City of Hanford

Storm Water Management Plan

(SWMP)
**TABLE OF CONTENTS**

**Part 1 – Introduction**  
1.1 Executive Summary ........................................................................................................1  
1.2 Storm Water Management Plan Outline .....................................................................1  
1.3 Community Setting .....................................................................................................2  
1.4 Storm Water Management Coordination Plan ............................................................2

**Part 2 - Regulatory Background and SWMP History**  
2.1 Federal Regulatory Actions .........................................................................................4  
2.2 SWMP History and Goals ..........................................................................................5

**Part 3 - Water Resource Description**  
3.1 Groundwater ..............................................................................................................7  
3.2 Water System ............................................................................................................7  
3.3 Flood History ............................................................................................................8  
3.4 Adjacent Waterways ..................................................................................................8

**Part 4 - SWMP Organization**  
4.1 SWMP Objective ........................................................................................................9  
4.2 Existing Agency Framework ......................................................................................9  
4.3 SWMP Responsibility Implementation Plan .............................................................10  
4.4 SWMP Timeline .......................................................................................................14  
4.5 City Impacts and Sustainability ................................................................................14

**Part 5 - SWMP Minimum Control Measures and Best Management Practices**  
5.1 Minimum Control Measures .....................................................................................16

**Part 6 - SWMP Performance Evaluation**  
6.1 BMP Performance Evaluation ..................................................................................22  
6.2 Annual Monitoring and Reporting............................................................................22

**Appendices**  
A – Hanford Vicinity Map, Storm Drain Map, USGS Map, and Aerial Map  
B – Best Management Practices  
C – Acronyms and Terms as used in this document  
D – Resource Management Responsibility Matrix, and City of Hanford Organizational Charts  
E – Attachment 4 – Requirements  
F – Proposed City Budget for SWMP  
G – Hotline Database Sample
PART 1 INTRODUCTION

1.1 Executive Summary

The Storm Water Management Plan (SWMP) provides a five-year comprehensive plan designed to enhance and protect storm water quality in the City of Hanford and the surrounding areas. The SWMP incorporates measurable goals, control measures and public programs to minimize the amount of pollutants discharged through the storm water system.

This SWMP was developed in conjunction with the State and Federal requirements as part of a National Pollutant Discharge Elimination System (NPDES) Phase II General Permit administered by the State Water Resources Control Board (SWRCB). As of March 10, 2003, the City of Hanford was designated as a small Municipal Separate Storm Sewer System (MS4) under Attachment II of the State’s Final NPDES Phase II General Permit.

The SWMP requires that Minimum Control Measures (MCMs) are implemented in six categories, as follows:

1) Public Education and Outreach on Storm Water Impacts
2) Public Involvement/Participation
3) Illicit Discharge Detection and Elimination
4) Construction Site Storm Water Runoff Control
5) Post-Construction Storm Water Management in New Development and Redevelopment
6) Pollution Prevention/Good Housekeeping for Municipal Operations.

The Storm Water Management Plan will be subject to change and evolve over time as Best Management Practices are monitored and adapted to accommodate new or more effective measures.

1.2 Storm Water Management Plan Outline

Part 1 - Introduction. This section provides the origin of the SWMP, an introductory outline, a geographical setting, and a brief summary of the City’s Storm Water Management Action Plan.

Part 2 - Regulatory Background and SWMP History. This section provides the regulatory context and requirements of the SWMP as part of the State’s NPDES Phase II General Permit, a brief summary of the City’s existing storm water system, and a preliminary timeline for submittal, adoption, and implementation of the SWMP and NPDES Phase II Permit.

Part 3 - Water Resources Description. This section describes existing groundwater resources, identifies the area flood history, and provides discussion of the City’s storm water impacts.
Part 4 - SWMP Management. This section identifies the strategy that was applied in creating the SWMP, the City’s existing storm water protection efforts, departmental responsibilities, anticipated timeline for implementation, and impacts on budget and staff resources.

Part 5 - SWMP Best Management Practices (BMP). This section defines each Minimum Control Measure as a tool in directing and implementing a functional SWMP. To attain the measurable goals, BMPs have been designed in combination with each MCM. (Refer to Appendix B.)

Part 6 - SWMP Performance Evaluation. New measures to monitor and report each BMP are phased for adequate management. An annual report will be conducted to review the effectiveness of each BMP described within the SWMP.

1.3 Community Setting

The City of Hanford is located in Kings County in the central portion of the San Joaquin Valley. The City’s planning area encompasses approximately 29.5 square miles (18,189 acres) according to the City’s 2002 General Plan Update. The City of Hanford is located approximately 32 miles south of Fresno, where State Route 198 (East/West) and State Route 43 (North/South) meet.

According to the 2000 United States Census, the City of Hanford has a population of 41,686. Past trends indicate that the population will increase at an average of 2.5 percent per year over the next five to ten years. Due to this projected growth, the SWRCB has determined that planning for future storm drainage use and maintenance has become a necessity.

The San Joaquin Valley climate is hot with dry summers and cool winters. It is not uncommon to exceed 100 degrees Fahrenheit in the summer months and drop below freezing in the winter months. January through February are the months when the San Joaquin Valley “Tule Fog” phenomena is prevalent. Between winter storms, high pressure and light winds allow cold moist air to pool on the Valley floor creating strong low-level temperature inversions and very stable air conditions. This situation leads to the San Joaquin Valley’s famous “Tule Fog”, resulting in low visibility and relatively low temperatures. The average annual rainfall is 7.95 inches per year. The terrain of the City is generally flat, with elevations around 249 feet.

The existing drainage infrastructure within the boundaries covered by the SWMP includes natural drainage channels, retention basins, natural vegetation, piping, and pump stations. There are numerous areas where storm drainage is controlled via drainage inlets and underground structures.

1.4 Storm Water Management Coordination Plan

The SWMP will be implemented through the combined efforts of The City of Hanford’s departmental and divisional staff. The representative departments included in the SWMP

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1 As posted on the Hanford’s Chamber of Commerce Website **Source: U.S. Census and Department of Finance E-1 Report (annual).
2 As posted on the Hanford’s Chamber of Commerce Website ** Source: National Weather Service, Hanford, California.
development and implementation are the Public Works (includes Administration and Engineering Divisions), Community Development, Police, Fire, and Recreation Departments (includes Community Promotions and Events Division).

The first step in the SWMP development was a meeting with staff to discuss the background and the requirements of the NPDES Permit, and the requirements that would be imposed on the City under such a permit. The Six Minimum Control Measures were discussed, along with examples of Best Management Practices related to these Control Measures. The next step is to identify and incorporate any existing programs related to storm water into the City’s SWMP.

The department staff information was followed up with individual department interviews. The interviews were aimed toward determining:

- The City’s existing storm drainage infrastructure system;
- The functional responsibilities of each department;
- The legal authority of each department; and
- The existing activities that may be used toward BMP implementation.

Once the information provided by City Staff was organized and disseminated, a Draft SWMP was prepared. The Draft SWMP was then distributed to City personnel for their internal review and comment. The SWMP was then submitted to the RWQCB along with the Notice of Intent (NOI) for coverage by the General Permit.
PART 2 REGULATORY BACKGROUND AND SWMP HISTORY

2.1 Federal Regulatory Actions

Growing public awareness and concern for controlling water pollution led to the enactment of the Federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the Clean Water Act (CWA). The CWA regulates discharge of pollutants to waters of the United States. Such discharge is unlawful from any point source without a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added §402(p), which established a framework for the regulation of storm water discharges under the NPDES Program.

In 1990, Phase I of the U.S. Environmental Protection Agency’s (EPA) storm water program was established under the CWA. Phase I relies on National Pollutant Discharge Elimination System (NPDES) permit coverage to address three types of storm water runoff.

1) “Medium” and “large” Municipal Separate Storm Sewer Systems (MS4s) serving populations of 100,000 or greater.

2) Construction activity disturbing 5 acres of land or greater.

3) Ten categories of industrial activity.

On December 8, 1999, the Phase II Final Rule was established. The Phase II program requires operators of Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas serving populations greater than 25,000 and less than 100,000 and operators of small construction sites disturbing 1 acre or more to implement programs and practices to control pollutants in storm water runoff. Such requirements are implemented through the use of the NPDES permitting system.

The NPDES Phase II Program is intended to reduce adverse impacts to water quality by implementing minimum control measures on unregulated storm water discharges that have the potential to cause increased environmental degradation.

Below is a list of environmental problems typically associated with discharges from MS4s in urbanized areas and discharges resulting from construction activities:

- Development in urbanized areas substantially increases impervious surfaces, such as city streets, driveways, parking lots, and sidewalks, which results in concentrated pollutants settling until a storm event washes them into nearby storm drains.

- Pollutants found in urban runoff may include pesticides, fertilizers, oils, litter, heavy metals and sediment.

- The illicit connections of sanitary sewers, which can result in fecal coliform bacteria entering the storm sewer system. Storm water runoff transports these and other harmful pollutants, and then discharges to waterways via storm sewer systems.
Runoff from construction sites is a water quality concern as unknown sedimentation contaminates local water bodies, particularly small streams. Construction activities yield pollutants such as pesticides, petroleum products, construction chemicals, solvents, asphalts, and acids that can contaminate storm water runoff.

2.2 SWMP History and Goals

The City of Hanford is a rural community that thrives on water resources to maintain a viable agricultural economy. Within the City, the Public Works Department has made efforts to manage storm water runoff both directly and indirectly through existing storm water management tools. Throughout the development of the SWMP, various discoveries were found on current storm water prevention activities.

The City can apply the existing storm water management control measures that are incorporated in the City of Hanford’s Storm Drain Master Plan to the SWMP. Additional BMPs will be added to accompany the MCMs and increase the level of storm water protection to eliminate any further illicit discharges. Thus, the development of new BMPs has been kept to a minimum. The SWMP is a working, living document intended to update the existing Storm Drain Master Plan. This SWMP will assist, direct and support City staff with implementing best management practices to protect illicit storm water discharge.

The SWMP is to be effective immediately, with the expected timelines set forth herein so that the City staff will be able to coordinate and develop most of the proposed activities within the first three years of the SWMP term. During the first year, the City will continue to apply their existing storm water protection activities and initiate a report that includes site assessments relative to implementation of BMPs. New practices will be explored to their maximum potential to determine if they are satisfactory in reducing storm water pollution. Financial impacts will be considered. The City will then evaluate the impacts of each BMP through findings that determine feasibility and any necessary modifications to the current budget and staffing.

Measures of BMP effectiveness may begin once each BMP is implemented and/or functional. An annual report conducted by the Task Manager, as designated by the City staff, and the RWQCB shall include findings, which evaluate the effectiveness of each BMP. The report shall review all aspects of current State and Federal Regulations against those applied to the SWMP, and outline necessary alterations to the SWMP. By the end of the initial five-year permit term, the City anticipates to have a comprehensive, practical, and effective SWMP that may be utilized to begin the next five-year term under NPDES permit regulations.

It is important to mention the potential impacts of pollution reduction to other agencies or entities within the City. These Agencies include:

- Kings County
- School Districts within the City
- Peoples Ditch Company
- Kings River Conservation District
- Kings Waste and Recycling Authority
- Kings County Water District
- Lakeside Irrigation Water District
PART 3  WATER RESOURCE DESCRIPTION

3.1  Groundwater

The City of Hanford is located near the southeastern edge of the San Joaquin Valley of California, a region that receives only a small amount of rainfall to contribute to the area’s groundwater resources. Historically, this region has been dependent on the Kings River System flowing westward down the foothills of the Sierra Nevada mountain range as the primary source of their groundwater supply. As the region’s population and agricultural community continued to grow, the Central Valley Project and the State Water Project were developed to import water from other parts of the state. Currently, this region imports more water than any other region in California to meet the high water usage demands of the area.

The City of Hanford obtains its water supply entirely from groundwater. Groundwater in the Hanford area is contained in both an unconfined and confined aquifer lying beneath the City. The groundwater supply is recharged by rain and snowfall in the Sierra Nevada range, and to a lesser degree, from rainfall on the Valley floor. In addition to natural water recharge, the City of Hanford, in cooperation with the Peoples Ditch Company and the Kings County Water District, delivers excess water flows from the Kings River, along with storm water runoff, into the 164 acres of drainage and slough basins located throughout the City to help replenish groundwater in surplus years. Other sources of groundwater recharge in the area include percolation from storm water basins, local waterways, and agricultural irrigation.

3.2  Water System

The City of Hanford water system is a groundwater supplied system. No surface water is used by the water system. Water is currently pumped from 18 deep wells. Well depths range from 600 to 1500 feet.

The City’s extensive 162 mile distribution piping system currently provides 13,000 service connections within the City Limits. The system is capable of producing and delivering 22.5 million gallons of water per day while maintaining 40 to 60 psi of pressure.

The City has established an ongoing program to replace undersized and aging water mains with larger lines that have the capability to deliver more water and consistent pressure as demand increases.

Over the past 10 years, the City has constructed 7 new deep-water wells and eliminated 6 older wells. In an effort to use the most efficient wells in the system as primary producers, a sophisticated computer SCADA control system was installed in 1992.

Other improvements planned for the water system include:

- Equip older water wells with more efficient pumping equipment.
- Continue replacing undersized and aged water mains.
- Projects to improve and increase groundwater replenishment.
- Continue the water conservation program through education and cooperation.
- Continue the Cross Connection Control Program.

### 3.3 Flood History

The City of Hanford is located within a 500-year Flood Zone as defined by the Federal Emergency Management Agencies Flood Insurance Maps. Five-Hundred Year Flood describes the flood that has a 0.2 percent chance of being equaled or exceeded in any year. Areas subject to the 500-year flood have a moderate to low risk of flooding. As expected, no floods have occurred in the area during recent years and therefore, there has not been a need to impede or place building restrictions upon development.

### 3.4 Adjacent Waterways

The nearest major waterway to Hanford is the Kings River. It runs southwest about 3 miles north of the City. The second closet waterway is a branch of the Kaweah River system, which flows westward. It is located about 22 miles east of the City of Hanford.

The major irrigation ditches that run through the City of Hanford are the Peoples Ditch and Lakeside Ditch. These ditches are operated and maintained privately by the Peoples Ditch Company and Lakeside Water District respectively.

Peoples Ditch is supplied by the Kings River and flows southward. The primary use for this ditch is for agricultural irrigation, but it also serves as a storm water outfall during high storm water flow periods. North of the City, the Ditch splits into two parts, the East Peoples and Central Peoples Ditches. The East Peoples Ditch flows southward through the center of the City ending at a basin just south of the State Highway 198. The Central Peoples Ditch is the main ditch of the two and flows southward along the west side of the City. The ditch continues to the southwest corner of the City where it discharges to the Weidman Basin or flows into the New Deal Ditch that continues towards Stratford.

Hanford has designed protection for the People’s Ditch, much of the Storm water discharging into it, first run through basins, before reaching the ditch it’s self. These basins allow for sediment fallout and groundwater recharge before dismissing it to the ditch.

The Lakeside Ditch is supplied by the Kaweah River system to the east and flows southwesterly on the east side of town. The ditch then continues southward for agricultural irrigation.
PART 4  SWMP ORGANIZATION

4.1  SWMP Objective

The purpose of the City of Hanford SWMP is to implement management tools known as Best Management Practices (BMPs). These are designed to reduce the discharge of pollutants from the Municipal Separate Storm Sewer Systems (MS4s) to the “maximum extent practicable,” to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The target objective will be gauged using a series of Measurable Goals contained in this SWMP.

The City of Hanford has been collecting storm water information through the Public Works Department in the form of BMP information, and encouraging input from interdepartmental and divisional staff with regards to the required MS4s. Through interviews with individuals and conference calls, ‘measures’ have been developed according to the most applicable and appropriate means to meet both City and State regulations. Some of these measures already exist and are in place, while others are amended practices, and new practices that shall be developed with the input and review of departmental staff.

Departmental and Divisional staff encourages compliance through the permitting process that already applies to certain measures. Enforcement will be obtained through ordinance(s) already in place under the General Plan, as well as future ordinances if the City decides this level of regulation is necessary.

Measurable goals and associated timelines ranging from one to five years have been designed for each BMP developed under the Six Minimum Control Measures. Mechanisms have also been designed and developed for BMP effectiveness to be tracked and measured. For example, under the category of ‘Illicit Discharges,’ a system whereby reporting of an incident may be called in, and documented in a City ‘Logbook.’ The number of calls or notifications can be calculated, and the areas where discharges have occurred can be documented.

The Regional Water Quality Control Board will review the SWMP annually over the five-year permit term. This will be accomplished through staff documentation and the measure of BMP effectiveness.

4.2  Existing Agency Framework

The SWMP requires effective communication and coordination between each department to be implemented successfully. The following departmental functions and responsibilities are related to the SWMP:

1) Public Works Department: This Department is comprised of eight separate divisions. It protects and promotes the health of the community by providing administration, engineering, building maintenance, fleet maintenance, park services, refuse collection, street maintenance and cleaning, wastewater treatment plant, sanitary sewer collection, storm drainage, and water operations. This Department seeks to protect and enhance the public’s health through
the control of potentially harmful materials, organisms, energies and conditions in the environment. Consultation and enforcement activities assure maintenance of standards sufficient to meet local environmental health and sanitation needs. The Public Works Department also maintains, repairs, and constructs streets and drainage systems.

2) **Administration and Engineering Division:** The Administration and Engineering Division is responsible for the supervision and administration of the Public Works Department, as well as for the design and supervision of all capital improvement projects. This Division provides support to the Planning Commission, and the Parking & Traffic Commission. They are responsible for all aspects of site plan review, new construction, and development.

3) **Community Development Department:** The Community Development Department is in charge of the preparation and updating a comprehensive, long-term, general plan for the land use and physical development of the City’s future growth needs. The Planning Department’s review includes land use zoning and subdivision enforcement within the City Limits of Hanford. The Community Development Department is also responsible for the administration of the Building Division 2nd administration of the California Environmental Quality Act of 1970 in accordance with the guidelines issued by the State Secretary of Resources.

4) **Building Division:** The Building Division is responsible for enforcement of current building codes and building construction inspection services within the City. This Division’s duties include processing and issuing permits for grading, demolition, residential and commercial construction, mechanical, plumbing and electrical installations. This department’s enforcement of building codes includes abatement procedures and notices of violation.

5) **Police and Fire Department:** These two departments work together to serve as the City’s emergency response group. In order to protect residents and visitors of Hanford from conditions that would pose a threat to life, environment, and property, these departments utilize aggressive prevention techniques and, when needed, respond to all emergencies in a safe, swift, and efficient manner. This is accomplished through creative partnerships, a commitment to serving the community needs, professional and proactive enforcement, and a dedicated, highly trained, and innovative workforce.

### 4.3 SWMP Responsibility Implementation Plan

Certain existing activities performed by departmental staff play a part in reducing storm water pollution to the Maximum Extent Practicable (MEP) and eliminating prohibited non-storm water discharges. The following activities are broken down by department:

- **Engineering Division**
  - **Standard Plans Development:** The City of Hanford currently uses the revised 2000 Improvement Standards to accommodate any necessary provisions required by current regulations.
- **Plan check fees & grading approvals:** The City Community Development Department and Engineering Division have an existing process that allows for review of grading plans and site development approvals. This existing process already accommodates construction site runoff control, as referenced in MCM 4 and 5. These include the development of runoff control standards and a requirement for submittal of a Storm Water Pollution Prevention Plan (SWPPP). Enforcement of these requirements are a part of the site development grading inspection and building permit inspection process.

- **Storm Sewer Map and Database:** In order to properly address complaints and monitor cleanups of illicit fluid and solid waste dumping, BMP 3-1 designates the City Engineering department to create a database and sewer and storm map.

- **Assigning Best Management Practices Standards (BMPs):** City Engineering will review BMPs for new development and redevelopment projects according to BMP 5-1.

- **Annual Administrative Report:** Although BMP 6-4 is an ongoing Litter Control program, it will be evaluated annually by City Engineering or park maintenance division. Visual inspections and collection volume will be used to address the overall BMP implementation and effectiveness.

### Public Works Department  Park Maintenance Division

- **Pet Waste Control Signs:** The Department will establish signage (in 4 City Parks) in accordance with BMP I-1. In the future, an additional 3 public parks, will have signage and Pet waste disposal bags installed.

- **Storm Water Insert:** The City utilities billings are generated and sent out once a month. A storm water insert shall be printed directly on the back of an existing flyer and **biannually** sent out with the billings for no additional postage or stuffing cost to the City, as described in BMP 1-3 of the Storm Water Management Plan.

- **Storm Drain Stenciling Program:** BMP 2-2 establishes a stenciling program utilizing the public and volunteer groups, to paint lines around existing City storm drains to indicate awareness and limits.

- **Waste Oil & Antifreeze Program:** Existing oil and antifreeze coolant recycling programs for local households and businesses is described in BMP 2-3.

- **Sewage Spill/Leak Taskforce:** The City Utilities and Street Maintenance personnel respond to sewage spills or leaks in accordance with BMP 3-2, which represents the existing program for responding and reporting sewage spills/leaks.

- **Illegal Dumping:** There is an existing, coordinated effort between the Hanford Police Department and The Public Works Department that recognizes that illegal dumping is a
problem. Complaints are currently logged. Repeat violators are tracked. BMP 3-4 describes how this will be integrated into the Storm Water Management Plan.

- **Illicit Discharge**: The Public Works Department works concurrently with the Police Department and the Peoples Ditch Company, in identifying any illicit discharges made into waterways. This program is conducted on an as-needed basis and before winter storms as described in BMP 3-4.

- **Construction Related Erosion Sediment Ordinance**: BMP 4-2 requires that the City establish a program to address construction related sediment and other pollutants at construction sites.

- **Storm Water Pollution Prevention (SWPPP) Guidelines**: The Public Works Department will establish guidelines for the creation and implementation of using SWPPP practices in all new construction permits. This also applies to renovation construction projects and is described in BMP 4-1.

- **SWPPP Construction Site Standards**: Similar to the above SWPPP guidelines, BMP 4-2 relates to enforcing the implemented BMPs at new and renovation related construction sites.

- **Training Programs & Strategies for Post Construction Storm Water Management**: Mandatory training for related City staff on structural and nonstructural BMPs is what BMP 5-3 addresses, and is for post construction phases of storm water management.

- **Criteria for Post Construction Runoff (New/Redevelopment Projects)**: This program includes the drafting and adoption of the program, referencing the CASQA standards, its enforcement, and conducting outreach and technical assistance for developers and designers. BMP 5-1 addresses this item.

- **Identification and Corrective Actions for Reducing Pollutant Runoff from Municipal Operations**: BMP 6-2 addresses how the City shall prevent and/or reduce municipal operation runoff through identification and corrective actions.

- **Inlet/Culvert, Catch Basin, Street Sweeping, and Detention/Retention Basin Maintenance**: The Public Works Department shall continue to clean annually/bi-annually all of the above waterways in conformance with BMP 6-2.

- **Waste Disposal Schedule**: The existing waste disposal program is currently in effect, and primarily consists of garbage collection within the city. BMP 6-4 is a program that shall control and evaluate the effects of litter throughout the community.

- **Training Programs & Seminars for Municipal Staff on Pollution Prevention & Good Housekeeping**: The Public Works Department will provide training and budget funding
for employee to attend training programs and seminars for all municipal staff in accordance with BMP 6-3.

- **EPA Landscape Maintenance Brochure:** The EPA Landscape Maintenance brochure is an excellent tool in Public Education and Outreach. BMP 1-4 is an item that helps perfect the SWMP.

- **Public Education & Outreach Programs:** There are existing programs on various topics that distribute public information during community events. Storm water public outreach shall be incorporated into the existing programs as described in BMP 2-2, 2-3 and 2-4.

- **City Cleanups:** The Public Works Department will work with the Community Development Department to reinstate annual program for Neighborhood Clean Ups. The City will identify a neighborhood and stage a clean up event that involves the immediate residence. Promoting neighborhood pride and public involvement and education. BMP 2-6 describes how this program is utilized in the SWMP.

- **Post-Construction Training Programs for Code Enforcement Personnel:** These training programs will be mandatory, and will encompass post storm water BMPs and standards for all Code Enforcement Personnel. BMP 5-3 outlines the program and timetable.

### Police & Fire Departments

- **Hazardous Materials Spill Response:** The Police and Fire Departments currently respond and contact the Kings County Environmental Health Department to implement the Emergency Response Plan to all hazardous waste material spills as required by State and Federal laws. BMP 3-2 provides details on how this program affects the SWMP.

- **Sewage Spill Response:** The Hanford Police Department contacts the Public Works Department for all breaks in existing sewer lines. Kings County is contacted if additional resources are needed. BMP 3-2 represents this existing program for responding and reporting sewage spills.

### Administrative Division of Public Works

- **Web Design:** The City of Hanford currently has an active website. A link representing information and education on storm water pollution and prevention (for both the private and public sector) shall be added to the website. Also in the revised web design a “hotline” area which will be provided for reporting and tracking complaints. This BMP tool is recommended as described in BMP 1-2 of the Storm Water Management Plan.

- **Illicit Discharge Program:** The City of Hanford will establish an ordinance to help in enforcing illicit discharge violators. This BMP tool is recommended as described in BMP 3-4 of the Storm Water Management Plan.
- **Complaint Procedures Program**: A SWMP that can be directly affected by citizens or other organizations is the key role of a Complaint Procedures Program. With the implementation of a website-based Hotline violators can be reported directly to the City, where appropriate enforcement measures can be dealt with as indicated in BMP 1-2 and 3-4.

- **Violations and Fines Procedures**: The Administrative Department shall establish policy and procedures for any violations or fines to be assessed to violators of storm water program, policies, etc. BMP 3-6 addresses this item.

- **24-Hour Response System**: A 24-hour response system is a critical component in addressing urgent storm water issues. BMP 3-3 outlines this system.

A SWMP Responsibility Matrix Chart provided in the Appendix outlines the proposed department framework for the SWMP. An MCM Task Manager is yet to be determined.

### 4.4 SWMP Timeline

The BMP Matrix in Appendix B provides an outline of each BMP with its prescribed implementation schedule. The measurable goals and implementation schedules are designed to promote progress toward satisfying a portion of one or more of the six Minimum Control Measures. For example, report generation and queries are incorporated into certain databases such that these reports and associated data may be reviewed on an annual basis.

To be successful, the BMP Matrix will be used as a management tool by department staff and the MCM Task Manager for annual planning and reporting activities. Planning and reporting activities are described further in Part 6. In general, all MCMs listed should be implemented by the end of the permit term.

### 4.5 City Impacts and Sustainability

The BMP Matrix in Appendix B indicates certain practices that can be a cooperative effort between adjacent communities and other agencies. To accommodate the regulatory statute intentions of the SWMP, public awareness, commitment, and contributions are necessary for a successful Storm Water Management Program. Utilizing existing resources is the most effective way to accomplish community involvement. Through ideas and experience of other organizations, whether municipal, civic, volunteer, or otherwise, we can broaden and enhance outreach activities. This SWMP attempts to achieve such collaboration whenever appropriate or applicable.

It is understood that budgets are even insufficient to accommodate programs and operations not related to the regulations stipulated under this permit. Specific activities and events may be performed cooperatively with outside organizations. This is explored in the SWMP to assist additional financial and/or staff burdens within the SWMP.
There are various resources that may provide legal authority to enforce the SWMP. Such resources include the Federal CWA, the California Water Code, California Environmental Quality Act (CEQA), Subdivision Map Act, Porter-Cologne Act, and City Ordinances. Aside from the formal, legal resources listed herein, the City intends on continuing certain enforcement practices at the ground level, such as stopping construction or withholding and/or suspending permits until compliance is reached.
PART 5  SWMP MINIMUM CONTROL MEASURES AND BEST MANAGEMENT PRACTICES

5.1 Minimum Control Measures

Best Management Practices (BMPs) have been selected for the City representing viable activities specific to the City of Hanford’s needs. These practices are intended to meet each Measurable Goal within the City’s budget and staff limitations by which this SWMP can be followed. The matrix that has been prepared outlines all activities and practices that are designed to fulfill each MCM. It should be noted that some are not easily quantifiable or predictable, although a concerted effort has been made toward developing ways to measure their effectiveness.

Under Permit requirements, the SWMP is to, “Describe measurable goals, and timetables for implementation in the following six program areas or Minimum Control Measures (MCMs). Each Minimum Control Measure below is followed by a brief description of the proposed Best Management Practices satisfying its requirement.”

**MCM – 1: Public Education and Outreach on Storm Water Impacts**

Per General Permit requirements, this MCM states that, “The Permittee must educate the public in its permitted jurisdiction about the importance of the storm water program and the public’s role in the program.”

BMP 1-1: The City shall establish ‘pet waste’ control display signs at parks to encourage the proper disposal of pet waste in public areas. Also supplied, along with the signage in 4 public parks will be Pet waste disposal bags. Restocking of the baggies will provide a quantitative means to monitor this BMP. Install pet waste control signage in an additional 3 Public Parks the following year. (Target date: 1 year)

BMP 1-2: A storm water quality section will be developed and added to the City’s website for public information and education. This will include information regarding illicit discharges, illegal dumping, and public reporting (hotline). A goal of a minimum of 10 hits per month will be established. Hotline is backed up by the Police Dept. after hours. (Target date: 2 years) (BMP 3-3) (Appendix G)

BMP 1-3: Mass mailings containing a storm water quality message will be distributed to local residents biannually. This will include information regarding illicit discharges, illegal dumping, and public reporting. A water quality packet will be distributed to those who sign up for water service when they register and biannually for continued education. (Target date: 1 year)

BMP 1-4: The City will have informational flyers available to the public, during City events and on display at city offices and participating retailers in the city. These flyers will cover storm water information including but not limited to illicit discharges, illegal dumping,
public reporting, home, and landscape maintenance. The number of flyers distributed and where will be the monitoring and measurement as to effectiveness. (Target date: 1 year)

**MCM - 2: Public Involvement/Participation**

Per General Permit requirements, this MCM states that, “The Permittee must comply with all State and local notice requirements when implementing a public involvement/participation program.”

BMP 2-1: The City will adopt SWMP ordinances which will enhance and enforce the City’s position on SWMP. The ordinance will address erosion, sediment, and non-sediment controls, construction and post construction issues, and non-storm water discharges, along with authoritative tiered enforcement information. Local and State requirements will be met within these ordinances and they will be presented to the community through public notice and meetings. (Target date: 1 year)

BMP 2-2: City volunteers will participate in stenciling storm drain inlets, culverts, headwalls, and other drainage structures annually. The number of structures stenciled will be recorded. (Target date: Ongoing)

BMP 2-3: The City will continue to implement the existing oil and automobile coolant recycling program and establish a hotline (BMP 1-2). The amount of oil and coolant will be tracked, monitored and evaluated with the database information. All drop off locations will maintain a log of participant information to be summarized and evaluated. (Target date: Ongoing)

BMP 2-4: The City will continue to implement weekly green waste pickup. Recording tonnage or trips required, will illustrate the public involvement and development of the program. (Target date: Ongoing)

BMP 2-5: The City will continue to implement the Street Sweeping schedules. Hanford’s aggressive schedule differs by city location and was determined by priority targeted areas. Maintain clean streets and environment remains the objective with tracking the number of miles per month swept and the volume and type of debris collected for annual reporting and evaluation (Target date: Ongoing)

BMP 2-6: The City will reinforce the program in coordination with Community Development Department, Neighborhood Clean Up. Identifying a priority location or neighborhood and stage a clean up event. Recording event location, type of clean up and participant information will install neighborhood pride and public involvement. (Target Date: Year 1)
MCM - 3: Illicit Discharge Detection and Elimination

Per General Permit requirements, this MCM states that, “The Permittee must adopt and enforce ordinances or take equivalent measures that prohibit illicit discharges. The Permittee must also implement a program to detect illicit discharges.”

The definition of an illicit discharge is any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities. Illicit discharges constituents or pollutants of concern include the following: oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens.

Certain discharges are considered as non-storm water discharges or flows and may be deemed as authorized discharges. The following types of discharges are authorized unless they first come into contact with pollutants prior to discharge:

- water line flushing
- landscape irrigation
- diverted stream flows
- rising groundwater
- uncontaminated groundwater infiltration (as defined in 40 CFR S35.2005(20)) to separate storm sewers
- uncontaminated pumped groundwater
- 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
- flows from riparian habitats and wetlands
- de-chlorinated swimming pool discharges

It should be noted that certain above-listed non-storm water discharges may be determined by the RWQCB to be significant sources of pollutants to waters of the State or physically interconnected MS4, or threaten water quality standards, at which point the City will be notified and the said discharge(s) would be removed from this authorized non-storm water discharge list.

BMP 3-1: The City will update a storm sewer map and database to monitor cleanups and address complaints of illicit fluid and solid waste dumping which will prioritize areas of concern which will be subject to inspection procedures that are to be developed. Included with the map all outfalls and any receiving waters locations and names. The maps and databases are updated and evaluated annually. (Target date: 4 years)

BMP 3-2: A City inter-department task force will be assigned to respond to notices of sewage spills, leaks, or dumping of illicit fluid and solid waste which may adversely affect discharge into storm water inlets, for both residential and commercial. The results will be
tracked and included in a Priority Action list. Violations will be addressed according to new city ordinances for SWMP. (Target date: Ongoing)

BMP 3-3: Field Utilities will be backed up by the City Police Department dispatch center for 24-hour emergency response system for public reporting of illicit discharges and dumping. The calls will be transferred to the police after office hours. (Target date: Ongoing) (BMP 1-2)

BMP 3-4: The City will establish a program by which to track and enforce the prohibition of illicit discharges and illegal dumping using the website, new ordinance and a priority action list. Prioritization will occur through many avenues of City reporting, inspections, public complaints, industry and type of business targeting, and response to corrective measures will also play an integral part in creating the Priority action list. (Target date: 2 years) (BMP 2-1)

BMP 3-5: The City shall provide training programs for building and construction inspectors, and any other related municipal staff (Target date: Year 2) regarding new illicit discharge control measures and requirements. Seminars and attendees will be logged and submitted with annual reports. Develop inspection procedures/checklists and include a section to help detect non-storm water discharge or illegal dumping. Training will occur at a minimum of one per year. (Target date: 4 years) (BMP 2-1)

BMP 3-6: An ordinance prohibiting non-storm water discharges will be developed and include tiered enforcement that may include education, notification, citation and fines. The above listings identifies "approved" non-storm water discharges that will be excluded under this ordinance. Should "approved" non storm water discharges become illicit, the ordinance must allow for these updates and revisions. (Target date: 2 years) (BMP 2-1)

**MCM - 4: Construction Site Storm Water Runoff Control**

Per General Permit requirements, this MCM states that, "The Permittee must develop a program to control the discharge of pollutants from construction sites greater than or equal to one acre in size within its permitted jurisdiction. The program must include inspections of construction sites and enforcement actions against violators."

BMP 4-1: The City shall provide training programs for plan checkers, building and construction inspectors, and any other related municipal staff regarding new municipal water quality control measures and requirements. The CASQA standards will be used to provide standards and guidelines. Training will occur annually. (Target date: 3 years)

BMP 4-2: The City will adopt a program establishing tiered enforcement, BMP standards, Standard SWPPP reviews and NOI submittal requirements. The annual review of the database will aid in monitoring and evaluating this BMP. (BMP 2-1 and 3-4) (Target date: 3 years)
BMP 4-3: The City will develop standard inspection checklist with measures to establish priority areas of concern (Erosion, sediment and site containment issues) including a tracking database. The annual evaluation of the database will aid in determination of priority sites or offenders. (Target date: 4 years)

BMP 4-4: The City will provide outreach handouts to contractors, including information training opportunities at least once per year. (Target date: 3 years)

**MCM – 5: Post-Construction Storm Water Management in New Development and Redevelopment**

Per General Permit requirements, this MCM states that, “The Permittee must require long-term post-construction BMPs that protect water quality and control runoff flow, to be incorporated into development and significant redevelopment projects.”

BMP 5-1: Develop technical criteria, guidance, for structural and non-structural BMPs appropriate for the City of Hanford. Construction inspectors, contractors, and other building related personnel are targeted for this BMP. Implementation will be measured by visual inspection. (Target date: 3 years)

BMP 5-2: The City will establish a system that implements Attachment 4 (Appendix E) requirements / standards and enforces them and tracks their maintenance while providing outreach and technical assistance to developers and designers. (BMP 2-1) (Target date: 5 years)

BMP 5-3: The City will train department staff involved with implementing, maintaining and tracking post-construction requirements and conditions of approval. Attendee's and training content will be recorded and reported annually. (Target date: 2 years)

**MCM – 6: Pollution Prevention/Good Housekeeping for Municipal Operations**

Per General Permit requirements, this MCM states that, “The Permittee must examine its own activities and develop a program to prevent the discharge of pollutants from these activities. At a minimum, the program must educate staff on pollution prevention, and minimize pollutant sources.”

BMP 6-1: The City shall conduct a survey of all departments and facilities for any activities that may contribute pollutants to the storm water system. The City will then develop and implement facility pollution prevention plans at all municipal facilities. Routine bi-annual inspections will provide evaluation of BMP’s and their effectiveness. (Target date: 4 years)

BMP 6-2: The City shall identify areas and corrective actions for preventing or reducing pollutant runoff from municipal operations. Providing manuals and procedures to implementing BMPs. Tracking effected operations and their conclusions will be evaluated annually. (Target date: 4 years)
BMP 6-3: The City shall provide a training program and conduct training seminars for all municipal staff on how to reduce or eliminate storm water pollution from their activities. Attendee's and training content will be recorded and reported annually. (Target date: 3 years)

BMP 6-4: The City will continue with litter visual inspections in public areas and evaluate the amount, or volume annually. (Ongoing)

BMP 6-5: A SWMP suggestion box will be placed at the cooperation yard for employee feedback. Input reviewed regularly at the facilities for implementation, evaluation, tracking and training. (Target date: 3 years)

The Best Management Practices Matrix can be found in Appendix B. Each is associated with a specific Minimum Control Measure. Within the Matrix you will find the following elements:

- Minimum Control Measure Objective
- Best Management Practice
- Implementation Method
- Measurable Goals
- Estimated Timeline for Complete Implementation
- Responsible Party
PART 6   SWMP PERFORMANCE AND EFFECTIVENESS EVALUATION

6.1  **BMP Performance Evaluation**

An annual review will be conducted amongst the department’s, evaluating progress and providing feedback on each BMP’s success. The staff review will address the following criteria:

- **Effectiveness:** Is the BMP set up appropriately for City staff? Is there a better way of tracking/reporting? Is there a more appropriate staff person to handle part or all of the responsibilities associated with the BMP?

- **Cost Analysis:** A rough cost-benefit analysis for each BMP scrutinized by staff, the public, or a regulatory agency will be encouraged so that determinations may be made as to what, if any, changes should be made.

- **Implementation:** Is the BMP implementation schedule adequate/appropriate or will the schedule need to be modified? Based upon visual inspection, what benefits are observed?

- **Pollution Removal:** Is the BMP effective in improving storm water quality?

- **Regulatory compliance:** Is the BMP compatible with environmental regulation?

6.2  **Annual Monitoring and Reporting**

Annual planning will be performed in the following manner:

- Reports for tracking various BMPs will be generated, collected, and provided to MCM Task Manager.

- Assess each BMP against the SWMP measurable goals for perceived effectiveness, actual effectiveness, and financial impact.

- Coordinate MCM Task Manager and department staff meetings to identify where certain BMPs should be modified, and why.

Annual reporting to the RWQCB is required to:

- Identify the BMP’s actual time versus SWMP implementation time goal.

- Provide a revised implementation schedule based upon the previous year’s SWMP development and the projected year’s progress.

- Describe the implemented BMPs and the criteria used to measure progress.

- Provide a list of BMPs that should be amended or incorporated in the revised SWMP.
The MCM Task Manager will be responsible for any and all interactions and reporting with the RWQCB.
APPENDICES
Appendix A – Hanford Vicinity Map, Storm Drain Map, USGS Map, and Aerial Map
### CITY OF HANFORD

**Appendix B - Best Management practices**

<table>
<thead>
<tr>
<th>BMP NO.</th>
<th>BMPS</th>
<th>TIME SCHEDULE FOR IMPLEMENTATION</th>
<th>MCM OBJECTIVE</th>
<th>MEASURABLE GOALS/IMPLEMENTATION</th>
<th>RESPONSIBLE PARTY</th>
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<tbody>
<tr>
<td>MCM - 1 PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS</td>
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</tbody>
</table>
| 1-1 | Pet waste control displays | Year 1 | The public education and outreach plan has the following objectives:  
1) Change public perception and attitudes toward the drainage issues in the City of Hanford,  
2) Raise public awareness about storm drainage pollution and its impact on the City of Hanford water resources, | Install signs at parks and supply pick up bags. The signs and bags will be installed at 4 parks and install signs only, at 3 City Community Parks during the second year. Visual inspections and restocking of the bags will provide a quantitative means to monitor. | Park Maintenance Division Superintendent Public Works |
| 1-2 | Storm water website Target: general private/public/staff | Year 2 | 3) Educate the community about specific pollutant sources and what the public can do to reduce drainage pollution,  
4) Seek out public involvement (volunteer groups) in pollution prevention programs. | Develop a storm water website: 10 hits per month Include a Hotline in the website design for E-complaints. Monitor input monthly, to evaluate the BMP. (ref. BMP 3-3) | Public Works Director |
<p>| 1-3 | Mass Mailings | Year 1 | 5) Website allowing for public feedback, monitoring, tracking and followup will help evaluate its' effectiveness. | Distribute water quality packet when people sign up for water service. Two times a year distribute general information on water quality through mass mailings. | Utilities Superintendent |
| 1-4 | Informational flyers and brochures | Year 1 | Display informational flyers at City offices and during City events; Distribute for display, brochures at hardware stores and nurseries. Record how many are distributed and from which event/location. | Utilities Superintendent |</p>
<table>
<thead>
<tr>
<th>BMP NO.</th>
<th>BMPS</th>
<th>TIME SCHEDULE FOR IMPLEMENTATION</th>
<th>MCM OBJECTIVE</th>
<th>MEASURABLE GOALS/IMPLEMENTATION</th>
<th>RESPONSIBLE PARTY</th>
</tr>
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<tbody>
<tr>
<td>2-1</td>
<td>2-1</td>
<td>Year 1</td>
<td>Adapt a SWMP ordinance which will enhance and enforce the City’s position on illicit discharges.  Local and State requirements will be met within this ordinance and it will be presented to the community through public notice and meetings.</td>
<td>Adopt the ordinance which will give the City legal authority to fully implement the SWMP including provisions for a tiered level of enforcement of the program. Review of non-compliances and follow-up information will measure the effectiveness of the BMP.</td>
<td>Utilities Division Superintendent</td>
</tr>
<tr>
<td>2-2</td>
<td>2-2</td>
<td>Ongoing</td>
<td>Implement a program that will involve the general public and provide an opportunity for public feedback.  The community is the target audience.</td>
<td>Develop stenciling standard and seek involvement from public groups to stencil storm drain inlets, culverts, headwalls, and other drainage structures. Record the number of structures stenciled annually. Performed by volunteers.</td>
<td>Utilities Division Superintendent Public Works</td>
</tr>
<tr>
<td>2-3</td>
<td>2-3</td>
<td>Ongoing</td>
<td>Waste Management Authority which is operated by the Joint Powers Authority (JPA).  Record the amount of oil and coolant recycled from all locations each year, into database (BMP 1-2) for review and evaluation.  Oil is recycled at the Corporate Yard Recycling 5 days a week.</td>
<td></td>
<td>Fleet Maintenance Manager</td>
</tr>
<tr>
<td>2-4</td>
<td>2-4</td>
<td>Ongoing</td>
<td>Weekly Pickup, Visual inspections of the community. Recording tonnage or trips required, will illustrate the public involvement and development of the program.</td>
<td></td>
<td>Refuse Division Superintendent</td>
</tr>
<tr>
<td>2-5</td>
<td>2-5</td>
<td>Ongoing</td>
<td>The City will continue to implement the Street Sweeping schedules. Schedule based on priority targeted areas. Track number of miles per month swept, and the volume and type of debris collected for annual reporting and evaluation</td>
<td></td>
<td>Public Works Director</td>
</tr>
<tr>
<td>2-6</td>
<td>2-6</td>
<td>Year 1</td>
<td>Identify a neighborhood and stage a clean up event that involves the immediate residence.  Report address of location, type of clean up and parties involve.  1-2 per year</td>
<td></td>
<td>Public Works Dept./Refuse Division Superintendent</td>
</tr>
<tr>
<td>BMP NO.</td>
<td>BMPS</td>
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<tr>
<td>MCM - 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION</td>
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<tr>
<td>3-1</td>
<td>Storm sewer map and database developed to prioritize areas of concern and establish inspection procedures</td>
<td>Year 4</td>
<td>Develop a plan to locate and prioritize areas of concern and address non-storm water discharges and illegal dumping.</td>
<td>Develop map and database to track cleaning complaints. At a minimum, the map will include the location of all outfalls, approximate limits of watersheds, and the names and locations of all waters that receive these discharges. Prioritization will occur through reporting, inspections, public complaints, type of business targeting and response to corrective measures.</td>
<td>City Engineer</td>
</tr>
<tr>
<td>3-2</td>
<td>Illegal dumping response &amp; Hazardous waste spill response</td>
<td>Ongoing</td>
<td></td>
<td>Inter-department task force to respond to spills, leaks, or dumping of illicit fluid and solid waste. Results and enforcement of procedures will be recorded, reviewed and responded to, in accordance to the new ordinance. (special consideration directed to Business)</td>
<td>Public Works Director</td>
</tr>
<tr>
<td>3-3</td>
<td>24-hour emergency response system for utilities,</td>
<td>Ongoing</td>
<td></td>
<td>Establish, advertise and maintain a public hotline. A call database will be maintained in conjunction with the hotline. Trouble calls and solutions will be recorded. City Police, will cover after hour calls, for Storm water, Sewer systems, construction complaints and water.</td>
<td>Utilities Division Supervisor City Engineers</td>
</tr>
<tr>
<td>3-4</td>
<td>Develop Enforcement system for violations and tracking.</td>
<td>Year 2</td>
<td></td>
<td>Enforce violations through a tiered system and track violations and inspections. Violations of non-compliance will be recorded, reviewed and acted on accordingly per the ordinance. (See BMP 2-1 for follow-up details)</td>
<td>Public Works Administration</td>
</tr>
<tr>
<td>3-5</td>
<td>Train public employees involved in program and develop inspection procedures/checklists</td>
<td>Year 4</td>
<td></td>
<td>Train building and construction inspectors (all Year 1) and other related municipal staff (Year 2); with refreshers, (1 per year). Develop checklist for inspectors and procedures to detect non-storm water discharges or illegal dumping. (Year 1) Track &amp; evaluate reports. (BMP 2-1)</td>
<td>Public Works Administration</td>
</tr>
<tr>
<td>3-6</td>
<td>Ordinance Prohibiting Non Storm water discharges</td>
<td>Year 2</td>
<td></td>
<td>Prohibit non storm water discharges and develop tiered enforcement that may include education, notification, citation and fines. Violations of non-compliance will be recorded, reviewed and acted on accordingly per the ordinance. (BMP 2-1)</td>
<td>Public Works Administration</td>
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<td>BMP NO.</td>
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<tr>
<td>4-1</td>
<td>Train city plan checkers &amp; inspectors with site plan review standards and standard site inspection criteria</td>
<td>Year 3</td>
<td>Develop ordinances for informing public employees, business, and general public of the hazards associated with construction site runoff. Establish procedures for inspection and enforcement of control measures.</td>
<td>Consider ALL new projects to plan review for proper SWMP. Training sessions conducted annually.</td>
<td>P.W Engineering City Engineer</td>
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<tr>
<td>4-2</td>
<td>Adopt a program establishing tiered enforcement, BMP standards and SWPPP reviews.</td>
<td>Year 3</td>
<td></td>
<td>Enforce violations through a tiered system. The number of violations will be reported and recorded in a database each year. (BMP 2-1 and BMP 3-3)</td>
<td>P.W Engineering City Engineer</td>
</tr>
<tr>
<td>4-3</td>
<td>Standard Inspection checklist with measures to establish priority areas of concern including a tracking database.</td>
<td>Year 4</td>
<td></td>
<td>Develop checklist / Assessment of effectiveness based on site plan review and site inspection efficiency. The annual evaluation of the database will also aid in determination of priority sites or offenders.</td>
<td>P.W Engineering City Engineer</td>
</tr>
<tr>
<td>4-4</td>
<td>Provide Outreach handouts to contractors, including information training opportunities.</td>
<td>Year 3</td>
<td></td>
<td>The City will provide at least one training session per 2 years for contractors and developers.</td>
<td>P.W Engineering City Engineer</td>
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<tr>
<td>BMP NO.</td>
<td>BMPS</td>
<td>TIME SCHEDULE FOR IMPLEMENTATION</td>
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<tr>
<td>MCM - 5: POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT</td>
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<tr>
<td>5-1</td>
<td>Establish technical criteria, guidance and design review for structural and non-structural BMP standards</td>
<td>Year 3</td>
<td>Educate public employees and developers of the water quality issues associated with improper post-construction controls. Establish standards and enforcement measures as required to maintain compliance and protect water quality.</td>
<td>Develop standards and require standards in 100% of new and re-development plans. Implementation will be measured by visual inspection.</td>
<td>Engineering Division</td>
</tr>
<tr>
<td>5-2</td>
<td>Establish a system that implements attachment 4 requirements / standards and enforces them and tracks their maintenance. Provide outreach and technical assistance to developers and designers.</td>
<td>Year 1</td>
<td></td>
<td>Develop and implement ordinance addressing post-construction runoff, including enforcement measures. (BMP 1-2 &amp; 2-1)</td>
<td>Public Works Director</td>
</tr>
<tr>
<td>5-3</td>
<td>Train department staff involved with maintaining, implementing and tracking post-construction requirements and conditions of approval.</td>
<td>Year 2</td>
<td></td>
<td>Conduct post-construction storm water training. Attendee’s and training content will be recorded and reported annually. The City will inspect 100% of the sites completed each year.</td>
<td>Public Works Director</td>
</tr>
<tr>
<td>BMP NO.</td>
<td>BMPS</td>
<td>TIME SCHEDULE FOR IMPLEMENTATION</td>
<td>MCM OBJECTIVE</td>
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<tr>
<td>6-1</td>
<td>Survey departments / Develop and implement SWPPPs</td>
<td>Year 4</td>
<td>Evaluate current municipal opportunities and develop a plan to educate City employees regarding storm water quality. Develop procedures for evaluating opportunities and establishing BMPs, that will improve water quality. Bi-annual evaluations of BMP’s will measure their effectiveness.</td>
<td>Conduct surveys / develop and implement SWPPP at municipal facilities. Routine bi-annual inspector will evaluate BMPs and their effectiveness.</td>
<td>City Engineer</td>
</tr>
<tr>
<td>6-2</td>
<td>Identify areas and corrective actions for preventing pollutant runoff from municipal facilities</td>
<td>Year 4</td>
<td>Develop operating manuals &amp; standard procedures (based on CASQA standards) on implementing BMP's during municipal activities. Clean inlets, culverts and other drainage facilities within City rights-of-ways prior to first storm and on an as-need basis thereafter. Keep log of activities in the fall of each year.</td>
<td></td>
<td>Utilities Division Superintendent</td>
</tr>
<tr>
<td>6-3</td>
<td>Training for all applicable municipal staff.</td>
<td>Year 3</td>
<td>Conduct training for all municipal staff. 1 training session per year. Training events and attendees will be included in annual reports.</td>
<td></td>
<td>Public Works</td>
</tr>
<tr>
<td>6-4</td>
<td>Litter Control Throughout the Community (City Parks)</td>
<td>Ongoing</td>
<td>Continue visual inspections of trash receptacles and of amount of trash recovered. Track the volume accumulated monthly for annual reporting and evaluation.</td>
<td></td>
<td>Park Maintenance</td>
</tr>
<tr>
<td>6-5</td>
<td>Employee Feedback</td>
<td>Year 3</td>
<td>Place a SWMP suggestion box at cooperation yard for employee feedback. Input review and tracked regularly for implementation, and evaluation.</td>
<td></td>
<td>Public Works Director</td>
</tr>
</tbody>
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**MCM - 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS**

Appendix B
Page 6
## Appendix C - Acronyms and terms as used in this document

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>BMPs</td>
<td>Best Management Practices - Physical, structural, and/or managerial practices that, when used singly or in combination, prevent or reduce pollution of storm water</td>
</tr>
<tr>
<td>County</td>
<td>City of Exeter</td>
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<tr>
<td>CWA</td>
<td>Clean Water Act, Phase I and Phase II NPDES programs fall under this legislation</td>
</tr>
<tr>
<td>EPA</td>
<td>United States Environmental Protection Agency</td>
</tr>
<tr>
<td>MCM(s)</td>
<td>Minimum Control Measure(s) - Measures required under the NPDES Permit for storm water management and protection</td>
</tr>
<tr>
<td>Measurable Goals</td>
<td>Definable tasks or accomplishments associated with implementing best management practices</td>
</tr>
<tr>
<td>MEP</td>
<td>Maximum Extent Practicable - Standard of evaluating permit compliance</td>
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<tr>
<td>MS4</td>
<td>Municipal Separate Storm Sewer System</td>
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<tr>
<td>NPDES</td>
<td>National Pollutant Discharge Elimination System - Section 404 of the Federal Clean Water Act</td>
</tr>
<tr>
<td>NOI</td>
<td>Notice of Intent - Notice to RWQCB of an entity's intention to apply for an NPDES Permit</td>
</tr>
<tr>
<td>Phase II</td>
<td>Second stage of State and Federal storm water permit regulations</td>
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<tr>
<td>Plan</td>
<td>Document providing organization, management activities, goals, strategy and direction for the activities associated with this effort</td>
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<tr>
<td>SWMP</td>
<td>Storm Water Management Plan - Required to accompanies NPDES Permit application under State and Federal regulations</td>
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<tr>
<td>SWPPP</td>
<td>Storm Water Pollution Prevention Plan</td>
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</table>
### Acronyms and Terms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>BMPs</td>
<td>Best Management Practices - Physical, structural, and/or managerial practices that, when used singly or in combination, prevent or reduce pollution of storm water</td>
</tr>
<tr>
<td>City</td>
<td>City of Hanford</td>
</tr>
<tr>
<td>CWA</td>
<td>Clean Water Act, Phase I and Phase II NPDES programs fall under this legislation</td>
</tr>
<tr>
<td>EPA</td>
<td>United States Environmental Protection Agency</td>
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<tr>
<td>MCM(s)</td>
<td>Minimum Control Measure(s) - Measures required under the NPDES Permit for storm water management and protection</td>
</tr>
<tr>
<td>Measurable Goals</td>
<td>Definable tasks or accomplishments associated with implementing best management practices</td>
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<tr>
<td>MEP</td>
<td>Maximum Extent Practicable - Standard of evaluating permit compliance</td>
</tr>
<tr>
<td>MS4</td>
<td>Municipal Separate Storm Sewer System</td>
</tr>
<tr>
<td>NPDES</td>
<td>National Pollutant Discharge Elimination System - Section 404 of the Federal Clean Water Act</td>
</tr>
<tr>
<td>NOI</td>
<td>Notice of Intent - Notice to RWQCB of an entity’s intention to apply for an NPDES Permit</td>
</tr>
<tr>
<td>Phase II</td>
<td>Second stage of State and Federal storm water permit regulations</td>
</tr>
<tr>
<td>Plan</td>
<td>Document providing organization, management activities, goals, strategy and direction for the activities associated with this effort</td>
</tr>
<tr>
<td>RWQCB</td>
<td>Regional Water Quality Control Board</td>
</tr>
<tr>
<td>SWMP</td>
<td>Storm Water Management Plan - Required to accompany NPDES Permit application under State and Federal regulations</td>
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<tr>
<td>SWPPP</td>
<td>Storm Water Pollution Prevention Plan</td>
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Appendix D – Resource Management Responsibility Matrix, and City of Hanford Organizational Charts
# City of Hanford Storm Water Management Plan
## Responsibility Matrix Chart

<table>
<thead>
<tr>
<th>EPA Minimum Control Measures</th>
<th>Minimum Control Measure I</th>
<th>Minimum Control Measure II</th>
<th>Minimum Control Measure III</th>
<th>Minimum Control Measure IV</th>
<th>Minimum Control Measure V</th>
<th>Minimum Control Measure VI</th>
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</thead>
</table>

### Activities
- Pet Waste Control Displays
- Storm Water Website
- Utility Bill Inserts
- School and Public Presentations
- EPA’s Landscape Maintenance Brochure
- Storm Drain Stenciling
- Annual City Cleanups
- Public Oil & Coolant Recycling Program
- Green Waste
- Street Sweeping

- Establish Illicit Discharge Ordinance
- Hazardous Waste and Sewage Spill Response Team
- Storm Sewer Map and Monitoring Database
- Illicit Dumping Ordinance
- 24-Hour Response System

- Regulatory Construction Ordinance
- SWPPP Creation Guidelines
- BMP Standards City Development Standards Manual Construction Accountability Program
- City Staff Training Programs

- BMP Standards for New Development & Redevelopment Programs
- Mandatory Post-Construction Training
- Post-Construction Activity Database

- Drainage Facilities Maintenance Program
- Annual Insert and Culvert Cleaning and Storm Drain Maintenance
- Waste Disposal Training Program
- Annual Administrative Report
- Litter Control Ordinance
- SWMP Training Manual for City Staff
Appendix E – Attachment 4 – Requirements
Areas subject to high growth or serving a population of at least 50,000 must comply with the following provisions (for counties this threshold population applies to the population within the permit area).

A. RECEIVING WATER LIMITATIONS

1. Discharges shall not cause or contribute to an exceedance of water quality standards contained in a Statewide Water Quality Control Plan, the California Toxics Rule (CTR), or in the applicable RWQCB Basin Plan.

2. The permittees shall comply with Receiving Water Limitations A.1 through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the SWMP and other requirements of this permit including any modifications. The SWMP shall be designed to achieve compliance with Receiving Water Limitations A.1. If exceedance(s) of water quality objectives or water quality standards (collectively, WQS) persist notwithstanding implementation of the SWMP and other requirements of this permit, the permittees shall assure compliance with Receiving Water Limitations A.1 by complying with the following procedure:

   a. Upon a determination by either the permittees or the RWQCB that discharges are causing or contributing to an exceedance of an applicable WQS, the permittees shall promptly notify and thereafter submit a report to the RWQCB that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of WQSs. The report may be incorporated in the annual update to the SWMP unless the RWQCB directs an earlier submittal. The report shall include an implementation schedule. The RWQCB may require modifications to the report.

   b. Submit any modifications to the report required by the RWQCB within 30 days of notification.

   c. Within 30 days following approval of the report described above by the RWQCB, the permittees shall revise the SWMP and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, implementation schedule, and any additional monitoring required.

   d. Implement the revised SWMP and monitoring program in accordance with the approved schedule.

So long as the permittees have complied with the procedures set forth above and are implementing the revised SWMP, the permittees do not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the RWQCB to develop additional BMPs.

B. DESIGN STANDARDS
Regulated Small MS4s subject to this requirement must adopt an ordinance or other document to ensure implementation of the Design Standards included herein or a functionally equivalent program that is acceptable to the appropriate RWQCB. The ordinance or other document must be adopted and effective prior to the expiration of this General Permit or, for Small MS4s designated subsequent to the Permit adoption, within five years of designation as a regulated Small MS4.

All discretionary development and redevelopment projects that fall into one of the following categories are subject to these Design Standards. These categories are:

- Single-Family Hillside Residences
- 100,000 Square Foot Commercial Developments
- Automotive Repair Shops
- Retail Gasoline Outlets
- Restaurants
- Home Subdivisions with 10 or more housing units
- Parking lots 5,000 square feet or more or with 25 or more parking spaces and potentially exposed to storm water runoff

1. Conflicts With Local Practices
Where provisions of the Design Standards conflict with established local codes or other regulatory mechanism, (e.g., specific language of signage used on storm drain stenciling), the Permittee may continue the local practice and modify the Design Standards to be consistent with the code or other regulatory mechanism, except that to the extent that the standards in the Design Standards are more stringent than those under local codes or other regulatory mechanism, such more stringent standards shall apply.

2. Design Standards Applicable to All Categories

a. Peak Storm Water Runoff Discharge Rates
Post-development peak storm water runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak storm water discharge rate will result in increased potential for downstream erosion.

b. Conserve Natural Areas
If applicable, the following items are required and must be implemented in the site layout during the subdivision design and approval process, consistent with applicable General Plan and Local Area Plan policies:

1) Concentrate or cluster Development on portions of a site while leaving the remaining land in a natural undisturbed condition.
2) Limit clearing and grading of native vegetation at a site to the minimum amount needed to build lots, allow access, and provide fire protection.
3) Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.
4) Promote natural vegetation by using parking lot islands and other landscaped areas.
5) Preserve riparian areas and wetlands.

c. Minimize Storm Water Pollutants of Concern

Storm water runoff from a site has the potential to contribute oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the storm water conveyance system. The development must be designed so as to minimize, to the maximum extent practicable, the introduction of pollutants of concern that may result in significant impacts, generated from site runoff of directly connected impervious areas (DCIA), to the storm water conveyance system as approved by the building official. Pollutants of concern consist of any pollutants that exhibit one or more of the following characteristics: current loadings or historic deposits of the pollutant are impacting the beneficial uses of a receiving water, elevated levels of the pollutant are found in sediments of a receiving water and/or have the potential to bioaccumulate in organisms therein, or the detectable inputs of the pollutant are at concentrations or loads considered potentially toxic to humans and/or flora and fauna.

In meeting this specific requirement, “minimization of the pollutants of concern” will require the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the Maximum Extent Practicable. Those BMPs best suited for that purpose are those listed in the California Storm Water Best Management Practices Handbooks; Caltrans Storm Water Quality Handbook: Planning and Design Staff Guide; Manual for Storm Water Management in Washington State; The Maryland Stormwater Design Manual; Florida Development Manual: A Guide to Sound Land and Water Management; Denver Urban Storm Drainage Criteria Manual, Volume 3 – Best Management Practices and Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters, USEPA Report No. EPA-840-B-92-002, as “likely to have significant impact” beneficial to water quality for targeted pollutants that are of concern at the site in question. However, it is possible that a combination of BMPs not so designated, may in a particular circumstance, be better suited to maximize the reduction of the pollutants.

d. Protect Slopes and Channels

Project plans must include BMPs consistent with local codes, ordinances, or other regulatory mechanism and the Design Standards to decrease the potential of slopes and/or channels from eroding and impacting storm water runoff:

1) Convey runoff safely from the tops of slopes and stabilize disturbed slopes.
2) Utilize natural drainage systems to the maximum extent practicable.
3) Stabilize permanent channel crossings.
4) Vegetate slopes with native or drought tolerant vegetation, as appropriate.
5) Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion, with the approval of all agencies.
with jurisdiction, e.g., the U.S. Army Corps of Engineers and the California Department of Fish and Game.

e. Provide Storm Drain System Stenciling and Signage
Storm drain stencils are highly visible source controls that are typically placed directly adjacent to storm drain inlets. The stencil contains a brief statement that prohibits the dumping of improper materials into the storm water conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. All storm drain inlets and catch basins within the project area must be stenciled with prohibitive language (such as: “NO DUMPING – DRAINS TO OCEAN”) and/or graphical icons to discourage illegal dumping. Signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, must be posted at public access points along channels and creeks within the project area. Legibility of stencils and signs must be maintained.

f. Properly Design Outdoor Material Storage Areas
Outdoor material storage areas refer to storage areas or storage facilities solely for the storage of materials. Improper storage of materials outdoors may provide an opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the storm water conveyance system. Where proposed project plans include outdoor areas for storage of materials that may contribute pollutants to the storm water conveyance system, the following Structural or Treatment BMPs are required:

1) Materials with the potential to contaminate storm water must be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the storm water conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.
2) The storage area must be paved and sufficiently impervious to contain leaks and spills.
3) The storage area must have a roof or awning to minimize collection of storm water within the secondary containment area.

g. Properly Design Trash Storage Areas
A trash storage area refers to an area where a trash receptacle or receptacles (dumpsters) are located for use as a repository for solid wastes. Loose trash and debris can be easily transported by the forces of water or wind into nearby storm drain inlets, channels, and/or creeks. All trash container areas must meet the following Structural or Treatment Control BMP requirements (individual single family residences are exempt from these requirements):

1) Trash container areas must have drainage from adjoining roofs and pavement diverted around the area(s).
2) Trash container areas must be screened or walled to prevent off-site transport of trash.

h. Provide Proof of Ongoing BMP Maintenance
Improper maintenance is one of the most common reasons why water quality controls will not function as designed or which may cause the system to fail entirely. It is important to consider who will be responsible for maintenance of a permanent BMP, and what equipment is required to perform the maintenance properly. As part of project review, if a project applicant has included or is required to include, Structural or Treatment Control BMPs in project plans, the Permittee shall require that the applicant provide verification of maintenance provisions through such means as may be appropriate, including, but not limited to legal agreements, covenants, CEQA mitigation requirements and/or Conditional Use Permits.

For all properties, the verification will include the developer’s signed statement, as part of the project application, accepting responsibility for all structural and treatment control BMP maintenance until the time the property is transferred and, where applicable, a signed agreement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance. The transfer of property to a private or public owner must have conditions requiring the recipient to assume responsibility for maintenance of any Structural or Treatment Control BMP to be included in the sales or lease agreement for that property, and will be the owner’s responsibility. The condition of transfer shall include a provision that the property owners conduct maintenance inspection of all Structural or Treatment Control BMPs at least once a year and retain proof of inspection. For residential properties where the Structural or Treatment Control BMPs are located within a common area which will be maintained by a homeowner’s association, language regarding the responsibility for maintenance must be included in the project’s conditions, covenants and restrictions (CC&Rs). Printed educational materials will be required to accompany the first deed transfer to highlight the existence of the requirement and to provide information on what storm water management facilities are present, signs that maintenance is needed, how the necessary maintenance can be performed, and assistance that the Permittee can provide. The transfer of this information shall also be required with any subsequent sale of the property.

If Structural or Treatment Control BMPs are located within a public area proposed for transfer, they will be the responsibility of the developer until they are accepted for transfer by the County or other appropriate public agency. Structural or Treatment Control BMPs proposed for transfer must meet design standards adopted by the public entity for the BMP installed and should be approved by the County or other appropriate public agency prior to its installation.

i. Design Standards for Structural or Treatment Control BMPs
The Permittees shall require that post-construction treatment control BMPs incorporate, at a minimum, either a volumetric or flow based treatment control design standard, or both, as identified below to mitigate (infiltrate, filter or treat) storm water runoff:

1) Volumetric Treatment Control BMP
a) The 85th percentile 24-hour runoff event determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or
b) The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (2003); or
c) The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for “treatment” that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.

2) Flow Based Treatment Control BMP
   a) The flow of runoff produced from a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the area; or
   b) The flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using volumetric standards above.

Limited Exclusion
Restaurants and Retail Gasoline Outlets, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical Structural or Treatment Control BMP design standard requirement only.

3. Provisions Applicable to Individual Priority Project Categories

a. 100,000 Square Foot Commercial Developments

1) Properly Design Loading/Unloading Dock Areas
   Loading/unloading dock areas have the potential for material spills to be quickly transported to the storm water conveyance system. To minimize this potential, the following design criteria are required:
   
a) Cover loading dock areas or design drainage to minimize run-on and runoff of storm water.
   b) Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

2) Properly Design Repair/Maintenance Bays
   Oil and grease, solvents, car battery acid, coolant and gasoline from the repair/maintenance bays can negatively impact storm water if allowed to come into contact with storm water runoff. Therefore, design plans for repair bays must include the following:
a) Repair/maintenance bays must be indoors or designed in such a way that doesn’t allow storm water runon or contact with storm water runoff.

b) Design a repair/maintenance bay drainage system to capture all washwater, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit.

3) Properly Design Vehicle/Equipment Wash Areas
   The activity of vehicle/equipment washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for washing/steam cleaning of vehicles and equipment. The area in the site design must be:

   a) Self-contained and/ or covered, equipped with a clarifier, or other pretreatment facility, and
   b) Properly connected to a sanitary sewer or other appropriately permitted disposal facility.

b. Restaurants

   1) Properly Design Equipment/Accessory Wash Areas
      The activity of outdoor equipment/accessory washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for the washing/steam cleaning of equipment and accessories. This area must be:

      a) Self-contained, equipped with a grease trap, and properly connected to a sanitary sewer.
      b) If the wash area is to be located outdoors, it must be covered, paved, have secondary containment, and be connected to the sanitary sewer or other appropriately permitted disposal facility.

c. Retail Gasoline Outlets

   1) Properly Design Fueling Area
      Fueling areas have the potential to contribute oil and grease, solvents, car battery acid, coolant and gasoline to the storm water conveyance system. The project plans must include the following BMPs:

      a) The fuel dispensing area must be covered with an overhanging roof structure or canopy. The canopy’s minimum dimensions must be equal to or greater than the area within the grade break. The canopy must not drain onto the fuel dispensing area, and the canopy downspouts must be routed to prevent drainage across the fueling area.
b) The fuel dispensing area must be paved with Portland cement concrete (or equivalent smooth impervious surface), and the use of asphalt concrete shall be prohibited.

c) The fuel dispensing area must have a 2% to 4% slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of storm water to the extent practicable.

d) At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less.

d. Automotive Repair Shops

1) Properly Design Fueling Area
Fueling areas have the potential to contribute oil and grease, solvents, car battery acid, coolant and gasoline to the storm water conveyance system. Therefore, design plans, which include fueling areas, must contain the following BMPs:

a. The fuel dispensing area must be covered with an overhanging roof structure or canopy. The canopy’s minimum dimensions must be equal to or greater than the area within the grade break. The canopy must not drain onto the fuel dispensing area, and the canopy downspouts must be routed to prevent drainage across the fueling area.

b. The fuel dispensing area must be paved with Portland cement concrete (or equivalent smooth impervious surface), and the use of asphalt concrete shall be prohibited.

c. The fuel dispensing area must have a 2% to 4% slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of storm water to the extent practicable.

d. At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less.

2) Properly Design Repair/Maintenance Bays
Oil and grease, solvents, car battery acid, coolant and gasoline from the repair/maintenance bays can negatively impact storm water if allowed to come into contact with storm water runoff. Therefore, design plans for repair bays must include the following:

a) Repair/maintenance bays must be indoors or designed in such a way that doesn’t allow storm water run-on or contact with storm water runoff.

b) Design a repair/maintenance bay drainage system to capture all wash-water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is
prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit.

3) Properly Design Vehicle/Equipment Wash Areas
The activity of vehicle/equipment washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for washing/steam cleaning of vehicles and equipment. This area must be:

a) Self-contained and/or covered, equipped with a clarifier, or other pretreatment facility, and properly connected to a sanitary sewer or other appropriately permitted disposal facility.

4) Properly Design Loading/Unloading Dock Areas
Loading/unloading dock areas have the potential for material spills to be quickly transported to the storm water conveyance system. To minimize this potential, the following design criteria are required:

a) Cover loading dock areas or design drainage to minimize run-on and runoff of storm water.
b) Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

e. Parking Lots

1) Properly Design Parking Area
Parking lots contain pollutants such as heavy metals, oil and grease, and polycyclic aromatic hydrocarbons that are deposited on parking lot surfaces by motor-vehicles. These pollutants are directly transported to surface waters. To minimize the offsite transport of pollutants, the following design criteria are required:

a) Reduce impervious land coverage of parking areas.
b) Infiltrate or treat runoff.

2) Properly Design To Limit Oil Contamination and Perform Maintenance
Parking lots may accumulate oil, grease, and water insoluble hydrocarbons from vehicle drippings and engine system leaks:

a) Treat to remove oil and petroleum hydrocarbons at parking lots that are heavily used (e.g. fast food outlets, lots with 25 or more parking spaces, sports event parking lots, shopping malls, grocery stores, discount warehouse stores).
b) Ensure adequate operation and maintenance of treatment systems particularly sludge and oil removal, and system fouling and plugging prevention control.
4. Waiver
A Permittee may, through adoption of an ordinance, code, or other regulatory mechanism incorporating the treatment requirements of the Design Standards, provide for a waiver from the requirement if impracticability for a specific property can be established. A waiver of impracticability shall be granted only when all other Structural or Treatment Control BMPs have been considered and rejected as infeasible. Recognized situations of impracticability include, (i) extreme limitations of space for treatment on a redevelopment project, (ii) unfavorable or unstable soil conditions at a site to attempt infiltration, and (iii) risk of ground water contamination because a known unconfined aquifer lies beneath the land surface or an existing or potential underground source of drinking water is less than 10 feet from the soil surface. Any other justification for impracticability must be separately petitioned by the Permittee and submitted to the appropriate RWQCB for consideration. The RWQCB may consider approval of the waiver justification or may delegate the authority to approve a class of waiver justifications to the RWQCB EO. The supplementary waiver justification becomes recognized and effective only after approval by the RWQCB or the RWQCB EO. A waiver granted by a Permittee to any development or redevelopment project may be revoked by the RWQCB EO for cause and with proper notice upon petition.

5. Limitation on Use of Infiltration BMPs

Three factors significantly influence the potential for storm water to contaminate ground water. They are (i) pollutant mobility, (ii) pollutant abundance in storm water, (iii) and soluble fraction of pollutant. The risk of contamination of groundwater may be reduced by pretreatment of storm water. A discussion of limitations and guidance for infiltration practices is contained in, Potential Groundwater Contamination from Intentional and Non-Intentional Stormwater Infiltration, Report No. EPA/600/R-94/051, USEPA (1994).

In addition, the distance of the groundwater table from the infiltration BMP may also be a factor determining the risk of contamination. A water table distance separation of ten feet depth in California presumptively poses negligible risk for storm water not associated with industrial activity or high vehicular traffic.

Site specific conditions must be evaluated when determining the most appropriate BMP. Additionally, monitoring and maintenance must be provided to ensure groundwater is protected and the infiltration BMP is not rendered ineffective by overload. This is especially important for infiltration BMPs for areas of industrial activity or areas subject to high vehicular traffic [25,000 or greater average daily traffic (ADT) on main roadway or 15,000 or more ADT on any intersecting roadway]. In some cases pretreatment may be necessary.

6. Alternative Certification for Storm Water Treatment Mitigation

In lieu of conducting detailed BMP review to verify Structural or Treatment Control BMP adequacy, a Permittee may elect to accept a signed certification from a Civil Engineer or a Licensed Architect registered in the State of California, that the plan meets
the criteria established herein. The Permittee is encouraged to verify that certifying person(s) have been trained on BMP design for water quality, not more than two years prior to the signature date. Training conducted by an organization with storm water BMP design expertise (e.g., a University, American Society of Civil Engineers, American Society of Landscape Architects, American Public Works Association, or the California Water Environment Association) may be considered qualifying.
Appendix F – Proposed City Budget for SWMP
**Storm Water Management Plan Budget**  
*(specific to storm water quality management permit compliance)*

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
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<th>05-06</th>
<th>06-07</th>
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<td><strong>Total Costs per Fiscal Year</strong></td>
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<td><strong>$83,550</strong></td>
<td><strong>$76,002</strong></td>
<td><strong>$75,750</strong></td>
<td><strong>$81,625</strong></td>
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**SWMP**

**STORM WATER QUALITY CONTROL DATA ENTRY**

Entered By:  
Date:  
Source:  
- Call
- Inspection
- Review

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<tr>
<th>Call into:</th>
<th>Hotline</th>
<th></th>
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<tbody>
<tr>
<td>Department</td>
<td>(Dept title)</td>
<td>Received by: (person)</td>
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</table>

Information:

- Name of caller:  
- Address:  
- Phone:  

Follow up date:     
Issue corrected date:     
Violation issued:     

Type of Issue:

- Illegal Dumping – Trash
- Illicit Discharge - Residential
- Illicit Discharge - Commercial
- Household Hazardous Waste
- Water Conservation (Runoff)

General Description:

Identify, per SWMP, the MCM that best describes this topic:  

<table>
<thead>
<tr>
<th>Public Participation</th>
<th>Illicit Discharge</th>
<th>Construction</th>
<th>Pollution Prevention</th>
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<td>Mapping GIS</td>
<td>Planning &amp; Site</td>
<td>Street Sweeping</td>
</tr>
<tr>
<td>Flyers</td>
<td>Restaurants</td>
<td>Permit</td>
<td>Basins</td>
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<tr>
<td>Signage</td>
<td>Auto Repair</td>
<td>Developer</td>
<td>Sewer System</td>
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<td>Stenciling</td>
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<tr>
<td>Bark Parks</td>
<td>Hotline call</td>
<td>Homeowner</td>
<td>Ditches, Creeks or Rivers</td>
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<tr>
<td>Household Haz Mat</td>
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<tr>
<td>Water Conservation</td>
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<tr>
<td>Illegal Dumping – Trash</td>
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