



Santa Clara Valley  
*Urban Runoff*  
Pollution Prevention Program

## *MONITORING PROJECT SUMMARY*

*Annual Receiving Water Body  
Monitoring*

**Purpose:** To analyze data collected during implementation of the Program's FY 07-08 Annual Monitoring Program Plan, summarize results and recommend next steps regarding data collection and watershed management.

**Background:** Since FY 02-03, the Program has developed and implemented Annual Monitoring Program Plans (Annual Plans) in fulfillment of Provision C.7 of its NPDES Permit. The Annual Plans identify monitoring activities that are implemented each year as part of the Program's Revised Multi-Year Receiving Waters Monitoring Plan (Revised Multi-Year Plan). In accordance with Provision C.10 (b), the Program annually develops a Watershed Monitoring and Assessment Summary Report (Summary Assessment Report) that summarizes the results and analyses of baseline data collected during the implementation of the Program's Annual Plans. These data are generated through ambient surface water quality monitoring; physical habitat assessment studies and bioassessment studies. The Summary Assessment Reports provide information on possible beneficial use impacts to the extent possible (based on the study design and available data) and suggests next steps for monitoring/assessments and developing strategies to control potential impacts.

In FY 07-08, the Program will summarize and analyze data collected during FY 07-08 in the Coyote Creek watershed, including its tributaries. Findings and recommendations will be included within the Program's FY 07-08 Annual Report.

**Scope Summary:**

- Collect and analyze data collected in the Coyote Creek watershed, including tributaries as part of the FY 07-08 Annual Monitoring Program Plan and summarize results.

**Products:**

- Technical Report (Watershed Monitoring and Assessment Summary)

**Schedule:** July 2007 – June 2008

**Program Staff:** Chris Sommers, Paul Randall, Jen Kovecses



Santa Clara Valley  
Urban Runoff  
Pollution Prevention Program

## *MONITORING PROJECT SUMMARY*

*Receiving Water Body  
Characterization (i.e., Existing Data  
Evaluation and Stream Survey)*

**Purpose:** To collect existing information and analyze field data collected during stream surveys; and to identify potential impacts to beneficial uses and inform future receiving water monitoring efforts according to the Program's Revised Multi-Year Receiving Waters Monitoring Plan.

**Background:** The Program's Multi-Year Receiving Water Monitoring Plan was revised in 2004 to include a systematic monitoring and assessment process. This process includes the follow steps/categories: 1) Watershed Characterization; 2) Screening-Level (Status/Condition) Monitoring; 3) Water Body Assessment; 4) Investigative Studies; and 5) Trends/Effectiveness Monitoring. Watershed characterization is intended to assist the Program in evaluating and documenting our current understanding of beneficial use condition and potential impacts in local water bodies.

As defined, watershed characterization entails two tasks. First, water quality data and watershed information collected to-date are summarized in a watershed characterization memorandum. The memorandum includes a compilation of existing data sources and a summary of the geologic and geomorphic setting, vegetation, land uses and associated water quality issues. An evaluation of the status of biological communities and relevant beneficial uses in the watershed(s) is also provided. Second, a creek survey is conducted to identify potential impacts to beneficial uses and to assess the quality of the physical habitat. Field data collected is entered into a database and evaluated. The Program has previously used the Unified Stream Assessment (USA) method (Center for Watershed Protection) when conducting creek surveys. Watershed characterizations have been previously conducted in Saratoga Creek (FY 05-06) and are underway in Matadero Creek (FY 06-07).

During FY 05-06, the Program developed a watershed characterization memorandum summarizing data collected to-date and watershed attributes for the Stevens and Permanente Creek watersheds. To complete the watershed characterization stage of the Program's water body monitoring and assessment process, the Program intends to conduct creek surveys in one of these watersheds in FY 07-08. The Program intends to coordinate this effort with the Stevens/Permanente Creek Watershed Council.

### **Scope Summary:**

- Compile and collect information to characterize the general physical and biological attributes of the Stevens or Permanente Creek watershed.

### **Products:**

- Technical memorandum characterizing the existing condition of beneficial uses; and
- Potential impacts in Stevens or Permanente Creek watersheds.

**Schedule:** July 2007 – June 2008

**Program Staff:** Lucy Buchan, Chris Sommers, Paul Randall



Santa Clara Valley  
Urban Runoff  
Pollution Prevention Program

*MONITORING  
PROJECT SUMMARY*

*Watershed (i.e., Sediment) Analyses*

**Purpose:** Initiate a sediment source and management practice assessment in the Saratoga Creek watershed and possibly the Coyote Creek watershed, consistent with the Program's Watershed Analysis Work Plan.

**Background:** In fulfillment of SCVURPPP NPDES Permit Order No. 01-024 Provision C.9.f.iii paragraph two, the Program submitted a watershed analysis work plan to RWQCB staff on August 30, 2002. The work plan identified four watershed areas where watershed analysis associated with sediment would be conducted. The work plan also identified a two-phase process for completing the analyses. Phase I includes conducting a watershed analysis and sediment management practices assessments to determine if excessive sediment from anthropogenic sources is impairing beneficial uses in the watershed. Phase II includes conducting a rapid sediment budget, which will only be conducted when the Phase I study results indicate that anthropogenic sediment sources are impairing beneficial uses.

In FY 03-04, Phase I was implemented in the Stevens Creek watershed. Based on results of the analysis (i.e., limiting factors analysis (LFA)), the Watershed Analysis AHTG recommended that Phase II was not warranted in the Stevens Creek watershed. In FY 05-06, an LFA was completed in the Upper Penitencia Creek watershed. Based on the results, a limited Phase II (i.e., sediment source assessment) was recommended to be completed in FY 06-07 in parallel to completing a sediment management practices assessment. A watershed analysis will also be complete for the Saratoga Creek watershed in FY 06-07. A sediment management practices assessment is scheduled for completion in the Saratoga Creek watershed in FY 07-08. Depending on the results of the watershed analysis, a sediment source assessment/budget may also be required in FY 07-08.

The final watershed area scheduled for analysis is Coyote Creek (mainstem). The Program is conducting an assessment of current information in FY 06-07 to determine the need to conduct a watershed analysis, based on a reevaluation of criteria used to develop the watershed analysis work plan. Depending on the results, a LFA (or similar analysis) may begin during FY 06-07 within the Coyote Creek watershed. If an LFA is warranted or feasible, a sediment source and management practices assessment may need to be completed in future fiscal years.

All Watershed Analysis AHTG recommendations will be reviewed and approved by the Management Committee prior to implementation.

**Scope Summary:**

- Conduct a sediment management practices assessment in the Saratoga Creek watershed.
- If sediment from anthropogenic sources in the Program's jurisdiction is determined to be a significant limiting factor in the Saratoga watershed, the Program will initiate work on a rapid sediment budget (or similar analysis) within the watershed.
- Plan, organize and facilitate meetings with consultants and Watershed Analysis AHTG members.

**Products:**

- Sediment Management Practices Assessment Technical Memorandum; and (if warranted)
- Rapid Sediment Budget Technical Memorandum.

**Schedule:** July 2007 – June 2008

**Program Staff:** Chris Sommers and Paul Randall



Santa Clara Valley  
Urban Runoff  
Pollution Prevention Program

## MONITORING PROJECT SUMMARY

### *Trash Management and Effectiveness Assessment Strategy*

**Purpose:** Implement Trash Management and Assessment Strategy

**Background:** On November 14, 2001, the Water Board released the document entitled Proposed Revisions to Section 303(d) List of Priorities for Development of Total Maximum Daily Loads for the San Francisco Bay Region Report. This report states that “between now and the next 303(d) listing cycle, municipalities will be expected to assess trash impairments in their jurisdiction ...”, Water Board staff will review information concerning trash in the next listing cycle to determine whether specific water bodies warrant 303(d) listing. In a proactive response to the 303(d) Staff Report, the Program’s Management Committee formed a Trash AHTG (first meeting on February 21, 2002). The Trash AHTG developed a Work Plan (submitted March 1, 2003) to identify a strategy for addressing trash problem areas that occur in or near urban streams and waterways of the Santa Clara Basin.

During FY 03-04, the Program assisted Co-permittees in completing the following Work Plan tasks: 1) document existing trash management practices implemented by municipalities and agencies within the Program’s jurisdiction; 2) identify and map high priority trash problem areas and sources of trash in Santa Clara Basin watersheds; 3) develop a strategy to conduct trash evaluations in or near creeks; 4) sponsor a training workshop on how to use existing trash assessment tools (i.e., RWQCB Rapid Trash Assessment Protocol (Version 7.0) and Keep America Beautiful (KAB) Litter Index); and 5) develop standardized reporting format for documenting and evaluating trash management and monitoring activities.

From FY 03-04 to FY 06-07, the Program completed tasks described in the Trash Work Plan and Monitoring Project Summaries provided in previous Work Plans. In October 2006, Program staff developed a *Draft Trash Management and Effectiveness Assessment Strategy* (Strategy), which was reviewed by the Trash AHTG. The Strategy includes four main areas of Program activity associated with trash: 1) identifying trash problem areas and sources; 2) selecting and implementing appropriate control measures at high priority problem areas; 3) assessing the effectiveness of control measure implementation; and, 4) providing administrative support to the Trash AHTG. The tasks scheduled for completion during FY 07-08 focus on assisting Co-permittees on: a) trash pilot demonstration project implementation, b) developing long-term trash management strategies for high priority watersheds, which will include current and future trash management activities, and c) continuing to evaluate creek condition and the effectiveness of management practices.

#### **Scope Summary:**

- Assist Co-permittees in implementing trash pilot demonstration projects which focuses on assessing the effectiveness and costs of structural treatment controls in the Santa Clara Basin;
- Assist Co-permittees in developing effective strategies for reducing trash in urban streams and waterways in high priority watersheds;
- Report information on trash evaluation results and trash management practices implemented by Co-permittees using standardized reporting format;
- Revise trash problem areas list, as appropriate; and,
- Update Trash Fact Sheets, as appropriate.

#### **Products:**

- Technical memorandum summarizing the results of the trash pilot demonstration projects including an evaluation of effectiveness and lessons learned;
- Draft and final long-term trash management strategies for high priority watersheds;
- Technical memorandum providing trash evaluation results and analyses;
- Enhanced and updated database; and,
- Updated trash fact sheets.

**Schedule:** July 2007 – June 2008

**Program Staff:** Chris Sommers, John Fusco, Paul Randall and Jen Kovecses



Santa Clara Valley  
Urban Runoff  
Pollution Prevention Program

## *MONITORING PROJECT SUMMARY*

*Bay Area Macroinvertebrate  
Bioassessment Information  
Network (BAMBI)*

**Purpose:** Provide coordination assistance and staff support to the Bay Area Macroinvertebrate Bioassessment Information Network (BAMBI)

**Background:** In February 2002, Program staff participated in a workshop for information sharing and discussion of recent and ongoing rapid bioassessment (benthic macroinvertebrates) studies in the Bay Area. The network of individuals participating in the workshop was named the Bay Area Macroinvertebrate Bioassessment Information Network (BAMBI). BAMBI's purpose is to coordinate and share bioassessment information throughout the Bay Area. In particular, BAMBI is interested in stormwater programs that include rapid bioassessments in their watershed monitoring and assessment programs. Since the initial workshop, the Program has assisted (with planning and coordination) and participated in five annual BAMBI workshops (through 2006).

Each workshop has included presentations of technical information on existing and planned bioassessment studies conducted within the San Francisco Bay Area. Workshop participants also reviewed and discussed potential BAMBI goals and objectives in the development of an Index of Biotic Integrity (IBI) for Bay Area Creeks, with the goal of developing a regional bioassessment tool necessary to provide context to data collected in Santa Clara Basin creeks. A draft BAMBI IBI Work Plan was presented at the 2005 BAMBI Workshop. Since FY 04-05, Program staff has provided in-kind services to implement specific tasks identified in the work plan.

### **Scope Summary:**

- Assist in the planning and coordination of the seventh annual BAMBI workshop.
- Continue to provide in-kind services to implement specific tasks identified in the BAMBI IBI Work Plan.
- Coordinate with other agencies and stormwater programs in further development and implementation of bioassessment tools and sharing of bioassessment data.

### **Products:**

- BAMBI meeting summary(s) and staff presentations
- Draft IBI for San Francisco Bay Area Creeks

**Schedule:** July 2007 – June 2008

**Program Staff:** Chris Sommers, Jen Koveceses, Paul Randall



Santa Clara Valley  
Urban Runoff  
Pollution Prevention Program

## *MONITORING PROJECT SUMMARY*

### *Stream Studies Inventory Update*

**Purpose:** Provide update to the Santa Clara Basin Watershed Management Initiative's (SCBWMI) Stream Studies Inventory (SSI) database.

**Background:** The Watershed Assessment and Monitoring Subgroup (WAMS) of Santa Clara Basin Watershed Management Initiative (SCBWMI), has a mission to provide the SCBWMI with a solid scientific foundation for watershed planning. One of WAMS's tasks is to coordinate the SCBWMI's data collection and data management efforts with stream monitoring studies within the Basin. The Stream Studies Inventory (SSI) is a result of this task and was initially prepared by the Program in November 1998. The purpose of the SSI is to promote inter-agency awareness of environmental investigations within riparian corridors and to facilitate coordination of related data collection and management. It also describes stream-related multi-stakeholder studies and projects that were in-progress in the Santa Clara Basin. The SSI was updated, revised and reissued in February 2000 (version 2.0), July 2001 (version 3.0), August 2002 (version 4.0), November 2003 (version 5.0), June 2005 (version 6.0) and September 2006 (version 7.0). The Program funded the initial development of the SSI and each of the annual updates.

In FY 06-07, the Program has begun to develop a new process for obtaining and displaying information on current projects that would typically be described in a SSI report. Beginning in FY 07-08, the SSI will be web-based and allow users to query information on current and historical environmental data collection and assessment efforts that are included within the Program's metadata database. Beginning in FY 07-08, the SSI will be available through the Program's website and maintained by Program staff.

#### **Scope Summary:**

- The Program will develop a Web-based Stream Studies Inventory (SSI) pilot, which will include updating and maintaining information contained within the Program's existing metadata database.

#### **Products:**

- Stream Studies Inventory – Web-based Stream Information Querying Tool

**Schedule:** July 2007 – June 2008

**Program Staff:** Paul Randall and Chris Sommers