

CITY OF MARYSVILLE STORM WATER MANAGEMENT PROGRAM

**In Compliance with the
Phase II Regulations of the
National Pollutant Discharge Elimination System**



Prepared By:

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CITY OF MARYSVILLE STORM WATER MANAGEMENT PROGRAM

This Storm Water Management Program (SWMP) is being initiated by the City of Marysville (City) to fulfill requirements of the National Pollutant Discharge Elimination System (NPDES) Phase II. The following provides direction for the City to develop a storm water management program (SWMP) including the six minimum control measures, to implement the SWMP using appropriate storm water controls and best management practices (BMP's), to develop measurable goals and to evaluate the effectiveness of the program – modifying when necessary.

The area covered by this SWMP is the City of Marysville shown on Map A.

INTRODUCTION

The City of Marysville Storm Water Management Plan (SWMP) is an effort of the City, which discharges storm water to the Yuba River and the Feather River through pumping stations located along the levees. The Yuba River feeds the Feather River and the Feather River feeds into the Sacramento River. This SWMP describes the city's approach to reduce storm water pollution. There are six major sections to the Plan, detailing the program for each. The SWMP will serve as the basis for a storm water discharge permit based on the State Water Resources Control Board (SWRCB), Water Quality Order 2003-0005-DWQ, National Pollutant Discharge Elimination System (NPDES), General Permit No. CAS000004. The federal Clean Water Act (CWA) requires storm water dischargers to reduce pollutants to the maximum extent practicable. The SWMP, in conjunction with the permit adopted by the SWRCB, is designed to enable the City to meet that requirement.

SIX MINIMUM CONTROL MEASURES

A. Public Education and Outreach

To satisfy this minimum control measure, the City will implement a public education program to distribute educational materials to the community.

Two main action areas will be developed to successfully implement a public education and outreach program. Those action areas are as follows:

- 1) Form a partnership between the local government agencies to implement a public education program.
- 2) Use educational materials and strategies. Educational materials that will be developed include:
 - Create a page on the City's website that is specifically dedicated to storm water management.
 - Implement storm drain stenciling throughout the City.
 - Participate in local events with an educational display.

- Create an educational program for school-age children.
- 3) Create brochures that target carpet cleaning companies and car washes, which will be distributed annually in the business license renewal packages.

The measurable goals for public education and outreach are as follows:

| Target Date | Activity |
|-------------|--|
| 2004-2005 | <ul style="list-style-type: none"> • Stencil 90% of the storm drain inlets within the City utilizing volunteers and community service groups. • Create a page on the City's website specifically dedicated to storm water management. • Create a general brochure about storm water management. |
| 2005-2006 | <ul style="list-style-type: none"> • Stencil 100% of the storm drain inlets within the City. |
| 2006-2007 | <ul style="list-style-type: none"> • Create brochures for carpet cleaning companies and car washes, and distribute once a year, with the intent to target problems or industries in subsequent years. • Develop an educational display for use at the Yuba-Sutter Fair, which takes place once a year in August. |
| 2007-2008 | <ul style="list-style-type: none"> • Create and implement an educational program for school-age children. |

Implementation for the City - Assistant/Associate Civil Engineer, City Services.

B. Public Participation/Involvement

To satisfy this minimum control measure, the City will:

- Comply with applicable State and local public notice requirements.
- Determine the appropriate best management practices (BMP's).

The City will include the public in developing, implementing and reviewing its storm water management program. Since the City is comprised of a wide variety of ethnic and economic groups, every effort will be made to engage everyone in the process.

To solicit input from the public, the City will advertise public meetings in the local newspaper, on the City's website, on the local radio stations and on the local cable channel.

The BMP's that will be incorporated into the City's public participation and involvement program shall include:

- Public meetings, which will allow citizens to discuss their viewpoints and provide input concerning appropriate storm water management policies.
- Storm drain stenciling by local community organizations.
- Community clean-ups along local waterways.

- Develop citizen watch groups to aid local enforcement authorities in the identification of polluters.
- Work with local schools, such as the high school or community college, to implement volunteer water quality monitoring.

The measurable goals for public participation and involvement are as follows:

| Target Date | Activity |
|-------------|--|
| 2004-2005 | <ul style="list-style-type: none"> • Notice of a public meeting in several different medias to discuss the storm water management plan. |
| 2005-2006 | <ul style="list-style-type: none"> • Recruit local community organizations to stencil remaining storm drain inlets. |
| 2006-2007 | <ul style="list-style-type: none"> • Provide training for citizen watch groups in order to educate them on storm water management, so that they can report occurrences in residential, industrial and commercial areas. |

Implementation for the City - Assistant/Associate Civil Engineer, City Services.

C. Illicit Discharge Detection and Elimination

To satisfy this minimum control measure, the City will:

- Develop storm sewer base maps, showing location of all outfalls.
- Develop an enforceable ordinance to prohibit non-storm water discharges into the storm sewer system.
- Develop a plan to detect and address non-storm water discharges through the development of inspection procedures and checklists for inspectors.
- Educate public employees, businesses and the general public about the hazards associated with illegal discharges and the improper disposal of waste.

In developing this measure, the following non-storm water discharges have been determined to be acceptable:

- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Decontaminated pumped ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensation
- Irrigation water

- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering
- Individual residential car washing
- Dechlorinated swimming pool discharges

The storm sewer base maps will show all storm sewer lines located within the City of Marysville. The maps will also show where the lines drain to and all outfall lines to the Feather River, Yuba River and Jack Slough.

The ordinance that will be developed will identify which non-storm water discharges will be allowed, and will outline the enforcement procedures and actions that will be taken if an incident occurs that is not allowed.

The plan to detect and address non-storm water discharges will include the following:

- Develop inspection procedures and checklists for inspectors. City Services staff will conduct an inventory of all commercial and industrial areas in the City. After the inventory is completed, the properties will be prioritized for inspection by City staff.
- Locate problem areas based on the likelihood of illicit connections, such as areas with older sanitary sewer lines. Methods used to locate problem areas will include public complaints and visual screening.
- Find the source of the problem once a problem area or discharge is found. Methods used to find the source of an illicit discharge may include smoke testing and tracing the discharge upstream in the storm sewer.
- Remove the source of an illicit discharge by notifying the offender of the problem and directing them to correct the problem.
- Document actions taken. Documentation will include any complaints received and corrected, number of discharges eliminated and number of smoke tests conducted.

Efforts will be made to outreach to public employees, businesses, property owners, elected officials and the general public regarding ways to detect and eliminate illicit discharges. These efforts will include:

- Developing informative brochures and guidance for detecting and eliminating illicit discharges.
- Design a means for the public to report illicit discharges via either a hotline for the public to report violations, and/or a form on the City's website to report violations. All reports will be tracked and the outcome of all investigations will be documented.
- Educate the public on recycling programs available to the community.

The measurable goals for public participation and involvement are as follows:

| Target Date | Activity |
|-------------|--|
| 2004-2005 | <ul style="list-style-type: none"> • Storm sewer maps completed which show watershed information for each outfall. • Educate the public that a household hazardous waste facility exists in the community via the City's website and other public communications. |
| 2005-2006 | <ul style="list-style-type: none"> • Ordinance in place. • Train public employees using a tiered approach. Completion of general training of all employees will take place this year. • Establish a hotline and/or a report form on the City's website for the public to report illicit discharges. The City Services Department will respond to all reports within 2 working days. |
| 2006-2007 | <ul style="list-style-type: none"> • Informative brochures developed and distributed to the public through a variety of channels, including public counters, community organizations, and if available in community mailings. • The plan to detect and eliminate non-storm water discharges in effect. • Continue training of public employees by providing specific training to those employees that are working in the field. |
| 2007-2008 | <ul style="list-style-type: none"> • Evaluate effectiveness of measures by analyzing how many non-storm water discharges were reported , how many sites were inspected and the outcome, for the previous two years. |

Implementation for the City - Assistant/Associate Civil Engineer, City Services.

D. Construction Site Runoff Control

To satisfy this minimum control measure, the City will do the following:

- Create/Adopt an ordinance requiring the implementation of proper erosion and sediment controls, and controls for other wastes on applicable construction sites.
- Create/Adopt Improvement and Development Standards requiring BMP's on construction sites for both storm water and non-storm water discharges.
- Create procedures for site plan review of construction plans to consider potential water quality impacts.
- Create procedures for site inspection and enforcement of control measures.
- Create sanctions to ensure compliance.
- Establish procedures for the receipt and consideration of information submitted by the public.

The ordinance will establish a construction program that controls polluted runoff from construction sites with a land disturbance of greater than or equal to one acre. One element of the construction program will be the requirement for a site plan review, prior to

disturbance of the land, to insure that appropriate BMP's are implemented on construction sites to control erosion, sediment and other waste.

With the establishment of the ordinance, a system for inspection and enforcement of violations will be developed. Inspection procedures will be drafted, including checklists and a system to track all inspection and enforcement activities, will be put into practice. Enforcement of storm water violations will be based on a tiered system, with first offences receiving a verbal warning, second offences receiving a written warning and further offences receiving a monetary fine.

Once construction commences, procedures will be in place to identify priority sites for inspection and enforcement based on the nature and extent of the construction activity, and the characteristics of the soil. City staff will inspect all construction sites greater than one acre, for storm water compliance once a month, and high priority sites will be inspected weekly. High priority sites will be determined by the potential for the site to pollute if BMP's are not maintained, and by the history of compliance at each site.

Throughout the construction process, a hotline and/or form on the City's website will be in place to receive and consider public inquiries, concerns and information submitted regarding local construction activities. The City will consider the information submitted, and will use discretion in following-up on reported information by recording reported information, both written and verbal, and giving it to the construction inspector for possible follow-up. A tracking system will be put in place to document all reports and enforcement activities.

The measurable goals for construction site runoff control are as follows:

| Target Date | Activity |
|-------------|---|
| 2004-2005 | <ul style="list-style-type: none"> • City ordinance in place. • Program developed for public to report problems with construction activities, including a tracking system for reports and enforcement activities. • Begin training City Services Inspectors on the basics of storm water management for construction sites. |
| 2005-2006 | <ul style="list-style-type: none"> • City procedures for site plan review implemented, and plan checkers trained on procedures. • Continue education of City Services Inspectors on more specific items associated with construction sites. • City procedures for site inspections and enforcement implemented including the development of inspection checklists, and a system to track reports and enforcement activities. |
| 2006-2007 | <ul style="list-style-type: none"> • Complete education of City Services Inspectors on procedures for site inspections and enforcement activities. |

Implementation for the City - Assistant/Associate Civil Engineer, City Services.

E. Post Construction Storm Water Management

To satisfy this minimum control measure, the City will do the following:

- Develop and implement strategies, which will include a combination of structural and non-structural BMP's.
- Develop technical criteria for the different control strategies.
- Create an ordinance requiring the implementation of post-construction runoff controls, including an enforcement mechanism for new development and redevelopment.
- Implement plan checking procedures to ensure the inclusion of post-construction runoff controls prior to plan approval.
- Conduct annual meetings with developers and contractors to discuss construction and post-construction BMP's.
- Develop regulatory requirements for the maintenance of privately owned post-construction control measures.
- Ensure adequate long-term operation and maintenance of controls.

Non-structural BMP's that will be considered include restricting certain types of growth to areas that can support it without compromising water quality, and possible implementation of buffer strips to minimize disturbance and maximize open spaces.

Structural BMP's that will be considered include the following:

- Utilizing detention basins to settle out particulates.
- Consider products that allow runoff to infiltrate into the soil, which will result in reduced storm water quantity and reduced mobilization of pollutants.
- Require landscape features that will enhance pollutant removal and increase aesthetic appeal.

The measurable goals for post-construction runoff control are as follows:

| Target Date | Activity |
|--------------------|--|
| 2004-2005 | <ul style="list-style-type: none">• Develop strategies that include structural and/or non-structural BMP's.• Develop technical criteria for the different control strategies.• Begin drafting ordinance requiring the implementation of post-construction runoff controls, including an enforcement mechanism for noncompliance. |
| 2005-2006 | <ul style="list-style-type: none">• Implement plan checking procedures and train plan checkers to ensure the inclusion of post-construction runoff controls prior to plan approval.• Ordinance finalized and in place.• Host a meeting with developers and contractors to discuss construction and post-construction BMP's, which will then be |

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| | <p>held on a periodic basis.</p> <ul style="list-style-type: none"> • Train inspectors on post-construction BMP's |
| 2006-2007 | <ul style="list-style-type: none"> • Train inspectors on inspection and maintenance of post-construction BMP's, and enforcement mechanisms available to handle violators. |
| 2007-2008 | <ul style="list-style-type: none"> • Entire program implemented. • Require landscape features that will enhance pollutant removal, whenever feasible. |

Implementation for the City - Assistant/Associate Civil Engineer, City Services.

F. Good Housekeeping of Municipal Operations

To satisfy this minimum control measure, the City will do the following:

- Develop and implement an operation and maintenance program to prevent or reduce pollutant runoff from municipal operations into the storm sewer system at the City's Corporation Yard.
- Develop a facility pollution prevention plan for the City's Corporation Yard.
- Develop visual inspection procedures, to be done on a monthly basis, at the City's Corporation Yard.
- Use a tiered approach to train employees on how to incorporate pollution prevention/good housekeeping techniques into municipal operations.
- Develop an employee feedback system to identify problems and solutions to municipal storm water management problems.

The methods used to satisfy this measure include:

- Sweep the streets located within the City limits to reduce the amount of debris that enters the storm sewer system.
- Prevent runoff from the City's Corporation Yard from entering the storm sewer system without first going through a device that will separate out floating debris, oils and other particulates. The device will be inspected routinely to ensure that it is always operating properly.
- Establish procedures for maintenance activities to reduce the amount of pollutants discharged into the storm sewer system.
- Establish procedures for the proper removal of waste that is collected through street sweeping and maintenance activities.
- Establish inspection schedules for storm sewer drain inlets and grates located on outfall lines.
- Create training materials to educate employees on pollution prevention and good housekeeping techniques.

The measurable goals for pollution prevention/good housekeeping are as follows:

| Target Date | Activity |
|-------------|----------|
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| 2004-2005 | <ul style="list-style-type: none"> • Continue street sweeping. • Prepare and implement a Facility Pollution Prevention Plan. • Provide general training to 100% of the employees. |
| 2005-2006 | <ul style="list-style-type: none"> • Create training materials to educate employees. • Establish procedures for maintenance activities. • Establish procedures for the proper removal of waste. • Provide specific training to 100% of the designated employees. |
| 2006-2007 | <ul style="list-style-type: none"> • Establish an inspection schedule for storm sewer inlets and grates located on outfall lines. • Employee feedback system in place to identify problems and solutions to municipal storm water problems. |

Implementation for the City - Assistant/Associate Civil Engineer, City Services.

The above six minimum measures comprise the City of Marysville's Storm Water Management Program. The program will be evaluated on a continual basis and modified as required.