

# Storm Water Management Program



*September 30, 2003*

*Submitted to:  
Regional Water Quality Control Board  
Central Valley Region  
Sacramento Office (5S)*

*Submitted by:*



**Stantec**



## San Joaquin County



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## GLOSSARY

BMP	Best Management Practice
HHW	Hazardous Household Waste
GIS	Geographic Information System
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MIS	Management Information System
PHF	Pesticides, Herbicides & Fertilizers
SIC	Standard Industry Classification
SJPIISWC	San Joaquin Phase II Storm Water Committee
SWMP	Storm Water Management Program
NPDES	National Pollutant Discharge Elimination System
U.S.	United States
WDID	Waste Discharge Identification

## DEFINITIONS

Structural BMP	Structural BMPs are facilities designed and constructed for the treatment of storm water with respect to quality and quantity. Examples of structural controls are vegetative strips, detention/water quality basins, and swirl separators.
Non-Structural BMP	Non structural BMPs are policies and procedures that manage land use in order to lessen the impacts of resource development and redevelopment on storm impacts on storm water quality and quantity.

**SAN JOAQUIN COUNTY**  
**STORM WATER MANAGEMENT PROGRAM**

**PURPOSE**

The Storm Water Management Program (SWMP) will be implemented to limit, to the Maximum Extent Practicable (MEP), the discharge of pollutants from the San Joaquin County storm sewer system in the Phase II permit areas. The development and implementation of the SWMP is to fulfill requirements for storm water discharges from Small Municipal Separate Storm Sewer System (MS4) operators in accordance with Section 402(p) of the Federal Clean Water Act (CWA). The SWMP was also developed to comply with General Permit Number CAS000004, Water Quality Order No. 2003-0005-DWQ.

**PROGRAM AREA DESCRIPTION**

The program limits are contiguous with the limits determined by the 2000 census as urbanized areas within San Joaquin County, outside of the incorporated Cities. The 2000 decennial census indicates the County had a population within the Phase II area of 24,697. The annual growth rate is projected to be less than 2 %.

Storm drainage is conveyed via County storm drains to the Mokolumne River, the San Joaquin River, Old River, the Calaveras River, and ultimately the Delta.

**SWMP COORDINATION**

<b>Entity</b>	<b>Contact</b>
San Joaquin County Public Works Department	Charles Kelley, 209-468-3062
San Joaquin Phase II Storm Water Committee	Denise Thomas, 209-468-2179

San Joaquin County also has an existing Phase I storm water permit and has developed many of the programs required under the Phase II requirements in accordance with the existing permit. As such, the County will be continuing, updating and expanding these existing programs as part of the new Phase II permit requirements. In addition, the County will be sharing the information that they have developed as well as lessons learned with the Phase II municipalities located within the County.

## LEAD ENTITIES

Public Works: The Department of Public Works will lead in the day-to-day activities and administration of the SWMP, with assistance from other entities as described in this SWMP. The Department of Public Works is located at the following address:

1810 East Hazelton  
Stockton, CA 95205

San Joaquin Phase II Storm Water Committee: The San Joaquin Phase II Storm Water Committee (SJPIISWC) is a consortium of phase II municipalities within San Joaquin County that have proposed to join together to promote consistency within individual SWMPs, and share the cost of implementing some of the associated BMPs.

## SWMP REVIEW AND MODIFICATION

The County has prepared this SWMP to meet the requirements for coverage under General Permit Number CAS000004, Water Quality Order No. 2003-0005-DWQ. This SWMP includes Best Management Practices (BMPs) intended to reduce, the quantity of the storm water and the discharge of pollutants to the storm water system to the MEP. The SWMP will be reviewed on an annual basis and any changes or modifications will be described and submitted to California State Regional Water Quality Control Board Central Valley Region (5S). This review will include the following:

- A review of the status of program implementation and compliance
- A review of any revision or change of BMPs during the year and an assessment of the effectiveness of such revision
- An overall assessment of the goals and direction of the SWMP and effectiveness of BMPs

## STAFFING AND RESOURCE ALLOCATIONS

The County has secured temporary funding for the first year of the Phase II program and will continue to develop a permanent funding source for the Phase II program. Proposed fees for construction inspection and other activities will also fund some program activities. Staff from the County Phase I program will administer the County Phase II program

## PROGRAM BENEFITS

Clean water is a desirable and beneficial resource of the County. Clean water is necessary to maintain recreational activities, habitat preservation, water supply and County aesthetics. Storm water quality is suspected to be a contributing source of pollutant loading into receiving waters. If not addressed, storm water pollutants may negatively impact the County and its resources.

Through effective implementation of the SWMP, the County believes pollutant loading will be reduced to the MEP and receiving waters will be cleaner. Clean water will enhance the quality of life by improving and reducing potential risks associated with poor water quality.

## **PROGRAM SUMMARY**

The SWMP has been developed to meet the terms of General Permit Number CAS000004, Water Quality Order No. 2003-00005-DWQ issued April 30, 2003 and consists of the six minimum control measures (MCM) established by the Federal EPA and the SWRCB for Phase II storm water discharges. Implementations of these MCMs are expected to result in significant reductions of pollutants discharged into receiving water bodies. An overall implementation schedule for the SWMP is provided in Figure 1. The six MCMs are addressed in separate sections.

Each MCM contains BMPs necessary for proper storm water management. The BMPs contain specific tasks to meet the objective of that MCM. A total of 38 BMPs are contained in this SWMP and will be completed by the end of the permit term. This SWMP is intended to be a living document with BMPs added and deleted as new management practices arise and management practices are found not to be effective. A schedule for implementing, and assessing each BMP is provided at the end of each section, also the responsible entity and responsible contact are identified. The following provides a summary of each MCM:

### **Section One – Public Education and Outreach on Storm Water Impacts Program**

This MCM is intended to ensure greater public support for the SWMP and greater compliance through education. An informed public can significantly contribute to the success of the program.

In general, the County is emphasizing education in the SWMP because it is a cost-effective BMP and is proactive in trying to reduce storm water pollutants rather than reactive by treating the storm water pollutants. The BMPs in this section include:

- Regional and Community programs
- Business programs
- School programs

### **Section Two – Public Involvement/Participation Program**

This MCM is intended to provide opportunities for the public to play an active role in both the development and implementation of the SWMP. An active community is important to the success of the program. The BMPs in this section not only serve to involve the public, but also function to educate the public on storm water issues. The BMPs in this section include:

- Public involvement
- Public participation

### **Section Three – Illicit Discharge Detection and Elimination Program**

This MCM is intended to minimize illicit discharges into the storm sewer system. Illicit discharges are discharges that are not composed entirely of storm water. Storm sewer systems are not designed to accept process or discharge such non-storm water wastes. Minimizing these discharges can help to prevent high levels of pollutants from entering receiving waters. The BMPs in this section include:

- Storm sewer system map
- Storm water ordinance
- Municipal employee training
- Dry weather screening program
- Public information program

### **Section Four – Construction Site Storm Water Runoff Control Program**

This MCM is intended to minimize polluted storm water runoff from construction activities. Construction activities can contribute significant levels of sediment to storm water runoff if erosion and sediment controls are not implemented. The BMPs in this section include:

- Erosion and sediment control ordinance
- Design Standards
- Training
- Program development
- Implementation

### **Section Five – Post-Construction Storm Water Management in New Development and Redevelopment Program**

This MCM is intended to minimize the impact to storm water quality caused by development and redevelopment. The increase in impervious areas caused by development can cause an increase in the type and quantity of pollutants in storm water runoff. Prior planning and design to minimize pollutants in runoff from these areas is an important component to storm water quality management. The BMPs in this section include:

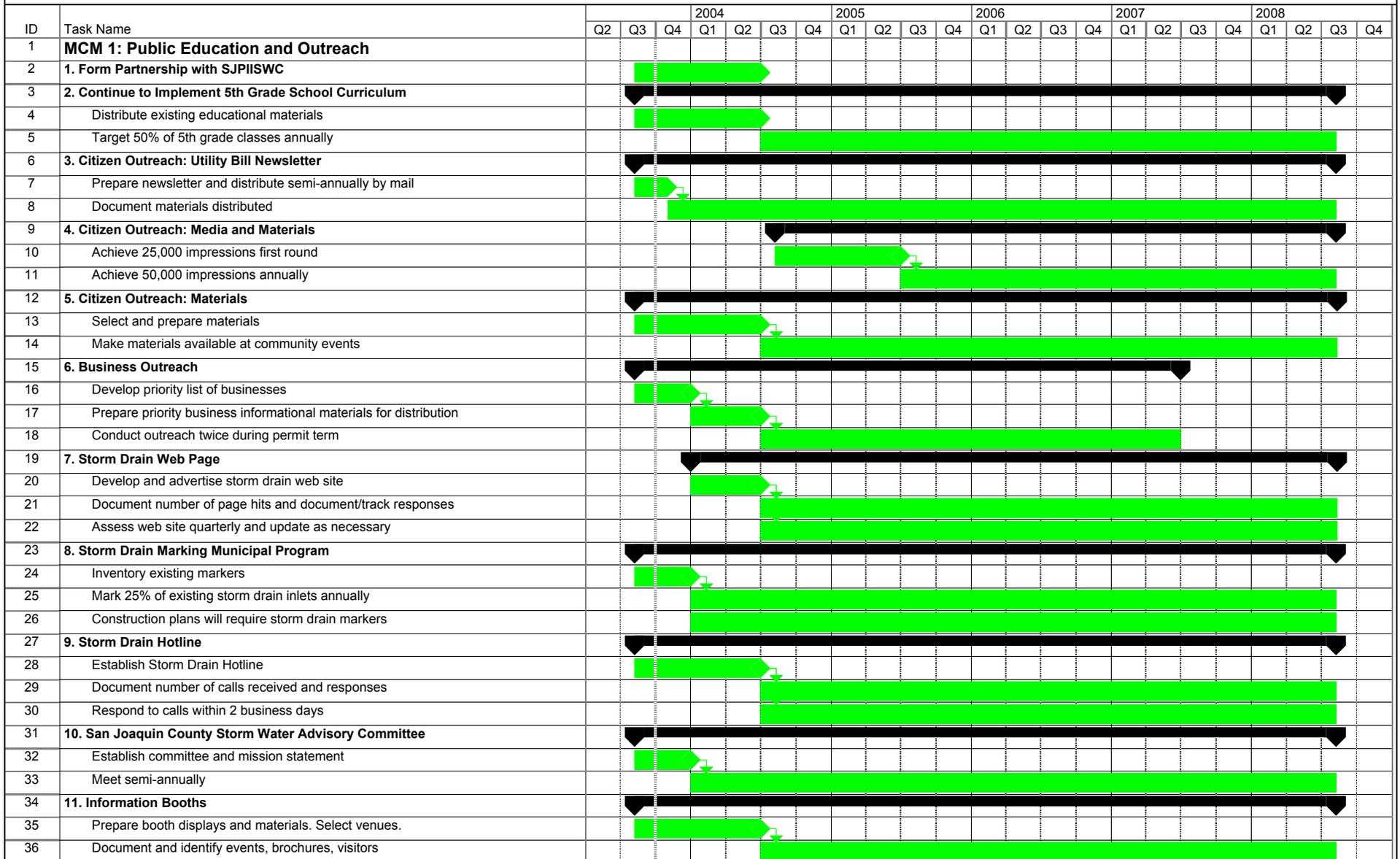
- Ordinance development and adoption
- Program development
- Post-construction implementation
- Post-construction maintenance

## **Section Six – Pollution Prevention/Good Housekeeping for Municipal Operations Program**

This MCM is intended to ensure a reduction in the amount and type of storm water pollutants by establishing routine activities in the operation and maintenance of municipal operations that address storm water runoff. Setting particular guidelines for source controls and materials management is an important component to storm water quality management. The BMPs in this section include:

- Source reduction
- Materials management
- Training workshops

## San Joaquin County Storm Water Management Program Implementation Schedule



Project: sjco impl\_sept  
Date: Mon 9/29/03

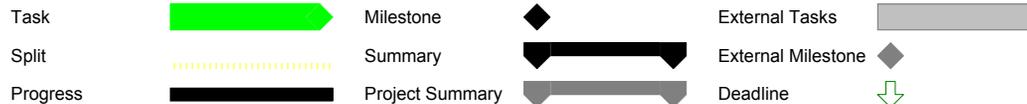
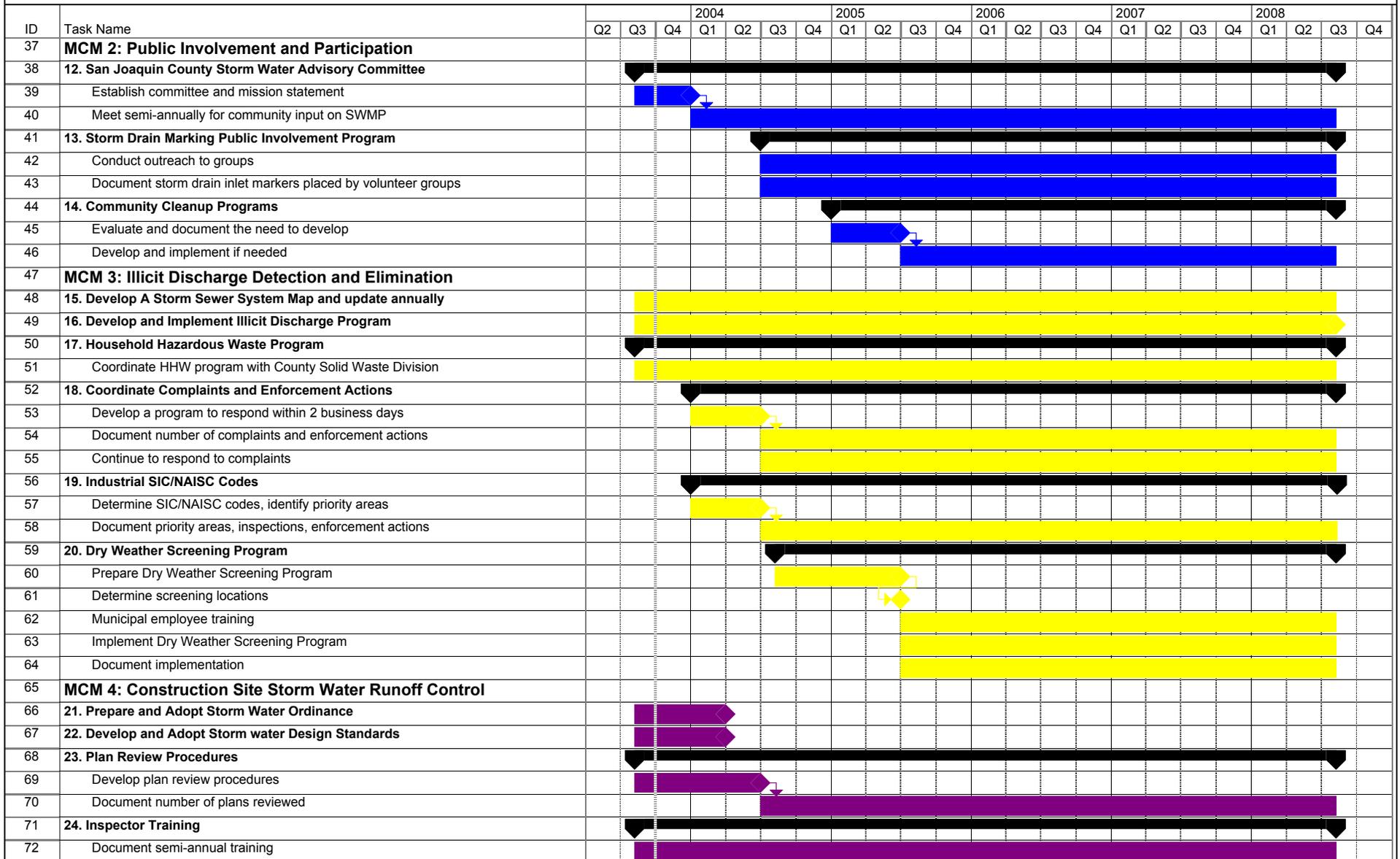


Figure 1

## San Joaquin County Storm Water Management Program Implementation Schedule

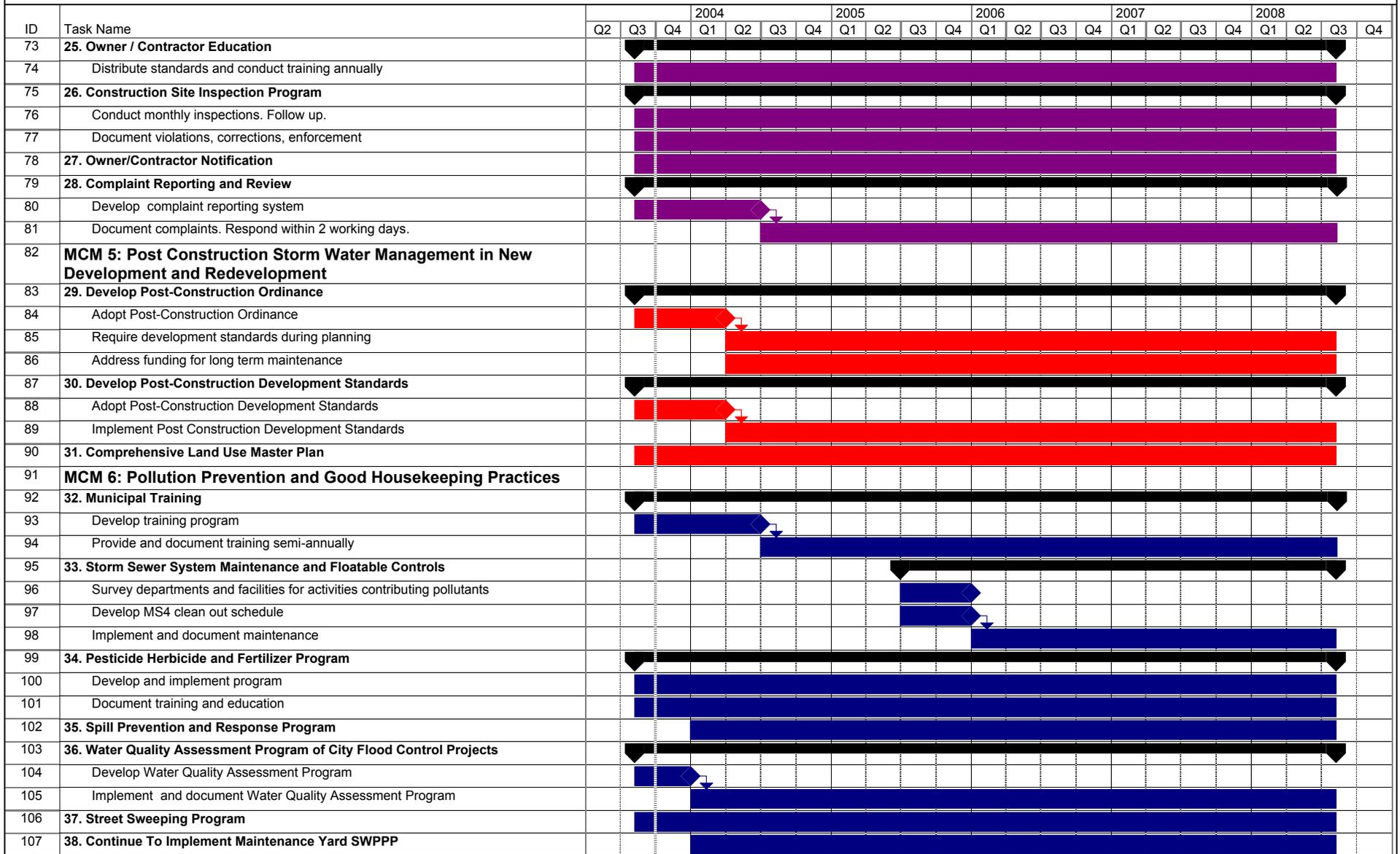


Project: sjco impl\_sept  
Date: Mon 9/29/03



Figure 1

## San Joaquin County Storm Water Management Program Implementation Schedule



Project: sjco impl\_sept  
Date: Mon 9/29/03



Figure 1

## SECTION ONE

### PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS PROGRAM

The Public Education and Outreach on Storm Water Impacts Program of the SWMP addresses increasing public and professional awareness of water quality concerns and BMPs that may be implemented with respect to protection of storm water. The BMPs described in this section of the SWMP include education of the public sector through the use of materials such as newsletters, handouts and displays. The public education will introduce the SWMP and focus on known contaminant sources and how to control these sources.

This program also integrates many other facets of the SWMP to provide information and up-to-date BMPs to the end user. The following BMPs describe implementation tasks and assessment tasks to be completed by the County for the Public Education and Outreach on Storm Water Impacts Program.

Objective: Reduce pollutants to receiving waters by increased public awareness of problems and implementation of solutions.

Permit Requirement: D.2.a. – Public Education and Outreach on Storm Water Impacts

Description of BMPs:

*Local and Regional Groups:* Develop a local group consisting of targeted audiences to be called the San Joaquin Phase II Storm Water Advisory Committee, (SWAC) to address the development and implementation of BMPs. Participate with the San Joaquin Phase II Storm Water Management Committee, (SJPIISWMC) to share resources in the development and implementation of BMPs.

*School Curriculum:* Continue to implement the existing school program in coordination with the local school districts targeting 50% of 5<sup>th</sup> grade classes annually regarding storm water.

*Newsletter in Utility Bill:* Develop a newsletter intended to provide information to the public regarding the impacts of their activities on storm water quality and ultimately the receiving waters. The newsletter will also instruct the public how to access the County's website to obtain more information. The newsletter could be sent to residents within the Phase II permit area, printed in local papers, or distributed at special events.

*Educational Materials:* In conjunction with the SJPIISWC, provide the public with educational materials, displays, newsletters, utility bill inserts, and outreach activities regarding the impact of daily activities on storm water quality. Due to the sparse population in the San Joaquin County Phase II area, the Phase II population will be reached by partnering with other Phase II cities within the County and the City of Stockton. The County will coordinate with the local municipality where the event is held. The County has existing educational materials that can be enhanced as necessary for use in the Phase II program. The types of media and timing for distribution are discussed with the community so that the public can be targeted during the spring and the fall. Other factors that are taken into consideration in choosing the types of media are the average number of times that a person will see the advertisement. Examples of the types of educational materials that may be developed are:

Public service announcements	Stickers with logo and message
Radio announcements	Posters
Newspaper advertisements	Magnets
Activity books	Tabloids

*Business Outreach:* A business outreach program will be implemented to help businesses reduce the amount of pollutants entering the storm drain system. A list of priority businesses to target (e.g., auto body shops, manufacturers, restaurants, auto maintenance contractors, etc.) will be developed. Business-specific materials will be developed or obtained by the City for distribution. Business outreach will be conducted twice during the permit term.

*Storm Water Web Page:* Continue to implement the storm water web site to educate the public on storm water issues. The page addresses illicit discharges, provides the Storm Drain Hotline phone number, and has questionnaires to challenge the public about storm water.

*Storm Drain Marking Municipal Program:* The County will complete an inventory of storm drain inlets to determine those that have existing markers and those that require markers to be installed. The County will mark 25% of the storm drain inlets annually and will require that new and redevelopment projects mark storm drain inlets.

*Storm Drain Hotline:* The County will continue to implement the Storm Drain Hotline number to receive public calls regarding illicit discharges such as the dumping of used motor oil into storm drains. The County will respond to calls within two business days.

*San Joaquin Phase II Storm Water Advisory Committee:* Form the San Joaquin Phase II Storm Water Advisory Committee based upon the initial stakeholders group. The SWAC

will meet twice a year to have input in the ongoing development and implementation of the SWMP.

*Information Booths/Earth Day:* Coordinate with the SWAC and the San Joaquin Phase II Storm Water Committee to participate in the Earth Day Festival and the County Fair with an information booth. The County has an existing information booth that was developed with the Phase I storm water program.

Goals and Assessment: The table below represents measurable goals for the BMPs to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness following the schedule identified.

**PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS PROGRAM**

BMP #	BMP	Measurable Goal	Compl. Date (mo/yr)	Lead Entity/ Funding Source	Contact
1	Form Partnership with the San Joaquin Phase II Storm Water Committee (SJPIISWC)	Adopt MOU or other agreement	6/04	SJPIISWC/ General Fund	Denise Thomas
2	Continue to implement School Curriculum for 5th grade students	Distribute existing educational materials	6/04 <sup>1</sup>	SJPIISWC/ General Fund	Denise Thomas
		Target 50% of 5 <sup>th</sup> grade classes annually	6/05 <sup>1</sup>		
3	Citizen Outreach: Utility Bill Newsletter	Prepare newsletter and distribute semi-annually by mail	10/03	SJPIISWC/ General Fund	Denise Thomas
		Document materials distributed	10/03 <sup>1</sup>		
4	Citizen Outreach: Media and Materials (TV, radio, other advertisements)	25,000 media impressions in first round and 50,000 media impressions per year thereafter	6/05 <sup>1</sup>	SJPIISWC/ General Fund	Denise Thomas

SECTION ONE  
PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS PROGRAM

BMP #	BMP	Measurable Goal	Compl. Date (mo/yr)	Lead Entity/ Funding Source	Contact
5	Citizen Outreach: Materials (activity books, pencils, paper, posters, etc)	Select and prepare materials. Make available at relevant City offices and during applicable festivals and events	7/04 <sup>1</sup>	SJPIISWC/ General Fund	Denise Thomas
6	Business Outreach	Develop priority list of businesses to target	12/03	SJPIISWC/ General Fund	Denise Thomas
		Prepare business-specific information materials for distribution	6/04		
		Conduct outreach twice during the permit term	6/05 6/07		
7	Advertise and Maintain Storm Water Web Page	Develop and advertise storm drain web site	12/03	SJPIISWC/ General Fund	Denise Thomas
		Document number of page hits	12/03 <sup>1</sup>		
		Assess web site quarterly and update as necessary	3/04 <sup>1</sup>		
8	Storm Drain Marking Municipal Program	Inventory existing markers and document number of new drains marked	12/03	Public Works/ General Fund	Denise Thomas
		25% of the existing storm drain inlets requiring markers will be marked annually	12/04 <sup>1</sup>		
		Construction plans will require new and redevelopment to mark all storm drains	12/03 <sup>1</sup>		

SECTION ONE  
PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS PROGRAM

BMP #	BMP	Measurable Goal	Compl. Date (mo/yr)	Lead Entity/ Funding Source	Contact
9	Storm Drain Hotline	Establish storm drain hotline	6/04	Public Works/ General Fund	Denise Thomas
		Document number of calls received and responses	6/04 <sup>1</sup>		
		Respond to calls within 2 business days	6/04 <sup>1</sup>		
10	Form the San Joaquin Storm Water Advisory Committee (SWAC)	Establish committee and mission statement	12/03	Public Works/ General Fund	Denise Thomas
		Meet twice annually to address issues associated with ongoing development and implementation of the SWMP	3/04 <sup>1</sup>		
11	Information Booth at festivals, events and relevant city offices	Prepare booth displays and materials. Select appropriate venues.	6/04	SJPIISWC/ General Fund	Denise Thomas
		Document and identify number events, number of brochures distributed, estimate number of visitors.	6/04 <sup>1</sup>		

<sup>1</sup> The date indicated represents the first completion date of an ongoing BMP

## SECTION TWO

### PUBLIC INVOLVEMENT/PARTICIPATION PROGRAM

The Public Involvement/Participation Program section of the SWMP addresses the importance of public involvement with respect to protection of storm water. Community participation provides for broader public support, shorter implementation schedules, a broader base of expertise and the development of important relationships with other community and government programs. The BMPs described in this section of the SWMP includes opportunities for the public to play an active role in the development and implementation of the SWMP. Such opportunities include the public notice process and efforts to reach out and engage all economic and ethnic groups, and additional community programs to foster public input.

This program will be integrated with the Public Education and Outreach Program to incorporate education with hands-on programs. The following BMPs describe implementation tasks and assessment tasks to be completed by the County for the Public Education Involvement/Participation Program.

Objective: Involve the public in the development and implementation of the SWMP.

Permit Requirement: D.2.b. – Public Involvement/Participation

Description of BMPs:

*San Joaquin Phase II Storm Water Advisory Committee:* The SWAC will be a vehicle to provide input in the ongoing development and implementation of the SWMP. This will include creation of ordinances, standards, and community programs.

*Storm Drain Marking Public Involvement Program:* The County conducts outreach to groups that may be interested in marking storm drain inlets. Examples of groups that may be interested are boy scouts, school groups, etc. The County provides such groups with a map of the inlets to be marked and supplies. The County will continue to document the number of storm drain markers that are placed.

*Community Involvement Program:* The County will continue to require stenciling of storm drains in new development. The County will also evaluate the cost and need to develop and implement other community involvement programs and to enlist the services of parties such as school groups and the Boy Scouts to participate in activities such as stencil existing storm drains, “Clean the Detention Basin Day,” “Adopt A Stream,” dry weather

screening and monitoring, and the reporting of illicit dumping. The purpose of these activities is to not only educate the community on the function of the storm drain system and pollutants that should not be introduced into it, the SWMP, and associated regulations, but through involvement induce a sense of ownership and consequently a respect of the quality storm water.

Goals and Assessment: The table below represents measurable goals for the BMPs to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness following the schedule identified.

**PUBLIC INVOLVEMENT AND PARTICIPATION**

<b>BMP #</b>	<b>BMP</b>	<b>Measurable Goal</b>	<b>Compl. Date (mo/yr)</b>	<b>Lead Entity/ Funding Source</b>	<b>Contact</b>
12	Form the SWAC	Establish committee and mission statement	12/03	Public Works / General Fund	Denise Thomas
		Meet twice annually to address issues associated with ongoing development and implementation of the SWMP with the community	3/04 <sup>1</sup>		

BMP #	BMP	Measurable Goal	Compl. Date (mo/yr)	Lead Entity/ Funding Source	Contact
13	Storm Drain Marking Public Involvement Program	Conduct outreach to groups that may be interested in marking storm drains (boy scouts, school groups, etc)	12/04 <sup>1</sup>	Public Works / General Fund	Denise Thomas
		Document number of storm drain inlet markers that are placed	12/04 <sup>1</sup>		
14	Community Cleanup Programs	Evaluate and document the cost and the need to develop and implement community involvement programs such as: "Clean the Curb Day", "Clean the Basin Day", Adopt a Basin Program", "Adopt A Stream"	6/05	Public Works / General Fund	Denise Thomas
		Develop and implement a community involvement program if needed	6/06 <sup>1</sup>		

<sup>1</sup> The date indicated represents the first completion date of an ongoing BMP

## SECTION THREE

### ILLCIT DISCHARGE AND ELIMINATION PROGRAM

The Illicit Discharge and Elimination Program section of the SWMP addresses non-storm water flows that are discharged to receiving waters via storm water conveyance systems. The program will implement BMPs to assist in the identification of illicit discharges and removal of these discharges from the system. This program will also focus on prevention of new illicit discharges to the storm water system by means of education, regulations, and through spill prevention and response.

This program will also be integrated with the Public Education and Outreach program to promote awareness of the importance of protecting the storm water system from illicit discharge and the resultant impact to receiving waters. The following BMPs describe implementation tasks and assessment tasks to be completed by the County for the Illicit Discharge and Elimination Program.

Objective: Detect and eliminate illicit discharges to the storm sewer system.

Permit Requirement: D.2.c. – Illicit Discharge Detection and Elimination

Description of BMPs:

*Storm Sewer System Map:* Maintain a current map that identifies the County's storm sewer system, (see Figure 2). The map will be updated annually. The purpose of the storm sewer map is to provide accurate location information to County personnel implementing the Illicit Discharge detection and Elimination Program. This includes identifying the location of watersheds, associated outfalls, and waters of the U.S. that receive discharges from those outfalls. This document will allow County personnel to better determine the source of pollutants contained in storm water.

*Ordinance:* Existing ordinances will be enhanced or some other regulatory mechanism will be developed to prohibit non-storm water discharges to the storm sewer system. The ordinance will include provisions for enforcement of the program.

*Hazardous Household Waste Program:* Under direction from the California Integrated Waste Management Board, the San Joaquin County Public Works Department manages and implements the Household Hazardous Waste (HHW) Program and now shares resources with the Storm Water Management Program. On August 8, 2003, the Solid

Waste Division opened the County's first new Permanent Household Hazardous Waste Consolidation Facility (PHHWCF) which will enable residents and small quantity generators to properly dispose of their hazardous waste in a more timely and less costly manner. The facility is open to residents three days each week (Thursday, Friday, Saturday). Small business generators must call for an appointment. The SWMP will promote the facility by listing the hours of availability and location on all appropriate printed materials. At least once per year the SWMP will participate at a satellite drop off location to help advertise the event and conduct surveys.

*Public Reporting:* The County maintains an After Hours Emergency phone number to central dispatch. If a call comes in regarding a complaint associated with the storm sewer system, the proper County personnel are notified to investigate the complaint. The phone number will be advertised on the storm water web page. Respond to calls within two business days. The County will develop standard, situation-specific response procedures that include the financial liability of an identified responsible party.

*SIC/NAICS Codes:* The County will use existing databases to determine the SIC codes or the new North America Industry Classification System (NAICS) codes as appropriate for all industries within the County. The County will use this information, in conjunction with the storm sewer stem map, to assist in the identification of possible locations of non-storm water discharges.

*Dry Weather Screening:* The County will develop and implement a Dry Weather Screening Program to detect and address non-storm water discharges and illegal dumping to the storm sewer system. The Dry Weather Screening Program will also address industries that are prone to discharge to the storm drain system such as power washers. Problem areas will be identified using citizen complaints, field screening and SIC codes for suspect industries. Municipal training will be in integral part of the illicit discharge program. The Dry Weather Screening Program will establish a system and procedures for enforcement of violations and will establish a tracking system for inspections and violations. Enforcement tools will be used to (1) require illicit dischargers to immediately cease and desist discharging to receiving waters or the storm sewer; (2) remove illicit detections as soon as practicable; and (3) require clean up and abatement or recover costs of the County to cleanup and abate discharge.

*Excluded Discharges:* The following non storm water discharges are allowed under the SWMP:

- a. Water line flushing
- b. Landscape irrigation that is not reclaimed treated wastewater
- c. Diverted stream flows

- d. Rising ground waters
- e. Uncontaminated ground water infiltration (as defined at 40 CFR § 35.2005.(20)).
- f. Uncontaminated pumped ground water
- g. Discharges from potable water sources
- h. Foundation drains
- i. Air conditioning condensation
- j. Irrigation water that is not reclaimed treated wastewater
- k. Springs
- l. Water from crawl space pumps
- m. Footing drains
- n. Lawn watering that is not reclaimed treated wastewater
- o. Individual residential car washing
- p. Flows from riparian habitats and wetlands
- q. Dechlorinated swimming pool discharges
- r. Fire fighting flows (if a significant contributor of pollutants to waters of the U.S.)

Goals and Assessment: The table below represents measurable goals for the BMPs to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness following the schedule identified.

**ILLICIT DISCHARGE AND ELIMINATION**

BMP #	BMP	Measurable Goals	Compl. Date (mo/yr)	Lead Entity/ Funding Source	Contact
15	Storm Sewer System Map that identifies all watersheds, outfalls and receiving waters	Continue to annually update	6/04 <sup>1</sup>	Public Works/ General Fund	Charles Kelley
16	Develop or enhance existing ordinances to prohibit non- storm water discharges. Establish and enforce penalties	Implement Ordinance	3/04 <sup>1</sup>	Public Works/ General Fund	Charles Kelley

SECTION THREE  
ILLICIT DISCHARGE AND ELIMINATION PROGRAM

BMP #	BMP	Measurable Goals	Compl. Date (mo/yr)	Lead Entity/ Funding Source	Contact
17	Used Motor Vehicle Fluids/ Household Hazardous Waste Materials	Coordinate HHW program with County Solid Waste Division	6/04 <sup>1</sup>	Public Works/ General Fund	Denise Thomas
18	Coordinate Complaints and Enforcement Actions	Develop a program to respond within 2 business days, include standard, situation-specific response procedures with financial liability	6/04	Public Works/ General Fund	Charles Kelley
		Document the number of complaints and enforcement actions	6/04 <sup>1</sup>		
		Continue to respond to complaints about the storm sewer system via the After Hours Emergency number	6/04 <sup>1</sup>		
19	Industrial SIC/NAISC Codes	Determine the SIC/NAISC codes of industries within the City and their Industrial permitting obligation, identify priority areas for training and enforcement	6/04 <sup>1</sup>	Public Works/ General Fund	Charles Kelley
		Document high priority areas on storm drain map document number of inspections and enforcement actions	6/04 <sup>1</sup>		

SECTION THREE  
ILLICIT DISCHARGE AND ELIMINATION PROGRAM

BMP #	BMP	Measurable Goals	Compl. Date (mo/yr)	Lead Entity/ Funding Source	Contact
20	Dry Weather Screening Program	Prepare a program to screen outfalls within the City for dry weather flows	6/05	Public Works / General Fund	Charles Kelley
		Determine screening locations using prioritization from SIC codes and land use map	6/05		
		Municipal employee training	6/06 <sup>1</sup>		
		Implement program on a monthly basis during dry weather	6/06 <sup>1</sup>		
		Track results with storm sewer system map. Document screening locations, inspections, pollutants discovered, and efforts undertaken to establish possible pollutant sources.	6/06 <sup>1</sup>		

<sup>1</sup> The date indicated represents the first completion date of an ongoing BMP

## SECTION FOUR

### CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM

The Construction Site Storm Water Runoff Control Program section of the SWMP addresses water quality concerns for construction sites greater than or equal to one acre. Polluted storm water runoff from construction sites often flow to storm sewers and into receiving waters. This runoff can contribute more sediment to receiving waters than can be deposited naturally during several decades. The resulting situation can cause physical, chemical and biological harm to receiving waters. The BMPs described in this section of the SWMP includes the development of a construction site program designed to reduce pollutants in storm water runoff from construction activities. This program will include procedures for construction site plan review, site inspections, public reporting, and notification of specific requirements to all construction site owners and contractors on projects greater than or equal to one acre, and sites less than one acre if part of a larger development of common plan.

This program will also be integrated with other facets of the SWMP to provide information and up-to-date BMPs to the end user. The following BMPs describe implementation tasks and assessment tasks to be completed by the County for the Construction Site Storm Water Runoff Control Program.

Objective: Reduce pollutants in storm water runoff from construction sites

Permit Requirement: D.2.d. – Construction Site Storm Water Runoff Control

Description of BMPs:

*Storm Water Ordinance:* The County will adopt a Storm Water Ordinance to address the regulatory programs required under Phase II of the NPDES Storm Water Program, including Construction Site Runoff Control. This ordinance will include provisions to address both erosion/sediment control and construction site materials and wastes. It will address not only grading disturbing one acre or more, but also land clearing. The ordinance will also include financial guarantees for compliance and site stabilization.

*Construction Site BMPs:* The County will utilize its Improvement and Construction Standards to require construction site runoff control measures and to specify, installation and maintenance requirements for those measures. The County will adopt the proposed technical guidance.

*Storm Water Plan Review Procedures:* The standards will specify submittal requirements to ensure adequate information is provided for plan review staff. The standards will provide technical guidance to project owners and contractors to ensure compliance with the program, as well as a regulatory basis on which to condition approval of projects.

*Training of Public Works Inspection Personnel:* County Public Works inspection personnel will be educated on the storm water regulations and the requirements for storm water controls at construction sites. Information on specific storm water best management practices will be provided.

*Owner/Contractor Education:* Information will be provided to owners and contractors regarding storm water controls for construction sites. The California Storm Water Quality Association Storm Water Best Management Practices Handbook for Construction Activity contains guidance in the implementation of BMPs. The County will provide contractors with information on how to access the document.

*Construction Site Inspection Program:* The County will implement the construction site program with field inspectors and enforcement items. The violations, corrective measures and enforcement actions will be documented in the annual report. Conduct storm water inspections at construction sites one acre or greater; frequency will be based on risk criteria; follow up inspections will be conducted where violations occur.

*General Construction Permit:* The County will notify owners and contractors of their obligations under the State Water Resources General Construction Permit.

*Complaint Reporting System:* The County will develop and implement a complaint reporting system to respond to storm water related public complaints. The County will respond to complaints within 2 working days.

Goals and Assessment: The table below represents measurable goals for the BMPs to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness following the schedule identified.

**CONSTRUCTION SITE STORM WATER RUNOFF CONTROL**

<b>BMP #</b>	<b>BMP</b>	<b>Measurable Goals</b>	<b>Compl. Date (mo/yr)</b>	<b>Lead Entity/ Funding Source</b>	<b>Contact</b>
21	Prepare and adopt a Storm Water Ordinance	Adopt ordinance	3/04	Public Works/ General Fund	Charles Kelley
22	Develop storm water BMPs for inclusion in the Design Standards	Adopt new standards	3/04	Public Works/ Development Fees	Charles Kelley
23	Develop storm water plan review procedures for storm water BMPs	Develop storm water plan review procedures	6/04	Public Works/ Development Fees	Charles Kelley
		Document number of plans reviewed and ensure either WDID number or copy of NOI is included	6/04 <sup>1</sup>		
24	Inspector Training	Document number of training and personnel semi-annually	6/04 <sup>1</sup>	Public Works/ Development Fees	Shawn Hart
		Complete training of personnel and conduct refresher and new inspector training to appropriate employees as part of orientation	6/04 <sup>1</sup>		
25	Owner/Contractor Education	Distribute standards and conduct training classes annually	6/04 <sup>1</sup>	Public Works/ Development Fees	Shawn Hart
		Document number of workshops, number of participants and material distributed	6/04 <sup>1</sup>		

SECTION FOUR  
CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM

BMP #	BMP	Measurable Goals	Compl. Date (mo/yr)	Lead Entity/ Funding Source	Contact
26	Construction Site Inspection Program	Conduct monthly storm water inspections at construction sites one acre or greater. Follow up inspections will be conducted where violations occur.	6/03 <sup>1</sup>	Public Works/ Development Fees	Shawn Hart
		Document violations, corrective measures and enforcement actions in Annual Report	6/03 <sup>1</sup>		
27	Notify Owners/Contractors of Permitting Obligation	Distribute informational flyer with grading and building permits	6/03 <sup>1</sup>	Public Works/ Development Fees	Charles Kelley
28	Complaint Reporting System	Develop and implement complaint reporting system to respond to storm water related public complaints	6/04 <sup>1</sup>	Public Works/ Development Fees	Denise Thomas
		Document number of complaints and responses. Respond to complaints within 2 working days.	6/04 <sup>1</sup>		

<sup>1</sup> The date indicated represents the first completion date of an ongoing BMP

## SECTION FIVE

### POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT PROGRAM

The Post-Construction Storm Water Management in New Development and Redevelopment Program addresses the importance of storm water runoff management in new development and redevelopment projects. This includes land disturbances of greater than or equal to one acre and projects less than one acre that are part of a larger common plan of development or sale. Substantial impacts of post-construction runoff are caused by an increase in the type and quantity of pollutants in storm water runoff. The BMPs described in this section of the SWMP include the development of structural and non-structural storm water runoff strategies and the development of post-construction programs that consider water quality impacts of new development and redevelopment projects in the comprehensive land use master planning process.

This program will also be integrated with the Construction Site Storm Water Runoff Control Program of the SWMP to provide information and up-to-date BMPs to the end user. The following BMPs describe implementation tasks and assessment tasks to be completed by the County for the Post-Construction Storm Water Management in New Development and Redevelopment Program.

Objective: Reduce pollutants in post-construction storm water runoff from new and redevelopment.

Permit Requirement: D.2.e. – Construction Site Storm Water Runoff Control

Description of BMPs:

*Storm Water Ordinance:* A storm water ordinance will be developed to reduce pollutants in storm water from new and redevelopment projects and insure that adequate long term funding is available. The ordinance will require the adoption of the development standards as set forth in Attachment 4 of the General Permit.

*Development Standards:* The County will prepare development standards during the first five year permit period in accordance with Attachment 4 of the General Permit. The development standards will be adopted prior to the expiration of the General Permit. The County will ensure that coordination occurs with the planners during the planning phase

to incorporate water quality controls into the design. Examples of development standards are to minimize directly connected impervious areas.

*Comprehensive Land Use Master Plan:* Water quality impacts of new and significant redevelopment will be addressed in any Comprehensive Land Use Master Plan.

Goals and Assessment: The table below represents measurable goals for the BMPs to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness following the schedule identified.

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP #	BMP	Measurable Goal	Compl. Date (mo/yr)	Lead Entity/ Funding Source	Contact
29	Develop storm water ordinance requiring development standards	Adopt ordinance	3/04	Public Works/ General Fund	Charles Kelley
		Require development standards to be considered in the planning phase	3/04 <sup>1</sup>		
		Include provisions to address responsibility and funding for long term maintenance	3/04 <sup>1</sup>		
30	Develop and adopt development standards utilizing structural and non structural controls in accordance with Attachment 4 of the General Permit	Include a pre-plan review with planning staff to incorporate long term water quality BMPs	3/04 <sup>1</sup>	Public Works/ Development Fees	Charles Kelley
		Document plan development progress in annual report, and adopt development standards	3/04 <sup>1</sup>		
31	Comprehensive Land Use Master Plan	Document annual Plan updates	3/04 <sup>1</sup>	Planning/ General Fund	Jon Moore

<sup>1</sup> The date indicated represents the first completion date of an ongoing BMP

## SECTION SIX

### POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

The Pollution Prevention/Good Housekeeping for Municipal Operations addresses routine activities in the operation and maintenance for drainage systems, roadways, parks and open spaces, and other municipal operations to help ensure a reduction in pollutants entering the storm sewer system. This Program includes a training component to prevent and reduce storm water pollution from municipal operations. The BMPs can be separated into two broad categories: source controls and materials management. Source controls are BMPs designed to prevent or reduce pollutants at the source and include BMPs such as storm drainage system maintenance, structural floatable controls, street maintenance staff training, flood control projects and litter ordinances. Materials management BMPs are designed to reduce pollutants with non-structural controls such as pesticide education and spill prevention control.

This program will also be integrated with the Public Education and Outreach, Public Involvement/Participation and Illicit Discharges and Improper Disposal Programs to promote awareness of water quality concerns in performing routine roadway maintenance and operation, and other practices.

Objective: Reduce pollutants in storm water runoff from municipal operations.

Permit Requirement: D.2.f. – Pollution Prevention/Good Housekeeping for Municipal Operations

Description of BMPs:

*Municipal Employee Training:* The training program for municipal operation employees will be continued. The training program educated employees regarding pollutants that may be discharged to the storm sewer system and the potential impacts. Proper training can reduce pollutants from such activities as storm sewer system maintenance, park and landscape maintenance, tack oil application, excess concrete, concrete truck washout and spill clean-up. Training occurs at during the monthly safety meetings. The purpose of the training is to update operations, parks and golf course employees on storm water issues and to provide a platform for a roundtable discussion on current practices and procedures and how they impact storm water quality.

*Storm Sewer System Maintenance:* The existing drainage system operation, maintenance and cleaning procedures will be evaluated for the purpose of reducing pollutants in storm water runoff. Areas of chronic problems will be identified and corrective actions for these areas will be developed and implemented. Implementation of BMPs shall reference appropriate guidance materials. Proper system maintenance and employee training will help to reduce storm water impacts from such activities as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance. A maintenance program will be developed for storm sewer inlets, manholes, catch basins, pump stations, pipelines, detention basins, etc.

The current disposal procedures for waste removed from the storm sewer system will be reviewed and assessed. Such wastes include dredge spoil, accumulated sediments, floatables and other debris. Controls for reducing or eliminating the discharge of pollutants from areas such as roads and parking lots, maintenance and storage yards and waste transfer stations will help to reduce the discharge of pollutants to receiving waterbodies.

The County will develop a program designed to utilize structural and non-structural controls where necessary to reduce the discharge of floatables to the MEP. The County will survey departments and facilities for activities that may contribute pollutants to the MS4; identify problem areas and corrective actions; implement appropriate BMPs to address water pollution issues at facilities and during municipal activities. Adequate floatable controls will help to ensure a reduction in the amount and type of pollutant that is discharge into local waterways. Current programs to promote recycling and trash removal to minimize floatables in storm water will continue and will be coordinated through the SWAC.

*Pesticide, Herbicide, Fertilizer (PHF) Program:* Current BMPs will be evaluated and implemented as appropriate to reduce the discharge of pollutants related to the application of pesticides, herbicides and fertilizers by municipal employees or contractors to public right-of-ways, parks and other municipal facilities.

*Spill Prevention and Response Program:* The County Office of Emergency Services will respond to reports of spills or illegal discharges. The fire departments within the County are also equipped to respond to spills, to mitigate spills and to eliminate the danger to human health. The current program will be evaluated for effectiveness, and will be modified as necessary. Personnel training is an important component to this program.

*Water Quality Assessment for Flood Control Projects:* The County will require attenuation of storm water discharges and in the future require the addition of other water quality features in the design and construction of any flood control project.

*Street Sweeping:* The County will continue its current street sweeping program. The miles of streets swept will be documented.

*Pollution Prevention at Maintenance Yards:* San Joaquin County currently has a Storm Water Pollution Prevention Plan for the maintenance yard and equipment shop. The County will continue to implement and document the SWPPP.

Goals and Assessment: The table below represents measurable goals for the BMPs to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness following the schedule identified.

**POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS**

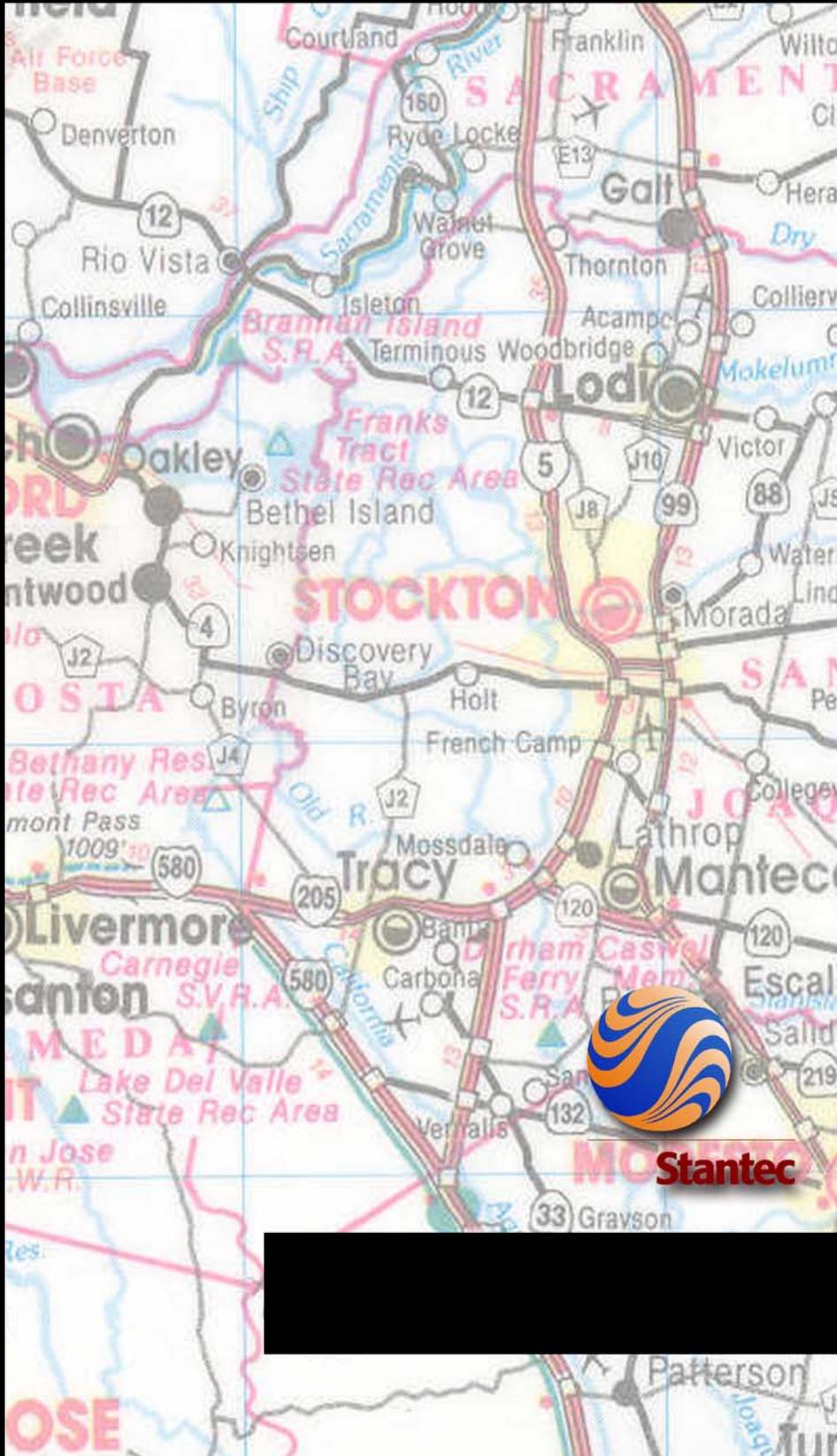
BMP #	BMP	Measurable Goal	Compl. Date (mo/yr)	Lead Entity/ Funding Source	Contact
32	Municipal Training	Develop a training program for all municipal operations employees	6/04	Public Works/ General Fund	Shawn Hart
		Provide training twice/year	6/04 <sup>1</sup>		
		Document attendance and topics	6/04 <sup>1</sup>		

SECTION SIX  
POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

BMP #	BMP	Measurable Goal	Compl. Date (mo/yr)	Lead Entity/ Funding Source	Contact
33	Storm Sewer System Maintenance and Floatable Controls	Survey departments and facilities for activities contributing pollutants	6/05	Public Works/ General Fund	Charles Kelley
		Develop a cleanout schedule for MS4 components, including detention basins, pump stations, catch basins, and storm sewer lines	6/05		
		Implement storm sewer system maintenance schedule and document activities	6/05 <sup>1</sup>		
34	Pesticide, Herbicide, and Fertilizer (PHF) Program	Develop and implement program. Document training and education.	12/03 <sup>1</sup>	Public Works/ General Fund	Charles Kelley
35	Spill Prevention and Response Program	Assess existing program	12/03	Public Works, Office of Emergency Services/ General Fund	Shawn Hart
		Document training, education and spill locations and response actions	12/03 <sup>1</sup>		
36	Water Quality Assessment for Flood Control Projects	Develop water quality assessment program	12/03	Public Works/ Flood Control	Charles Kelley
		Ensure that projects are assessed and project plans are revised accordingly	12/03 <sup>1</sup>		
		Document water quality assessment of capital improvements	12/03 <sup>1</sup>		

BMP #	BMP	Measurable Goal	Compl. Date (mo/yr)	Lead Entity/ Funding Source	Contact
37	Street Sweeping	Sweep residential streets in City at least 2 times per month and commercial streets 2 or 3 times per week	12/03 <sup>1</sup>	Public Works/ General Fund	Shawn Hart
		Document miles swept per month and amount of material removed from roads	12/03 <sup>1</sup>		
		Document roads that are swept	12/03 <sup>1</sup>		
38	Pollution Prevention Plan for Maintenance Yard	Continue to implement the SWPPP for the maintenance yard	6/04 <sup>1</sup>	Public Works/ General Fund	Shawn Hart

<sup>1</sup> The date indicated represents the first completion date of an ongoing BMP



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