

**NPDES PHASE II
STORM WATER MANAGEMENT PLAN**

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**City of Lathrop
Public Works Department
16775 Howland Road
Lathrop, CA 95330**

**CITY OF LATHROP
STORM WATER MANAGEMENT PLAN**

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INTRODUCTION

General Information

The City of Lathrop is located in the south central portion of San Joaquin County, south of Stockton, west of Manteca and northeast of Tracy (Figure 1 – Vicinity Map City of Lathrop). The San Joaquin River flows between the east and west areas of the City. Major highways in Lathrop include Interstate 5 (I-5) and State Route 120 (SR-120). The former Southern Pacific (now Union Pacific) and original Union Pacific railroads serve the Lathrop community. The City was incorporated in July 1989, and adopted a General Plan in 1991 which was amended in 1992, 1997 and 2003. Master plan documents for the City were prepared in 1992 and have undergone several updates, the latest revision in September 2003.

Lathrop is a general law city operating under a “council-administrator” form of government with the five-member City Council elected at large.

Population and Growth

The community of Lathrop began around 1870 and steadily grew to a population of about 600 by 1879. Lathrop entered a period of decline in the 1880’s which lasted for about 50 years. During the 1940’s Lathrop experienced a growth due to postwar housing tracts, and large industrial employers. Residential growth was slow during the 1950’s and 1960’s but accelerated through the 70’s and 80’s. Lathrop’s population has grown from about 3,700 people in 1980, to 6,841 in 1990, 10,445 in 2000, and approximately 12,000 people in 2003. Lathrop is anticipating high urban growth to occur in the area west of I-5 and a population of 65,400 is projected by the year 2030.

Land Use Distribution

Lathrop’s Master Plan documents study area is divided into three Sub Plan Areas described as follows (Figure 2 – Planning Area and Sub Plan Areas):

- East Lathrop: developed and undeveloped parcels east of I-5 including the existing urbanized City core, Crossroads Commerce Center, the McKinley Avenue corridor, Roth Road corridor, and Landmark Development.

- West Central Lathrop: generally undeveloped properties west of I-5 and north of the San Joaquin River.

- Stewart Tract: generally undeveloped properties of the adopted plan area of the West Lathrop Specific Plan, south of the San Joaquin River and between Paradise Cut and Old River.

Lathrop’s land use pattern is comprised of primarily residential development in the East Lathrop area between the former SPRR, I-5, and north of Louise Avenue. Commercial and industrial land uses are concentrated at the

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Louise Avenue and Lathrop Road interchanges with I-5, and commercial and industrial development located south of Louise Avenue in the East Lathrop Area. West Central Lathrop and Stewart Tract current land use is primarily agricultural but planned for urban development with build-out expected to occur within 20 to 25 years (Figure 3 – Zoning Map).

Topography

The lands within the Lathrop area are relatively flat, sloping gently to the north between the San Joaquin River and I-5. Elevations range from a high of about 25 feet to near sea level, with an average elevation of about 15 feet.

Hydrologic Conditions

Soils in the Lathrop area are mostly alluvial fan terraces consisting of loamy sands, and silty clays over varied hardpan substratum. They vary from slow to rapid in regard to permeability and drain from poorly to moderately well. Groundwater levels typically vary in depth from about seven feet to approximately twenty feet, although in wet years, as recently as 1983, groundwater has surfaced. Lathrop receives an average precipitation of approximately 13 inches per year with ninety percent occurring in the months of November through April.

Receiving Water Quality/Pollutants of Concern

The City of Lathrop storm water drainage system outfalls to the San Joaquin River which is listed on the CWA Section 303(d) list of impaired water bodies. Pollutants/stressors of concern include Boron, Chlorpyrifos, DDT, Diazinon, electrical conductivity, Group A Pesticides, and Mercury. Potential sources of pollution include agriculture, resource extraction, and other unknown sources. Pollutants with high TMDL priority have proposed TMDL completion dates of between 2003 and 2004. Other anticipated pollutants of concern due to the proposed and existing residential, industrial and commercial developments include pathogens, heavy metals, nutrients, pesticides, organic compounds, sediments, trash and debris, oxygen demanding substances, oil and grease.

Industry

Major industries and businesses in Lathrop include: Daimler Chrysler, Medline Industries, University of Phoenix, ITT Technical Institute, Superstore Industries, Longs Drugs Distribution, California Natural Products, Commercial Building Components, J.R. Simplot, Pilkington Glass, Holiday Inn, Days Inn, Comfort Inn, Home Depot Distribution, Fuel Total Systems California (an affiliate of Toyota), and DDJC-Sharpe (US Army distribution center).

Storm Water Drainage System

Existing Development

Existing developed portions of Lathrop are generally east of I-5. Drainage in much of the older and partially developed areas of the City is either lacking or of marginal effectiveness because of lack of access to off-site

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terminal drainage facilities. Existing storm water facilities consist of collection systems, retention or detention basins and in some instances, pump stations that discharge to the San Joaquin River via two existing storm drain pipes and a planned third outfall system. More recent construction is sized for 10 year intensity, 24 hour storms, with retention/detention basins sized for 100 year 48 hour storms in accordance with the City design standards. The City is working on updating a map of the existing storm water drainage system (Figure 4 - Existing Storm System Map – 2003)

Future Development

For areas between 1-5 and the San Joaquin River, the City has established that the maximum allowable discharge into the San Joaquin River must not exceed 30 percent of the estimated 100-year peak developed condition runoff rate. This maximum discharge policy is incorporated into the Project Area Drainage Plan for Mossdale Landing and has been adopted as part of the Northern Area Portion Master Plan of Drainage. The policy is based on hydraulic analysis that a 30% discharge from future development areas in Lathrop has very little impact on the total flow rate, water surface elevation and velocity in the San Joaquin River during a high flow event. It also gives assurance that the post development increase in flow in the San Joaquin River will not result in increased potential for downstream erosion.

As a result of a 1955 memorandum by the Corps of Engineers, the State Reclamation Board adopted a policy of “zero impact” to the San Joaquin. As implemented, discharge to the river must be restricted to pre-development rates whenever water levels in the San Joaquin River exceed a design elevation of 21.0 feet. This requirement overrides the 30% discharge described above (which is allowed during conditions whenever the river is not at maximum stage). New development must be designed to accommodate excess runoff from a 100 year 48 hour storm while river discharges are limited to pre-development rates.

The City’s Design and Construction Standards require that the bottom of detention and retention basins shall be a minimum of 2 feet above the high groundwater design elevation, and shall meet all requirements of the State Regional Water Quality Control Board. However, it should be noted that Attachment 4 of the NPDES General Permit for Small MS4s imposes limitations on the use of infiltration BMPs to ensure the groundwater is protected from contamination of groundwater from pollutants and to assure the BMP is not rendered ineffective by overload.

Storm Drain Maintenance Districts

The City’s storm water management plan under the NPDES Phase II permit should be funded from storm drainage maintenance districts and as part of the new construction at the time of development. Lathrop currently has three Storm Drain Maintenance Districts that are used to fund the storm sewer system maintenance and are available to fund any NPDES requirements permitted by Proposition 218 or other laws. Lathrop has a limited ability to implement improvements due to the limited funding within the existing storm drain maintenance districts. . The City’s three storm drain maintenance districts are as follows:

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- Stonebridge Drainage and Lighting Area of Benefit; consisting of partially developed residential area generally located east of I-5, west of the Union Pacific Railroad, north of Warren Avenue, and approximately 4,700 feet south of Roth Road;
- City Zone 1, Storm Drainage; which encompasses most of the area north of Louise Avenue, south of and including Warren Avenue, east of I-5 and west of the former Southern Pacific Railroad;
- City Zone 1A, Storm Drainage; which encompasses the area south of Louise Avenue, east of I-5, and northwest of the former Southern Pacific Railroad.

New development will require new storm drain maintenance districts with funding to comply with the RWQCB requirements. For example, the Pacific Union Homes development will require a Community Facilities District which will include funding for it's share of the City's SWMP in addition to maintaining the storm drain facilities and landscaping.

REGULATORY REQUIREMENTS

Under the requirements of the Clean Water Act of 1972, the City of Lathrop is required to apply for coverage under the National Pollutant Discharge Elimination System (NPDES) Phase II permit, and develop and implement a Storm Water Management Plan to control and prohibit the discharge of pollutants into the Municipal Storm Sewer System. This document represents the City of Lathrop's Storm Water Management Plan (SWMP). The SWMP is composed of six elements that, when implemented together, are expected to reduce pollutants discharged into receiving water bodies to the Maximum Extent Possible (MEP). These six program elements, or Minimum Control Measures (MCMs), are Public Education and Outreach, Public Involvement/Participation, Illicit Discharge Detection and Elimination, Construction Site Runoff Control, Post-Construction Runoff Control in New Development and Redevelopment, and Pollution Prevention/Good Housekeeping for Municipal Operations. For each minimum control measure, the City will select and implement Best Management Practices (BMPs) and measurable goals that comprehensively address the specific storm water problems within Lathrop city limits. Measurable goals are intended to gauge permit compliance and program effectiveness. The City will then be responsible for monitoring and reporting on the BMPs and measurable goals selected to fulfill the minimum control measures. This will help determine whether the BMPs and measurable goals set forth in the SWMP are realistic and obtainable.

MINIMUM CONTROL MEASURES

The Storm Water Management Plan is characterized by the six Minimum Control Measures (MCMs) contained in the Phase II Permit. These six MCMs are outlined below, with descriptions of associated BMPs for each MCM. Tables summarizing the BMPs, Measurable Goals, and Implementation Schedules for each MCM for the SWMP are provided in the tables following the body text of this report.

Public Education and Outreach (MCM #1)

The Public Outreach Program is intended to provide information to the public on the impacts of storm water discharges on water bodies and the steps the public can take to reduce pollutants in storm water runoff. An informed and knowledgeable community is crucial to the success of a storm water management program since it helps to ensure greater support for the program as the public gains a greater understanding of the reasons why it is necessary and important. Public support will be particularly beneficial when the City attempts to institute

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new funding initiatives for the program or to seek volunteers to help implement the program. The City will obtain greater compliance with the program as the public becomes more aware of the personal responsibilities expected of them and others in the community, including the individual actions they can take to protect or improve the quality of nearby discharge waters.

Description of BMPs

1. **Local and Regional Groups:** Form the Lathrop Storm Water Management Committee (LSWMC) comprised of members from the City, public, industrial, commercial, construction and developer groups. The LSWMC will meet twice a year to have input in the ongoing development and implementation of the SWMP and to address the development and implementation of BMPs. Participate with the San Joaquin Phase II Storm Water Committee (SJPIISWC) to share resources in the development and implementation of BMPs.
2. **School Curriculum:** Create and implement in coordination with the Lathrop Unified School District an educational program targeting 50% of 5th grade classes annually regarding storm water.
3. **Newsletter in Utility Bill:** Develop a semi-annual 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 City's website to obtain more information. The newsletter will be sent with the utility bills. The newsletter may include a questionnaire aimed at ascertaining the community's knowledge of the impacts of pollutants in storm water to receiving waters. Based upon the results obtained from the questionnaire the Public Education and Outreach Program along with the Public Involvement and Participation Program will be modified to increase public awareness of storm water quality concerns.
4. **Citizen Outreach/Educational Materials:** Provide, in conjunction with the SJPIISWC, the public with educational materials, displays, newsletters, utility bill inserts, and outreach activities regarding the impact of daily activities on storm water quality. 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:

Television commercials	Pencils and pads of papers
Radio commercials	Posters
Newspaper advertisements	Magnets
Activity books	Tabloids

5. **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., regional distribution centers, auto body shops, manufacturers, restaurants, pool maintenance contractors, etc.) will be developed. Business-specific materials will be developed or obtained by the City for distribution. Letters will be sent about SWMP and consequences of non-compliance. Business outreach will be conducted once during the permit term.

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6. **Storm Water Web Page:** The City will create a storm water page on the City website to educate the public on storm water issues. The page will provide the current copy of the SWMP, provide the Storm Drain Hotline phone number, identify educational materials outreach programs, requirements under the State's General Construction Permit, and provide contact information. The website will be assessed quarterly and updated as necessary.
7. **Storm Drain Stenciling/Stamping:** The City will complete an inventory of storm drain inlets to determine those that have existing storm drain stencils and those that require stenciling. The City will stencil 80% of the storm drain inlets by the end of permit term. The City will also require that new and redevelopment projects stencil or stamp storm drain inlets. A community storm drain stenciling drive will be coordinated with the LSWMC and citizen outreach to groups such as the Boy Scouts and others that may be interested in participating in the storm drain stenciling drive.
8. **Storm Drain Hotline:** Create and advertise a Storm Drain Hotline to receive comments so the public may report illicit discharges such as the dumping of used motor oil into storm drains. The City will respond to reports within 3 business days.
9. **Information Booth:** Create a display regarding storm water information for use at the City. Information and materials specific to City needs will be utilized for this display. Coordinate with LSWMC and the SJPIISWC to participate in local festivals such as Founders Day, Earth Day, Manteca Pumpkin Faire and other events or City offices as applicable with an information booth. The booth display includes a graphic panel illustrating the hydrologic cycle in an urban setting and is accompanied by a series of pamphlets or other educational materials that explain how the public can help reduce the potential for pollutant exposure to rainfall.

Public Involvement/Participation (MCM #2)

The Public Involvement Program Minimum Control Measure (MCM #2) is important because it fosters public acceptance and ownership. The City will receive broader public support since citizens who participate in the development and decision making process are partially responsible for the program and, therefore, may be less likely to raise legal challenges to the program and more likely to take an active role in its implementation. This program will be integrated with the Public Education and Outreach Program to incorporate education with hands-on programs.

Description of BMPs

1. **Lathrop Storm Water Management Committee:** The LSWMC will be a vehicle to provide input in the ongoing development and implementation of the SWMP. This will include involvement in the creation of ordinances, standards, and community programs. The LSWMC would meet at least twice per year.
2. **Storm Drain Stenciling:** The City and LSWMC will conduct outreach to groups that may be interested in stenciling storm drain inlets. Examples of groups that may be interested are boy scouts, school groups, etc. The City will provide such groups with a map of the inlets to be marked and supplies. The City will document the number of storm drain inlets that are stenciled.

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3. ***Community Involvement Program:*** The City and LSWMC will conduct outreach to groups that may be interested such as the Boy Scouts, school groups and others to participate in activities such as cleaning and beautification of detention basins, 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.

4. ***Clean Water Business Partnership:*** The City will evaluate the cost and need to develop and implement a program that targets selected business to insure that they dispose of pollutants in a fashion that does not increase the degradation of water quality in surface waters. Targeted businesses will include restaurants, regional distribution centers, truck stops, automotive repair shops and car washes.

Illicit Discharge Detection and Elimination (MCM #3)

The Illicit Discharge Detection and Elimination (IDDE) minimum control measure for the City of Lathrop will include measures to control illicit discharges, prevent improper disposal of wastes, and contain and clean up spills that threaten storm water quality. Typical sources of illicit discharges that the program will be designed to control include: sanitary wastewater, car wash discharge, improper oil or toxic disposal, radiator flushing, unauthorized industrial discharges, and chemical spills.

An illicit connection is defined as a man-made conveyance that is connected directly to the storm drain system without a permit and through which non-storm water flows are discharged. Illicit discharges may be intentional or unknown.

Elements included in this control measure to control these discharges include: A storm system map, a prohibition or ordinance created on non-storm water discharges, new City Design and Construction Standards, a plan to detect non-storm water discharges, a plan to address non-storm water discharges, and education on illegal discharges and improper disposal. This minimum control measure differentiates between authorized and un-authorized discharges. The plan to detect and address non-storm water discharges will be developed with consideration of the staff and resources available to the City. It will include elements to identify problems, locate sources, take corrective action, and provide documentation.

Description of BMPs

1. ***Storm Sewer System Map:*** Develop and maintain a current map that identifies the City'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 City 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 City personnel to better determine the source of pollutants contained in storm water.

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2. ***Illicit Discharge 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 establish a system for enforcement of violations.
3. ***Household Hazardous Waste Program:*** This program includes the pickup of used oil in residential areas. Other household hazardous wastes (HHW) such as anti-freeze, batteries, oil, paint can be dropped off at the San Joaquin County HHW collection facility at the Stockton Airport.
4. ***Public Reporting:*** The City will maintain an After Hours Emergency phone number to central dispatch for a complaint reporting system. If a call comes in regarding a complaint associated with the storm sewer system, the proper City personnel are notified to investigate the complaint. The phone number will be advertised on the storm water web page.
5. ***SIC Codes:*** The City will use existing databases to determine the SIC codes for all industries within the City. The City will use this information, in conjunction with the storm sewer system map, to assist in the identification of possible locations of non-storm water discharges.
6. ***Dry Weather Screening:*** The City will develop and implement a Dry Weather Screening Program to detect and address non-storm water discharges to the storm sewer system.
7. ***Illicit/Non-Storm water Discharge Detection:*** This BMP addresses detection and enforcement activities targeted towards commercial and industrial facilities, businesses, residential, construction sites, and municipal facilities. The goal is to detect illicit/non-storm water discharges through a range of activities by City personnel and the public. This will include increasing public awareness of how to identify illicit and non-storm water discharges. There are various methods that can be used to monitor illicit connections and non-storm water discharges. They include, industrial inspections, the HAZMAT spill response program, citizen reporting, and specific training of City personnel to observe and report illicit discharges.
 - a. **Industrial Inspection:** The City will use any existing inspection programs and will introduce one inspection entity to coordinate all inspections so as not to be redundant with the number of inspections.
 - b. **Spill Response:** Coordinate the City's HAZMAT spill response program with the storm water program that monitors location, frequency, and number of spills.
 - c. **Citizen Reporting:** The City will expand its website and/or hotline to allow citizens to report observed illicit discharges and connections, as well as non-storm water discharges and odors.
 - d. **Train City Personnel to Observe and Report:** The City will provide training for field personnel to observe illicit discharges/connections when performing normal duties in the field.
8. ***Address/Eliminate Illicit Connections and Non-Storm Water Discharges:*** Once an illicit connection or a non-storm water discharge has been reported, steps need to be taken to properly evaluate the discharge or connection and to help prevent future incidents. The goal of this BMP is to address, or eliminate, illicit connections and non-storm water discharges by taking the following measures:

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- a. Policies and Procedures: Instituting policies and procedures for a consistent monitoring program to detect and eliminate illicit and non-storm water discharges and connections.
- b. Technical Guidance: Providing a means for technical guidance for staff on methods to identify illicit connections and discharges, and providing proper enforcement of infractions.
- c. Response and Enforcement Procedures: Essentially there are two general activities to address and/or eliminate illicit connections and non-storm water discharges detected. The first is conducting interviews in conjunction with site inspections and testing of suspected sources. Secondly, enforcement procedures to regulate the illicit connections and non-storm water discharges. Provide City staff guidance with respect to making qualified decisions related to discharges and connections when performing inspections. Define different levels of enforcement actions, from least severe to most severe, a warning letter, Notice of Violation (NOV), Cease and Desist (C&D), administrative fines, and even possible referral to the District Attorney when danger to the environment is eminent.
- d. Fundraiser Carwash Management: Develop a carwash fundraiser management program to ensure that rinse water from fundraiser carwashes does not enter the storm drain. Educate gas station owners and owners of other sites where carwashes occur, about water quality impacts and ordinances prohibiting carwash rinse discharges. Block storm drains and use trash pumps to transfer water to sanitary sewer or pervious area.

Construction Site Runoff Control (MCM #4)

The Construction Site Runoff program is intended to reduce pollutants in storm water runoff from the construction activities that disturb one acre or more. The program also covers disturbances less than one acre if it is part of a larger common plan of development. The program includes an ordinance; implementation of erosion, sediment and materials/waste BMPs through the City Improvement and Construction Standards; design review guidance for City staff; web page/email address for public reporting; an inspection/enforcement program; and an outreach and training program.

The City will also coordinate community construction education and outreach with the Public Outreach Program minimum control measure. The City will adjust its plan review process to ensure that storm water runoff issues are addressed, and develop a streamlined inspection, enforcement and documentation strategy.

Description of BMPs

1. ***Storm Water Ordinance***: The City will adopt a new 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 that disturbs one acre or more, but also land clearing. The ordinance will also include financial guarantees for compliance and site stabilization.
2. ***City Construction Standards***: The City will establish Construction Standards to require construction site runoff control measures and to specify the design, installation and maintenance requirements for those measures. The standards will also specify submittal requirements to ensure adequate information is provided for plan review staff. The standards will provide technical

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guidance to project applicants and contractors to ensure compliance with the program, as well as a regulatory basis on which to condition the approval of projects.

3. ***Design Review Guidance for City Staff:*** Once the new Storm Water Ordinance is adopted and the City Construction Standards have been created, the City will prepare design review guidance for its plan review staff, to assist them in implementing the new requirements. The City will provide the guidance on its website to assist project applicants. As part of construction plan review, the City will consider withholding approval of grading/building permits until developer presents Notice of Intent for coverage under State General Permit (for applicable sites).
4. ***Illicit Discharge Reporting System:*** The City will provide one email address that citizens can use to report suspected violations of the City's Construction Site Runoff program, as well as an e-mail link on its website for public reporting. Referral, tracking, and follow-up procedures will be adopted to ensure that reports are investigated and resolved.
5. ***Inspection and Enforcement Program:*** The City will inspect construction sites in sensitive areas or sites one acre or greater through its Engineering and Building Departments for compliance with City requirements for construction site runoff. The City will develop a tiered inspection schedule using risk criteria (e.g. slopes, soil type and previous violations). When a violation at a construction site is found, the City will use a tiered system of enforcement actions, including staff guidance, notice letters, suspension of progress inspections, and referral to the District Attorney. The City inspection and enforcement staff will be trained on the new policies and procedures, as well as the new requirements of the City Storm Water Ordinance and Standards. The construction site inspectors will be equipped with cameras (preferably digital) to document ordinance violations. The City will establish a tracking system for violations.
6. ***Training/Information Distribution Program:*** This BMP is intended to ensure that construction industry professionals are informed about City requirements for construction site management. The City will spread word to the industry professionals during development of revisions to the City Standards and distribute updates on the adopted standards and new Storm water Ordinance requirements. The program also includes distribution of information for City staff on the new design review guidance developed under the Design Review Guidance for City Staff BMP.

Post-Construction Runoff Control in New Development and Redevelopment (MCM #5)

The goal of the City's New Development and Redevelopment Minimum Control Measure is to minimize the effects of new development or redevelopment for any project disturbing more than one acre of land. New Development and Redevelopment control measures will include: development of Structural Controls, development of Non-Structural Controls, development of Ordinances or Regulatory Mechanisms, and development of Long Term Operation and Maintenance (O&M) Practices.

Structural controls are composed of manmade facilities constructed for the storage or treatment of storm water runoff. Non-structural controls are policies and procedures that manage land use in order to lessen the impacts of resource development and redevelopment activities on storm water quality. It is intended that for this minimum control measure, both structural and non-structural controls will be combined with regulatory ordinances and O&M practices, and incorporated into the City's Construction Standards. Once incorporated into the City's design standards and planning ordinances, new projects will be required to incorporate structural or non-structural controls in order to proceed through the development review process.

Description of BMPs

1. ***Storm Water Ordinance:*** The City will adopt a new Storm Water Ordinance that will include provisions to address post-construction runoff from new development and redevelopment, and requirements for long-term maintenance of structural controls. This ordinance will allow the City to require post-construction controls on new development and will provide the authority to inspect privately owned controls approved by the City and require maintenance of those controls. The ordinance will require the adoption of the development standards as set forth in Attachment 4 of the General Permit. Storm water controls will be initially evaluated during project approval practices.

2. ***Operations and Maintenance of BMPs:*** Often storm water facilities are neglected or improperly maintained after construction. This, in turn, leads to a dramatic decrease in treatment efficiency, as well as accumulated trash and solids, localized flooding, and the possible destruction or failure of storm water facilities. Therefore, it is necessary to establish regulatory requirements for privately owned controls including project approval conditions, O&M guidance for controls owners, and a tracking and enforcement program. The City may utilize conditions of approval, bonding, long-term maintenance agreements or other legal agreements developed under the Storm Water Ordinance to require maintenance of structural controls. Other mechanisms for ensuring maintenance of structural controls include assumption of ownership and a regulatory inspection program. Once the City has determined the types of structural controls to be required and the maintenance program to be used, the use of a database will help track approved controls and a self-certification program will require reporting of periodic maintenance by control owners. The City will conduct follow-up inspections for those not certifying maintenance and for a subset of certified owners to confirm maintenance.

3. ***Development Review Process:*** Currently, the City's Public Works Engineering and Planning Departments must review all new development and redevelopment projects. During plan review, proposed projects are checked for conformance to the City's General Plan, applicable zoning codes and ordinances, and Improvement and Construction Standards. These documents are implemented through existing policies and procedures, such as standard conditions, facility master plans, and development agreements. In order to improve the review process for storm water quality, the City will assess its policies and procedures for development review based on a new Storm Water Ordinance and amended improvement and construction standards. Design review guidance and training for design review staff will also be utilized to ensure appropriate application of the adopted structural and non-structural controls in order to proceed through the development review process. Each project will be reviewed for incorporation of storm water controls during plan checks by the Planning and Engineering Departments. Then construction of the approved controls will be observed and inspected by the Engineering and Building Departments. Prior to final approval, the owner of the storm water control structure will be required to submit an Operations and Maintenance (O&M) manual and a proposed maintenance schedule. The O&M manual and proposed schedule will serve as a basis for long-term maintenance and will be checked for compliance with the Storm Water Ordinance after final approval has been granted.

4. ***Development Standards:*** The City will develop development standards for adoption into the planning and development approval process. The development standards will include volume and flow control design parameters. In addition, the City will continue to develop and implement structural and/or non-structural control strategies through its improvement and construction standards.

Pollution Prevention/Good Housekeeping – Municipal Operations (MCM #6)

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.

Description of BMPs

1. ***Training:*** A training program for municipal operations employees will be developed 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 will occur during the monthly safety meetings. The purpose of the training is to update operations, parks and recreation 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.
2. ***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, overflow and spill pollution prevention, and storm water system maintenance. The current disposal procedures for waste removed from the storm sewer system will be reviewed and assessed. Storm drain outlets will be vacuumed at least once per year.
3. ***Street Sweeping:*** The City will sweep residential and commercial streets a least once per month. The City will document the miles of streets swept per month and the amount of material swept.
4. ***Parking Lot Cleaning:*** The City will clean all municipal parking lots at least once per year.
5. ***Pollution Prevention at Maintenance Yards:*** The City of Lathrop will develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the maintenance yard. The City will survey departments and facilities for activities that may contribute to pollutants to the storm sewer system and identify problem areas and corrective actions. The City will develop a program for good housekeeping practices at, and inspection of the corporation yard. The City will ensure that vehicle maintenance areas, material storage facilities, and corporate yards minimize outdoor operations; remove, seal or cover pollutant sources; and they are inspected periodically.
6. ***Green Waste Program:*** The City of Lathrop currently has a program that collects residential green wastes on a bi-weekly basis. In addition, leaf bags are provided in the fall and Christmas trees are

collected in the winter. The City will develop a similar program for commercial green waste management.

MONITORING AND REPORTING

The City of Lathrop will prepare annual reports for the State Regional Water Quality Control Board, which will contain reports, evaluations, and assessments on the monitoring, inspections, and implementation of the Storm water Management Plan. The City will evaluate each year, the overall program compliance, along with the appropriateness of the identified BMPs, and the progress toward reaching the measurable goals. Accurate records will be kept on the dates, times, and descriptions of all scheduled inspections, monitoring, and data collected. A summary of the activities to take place during the next reporting period will be included in each annual report, along with any changes in measurable goals.

SWMP REVIEW AND MODIFICATION

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
- A review of monitoring data, any changes in monitoring methods and parameters, and an assessment of the overall monitoring program.

COST AND FINANCING

The EPA uses a variety of methods to determine if regulated entities are complying including inspecting facilities, reviewing records and reports, and responding to citizen complaints. Non-compliance with the Phase II regulations may result in enforcement actions by the EPA, SWRCB or RWQCB seeking penalties of up to \$27,500 per violation per day.

The estimated costs of the SWMP are presented below followed by a discussion of the financing/funding options.

Program Costs

West Yost & Associates estimated the SWMP cost to the City for the first year's activities to be about \$65,000 and in the range of about \$100,000 to \$125,000 annually each year thereafter.

Funding Options

Funding for the SWMP will need to be obtained from various sources and would depend on whether the area is classified as in an existing developed zone of the City (mainly on the east side of Interstate 5) or in a new developing zone of the City (mainly on the west side of Interstate 5).

Funding Sources of Existing Developed Zones of the City

- ❑ Existing Storm Drainage Assessment Districts
- ❑ Grants and Loans

Funding Sources for New Developing Zones of the City

- ❑ The City will set up a Community Facility District (CFD) Service District that covers maintenance services for storm drainage, environmental mitigation, landscape maintenance, street lighting, etc.. The storm drainage fund within the CFD will fund the development's share of the SWMP.
- ❑ Capital Facilities Fees (Connection/Developer Fees)
- ❑ Developer Funds for BMP's During Construction and Post Construction

MANAGEMENT

The City's overall NPDES Phase II permit Program Manager will be designated by the Public Works Director and the City Engineer. The Program Manager's job will be phased in the first few years of the program but, eventually, is estimated to take from one quarter to one half time effort. Parties responsible for the execution of each minimum control measure under the direction of the Program Manager will be identified. The duties of the Program Manager will include coordinating duties between other City employees responsible for individual tasks, coordinating with nearby City and County programs, maintaining records of periodic program evaluations and assessments, compiling the permit application and subsequent status reports and the next years implementation activities.

City of Lathrop
Storm Water Management Program

MCM 1: Public Education and Outreach Program		
BMP	Measurable Goal	Implementation Schedule
<u>LOCAL AND REGIONAL GROUPS</u>	Establish Lathrop Storm Water Management Committee and mission statement. Meet twice per year. Implement appropriate committee suggestions where they meet the MEP standard.	June 2004
	Form partnership with SJPIISWC for resource sharing to support other BMPs. Adopt a memorandum of understanding (MOU).	December 2003
School Curriculum	Prepare or acquire educational materials	June 2005
	Complete first round of presentations on 50 percentage of 5 th graders per year; annually thereafter	December 2005
Newsletter in Utility Bill	Prepare newsletter and deliver first volume to citizenry; send newsletters semi-annually thereafter	June 2005
Citizen Outreach	Conduct citizen outreach using media and materials (i.e. T.V. and radio commercials, billboards, newspaper advertisements) target 22,000 media impressions per year	December 2005
Business Outreach	Develop priority list of businesses to target (e.g., auto body shops, manufacturers, restaurants, pool maintenance contractors, etc.)	June 2005
	Prepare business-specific materials for outreach	December 2005
	Conduct outreach once during permit term	January 2006
Educational Materials	Select and prepare educational materials; make them available to citizens at relevant City offices and during applicable festivals and events such as Founder's Day, Earth Day, and the Manteca Pumpkin Faire.	December 2005
Storm Water Web Page	Develop and advertise web page; track number of	June 2005

City of Lathrop
Storm Water Management Program

	hits; update web page at least quarterly	
Storm Drain Stenciling/Stamping	80 percent of storm drains stenciled by end of first permit term	April 2007
	Building permits to require new and redevelopment to stencil or stamp (preferred) all storm drains	June 2004
Storm Drain Hotline	Establish hotline; respond to complaints within two business days	June 2005
Information Booth	Prepare booth displays and materials; display the information booth at local events such as Founder's Day, Earth Day, and the Manteca Pumpkin Faire.	December 2005

**City of Lathrop
Storm Water Management Program**

MCM 2: Public Involvement/Participation Program		
BMP	Measurable Goal	Implementation Schedule
<u>LATHROP STORM WATER MANAGEMENT COMMITTEE</u>	Establish Lathrop Storm Water Management Committee and mission statement. Meet twice per year. Implement appropriate committee suggestions where they meet the MEP standard.	June 2004
Storm Drain Stenciling	Conduct outreach to groups that may be interested (e.g., Boy Scouts, environmental groups, etc.); if interest exists, develop implementation plan and schedule.	December 2005
Community Involvement Program	Conduct outreach to groups that may be interested (e.g., Boy Scouts, environmental groups, etc.); if interest exists, develop implementation plan and schedule.	December 2005
Clean Water Business Partnership	Evaluate and document the cost and the need to develop and implement a Clean Water Business Partnership program.	June 2005
	Develop and implement a Clean Water Business Partnership program if needed.	June 2006

City of Lathrop
Storm Water Management Program

MCM 3: Illicit Discharge Detection and Elimination Program		
BMP	Measurable Goal	Implementation Schedule
Storm Sewer System Map	Prepare map and update annually thereafter	December 2003
Illicit Discharge Ordinance	Develop or enhance existing ordinances to prohibit unauthorized non-storm water discharges; establish and enforce penalties.	June 2004
Household Hazardous Waste Program	Develop household hazardous waste management program; advertise drop off locale	December 2004
Public Reporting	Establish illicit discharge/illegal dumping hotline. Advertise hotline phone number on storm water web page.	June 2005
SIC Codes	Determine the SIC codes of industries within the City and their Industrial permitting obligation. Identify priority areas for training and enforcement.	June 2005
	Document high priority areas on storm drain map. Document number of inspections and enforcement actions.	June 2005
Dry Weather Screening	Prepare a program to screen outfalls within the City for dry weather flows.	December 2005
	Determine screening locations using prioritization from SIC codes and land use map.	June 2006
	Implement program on a monthly basis during dry weather.	June 2006
	Complete field screening of storm sewer lines from identified problem areas.	December 2007
Illicit/Non-Storm Water Discharge Detection	Develop and implement industrial inspection program.	June 2006
	Coordinate the City's HAZMAT spill response	June 2005

City of Lathrop
Storm Water Management Program

	<p>program.</p> <p>Train City personnel to observe and report illicit discharges/connections when performing normal duties in the field.</p>	<p>June 2004</p>
<p>Address/Eliminate Illicit Connections and Non-Storm Water Discharges</p>	<p>Develop policies and procedures to detect and eliminate illicit and non-storm water discharges and connections.</p> <p>Provide technical guidance for staff on methods to identify illicit connections and discharges and providing proper enforcement of infractions.</p> <p>Develop and implement response and enforcement procedures to address and eliminate illicit connections and non-storm water discharges.</p> <p>Develop a carwash fundraiser management program to ensure that rinse water from fundraiser carwashes does not enter the storm drain. Educate gas station owners and owners of other sites where carwashes occur, about water quality impacts and ordinances prohibiting carwash rinse discharges. Block storm drains and use trash pumps to transfer water to sanitary sewer or pervious area.</p>	<p>June 2005</p> <p>June 2005</p> <p>June 2005</p> <p>June 2005</p>

City of Lathrop
Storm Water Management Program

MCM 4: Construction Site Runoff Control Program		
BMP	Measurable Goal	Implementation Schedule
<u>STORM WATER ORDINANCE</u>	Develop and adopt ordinance	June 2004
City Construction Standards	Adopt design standards for construction contractors	June 2004
Design Review Guidance for City Staff	Develop and implement storm water plan review procedures for storm water BMPs; ensure that every construction plan and grading permit is reviewed for compliance with City ordinance and design standards.	June 2004
	Ensure that applicable sites are covered under Regional Board Permit	June 2004
Illicit Discharge Reporting System	Develop and implement construction site illicit discharge reporting system	June 2004
Inspection and Enforcement Program	Develop tiered inspection schedule using risk criteria (e.g. slopes, soil type and previous violations)	<u>June 2005</u>
	Train construction site inspectors	June 2005
	Inspect every construction site one acre or greater at least once per year; conduct follow-up inspections where violations occur.	June 2005
Training/Information Distribution Program	Inform contractors about City requirements for construction site runoff control programs.	June 2004
	Provide training opportunities to contractors on construction site runoff control programs.	<u>June 2005</u>

City of Lathrop
Storm Water Management Program

MCM 5: Post-Construction Storm Water Management in New Development and Redevelopment		
BMP	Measurable Goal	Implementation Schedule
<u>STORM WATER ORDINANCE</u>	Develop and adopt an ordinance requiring compliance with development standards as set forth in Attachment 4 of the General Permit including provisions to address responsibility and funding for long-term maintenance.	June 2004
Operations and Maintenance of BMPs	Establish regulatory requirements and procedures to ensure long-term operation and maintenance of BMPs	December 2004
Development Review Process	Develop design review guidance and training for planning and public works departments.	June 2004
	All construction plans reviewed for compliance with development standards.	December 2004
<u>DEVELOPMENT STANDARDS</u>	Develop and implement strategies which include a combination of structural and non-structural BMPs appropriate for the community.	December 2004
	Develop and adopt development standards for selected control strategies	December 2004

City of Lathrop
Storm Water Management Program

MCM 6: Pollution Prevention/Good Housekeeping		
BMP	Measurable Goal	Implementation Schedule
<u>TRAINING</u>	Develop and implement a training program for applicable municipal employees	December 2005
	Conduct two training programs per year; document training topics and attendance	December 2005
Storm Sewer System Maintenance	Survey departments and facilities for activities that may contribute pollutants to MS4	June 2004
	Identify problem areas and corrective actions	December 2004
	Develop procedures for implementing BMPs at facilities and during municipal activities.	December 2004
	Develop and implement program to address maintenance and cleanout of storm sewer inlets, outlets, manholes, catch basins, pump stations, pipelines, detention basins, and any other significant sources of storm sewer debris	June 2005
Street Sweeping	Sweep all streets once per month..	December 2003
Parking Lot Cleaning	Clean municipal parking lots once per year.	December 2003
Pollution Prevention at Maintenance Yards	Develop SWPPP and implement good house keeping practices at and inspection of corporation yard.	December 2004
Green Waste Program	Continue weekly pick-up of green wastes	December 2003