stock piles, and/or other measures.
4. Provide notes, specifications, or attachments describing the following:
 - a) Construction, operation and maintenance of erosion and sediment control measures, including inspection frequency;
 - b) Methods and schedule for grading, excavation, filling, clearing of vegetation, and storage and disposal of excavated or cleared material;
 - c) Specifications for vegetative cover and mulch, including methods and schedules for planting and fertilization;
 - d) Provisions for temporary and/or permanent irrigation.

E. CONSTRUCTION BMPs. *Project plans must incorporate all of the following BMPs as project notes. Additionally, project plan set must include SMCWPPP's Construction BMP page, available for download at [\(enter municipality website address\)](#).*

1. Store, handle, and dispose of construction materials and wastes properly, so as to prevent their contact with stormwater.
2. Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, and non-stormwater discharges to storm drains and watercourses.
3. Use sediment controls or filtration to remove sediment when dewatering site and obtain all necessary permits.
4. Avoid cleaning, fueling, or maintaining vehicles on-site, except in a designated area where washwater is contained and treated.
5. Delineate with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses.
6. Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
7. Perform clearing and earth moving activities only during dry weather.
8. Limit and time applications of pesticides and fertilizers to prevent polluted runoff.
9. Limit construction access routes and stabilize designated access points.
10. Avoid tracking dirt or other materials off-site; clean off-site paved areas and sidewalks using dry sweeping methods.
11. The Contractor shall train and provide instruction to all employees and subcontractors regarding the construction BMPs.

III. CONSTRUCTION PROJECTS THAT DISTURB ≥ 1 ACRE OF AREA — *For all projects with 1 acre or more of disturbed area, applicants must file a Notice of Intent (NOI) with the State Water Resources Control Board to obtain coverage under the State General Construction Activity NPDES Permit, and must prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). Note: Completion of this checklist does not imply certification of the adequacy of the SWPPP by the municipality.*

1. A copy of the project's NOI and SWPPP shall be submitted to the planning, building, or engineering department prior to issuance of a grading or building permit.
2. A copy of the project's NOI and SWPPP shall be kept on-site and make available for review by the municipal inspector upon request.

Continued ⇒

IV. GROUP 1 PROJECTS: PROJECTS THAT ADD AND/OR REPLACE ≥ 1 ACRE OF IMPERVIOUS SURFACE-

- The following requirements apply to projects that add and/or replace 1 acre (43,540 sq. ft.) or more of impervious surface, and are therefore subject to the requirements of Provision C.3 of SMCWPPP's amended NPDES permit. If the project consists of a single-family residence that is not part of a larger plan of development, the project will be considered in compliance with Provision C.3, regardless of amount of impervious surface added and/or replaced, with the incorporation of appropriate pollutant source control and site design measures, and the use of landscaping to appropriately treat runoff from the roof and house-associated impervious surfaces (e.g., runoff from roofs, patios, driveways, sidewalks, and similar surfaces).

- | | |
|--|---|
| <p>1. Incorporate site design measures, as listed in Section II.A above.</p> <p>2. Incorporate all applicable source control measures listed in municipality's Local Source Control Measures List.</p> <p>3. Incorporate pesticide-reduction measures, such as using Integrated Pest Management.</p> <p>4. Enter into an agreement of responsibility and funding for ongoing implementation and maintenance of stormwater treatment control measures, as appropriate for the control measure.</p> <p>5. Treatment control measure design must be consistent with Vector Control Plan requirements.</p> | <p>6. Use of a hydraulically sized, permanent stormwater treatment control, as follows (see http://www.flowstobay.org/pdfs/bmp/Construction%20Series/SMCWPPP_c3_handbook_final.pdf for more information):</p> <p><input type="checkbox"/> A flow-based treatment control hydraulically sized to manage the flow of runoff produced by a rain event equal to at least 0.16 or 0.2, inches per hour; or</p> <p><input type="checkbox"/> A volume-based treatment control hydraulically sized to capture 80 percent or more of the volume of annual runoff, using local rainfall data.</p> <p>More hydraulic sizing information can be found at http://www.cabmphandbooks.com/Documents/Development/Section_5.pdf.</p> |
|--|---|

V. HYDROMODIFICATION MANAGEMENT – *In addition to the requirements under Section IV, the following requirement applies to applicable** Group 1 projects located in areas subject to hydromodification management. See figure 3-1 of SMCWPPP's Hydromodification Management Plan for exempted and non-exempted areas (generally, lands east of Alameda de las Pulgas are exempt and lands west are subject to hydromodification management requirements). The HMP is available at http://www.flowstobay.org/pdfs/bmp/Construction%20Series/SMCWPPP_c3_handbook_final.pdf.*

1. Use a flow duration stormwater control measure designed such that post-project stormwater discharge rates and durations match pre-project discharge rates and durations. For sizing information, please consult the HMP. (In the future, include reference to Bay Area Hydrology Model (BAHM) download information.)

**The following types of projects are exempt from the requirements for hydromodification management:

- The construction of a single-family residence that is not part of a larger plan of development.
- A redevelopment project that does not increase the amount of impervious surface and the time of concentration of stormwater runoff.
- A transit type of development within ¼ to ½ mile of a transit station and/or intermodal facility.
- A project within a "Redevelopment Project Area" that redevelops an existing brownfield site or creates housing units affordable to persons of low or moderate income.

Reviewed by:
Planning: _____ date / /
Engineering: _____ date / /
Building: _____ date / /

Operation & Maintenance Document Templates

Templates are provided to help you prepare documents that municipalities typically require with your stormwater treatment measure maintenance agreement. Microsoft Word files of the templates may be downloaded from the online version of the C.3 Technical Guidance that allows for downloading individual chapters and appendices (go to www.flowstobay.org, click on Business Pollution Prevention, then C.3 Stormwater Technical Guidance). Please insert project-specific information where the templates include prompts such as: [[== insert name of property address ==]]. Remember to contact the local jurisdiction for information on municipality-specific requirements. This appendix includes the following templates:

- **Standard Treatment Measure O&M Report Form** – This form is typically included as an exhibit to the project’s maintenance agreement, which requires this form to be completed and submitted annually to the applicable municipality.
- **Maintenance Plan Templates** – for preparing maintenance plans for the stormwater treatment measures included in your project. Templates are provided for the following types of stormwater treatment measures:
 - Vegetated swales,
 - Vegetated buffer strips,
 - Tree well filters,
 - Non-proprietary media filters,
 - Flow-through planters,
 - Bioretention areas,
 - Infiltration trenches,
 - Extended detention basins, and
 - Manufactured stormwater treatment measures.

In some cases, a treatment measure may be sized to function as both a treatment and hydromodification management (HM) measure, as described in Chapter 7. If your project includes treatment and/or HM measures that are not listed above, but have been approved by the municipality, you may customize one of the maintenance plan templates with information specific to your treatment/HM measure(s). Be sure to attach to your maintenance plan a legible, letter-size (8.5-by-11-inch) site plan showing the location(s) of the treatment/HM measure(s).

SOIL GUIDELINES FOR STORMWATER TREATMENT MEASURES

The New Development Subcommittee of the San Mateo Countywide Clean Water Program (SMCWPPP) is providing these guidelines to its member municipalities for use in non-proprietary, landscaped-based stormwater treatment measures. The purpose of these guidelines is to help project applicants specify soils that will provide suitable growing conditions for appropriate plantings and meet the percolation guidelines identified in Chapter 6 of SMCWPPP's C.3 Stormwater Technical Guidance (March 2007) for the specific types of landscape-based treatment measures proposed in their projects. SMCWPPP's member municipalities are not required to use these guidelines, and the municipalities may modify the guidelines as needed to address local concerns. Before using these guidelines, project applicants should check with the jurisdiction having authority over the project regarding local considerations.

The guidelines refer specifically to treatment measures for which technical guidance is included in the SMCWPPP's C.3 Stormwater Technical Guidance. The guidelines identify planting soils to be used (Section I), guidelines for compost amendments in the planting soils (Section II), and a top dressing layer of mulch (Section III).

I. PLANTING SOILS

Planting soil is to be placed for the purpose of providing a soil for plants to be established in the treatment measure. One of two types of planting soils shall be used: dewatering soils or treatment soils.

Dewatering soils (moderate percolation planting soils, such as sandy loam) shall be used for dewatering of treatment measures such as vegetated swales, vegetated buffer strips and extended detention basins. These treatment measures remove pollutants from runoff by filtering the runoff through both plants and surface features, or holding a volume of water for a duration of time and then releasing runoff to a storm drain system. These treatment measures do not rely on a percolation rate for treatment. Dewatering planting soils percolate runoff that has been trapped in the treatment measure.

Treatment Soils (high percolation planting soils, such as loamy sands) shall be used for filtering of a volume of water in the treatment measures, such as flow-through planters and bioretention areas. These treatment measures shall treat runoff by passing it through the surface layer of high percolation planting soil, then saturating a zone of crushed drain rock and finally in most cases, entering a perforated sub-drain.

A. IMPORTED MATERIAL FOR DEWATERING (SANDY LOAM)

Planting soil material for surface dewatering shall consist of soil (no gravel) with a moderate percolation rate (2 to 10 inches per hour), supplied from previously tested and approved sources, and shall conform to the following guidelines:

1. All material shall be free of trash and debris, expansive clays or any other deleterious materials, and shall be subject to the approval and acceptance of the Authority Having Jurisdiction.
2. The contractor shall designate their proposed import sources in advance and shall provide source samples of material to the jurisdiction having authority.
3. Material shall be free of seeds.
4. The dewatering planting soil material shall have documentation from the supplier showing conformance to the following gradation guidelines:

Screen Information

Percentage

- | | |
|--|----------------------------|
| a. Maximum particle size | 2 millimeters (0.078 inch) |
| b. Percent passing No. 10 screen (2mm) | 100 (coarse sand or finer) |
| c. Percent passing No. 200 screen (0.074mm) | 15 to 50% |
| d. The 15 to 50% percent passing #200 sieve is silt, clay and organics, with a range of silt from 5-35% and a clay content of 5-20%. | |
5. The above screened dewatering planting soil shall have 4 to 6% by dry weight organic compost mixed in (see section II). Final dry weight per unit volume mixed in may be lowered by the jurisdiction having authority for varying plant species in the treatment measure. Native in-situ sandy loam soils can be used, with 4 to 6% by weight of organic compost mixed in, if approved by the jurisdiction having authority. This native soil used must be certified to meet the imported planting soil guidelines. Organic compost shall meet the guidelines stated in Section II – Organic Compost Amendment. The soil shall have a salt concentration less than 500 mg/L. The pH shall be between 5.5 and 7, unless directed otherwise by the jurisdiction having authority.
 6. One test shall be conducted by the supplier per each 500 cubic yards supplied. Testing shall be conducted for the above gradation requirements, salt contents and pH range.
 7. Contractor shall demonstrate the in-situ percolation of each treatment measure for design storm flows through the installed soil to the satisfaction of the Authority Having Jurisdiction. The material shall have an onsite tested percolation rate of 2 to 10 inches per hour. In-field percolation test shall consist of a 1-foot diameter pipe, 2.5 feet long pipe, driven 1.5 feet deep into dewatering soils, as shown in Figure 1 attached. Pipe shall be filled with 1 foot of water after the treatment measure has been wetted. The pipe should empty 1 foot of water above the wetted soil layer in no less than 1 hour and 12 minutes, and no longer than 6 hours. Contractor shall provide records of percolation tests to city inspector.
 8. Standard compaction of a minimum of 85 percent shall be used when placing the mixed material. Complete inundation of the soil shall be used to reach this compaction.
 9. Soil shall be placed in lifts of 8-10 inches.

Note: Lower percolation rate of dewatering soil may be allowed by the local jurisdiction.

B. IMPORTED MATERIAL FOR TREATMENT (LOAMY SAND)

Planting soil material for treatment shall consist of high organics soil (no gravel) with a high percolation rate, supplied from previously tested and approved sources, and shall conform to the following guidelines:

1. All material shall be free of trash and debris, expansive clays or any other deleterious materials, and shall be subject to the approval and acceptance of the Authority Having Jurisdiction.
2. The contractor shall designate their proposed import sources in advance and shall provide source samples of material to the jurisdiction having authority.
3. Material shall be free of seeds.
4. The treatment planting soil shall have documentation from the supplier showing conformance to the following gradation guidelines:

Screen Information

Percentage

- | | |
|---|----------------------------|
| a. Maximum particle size | 2 millimeters (0.078 inch) |
| b. Percent passing No. 10 screen (2mm) | 100 (coarse sand or finer) |
| c. Percent passing No. 200 screen (0.074mm) | 10 to 15% |
- d. The overall dry weight percentages shall be 85-90% sand, less than 5% clay, and less than 5% silt. The range of clay and silt and organics should be 10-15% of total volume.
 5. The treatment planting soil shall have 4 to 6% by dry weight organic compost mixed in. Organic compost percentage may be lowered by the jurisdiction of authority for varying plant species in the treatment measure. Native in-situ loamy sand soils can be used, with 4 to 6% of organic compost mixed in. This mixed soil must be certified to meet the imported planting soil guidelines. Organic compost shall meet the guidelines stated in Section II – Organic Compost Amendment. The soil shall have a salt concentration less than 500 mg/L. The pH shall be between 5.5 and 7, unless directed otherwise by the jurisdiction of authority.
 6. One test shall be conducted by the supplier per each 500 cubic yards supplied. Testing shall be conducted for the above gradation requirements, salt contents and pH range.
 7. Contractor shall demonstrate the in-situ percolation of each treatment measure for design storm flows through the installed soil to the satisfaction of the Authority Having Jurisdiction. The material shall have an onsite tested percolation rate of 5 to 10 inch per hour. In-field percolation test shall consist of a 1-foot diameter pipe, 2.5 feet long pipe, driven 1.5 feet deep into treatment soils. Pipe shall be filled with 1 foot of water after the treatment measure has been wetted. The pipe should empty 1 foot of water above the wetted soil layer in no less than 1 hour and 12 minutes, and no longer than 2

hours and 24 minutes. Contractor shall provide records of percolation tests to city inspector.

8. Soil shall be placed in lifts of 8-10 inches.
9. Standard compaction to a minimum of 85 percent shall be used when placing the mixed material. The method to achieve 85% compaction shall be approved by the local jurisdiction before the soil is placed in the treatment measure.

II. ORGANIC COMPOST AMENDMENT

An organic amendment per Attachment 1 is to be mixed into the planting soil for the purpose of providing organic material to be utilized by plantings placed within the treatment measure. The following guidelines are for amendments used in bioretention areas, flow through planters, vegetated buffer strips, vegetated swales, and extended detention basins only.

A. COMPOST GUIDELINES

Organic compost shall meet the requirements of the Alameda County Bay-Friendly Landscape program. Provide a lab analysis of proposed material performed by either: (1) a certified US Composting Council Compost Analysis Program (CAP) laboratory or (2) a laboratory approved by the local jurisdiction, using approved Test Methods for the Evaluation of Composting and Compost (TMECC). Verifying current participation in CAP can be achieved by visiting www.compostingcouncil.org. The TMECC methods are explained at www.tmecc.org/tmecc. Check with local jurisdiction for a list of approved laboratories.

See the attached Friendly Landscaping (BFL) Soil Preparation Specifications, Part 2.1.B.1, Section 02920: Soil Preparation for approved testing ranges of attributes for compost amendments.

Organic content may be lowered by the jurisdiction having authority for varying plant species in the treatment measure. This mixed soil must be certified by the laboratory to meet the imported planting soil guidelines.

III. TOP DRESSING MULCH

A three-inch thick layer of top dressing mulch shall be placed in all designated planting areas for the purpose of retaining moisture, preventing erosion and minimizing weed growth. Keep top dressing six inches away from tree trunks for tree health except where approved by the jurisdiction having authority. The following guidelines are for top dressing soils used in bioretention areas, flow through planters, vegetated buffer strips, vegetated swales, and extended detention basins only.

A. MULCH GUIDELINES

Any of the following materials may be used as top dressing for any of the treatment measures listed above, subject to the jurisdiction of authority's approval. Options for top dressing material include:

Arbor Mulch: Arbor Mulch shall be wood waste from tree trimming and not contain eucalyptus. Local tree companies may have material available free of charge. Submit a minimum one-quart sample of proposed material to be used, to jurisdiction with authority.

Wood Chip Mulch: Wood Chip Mulch shall be a coarse wood mulch made from salvaged kiln dried lumber and be color enhanced with mineral pigments that have a demonstrated color longevity of one year. Mulch material shall pass a two inch screen.

Organic Compost: Organic Compost may be used as mulch as determined by the jurisdiction having authority. Organic compost shall meet the guidelines stated above in Section II – Organic Compost Amendment.

The following are guidelines for the above dressing materials:

1. The top dressing soil material shall not float when three inches or more of water has ponded in the treatment measure.
2. Natural compaction is adequate for top dressing layer soil.
3. The 3 inches of top dressing mulch shall be placed in a single lift.

IV. SOURCES/ACKNOWLEDGEMENTS

SMCWPPP gratefully acknowledges the Alameda Countywide Clean Water Program (ACCWP), for its preparation of Soil Specifications for Stormwater Treatment Measures, which formed the basis for these soil guidelines; and Stopwaste.org, for its preparation of the Bay-Friendly Landscaping Soil Preparation Specifications, included as Attachment 1.

V. DEFINITIONS

1. Lift – Depth of soil placed before compaction is necessary
2. Expansive clay soils – are in-situ clay soils. These soils must be amended to be used in the treatment measures.
3. Stormwater treatment measure – Any engineered system designed to remove pollutants from stormwater by simple gravity settling of particle pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process. Sometimes called a treatment control, treatment control measure, treatment best management practice (BMP), or treatment facility.
4. Wetted soil – soil that has been irrigated until the water has penetrated soil to a minimum of 4 inches.

Attachment 1**BFL Soil Preparation Specifications Part 2.1.B.1****Section 02920: Soil Preparation****1. Organic Amendment**

Compost shall be a well decomposed, stable, weed free organic matter source. The product shall be certified through the US Composting Council's (USCC) Seal of Testing Assurance Program (STA) Program (a compost testing and information disclosure program). It shall be derived from agricultural or food waste or yard trimmings. The product shall contain no substances toxic to plants, shall possess no objectionable odors and shall not resemble the feedstock (the original materials from which it was derived).

Before delivery of the compost, the supplier shall submit a copy of lab analysis performed by a laboratory that is enrolled in the US Composting Council's CAP and using the approved Test Methods for the Evaluation of Composting and Compost (TMECC). The lab report shall verify:

- A. Feedstock Materials shall be specified and include one or more of the following:
landscape/yard trimmings, grass clippings, food scraps, and agricultural crop residues.
- B. Organic Matter Content: 50% - 60% by dry wt. preferred, 35-70% acceptable
- C. Carbon and Nitrogen Ratio: C:N < 25:1 plus at least one measure of stability and at least one measure of toxicity.
- D. Maturity/Stability: shall have a dark brown color and a soil-like odor. Compost exhibiting a sour or putrid smell, containing recognizable grass or leaves, or is hot (120F) upon delivery or rewetting is not acceptable. In addition any one of the following is required to indicate stability
 - a. Oxygen Test < 1.3 O_2 / unit TS / hr
 - b. Specific oxy. Test < 1.5 O_2 / unit BVS / hr
 - c. Respiration test < 8 C / unit VS / day
 - d. Dewar test < 20 Temp. rise ($^{\circ}C$)
 - e. Solvita® > 5 Index value
- E. Toxicity: any one of the following measures is sufficient to indicate non-toxicity.
 - a. NH_4^+ : NO_3-N < 3
 - b. Ammonium < 500 ppm, dry basis
 - c. Seed Germination > 80 % of control
 - d. Plant Trials > 80% of control
 - e. Solvita® > 5 Index value
- F. Nutrient Content: provide analysis detailing nutrient content including N-P-K, Ca, Na, Mg, S, and B.
 - a. Total Nitrogen content 0.9% or above preferred.
 - b. Boron: Total shall be <80 ppm; Soluble shall be <2.5 ppm
- G. Salinity: Must be reported; may vary but < 4.0 mmhos/cm preferred. Soil should also be tested: <2.5 mmhos/cm is preferred for soil/compost blend but may vary with plant species.
- H. pH: pH shall be between 6.5 and 8. May vary with plant species.

- I. Particle size: 95% passing a 1/2" screen.
 - J. Bulk density: shall be between 500 and 1100 dry lbs/cubic yard
 - K. Moisture Content shall be between 35% - 55% of dry solids.
 - L. Inerts: compost shall be relatively free of inert ingredients, including glass, plastic and paper, < 0.1 % by weight or volume.
 - M. Weed seed/pathogen destruction: provide proof of process to further reduce pathogens (PFRP). For example, turned windrows must reach min. 55C for 15 days with at least 5 turnings during that period.
 - N. Select Pathogens: Salmonella <3 MPN/4grams of TS, or Coliform Bacteria <10000 MPN/gram.
 - O. Trace Contaminants Metals (Lead, Mercury, Etc.) Product must meet US EPA, 40 CFR 503 regulations.
2. Additional amendments and/or fertilizers as required in the soils report.
- a. Additional amendments and fertilizers that are approved for use by the Organics Materials Research Institute (OMRI) for use in crop production are approved for use. See www.omri.org. Fertilizers that are not approved or are restricted for use by OMRI shall be applied only after review and written approval by the Owner.

Notes:

- 1) Solvita is a registered trademark test. Please see <http://solvita.com/>
- 2) TS is Total Solids, BVS is Biological Volatile Solids, VS is Volatile Solids, MPN/gram is Most Probable Number per gram, ppm is parts per million.

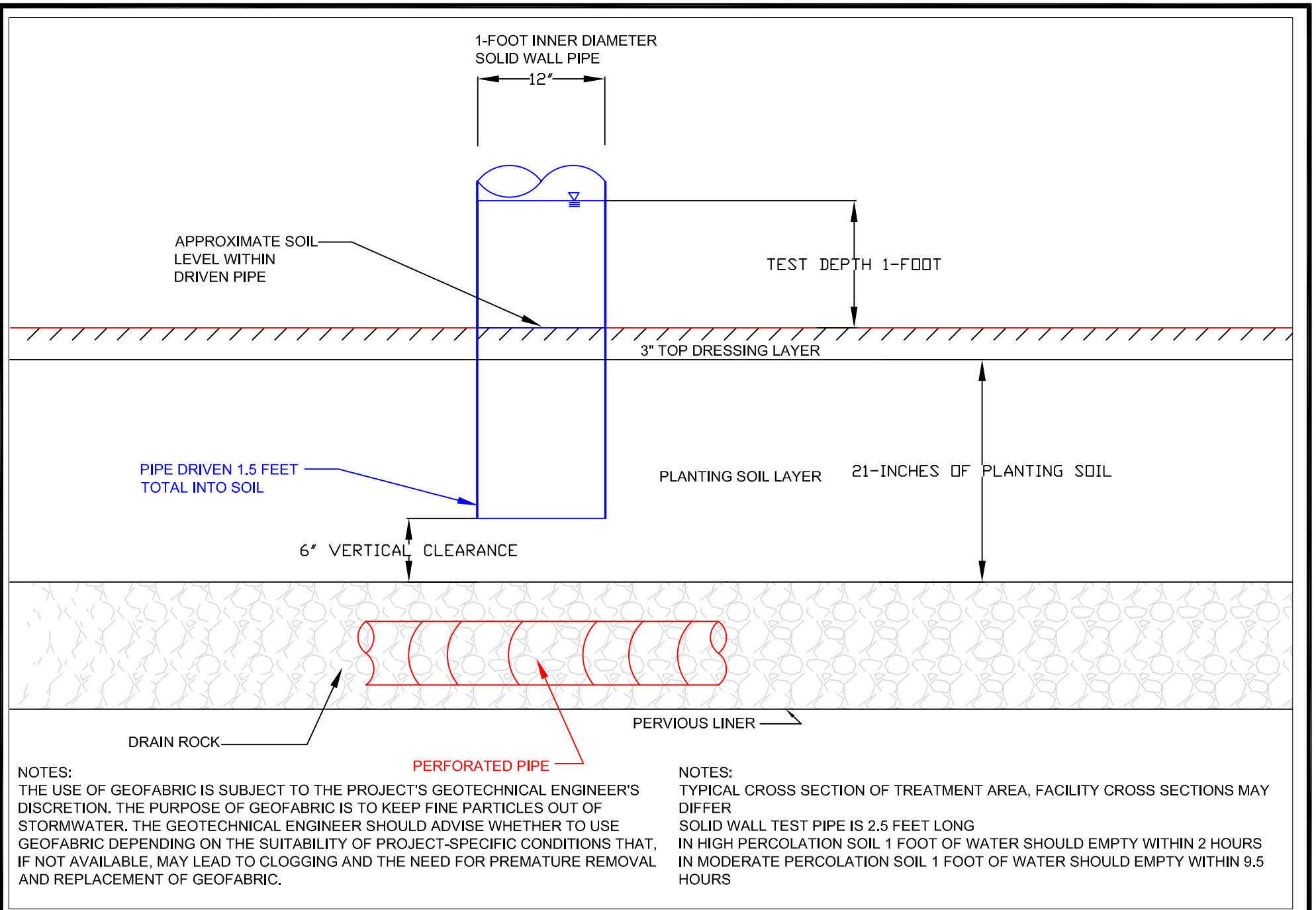


FIGURE 1
PERCOLATION TEST SETUP

Source: ACCWP

New Development Subcommittee Report

Date: April 1, 2008

In lieu of its regular meeting, the Subcommittee took a field trip to view stormwater treatment measures at two recent projects in San Francisco: Sunset Circle Parking Lot, and Old Mint Plaza.

Sunset Circle Parking Lot

Rosey Jenks, of the San Francisco Public Utilities Commission staff, and Koa Pickering, of the San Francisco Department of Public Works, gave presentations at this site. The Sunset Circle Parking Lot is a 3.5-acre surface parking area at the intersection of Sunset Boulevard and Lake Merced Boulevard, along the east shore of Lake Merced, San Francisco's largest natural surface water body, which San Francisco's Natural Areas Program has deemed an area of significant habitat. This area is not connected to San Francisco's combined stormwater/wastewater sewer system. Before the project, runoff from the parking lot discharged directly to Lake Merced with no treatment.

There was no requirement to install stormwater treatment measures at this site; however, San Francisco has begun to prioritize low impact development (LID) techniques to reduce impacts of developed areas on water resources. This site was selected based on its direct discharge to Lake Merced, gentle slopes that are conducive to vegetated swales, available funding, and an opportunity to combine the LID improvements with San Francisco's planned relocation of a statue to the parking lot. LID features include vegetated swales that also function as parking islands, and a landscaped infiltration basin that features the relocated statue of Juan Bautista de Anza. Landscaping consists of native and drought-tolerant plants, which will require little or no irrigation once they are established. Treatment measures were sized for a 25-year storm; higher flows discharge to Lake Merced without treatment. High percolation rates of the native soil and a relatively low water table contributed to the feasibility of the infiltration basin. An interpretive sign explains the site's LID features and the benefits of LID.

Old Mint Plaza

Ken Kortkamp, of Sherwood Design Engineers, gave the presentation at this site. The Old Mint Plaza was formerly a block of Jessie Street, adjacent to San Francisco's Old Mint Building, between Fifth Street and Mint Street. This is a transitional area between the upscale Westfield Mall (just east of the plaza) and a rough, economically depressed area west of the plaza. The plaza project was undertaken by a public-private partnership between the City and adjacent landowners, funded, in part, by a grant from San Francisco's Public Utilities Commission, and through tax mechanisms allowed by the State's Mello-Roos Act. The adjacent landowners viewed their investment in constructing and maintaining the plaza as a means of improving their property values.

Low impact development features at this site include pervious pavers, bioretention areas, and a subsurface infiltration gallery. Some runoff is directed to relatively small bioretention areas, which contain drought-tolerant plantings. Most of the runoff enters the subsurface infiltration gallery by way of a ½-inch-wide grate that runs down much of the length of the plaza, and some water seeps in between the unsealed pavers. The extremely narrow grate blends unobtrusively into the visual design of the pavers. Frequent, attentive maintenance prevents the grate from becoming clogged with trash and debris. Stormwater from frequent small storms is handled by the bioretention areas and infiltration gallery. A high-flow bypass directs stormwater from larger storms to the combined wastewater/stormwater sewer main in Fifth Street.

Dates of Next Meetings: New Development Workshop on May 8. Next regular meeting on June 3.



Infiltration Basin at Sunset Circle Parking Lot



Vegetated swale at Sunset Circle Parking Lot



Mint Plaza: 1/2-inch slot drain (center); bioretention area (far end of plaza)



2008 New Development Workshop
Implementing Permanent Stormwater Controls

Green Building Exchange
305 Main Street, Redwood City
Thursday, May 8, 2008

Agenda

Registration and Refreshments	8:00 – 8:30
Welcoming Remarks Matt Fabry, <i>San Mateo Countywide Water Pollution Prevention Program</i>	8:30 – 8:45
Water Board Staff's Perspective on Implementing Permanent Stormwater Controls Habte Kifle, <i>San Francisco Bay Regional Water Quality Control Board</i>	8:45 – 9:00
Overview of the Countywide C.3 Stormwater Technical Guidance Laura Prickett, <i>EOA, Inc.</i>	9:00 – 9:30
Using Site Designs and Low Impact Development to Protect Water Quality Ken Kortkamp, <i>Sherwood Design Engineers</i>	9:30 – 10:15
BREAK	10:15 – 10:30
Implementing Stormwater Treatment Measures Ed Boscacci, <i>BKF Engineers</i>	10:30 – 11:15
Implementing Hydromodification Management Requirements Arleen Feng, <i>Alameda Countywide Clean Water Program</i>	11:15 – 12:00
LUNCH (provided on-site) <i>During lunch an informal computer demonstration of Bay Area Hydrology Model is available</i>	12:00 – 1:00
Planting Guidance for Landscape-Based Stormwater Treatment Measures Sarah Sutton, <i>Design, Community and Environment</i>	1:00 – 1:45

Case Study: Implementing Permanent Stormwater Controls at Genentech's South San Francisco Campus	1:45 – 2:30
Paul Matuszewski, <i>Genentech, Inc.</i> Mark Emerson, <i>Genentech, Inc.</i> Jeff Peterson, <i>Wilsey Ham</i> Jon Kawamoto, <i>Genentech, Inc.</i>	
BREAK	2:30 – 2:40
Operation and Maintenance Requirements and Case Study	2:40 – 3:25
Christina Hovland, <i>EOA, Inc.</i> Jon Lynch, <i>City of Redwood City</i>	
Closing Remarks	3:25 – 3:30
Matt Fabry, <i>San Mateo Countywide Water Pollution Prevention Program</i>	
Adjourn	3:30

San Mateo Countywide Water Pollution Prevention Program
2008 New Development Workshop
Sign-In Sheet

Last Name	First Name	Agency	Sign-In	Guidance? (1=Yes, 0 = No)
Boscacci	Ed	BKF	X	1
Chan	Catherine	Town of Hillsborough	X	1
Chen	Jen	Town of Hillsborough	X	2
Chen	Tzuhui	City of East Palo Alto	X	0
Chuck	Dennis	City of South San Francisco	X	1
Corpus	Dalia	City of Belmont	X	1
Dahu	Nader	City of San Bruno	X	1
Diaz	Lee	City of Pacifica	X	1
Ebo	Florian	City of Millbrae	X	1
Emerson	Mark	Genentech	X	1
Etchebehere	Gratien	Town of Woodside	X	1
Fabry	Matt	City of Brisbane	X	0
Farbstein	Kathryn	City of Pacifica	X	1
Feng	Arleen	Alameda County	X	1
Feske	Matthew	Foster City, Community Dev.	X	1
Fulford	Daniel	City of South San Francisco	X	1
Gomery	Jane	City of Burlingame	X	1
Hathaway	Mark	City of San Mateo	X	1
Hirsch	Rick	City of Millbrae	X	1
Horrisberger	Christina	City of Pacifica	X	1
Hovland	Christina	EOA, Inc.	X	
Hurin	Ruben	City of Burlingame	X	1
Justimbaste	Eva	City of Burlingame	X	0
Kawamoto	Jon	Genentech	X	1
Kholafat	Ayad	City of Pacifica	X	1
Kifle	Habte	Water Board	X	1
Kim	Eunegune	Town of Woodside	X	1
Kortkamp	Ken	Sherwood Engineers	X	1
Lambert	Leslie	Town of Portola Valley	X	1
Latu	John	City of East Palo Alto	X	1
Lim	Lily	City of Pacifica	X	1
Lo	Jason	City of Pacifica	X	1
Lu	Quan	EOA, Inc.	X	
Lustenberger	Craig	City of South San Francisco	X	1
Lynch	Jon	Redwood City	X	1
Mallison	Deborah	Town of Woodside	X	1
Mandola	Frank	City of South San Francisco	X	1
Mao	Shaun	City of Menlo Park	X	1

**San Mateo Countywide Water Pollution Prevention Program
New Development Workshop, May 8, 2008**

Summary of Workshop Evaluations

Total Number of Evaluations: 26 (67% Response) Total Number of Attendees: 39¹

I. Water Board Staff's Perspective on Implementing Permanent Stormwater Controls

Habte Kifle, *San Francisco Bay Regional Water Quality Control Board*

1-Very Useful 20-Useful 5-Not Useful 0-No Answer

Should define technical terms or measures referenced in presentation for staff not familiar.

Good to hear the regulating angle – hard to understand speaker.

II. Overview of the Countywide C.3 Stormwater Technical Guidance

Laura Prickett, *EOA, Inc.*

20-Very Useful 7-Useful 0-Not Useful 0-No Answer

Great presentation and tips on what not to forget during process. Going through manual was helpful. Thank you!
Great speaker (animated) and great info!

III. Using Site Designs and Low Impact Development to Protect Water Quality

Ken Kortkamp, *Sherwood Design Engineers*

16-Very Useful 8-Useful 1-Not Useful 0-No Answer

Loved seeing examples of successful projects: local & out of state. Great presentation!

Very good presentation!

IV. Implementing Stormwater Treatment Measures

Ed Boscacci, *BKF Engineers*

12-Very Useful 14-Useful 0-Not Useful 0-No Answer

Lots of info but great explanations and tips for successful veg. buffers, swales, etc.

¹ Does not include workshop speakers and staff.

V. Implementing Hydromodification Management Requirements

Arleen Feng, *Alameda Countywide Clean Water Program*

12-Very Useful 13-Useful 1-Not useful 0-No Answer

Explained HMP very well & gave great examples.

VI. Planting Guidance for Landscape-Based Stormwater Treatment Measures

Sarah Sutton, Design, Community and Environment

20-Very Useful 6-Useful 0-Not useful 0-No Answer

Presentation brought a great balance to the technical info.
Good speaker. I enjoy her enthusiasm.

VII. Case Study: Implementing Permanent Stormwater Controls at Genentech's South San Francisco Campus

Paul Matuszewski, *Genentech, Inc.*; Mark Emerson, *Genentech, Inc.*;
Jeff Peterson, *Wilsey Ham*; and Jon Kawamoto, *Genentech, Inc.*

7-Very Useful 15-Useful 2-Not useful 0-No Answer

Nice to see large local example that I can visit.

VIII. Operation and Maintenance Requirements and Case Study

Christina Hovland, *EOA, Inc.*, and Jon Lynch, *City of Redwood City*

13-Very Useful 8-Useful 1-Not useful 0-No Answer

1st Overview I have seen on O & M = very helpful.

1. Which Topics were most beneficial?

Planting Guidance (VI): 8
Treatment Measures (IV): 7
Technical Guidance Overview (II): 6
Site Design and LID (III): 3
Operation & Maintenance (VIII): 2
Hydromodification Management (V): 2
C.3 Binder: 2
All: 1
Discussion of why we need this: 1

2. **Which Topics were the least beneficial?**

Water Board Staff Perspective (I) – 4

Case Study (VII) – 3

Hydromodification Management: (V) – 2

Operation and Maintenance (VIII) – 1

The regulating aspect in first presentation was very negative. The beginning Genentech presentation talked about Genentech way too much!

3. **Would you be interested in attending another workshop on construction site management?**

Yes: 12

Sure, especially when/if new permit is adopted. MRP – Yikes!

4. **Suggestion for future topics?**

Examples for cost effective designs.

Field visits.

New MRP requirements for New Development.

Make sure presentations are viewable from the rear of the room.

More examples of treatment measures. Maybe one from each city in the County of San Mateo.

Detail for project submittal to employ C3.

Great workshop. Well organized! Appreciated the handouts in advance so I could add notes to the specific presentation, for my future reference. Good Job!

Green roofs (local area) – experience, maintenance, dos & don'ts.

Additional information on “New technologies” such as green roofs – options not often seen here. Also, please expand on the planting guidance. This was very helpful.

Commercial & manufacturing facilities and how C3 & MRP requirements are implemented & maintained.

5. **Comments?**

Keep the seminars coming.

Need discussion on why we need this. I'm a consultant and I need to increase my fees to account for C3. More Kent Kortcamp type of examples would be nice.

Overall, useful.

It is great being informed of local projects that have successfully implemented these measures.

Glad you had food for breakfast, breaks & lunch!

Thanks!

Too bad more people don't attend!

Great job!

Good mix of private/public topics. Set out cold cuts, no need for paper bags and such waste for the green building.

Too much info about Genentech as a company.

End of Evaluations



Construction Site Compliance Workshop for Local Government Inspectors October 31, 2007 Green Building Exchange

- 8:00 AM Registration and Continental Breakfast**
- 8:30 Welcome and Introduction**
Matt Fabry, Program Coordinator, San Mateo Countywide Water Pollution Prevention Program
- 8:40 Overview and Compliance with State Regulations, Update on Pending Regulatory Changes, including Municipal Regional Permit**
Cecil Felix and Keith Lichten, San Francisco Regional Water Quality Control Board
- 9:25 Compliance with State Construction Site Regulations: SWPPPs, NOIs, COIs, NOTs & other acronyms**
Scott Taylor, RBF Consulting
- 10:10 BREAK**
- 10:25 Issues in the Field: Effective Sediment Control; Housekeeping, Sampling, Groundwater, Existing Improvements**
Scott Taylor, RBF Consulting
- 12:00 PM Lunch (To be provided) & Vendor Exhibition**
- 12:15 Videos “Hold Onto Your Dirt” and “Keep It Clean” (shown during lunch)**
- 1:00 Question & Answer**
- 1:15 Test Your Knowledge**
- 1:45 Demonstration Site Visit (Attendees provide own transportation – please carpool! Directions in workshop folder)**
- 3:00 Adjourn**

**Construction Site Compliance Workshop for
Local Government Inspectors**

October 31, 2007

Summary of Workshop Evaluations

Total Number of Evaluations: 27 (81% Response) Total Number of Attendees: 33*

I. Welcome and Introduction –

Matt Fabry, SMCWPPP Coordinator

15-Very Useful 11-Useful 1-Not Useful 0-No Answer

**II. Overview and Compliance with State Regulations, Update on
Pending Regulatory Changes, including Municipal Regional Permit –**
Cecil Felix and Keith Lichten San Francisco Bay Regional Water Quality
Control Board

15-Very Useful 12-Useful 0-Not Useful 0-No Answer

**III. Compliance with State Construction Site Regulations: SWPPPs,
NOIs, COIs, NOTs and Other Acronyms –**
Scott Taylor, RBF Consulting

21-Very Useful 6-Useful 0-Not Useful 0-No Answer

**IV. Issues in the Field: Effective Sediment Control; Housekeeping,
Sampling, Groundwater, Existing Improvements –**
Scott Taylor, RBF Consulting

21-Very Useful 5-Useful 1-Not Useful 0-No Answer

V. Videos: “Hold Onto Your Dirt” and “Keep it Clean” –

8-Very Useful 12-Useful 2-Not Useful 5-No Answer

VI. Vendor Exhibition –

6-Very Useful 16-Useful 4-Not useful 1-No Answer

VII. Question and Answer –

8-Very Useful 12-Useful 4-Not useful 3-No Answer

*** Does not include vendors, speakers and staff**

**Construction Site Compliance Workshop for
Local Government Inspectors**

October 31, 2007

VIII. Test Your Knowledge –

10-Very Useful 13-Useful 2-Not useful 2-No Answer

IX. Demonstration Site Visit –

10-Very Useful 5-Useful 1-Not useful 11-No Answer

1. Which Topics were most beneficial?

No Answer (17)
All were beneficial (5)
Current regulations (2)
Site Visits (2)
“Bio-retention”
“Issues in the field”
“Demos and Pictures”

2. Which Topics were the least beneficial?

No Answer (20)
“None” (4)
Videos
Slides
“Info on specific fabrics/vendors. etc.”

3. Would you be interested in attending another workshop on construction site management?

No Answer (13)
Yes (14)

4. Suggestion for future topics?

No Answer (21)
None (3)
“MRP”
“More useful printouts for public”
“Include BAHM, show use of modeling for all BMP’s and major developments and small developments in or within close proximity to endangered species habitat, wetlands, watersheds, creeks and streams.”

Construction Site Compliance Workshop for Local Government Inspectors

October 31, 2007

5. Comments?

No Answer (20)

“Good presentations, informative”

“Thank you, reminder was helpful”

“Good Job SMCWPP”

“Matt you were awesome!!!”

“More sample pictures are good and useful”

“Very informative, looking forward to next year’s session”

“Glad the handbooks aren’t provided every year. I’d rather bring a lunch and have better coffee in the morning...I think it would help if scenarios (recent scenarios) were discussed. Perhaps ask participants to bring scenarios with pictures if possible to discuss. Rain-4-Rent is great, but I’d like to see other vendors/methods do demonstrations. I think the venue last year was better. There were a lot of interruptions, noise, distractions during the presentations, sort of inconsiderate to the speakers and audience.”

End of Evaluations

APPENDIX E: TABLE OF CONTENTS

Watershed Assessment and Monitoring Subcommittee FY 2007/08 Attendance.

Unified Stream Assessment in Seven Watersheds in San Mateo County, California, August 2008 (cover page and summary).

The Unified Stream Assessment: Potential Uses for Stormwater Programs, San Francisco Bay Area Examples, July 2008 (cover page and summary).

FY 2007/08 Trash Assessments in Urban Creeks in San Mateo County, California, August 2008.

Review of San Francisquito Creek Sediment TMDL and Habitat Enhancement Plan Preliminary Project Report, August 2008.

SMCWPPP Watershed Assessment and Monitoring Subcommittee Attendance - FY 2007/08

Agency	Representative	AUG	NOV	FEB	JUN*
Atherton					
Belmont	Rosemary Field	√		√	
	Karen Borrmann		√		
	Gilbert Yau				√
Brisbane	Matt Fabry (SMCWPPP Coordinator)	√	√	√	√
Burlingame	Eva Justimbaste	√	√	√	√
Colma					
Daly City	Cynthia Royer	√	√		
East Palo Alto					
Foster City					
Half Moon Bay					
Hillsborough					
Menlo Park					
Millbrae					
Pacifica	Elizabeth Claycomb		√		
	Christina Horrisberger	√			
Portola Valley					
Redwood City					
San Bruno	Jim Shannon				√
San Carlos					
San Mateo (city)	Kacey Karmendy	√	√		
	Vern Bessey				√
	Rob Lecel				√
	Alan Atwater				√
SSF	Frank Mandola (Chair)	√	√	√	√
Woodside					
San Mateo County	Dermot Casey	√	√	√	√
	Mark Chow			√	
	Ana Clayton				√
EOA	Jon Konnan	√	√	√	√
	Paul Randall		√		√
Urban Creeks Council	Josh Bradt		√		
	Kristen Quay		√		

*Annual field trip.

Unified Stream Assessment in Seven Watersheds in San Mateo County, California



SAN MATEO COUNTYWIDE
**Water Pollution
Prevention Program**

Clean Water. Healthy Community.

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

August 2008

SUMMARY

Introduction

During fall 2007, the San Mateo Countywide Water Pollution Prevention Program (the Program) performed creek walks in seven watersheds in San Mateo County – the Atherton, Redwood, Burlingame, Sanchez, Easton, Mills, and Millbrae Creek watersheds. The primary objective was to characterize physical conditions and features of creek channels and riparian corridors as part of the Program's screening-level water quality monitoring activities.

Methods

The creek walks were conducted using the Unified Stream Assessment (USA) protocol developed by the Center for Watershed Protection. The USA is a rapid assessment tool used to collect data on instream and riparian habitat conditions and identify possible influencing factors and opportunities for improvement. Each study creek was delineated into reaches. Each reach represented a relatively uniform set of conditions within the creek corridor. Factors that contributed to delineating a reach included land use in the immediate vicinity, elevation, creek order, access, and total length. The study reaches were typically less than one mile long, began and ended at major creek crossings or grade changes, and reflected the general condition of the area adjacent to the creek. Tributaries were generally considered separate reaches. Creek sections were not assessed if inaccessible (e.g., due to culverts or dense vegetation) or if little apparent urban influence was present.

A single overall assessment was conducted for each reach. This reach level assessment qualitatively evaluated characteristics such as base flow, dominant substrate, water clarity, biota, shading, and active channel dynamics. Each reach was ranked for overall stream condition and overall buffer and floodplain condition based on eight subcategories: in-stream habitat, vegetative protection, bank erosion, floodplain connection, vegetated buffer width, floodplain vegetation, floodplain habitat, and floodplain encroachment. Each subcategory was given a score on a 20-point scale (in general, a score of zero to 5 is designated as poor condition, 6 to 10 is marginal, 11 to 15 is suboptimal and 16 to 20 is optimal). The subcategory scores were summed to give a total reach score ranging from zero to 160.

The USA protocol was also used to identify eight potential creek impacts: channel modification, erosion, utilities, outfalls, creek crossings, trash/debris, recreation sites, and miscellaneous features. The location, extent and general characteristics of each impact were documented.

Findings

Reach Level Assessment

In the larger study watersheds (i.e., Atherton and Redwood Creek), overall creek condition scores generally increased in the upstream direction with decreasing urbanization. The scores were largely driven by improved instream habitat and increased buffer widths and floodplain connection in the upper parts of the larger watersheds. In the smaller study watersheds (i.e., Burlingame, Sanchez, Easton and Mills Creek), overall creek condition was generally marginal or suboptimal in all reaches due to extensive urbanization throughout the watershed. Impacts were typically associated with low buffer widths (e.g., homes constructed very close to the creek) or highly impacted riparian corridor due to culverting beneath roads and driveways and extensive channel armoring, often to protect the backyards of residential properties.

Channel Modification

Construction of bank revetments along homes and yards was the most common type of channel modification observed. Culverted sections of creek, typically below roads or driveways, were also common. Some of the channel modifications identified appeared to be failing and/or causing erosion. Older revetments were especially vulnerable to scour and undercutting by increased peak flows associated with urbanization.

Erosion

The majority of erosion observed was in the form of bank scour, especially at meander bends and revetments. Bank failure was also common, especially the failure of steep banks within highly incised channels. Channel incision in the study watersheds generally appeared to be associated with historical land use changes and may no longer be active (i.e., the watersheds have likely been developed for a long enough period of time for the channel to have adjusted to change in the hydrograph and reached a new equilibrium). The channel bed in many of the reaches appeared to be clay, which is relatively resistant to erosion. In some cases grade control structures appeared to further stabilize the channel bed.

Utilities

In most cases, utilities in the study watersheds did not appear to have much impact on the creeks. The majority of utilities observed consisted of small pipes crossing over the creek high above the channel bed without any apparent impact on the creek. In some cases, utilities were located near the channel bed and were associated with bank erosion, apparently during high flow events. In areas that had major utilities such as a San Francisco Public Utilities Commission water supply pipeline, grade control structures and bank armoring had often been constructed to protect the facility.

Outfalls

The assessments were carried out during the dry season and few dry weather flows were observed. Only a small fraction of the outfalls with discharge showed any indications of illicit discharge (e.g., discoloration, odor). All suspicious discharges were reported to a municipal illicit discharge coordinator. Some outfall pipes were associated with erosion, either immediately downstream from the outfall or head cuts perpendicular to the creek.

Creek Crossings

The most common type of creek crossing observed was road crossings. Other types of crossings identified include houses, yards and driveways. In addition to habitat alteration impacts, creek crossings can potentially impact upstream passage for fish. The study watersheds are not expected to support anadromous fish (e.g., steelhead); however, native warm water fish, primarily stickleback, were observed in several reaches. These fish need to migrate to search for spawning habitat and refuge during summer low flow conditions. Conversely, creek crossings can be beneficial by serving as grade controls. When the bottoms of creek crossings are hardened, creek bed erosion may be prevented from migrating upstream.

Trash/Debris

Trash is deposited in creeks through several possible means including illegal dumping and/or littering at the site, windborne transport from adjacent land uses, and waterborne transport from upstream sources. Littering and illegal dumping are typically problematic when urban creeks are adjacent to areas that receive high vehicle and/or foot traffic (e.g., shopping centers) or locations with good public access (e.g., parks and schools). The study area was predominately comprised of residential land uses west of major transportation corridors, such as El Camino Real or Alameda de las Pulgas. As a result, littering or dumping in creeks occurred in only a limited number of locations.

Trash impacts in the study area were often associated with the dumping of yard waste into creek channels behind residential properties. Impacted sites also included areas where trash accumulated due to obstructions in the channel, such as dense vegetation or utilities. Other impacted sites occurred where creeks passed through parks or vacant lands that were in close proximity to schools. SMCWPPP (2008a) describes the application of an additional protocol, the Urban Rapid Trash Assessment (URTA), which was used to further characterize selected locations in the study watersheds with relatively high levels of trash.

Recreation

Evidence of recreation in the study watersheds was limited to two sites located within one creek reach in a public park (Stulsaft Park in Redwood City). Both of these sites had rope swings over the creek with excellent public access. However, the potential for

water contact recreation appeared limited at the time of the assessment due to low flow conditions and the lack of deep-water pools.

Potential Uses of USA Data

Data generated through USA surveys can address multiple stormwater program monitoring-related objectives. USA survey uses include establishing baseline data, identifying the types and locations of potential impacts to water quality, identifying potential beneficial uses to protect and threats to such uses, and refining monitoring program objectives and design. USA survey data can assist stormwater programs to better understand creek conditions and threats to water quality upstream and downstream of existing monitoring sites, thereby assisting in the interpretation of existing monitoring data and the identification of appropriate stormwater BMPs and potential restoration activities. The Program, in collaboration with the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), recently prepared a guidance document for municipal stormwater programs and other interested agencies on the potential uses of the USA based on recent experience in the Bay Area (SCVURPPP and SMCWPPP 2008).

Many of the impacts observed during the Program's USA surveys are associated with efforts by individual private property owners to control bank instability on their properties. Education and outreach could help landowners understand the impacts of such actions on creeks and potentially lead to the use of better practices in the future. The Program is currently exploring developing an outreach and support program similar to the Urban Creeks Council's Stream Management Program for Landowners (SMPL). This program is funded by the Contra Costa Clean Water Program and provides free advice about creek care to Contra Costa County property owners. The data from the Program's USA surveys could assist San Mateo County property owners to target and optimize creek management and restoration efforts initiated through this type of creek management program. However, a funding source to implement a program similar to SMPL in San Mateo County has not been identified. SMCWPPP (2008b) has prepared a memo that further discusses the SMPL program and the potential development of a creek management program in San Mateo County.

The Unified Stream Assessment: Potential Uses for Stormwater Programs

San Francisco Bay Area Examples



Prepared for:



Prepared by:



1410 Jackson St.
Oakland, CA 94612

May 2008

Summary

The USA protocol is a relatively rapid and inexpensive tool that has been used successfully in the San Francisco Bay area to meet a wide range of monitoring program objectives, including guiding the development of monitoring plans; assisting in the interpretation of existing physical, chemical, and biological monitoring data; identifying potential water quality impacts and relevant BMPs; and identifying potential rehabilitation and restoration sites. In future years, Phase I municipal stormwater programs in the Bay Area will likely be required to conduct stream surveys using the USA or an equivalent method. Once a program's monitoring objectives have been established, the USA protocol can be tailored to efficiently meet the type and level of data collection required to achieve those objectives. The flexibility inherent in this assessment tool, together with its relatively low cost for the diversity and depth of information it can provide, makes it a valuable component of stormwater program toolkits.

**FY 2007/08
TRASH ASSESSMENTS IN URBAN CREEKS
IN SAN MATEO COUNTY, CALIFORNIA**

**Prepared for the
San Mateo Countywide Water Pollution Prevention Program by
EOA, Inc., 1410 Jackson St., Oakland, CA**

1.0 INTRODUCTION

The San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) conducts Watershed Assessment and Monitoring (WAM) component activities in compliance with its municipal stormwater NPDES permit. A current emphasis is collecting screening-level biological, physical and chemical water quality data from creeks in representative urban watersheds in San Mateo County. These creeks are typically receiving waters for urban runoff discharges from municipal storm drain systems. SMCWPPP collects environmental indicator data from the creeks (e.g., via creek walks, trash assessments, bioassessments and water column toxicity testing) to help evaluate current creek health and water quality conditions. These data also help establish a baseline for future evaluations of long-term trends and thereby inform SMCWPPP's efforts to improve the effectiveness of its Best Management Practices (BMPs) to prevent or reduce stormwater runoff impacts.

As part of the WAM program, SMCWPPP conducted creek walks and trash assessments in urban creeks in San Mateo County during FY 2006/07 (SMCWPPP 2007) and FY 2007/08. This report documents the results of the FY 2007/08 trash assessments. The primary objectives were:

- Identifying sites in San Mateo County urban creeks where trash accumulates;
- Evaluating the status and condition of selected urban creek trash accumulation sites, including establishing a baseline against which to track future trends; and
- Collecting data that will help identify primary trash sources and transport pathways associated with the selected trash accumulation sites and inform development of BMPs to address trash in urban creeks.

2.0 BACKGROUND

SMCWPPP has initiated a program to begin identifying and addressing trash accumulation areas in urban waterways in San Mateo County. SMCWPPP (2008a) discusses typical trash management activities currently conducted by SMCWPPP's municipalities, SMCWPPP's efforts to characterize trash in urban waterways in the county, SMCWPPP's progress in beginning to identify new BMPs to address trash accumulation areas, and the proposed general future direction of SMCWPPP's trash program. It should be noted that staff of the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) is currently developing specific

trash-related provisions for a Bay Area stormwater NPDES Municipal Regional Permit (MRP). The MRP will replace existing countywide municipal stormwater NPDES permits held by SMCWPPP and other San Francisco Bay Area Phase I stormwater programs. It is anticipated that these provisions will require a variety of trash-related activities, including assessing trash in urban creeks using similar methods to those applied in this study.

3.0 METHODS

3.1 Identification of Trash Accumulation Sites in Urban Creeks

SMCWPPP (2008b) conducted creek walks during fall 2007 in seven San Mateo County watersheds using the Unified Stream Assessment (USA) creek walk protocol (CWP 2005). The USA was conducted within urban reaches of the Atherton, Redwood, Burlingame, Sanchez, Easton, Mills and Millbrae Creek watersheds. One component of the USA is to document creek sites where trash accumulates. General characteristics of each identified trash site were documented including major types of trash, readily apparent sources (i.e., littering,¹ illegal dumping,² and accumulation from upstream sources) and adjacent land uses. GPS coordinates of each site were recorded and digital photographs were taken.

3.2 Trash Assessments at Accumulation Sites

The Urban Rapid Trash Assessment (URTA)³ protocol (Version 1.0) was used to further characterize trash conditions at a subset of the trash accumulation sites identified during the fall 2007 USA creek walks. URTAs were performed at a total of seven of the 27 trash accumulation sites identified during the creek walks - two sites in the Redwood Creek watershed, two sites in the Mills Creek watershed, two sites in the Millbrae Creek watershed and one site in the Burlingame Creek watershed. The URTA was conducted twice at each site, once during fall 2007 and a second time during spring 2008, for a total of 14 assessments. The remaining USA trash accumulation sites were not assessed using the URTA because only a relatively small quantity of trash was present, yard waste was the only type of trash observed, and/or site access was poor.

It is important to note that the sites selected for the more detailed URTA assessments were not intended to represent trash conditions throughout a watershed. Instead, relatively impacted and accessible sites were selected to begin identifying and prioritizing major trash sources and potential BMPs to reduce levels of trash.

The URTA was applied at defined 100-foot sections of creek. Where possible, the starting or end point of the assessment reach was marked by an easily identifiable landmark (e.g., bridge crossing, storm drain culvert). Each trash item at the site was categorized by type (e.g.,

¹Littering refers to when individual(s) leave trash behind in the course of other activities at a creek site (e.g., walking, picnicking).

²Dumping refers to when individual(s) in a premeditated action dispose of a relatively large quantity of trash onto the creek bank or bed, often using a vehicle.

³During FY 2005/06, the SCVURPPP revised the Regional Water Board's Rapid Trash Assessment protocol (SFBRWQCB 2007) to increase its utility in evaluating trash conditions at typical impacted sites in urban watersheds. The revisions were intended to enhance the utility of this tool in assisting municipal staff to identify, prioritize and evaluate trash management activities in urban creeks. The revised protocol is referred to as the Urban Rapid Trash Assessment (URTA).

plastics, metals, biohazards, construction materials) and the total number of items found in each category was recorded. Also recorded was whether the trash was found above the high water line on the bank or below the high water line, either on the bank or in the creek channel. All of the trash observed at each site was removed to facilitate determination of trash accumulation rates during subsequent URTAs.

In addition to enumerating the total number of trash pieces, a score was assigned to each of six condition parameters that relate to a range of issues associated with trash and water quality:

1. Level of Trash - reflects a qualitative “first impression” of the site after observing the entire length of the reach. Sites scoring in the “poor” range are those where trash is one of the first things noticeable about the water body and where trash is evident in very large amounts. Sites that score in the “optimal” range appear to have little or no trash.
2. Actual Number of Trash Items Found - based on the tally of trash pieces found at the 100-foot creek site, a score within the appropriate condition category is selected based on the number of tallied items.
3. Transportable, Persistent, Buoyant Trash - based on the presence of trash items that are persistent in the environment, buoyant (floatable), and relatively small, can be transported long distances and be mistaken by wildlife as food items. Larger items can cause entanglement. All of these factors are considered in this parameter.
4. Biohazards, Toxic Items, Sharp Objects and Site Accessibility/Use - based on the presence of trash items that are dangerous to people who wade or swim in the water and/or wildlife, including medical waste, diapers, human or pet waste and toxic substances. Site accessibility and use are also scored by this parameter.
5. Illegal Dumping and Littering - reflects the direct placement of trash items at a site, with “poor” conditions assigned to sites that appear to be dumping or littering locations.
6. Accumulation of Trash - reflects the accumulation of trash from upstream locations as distinguished from dumped trash by indications of age and transport.

Each parameter is scored from 0 to 20, with higher parameter scores indicating better conditions. The six parameter scores are summed for a total assessment score of 0 to 120. The Appendix contains further documentation on the URTA methodology and the field forms used to record the results of each assessment.

4.0 RESULTS AND DISCUSSION

4.1 Location and Characteristics of Trash Accumulation Sites in Creeks

Table 1 lists the 27 trash accumulation sites identified during the fall 2007 USA creek walks, including the seven sites further assessed using the URTA. Figures 1 and 2 show the locations of these trash sites.

Table 1. Location and general characteristics of 27 creek sites with trash accumulation documented during fall 2007 USA creek walks. The seven indicated sites were further assessed using the URTA.

Site ID	Water Body	Location	URTA Site	Trash Source	Adjacent Land Use
A1	Atherton Creek	Behind homes near Valley Rd.		TA	Residential
RW1	Redwood Creek	Downstream end of Menlo Country Club golf course	X	L	Golf Course
RW2	Redwood Creek	Upstream end of Menlo Country Club golf course		D	Golf Course
RW3	Redwood Creek	Behind homes at Woodside Rd.		TA	Residential
RW4	Redwood Creek	Below outfall from Woodside Rd.		TA	Open Space
RW5	Redwood Creek	Downstream of I-280 culvert	X	TA	Transportation
RW6	Redwood Creek	Upstream of I-280 culvert		TA	Transportation
OA1	Arroyo Ojo de Agua	Stulsaft Park trail along unnamed tributary		L	Urban Park
OA2	Arroyo Ojo de Agua	Stulsaft Park		TA	Urban Park
OA3	Arroyo Ojo de Agua	Upper end of Stulsaft Park below outfall		TA	Urban Park
T1	Terrace Creek	Upstream of El Camino Real	X	L	Institutional
T2	Terrace Creek	Downstream of Sharon Ave.		D	Residential
R1	Ralston Creek	Downstream of Eucalyptus Ave.		D	Residential
R2	Ralston Creek	Adjacent to Ralston Ave.		L	Residential
S1	Sanchez Creek	Upstream of Forest View Ave.		D	Residential
S2	Sanchez Creek	Upstream of Geri Ln.		D	Residential
S3	Sanchez Creek	Upstream of Geri Ln.		D	Residential
S4	Sanchez Creek	Downstream of Fern Ct.		D	Residential
E1	Easton Creek	At Benito Ave.		TA	Residential
E2	Easton Creek	Adjacent to Canyon Rd.		D	Residential
E3	Easton Creek	Below Canyon Rd. culvert		L	Residential
M1	Mills Creek	Upstream of El Camino Real	X	TA	Residential
M2	Mills Creek	At tributary confluence		D	Residential
M3	Tributary to Mills Cr.	Below outfall at Martinez Dr.	X	TA	Residential/school
MB1	Millbrae Creek	Palm and Millbrae Ave. at park	X	L	Park/school
MB2	Millbrae Creek	Above Ashton in vacant parcel	X	L	Vacant
MB3	Millbrae Creek	Downstream Minorca Way		L	Residential

Trash source categories identified during the USA: L - Littering, ID - Illegal Dumping, TA - Trash Accumulation.
URTA - Urban Rapid Trash Assessment.

The greatest number of trash accumulation sites occurred in the Redwood Creek watershed (n=9), followed by the Burlingame and Sanchez Creek watersheds (n=4), Mills, Millbrae and Easton Creek watersheds (n=3) and Atherton Creek watershed (n=1). The sites were distributed across a variety of land uses, including residential areas, transportation corridors, parks, schools and a golf course. Three general trash source categories identified during the USA were approximately equally represented: trash accumulation (n=10), litter (n=9) and illegal dumping (n=8). Trash accumulation sites were typically below large outfalls and/or areas with dense vegetation or other obstructions that capture trash as it moves downstream. Litter sites were generally in high traffic areas with good public access (i.e., schools and/or public parks). The illegal dumping sites observed were all in residential areas, with the exception of one site at a private golf course.

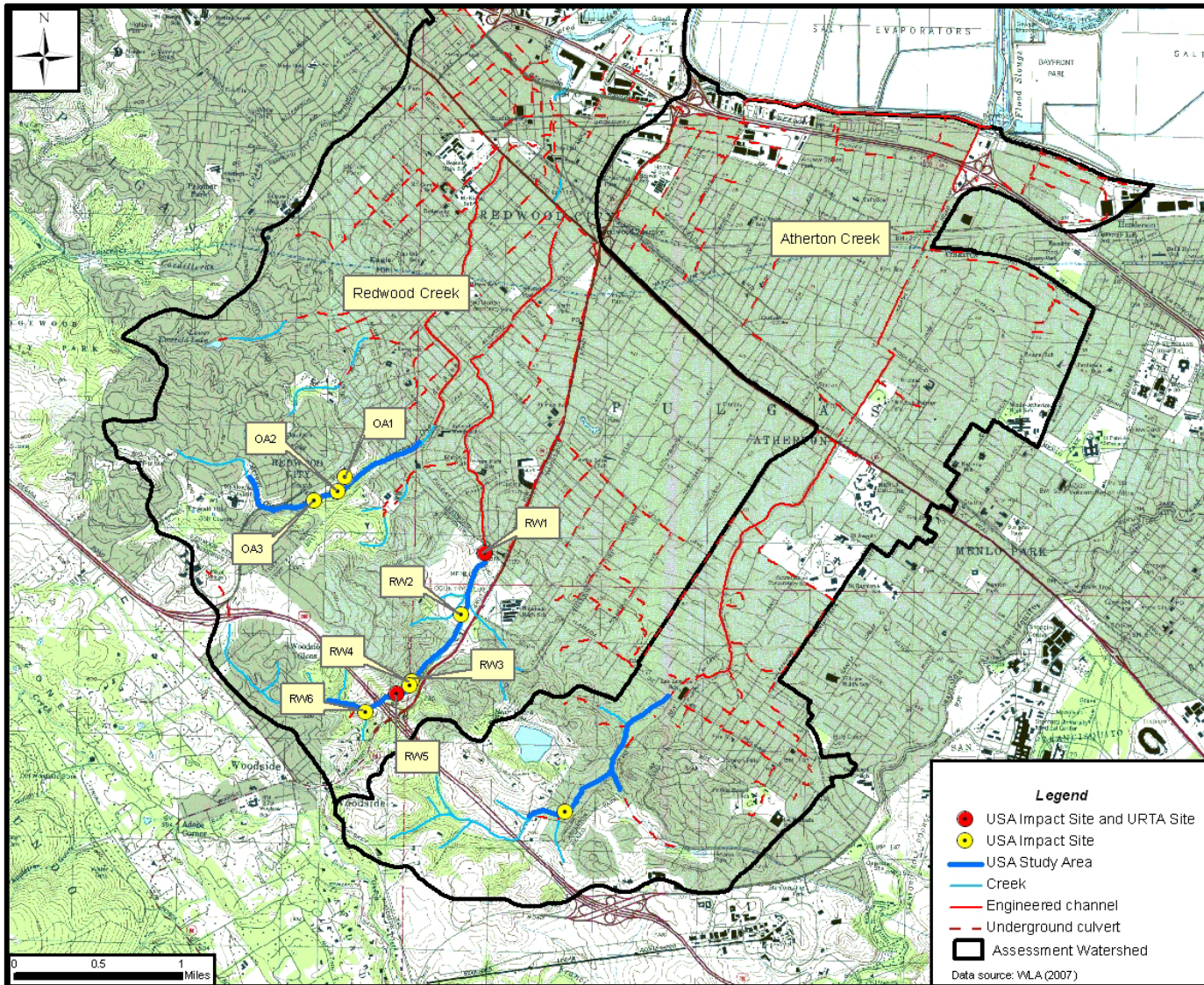


Figure 1. Location of USA and URTRA trash sites in the Atherton and Redwood Creek watersheds.

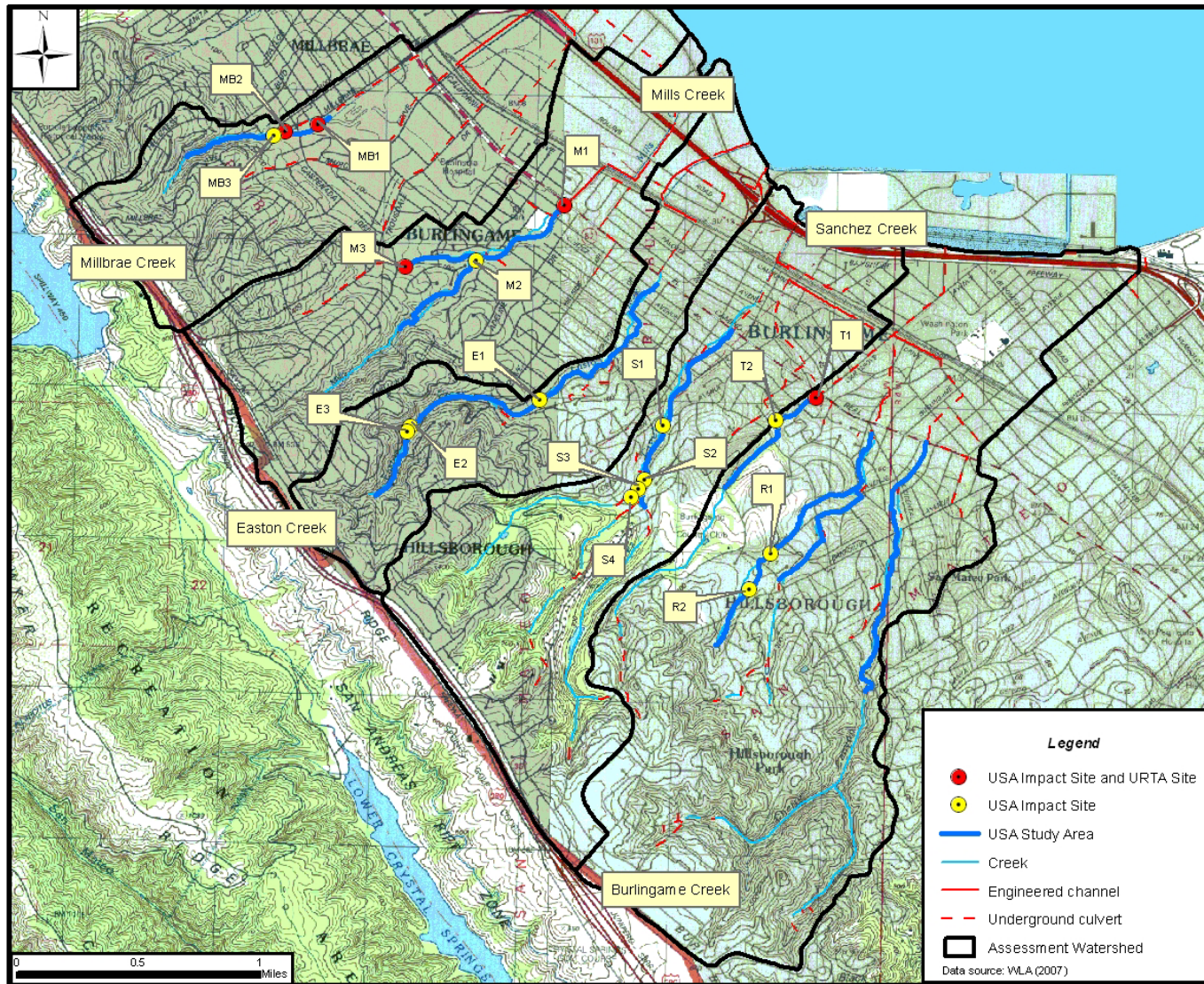


Figure 2. Location of USA and URTA trash sites in the Burlingame, Sanchez, Easton, Mills and Millbrae Creek watersheds.

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4.2 Urban Rapid Trash Assessments

4.2.1 Overall Status and Condition of Trash Accumulation Sites

Total URTA scores ranged between 31 and 71 (higher scores indicate less trash impacts and better conditions) (Table 2). The three lowest scores occurred during fall season assessments at a site in the tributary to Mills Creek (31), a site in Redwood Creek (42) and a site in Millbrae Creek (45). These three sites also had the highest total number of trash items, 607, 1,278 and 542, respectively.

Figure 3 is a frequency histogram of the URTA scores for both fall and spring season assessments. Spring 2008 assessment scores were generally higher than fall 2007 scores.

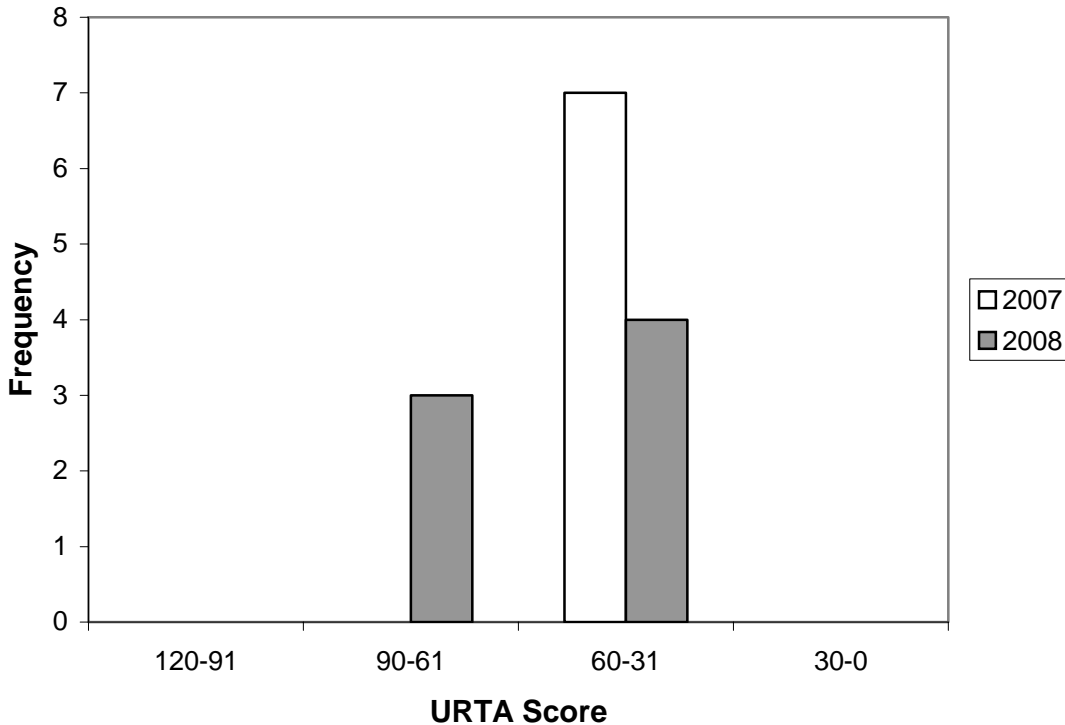


Figure 3. Distribution of Urban Rapid Trash Assessment (URTA) scores conducted during fall 2007 and spring 2008 at seven sites. Higher scores indicate less trash impacts and better conditions.

Table 2. Total and individual parameter scores and total number of trash items documented during URTAs conducted at seven creek locations in four watersheds during fall 2007 and spring 2008.

Water Body	Site ID	Site	Date	1	2	3	4a	4b	5a	5b	6	Total Score	Total Trash Items
				Qualitative	Quantitative	Transportable Items	Hazardous Items	Access	Dumping	Litter	Accumulation		
Mills Creek	M1	Upstream El Camino Real	Oct-07	6	7	4	6	6	10	8	0	47	383
			Mar-08	9	12	6	10	6	10	8	4	65	211
Tributary to Mills Creek	M3	Below outfall at Martinez Drive	Oct-07	4	4	3	2	9	1	6	2	31	607
			Mar-08	10	8	3	9	9	6	9	3	57	395
Redwood Creek	RW1	Menlo Country Club golf course	Nov-07	11	11	5	10	4	10	3	6	60	230
			Mar-08	12	14	8	9	4	10	6	8	71	133
Redwood Creek	RW5	Downstream end I-280 culvert	Nov-07	5	0	0	8	9	10	10	0	42	1,278
			Mar-08	9	6	2	7	9	10	9	5	57	461
Terrace Creek	T1	Upstream El Camino Real	Oct-07	10	10	7	4	5	10	6	7	59	259
			Mar-08	7	11	7	9	5	6	3	15	63	236
Millbrae Creek	MB1	Palm and Millbrae Avenue at park	Oct-07	10	9	5	2	1	4	4	14	49	329
			Mar-08	14	9	9	2	1	9	6	6	56	327
Millbrae Creek	MB2	Upstream Ashton in vacant land	Oct-07	7	5	5	0	1	10	1	16	45	542
			Mar-08	6	7	8	1	1	9	1	12	45	406

Note: higher scores indicate less trash impacts and better conditions. See the Appendix for more information.
 URTA – Urban Rapid Trash Assessment.

4.2.2 Trash Characteristics

The total number of trash items per URTA ranged between 133 and 1,278, with a total of 5,797 pieces of trash observed and collected during the 14 assessments (Table 3). In general, a smaller number of trash items was found at each site in the spring compared to the fall. Plastic was the most common item found during the assessments, representing about 65% of all the trash observed. Miscellaneous, glass, biodegradable and metal items were the next most common trash items, collectively representing about 33% of the trash found (Figure 4).

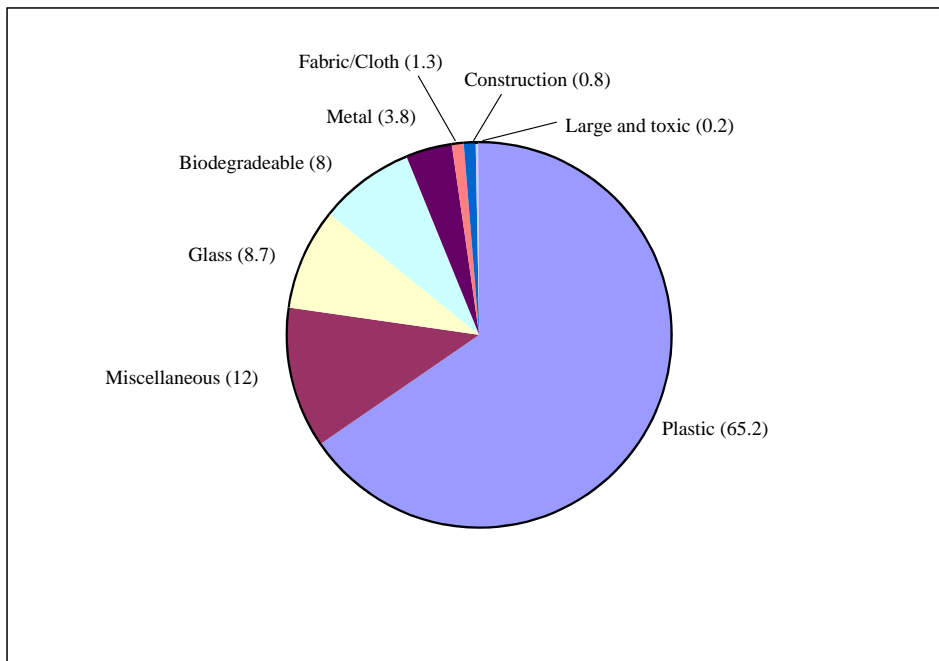


Figure 4. Relative proportions of trash types enumerated using the Urban Rapid Trash Assessment at seven creek sites over two seasons.

URTA Parameters 3 and 4 provide an indication of potential impacts that trash items at the site may have on water quality and beneficial uses. The Parameter 3 score reflects the amount of transportable, persistent, buoyant litter at the assessment site. Trash in this category can be transported over long distances and may impact wildlife through ingestion and entanglement (see Section 3.2 and the Appendix). The number of plastic items (e.g., bags, wrappers, bottles) and miscellaneous items (e.g., cigarette butts, rubber balls) found during an assessment was totaled to determine that assessment’s Parameter 3 score (see the Appendix for more information). The average Parameter 3 score for the 14 URTAs conducted was 5 out of a total of 20 possible points (higher scores indicate less trash impacts and better conditions). Over 75% of the trash that was identified during the URTAs was categorized as transportable, persistent, buoyant litter.

Table 3. Total number and type of trash items documented at seven sites assessed using the URTA during fall 2007 and spring 2008.

Trash Category ¹	Redwood Cr. Golf Course		Redwood Cr. below I-280		Terrace Cr. El Camino		Mills Cr. El Camino		Mills Cr. Tributary Outfall		Millbrae Cr. Park		Millbrae Cr. Vacant Land		Total Items
	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	
Biodegradable	0	1	20	11	62	49	2	4	9	39	32	27	117	90	463
Biohazard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	4	3	0	12	0	11	8	3	2	3	0	46
Fabric/Cloth	1	1	15	5	0	1	4	4	30	7	5	0	2	0	75
Glass	0	0	4	5	1	1	0	1	8	1	57	155	138	136	507
Large	0	0	1	1	0	0	0	0	3	1	0	1	0	0	7
Metal	2	4	19	14	33	10	8	4	43	10	6	12	26	30	221
Miscellaneous	187	74	102	52	15	24	47	16	44	28	19	25	40	22	695
Plastic	40	53	1,117	369	145	151	310	182	459	301	206	104	213	128	3,778
Toxic	0	0	0	0	0	0	0	0	0	0	1	1	3	0	5
Total Items	230	133	1,278	461	259	236	383	211	607	395	329	327	542	406	5,797

¹See the Appendix for more information on the trash categories.
 URTA – Urban Rapid Trash Assessment.

The Parameter 4a score reflects the amount of trash items at the assessment site that are a biohazard, toxic, or sharp, (e.g., broken glass, metal shards, medical waste, diapers, pet waste and batteries). Trash in this category is potentially dangerous to wildlife and to people who wade or swim in the water (see Section 3.2 and the Appendix). The number of trash items found in this category during an assessment was totaled to determine that assessment's Parameter 4a score (see the Appendix for more information). The average Parameter 4a score for the 14 URTAs conducted was 6 out of a total of 10 possible points (higher scores indicate less trash impacts and better conditions). About 13 percent of the trash that was identified during the URTAs was categorized as hazardous (biohazard, toxic, or sharp). Most items in this category were glass and metal objects; biohazardous items were not observed and toxic items were relatively uncommon.

The URTA Parameter 4b score (site accessibility/use) for five of the seven URTA sites averaged 6.6 out of 10 possible points (a score of 10 points indicates that a site is inaccessible to the public), indicating that on average these sites had limited access and use. This contrasted with the results for the other two URTA sites, which were both located in Millbrae Creek. Four URTAs were performed in Millbrae Creek (two assessments at each of the two sites). The Parameter 4b score for each of the four assessments was 1.0, indicating that these sites are readily accessible by people. In addition, the Millbrae Creek sites had relatively low scores (lower scores indicate more trash impacts and worse conditions) for URTA parameter 4a (biohazard, toxic, or sharp trash items), ranging from zero to two, mainly due to a high number of pieces of broken glass.⁴

4.2.3 Trash Sources and Pathways at URTA Sites

URTA Parameters 5 and 6 evaluate potential trash sources/pathways. On average, the most common trash pathway identified during the 14 URTAs was accumulation from upstream sources with an average score of seven out of 20 possible points (a score of 20 points indicates no accumulation). The lowest scores for trash accumulation (score 0.0) occurred in two locations: Redwood Creek downstream of the I-280 culvert and Mills Creek, upstream of an SFPUC pipeline below El Camino Real. Another site with high accumulation (score 2.0) was located in the upper end of a tributary to Mills Creek just below an outfall at Martinez Drive (Table 2).

The littering source/pathway was slightly less common than trash accumulation at URTA sites, with an average score of 5.7 (a score of 10 points indicates no littering at a site). The lowest score for littering (1.0) occurred in Millbrae Creek at an undeveloped vacant parcel near to a high school. Other sites where littering was important included a golf course in Redwood Creek (i.e., golf balls in the creek) and an overflowing dumpster in a parking lot adjacent to Terrace Creek.

Dumping was relatively uncommon at URTA sites, with an average score of 8.2 (a score of 10 points indicates no dumping at site). The lowest score (1.0) for dumping occurred below an outfall at the upper end of tributary to Mills Creek. It was unclear how large materials (e.g.,

⁴Sometimes items are broken into two or more pieces. Transportable, persistent, and buoyant fragments such as plastics are individually counted, while paper and broken glass, with lower persistence and/or mobility, are counted based on the parent item(s). Broken glass pieces that are scattered, with no recognizable original shape, are counted individually.

construction materials, shopping cart) entered this site as public access was limited by a fence. Dumping was also identified at the downstream site on Millbrae Creek, which had good public access along Millbrae Drive.

In general, high levels of trash in the creek channel generally originated from upstream sources and accumulated at the assessment sites due to dense vegetation or instream structures (e.g., a pipeline) that captured it during conveyance downstream. Littering from adjacent land uses was the predominant source of trash at sites that had larger proportions of trash on the banks compared to the creek channel. These sites usually had good public access. Larger trash items (construction materials, furniture) were found on both banks and in creek channels.

5.0 REFERENCES

CWP 2005. *Urban Subwatershed Restoration Manual Series, No. 10. Unified Stream Assessment: A User's Manual*. Version 2.0. Center for Watershed Protection. Ellicott City, Maryland. February 2005.

SMCWPPP 2007. *Trash Assessments in Six Watersheds in San Mateo County, California*. Prepared for the San Mateo Countywide Water Pollution Prevention Program by EOA, Inc. August 2007.

SMCWPPP 2008a. *Addressing Trash in Urban Waterways in San Mateo County, California*. Fact Sheet prepared for the San Mateo Countywide Water Pollution Prevention Program by EOA, Inc. August 2008.

SMCWPPP 2008b. *Unified Stream Assessment in Seven Watersheds in San Mateo County, California*. Prepared for the San Mateo Countywide Water Pollution Prevention Program by EOA, Inc. August 2008.

APPENDIX

URBAN RAPID TRASH ASSESSMENT PROTOCOL

Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP)

Adapted from the San Francisco Bay Regional Water Quality Control Board Rapid Trash Assessment Protocol, Version 8.

Monitoring Design:

The urban rapid trash assessment can be used for a number of purposes, such as ambient monitoring, evaluation of management actions, determination of trash accumulation rates, or comparing sites with and without public access. Ambient monitoring efforts should provide information at sites distributed throughout a waterbody, and may be conducted several times a year to characterize spatial and temporal variability. Additionally, the ambient sampling design should document the effects of episodes that affect trash levels such as storms or community cleanup events. Pre- and post-project assessments can assist in evaluating the effectiveness of management practices ranging from public outreach to structural controls, or to document the effects of public access on trash levels in waterbodies (e.g., upstream/downstream). Trash accumulation rates may be determined by conducting trash assessments before and after the summer or dry weather index (to capture rates of littering) and the winter or rainy index (to capture rates of accumulation from upstream sources). This method was developed for sections of wadeable streams, but can be adapted to shorelines of lakes, beaches, or estuaries. This adapted version of the San Francisco Bay Regional Water Quality Control Board Rapid Trash Assessment Protocol, Version 8 was developed by SCVURPPP to more effectively assess trash problem areas and to detect changes in trash conditions over time as a result of management actions.

Site Definition:

A team of two people or more defines or verifies a 100-foot section of the stream or shoreline to analyze. When a site is first established, it is recommended that the 100-foot distance be accurately measured. The length should be measured not as a straight line, but as 100 feet of the actual stream or shore length, including sinuous curves. Where possible, the starting and ending points of the stream section should be easily identified landmarks, such as an oak tree or boulder, and noted on the worksheet (“Upper/Lower Boundaries of Reach”), or documented using a global positioning system (GPS), so that future assessments are made at the same location. The team should confer and document the upper boundary of the banks to be surveyed, based on evaluation of whether trash can be carried to the waterbody by wind or water (e.g., an upper terrace in the stream bank). The team documents the location of the high water line based on site-specific physical indicators, such as a debris line found in the riparian vegetation along the stream channel. If the high water line cannot be determined, it is suggested that bankfull height be documented, noting that the high water line could not be determined. Trash located below the high water line can be expected to move into the streambed or to be swept downstream during the next winter season. Visually extend all boundaries in order to encompass the 100’ section. Defining site characteristics will facilitate the comparison of trash assessments conducted at the same site at different times of the year.

Survey:

It is highly recommended that all trash items within an assessed site be picked up, so that the site can be re-assessed to evaluate usage patterns, trash return rates, and management actions. A survey, including notes and scoring, will take approximately one to two hours based on how trash-impacted the site is and how many people are working together. The first time a reach is assessed, the process will generally take longer than on subsequent visits. Begin the survey at the downstream end of the selected reach so that trash can be seen in the undisturbed stream channel. Tasks can be divided according to the number of team members. If there are two team members, one team member begins walking along the bank or in the water at the edge of the stream or shore, looking for trash on the bank up to the upper bank boundary, and above and below the high water line. This person picks up trash and tallies the items on the trash assessment worksheet as either above or below the high water line based on the previously determined boundary. The other person walks in the streambed and up and down the opposite bank, picking up and calling out specific trash items found in the water body and on the opposite bank both above and below the high water line, for the tally person to mark down appropriately on the

trash assessment sheet. All team members pick up the trash items as they are found. All team members should wear gloves to avoid injuries.

The person tallying the trash indicates on the sheet whether the trash was found above the high water line on the bank, or below the high water line either on the bank or in the stream (i.e., tally dots or circles (•) for above high water line, tally lines (|) for below). If it is evident that items have been littered, dumped, or accumulated via downstream transport, make a note in the designated rows near the bottom of the tally sheet - this will help when assessing scores. A trash grabber, metal kitchen tongs, or a similar tool should be used to help pick up trash. Be sure to look under bushes, logs, and other plant growth to see if trash has accumulated underneath. The ground and substrate should be inspected to ensure that small items such as cigarette butts and pieces of broken glass or Styrofoam are picked up and counted. The tally count is an important indicator of trash impairment and should be used in conjunction with the total score to assist in site comparisons.

Sometimes items are broken into many pieces. Transportable, persistent, and buoyant, fragments such as plastics should be individually counted, while paper and broken glass, with lower persistence and/or mobility, should be counted based on the parent item(s). Broken glass pieces that are scattered, with no recognizable original shape, should be counted individually. The judgment of whether to count all fragments or just one item also depends on the potential exposure to downstream fish and wildlife, or to waders and swimmers at a given site. Concrete is trash when it is dumped, but not when it is placed. Consider tallying only those items that would be removed in a restoration or cleanup effort.

Once the team is finished with the tallying, use the tally sheet margins to count up two totals for each trash item line: one total for items found above the high water line, and one total for items found below the high water line. Now sum the totals of above and below for each trash category, and write in next to each trash category. Complete the worksheets before leaving the site in order to remember pertinent details. The team should discuss each parameter and agree on a score based on a discussion of the condition categories. Discuss and document possible influential factors affecting trash levels at the site, such as a park, school, or nearby residences or businesses. Within each trash parameter, narrative language is provided to assist with choosing a condition category. The worksheet provides a range of numbers within some of the categories, allowing for a range of conditions encountered in the field. Note that trash located in the water leads to lower scores than trash above the high water line. Not all specific trash conditions mentioned in the narratives need to be present to fit into a specific condition category (e.g., “site frequently used by people”), nor do the narratives describe all possible conditions. Scores of “0” should be reserved for the most extreme conditions. Once the scores are assigned for the six categories, sum the final score and include specific notes about the site at the end of the sheet. To characterize the variability, persistence, and return rate of trash it is necessary to assess a site three to four times, bracketing different seasons.

Trash Assessment Parameters:

The rapid trash assessment includes a range of parameters that capture the breadth of issues associated with trash and water quality. The first two parameters focus on qualitative and quantitative levels of trash, the second two parameters characterize trash levels of certain types of trash that may affect water quality, and the last two parameters estimate sources of trash (adjacent land use-related littering, dumping or upstream sources).

- 1. Level of Trash.** This assessment parameter is intended to reflect a qualitative “first impression” of the site, after observing the entire length of the reach. Sites scoring in the “poor” range are those where trash is one of the first things noticeable about the waterbody and where trash is evident in very large amounts. Sites that score in the “optimal” range appear to have little or no trash. This parameter should be assessed prior to the collection and enumeration of trash done for subsequent parameter.
- 2. Actual Number of Trash Items Found.** Based on the tally of trash along the 100-foot stream reach, total the number of items both above and below the high water line, and choose a score within the appropriate condition category based on the number of tallied items. Where more than 500 items have been tallied, assign the following scores: 5: 501-600 items; 4: 601-700 items; 3: 701-800 items; 2: 801-

900 items; 1: 901-1000 items; 0: over 1000 items. Use similar guidelines to assign scores in other condition categories.

3. **Transportable, Persistent, Buoyant Trash.** As indicated in the technical notes, below, certain characteristics of trash make it more harmful to aquatic life. If trash items are persistent in the environment, buoyant (floatable), and relatively small, they can be transported long distances and be mistaken by wildlife as food items. Larger items can cause entanglement. All of these factors are considered in the narrative descriptions in this assessment parameter.
4. **Biohazards, Toxic Items, Sharp Objects and Site Accessibility/Use.** This category is concerned with items that are dangerous to people who wade or swim in the water, and with pollutants that could accumulate in fish in the downstream environment. Medical waste, diapers, and human or pet waste could potentially adversely affect water quality. Site accessibility and site use is considered in the scoring of this condition category. Sites with very difficult or restricted human access and no evidence of recreational use will receive higher scores due to reduced risk of human exposure at the site.
5. **Illegal Dumping and Littering.** This assessment category relates to direct placement of trash items at a site, with “poor” conditions assigned to sites that appear to be dumping or littering locations based on adjacent land use practices or site accessibility.
6. **Accumulation of Trash.** Trash that accumulates from upstream locations is distinguished from dumped trash by indications of age and transport. Faded colors, silt marks, trash wrapped around roots, and signs of decay suggest downstream transport, indicating that the local drainage system facilitates conveyance of trash to water bodies, in violation of clean water laws and policies.

Technical Notes on Trash and Water Quality:

Trash is a water pollutant that has a large range of characteristics of concern. Not all litter and debris delivered to streams are of equal concern to water quality. Besides the obvious negative aesthetic effects, most of the harm of trash in surface waters is imparted to aquatic life in the form of ingestion or entanglement. Some elements of trash can negatively affect water quality such as discarded medical waste, and human or pet waste. Also, some household and industrial wastes may contain toxic substances that may influence water quality, such as batteries, pesticide containers, and fluorescent light bulbs that contain mercury. Sharp glass and metal objects are potential puncture and laceration hazards. Larger trash such as discarded appliances can present physical barriers to natural stream flow, causing physical impacts such as bank erosion. From a management perspective, the persistence and accumulation of trash in a waterbody are of particular concern and signify a priority area for prevention of trash discharges. Also of concern are trash “hotspots” where illegal dumping, littering, and/or accumulation of trash occur in very large amounts.

Rapid Trash Assessment. Trash assessment includes a visual survey of the waterbody (e.g., streambed and banks) and adjacent areas from which trash elements can be carried to the waterbody by wind, water, or gravity. The delineation of these adjacent areas is site-specific and requires some judgment and documentation. The rapid trash assessment worksheet is designed to represent the range of effects that trash has on the physical, biological, and chemical integrity of water bodies, in accordance with the goals of the Clean Water Act and the California Water Code. The worksheet also provides a record for evaluation of the management of trash discharges, by documenting sites that receive direct discharges (i.e., dumping or littering) and those that accumulate trash from upstream locations.

Trash Characteristics of Concern. Buoyant (floatable) elements tend to be more harmful to water quality than settleable elements, due to their ability to be transported throughout the waterbody and ultimately to the marine environment. Elements such as plastics, synthetic rubber and synthetic cloth, because of their persistence, have a more adverse effect on water quality than degradable elements such as paper or organic waste. Glass and metal are less persistent, even though they are not biodegradable, because wave action and rusting can cause them to break into smaller pieces. Natural rubber and cloth can degrade but not as quickly as paper (U.S. EPA, 2002).

Smaller elements such as plastic resin pellets (a by-product of plastic manufacturing) and cigarette butts are often more harmful to aquatic life than larger elements, since they can be ingested by a large number of small organisms which can then suffer malnutrition or internal injuries. Larger plastic elements such as plastic grocery bags are also harmful to larger aquatic life such as sea turtles, which can mistake the trash for floating prey and ingest it, leading to starvation or suffocation. Floating debris that is not trapped and removed will eventually end up on the beaches or in the ocean, repelling visitors and residents from the beaches and degrading coastal and open ocean waters.

Leaf litter is trash when there is evidence of intentional dumping. Leaves and pine needles in streams provide a natural source of food for organisms, but excessive levels due to human influence can cause nutrient imbalance and oxygen depletion in streams, to the detriment of the aquatic ecosystem. Clumps of leaf litter and yard waste from trash bags should be treated as trash in the water quality assessment, and not confused with natural inputs of leaves to streams. If there is a question in the field, check the type of leaf to confirm that it comes from a nearby riparian tree. In some instances, leaf litter may be trash if it originates from dense ornamental stands of nearby human planted trees that are overloading the stream's assimilative capacity for leaf inputs. Other biodegradable trash, such as food waste, also exerts a demand on dissolved oxygen, but aquatic life is unlikely to be adversely affected unless the dumping of food waste is substantial and persistent at a given location.

Wildlife impacts due to trash occur in creeks, lakes, estuaries, and ultimately the ocean. The two primary problems that trash poses to wildlife are entanglement and ingestion. Marine mammals, turtles, birds, fish, and crustaceans all have been affected by entanglement in or ingestion of floatable debris. Many of the species most vulnerable to the problems of floatable debris are endangered or threatened by extinction.

Entanglement results when an animal becomes encircled or ensnared by debris. It can occur accidentally, or when the animal is attracted to the debris as part of its normal behavior or out of curiosity. Entanglement is harmful to wildlife for several reasons. Not only can it cause wounds that can lead to infections or loss of limbs; it can also cause strangulation or suffocation. In addition, entanglement can impair an animal's ability to swim, which can result in drowning, or in difficulty in moving, finding food, or escaping predators (U.S. EPA, 2001).

Ingestion occurs when an animal swallows floatable debris. It sometimes occurs accidentally, but usually animals feed on debris because it looks like food (i.e., plastic bags look like jellyfish, a prey item of sea turtles). Ingestion can lead to starvation or malnutrition if the ingested items block the intestinal tract and prevent digestion, or accumulate in the digestive tract, making the animal feel "full" and lessening its desire to feed. Ingestion of sharp objects can damage the mouth, digestive tract and/or stomach lining and cause infection or pain. Ingested items can also block air passages and prevent breathing, thereby causing death (U.S. EPA, 2001).

Common settled debris includes glass, cigarettes, rubber, construction debris and more. Settleables are a problem for bottom feeders and dwellers and can contribute to sediment contamination. Larger settleable items such as automobiles, shopping carts, and furniture can redirect stream flow and destabilize the channel.

In conclusion, trash in water bodies can adversely affect humans, fish, and wildlife. Not all water quality effects of trash are equal in severity or duration, thus the trash assessment methodology was designed to reflect a range of trash impacts to aquatic life, public health, and aesthetic enjoyment. When considering the water quality effects of trash while conducting a trash assessment, remember to evaluate individual items and their buoyancy, degradability, size, potential health hazard, and potential hazards to fish and wildlife. Utilize the narratives in the worksheet, refer to the technical notes and trash parameter descriptions in the text as needed, and select your scores after careful consideration of actual conditions.

References:

U.S. Environmental Protection Agency, 2001. Draft Assessing and Monitoring Floatable Debris.

U.S. Environmental Protection Agency, 2002. The Definition, Characterization and Sources of Marine Debris. Unit 1 of Turning the Tide on Trash, a Learning Guide on Marine Debris.

Urban Rapid Trash Assessment Worksheet

Santa Clara Valley Urban Runoff Pollution Prevention Program

WATERSHED/STREAM: _____ DATE/TIME: _____
 MONITORING GROUP, STAFF: _____ STATION ID _____
 STATION NAME /LOCATION: _____

Trash Assessment Parameter	CONDITION CATEGORY																				
	Least Disturbed (Optimal Urban)					Sub optimal Urban					Marginal Urban					Poor					
1. Level of Trash	On first glance, little or no trash visible. Little or no trash evident when streambed and stream banks are closely examined for litter and debris, for instance by looking under leaves.					On first glance, trash is evident in low levels. After close inspection small levels of trash evident in stream bank and streambed.					Trash is evident in medium on first glance. Stream, bank surfaces, and riparian zone contain litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, clothing.					Trash distracts the eye on first glance. Stream, bank surfaces, and immediate riparian zone contain substantial levels of litter and debris Evidence of site being used frequently by people: many cans, bottles, and food wrappers, blankets, clothing.					
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
2. Actual Number of Trash Items Found	0 to 100 trash items found based on a trash assessment of a 100-foot stream reach.					101 to 250 trash items found based on a trash assessment of a 100-foot stream reach.					251 to 500 trash items found based on a trash assessment of a 100-foot stream reach.					Over 500 trash items found based on a trash assessment of a 100-foot stream reach.					
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
3. Transportable, Persistent, Buoyant Litter	Little or no (< 25 pieces) transportable, persistent, buoyant litter such as: hard or soft plastics, styrofoam, balloons, cigarette butts.					Low to medium presence (26-75 pieces) of transportable, persistent, buoyant litter such as: hard or soft plastics, styrofoam, balloons, cigarette butts.					Medium prevalence (76-200 pieces) of transportable, persistent, buoyant litter such as: hard or soft plastics, styrofoam, balloons, cigarette butts.					Large amount (>200 pieces) of transportable, persistent, buoyant litter such as: hard or soft plastics, balloons, styrofoam, cigarette butts;					
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
4. Biohazard, Toxic and Sharp Objects	B: Trash contains no medical waste, diapers, pet or human waste. No evidence of toxic substances such as chemical containers or batteries. Only 1 piece of broken glass or metal debris, if any, is present.					B: No toxic substances, but small presence (2-10 pieces) of sharp objects such as broken glass and metal debris.					Presence of any one of the following: hypodermic needles or other medical waste; used diaper, pet waste, or human feces; any toxic substance such as chemical containers, batteries, or fluorescent light bulbs. Medium to high prevalence (11-50 pieces) sharp objects.					Presence of more than one of the items described in the marginal condition category, and/or high prevalence of (> 50) sharp objects.					
Site Accessibility	A: Access is difficult, restricted by locked gate or some other physical barrier like steep banks or thick riparian veg. Site reach does not appear to be used by people. Might be private property or protected watershed.					A: Access is limited and site reach does not appear to be used by people. No trails down to creek.					A: Public access to reach is fair to good but site does not appear to be used frequently, or private access is good without any public access.					A: Excellent reach access including trails down to and adjacent creek and creekside space for sitting down. Some evidence that reach is used frequently by the public (e.g. rope swings, many beer/soda cans and food wrappers left on the banks, etc.).					
B SCORE	10	9				8	7	6			5	4	3			2	1	0			
A SCORE	10	9				8	7	6			5	4	3			2	1	0			

Trash Item Talley Worksheet

Santa Clara Valley Urban Runoff Pollution Prevention Program

TRASH ITEM TALLY (Tally with (•) if found above high water line, and (l) if below)

PLASTIC # Above ___ # Below ___	METAL # Above ___ # Below ___	
Plastic Bags	Aluminum Foil	
Plastic Bottles	Aluminum or Steel Cans	
Plastic Bottle Caps	Bottle Caps	
Plastic Cup Lid/Straw	Metal Pipe Segments	
Plastic Pipe Segments	Auto Parts (specify below)	
Plastic Six-Pack Rings	Wire (barb, chicken wire etc.)	
Plastic Wrapper	Metal Object	
Soft Plastic Pieces	LARGE (specify below) # Above ___ # Below ___	
Hard Plastic Pieces	Appliances	
Styrofoam cups pieces	Furniture	
Styrofoam Pellets	Garbage Bags of Trash	
Fishing Line	Tires	
Tarp	Shopping Carts	
Other (write-in)	Other (write-in)	
BIOHAZARD # Above ___ # Below ___	TOXIC # Above ___ # Below ___	
Human Waste/Diapers	Chemical Containers	
Pet Waste	Oil/Surfactant on Water	
Syringes or Pipettes	Spray Paint Cans	
Dead Animals	Lighters	
Other (write-in)	Small Batteries	
CONSTRUCTION DEBRIS # Above ___ # Below ___	Vehicle Batteries	
Concrete (not placed)	Other (write-in)	
Rebar	BIODEGRADABLE # Above ___ # Below ___	
Bricks	Paper	
Wood Debris	Cardboard	
Other (write-in)	Food Waste	
MISCELLANEOUS # Above ___ # Below ___	Yard Waste (incl. trees)	
Synthetic Rubber	Leaf Litter Piles	
Foam Rubber	Other (write-in)	
Balloons	GLASS # Above ___ # Below ___	
Ceramic pots/shards	Glass bottles	
Hose Pieces	Glass pieces	
Cigarette Butts	FABRIC AND CLOTH # Above ___ # Below ___	
Golf Balls	Synthetic Fabric	
Tennis Balls	Natural Fabric (cotton, wool)	
Other (write-in)	Other (write-in)	
Total pieces Above:	Below:	Grand total:
Tally all trash in above rows; make notes below as needed to facilitate scoring.		
Littered:		
Dumped:		
Downstream Accumulation:		
SPECIFIC DESCRIPTION OF ITEMS FOUND: _____		



August 27, 2008

Ms. Sandy Potter
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: Review of San Francisquito Creek Sediment TMDL and Habitat Enhancement Plan Preliminary Project Report

Ms. Potter:

The San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) appreciates this opportunity to comment on a report prepared by San Francisco Bay Regional Water Quality Control Board (Regional Water Board) staff entitled *San Francisquito Creek Sediment TMDL and Habitat Enhancement Plan Preliminary Project Report* (Project Report) (dated June 30, 2007). Our comments are also based on review of relevant existing studies on the San Francisquito Creek watershed, including a sediment budget (SFCJPA 2004) and limiting factors analysis (Jones and Stokes 2006). We also reviewed a similar project, the *Sediment TMDL and Habitat Enhancement Plan* developed for the Napa River (SFBRWQCB 2007).

SMCWPPP recognizes the importance of the San Francisquito Creek watershed as one of the few remaining creek systems in the southern Bay Area that supports anadromous steelhead populations. Since 1996, the creek has been on the Clean Water Act 303(d) list for impairment by excess fine sediment. Excess sedimentation is thought to have contributed to the decline of habitat conditions and steelhead populations in the watershed. About 80% of the San Francisquito Creek watershed is located within San Mateo County, and municipalities, resource agencies, and other stakeholders within the county will have an important role in developing and implementing a strategy for recovery of steelhead populations.

The Project Report proposes TMDL requirements to help reduce sediment production in the watershed, including a load allocation of 125% of the natural background sediment load and specific sediment-related numeric targets related to fish habitat factors such as pool filling and embeddedness. In addition, Regional Water Board staff strongly recommends that stakeholders in the watershed collaborate to implement habitat enhancement and restoration actions (e.g., fish barrier removal). The Project Report acknowledges that existing data sources have a degree of uncertainty (i.e., the sediment budget) or do not adequately describe existing conditions of creeks in San Mateo County (i.e., the limiting factors analysis). Thus an adaptive approach is needed to allow changes in the TMDL strategy as new information becomes available.

We understand that due to resource constraints Regional Water Board staff will not be able to work on further development of this TMDL for the next year or two. At this time, SMCWPPP would like to provide the following preliminary comments on the Project Report. We look forward to providing additional input as this process continues.

- The Project Report describes 1) a sediment TMDL, and 2) a habitat enhancement plan. When the project moves forward, a clear separation should be made between pollutant-

Ms. Sandy Potter

August 27, 2008

p.2 of 3

based TMDL requirements (i.e., sediment load allocations and numeric targets) and habitat enhancement actions (i.e., non-pollutant based habitat enhancement or restoration).

- The targets/allocations and source areas should be linked, i.e., the targets/allocations should be applied to specific impacted habitat areas at or downstream of the anthropogenic sediment source areas. Existing information suggest that the Los Trancos Creek subwatershed would be the most appropriate area to establish targets/allocations since it is reported to have the greatest proportion of controllable sediment sources (an estimated 37% of total sediment production is human-related). In addition, Los Trancos Creek has the greatest amount of steelhead production. The Corte Madera Creek subwatershed has high sediment production; however, most of the sediment is from natural sources and majority of sediment is trapped behind the Searsville Dam. In addition, steelhead have no access to creek areas above the dam.
- The Project Report indicates sediment-related fish habitat numeric targets established in the Los Trancos Creek watershed (based on existing data) will also be used in the Bear and San Francisquito Creek subwatersheds unless additional data become available that demonstrate the targets are already met in these watersheds. SMCWPPP does not support use of data collected in Los Trancos Creek to generate targets for the other subwatersheds, especially where other factors not related to sediment (e.g., low summer base flows in Bear Creek) may be more important to address. Similarly, the San Francisquito Creek subwatershed is primarily urbanized with hardened banks, contributes a relatively low sediment load, and is unlikely to provide suitable rearing habitat for steelhead. It may therefore be inappropriate to apply sediment-related targets in these subwatersheds. Data from additional field studies would be needed to determine whether excess sediment is a limiting factor in the Bear and San Francisquito Creek subwatersheds, and if so, what sediment-related numeric targets would be appropriate.
- The TMDL should clearly identify the responsible party and regulatory tool or authority for each sediment source category. Table 4 of the Project Report is incomplete and sometimes misleading. For example, Table 4 implies that municipal stormwater (MS4) permits are the appropriate regulatory tool for implementing erosion controls on lands managed by the Midpeninsula Regional Open Space District (MROSD). However, as stated on p.14 of the Project Report, MROSD lands are not regulated under a MS4 permit. Other important stakeholders that own and/or manage property in the watershed but are not regulated under MS4 permits include the Peninsula Open Space Trust (POST) and the National Park Service. Table 4 should include all such entities and clearly specify the appropriate regulatory tools or authorities for implementation of TMDL-related management activities. MS4 permits are limited to regulation of facilities owned and operated by municipalities.
- The Bay Area Phase I municipal stormwater NPDES permits are being reissued as one Municipal Regional Permit (MRP). The MRP will replace SMCWPPP's current NPDES permit and the other Bay Area Phase I permits. A Tentative Order for the MRP was released for public comment in December 2007 and a hearing to take testimony from the public on the Tentative Order took place in March 2008. Any actions specified in the TMDL's implementation plan that would be regulated under a MS4 NPDES permit should be consistent with the adopted MRP's requirements.

Ms. Sandy Potter

August 27, 2008

p.3 of 3

- As with the implementation of other TMDLs, it is important to maintain a reasonable balance between resources expended on monitoring activities and those expended for actual pollutant control measures.

We look forward to continuing to work with you during the development of this important TMDL. Please call me if you have any questions or comments.

Sincerely,



Matthew Fabry
SMCWPPP Coordinator

cc: Sue Ma, Regional Water Board staff

References:

Jones and Stokes 2006. *Lower San Francisquito Creek Watershed Aquatic Habitat Assessment and Limiting Factors Analysis* (J&S 04262.04). Prepared for Santa Clara Valley Water District. San Jose, CA.

San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) 2007. *Napa River Watershed Sediment TMDL and Habitat Enhancement Plan Staff Report*. Oakland, CA.

San Francisquito Creek Joint Powers Authority (SFCJPA) 2004. *San Francisquito Creek Watershed Analysis and Sediment Reduction Plan Final Report*. Prepared by Northwest Hydraulic Consultants Inc., and Jones and Stokes. Palo Alto, CA.

APPENDIX F: TABLE OF CONTENTS

Template for First Half-Year Deliverables FY 2007/08

Template for Second Half-Year Deliverables FY 2007/08



First Half -Year Deliverables
(July-December 2007)
Due by January 15, 2008

Municipality: _____

Contact Person: _____ Phone: _____

(Please complete the following report and submit, along with a statement of certification, to Matt Fabry by the January 15, 2008 TAC meeting.)

Submittal Checklist

1. Certification Letter (signed by an authorized representative from your municipality).....

2. Municipal Government Maintenance Monthly Record Keeping Forms (Attachment A)
Check if data submitted electronically.

	<u>Street/Leaf</u>	<u>Storm/Litter</u>
July 2007	<input type="checkbox"/>	<input type="checkbox"/>
August 2007	<input type="checkbox"/>	<input type="checkbox"/>
September 2007	<input type="checkbox"/>	<input type="checkbox"/>
October 2007	<input type="checkbox"/>	<input type="checkbox"/>
November 2007	<input type="checkbox"/>	<input type="checkbox"/>
December 2007	<input type="checkbox"/>	<input type="checkbox"/>

* For maintenance activities not conducted, please fill in zeros on the forms.

3. Stormwater Inspections & Violations Summary (for this reporting period - Attachment B)

4. Illicit Discharge Quarterly Summary Report: First Quarter
(Attachment C) Second Quarter

* Please complete one form for each quarter (do not combine quarters).

5. Operations and Maintenance Information for Stormwater Treatment Measures
form for each new and redevelopment project where post-construction, stormwater treatment
controls have been implemented this reporting period (Attachment D)

6. Summary of Pre-Wet Season Erosion Control Inspections Form (Attachment E).....

7. Table of New Development Projects (Attachment F).....

To assist us in compiling information from all the municipalities, please also:

- *Do not remove page breaks (start each component at the top of a new page).*
- *Write your municipality's name at the top of every page.*

COMPONENT 3. INDUSTRIAL AND ILLICIT DISCHARGE CONTROLS

Performance standards contained in the Stormwater Management Plan and which are therefore enforceable requirements of the NPDES permit

1. Submit completed Stormwater Inspections & Violations Summary forms (Attachment B).
 - a. How many businesses were inspected between July and December 2007?
 - b. How many inspected businesses had one or more violations using definition on the Summary Inspections & Violation Summary form?
 - c. How many businesses had a violation that was pending correction as of end of day on December 31, 2007?
2. Complete the attached forms: *Illicit Discharge Inspection Quarterly Summary Report: 1st Quarter 2007/08* and *Illicit Discharge Inspection Quarterly Summary Report: 2nd Quarter 2007/08 (Attachment C)*. **NOTE: For each illicit discharge found please fill out the Illicit Discharge Source Identification Form (Attachment C) and retain copies of these forms at your municipality (don't submit with deliverables). The completed forms must be made available if requested in the future by the Water Board staff or its representatives.**
3. Describe assistance provided to the CII Subcommittee and its Educational Outreach Work Group during July through December 2007. (Do not list the subcommittee meetings attended because EOA will track and include information about meeting attendance in SMCWPPP's Annual Report).
4. Describe your municipality's use of SMCWPPP's business educational outreach materials, such as the Vehicle Service Facility booklets, restaurant posters, and any other educational outreach activities for businesses.

COMPONENT 4. PUBLIC INFORMATION AND PARTICIPATION

COMPONENT 5. NEW DEVELOPMENT AND CONSTRUCTION SITE CONTROLS

I. Tasks described in the Stormwater Management Plan and which are therefore enforceable requirements of the NPDES permit.

1. Describe assistance provided to the New Development Subcommittee during July through December 2007. (Do not list the subcommittee meetings attended because EOA will track and include information about meeting attendance in SMCWPPP’s Annual Report).

2. List workshops attended **other than SMCWPPP-sponsored workshops**. (EOA will track and include information about your municipality’s attendance at SMCWPPP-sponsored workshops in SMCWPPP’s Annual Report).

3. How many municipal staff members have received a certificate of completion from a Construction Site Stormwater Compliance workshop offered by SMCWPPP, the San Francisco Estuary Project, or the Santa Clara Valley Urban Runoff Pollution Prevention Program during Fall 2007 or during Fiscal Year 2006/07?

II. Compliance with the Performance Standards.

1. Please include in your deliverables the 2007 Certification letter that all active construction sites have been inspected prior to the wet season. Check this box if the letter is attached or enclosed.

Also, be sure to complete and attach a copy of the Summary of Pre-Wet Season Erosion Control Inspections Form (Attachment E).

III. Tasks required by Provision C.3 of SMCWPPP’s NPDES permit amended on February 19, 2003.

1. Attach a copy of the completed Operations and Maintenance Information for Stormwater Treatment Measures form (Attachment D) for each new and redevelopment project where treatment measures have been implemented during this reporting period.

2. As required by Provision C.3.e.iii of SMCWPPP’s amended NPDES permit, provide the following details about your municipality’s Operation and Maintenance (O&M) Verification Program:
 - Provide a list or summary of O&M verification inspections conducted between July 1, 2007 and December 31, 2007. Include a summary of inspection results.

ATTACHMENT A

MUNICIPAL MAINTENANCE REPORTING FORMS

SAN MATEO COUNTYWIDE WATER POLLUTION PREVENTION PROGRAM

Municipal Government Maintenance Activities
FY 2007/08 Monthly Record Keeping Form

Month of: _____

Municipality: _____

Completed by: _____ Date: _____

STREET CLEANING	Volume of material collected (cubic yards)	Miles swept (curb miles)
1. Sweeping		
Residential Areas:	_____	_____
Commercial Areas:	_____	_____
Industrial Areas:	_____	_____
Other Areas Swept: (e.g., parking lots, major arterials, etc.)	_____	_____
TOTAL	_____	_____
2. Have you implemented any changes in your street sweeping program. (changed sweeping frequency, new equipment, etc.)		

LEAF REMOVAL		
Volume of leaves removed by City crews. _____ cubic yards		
Leaves bagged by residents and picked up by City. _____ bags.		
Check box if you do not have a leaf removal program other than routine street sweeping. <input type="checkbox"/>		

* Report total miles covered by sweepers including areas operated in tandem or repeated.

SAN MATEO COUNTYWIDE WATER POLLUTION PREVENTION PROGRAM

Municipal Government Maintenance Activities
 FY 2007/08 Monthly Record Keeping Form

Month of: _____

Municipality: _____

Completed by: _____ Date: _____

MAINTENANCE OF STORM DRAINAGE FACILITIES

	Inspected		Cleaned	
Number of storm drain inlets or curb inlets/outlets (convey storm water around street corners)	_____		_____	
V ditches	_____	miles	_____	miles
Storm drain lines	_____	miles	_____	miles
Channels	_____	miles	_____	miles
Creeks	_____	miles	_____	miles
Culverts, cross-culverts, pipes	_____	linear feet	_____	linear feet
Number of junction boxes	_____		_____	
Number of pump stations	_____		_____	

Other (please specify) _____

Total volume of material removed _____ cubic yards or _____ tons

Describe any observed illegal discharges or illicit connections below or check the box if activities are included in the Illicit Discharge Quarterly Summary Form.

Have you responded to complaints or noticed areas which should be targeted for more frequent cleaning?

Yes _____ No _____ If yes, explain _____

LITTER CONTROL

	Areas Targeted	Volume Removed
City/County Personnel (include receptacles)	_____ _____	_____ _____
Court Referred Crews	_____ _____	_____ _____
Other (weed and rubbish Abatement removal, etc.)	_____ _____	_____ _____
Total (specify cubic yards or pounds)		_____

ATTACHMENT B

STORMWATER INSPECTIONS & VIOLATIONS SUMMARY

STORMWATER INSPECTIONS & VIOLATIONS SUMMARY (Attachment B)

Municipality:
Period Covered By This Report: July 1, 2007 through December 31, 2007
Period Covered by the Previous Report:
Date:

Total Number of Inspections:
Total Number of Violations:
Total Follow-up Actions:
Total Violations Corrected:
Total Violations Pending:

NAME ADDRESS TYPE OF BUSINESS	VIOL DATE	TYPES OF VIOLATION		DESCRIPTION OF VIOLATION, including whether violating flow reached a creek or other waterbody (name waterbody)	ENFORCEMENT ACTIONS						FOLLOW-UP ACTIONS	VIOLATIONS CORRECTED (YES/NO)	DATE CORRECTED
		PEX	NSW		N	V	W	I	F	L			

Type of Violation

PEX Pollutant Exposure
NSW Non-Stormwater Discharge

Discharge of pollutants to storm drain system because pollutants are exposed to stormwater runoff.
 Discharge of non-stormwater materials to storm drain system. Non-stormwater discharges allowed by SMCWPPP's NPDES permit as conditionally exempted should not be identified as a NSW violation.

Enforcement Actions

NONE	No Action taken	IN	Informal Notice
VN	Verbal Notice	FN	Formal Notice
WN	Warning Notice	LA	Legal Notice

ATTACHMENT C

ILLCIT DISCHARGE QUARTERLY SUMMARY REPORT FORMS

AND

ILLCIT DISCHARGE SOURCE IDENTIFICATION FORM



Attachment C) Illicit Discharge Inspection Quarterly Summary Report

1st Quarter 2007/08
(July-September 2007)

Municipality: _____

Contact: _____

I. Field Activities																					
1. <i>Describe field surveys.</i> Number of established locations visited: Outfalls Inlets Manholes other (describe) Channel miles visited:	Industrial Areas	Commercial Areas	Residential Areas																		
2. <i>List how many discharges were identified by the following methods. Include only discharges that could have been prevented by BMPs. Do not include fluid releases associated with minor traffic accidents.</i> a. During field surveys at established locations: <table style="width: 100%; margin-left: 20px;"> <tr> <td style="width: 50%;">_____ identified by maintenance crews</td> <td style="width: 50%;">_____ maintenance crews</td> </tr> <tr> <td>_____ identified by illicit discharge inspectors</td> <td>_____ other agencies</td> </tr> <tr> <td></td> <td>_____ public</td> </tr> </table>				_____ identified by maintenance crews	_____ maintenance crews	_____ identified by illicit discharge inspectors	_____ other agencies		_____ public												
_____ identified by maintenance crews	_____ maintenance crews																				
_____ identified by illicit discharge inspectors	_____ other agencies																				
	_____ public																				
3. <i>List the number of times the following materials were identified.</i> <table style="width: 100%; margin-left: 20px;"> <tr> <td style="width: 50%;">_____ Sewage</td> <td style="width: 50%;">_____ Yard Wastes</td> </tr> <tr> <td>_____ Used Motor Oil</td> <td>_____ Sediment and/or silt</td> </tr> <tr> <td>_____ Antifreeze</td> <td>_____ Concrete Cutting Slurry/Washwaters</td> </tr> <tr> <td>_____ Fuels</td> <td>_____ Vehicle Cleaning Washwaters</td> </tr> <tr> <td>_____ Paint</td> <td>_____ Building/Sidewalk Washwaters</td> </tr> <tr> <td>_____ Concrete</td> <td>_____ Other Washwaters</td> </tr> <tr> <td>_____ Construction Debris</td> <td>_____ Industrial Wastes (solvents, metals, corrosives, cooling tower blowdown, etc)</td> </tr> <tr> <td>_____ Wall Compound</td> <td>_____ Other (describe):</td> </tr> <tr> <td>_____ Food Wastes</td> <td></td> </tr> </table>				_____ Sewage	_____ Yard Wastes	_____ Used Motor Oil	_____ Sediment and/or silt	_____ Antifreeze	_____ Concrete Cutting Slurry/Washwaters	_____ Fuels	_____ Vehicle Cleaning Washwaters	_____ Paint	_____ Building/Sidewalk Washwaters	_____ Concrete	_____ Other Washwaters	_____ Construction Debris	_____ Industrial Wastes (solvents, metals, corrosives, cooling tower blowdown, etc)	_____ Wall Compound	_____ Other (describe):	_____ Food Wastes	
_____ Sewage	_____ Yard Wastes																				
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_____ Wall Compound	_____ Other (describe):																				
_____ Food Wastes																					
II. Follow-up Activities																					
1. <i>Describe whether sources of discharges were identified.</i> _____ Number of sources that were identified _____ Number of incidents when source of discharge was not identified																					
2. <i>Describe whether discharges were abated.</i> _____ Number of discharge incidents that were abated _____ Number of new discharge incidents where discharge is continuing, as of the end of the reporting period; Attach the inspection report _____ Number of continuing discharges that have already been reported in previous quarter(s).																					
3. <i>Describe enforcement activities conducted.</i> <table style="width: 100%; margin-left: 20px;"> <tr> <td style="width: 50%;">_____ Warning Notice (verbal warning)</td> <td style="width: 50%;">_____ Formal Violation</td> </tr> <tr> <td>_____ Informal Violation</td> <td>_____ Legal Action</td> </tr> </table>				_____ Warning Notice (verbal warning)	_____ Formal Violation	_____ Informal Violation	_____ Legal Action														
_____ Warning Notice (verbal warning)	_____ Formal Violation																				
_____ Informal Violation	_____ Legal Action																				



Attachment C) Illicit Discharge Inspection Quarterly Summary Report

2nd Quarter 2007/08
(October-December 2007)

Municipality: _____

Contact: _____

I. Field Activities					
<p>1. <i>Describe field surveys.</i></p> <p>Number of established locations visited:</p> <p style="padding-left: 20px;">Outfalls</p> <p style="padding-left: 20px;">Inlets</p> <p style="padding-left: 20px;">Manholes</p> <p style="padding-left: 20px;">other (describe)</p> <p>Channel miles visited:</p>	Industrial Areas	Commercial Areas	Residential Areas		
<p>2. <i>List how many discharges were identified by the following methods. Include only discharges that could have been prevented by BMPs. Do not include fluid releases associated with minor traffic accidents.</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <p>a. During field surveys at established locations:</p> <p style="padding-left: 20px;">_____ identified by maintenance crews</p> <p style="padding-left: 20px;">_____ identified by illicit discharge inspectors</p> </td> <td style="width: 50%; border: none; vertical-align: top;"> <p>b. Calls from:</p> <p style="padding-left: 20px;">_____ maintenance crews</p> <p style="padding-left: 20px;">_____ other agencies</p> <p style="padding-left: 20px;">_____ public</p> </td> </tr> </table>				<p>a. During field surveys at established locations:</p> <p style="padding-left: 20px;">_____ identified by maintenance crews</p> <p style="padding-left: 20px;">_____ identified by illicit discharge inspectors</p>	<p>b. Calls from:</p> <p style="padding-left: 20px;">_____ maintenance crews</p> <p style="padding-left: 20px;">_____ other agencies</p> <p style="padding-left: 20px;">_____ public</p>
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II. Follow-up Activities					
<p>1. <i>Describe whether sources of discharges were identified.</i></p> <p>_____ Number of sources that were identified</p> <p>_____ Number of incidents when source of discharge was not identified</p>					
<p>2. <i>Describe whether discharges were abated.</i></p> <p>_____ Number of discharge incidents that were abated</p> <p>_____ Number of new discharge incidents where discharge is continuing, as of the end of the reporting period;</p> <p>_____ Attach the inspection report</p> <p>_____ Number of continuing discharges that have already been reported in previous quarter(s).</p>					
<p>3. <i>Describe enforcement activities conducted.</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <p>_____ Warning Notice (verbal warning)</p> <p>_____ Informal Violation</p> </td> <td style="width: 50%; border: none;"> <p>_____ Formal Violation</p> <p>_____ Legal Action</p> </td> </tr> </table>				<p>_____ Warning Notice (verbal warning)</p> <p>_____ Informal Violation</p>	<p>_____ Formal Violation</p> <p>_____ Legal Action</p>
<p>_____ Warning Notice (verbal warning)</p> <p>_____ Informal Violation</p>	<p>_____ Formal Violation</p> <p>_____ Legal Action</p>				

ATTACHMENT D

**OPERATION AND MAINTENANCE INFORMATION FOR STORMWATER
TREATMENT MEASURES**



Operation and Maintenance Information for Stormwater Treatment Measures (Attachment D)

Complete and submit for municipal stormwater NPDES permit reporting the following information for each new and redevelopment project where treatment measures have been implemented this reporting period.

This section to be completed by Applicant

Background Information

Location or Address: _____

Type of Land Use: Commercial Industrial Residential Public Agency

Property Owner's Name: _____

Parcel/Tract No.: _____ Lot No.: _____ APN # _____

Type of treatment measures implemented: _____

Describe locations of each treatment measure or attach map showing locations on the property:

Stormwater Treatment Measure Owner or Operator's Information:

Name: _____

Address: _____

Phone: _____ Fax: _____ Email: _____

Numeric hydraulic sizing criteria used to design each stormwater treatment measure:

- San Mateo Countywide Stormwater Pollution Prevention Program's NPDES permit's Provision C.3.d
- Other, describe: _____

Applicant's Name

Signature

Date

This section to be completed by Agency staff

More Detailed Information about Access Assurance and O&M Responsibilities:

Describe how access permission is assured for O&M verification by public agencies or their representatives (e.g., municipality, Regional Water Quality Control Board, and Mosquito Abatement District):

Indicate how responsibility for O&M is assured. Check all that apply:

- Signed statement from private entity accepting responsibility for O&M until responsibility is legally transferred.
- Signed statement from public entity assuming O&M and that the treatment measures meet all local design standards.
- Written conditions in the sales or lease agreement requiring the buyer or lessee to assume O&M (in the case of purchase and sale agreements, conditions shall survive the close of escrow).
- Written text in project conditions, covenants and restrictions for residential properties assigning O&M responsibilities to the home owners association.
- Any other legally enforceable agreement or mechanism that assigns responsibility and describe below.

Local Agency O&M Verification Program

Name of municipality or Flood Control District responsible under the NPDES permit for verifying O&M.

Describe where information documenting responsibility for O&M is kept and updated.

ATTACHMENT E

SUMMARY OF PRE-WET SEASON EROSION CONTROL INSPECTIONS FORM



Attachment E

Summary of Pre-Wet Season Erosion Control Inspections Form

Municipality Name _____

Directions: A copy of this completed form documenting your municipality's pre-wet season erosion control inspections should be included with your municipality's 2007 letter that certifies that each active construction site has been stabilized to minimize erosion and the discharge of sediment from disturbed areas prior to the FY 2007/08 wet season.

Project Name	Project Address	Project Type r= residential (units) c=commercial i=industrial g=governmental ¹	Does Project Have Coverage Under Statewide Construction General Permit?	Was Site Inspected by Municipal Staff? If so, provide inspection date(s)	Were Erosion and Sedimentation Control Measures Undertaken Acceptable? ²	Describe Corrections Made NN= none needed
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>

¹ Select one or more of the code letters that are applicable to the project site

² If no inspection was done, provide explanation in the certification letter about how the acceptability of the erosion and sedimentation control measures was determined.



Attachment E
Summary of Pre-Wet Season Erosion Control Inspections Form
Municipality Name _____

Project Name	Project Address	Project Type r= residential (units) c=commercial i=industrial g=governmental ¹	Does Project Have Coverage Under Statewide Construction General Permit?	Was Site Inspected by Municipal Staff? If so, provide inspection date(s)	Were Erosion and Sedimentation Control Measures Undertaken Acceptable? ²	Describe Corrections Made NN= none needed
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>
		r <input type="checkbox"/> (____ units) c <input type="checkbox"/> i <input type="checkbox"/> g <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> date _____ No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	NN <input type="checkbox"/>

ATTACHMENT F

TABLE OF NEW DEVELOPMENT PROJECTS

Table of New Development Projects¹

[[= Enter Name of Municipality =]]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Project Name; Location (cross streets); Street Address	Name of Developer; Project Phase No. ² ; Project Description	Status of Project	Project Type ³	Site Acreage	New or Replaced Impervious Surface Area	Source Control Measure BMPs	Site Design Measure BMPs	Post-Construction Treatment BMPs				Pesticide Reduction Measures Included in Project	Alternative Compliance ⁴		HMP ⁵
								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracticability	Alternative Compliance Measures	
Private Projects															
EXAMPLE: Nirvana Estates; Property bounded by Paradise Lane, Serenity Drive, and Eternity Circle; Waterville, CA	EXAMPLE: Heavenly Homes; Phase 1; Construction of 156 single-family homes and 45 townhomes with commercial shops and underground parking.	EXAMPLE: Application submitted 12/29/03 and approved 6/06/04; Grading began 10/31/04; Construction began 5/12/06 and completed 11/30/06.	EXAMPLE: Mixed use: residential and commercial	EXAMPLE: 25 acres	EXAMPLE: 20 acres	EXAMPLE: Stenciled inlets, street sweeping, covered parking, car wash pad drains to sanitary sewer	EXAMPLE: Pervious pavement for all driveways, sidewalks, and commercial plaza	EXAMPLE: vegetated swales, detention basins,	EXAMPLE: WEF Method	EXAMPLE: Homeowners Association CCRs require implementation of approved maintenance plan. Annual O&M report will be submitted to City.	EXAMPLE: Yes	EXAMPLE: Pest-resistant landscaping, pervious paving to reduce impervious surface, incorporate stormwater detention			EXAMPLE: Extended detention basin
Public Projects															
EXAMPLE: Waterville Downtown Plaza; Rushing Road and Bubbling Blvd; 123 Rushing Road, Waterville, CA	EXAMPLE: City of Waterville; Capital improvement project to build plaza on roof of existing parking structure.	EXAMPLE: Negative Declaration adopted 1/15/06. Advertised for construction bids 6/26/06. Construction scheduled to begin 9/06.	EXAMPLE: Redevelopment	EXAMPLE: 1.5 acres	EXAMPLE: 1 acre	EXAMPLE: Roofed trash enclosure. Fountain designed to recirculate water-no discharge to storm drain.	EXAMPLE: Down-spouts connected to land-scaping. Pervious pavement for entire plaza area	EXAMPLE: tree wells with bioretention; planter boxes with bioretention	EXAMPLE: WEF Method	EXAMPLE: Signed statement from Waterville Public Works assuming post-construction responsibility for treatment BMP maintenance.	EXAMPLE: No	EXAMPLE: Pest-resistant landscaping, pervious paving to reduce impervious surface, incorporate stormwater detention			EXAMPLE: Not Required: Site located in exempt area

¹ List on this table information for all Group 1 and Group 2 Projects, e.g. those that create and/or replace at least 10,000 square feet of impervious surface. Projects that create and/or replace less than 10,000 square feet of impervious surface are not required to be reported.

² If a project is being constructed in Phases, each Phase should have a separate entry.

³ Indicate project type, based on NPDES Permit Provision C.3.c categories: Commercial, Industrial, Residential, Streets/Road/Highways/Freeways, Significant Redevelopment.

⁴ If a project was granted Alternative Compliance (Provision C.3.g), report required information on the Interim Alternative Compliance Form (Attachment __).

⁵ If hydromodification (HM) control is not required, state why not. If HM control is required, describe the control method used and attach the pre- and post-project hydrographs.



Second Half -Year Deliverables
(January – June 2008)
Due by July 15, 2008

Municipality: _____

Contact Person: _____ Phone: _____

(Please complete the following report and submit, along with a statement of certification, to Matt Fabry by the July 15, 2008 TAC meeting.)

Submittal Checklist

1. Certification Letter (signed by an authorized representative from your municipality).....

2. Municipal Government Maintenance Monthly Record Keeping Forms (Attachment A)

Check if data submitted electronically.

	<u>Street/Leaf</u>	<u>Storm/Litter</u>
January 2008	<input type="checkbox"/>	<input type="checkbox"/>
February 2008	<input type="checkbox"/>	<input type="checkbox"/>
March 2008	<input type="checkbox"/>	<input type="checkbox"/>
April 2008	<input type="checkbox"/>	<input type="checkbox"/>
May 2008	<input type="checkbox"/>	<input type="checkbox"/>
June 2008	<input type="checkbox"/>	<input type="checkbox"/>

* For maintenance activities not conducted, please fill in zeros on the forms.

3. Stormwater Inspections & Violations Summary (for this reporting period - Attachment B)

4. Illicit Discharge Quarterly Summary Report: Third Quarter

(Attachment C) Fourth Quarter

* Please complete one form for each quarter (do not combine quarters).

5. Operations and Maintenance Information for Stormwater Treatment Measures form for each new and redevelopment project where post-construction, stormwater treatment controls have been implemented this reporting period (Attachment D)

6. Table of New Development Projects (Attachment E).....

To assist us in compiling information from all the municipalities, please also:

- *Do not remove page breaks (start each component at the top of a new page).*
- *Write your municipality's name at the top of every page.*

COMPONENT 3. INDUSTRIAL AND ILLICIT DISCHARGE CONTROLS

Performance standards contained in the Stormwater Management Plan and which are therefore enforceable requirements of the NPDES permit

1. Submit completed Stormwater Inspections & Violations Summary forms (Attachment B).
 - a. How many businesses were inspected between January and June 2008?
 - b. How many inspected businesses had one or more violations using definition on the Summary Inspections & Violation Summary form?
 - c. How many businesses had a violation that was pending correction as of end of day on June 30, 2008?
2. Complete the attached forms: *Illicit Discharge Inspection Quarterly Summary Report: 3rd Quarter 2007/08* and *Illicit Discharge Inspection Quarterly Summary Report: 4th Quarter 2007/08 (Attachment C)*. **NOTE: For each illicit discharge found please fill out the Illicit Discharge Source Identification Form (Attachment C) and retain copies of these forms at your municipality (don't submit with deliverables). The completed forms must be made available if requested in the future by the Water Board staff or its representatives.**
3. Describe assistance provided to the CII Subcommittee and its Educational Outreach Work Group during January through June 2008. (Do not list the subcommittee meetings attended because EOA will track and include information about meeting attendance in SMCWPPP's Annual Report).
4. Describe your municipality's use of SMCWPPP's business educational outreach materials, such as the Vehicle Service Facility booklets, restaurant posters, and any other educational outreach activities for businesses.

COMPONENT 4. PUBLIC INFORMATION AND PARTICIPATION

COMPONENT 5. NEW DEVELOPMENT AND CONSTRUCTION SITE CONTROLS

I. Tasks described in the Stormwater Management Plan and which are therefore enforceable requirements of the NPDES permit.

1. Who is the designated person responsible for overseeing the implementation of these performance standards and for acting as a liaison with the SMCWPPP New Development Subcommittee?

II. Tasks required by Provision C.3 of SMCWPPP's NPDES permit.

1. Attach a copy of the completed Operations and Maintenance Information for Stormwater Treatment Measures form (Attachment D) for each new and redevelopment project where treatment measures have been implemented during this reporting period.
2. As required by Provision C.3.e.iii of SMCWPPP's amended NPDES permit, provide the following details about your municipality's Operation and Maintenance (O&M) Verification Program:

- Provide a list or summary of O&M verification inspections conducted between January 1, 2008 and June 30, 2008. Include a summary of inspection results.

- Describe any inspection follow-up.

- Evaluate your municipality's O&M Verification Program's effectiveness.

- Summarize any planned improvements to the O&M Verification Program.

- Describe the organizational structure of your O&M Verification Program.
3. Complete the Table of New Development Projects (Attachment E) for all Group 1 and 2 projects being planned or constructed during January through June 2008. **NOTE: Include information on hydromodification management for any projects that create and/or replace one acre or more of impervious surface and are located in susceptible areas.**
 4. **Alternative Certification of Adherence to Design Criteria for Stormwater Treatment Measures.** During this reporting period, did your municipality use this *optional* approach for allowing projects to be certified in writing by someone other than an employee of your municipality as meeting the hydraulic sizing design criteria for stormwater treatment?

If yes, please list the projects certified by someone other than an employee of your municipality.

5. **Site Design Standards and/or Guidance Development.** List any actions that your municipality has taken during the reporting period from July 2007 through June 2008 to implement the Draft Review and Analysis and Proposed Revisions of Local Site Design Standards and Guidance, which was submitted to the Regional Water Board on November 15, 2004 (Provision C.3.j). You may also list actions taken prior to this reporting period that were not previously reported.
6. **Source Control Measures Guidance Development.** Summarize any changes made during the reporting period from July 2007 through June 2008 to the contents or use of your municipality's Local Source Control Measures list, which is based on SMCWPPP's Model Source Control Measures Guidance Document, submitted to the Regional Water Board on August 15, 2004 (Provision C.3.k).

ATTACHMENT A

MUNICIPAL MAINTENANCE REPORTING FORMS

SAN MATEO COUNTYWIDE WATER POLLUTION PREVENTION PROGRAM

Municipal Government Maintenance Activities
 FY 2006/07 Monthly Record Keeping Form

Month of: _____

Municipality: _____

Completed by: _____ Date: _____

MAINTENANCE OF STORM DRAINAGE FACILITIES

	Inspected		Cleaned	
Number of storm drain inlets or curb inlets/outlets (convey storm water around street corners)	_____		_____	
V ditches	_____	miles	_____	miles
Storm drain lines	_____	miles	_____	miles
Channels	_____	miles	_____	miles
Creeks	_____	miles	_____	miles
Culverts, cross-culverts, pipes	_____	linear feet	_____	linear feet
Number of junction boxes	_____		_____	
Number of pump stations	_____		_____	

Other (please specify) _____

Total volume of material removed _____ cubic yards or _____ tons

Describe any observed illegal discharges or illicit connections below or check the box if activities are included in the Illicit Discharge Quarterly Summary Form.

Have you responded to complaints or noticed areas which should be targeted for more frequent cleaning?

Yes _____ No _____ If yes, explain _____

LITTER CONTROL

	Areas Targeted	Volume Removed
City/County Personnel (include receptacles)	_____	_____
Court Referred Crews	_____	_____
Other (weed and rubbish Abatement removal, etc.)	_____	_____
	_____	_____
Total (specify cubic yards or pounds)		_____

ATTACHMENT B

STORMWATER INSPECTIONS & VIOLATIONS SUMMARY

STORMWATER INSPECTIONS & VIOLATIONS SUMMARY (Attachment B)

Municipality:
Period Covered By This Report: January 1, 2008 through June 30, 2008
Period Covered by the Previous Report:
Date:

Total Number of Inspections:
Total Number of Violations:
Total Follow-up Actions:
Total Violations Corrected:
Total Violations Pending:

NAME ADDRESS TYPE OF BUSINESS	VIOL DATE	TYPES OF VIOLATION		DESCRIPTION OF VIOLATION, including whether violating flow reached a creek or other waterbody (name waterbody)	ENFORCEMENT ACTIONS						FOLLOW-UP ACTIONS	VIOLATIONS CORRECTED (YES/NO)	DATE CORRECTED
		PEX	NSW		N O N E	V N	W N	I N	F N	L A			

Type of Violation

PEX Pollutant Exposure
NSW Non-Stormwater Discharge

Discharge of pollutants to storm drain system because pollutants are exposed to stormwater runoff.
 Discharge of non-stormwater materials to storm drain system. Non-stormwater discharges allowed by SMCWPPP's NPDES permit as conditionally exempted should not be identified as a NSW violation.

Enforcement Actions

NONE	No Action taken	IN	Informal Notice
VN	Verbal Notice	FN	Formal Notice
WN	Warning Notice	LA	Legal Notice

ATTACHMENT C

ILLCIT DISCHARGE QUARTERLY SUMMARY REPORT FORMS

AND

ILLCIT DISCHARGE SOURCE IDENTIFICATION FORM



Attachment C) Illicit Discharge Inspection Quarterly Summary Report

3rd Quarter 2007/08
(January - March 2008)

Municipality: _____

Contact: _____

I. Field Activities					
<p>1. <i>Describe field surveys.</i></p> <p>Number of established locations visited:</p> <p style="padding-left: 20px;">Outfalls</p> <p style="padding-left: 20px;">Inlets</p> <p style="padding-left: 20px;">Manholes</p> <p style="padding-left: 20px;">other (describe)</p> <p>Channel miles visited:</p>	Industrial Areas	Commercial Areas	Residential Areas		
<p>2. <i>List how many discharges were identified by the following methods. Include only discharges that could have been prevented by BMPs. Do not include fluid releases associated with minor traffic accidents.</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <p>a. During field surveys at established locations:</p> <p style="padding-left: 20px;">_____ identified by maintenance crews</p> <p style="padding-left: 20px;">_____ identified by illicit discharge inspectors</p> </td> <td style="width: 50%; border: none; vertical-align: top;"> <p>b. Calls from:</p> <p style="padding-left: 20px;">_____ maintenance crews</p> <p style="padding-left: 20px;">_____ other agencies</p> <p style="padding-left: 20px;">_____ public</p> </td> </tr> </table>				<p>a. During field surveys at established locations:</p> <p style="padding-left: 20px;">_____ identified by maintenance crews</p> <p style="padding-left: 20px;">_____ identified by illicit discharge inspectors</p>	<p>b. Calls from:</p> <p style="padding-left: 20px;">_____ maintenance crews</p> <p style="padding-left: 20px;">_____ other agencies</p> <p style="padding-left: 20px;">_____ public</p>
<p>a. During field surveys at established locations:</p> <p style="padding-left: 20px;">_____ identified by maintenance crews</p> <p style="padding-left: 20px;">_____ identified by illicit discharge inspectors</p>	<p>b. Calls from:</p> <p style="padding-left: 20px;">_____ maintenance crews</p> <p style="padding-left: 20px;">_____ other agencies</p> <p style="padding-left: 20px;">_____ public</p>				
<p>3. <i>List the number of times the following materials were identified.</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <p>_____ Sewage</p> <p>_____ Used Motor Oil</p> <p>_____ Antifreeze</p> <p>_____ Fuels</p> <p>_____ Paint</p> <p>_____ Concrete</p> <p>_____ Construction Debris</p> <p>_____ Wall Compound</p> <p>_____ Food Wastes</p> </td> <td style="width: 50%; border: none; vertical-align: top;"> <p>_____ Yard Wastes</p> <p>_____ Sediment and/or silt</p> <p>_____ Concrete Cutting Slurry/Washwaters</p> <p>_____ Vehicle Cleaning Washwaters</p> <p>_____ Building/Sidewalk Washwaters</p> <p>_____ Other Washwaters</p> <p>_____ Industrial Wastes (solvents, metals, corrosives, cooling tower blowdown, etc)</p> <p>_____ Other (describe):</p> </td> </tr> </table>				<p>_____ Sewage</p> <p>_____ Used Motor Oil</p> <p>_____ Antifreeze</p> <p>_____ Fuels</p> <p>_____ Paint</p> <p>_____ Concrete</p> <p>_____ Construction Debris</p> <p>_____ Wall Compound</p> <p>_____ Food Wastes</p>	<p>_____ Yard Wastes</p> <p>_____ Sediment and/or silt</p> <p>_____ Concrete Cutting Slurry/Washwaters</p> <p>_____ Vehicle Cleaning Washwaters</p> <p>_____ Building/Sidewalk Washwaters</p> <p>_____ Other Washwaters</p> <p>_____ Industrial Wastes (solvents, metals, corrosives, cooling tower blowdown, etc)</p> <p>_____ Other (describe):</p>
<p>_____ Sewage</p> <p>_____ Used Motor Oil</p> <p>_____ Antifreeze</p> <p>_____ Fuels</p> <p>_____ Paint</p> <p>_____ Concrete</p> <p>_____ Construction Debris</p> <p>_____ Wall Compound</p> <p>_____ Food Wastes</p>	<p>_____ Yard Wastes</p> <p>_____ Sediment and/or silt</p> <p>_____ Concrete Cutting Slurry/Washwaters</p> <p>_____ Vehicle Cleaning Washwaters</p> <p>_____ Building/Sidewalk Washwaters</p> <p>_____ Other Washwaters</p> <p>_____ Industrial Wastes (solvents, metals, corrosives, cooling tower blowdown, etc)</p> <p>_____ Other (describe):</p>				
II. Follow-up Activities					
<p>1. <i>Describe whether sources of discharges were identified.</i></p> <p>_____ Number of sources that were identified</p> <p>_____ Number of incidents when source of discharge was not identified</p>					
<p>2. <i>Describe whether discharges were abated.</i></p> <p>_____ Number of discharge incidents that were abated</p> <p>_____ Number of new discharge incidents where discharge is continuing, as of the end of the reporting period;</p> <p>_____ Attach the inspection report</p> <p>_____ Number of continuing discharges that have already been reported in previous quarter(s).</p>					
<p>3. <i>Describe enforcement activities conducted.</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <p>_____ Warning Notice (verbal warning)</p> <p>_____ Informal Violation</p> </td> <td style="width: 50%; border: none;"> <p>_____ Formal Violation</p> <p>_____ Legal Action</p> </td> </tr> </table>				<p>_____ Warning Notice (verbal warning)</p> <p>_____ Informal Violation</p>	<p>_____ Formal Violation</p> <p>_____ Legal Action</p>
<p>_____ Warning Notice (verbal warning)</p> <p>_____ Informal Violation</p>	<p>_____ Formal Violation</p> <p>_____ Legal Action</p>				



(Attachment C) Illicit Discharge Inspection Quarterly Summary Report

4th Quarter 2007/08
(April - June 2008)

Municipality: _____

Contact: _____

I. Field Activities			
1. Describe field surveys.	Industrial Areas	Commercial Areas	Residential Areas
Number of established locations visited:			
Outfalls			
Inlets			
Manholes			
other (describe)			
Channel miles visited:			
2. List how many discharges were identified by the following methods. Include only discharges that could have been prevented by BMPs. Do not include fluid releases associated with minor traffic accidents.			
a. During field surveys at established locations:		b. Calls from:	
_____ identified by maintenance crews		_____ maintenance crews	
_____ identified by illicit discharge inspectors		_____ other agencies	
		_____ public	
3. List the number of times the following materials were identified.			
_____ Sewage		_____ Yard Wastes	
_____ Used Motor Oil		_____ Sediment and/or silt	
_____ Antifreeze		_____ Concrete Cutting Slurry/Washwaters	
_____ Fuels		_____ Vehicle Cleaning Washwaters	
_____ Paint		_____ Building/Sidewalk Washwaters	
_____ Concrete		_____ Other Washwaters	
_____ Construction Debris		_____ Industrial Wastes (solvents, metals, corrosives, cooling tower blowdown, etc)	
_____ Wall Compound		_____ Other (describe):	
_____ Food Wastes			
II. Follow-up Activities			
1. Describe whether sources of discharges were identified.			
_____ Number of sources that were identified			
_____ Number of incidents when source of discharge was not identified			
2. Describe whether discharges were abated.			
_____ Number of discharge incidents that were abated			
_____ Number of new discharge incidents where discharge is continuing, as of the end of the reporting period;			
Attach the inspection report			
_____ Number of continuing discharges that have already been reported in previous quarter(s).			
3. Describe enforcement activities conducted.			
_____ Warning Notice (verbal warning)		_____ Formal Violation	
_____ Informal Violation		_____ Legal Action	

ATTACHMENT D

**OPERATION AND MAINTENANCE INFORMATION FOR STORMWATER
TREATMENT MEASURES**

ATTACHMENT E
TABLE OF NEW DEVELOPMENT PROJECTS

Table of New Development Projects¹

[[= Enter Name of Municipality =]]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Project Name; Location (cross streets); Street Address	Name of Developer; Project Phase No. ² ; Project Description	Status of Project	Project Type ³	Site Acreage	New or Replaced Impervious Surface Area	Source Control Measure BMPs	Site Design Measure BMPs	Post-Construction Treatment BMPs				Pesticide Reduction Measures Included in Project	Alternative Compliance ⁴		Hydrograph Modification Management ⁵
								Treatment BMPs Used	Hydraulic Sizing Criteria Used	Operation & Maintenance Responsibility Mechanism	Referred to O&M Inspection Team (y/n)?		Basis of Impracticability	Alternative Compliance Measures	
Private Projects															
EXAMPLE: Nirvana Estates; Property bounded by Paradise Lane, Serenity Drive, and Eternity Circle; Waterville, CA	EXAMPLE: Heavenly Homes; Phase 1; Construction of 156 single-family homes and 45 townhomes with commercial shops and underground parking.	EXAMPLE: Application submitted 12/29/03 and approved 6/06/04; Grading began 10/31/04; Construction began 5/12/06 and completed 11/30/06.	EXAMPLE: Mixed use: residential and commercial	EXAMPLE: 25 acres	EXAMPLE: 20 acres	EXAMPLE: Stenciled inlets, street sweeping, covered parking, car wash pad drains to sanitary sewer	EXAMPLE: Pervious pavement for all driveways, sidewalks, and commercial plaza	EXAMPLE: vegetated swales, detention basins,	EXAMPLE: WEF Method	EXAMPLE: Homeowners Association CCRs require implementation of approved maintenance plan. Annual O&M report will be submitted to City.	EXAMPLE: Yes	EXAMPLE: Pest-resistant landscaping, pervious paving to reduce impervious surface, incorporate stormwater detention			EXAMPLE: Extended detention basin
Public Projects															
EXAMPLE: Waterville Downtown Plaza; Rushing Road and Bubbling Blvd; 123 Rushing Road, Waterville, CA	EXAMPLE: City of Waterville; Capital improvement project to build plaza on roof of existing parking structure.	EXAMPLE: Negative Declaration adopted 1/15/06. Advertised for construction bids 6/26/06. Construction scheduled to begin 9/06.	EXAMPLE: Redevelopment	EXAMPLE: 1.5 acres	EXAMPLE: 1 acre	EXAMPLE: Roofed trash enclosure. Fountain designed to recirculate water-no discharge to storm drain.	EXAMPLE: Down-spouts connected to land-scaping. Pervious pavement for entire plaza area	EXAMPLE: tree wells with bioretention; planter boxes with bioretention	EXAMPLE: WEF Method	EXAMPLE: Signed statement from Waterville Public Works assuming post-construction responsibility for treatment BMP maintenance.	EXAMPLE: No	EXAMPLE: Pest-resistant landscaping, pervious paving to reduce impervious surface, incorporate stormwater detention			EXAMPLE: Not Required: Site located in exempt area

¹ List on this table information for all Group 1 and Group 2 Projects, e.g. those that create and/or replace at least 10,000 square feet of impervious surface. Projects that create and/or replace less than 10,000 square feet of impervious surface are not required to be reported.

² If a project is being constructed in Phases, each Phase should have a separate entry.

³ Indicate project type, based on NPDES Permit Provision C.3.c categories: Commercial, Industrial, Residential, Streets/Road/Highways/Freeways, Significant Redevelopment.

⁴ If a project was granted Alternative Compliance (Provision C.3.g), report required information on the Interim Alternative Compliance Form (contact SMCWPPP staff for details).

⁵ If hydromodification (HM) control is not required, state why not. If HM control is required, describe the control method used and attach the pre- and post-project hydrographs.