



SECTION 2

NEW DEVELOPMENT AND REDEVELOPMENT (C.3)

2. FY 08-09 NEW AND REDEVELOPMENT (C.3.) WORK PLAN

INTRODUCTION

This section describes the Program's planned tasks during FY 08-09 to continue to assist Co-permittees to control the impacts of development on stormwater quality and flow through the development project planning, review and approval process. The planned tasks include Program efforts that are likely to be needed to assist the Co-permittees with compliance with the C.3. Provisions of the Municipal Regional Permit.

BACKGROUND

On October 17, 2001, the Water Board adopted Order 01-119 which amended the Program's Permit Provision C.3. (New and Redevelopment Requirements) to contain significant new requirements. These requirements include:

- Numeric design standards for sizing stormwater treatment controls;
- Limits on increases in peak stormwater discharges from new or redevelopment sites that may increase erosion in creeks;
- Requirements for operation and maintenance of stormwater controls;
- Requirements for site design and source control measures;
- Definition of a minimum project size, based on amount of impervious surface created, for which the design standards, control measures, peak flow limitations, and maintenance requirements apply;
- Requirements for changes to General Plans and environmental review processes to provide authority to implement the requirements;
- Reporting requirements; and
- Schedule for implementation.

The Program and Co-permittees submitted work plans for implementing all C.3. requirements to the Water Board on March 1, 2002 (as part of the Program's *FY 02-03 Work Plan*, Volume II). These included the Program's "Guidance for Work Plan Tasks Related to Implementation of Permit Provision C.3." (referred to herein as C.3. Work Plan Guidance) which identifies proposed actions to meet the requirements of Provision C.3. and whether the actions will be implemented at the Program level, Co-permittee level or both. Most of the tasks in the C.3 Work Plan Guidance were completed by the end of FY 04-05. Additional implementation-phase tasks identified by the C3 Provision Oversight (C3PO) Ad Hoc Task Group and the Management Committee for FY 08-09 and ongoing support tasks are the basis of this work plan section.

Since the October 17, 2001 adoption by the Water Board of Order 01-119, there have been several changes to the requirements of Provision C.3. The first change, authorized by the Water Board Executive Officer, was an extension of three of the permit deadlines, as shown below, in order to be consistent with other Bay Area stormwater permits adopted subsequent to SCVURPPP Order 01-119.

Provision	Activity	Original Deadline	New Deadline ¹
C.3.c.i.	Require stormwater treatment BMPs at Group 1 Projects	July 15, 2003	October 15, 2003
C.3.c.ii.	Require stormwater treatment BMPs at Group 2 Projects in addition to Group 1 Projects	October 15, 2004	April 15, 2005
C.3.f.	Submit HMP for Regional Board approval	October 15, 2003	January 15, 2004

The second change relates to the definition of Group 2 projects. The Program requested Water Board approval of an Alternative Group 2 Project Definition, as allowed under Provision C.3.c.iii. of the Program's permit (Order No. 01-119). In a letter dated September 22, 2003, the Program proposed an Alternative Group 2 Project Definition that would make its Provision C.3. project size requirements consistent with the other Bay Area stormwater permit requirements (i.e., minimum project size of 10,000 square feet of impervious surface). At the Water Board's October 15, 2003, meeting, the Water Board authorized the Executive Officer to approve the Program's proposal.

The third change relates to the implementation date for Group 2 projects. Order R2-2005-0035, adopted July 20, 2005, contains revisions to Order 01-119 that recognize two types of Group 2 projects and extends the implementation dates for both. Group 2A includes projects that are more likely to contribute pollutants to stormwater (e.g., gas stations, auto wrecking yards, loading docks) and parking lots with 10,000 square feet or more of impervious surface. Group 2B includes all other Group 2 projects. The Group 2A implementation date was effective on October 20, 2005. The Group 2B implementation date was extended to August 15, 2006 to be consistent with other Bay area permits. In addition, Order R2-2005-0035 incorporated key provisions of the Program's *Hydromodification Management Plan Report* (April 2005) into the SCVURPPP permit.

A summary of the subsequent changes in permit deadlines resulting from the adoption of Order R2-2005-0035 is presented below:

Provision	Activity	Previous Deadline	New Deadline
C.3.c.ii.	Require stormwater treatment BMPs at Group 2 Projects: <ul style="list-style-type: none"> • Group 2A (special land use categories) • Group 2B 	April 15, 2005	October 20, 2005 August 15, 2006
C.3.f.	Implement HMP Key Provisions	Following Water Board approval	October 20, 2005

The draft Municipal Regional Permit (MRP) contains requirements for all six Phase 1 municipal stormwater (MS4s) programs in the San Francisco Bay Area. The MRP Tentative Order was released on December 4, 2007.. Provision C.3. in the Tentative Order contains similar requirements for new and redevelopment projects with some enhancements that will likely need to be addressed in FY 08-09.

¹ Letter to Beau Goldie, SCVURPPP Management Committee Chair, from Loretta Barsamian, Executive Officer, San Francisco Bay Regional Water Quality Control Board, re: Extension of Specified Deadlines in Order 01-119, May 12, 2003.

PAST AND CURRENT ACTIVITIES TO IMPLEMENT C.3.

Section 8 of the Program's *FY 06-07 Annual Report* described the progress of the Program (up to September 15, 2007) in completing Program tasks in the C.3 Work Plan and assisting Co-permittees with implementation of the C.3. requirements. With all of the preparation tasks completed, Co-permittees are now focusing on the implementation of C.3. requirements for Group 1 and Group 2 projects (i.e., those creating or replacing 10,000 square feet or more of impervious surface). The Program has continued to hold meetings of the C.3. Provision Oversight Ad Hoc Task Group (C3PO AHTG) to keep Co-permittees updated on current issues and promote exchange of ideas on and experience with C.3. implementation.

The Program also completed its Hydromodification Management Plan (HMP) in April 2005, and submitted it to the Water Board on May 4, 2005. Key provisions of the HMP were adopted by the Water Board on July 20, 2005 (as described above), and Co-permittees began implementation on October 20, 2005. Chapter 7 of the HMP Report identifies a number of action items that Program and Co-permittee staff will complete to address remaining HMP implementation issues. These action items and other related tasks are listed with anticipated start and completion dates within Attachment 7-1, "SCVURPPP HMP - Summary of Next Steps" (revised September 15, 2006). An internal HMP Instream Work Group, consisting of City of San Jose, Santa Clara Valley Water District and Program staff, has been meeting to discuss and work toward implementation of the tasks related to instream control measures for hydromodification.

To make it easier for developers to design flow control facilities to comply with the HMP, the Program developed an automated modeling and flow control facility sizing tool called the Bay Area Hydrology Model (BAHM), in collaboration with several other Bay Area stormwater programs. Development of the regional portion of the model and calibration of the tool to specific watersheds within the Santa Clara Valley has been completed, and several training sessions for municipal staff and consultants have been held.

Since the fall 2005, Program staff has been involved with Water Board staff and environmental NGO representatives in a process to develop the MRP. A Program staff person served on the New Development Work Group and assisted the group in establishing the current baseline activities conducted by municipal agencies and developing a list of options for the future permit. Initial drafts of the MRP included a number of changes to Provision C.3., some of which remain in the December 4, 2007 Tentative Order. Work on the MRP is expected to continue through FY 07-08.

FY 08-09 C.3. IMPLEMENTATION TASKS

General C.3. Tasks

Table 2-1 presents a list of ongoing tasks from the C.3. Work Plan and anticipated MRP tasks that will be implemented in FY 08-09. These tasks will provide continuing assistance with current provisions, as well as guidance on implementation of any changes made in the MRP, assuming it will be adopted near the beginning of the fiscal year.

Tasks for implementation assistance in FY 08-09 include:

- Continue to assist with Co-permittee implementation of C.3. on projects, and with BMP O&M verification programs;

- Continue to assist with the C3PO AHTG meetings and action items;
- Update the C.3. Handbook and Planning Procedures Performance Standards to reflect changes to Provision C.3. in the MRP, including source control and site design measure guidance;
- Conduct workshop on C.3. implementation, with the topic to be determined by the C3PO AHTG;
- Continue to provide guidance and assistance with annual reporting of C.3. information.
- Continue regional roundtable meetings with Co-permittee staff and other stormwater programs to share information about implementation strategies and experience (facilitate through BASMAA New Development Committee);
- Provide additional guidance on proper design/construction of pervious paving systems and use of pervious areas for infiltration;
- Develop Program-wide database to assist with BMP O&M verification reporting and effectiveness analysis;
- Begin to work with BASMAA and/or other stormwater programs to develop standard specifications for lot-scale treatment BMPs for single family homes;
- If needed, prepare pilot study plan for collection of impervious surface data for Water Board submittal, and assist designated Co-permittees with guidance on data collection and reporting.

HMP Tasks

The focus in FY 08-09 will be continue to be assistance to the local agencies and the development community with outreach and implementation, and guidance on any changes that are required by the MRP. Tasks for FY 08-09 include the following:

- Provide guidance on changes to HMP requirements in the MRP, and update the HMP and C.3. Stormwater Handbook to reflect these changes;
- Continue to assist with the HMP Implementation Phase (HIP) Work Group meetings and action items;
- Continue to meet with the HMP Instream Measures Work Group and work toward progress on HMP “next steps” (Table 2-2);
- Conduct programmatic monitoring tasks identified in Section 7.8 of the HMP Report (tracking projects, documenting BMP design and inspection, self-evaluation);
- Continue to provide guidance and conduct trainings on the Bay Area Hydrology Model (BAHM); and
- Conduct one workshop on HMP implementation.
- Assist Co-permittees with impervious surface data analysis, as needed, to revised the HMP applicability map, prepare submittal to Water Board on map changes, and create Co-permittee specific HM applicability maps.

**Table 2-1
Schedule and Deliverables for FY 08-09 New and Redevelopment (C.3) Tasks**

Task from C.3. Work Plan	Schedule	Deliverables
C.3.a. Performance Standards		
<ul style="list-style-type: none"> Update the model Planning Procedures Performance Standards to reflect the requirements in the MRP. 	12/08	<ul style="list-style-type: none"> Updated Performance Standards
C.3.c. Requirements for Group 1 and Group 2 Projects		
<ul style="list-style-type: none"> Prepare guidance on implementing changes to Provision C.3. in the MRP, and updates to the C.3. Handbook to reflect those changes, including: <ul style="list-style-type: none"> updating list of source control measures; updating guidance on site design issues; updating fact sheets and website. Provide additional guidance on proper design/construction of pervious paving systems and use of pervious areas for infiltration <p>Ongoing Tasks:</p> <ul style="list-style-type: none"> Promote/facilitate regional roundtable meetings with agency staff from SCVURPPP and other stormwater programs to share information about implementation strategies and experience; Continue assistance with the C3PO AHTG meetings and action items; Conduct one workshop on a C.3-related topic (to be determined). 	<p>12/08</p> <p>6/09</p> <p>Ongoing</p> <p>Ongoing</p> <p>6/09</p>	<ul style="list-style-type: none"> Updated sections of the C.3. Handbook and updated fact sheets. <p>Section for C.3. Handbook on pervious paving and use of pervious areas</p> <ul style="list-style-type: none"> Meeting summaries C3PO AHTG meetings and summaries Workshop
C.3.e. Operation and Maintenance of Treatment BMPs		
<ul style="list-style-type: none"> Assist Co-permittees to report on treatment BMP O&M verification program in each annual report, including inspection results, evaluation of effectiveness, and planned improvement to the program. Develop Program-wide database to assist with BMP O&M verification reporting and effectiveness analysis. 	<p>Ongoing - FY 07-08 Annual Report and future ARs</p> <p>12/08</p>	<ul style="list-style-type: none"> Guidance on Annual Report preparation Updated Program-wide database

Table 2-1, continued
Schedule and Deliverables for FY 08-09 New and Redevelopment (C.3) Tasks

Task from C.3. Work Plan	Schedule	Deliverables
<p>Ongoing Tasks:</p> <ul style="list-style-type: none"> Continue assistance with SCVURPPP agencies' implementation of BMP O&M verification programs. 	Ongoing	
C.3.f. Hydromodification Management Plan		
<ul style="list-style-type: none"> Assist Co-permittees with impervious surface data analysis, as needed, to revise the HMP applicability map. Prepare submittal to Water Board on map changes. Create Co-permittee-specific HMP applicability maps. <p>Ongoing Tasks:</p> <ul style="list-style-type: none"> Provide guidance on any changes to HMP requirements in the Regional Permit, and update the HMP and C.3. Stormwater Handbook to reflect these changes; Conduct one workshop on HMP implementation and hydromodification control measures; Continue to provide guidance and conduct trainings on the Bay Area Hydrology Model (BAHM); Continue to assist with the HMP Implementation Phase (HIP) Work Group meetings and action items Continue to meet with the HMP Instream Measures Work Group and work toward progress on HMP "next steps" (Attachment 7-1) 	<p>12/08</p> <p>6/09</p> <p>TBD, pending WB approval of map</p> <p>12/08</p> <p>6/09</p> <p>Ongoing, as needed</p> <p>Ongoing</p> <p>Ongoing</p>	<ul style="list-style-type: none"> Guidance on impervious surface data analysis Memo to Water Board BAHM guidance/handouts <p>Updated section of C.3. Handbook</p> <ul style="list-style-type: none"> Workshop Training(s) Meeting summaries Meeting summaries

**Table 2-2
SCVURPPP HMP - Summary of Next Steps (Updated 3/1/08)**

Task ¹	Anticipated Completion Date ²	Status
1. Develop the following: a. a funding mechanism ³ such that projects can utilize in-stream control options b. a methodology for determining developer contributions based on the stream changes expected to result from changes in project runoff conditions.	6/08 6/08	In Progress - The HMP Instream Projects Work Group, consisting of Water District, City of San Jose and Program staff, continues to meet regularly.
2. Work with City/County planning and public works departments and the Water District to determine the timing and method of notifying District staff during the development review process about HMP projects that may need in-stream controls, in a manner that does not unreasonably prolong the review process. Further, look at ways to improve method to provide early communication on Group 1 project reporting.	6/08	In Progress – This task was delayed pending decisions by the HMP Instream Projects Work Group. Some Co-permittees already have a process for involving Water District staff in development project review. Program staff will document current practices and develop guidance for other Co-permittees, in consultation with Water District staff.
3. Facilitate review of District’s MDL analysis, both by the Co-permittees and the Expert Panel, and work with the Management Committee to determine the need to integrate some or all of the MDL analyses into implementation of the HMP.	N.A.	Eliminated – This task is no longer needed to implement the HMP. A revised HMP applicability map was developed by the Program based on other criteria, negotiated with Water Board staff, and will likely be adopted. The Management Committee voted to remove this action item from the list at its December 20, 2007 meeting.
4. Conduct additional studies of implementation of site design, integrated management practices, and/or basins at example development sites in Santa Clara Valley.	6/08	In Progress – In FY 06-07, the Program contracted with GeoSyntec Consultants to do a comparison of flow basin sizing using the HEC-HMS and HSPF models. The results will provide guidance on model use and sizing procedures and to assist development of the BAHM. The draft comparison report was completed and is under going review by Program staff.

¹ Tasks are from Chapter 7 of April 2005 HMP Report. *Tasks in italics have been added.*

² All dates depend on availability of resources and cooperation/collaboration of numerous staff from different agencies and may change because of circumstances beyond the control of the Program. The Program periodically updates the Management Committee regarding schedule changes and will transmit updates schedules to Water Board staff.

³ The intent is to describe a mechanism agreeable to Co-permittees and next steps for implementation.

**Table 2-2
SCVURPPP HMP - Summary of Next Steps (continued)**

Task¹	Anticipated Completion Date²	Status
		<p>In addition, the Program also contracted with GeoSyntec to develop a methodology for estimating costs for the purpose of determining impracticability of hydromodification management measures (i.e. the 2% cost cap). This work is underway and a draft report will be completed by March 2008.</p>
<p><i>Bay Area Hydrology Model (BAHM) Development Project – Regional Model, Local Calibration, Training</i></p>	<p>Completed 7/07; Ongoing</p>	<p>Completed/Ongoing –The BAHM was completed in July 2007. The Program participated with the Alameda and San Mateo countywide stormwater programs in the development of the regional component of the BAHM, and also contracted with the software developer, Clear Creek Solutions, to calibrate the model to two watersheds in Santa Clara Valley. Local calibration was completed in May 2007. A series of trainings were conducted in July and November, 2007.</p> <p>The BAHM includes the ability to model common site design and treatment control measures and quantify the reduction in flow duration due to these measures. Additional testing will be conducted in FY 07-08 and FY 08-09 to fine tune and improve guidance on the use of the BAHM for this purpose.</p>
<p>5. During implementation of the HMP, obtain feedback/suggestions for further refinement and implementation guidance</p>	<p>As needed/ Ongoing</p>	<p>Completed/Ongoing – The HMP Implementation Work Group has been meeting on a regular basis, and has been an effective forum to share experience with HMP implementation and obtain suggestions for additional HMP guidance. Members of the development community have also attended these meetings. Program staff have reviewed several conceptual design submittals to meet HMP requirements for projects in San Jose and discussed these with the work group. Additional guidance will be prepared on HMP implementation following adoption of new requirements in the MRP (expected mid-2008).</p>

