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FISCAL YEAR 2004/05  
ANNUAL REPORT



San Mateo Countywide  
Stormwater Pollution  
Prevention Program

*July 2004 through June 2005  
Volume I of V  
August 31, 2005*

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

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## Credits

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This report is being submitted by the participating agencies in the



### San Mateo Countywide Stormwater Pollution Prevention Program

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 Stormwater 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.

# 1

## EXECUTIVE SUMMARY

### INTRODUCTION

This report summarizes the San Mateo Countywide Stormwater Pollution Prevention Program's (STOPPP) progress in implementing the second year of activities following completion of the current Stormwater Management Plan (July 1998 – June 2003 SWMP). The NPDES permit was adopted on July 1999, one year after the implementation of the plan was initiated.

This report summarizes progress during FY 2004/05 in implementing the following five major components of the SWMP:

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

Information for this report originated from General Program deliverables and semiannual reports prepared by each of the STOPPP 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 flyers.

The following describes the organizational structure of STOPPP and funding information that is not contained elsewhere.

### Organizational Structure

The current organizational structure of STOPPP is illustrated in Figure 1-1. The City/County Association of Governments (CCAG) 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 STOPPP. 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 SWMP'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 CCAG 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 2004/05 C/CAG budget was \$1,334,014. Generally, fees to fund the General Program were applied according to land use area as follows:

- \$3.44 residential parcel – basic fee;  
\$2.4842 – additional fee
- \$1.72 condominium, agriculture and vacant parcel – basic fee;  
\$1.2421 – additional fee
- \$3.44 all other uses for first 11,000 square feet, plus \$0.3127 per 1,000 additional square feet of parcel area – basic fee;  
\$2.4842 - 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, and the Town of Portola Valley participate 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**

STOPPP 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, STOPPP has provided financial support for the Clean Estuary Partnership that addresses planning for the implementation of TMDLs, and STOPPP's Program Coordinator serves as BASMAA's representative on the Clean Estuary Program's Administrative Committee. STOPPP has also actively supported the San Francisco Estuary Project's Implementation Committee. Lastly, STOPPP has participated in the Regional Board's Mercury Watershed Council since it was initiated in 1999.

STOPPP is also supporting the development of the Bay Area Hydrology Model (BAHM), along with SCVURPPP

and ACCWP. The BAHM is being adapted from the Western Washington Hydrology Model to help local agencies correctly design Flow Duration Control treatment measures in compliance with their respective Hydromodification Management Plans.

Finally, STOPPP has so far contributed \$2,000 towards the development of BASMAA's Design Tool, and additional monies may be contributed in FY 2005/2006.

**SUMMARY OF PROGRESS IN EACH PLAN COMPONENT**

A summary of FY 2004/05 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 conducting routine maintenance activities (e.g., street sweeping and storm drain inlet cleaning).
- To minimize the discharge of pollutants to storm drains and water-courses from maintenance-related activities.

Outreach to local maintenance staff is conducted primarily through regular Public Works and Parks Supervisors meetings and two annual workshops for supervisors and field staff. One of these annual workshops focused on minimizing pesticide usage.

Major accomplishments during the past year include the following:

- Facilitated four Municipal Maintenance Subcommittee meetings and three Parks and Recreation Integrated Pest Management (IPM) Work Group meetings. .
- Conducted the Twelfth Annual Maintenance Workshop that was attended by over 100 public works and parks supervisors, and field staff. A copy of the workshop agenda, attendee's list, and a summary of the evaluation forms are contained in Appendix A.
- Conducted a Parks and Recreation IPM Workshop attended by approximately 81 people. A copy of the workshop agenda, attendee's list, and a summary of the evaluation forms are contained in Appendix A.
- Developed an outreach brochure for landscapers and professional gardeners. A copy of the brochure can be seen in Appendix A.
- Prepared a door hanger for enforcement and education focusing on residential yard maintenance and improvements. A copy of the door hanger, designed for contract gardeners, is contained in Appendix A.
- Tracked contractors' and in-house staff's use of pesticide on municipally owned or operated property and reported justification for use of organophosphate (OP) pesticides and BMPs employed (Pesticide Management Plan, Action Item I.A.1).
- Tracked records for street sweeping, maintenance of storm drainage facilities, and removal of leaf and

litter in order to evaluate effectiveness and improve 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 year:

- Assisted with stormwater BMP training for school maintenance staff as part of San Mateo County's School Recycling Program.
- Prepared and published an article in the Tri-County Apartment Association's *Apartment Management* magazine on the use of stormwater BMPs as part of managing rental property.
- Prepared integrated pest management information that the County Agriculture Commission mailed to Pest Control Operators who are licensed to work in San Mateo County.
- Developed fluorescent lamp disposal cards for business inspectors to distribute to businesses in order to encourage lamp recycling.
- Continued to develop a PowerPoint

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presentation that will be used to educate restaurant workers about stormwater BMPs.

- Conducted inspections and provided educational outreach to 1,906 businesses in FY 2004/05, as part of the effort to re-inspect high priority businesses annually and re-inspect other businesses that impact stormwater quality at least once every five years. The total number of inspections in FY 2004/05 was within the range of the number of inspections conducted during the previous four years. The number of inspections conducted during each of the last four years is about 65 percent higher than the number inspected annually during the preceding four year period from FYs 1997/98 to 2000/01.
- Approximately 12 percent of the business inspections (227) resulted in the identification of municipal stormwater violations. For reporting purposes, the term violation was defined as either the discharge of pollutants to the storm drain system because pollutants are exposed to stormwater runoff or there was a discharge of non-stormwater materials to the storm drain system. Approximately 96 percent of the violations were reportedly corrected with the remaining 4 percent (nine violations) pending correction. The percentage of violations found was similar to what was reported during the preceding two years.
- Found more illicit discharges (352) than had been found in the previous six years. There were no continuing illicit discharges reported (Performance Standards for Industrial and Illicit Discharge

Controls).

### Public Information and Participation

The primary goals of STOPPP'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 STOPPP 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.

- Conducted school outreach to 59 schools reaching over 12,500 students through the Zun Zun assembly program.
- Continued the Community Action Grant Program.
- Participated in the regionwide Integrated Pest Management "Our

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Water Our World” campaign through the participation of local retail stores.

- Coordinated the Countywide Thermometer Exchange Program.
- Hosted an educational booth at the County Fair.
- Continued to support STOPPP’s website, [www.flowstobay.org](http://www.flowstobay.org), by making all of the brochures available and doing monthly updates about new events and IPM training opportunities. The educational outreach provided by the website is supplemented by using public service announcements on Community Access Cable Television, and running advertising campaigns in local newspapers.
- Continued collaborative outreach with the Used Oil Block Grant Program.
- Supported the Watershed Project’s School Gardening 2-day workshop for educators.
- Implemented municipalities’ community outreach program.

**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.

STOPPP’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.

STOPPP’s primary accomplishments during the past year included:

- Completed and submitted to the Regional Board on November 15, 2004 STOPPP’s *Provision C.3.j: Site Design Review Submittal* that is required by Provision C.3.j. of the amended NPDES permit.
- Continued to support the San Francisco Estuary Project/Regional Water Quality Control Board’s annual workshop on Construction Site Management.
- Developed draft revised performance standards for new development and construction control and identified new tasks for the New Development and Construction Controls section of the proposed Stormwater Management Plan April 2004 – June 2010.
- Developed and submitted to the Regional Board on August 15, 2004 a Source Control Model List which the municipalities then used to develop their Local Source Control Measures lists as required by Provision C.3.k of the amended NPDES permit.
- Developed and submitted to the Regional Board on November 15, 2004 STOPPP’s Draft Hydromodification Management



Plan and, following input from the Regional Water Board staff, submitted on May 12, 2005 STOPPP's Final Hydromodification Management Plan.

- Conducted a new development training workshop titled *Incorporating Stormwater Control Measures into Development Projects: Design, Practice and the Current Regulatory Requirements*. The workshop was held on May 24, 2004 at the Belmont Sports Complex in the City of Belmont.
- Developed a C.3 Stormwater Handbook to assist the municipalities with the implementation of the Provision C.3 requirements.
- A total of 17 Group 1 projects in Belmont, Daly City, Redwood City and South San Francisco were reported, which incorporate a variety of BMPs.
- STOPPP municipalities instituted Operation and Maintenance Verification Programs of treatment measures in accordance with Provision C.3.e of the amended NPDES permit.

**Watershed Assessment and Monitoring**

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

- Assessing general physical, biological and chemical water quality conditions in receiving waters in representative watersheds in San Mateo County, and thereby helping to evaluate the overall effectiveness

of STOPPP's stormwater pollution prevention and control Best Management Practices (BMPs), and

- Developing data that inform STOPPP's efforts to select stormwater pollution prevention and control BMPs. STOPPP's BMPs target stormwater runoff-related water quality impairment problems in San Francisco Bay and San Mateo County surface waters such as creeks, including impairments associated with specific pollutants of concern found in stormwater runoff.

STOPPP's WAM component activities help address these objectives and fall under four general categories:

- Watershed Assessment
- Specific Pollutants of Concern
- Regional Collaborative Efforts
- Planning

Accomplishments during the past year are briefly described below.

Watershed Assessment

- STOPPP completed a summary report on assessment activities in the San Pedro Creek watershed. Benthic macroinvertebrate assemblages sampled from various sites in the watershed were highly dissimilar, reflecting upstream land use. Dissolved oxygen and pH measurements were within acceptable ranges specified in the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). Organophosphate pesticides, including diazinon, were not detected in grab water samples. Standard three-species bioassays revealed sublethal effects (reduced growth or reproduction) in a limited

number of water samples. The cause(s) of the toxicity is unknown.

- STOPPP completed a summary report on assessment activities in the San Mateo Creek watershed. Benthic macroinvertebrate assemblages sampled from various sites in the watershed were highly dissimilar, reflecting upstream land use and potentially variations in habitat associated with elevation differences. Dissolved oxygen and pH measurements were generally within acceptable ranges specified in the Basin Plan. Organophosphate pesticides, including diazinon, were not detected in grab water samples. Standard three-species bioassays did not indicate water column toxicity, with the exception of apparently minor inhibition of *Ceriodaphnia* reproduction in one sample.
- STOPPP initiated screening-level biological and chemical water quality monitoring in the Cordilleras Creek watershed. Three episodes of water quality sampling (December, March and June) were conducted at three locations in the watershed. Parameters measured included temperature, pH, conductivity, dissolved oxygen, flow velocity, organophosphate pesticides, metals, hardness, suspended sediment concentration, and water column toxicity. A year-one bioassessment based on analysis of benthic macroinvertebrate assemblages and physical habitat assessment was conducted in March at six locations in the watershed.
- STOPPP compiled readily available existing data on the Belmont Creek watershed, including land use,

topographical information (including stream gradients), imperviousness, channel modifications, ecoregion subsections, and water and sediment quality. STOPPP also developed a plan for field monitoring in the Belmont Creek watershed in FY 2005/06. Similar to past watershed assessments, STOPPP will collect screening-level biological and chemical water quality monitoring data. Monitoring techniques will include bioassessment (analysis of benthic macroinvertebrate assemblages and physical habitat assessment), chemical analysis and bioassay of grab water samples, and field instrument measurements of general water quality parameters. Three episodes of water quality sampling (summer, rainy season and spring) will be conducted at three locations in the watershed. One episode of bioassessment will be conducted in the spring at six locations in the watershed.

- As a follow-up to STOPPP's FY 2003/04 survey on existing municipal trash management practices and known trash problem areas, STOPPP performed a pilot study at a reach of San Mateo Creek in Gateway Park. The objective was to attempt to identify trash sources and management measures at this in-stream trash accumulation area. The methodology included applying a Rapid Trash Assessment protocol developed by Water Board staff in conjunction with research on adjacent and upstream land uses, sources and transport pathways. Field reconnaissance in the vicinity of the site and interviews with City of San Mateo staff indicated that littering at Gateway Park and nearby

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upstream bridges and occasional dumping from the bridges were the primary sources of trash to the site, rather than accumulation from further upstream sites or discharges from storm drains in the vicinity of the site. This conclusion was supported by the results of the field assessments.

Specific Pollutants of Concern

STOPPP's NPDES permit finds that "there is reasonable potential that municipal stormwater discharges may cause or contribute to an excursion above water quality standards" for specific pollutants of concern (e.g., mercury, PCBs and diazinon) in San Francisco Bay and/or San Mateo County creeks. STOPPP completed an interim plan that summarizes STOPPP's recent and ongoing activities addressing these pollutants. The interim plan is intended to cover the period preceding adoption of a Municipal Regional Permit that is currently under development.

Regional Collaborative Efforts

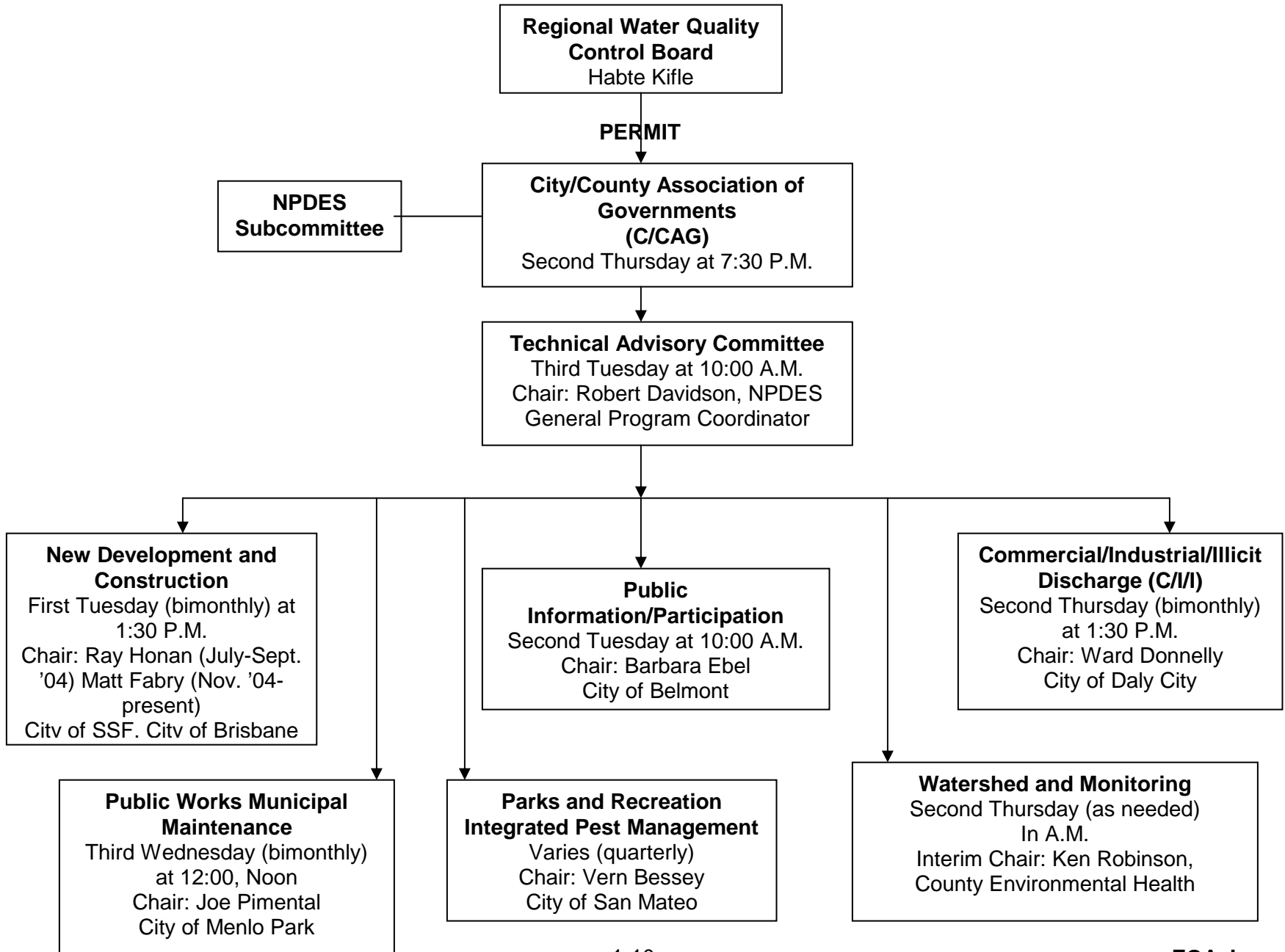
- STOPPP continued to coordinate its WAM component activities with other Bay Area stormwater management agencies through participation in the Bay Area Stormwater Management Agencies Association (BASMAA) Monitoring Committee and STOPPP continued to provide funding to BASMAA.
- STOPPP continued to provide in-kind assistance to the Bay Area Macroinvertebrate Bioassessment Information Network (BAMBI).
- STOPPP continued to participate in the San Francisco Estuary Regional Monitoring Program (RMP).

- STOPPP continued to participate in the Clean Estuary Partnership.

Planning

STOPPP completed an interim plan describing ongoing WAM component activities. The interim plan is intended to cover the period preceding adoption of a Municipal Regional Permit that is currently under development.

**SAN MATEO COUNTYWIDE STORMWATER POLLUTION PREVENTION PROGRAM  
ORGANIZATIONAL STRUCTURE AND MEETINGS**



**Table 1-1. STOPPP Submittals for the FY 2004/05 Annual Report**

| Agency              | Deliverable Report Forms |                      | Certification Letter*          | Monthly Maintenance Forms |                      | Illicit Discharge Quarterly Reports |                      |
|---------------------|--------------------------|----------------------|--------------------------------|---------------------------|----------------------|-------------------------------------|----------------------|
|                     | 1 <sup>st</sup> Half     | 2 <sup>nd</sup> Half |                                | 1 <sup>st</sup> Half      | 2 <sup>nd</sup> Half | 1 <sup>st</sup> Half                | 2 <sup>nd</sup> Half |
| Atherton            | ✓                        | ✓                    | Duncan Jones                   | ✓                         | ✓                    | ✓                                   | ✓                    |
| Belmont             | ✓                        | ✓                    | Kathleen Phalen                | ✓                         | ✓                    | ✓                                   | ✓                    |
| Brisbane            | ✓                        | ✓                    | Matthew Fabry                  | ✓                         | ✓                    | ✓                                   | ✓                    |
| Burlingame          | ✓                        | ✓                    | George Bagdon                  | ✓                         | ✓                    | ✓                                   | ✓                    |
| Colma               | ✓                        | ✓                    | Meliza Cruz<br>Phil Scramaglia | ✓                         | ✓                    | ✓                                   | ✓                    |
| Daly City           | ✓                        | ✓                    | Patrick<br>Sweetland           | ✓                         | ✓                    | ✓                                   | ✓                    |
| East Palo Alto      | ✓                        | ✓                    | Fernando Bravo                 | ✓                         | ✓                    | ✓                                   | ✓                    |
| Foster City         | ✓                        | ✓                    | Ramon Towne                    | ✓                         | ✓                    | ✓                                   | ✓                    |
| Half Moon Bay       | ✓                        | ✓                    | Charlie Voos                   | ✓                         | ✓                    | ✓                                   | ✓                    |
| Hillsborough        | ✓                        | ✓                    | Dave Bishop                    | ✓                         | ✓                    | ✓                                   | ✓                    |
| Menlo Park          | ✓                        | ✓                    | Pat Stone                      | ✓                         | ✓                    | ✓                                   | ✓                    |
| Millbrae            | ✓                        | ✓                    | Khee Lim                       | ✓                         | ✓                    | ✓                                   | ✓                    |
| Pacifica            | ✓                        | ✓                    | Scott Holmes                   | ✓                         | ✓                    | ✓                                   | ✓                    |
| Portola Valley      | ✓                        | ✓                    | Howard Young                   | ✓                         | ✓                    | ✓                                   | ✓                    |
| Redwood City        | ✓                        | ✓                    | Peter Ingram                   | ✓                         | ✓                    | ✓                                   | ✓                    |
| San Bruno           | ✓                        | ✓                    | Scott Munns                    | ✓                         | ✓                    | ✓                                   | ✓                    |
| San Carlos          | ✓                        | ✓                    | Brian Moura                    | ✓                         | ✓                    | ✓                                   | ✓                    |
| San Mateo, City of  | ✓                        | ✓                    | Vern Bessey<br>Larry Patterson | ✓                         | ✓                    | ✓                                   | ✓                    |
| San Mateo County    | ✓                        | ✓                    | Dean Peterson                  | ✓                         | ✓                    | ✓                                   | ✓                    |
| South San Francisco | ✓                        | ✓                    | Cassie Prudhel                 | ✓                         | ✓                    | ✓                                   | ✓                    |
| Woodside            | ✓                        | ✓                    | Hope Sullivan                  | ✓                         | ✓                    | ✓                                   | ✓                    |

✓ = Municipality submitted all or most of the forms.

N/A = Not applicable.

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