

# City of Porterville



## Storm Water Management Program

February, 2006

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**APENDICES**

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- B – CITY OF PORTERVILLE EXISTING PROGRAM INFORMATION
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## 1.0 INTRODUCTION

This document is the City of Porterville's Storm Water Management Program (SWMP). It is intended to outline and direct the City's storm water related priorities and activities for the years 2003 through June 2008. It is being submitted as part of the City's Notice of Intent to comply with the terms of the General Permit for storm water discharges from small municipal separate storm sewer systems (MS4s). This SWMP will be revised as needed throughout the permit term.

The City of Porterville encompasses approximately 14.8 square miles in California's San Joaquin Valley, and has a population of 43,150 as of January 2004. The program responsibilities are contiguous with the city limits as of January 2004. The City was developed from agricultural land on a variety of well drained clay and loam soils. Rainfall for the area averages approximately eleven and one half inches per year. Ninety-five percent (95%) of this rainfall occurs October through April, though rainfall can occur year-round. In addition, this portion of the San Joaquin Valley is subject to dense fog, commonly called "tule fog," from mid-November through February. The incidence and duration of this condition in Porterville are somewhat less than in the remainder of the Valley portion of Tulare County due to air currents created by the migration of cold air from the nearby foothills to the Valley floor.

The City municipal storm drainage system consists of 2 natural channels, 6 Irrigation Ditches, 8 Major Storage Reservoirs, and 14 detention/retention basins with approximately 550 acre feet of storage within the City limits. This number does not include the smaller retention/detention basins constructed specifically to a subdivision or industrial site. Historically, runoff was disposed of by directing it to the natural creeks, rivers and irrigation ditches that flow through the city including Tule River, Porter Slough, managed by Porterville Irrigation District, the remainder managed by the Lower Tule River Irrigation District, the Pioneer, Hubbs-Minor, Poplar, Campbell-Moreland and Vandalia ditches, and Lower Tule River Irrigation District & Poplar Irrigation Ditches. To mitigate the increased runoff due to urbanization, the City plans to concentrate on discharging storm water into storage reservoirs for detention, retention and recharge.

The City of Porterville's storm drainage management plan includes mapping, land use, and system inventory study of the area to the 2010 Planning Area limit (45 square miles). The plan focuses on avoiding additional storm waters into Hubbs-Minor, Poplar, Campbell-Moreland, and Vandalia Ditches, and controlled draining of detention reservoirs to provide adequate storage are objectives for the existing storm drain system. Many of these retention basins incorporate water quality features for environmental restoration and preservation. As future development takes place there are no new points where storm waters will be introduced to the water courses along Porter Slough. Also plans to allocate future storage reservoir sites are a direction for growth.

### **1.1 Regulatory Background**

The 1972 amendments to the federal Clean Water Act (CWA) prohibited the discharge of pollutants from point sources to waters of the United States unless a permit issued under the NPDES permitting program authorized the discharge. The 1987 amendments to the CWA added Section 402(p), which defined certain storm water discharges as point sources. The amendments directed the U.S. Environmental Protection Agency (EPA) to adopt regulations establishing permitting requirements for municipal and industrial storm water discharges. The amendments also required storm water discharges from municipal separate storm sewer systems (known as MS4 systems) to obtain coverage under an NPDES permit if that system served a population greater than 100,000. This became known as Phase I of the storm water program.

In December 1999, the EPA promulgated the Storm Water Phase II Final Rule, which was intended to further protect the Nation's water resources from polluted storm water runoff. The Phase II program expands the Phase I program by requiring, through the use of NPDES permits, operators of small MS4s and operators of small construction sites to implement programs and practices to control polluted storm water runoff. A small MS4 is one that serves fewer than 100,000 residents.

In California, the federal NPDES permitting program is implemented by the State Water Resources Control Board (State Board) and the Regional Water Quality Control Boards (Regional Boards) through the Porter-Cologne Act, a part of the California Water Code.

## 2.0 PROGRAM REQUIREMENTS

As a federally designated Phase II MS4, the City of Porterville is required to obtain coverage under an NPDES storm water permit. As part of the permit application to be submitted to the Regional Board, the City must develop a storm water management program (SWMP) that addresses six minimum control measures (MCMs). These minimum control measures are:

- Public education and outreach,
- Public involvement and participation,
- Illicit discharge detection and elimination,
- Construction site storm water runoff control,
- Post-construction storm water management, and
- Pollution prevention and good housekeeping.

Each of these MCMs, or program elements, are to be implemented by applying one or more Best Management Practice (BMP) designed to protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy the requirements of the Clean Water Act.

SWMP will involve a range of city departments and contacts for each department are listed below:

City Manager	John Longley	559-782-7466
Community Development Dept.	Brad Dunlap	559-782-7460
Public Works	Baldo Rodriguez	559-782-7460
Field Services	Wyndi Ferguson	559-782-7593 **
Finance Dept.	Susan Slayton	559-782-7566
Parks & Services	Services Director	559-782-7536
Fire & Police Dept.	(24hr) Dispatch	559-782-7400
Code Enforcement Officer		559-782-7460**

\*\* Storm water calls are anticipated to funnel through these offices.

The following sections summarize the regulatory requirements of each of the six MCMs and outline the programs and BMPs that the City of Porterville will use to address each of these program elements. In addition, the person within the City organization responsible for overseeing the implementation of each BMP is identified.

## **2.1 Current Efforts**

The City of Porterville currently utilizes several established programs to mitigate storm water pollution. Many of these programs will be continued while others will be added to improve the community. Many sample flyers of existing programs are provided in Appendices B.

As part of the Storm Water Management Program (SWMP), the City will implement, monitor and report new and existing programs, as required.

### **2.1.1 Wasting Water Ordinance – Water Conservation**

Lawn and garden activities can result in contamination of storm water through pesticide, soil, and fertilizer runoff. The City of Porterville enacted a water conservation plan to promote water conservation and curtail runoff from residential properties, thereby preventing these contaminants from entering the storm water system. The ordinance is primarily focused on during summer months. Water conservation measures are implemented during that time frame also. There are restrictions on irrigation times and methods.

While the primary purpose of this ordinance is water conservation, it has the secondary effect of improving storm water quality by minimizing runoff. This program is widely publicized throughout the summer months through various media campaigns including TV, radio, bill inserts, and classroom presentations. The request of such use as positive shutoff valve on all handheld water hoses used for the washing of vehicles, buildings, patios, etc. are addressed.

### **2.1.2 Charitable Car Washing – Ordinance 1669**

An ordinance is in place requiring permits for such functions. Restrictions are placed in regards to time of day, length of function and areas of the city they can take place. The waters must drain to the City Sewer System. Types of detergents (biodegradable) etc. are specified. The use of positive shutoff valve on all handheld water hoses used for the washing of vehicles. Revocation of permits and fines are possible consequences if requirements are not met.

### **2.1.3 E-Waste Program**

This program gives the community, annually, a chance to discard Electronic items such as, TV's, computers, and appliances. Addressing these "hard to discard" items individually, gives the area an outlet where dumping was the primary alternative. These discarded items can then be recycled and possibly utilized in a second hand nature that was not available before. Though not directly affecting storm water issues it helps to eliminate dumping, and inputs the thought of recycling into the community.

### **2.1.4 Household Hazardous Waste**

Many products found in homes contain chemical ingredients that are potentially harmful to people and to the environment. Unless properly disposed of, the chemicals in these products have the potential to contaminate surface and groundwater.

In order to facilitate proper disposal, the City of Porterville, in partnership with the County of Tulare, implemented the Household Hazardous Waste Program. The program is widely publicized throughout the community by radio and print ads and through handouts at various public events. As part of the program, used oil collection pans are offered to the general public without charge.

Cleaning products, motor oil, antifreeze, degreaser, paint, wood preservatives, batteries, and other toxic or hazardous products can be disposed of at the hazardous waste collection site free of charge.

### **2.1.5 Annual Spring Clean Up**

The Spring Clean Up allows easy disposal of unwanted items and excessive yard waste. The program discourages illegal dumping of these type items, yet provides a way to dispose of them without charge to the homeowners. This program was started in 2004 with good success.

### **2.1.6 Red, White and Blue – Recycling Program**

Porterville was a large scale recycling program. A permanent drive through drop off recycling center is centrally located at the City Corporation Yard. The city also has four large Red, White, and Blue receptacles accepting recyclables on a continuous basis. These receptacles are located in highly visible, and easily accessible areas of town. This program has been in place for 12 years and continues to be accepted and well utilized.

A residential curbside recycling program is expected to begin sometime in 2006.

### **2.1.7 Trash for Cash**

This program is in place through the local schools. Students are encouraged to bring in recyclable goods in exchange for a cash reward program. The monies generated are put back into the schools for supplies and events.

### **2.1.8 Street Sweeping**

Street sweeping is practiced in the City of Porterville to remove sediment buildup and large debris from curb gutters. This practice has a significant impact on storm water quality. The City will continue to use PM10 compliant street sweepers to implement the schedules based on priority targeted areas. Current sweeping schedule is downtown area once a week, and the remainder of the City streets every three weeks. An additional sweeper runs in the fall focusing on leaves through out the city. Recording tonnage or trips required, will illustrate the public involvement and development of the program.

### **2.1.9 Detention Basins**

The Storm Drain Master Plan incorporates the use of localized storm drain basins in order to minimize flooding and allow particles and pollutants to settle. The larger city basins are located behind the City Corporation Yard near Henderson and Prospect. Whenever feasible, these storm water retention basins are used. In addition, some industrial sites have individual storm drain basins to contain any localized spills and prevent contaminants from reaching receiving waters. This practice will continue to be utilized as the City develops.

### **2.1.10 Sewer System Maintenance**

A schedule of regular maintenance of the sanitary sewer collection system is an effective way to avoid more expensive repairs due to system failure. Preventative maintenance through scheduled inspections and routine cleaning of the sewer system can identify and help eliminate many of the causes of Sanitary Sewer Overflows (SSOs). The City sanitary sewer collection system is TV inspected as needed and cleaned on an ongoing basis to help eliminate SSOs.

### **2.1.11 Storm System Maintenance**

Routine cleaning of the storm drain system reduces the amount of pollutants, trash, and debris both in the drain system and in receiving waters. Clogged drains and inlets can cause the drains to overflow, leading to increased erosion. Benefits of cleaning include increased dissolved oxygen, reduced levels of bacteria, and support of stream habitats. As part of its established maintenance program, the City regularly cleans its storm catch basins and cross drains. Each storm pump wet well is cleaned yearly to remove accumulated pollutants. The City also works closely with the Irrigation Districts to eliminate debris from curbs and ditches to prevent backup or overflow during peak and first flush time frames.

### **2.1.12 Septic Systems**

The City of Porterville has a resolution in place that prohibits the installation of new private sewage disposal systems within the city limits. The resolution also provides specific guidelines describing the conditions and criteria by which a septic tank or a leach line can be repaired.

## **3.0 PUBLIC EDUCATION AND OUTREACH**

### ***Regulatory Requirements:***

*You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.*

Whether dealing with the general public, local industries, developers, or City officials and departments, the goal of the Public Education and Outreach element is to generate awareness of storm water pollution prevention by educating people about the storm drain system and its relationship to the health of local waterways. It is through education that behavior patterns are changed and active participation in water pollution prevention is established.

Storm water education starts with a well-thought-out and well-developed outreach plan. The outreach plan must identify goals and objectives, classify the target audience, identify the message to be conveyed, and explain how the message will be distributed to the audience. With the communities population it will be important for Porterville to address most efforts in both English and Spanish.

Examples might include a campaign to educate citizens of the importance of proper septic system maintenance, the proper use and disposal of landscape and garden chemicals, the proper disposal of used motor oil and household hazardous wastes, or the need to protect and restore riparian vegetation. The public education program can be

tailored to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children.

Outreach and education can be implemented in several ways. Common distribution mechanisms include direct mail, door-to-door distribution, telephone, targeted businesses, presentations, handouts at events, schools, service clubs, media outlets, and messages posted in public places. However, educational materials (posters, flyers, magnets, etc.) will not help prevent storm water pollution if the target audience does not receive and read them. Targeted groups and distribution methods will be evaluated annually throughout the permit term.

### **3.1 *Interagency Agreement***

The public education campaign is expected to be the cornerstone of all SWMPs in the surrounding region. Therefore, to increase the effectiveness of all media campaigns and to avoid duplication of effort, it is vital that the MS4s in the vicinity act in a coordinated manner.

**3.1.1** The City will coordinate media and outreach efforts with other local agencies to enhance the effectiveness of the storm water program. The City has entered into an agreement or MOU with the Tulare County Association of Governments and other local cities regarding this coordinated effort.

The educational outreach effort will continue being coordinated through the Tulare County Association of Governments (TCAG). Meetings to this end are already underway. TCAG, through the cities are currently:

**3.1.2** Distributing bilingual Storm Water Pollution Prevention flyers. (See Appendix “C” “Protect your Water”)

**3.1.3** Working with local retailers for counter displays for general storm water flyers.

### **3.2 *Illegal Dumping Control***

One focus of the public education campaign will be the illegal dumping of household and commercial waste. This waste has a variety of impacts on water quality. Hazardous chemicals generated from household, commercial, and industrial sources can contaminate ground and surface water supplies, affecting drinking water and public health as well as aquatic habitat. Increased runoff due to blockage of streams, culverts and drainage basins can result in flooding and channel erosion. Open burning associated with some illegal sites can cause fires that threaten property, create severe erosion and cause sediment loading in streams. Economically, property values decrease as a result of illegal dumping and affect the local tax base and the ability to maintain pollution prevention programs.

The illegal dumping of litter occurs primarily to avoid disposal fees or the time and effort required for proper disposal at landfills or recycling facilities. This dumping happens at abandoned industrial, commercial, or residential buildings, vacant lots, and poorly lit areas such as rural roads and railway lines.

Illegal dumping control as a management practice involves using public education to familiarize residents and businesses with the effects of illegal dumping on storm water quality. By locating and correcting illegal dumping practices through education and enforcement measures, the risks to public safety and water quality associated with illegal disposal actions can be prevented.

Trash and floating debris in waterways has been a significant pollutant for Porterville. Besides contributing to visual pollution and detracting from the aesthetic qualities of the landscape, this debris increases sediment buildup in streams and can reduce dissolved oxygen levels resulting in the disruption of aquatic life cycles. In addition, it threatens property by restricting the water flow in flood channels.

- 3.2.1** As part of its public awareness campaign, the City will educate residents, particularly those adjacent to city waterways and basins, of the importance of proper trash disposal.
- 3.2.2** Signage will be placed in areas easily accessible by the public that are frequently used as illegal dumpsites.
- 3.2.3** Storm water quality information will be incorporated in school presentations, community events, and outreach efforts.

### **3.3 Commercial Activities/Business Outreach**

Industries and businesses can be a very influential component of the watershed. Many commercial activities have the potential to contribute significantly to storm water pollution; therefore, it is important to address commercial activities. In most cases, businesses need to be encouraged to change their behavior. The City will establish a business outreach program that will help businesses reduce the amount of pollutants entering the drainage system. A prioritized list of businesses will be prepared, which may include auto body shops, restaurants, strip malls with fast food, and pool supply and maintenance companies. Business-specific materials will be prepared and distributed accordingly.

- 3.3.1** To further reduce grease discharge into the sanitary sewer system, informational material will be provided to restaurant operators to better explain the importance of proper grease trap maintenance.
- 3.3.2** Pamphlets, brochures, and flyers will be distributed to outline how to properly dispose of used motor oil and other automotive fluids.
- 3.3.3** To target home mechanics specifically, materials will be placed in automotive supply outlets or other easily accessible locations.

### **3.4 Element Evaluation, Public Education and Outreach**

There are many methods of evaluating the effectiveness of the Public Education and Outreach element. The number of materials distributed, number of people reached, or the frequency of the message, for example, may be used to measure media campaigns. A reduction in sanitary sewer overflows may be an indication of the success of commercial outreach efforts.

The following table summarizes the BMPs the City of Porterville will use to conduct its Public Education and Outreach program. Also included are the goals, milestones, and assessments for each BMP, as well as the person (or position) responsible for implementation. Assessment information will be used to plan and schedule the resources necessary to conduct the program and to gauge the program's effectiveness.

### 3.5 Program Summary, Public Education and Outreach

Task #	BMP Description	Timeline	Goal	Assessment	Responsible
3.1.1	Form a partnership and coordinate media efforts through local agencies (TCAG)	Ongoing	Adopt an MOU or adopt other agreement	Continued meetings and local agency combined efforts	Public Works Director
3.1.2	Distributing bilingual Storm Water Pollution Prevention flyers. (See Appendix “B”) “Protect your Water”	Ongoing	Track sites receiving flyers. Each year new group of residence targeted to receive them until all residence get notified.	Based on TCAG printing, City will distribute general storm water flyers to 500 residents each year	Field Services Water Systems Specialist
3.1.3	Working with local retailers for counter displays for general storm water flyers.	June-06	Increase in quantities of fliers picked up and retailers involved	Reduction of automotive type pollutants in storm drains inspections.	Field Services Water Systems Specialist
3.2.1	Distribute material on proper trash disposal	June-06	300 door hangers each year.	Reduced trash in waterways & basins	Field Services Refuse Dept.
3.2.2	Signage placed in illegal dumping areas	July-06	5 areas with 2 new sites each year	50% reduction in trash disposal in selected areas	Field Services Refuse Dept.

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
3.2.3	Citizen Outreach: Presentations and community events	July 06	2 presentations or events per year	# of events or presentations w/ # of attendees & agendas on record for each event	Field Services Water Systems Specialist
3.3.1	Restaurant guide on grease (Restaurants; approximately 65 listed in the Yellow Pages.com, Oct. 2005)	December-06	± 65 Restaurants 50% (30) of restaurants by yr 2 with the diff. in yr 3	SSO decrease w/ inspections conducted twice a yr.	Field Services Water Systems Specialist
3.3.2	Business Outreach: Auto repair facility guide on fluid disposal (Automotive Repair; approx. 42 listed in the Yellow Pages.com , Oct. 2005)	December-06	± 10 Repair services (25%) first year, different 25% each year following	Number of pamphlets distributed	Field Services Water Systems Specialist
3.3.3	Display material in automotive parts & supply stores (Automotive Supply; approx. 19 listed in the Yellow Pages.com, Oct. 2005)	December-06	± 5 Supply outlets (25%) first year, different 25% each year following	Number of pamphlets distributed	Field Services Water Systems Specialist

## **4.0 PUBLIC INVOLVEMENT AND PARTICIPATION**

### ***Regulatory Requirements:***

*You must, at a minimum, comply with state, tribal, and local public notice requirements when implementing a public involvement/participation program.*

It is desirable to involve the public in the development, implementation and review of the Storm Water Management Program. An active and involved community is crucial to the success of a Storm Water Management Program because it allows for:

- Broader public support. Citizens who participate in the development and decision-making process feel partially responsible for the program and are less likely to raise legal challenges and more likely to take an active role in program implementation,
- Shorter implementation schedules due to fewer obstacles in the form of public and legal challenges and increased sources in the form of citizen volunteers,
- A broader base of expertise and economic benefits since the community can be a valuable, and free, intellectual resource;
- A conduit to other programs, as citizens involved in the storm water program process provides important cross-connections and relationships with other community and government programs.

### **4.1 Storm Drain Stenciling**

Storm drain stenciling involves labeling storm drain inlets with placards or painted messages warning citizens not to dump pollutants into the drains. The stenciled messages are generally a simple phrase to remind passersby that the storm drains connect to local water bodies and that dumping pollutes those waters. Porterville's storm drains are about 90% stenciled with the message "Dump No Waste Protect Our Groundwater".

- 4.1.1** The City will work with public groups to refresh the existing stenciling, expanding coverage into new areas in an effort to reach the maximum number of citizens.
- 4.1.2** The City will evaluate the means by which the stenciling will occur; i.e. City staff or volunteer groups in cooperation with staff.
- 4.1.3** The City will address stenciling of storm drains inlets in new developments, as a condition on the subdivision improvement plans. The developer should stencil drain inlets as part of the project, which would serve as an education tool for the developers and their staff.

## **4.2 Hotline**

Regulators and authorities cannot monitor all water bodies at once, it is necessary to rely on the public to keep them informed of water polluters. Community hotlines provide a means for concerned citizens and agencies to contact the appropriate authority when they see water quality issues. A typical call might report a leaking automobile, concrete wash-out dumped on the street, paint in a creek, or debris in a drainage system or waterway.

The Field Services Division will administer any incoming issues and all calls will be logged into a database. Additional assistance may come from Public Works Department, the existing Emergency Service (24hr dispatch) or the Code Enforcement Officer.

The general response to a hotline call would be a site visit. If a problem exists and the responsible party can be identified, they are informed of the problem, instructed as to how to resolve the immediate issue, and given alternative future disposal options. If the issue is not resolved by the responsible party (or the party cannot be identified), action is taken by the proper authority to remediate the situation and prevent future violations.

A hotline can serve as a link between the citizens and the municipality's government. It can be an avenue for citizens to feel more involved in their community. It also can be an inexpensive way to catch illegal polluters or to stop accidental spills that might otherwise go unnoticed.

**4.2.1** A water quality hotline & database will be established. The details for maintaining and publicizing the hotline will be developed at a future date. The details for the responsibility, data recording, and enforcement will be identified through the ordinance. (City Standard database)

### **4.3 *Pet Waste and City Parks***

The City of Porterville does not have parks equipped with dog waste disposal. The City can start by posting signage suggesting owners to pick up after their dogs in existing parks without designating them as Bark Parks. This type of environment encourages positive peer pressure and will provide a great venue allowing the City to target dog owners. These areas are also good public outreach locations, housing signage explaining the effect of Dog waste on Storm water.

**4.3.1** The City will provide visual inspections of the parks as a means to evaluate and record the effectiveness of the program.

### **4.4 *Participation Booth at County Fair***

The booth at the annual county fair will be coordinated with TCAG. The booth was first started in 2004. The purpose of the booth will be to educate the public regarding the local storm drain systems and the impacts of pollutants. The community's knowledge of storm water issues and the effectiveness of public education programs will be evaluated using a questionnaire.

**4.4.1** Provide annually, funding in a participation booth at the county fair with questionnaires used to evaluate and record the public's knowledge of storm water issues. Typical average fair attendance is approximately 80,000.

### **4.5 *Participation Booth at City Fair and local events***

Providing a booth at the annual City Fair and other civic events will reach a more concentrated group in the community and can address specific issues. The booth will

educate the public regarding the local storm drain systems and the impacts of pollutants. The community's knowledge of storm water issues and the effectiveness of public education programs will be evaluated through the outcome of the overall storm water reports.

**4.5.1** Provide annually, a participation booth at the city fair with the quantity of handouts distributed used to evaluate and record the amount of public reached regarding storm water issues. Typical average fair attendance is approximately 56,000.

#### **4.6 *Element Evaluation, Public Involvement and Participation***

There are many methods of evaluating the effectiveness of the Public Involvement and Participation element. Participation in community events such as the storm drain stenciling program, household hazardous waste collection program, and the Spring Clean up could all be used to measure the effectiveness of the program.

The following table summarizes the BMPs the City of Porterville will use to conduct the Public Involvement and Participation element of the program. Also included are the goals, milestone dates and assessment methods for each BMP as well as the person (or position) responsible for implementation. Assessment information will be used to plan and schedule the resources necessary to conduct the Program and to gauge the program's effectiveness.

#### 4.7 Program Summary, Public Involvement and Participation

Task #	BMP Description	Timeline	Goal	Assessment	Responsible
4.1.1	Storm drain Stencils or Markers	December-06	100 storm drains per year	Number of storm drains stenciled and number of groups participating	Field Services Water Systems Specialist
4.1.2	New developments, the developer will stencil drain inlets as part of the project requirement in the Permit Approval process.	March-06	100% new developments in compliance	Report direct correlation between new developments and new storm drains stenciled.	Public Works Engineering
4.2.1	Establish water quality hotline Use existing Field Services Dept. & Code Enforcement Officer	June - 06	Establish Hotline	Hotline established w/ a database provided to log calls	Field Services Water Systems Specialist
4.3.1	Post signage regarding effects of pet waste on storm water in City parks.	March - 06	Post in two existing parks within the community.	Record appraisal of monthly visual inspections.	Parks Dept.
4.4.1	Annual participation in booth @ County Fair (w/ storm water questionnaire – started in 2004)	December-05	200 questionnaires filled out each year	Number of questionnaires filled out each year and feedback regarding the public knowledge of storm water issues	Field Services Water Systems Specialist

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
4.5.1	Annual participation in booth @ City Fair and other similar events. (w/ storm water handouts – started in 2004)	Ongoing	200 handouts each year	Number of handouts distributed each year and feedback regarding the public knowledge of storm water issues	Field Services Water Systems Specialist

## 5.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

### **Regulatory Requirements:**

*You must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at Sec. 122.26(b)(2)) into your small MS4.*

*(ii) You must:*

- Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;*
- To the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions;*
- Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system; and*
- Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.*

*You need to address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and*

*wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).*

An illicit discharge is defined as any discharge to the municipal separate storm sewer system that is not composed entirely of storm water, except for discharges allowed under an NPDES permit or waters used for firefighting operations. These non-storm water discharges can occur due to illegal connections to the storm drain system from both residential and commercial establishments. As a result of these illicit connections, contaminated wastewater enters into storm drains without receiving treatment from a wastewater treatment plant.

This illicit discharge detection and elimination program is designed to prevent contamination of ground and surface water by identifying and eliminating these illegal non-storm water discharges.

EPA recommends that the plan to detect and address illicit discharges include the following four components:

- Procedures for locating priority areas likely to have illicit discharges;
- Procedures for tracing the source of an illicit discharge;
- Procedures for removing the source of the discharge; and
- Procedures for program evaluation and assessment.

Illicit discharge education actions may include storm drain stenciling, programs to promote, publicize, and facilitate public reporting of illicit connections or discharges, and distribution of outreach materials.

## **5.1 Storm Water Ordinance**

An essential element of any SWMP is an ordinance granting the authority to inspect properties suspected of releasing contaminated discharges into storm drain systems.

Guaranteed “right of entry” to private property is critical to allowing inspectors to identify and take corrective actions on individual sources of illicit discharges. Another important factor is the establishment of enforcement actions for those properties found to be in noncompliance or that refuse to allow access to their facilities. Among the enforcement actions that have been used in ordinances are cease and desist orders, suspension of water or sewer service, and criminal and civil penalties including charging the owner of the property for the cost of abatement. Methods for appeal are often included in these enforcement measures that provide owners with avenues for compliance with the ordinance.

The City does not currently have an ordinance to give it the authority to regulate storm water discharges or enforce corrective actions.

**5.1.1** The City will enact an ordinance to give it the legal authority to fully implement this SWMP including provisions for a tiered level of enforcement of this program.

The City has a Code Enforcement Officer that will aid in the storm water enforcements.

## **5.2 Storm Water Master Plan**

Maintaining an inventory of the basic storm water system structures and outfalls is a pivotal component of any storm water management program. The regular inspection and maintenance of these items ensures that the structures in the inventory are clean, serviceable and operating properly. Through inspection, illicit discharges can be detected, and the source eliminated. Inspection forms and databases will aid in the identifying, recording and updating of GIS maps, to better monitor existing and new discharges.

The City currently uses GIS to map its storm water collection system, inlets, and pump stations. This GIS data is updated on a regular basis as new developments are completed. However, not all of the outfall locations are currently identified. The addition of regulated inspections will help identify additional outfall locations. The City’s Industrial area has been organized to have all large facilities discharging to their own privately

owned detention basins. This forethought minimizes the effect the Industrial area has on the overall City storm water system.

**5.2.1** A survey of the storm drain system will be made to identify and map outfalls. This information will be incorporated into the GIS database, and updated annually as a minimum.

**5.2.2** An annual inspection of identified outfalls will be conducted during extended dry periods to identify non-storm water discharges and their source. (City standard database)

If a discharge results from an illicit connection to the system, the City will take appropriate actions to identify and eliminate the connection. After the illicit connection is eliminated, the City will re-inspect the outfall to ensure that there are no further illicit discharges from the outfall.

### **5.3 Non Storm Water Discharges**

The City can utilize the Field Services Division of Public Works for the general public to report complaints. The existing Water & Sewer Emergency Service (24 hr dispatch) and the Code Enforcement Officer can provide assistance and back up. If a call is received regarding the storm sewer system, City staff will investigate. A database will be used to log, assess and evaluate calls.

**5.3.1** Public Reporting: Publicize the Fields Services Division phone number for violations, complaints, tracking a designated database for annual reporting and evaluations. (City standard database)

**5.3.2** Continuing to publicize and fund the existing Household Hazardous Waste program allows the drop off of oil, paints, batteries, some appliances and other household hazardous wastes.

## **5.4 Wasting Water Guidelines**

The existing guidelines will continue to be enforced or may be revised to incorporate more stringent enforcement as required to reduce residential and commercial non-storm water runoff. This program is somewhat self monitoring as the 98 % of Porterville's water is metered.

### **5.4.1 Wasting Water Guidelines (ref. 2.1.1)**

The existing guidelines will continue to be enforced with a specific goal of reducing commercial and residential irrigation runoff. Involve educating public with billing inserts.

## **5.5 Public Employee Training**

The City will train inspectors and develop a program that will detect non-storm water discharges. This program may include the following:

- Dry weather screening
- Response to public complaints

### **5.5.1 Train employees involved in the program.**

## **5.6 Illicit Discharge Detection and Elimination**

The effectiveness of the Illicit Discharge and Elimination element is dependent on reductions in the number of discharge incidents and the quantity of pollutants discharged to the drainage system as well as continued control of illicit connections. Efforts to measure effectiveness through quantification methods (e.g., “number of discharge incidents” or “pounds of pollutants”) are not valid because they actually measure the effectiveness of identification and reporting programs that are continuing to develop and improve.

Other quantification efforts such as the gallons of waste oil collected might indicate a quantity of pollutants that was potentially kept out of the storm drains, but the annual increase or decrease might also be attributed to better record keeping or the availability of other collection or disposal alternatives. Also measured with this data is new and continuing public education.

Assessments will include feedback from City staff directly responsible for the day-to-day operation of the storm system, storm water monitoring results, and public comments.

**5.6.1** Review Field Services Division data, Public Inspection, Municipal Reports and Building Department (Planning Review) input.

The City has identified several methods of detecting, reporting and preventing illicit discharges. The database provides accountability and a system to track data to measure the effects of the program and display the details related to the elimination of discharge.

The following table summarizes the BMPs the City of Porterville will use to conduct the Illicit Discharge and Detection element of the program. Also included are the goals, milestone dates and assessment methods for each BMP, as well as the person (or position) responsible for implementation. Assessment information will be used to plan and schedule the resources necessary to conduct the program and to gauge the program's effectiveness.

**5.7 Program Summary, Illicit Discharge Detection and Elimination**

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
5.1.1	Storm water Ordinance	December-06	Ordinance adopted	A City Ordinance will give the city the “legal” right to fully implement the SWMP. The City will have the authority to: “right of entry”, “Cease and Desist orders”, and “Criminal and Civil Penalties”.	Public Works Director
5.2.1	Storm Water Master Plan (identify and map outfalls) G.I.S.	December-06	100% mapped Updated annually (min.)	Add locations of all outfalls & names of receiving ditches & creeks to current mapping.	Comm. Development Admin. Analyst
5.2.2	Inspection of outfalls Dry season inspection	-Procedure and forms by September 06 -Annually	Establish standard inspection procedures & inspect discharges annually. Review of data gathered for enforcement and/or improvements.	Number the illegal discharges eliminated each year based upon dry season inspections conducted each fall. Record enforcement or maintenance activities in database.	Field Services Water Utilities Supt.

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
5.3.1	Public Reporting: Field Services Division for violations & complaints	June - 06	Publicize existing field services phone number and database	Utilize Field Services Division and database provided to log, monitor, and evaluate calls. Post violations and resolutions, monthly in local paper.	Field Services Water Systems Specialist
5.3.2	Publicize and Fund Household Hazardous Waste Drop off Program (Tulare County Program)	Ongoing	20% increase in volume – Continue to support program and track volume. Publicize with print, radio and public events.	Volume and traffic at the disposal area. Increase in participants based upon record keeping and annual reporting.	Field Services Recycling Coordinator
5.4.1	Wasting Water Guidelines (Reduce residential runoff of pesticides, fertilizers, wash water, etc.)	Ongoing	Continue to enforce program and track violations. Educate public with billing inserts.	Reduction in number of violations per year of residential runoff in waterways	Field Services Water Systems Specialist
5.5.1	Train all public employees involved in program	June - 06	Adopt a program per public employee input and inspections	-Two meetings per year -Reduction in illicit discharges	Field Services Water Utilities Supt.

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
5.6.1	Illicit Discharge; Assessment & Evaluations Tracking System	June - 06 quarterly reviews	Review 80% (min.) of data collected quarterly. Detect patterns and areas of improvement and awareness.	Review of hotline data, public inspection, municipal reports and Building Department input.	Field Services Water Utilities Supt or Industrial Water Inspector

## 6.0 CONSTRUCTION SITE RUNOFF CONTROLS

### **Regulatory Requirements:**

*You must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority waives requirements for storm water discharges associated with small construction activity in accordance with Sec. 122.26(b)(15)(i), you are not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites.*

*Your program must include the development and implementation of, at a minimum:*

- *An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;*
- *Requirements for construction site operators to implement appropriate erosion and sediment control (ESC) best management practices;*
- *Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;*
- *Procedures for site plan review which incorporate consideration of potential water quality impacts;*

- *Procedures for receipt and consideration of information submitted by the public, and*
- *Procedures for site inspection and enforcement of control measures.*

Sediment runoff rates from construction sites are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. Polluted storm water runoff from construction sites often flows to MS4s and is ultimately discharged into local rivers and streams. Sediment is usually the main pollutant of concern. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades, resulting in physical, chemical, and biological harm to our nation's waters.

Porterville currently has measures in place to prevent storm water pollution from construction activities. The City's current building guidelines state:

*"...The contractor shall keep the work site clean and free of rubbish and debris. The contractor shall also abate dust nuisance by cleaning, sweeping, and sprinkling with water, or other means as necessary. The use of water resulting in mud on public streets will not be permitted as a substitute for sweeping or other method.*

*"...Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned.*

*"...Failure of the Contractor to comply with engineer cleanup order may result in an order to suspend work until the condition is corrected."*

## **6.1 Storm Water Ordinance**

The City has Code Enforcement Officer. This position will greatly add to the implementation and enforcement of the Storm water plan. The City will develop a

thorough storm water ordinance to meet the Phase II compliance requirements for construction runoff.

The ordinance will address erosion control, sediment and non-sediment construction wastes, and non-storm water discharges, along with authoritative enforcement information. The City will review the CASQA BMP handbooks and adopt BMP standards from this source or other equivalent. The approved construction standards will be provided to all developers, and addressed in the Project Review process.

**6.1.1** The City will adopt a storm water ordinance with a tiered level of enforcement, which will be used as a mechanism to deter violations. This may include requirements to implement improved BMPs, bonding requirements, fines, work stoppages and/or permit denials.

**6.1.2** The City will establish a tracking system for inspections, violations, and site prioritization.

## **6.2 Site Inspections**

Construction sites are considered for all forms of storm water pollution and preventative measures. BMPs are implemented per site with considerations to before, during and after development. Due to the varying topography and soil types in Porterville there are erosion or storm water runoff concerns in some areas. Sediment leaving the site as mud and sediment attached to motorized vehicles is the most common occurrence. When these issues are encountered, they are resolved by implementing Best Management Practices. Many contractors have used stabilized gravel beds placed at entrance and exit points, for example. If dirt is tracked from the job site, the contractor is required to sweep the area where the dirt has been tracked.

Construction site inspections are routinely performed by authorized representatives of the City of Porterville. Such inspections are performed randomly and concurrently with other standard building inspections and are designed to ensure that necessary BMPs are being properly implemented and maintained and to ensure that there is no polluted runoff leaving the site and entering the storm sewer system.

- 6.2.1** The City will develop inspection procedures, inspection checklists, and instruct staff to use it in evaluating construction projects.
- 6.2.2** The City will provide training for all building inspectors, construction inspectors and plan checkers covering BMP measures, the City SWMP, and enforcement. Continue training w/ requirements for refreshers every other year.
- 6.2.3** The City will establish/identify priority sites, based on storm drain design, topography of area, past non-compliance, proximity to surface waters, etc., for inspections and communicate that to the staff.

### **6.3 *Project Review Committee***

The City currently reviews all new development and redevelopment projects greater than one acre. Through the review process, city engineers, planners and building inspectors review storm water quality and controls with the developer during the preliminary design phases of the projects.

- 6.3.1** Continue to use the project review committee process as a conduit to communicate and enforce the storm water ordinance. Organize ongoing refresher programs for continuous learning.
- 6.3.2** Use the project review committee process as an opportunity to educate developers regarding the NPDES Phase II requirements. The City will advise developers of any approved construction BMP standards or new criteria. Organize ongoing refresher programs for continuous learning.
- 6.3.3** Require Notice Of Intent (NOI) submittal and Water Pollution Control Drawing (WPCD) verification through Project Review. The number of permits over 1 acre should directly correlate w/ project permits 1 acre or more.

### **6.4 *Element Evaluation & Controls, Construction Site Runoff Controls***

The effectiveness of the Construction Site Runoff element will be based on several factors, including the establishment of an effective program to enforce erosion control,

the overall contractor compliance level and by runoff reduction from construction sites. City staff conducting field inspections or other appropriate means will assess this. Assessment information will be used by staff to plan and schedule the resources required to conduct the program and to gauge the program's effectiveness.

**6.4.1** Project review comments and Field Services Division calls, enforcements, and or follow ups, compiled in database, for full issue evaluation.

The following table summarizes the BMPs the City of Porterville will use to conduct the Construction Site Runoff Control element of the program. Also included are the goals, milestone dates and assessment methods for each BMP as well as the person (or position) responsible for implementation. Assessment information will be used to plan and schedule the resources necessary to conduct the program and to gauge the program's effectiveness.

**6.5 Program Summary, Construction Site Runoff Controls**

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
6.1.1	Adopt a storm water ordinance and establish source control & pollution prevention standards and enforcement procedures	Dec-06	Obtain City Council approval	Ordinance approved	Public Works Director
6.1.2	Establish a tracking system for inspections and violations	June-06	Program adopted and database established	Number of violations per year	Field Services Water Utilities Supt.
6.2.1	Develop Inspection procedures & train staff	June-06	<ul style="list-style-type: none"> <li>- Plan in place</li> <li>- Develop inspection procedures</li> <li>- Establish checklist for evaluating construction projects</li> <li>- Annual training; refresher and new staff.</li> </ul>	Plan in place June – 06  June – 06	Field Services Water Utilities Supt.
6.2.2	The City will provide training for all building inspectors, construction inspectors and plan checkers covering BMP measures, the City SWMP and enforcement.	Dec-06	<ul style="list-style-type: none"> <li>- Standards adopted (CASQA or equivalent)</li> <li>-50% of plan checkers trained by June-06 w/ difference by June-07</li> </ul>	Plan in place	Field Services Water Utilities Supt

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
6.2.3	The City will establish/identify priority sites for inspections, based on storm drain design, topography of area, past non-compliance, proximity to surface waters, etc., and communicate that to the staff.	Dec-06	-Establish & implement procedures and training guidelines (refresher seminars every other year) - 50% of Inspectors trained by June-06 w/ difference by June-07	Procedures in place and trained employees	Public Works City Engineer
6.3.1	Procedures for site plan review & train plan checkers on requirements and conditions of approval for storm water management	June – 07	-Establish & implement procedures and training guidelines (refresher seminars every other year)	Procedures in place and continuing training for employees	Public Works City Engineer
6.3.2	Conduct outreach to construction professionals (developers) during and after site plan review	Dec-07	Communicate storm water quality requirements to 100% of all projects processed through site plan	Site inspections & feedback from developers during site plan review & construction	Public Works City Engineer
6.3.3	NOI submittal and WPCD verified through Plan Review process	Dec -06	100% correlation w/ permits approved	# of permits 1 or more acres should directly correlate w/ project permits 1 or more acres.	Public Works City Engineer

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
6.4.1	Site review comments and hotline calls compiled in database.	June – 06	Existing program utilized and database established	Start, maintain and evaluate for annual reporting and prioritizing.	Public Works Engineering Secretary

## 7.0 POST-CONSTRUCTION RUNOFF CONTROLS

### ***Regulatory Requirements:***

*You must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts.*

*You must:*

- Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community;*
- Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law;*
- Ensure adequate long-term operation and maintenance of BMPs.*

Post-construction storm water management in areas undergoing new development or redevelopment is necessary because runoff from these areas has been shown to significantly affect receiving water bodies. Planning and design for the minimization of pollutants in post-construction storm water discharges is the most cost-effective approach to storm water quality management.

There are generally two forms of substantial impacts of post-construction runoff. The first is caused by an increase in the type and quantity of pollutants in storm water runoff. As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients. These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams.

The second kind of post-construction runoff impact occurs by increasing the quantity of water delivered to the water body during storms. Increased impervious surfaces interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process include stream bank scouring and downstream flooding, which can lead to property damage.

## **7.1 Project Review Committee**

If water quality impacts are considered from the beginning stages of a project, new development, and potentially redevelopment, projects provide opportunities for water quality protection. The adoption of a planning process that identifies the municipality's program goals, implementation strategies, and enforcement procedures is consistent with this measure's intent. Public and industry participation in the development of this planning process is highly desirable.

- 7.1.1** The City will adopt an ordinance including enforcement for post construction runoff and establishing a tiered level of enforcement for violations. This may include required implementation of BMPs, fees, and/or fines.
- 7.1.2** The City will develop a planning process to incorporate new criteria, standards, and BMPs which will minimize, to the highest extent practical, the water quality impact for post-construction for new development and redevelopment.
- 7.1.3** Develop and implement a program incorporating the design standards contained in Attachment 4 requirements in the MS4 Permit into the project review and plan checks. (See Appendix "E" for Attachment 4)
- 7.1.4** Develop requirements for maintenance of privately-owned controls and establish a database for tracking private and public controls.
- 7.1.5** The existing site plan review and approval procedures will be incorporating the Attachment 4, CASQA BMP into requirements to ensure long-term water quality

protection. These efforts will include “outreach and guidance to the development community” and to City staff “on construction and post-construction control requirements.”

The above effects work together to reach the developer and the City in an effort to inform and enhance the overall development of sustaining storm water maintenance and control.

## **7.2 Education and Training**

In order to effectively enforce and implement the Attachment 4 development and post-construction runoff requirements, the City will need to educate staff of the new program.

**7.2.1** Train staff on the Attachment 4 requirements and CASQA BMPs. (Post-construction requirements and conditions of approval.)

**7.2.2** Train staff in maintenance of BMPs, long-term operations, and tracking.

## **7.3 Element Evaluation, Post Construction Runoff Controls**

The success of the Post Construction Runoff element will be based on the degree to which water quality considerations have been incorporated into the design process. City staff will assess this during the project review process, field inspections or other appropriate means.

**7.3.1** Establish procedures for tracking maintenance activities. (Hotline) Database will tabulate entries and proper responses implemented. (i.e. responses and follow up actions, etc.)

The following table summarizes the BMPs the City of Porterville will use to conduct the Post Construction Runoff element of the program. Also included are the goals, milestone dates and assessment methods for each BMP as well as the person (or position) responsible for implementation. Assessment information will be used to plan and

schedule the resources necessary to conduct the Program and to gauge the program's effectiveness.

#### 7.4 Program Summary, Post Construction Runoff Controls

Task #	BMP Description	Timeline	Goal	Assessment	Responsible
7.1.1	Draft and adopt ordinance, include enforcement for runoff & establish a system and procedures for enforcement of violations (City Council Approved)	Dec-06	Ordinance adopted	Ordinance adopted	Public Works Director
7.1.2	Develop post-construction plan & technical criteria based on CASQA BMP's for selected control strategies	Dec-06	Plan in place	Plan in place	Public Works Director
7.1.3	Develop and implement program requiring the design standards contained in Attachment 4. Incorporate Attachment 4 SWMP requirements into site plan review and plan checks.	June-07 Dec-07 June-06	- Plan Checkers - Field Inspectors - Educate City Engineers (provide Attachment 4 document MS4)	Identify the number of projects with Attachment 4 requirements/year	Public Works Engineering Div.
7.1.4	Establish regulatory requirements for maintenance of privately-owned controls. Develop a database for tracking private and public structural controls.	Dec-07	Plan in place	Tracking of structural controls and inspections	Field Services Water Utilities Supt. & City Engineer

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
7.1.5	Provide outreach and guidance to the development community through site plan review process and include Attachment 4 requirements in discussion and requirements.	June – 06	100% by June-06	Procedures established and number of attendees and records of sessions	Field Services Water Utilities Supt. & City Engineer
7.2.1	Train staff on post-construction requirements and conditions of approval.	Dec-06	Procedures established and 2 training sessions/year	Procedures established and number of attendees and records of sessions	Public Works & Field Services
7.2.2	Train staff in maintenance of BMPs, long-term operation and tracking	Dec-06	2 training sessions/year	Number of attendees and records of sessions	Field Services Water Utilities Supt.
7.3.1	Establish procedures for tracking maintenance activities. (Hotline) Database will tabulate entries and proper responses implemented. (i.e. responses and follow up actions, etc.)	Dec-06	Procedures established and 2 training sessions/year	Procedures established and summarized periodically	Public Works & Field Services

## 8.0 POLLUTION PREVENTION AND GOOD HOUSEKEEPING

### ***Regulatory Requirements:***

*You must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, your State, Tribe, or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance*

EPA recommends that, at a minimum, the following be considered when developing the Pollution Prevention and Good Housekeeping section of the SWMP:

- Maintenance activities, maintenance schedules, and long-term inspection procedures for structural and nonstructural storm water controls to reduce floatables and other pollutants discharged from your separate storm sewers,
- Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, and waste transfer stations,
- Procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris), and
- Ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices.

The City conducts numerous municipal operational and maintenance activities, some of which have the potential to result in discharges of pollutants in runoff or be sources of

non-storm water discharges. It is important that the City evaluate these activities to identify those that could be significant sources of pollutants in runoff, develop appropriate measures to reduce the discharge of pollutants from these sources to the maximum extent practicable (MEP), and identify and control discharges of non-storm water from facilities owned or operated by the City.

Properly developed and implemented operation and maintenance programs reduce the risk of water quality problems. Operation and maintenance of the storm system should be an integral component of this storm water management program.

### **8.1 System Evaluation**

Visual inspection is a Best Management Practice (BMP) in which members of the Field Services Division water pollution prevention team visually examine material storage and outdoor processing areas, the storm water discharges from such areas, and the environment in the vicinity of the discharges, to identify contaminated runoff and its possible sources. The EPA has recognized visual inspection as a baseline BMP for over 10 years.

In a visual inspection, storm water runoff may be examined for the presence of floating and suspended materials, oil and grease, discoloration, turbidity, odor, or foam, and storage areas may be inspected for leaks from containers, discolorations on the storage area floor, or other indications of a potential for pollutants to contaminate storm water runoff. Visual inspections may indicate the need to modify a facility to reduce the risk of contaminating runoff.

**8.1.1** The City will utilize the Field Services Division with representatives from throughout the organization. This Division will periodically (quarterly) inspect City facilities and monitor activities on a regular basis (annually as a minimum) to determine what water quality improvements can be made. Information will be input to storm water database for compiling, sorting and evaluating.

**8.1.2** The Field Services Division will survey other city departments and activities to determine those activities that may significantly contribute pollutants to the storm water system. Recommendations will be provided to staff.

## **8.2 Employee Training**

The City's pollution prevention program cannot be successful without the support and involvement of the front-line employees and a strong commitment from senior management personnel.

**8.2.1** A training program will be established to educate employees about storm water management, potential sources of contaminants, and Best Management Practices (BMPs).

**8.2.2** The Municipal sites will include SWMP review in staff meetings. Review suggestions, improvements and implementations. Record for annual reporting.

The employee training program will be designed to:

- Instill personnel with an understanding of their role in pollution prevention and the practices and procedures for preventing discharges,
- Ensure strong commitment and periodic input from senior management,
- Communicate timely information to ensure adequate understanding and reinforcement of goals and objectives,
- Utilize the experiences from past spills to prevent future spills,

- Inform employees of BMP monitoring and spill reporting procedures, and
- Develop operating manuals and standard procedures.

### **8.3 Implement Storm Water Quality Programs**

The City currently has a number of programs in place that fall under this MCM. The existing activities will be reevaluated during this permit term and activities will be better documented. In addition, visual inspections will be completed to verify effectiveness of certain efforts.

- 8.3.1** Continue to complete street sweeping activities. Log the number of miles swept per month.
- 8.3.2** The Pollution Prevention Plan for the City corporation yard will continue to be implemented.
- 8.3.3** Continue to monitor and implement maintenance activities on storm water control facilities. Document activities and complete visual inspections on a regular basis. (minimum annually prior to wet season)

### **8.4 Element Evaluation, Pollution Prevention and Good Housekeeping**

The effectiveness of the Pollution Prevention and Good Housekeeping element is dependent on adequate training, resources, and staff to ensure that City operations and facilities are reducing storm water pollution and controlling non-storm water discharges. Assessments will include site visits, improved procedures for managing target pollutants, review of feedback from City staff, and public comments. Quantitative measurements of effectiveness include evaluation of sediment removed from sump maintenance and street sweeping, as well as estimated reductions in pollutant loadings.

- 8.4.1** Implement SWMP/BMPs into regularly scheduled staff meetings. Open forum for issues, improvements, maintenance, and training.

The following table summarizes the BMPs the City of Porterville will use to conduct the Pollution Prevention and Good Housekeeping element of the program. Also included are

the goals, milestone dates and assessment methods for each BMP as well as the person (or position) responsible for implementation. Assessment information will be used to plan and schedule the resources necessary to conduct the program and to gauge the program's effectiveness.

**8.5 Program Summary, Pollution Prevention and Good Housekeeping**

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
8.1.1	Establish Storm Water Pollution Prevention Team and inspect City facilities	March - 06	Establish team 50% of city facilities per year	Team established	Field Services Water Utilities Supt.
8.1.2	Storm Water Team will survey city departments and & record activities to determine areas for improvement	Dec-07	50% of sites annually	Number of problems detected versus corrected	Field Services Water Utilities Supt
8.2.1	Employee educational program. Develop and implement a program for municipal maintenance of structural storm water controls	Dec-07	50% employees / year Remainder the following year	Number of employees recorded & reached	Field Services Water Utilities Supt
8.2.2	The Municipal sites will include SWMP review in staff meetings.	Dec - 06	Implement 50% of approved suggestions	Reduction in suggestions indicates better daily control	Field Services Water Utilities Supt
8.3.1	Continue street sweeping operations and develop database	Ongoing	Maintain clean streets and environment	- Number of miles per month - Volume & type of debris collected & where	Field Services Refuse Dept.

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
8.3.2	Continue implementation of corporation yard SWPPP	Ongoing	Reduction in maintenance indicates better daily control	Record number of BMPs and maintenance. Periodic review.	Field Services Water Utilities Supt
8.3.3	Continue storm system maintenance activities and update database to log activities and inspections	Ongoing	Reduction in maintenance indicates better daily control	Record number of BMPs and maintenance. Periodic review and update database	Field Services Water Systems Specialist
8.4.1	Implement SWMP/BMPs into regularly scheduled staff meetings	Jan 06	Reduction in input indicates better daily control and opens for additional training	Record issues and improvements	Field Services Water Utilities Supt

## 9.0 CITY OF PORTERVILLE STORMWATER MANAGEMENT PROGRAM SUMMARY

Task #	BMP Description	Timeline	Goal	Assessment	Responsible
3.1.1	Form a partnership and coordinate media efforts through local agencies (TCAG)	Ongoing	Adopt an MOU or adopt other agreement	Continued meetings and local agency combined efforts	Public Works Director
3.1.2	Distributing bilingual Storm Water Pollution Prevention flyers. (See Appendix "B") "Protect your Water"	Ongoing	Track sites receiving flyers. Each year new group of residence targeted to receive them until all residence get notified.	Based on TCAG printing, City will distribute general storm water flyers to 500 residents each year	Field Services Water Systems Specialist
3.1.3	Working with local retailers for counter displays for general storm water flyers.	June-06	Increase in quantities of fliers picked up and retailers involved	Reduction of automotive type pollutants in storm drains inspections.	Field Services Water Systems Specialist
3.2.1	Distribute material on proper trash disposal	June-06	300 door hangers each year.	Reduced trash in waterways & basins	Field Services Refuse Dept.
3.2.2	Signage placed in illegal dumping areas	July-06	5 areas with 2 new sites each year	50% reduction in trash disposal in selected areas	Field Services Refuse Dept.

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
3.2.3	Citizen Outreach: Presentations and community events	July 06	2 presentations or events per year	# of events or presentations w/ # of attendees & agendas on record for each event	Field Services Water Systems Specialist
3.3.1	Restaurant guide on grease (Restaurants; approximately 65 listed in the Yellow Pages.com, Oct. 2005)	December-06	± 65 Restaurants 50% (30) of restaurants by yr 2 with the diff. in yr 2	SSO decrease w/ inspections conducted twice a yr.	Field Services Water Systems Specialist
3.3.2	Business Outreach: Auto repair facility guide on fluid disposal (Automotive Repair; approx. 42 listed in the Yellow Pages.com , Oct. 2005)	December-06	± 10 Repair services 25% (10) of outlets with 25% increase each year	Number of pamphlets distributed	Field Services Water Systems Specialist
3.3.3	Display material in automotive parts & supply stores (Automotive Supply; approx. 19 listed in the Yellow Pages.com, Oct. 2005)	December-06	± 5 Supply outlets 25% (5) of outlets in year 1 with a 25% increase each year	Number of pamphlets distributed	Field Services Water Systems Specialist
4.1.1	Storm drain Stencils or Markers	December-06	100 storm drains per year	Number of storm drains stenciled and number of groups participating	Field Services Water Systems Specialist

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
4.1.2	New developments, the developer will stencil drain inlets as part of the project requirement in the Permit Approval process.	March-06	100% new developments in compliance	Report direct correlation between new developments and new storm drains stenciled.	Public Works Engineering
4.2.1	Establish water quality hotline Use existing Field Services Dept. & Code Enforcement Officer	June - 06	Establish Hotline	Hotline established w/ a database provided to log calls	Field Services Water Systems Specialist
4.3.1	Post signage regarding effects of pet waste on storm water in City parks.	March - 06	Post in two existing parks within the community.	Record appraisal of monthly visual inspections.	Parks Dept.
4.4.1	Annual participation in booth @ County Fair (w/ storm water questionnaire – started in 2004)	December-05	200 questionnaires filled out each year	Number of questionnaires filled out each year and feedback regarding the public knowledge of storm water issues	Field Services Water Systems Specialist

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
4.5.1	Annual participation in booth @ City Fair and other similar events. (w/ storm water handouts – started in 2004)	Ongoing	200 handouts each year	Number of handouts distributed each year and feedback regarding the public knowledge of storm water issues	Field Services Water Systems Specialist
5.1.1	Storm water Ordinance	December-06	Ordinance adopted	A City Ordinance will give the city the “legal” right to fully implement the SWMP. The City will have the authority to: “right of entry”, “Cease and Desist orders”, and “Criminal and Civil Penalties”.	Public Works Director
5.2.1	Storm Water Master Plan (identify and map outfalls) G.I.S.	December-06	100% mapped Updated annually (min.)	Add locations of all outfalls & names of receiving ditches & creeks to current mapping.	Comm. Development Admin. Analyst

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
5.2.2	Inspection of outfalls Dry season inspection	-Procedure and forms by September 06 -Annually	Establish standard inspection procedures & inspect discharges annually. Review of data gathered for enforcement and/or improvements.	Number the illegal discharges eliminated each year based upon dry season inspections conducted each fall. Record enforcement or maintenance activities in database.	Field Services Water Utilities Supt.
5.3.1	Public Reporting: Field Services Division for violations & complaints	June - 06	Publicize existing field services phone number and database	Utilize Field Services Division and database provided to log, monitor, and evaluate calls. Post violations and resolutions, monthly in local paper.	Field Services Water Systems Specialist

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
5.3.2	Publicize and Fund Household Hazardous Waste Drop off Program (Tulare County Program)	Ongoing	20% increase in volume – Continue to support program and track volume. Publicize with print, radio and public events.	Volume and traffic at the disposal area. Increase in participants based upon record keeping and annual reporting.	Field Services Recycling Coordinator
5.4.1	Wasting Water Guidelines (Reduce residential runoff of pesticides, fertilizers, wash water, etc.)	Ongoing	Continue to enforce program and track violations. Educate public with billing inserts.	Reduction in number of violations per year of residential runoff in waterways	Field Services Water Systems Specialist
5.5.1	Train all public employees involved in program	June - 06	Adopt a program per public employee input and inspections	-Two meetings per year -Reduction in illicit discharges	Field Services Water Utilities Supt.
5.6.1	Illicit Discharge; Assessment & Evaluations Tracking System	June - 06 quarterly reviews	Review 80% (min.) of data collected quarterly. Detect patterns and areas of improvement and awareness.	Review of hotline data, public inspection, municipal reports and Building Department input.	Field Services Water Utilities Supt or Industrial Water Inspector

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
6.1.1	Adopt a storm water ordinance and establish source control & pollution prevention standards and enforcement procedures	Dec-06	Obtain City Council approval	Ordinance approved	Public Works Director
6.1.2	Establish a tracking system for inspections and violations	June-06	Program adopted and database established	Number of violations per year	Field Services Water Utilities Supt.
6.2.1	Develop Inspection procedures & train staff	June-06	<ul style="list-style-type: none"> <li>- Plan in place</li> <li>- Develop inspection procedures</li> <li>- Establish checklist for evaluating construction projects</li> <li>- Annual training; refresher and new staff.</li> </ul>	Plan in place June – 06  June – 06	Field Services Water Utilities Supt.

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
6.2.2	The City will provide training for all building inspectors, construction inspectors and plan checkers covering BMP measures, the City SWMP and enforcement.	Dec-06	- Standards adopted (CASQA or equivalent) -50% of plan checkers trained by June-06 w/ difference by June-07	Plan in place	Field Services Water Utilities Supt
6.2.3	The City will establish/identify priority sites for inspections, based on storm drain design, topography of area, past non-compliance, proximity to surface waters, etc., and communicate that to the staff.	Dec-06	-Establish & implement procedures and training guidelines (refresher seminars every other year) - 50% of Inspectors trained by June-06 w/ difference by June-07	Procedures in place and trained employees	Public Works City Engineer
6.3.1	Procedures for site plan review & train plan checkers on requirements and conditions of approval for storm water management	June – 07	-Establish & implement procedures and training guidelines (refresher seminars every other year)	Procedures in place and continuing training for employees	Public Works City Engineer

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
6.3.2	Conduct outreach to construction professionals (developers) during and after site plan review	Dec-07	Communicate storm water quality requirements to 100% of all projects processed through site plan	Site inspections & feedback from developers during site plan review & construction	Public Works City Engineer
6.3.3	NOI submittal and WPCD verified through Plan Review process	Dec -06	100% correlation w/ permits approved	# of permits 1 or more acres should directly correlate w/ project permits 1 or more acres.	Public Works City Engineer
6.4.1	Site review comments and hotline calls compiled in database.	June – 06	Existing program utilized and database established	Start, maintain and evaluate for annual reporting and prioritizing.	Public Works Engineering Secretary
7.1.1	Draft and adopt ordinance, include enforcement for runoff & establish a system and procedures for enforcement of violations (City Council Approved)	Dec-06	Ordinance adopted	Ordinance adopted	Public Works Director
7.1.2	Develop post-construction plan & technical criteria based on CASQA BMP's for selected control strategies	Dec-06	Plan in place	Plan in place	Public Works Director

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
7.1.3	Develop and implement program requiring the design standards contained in Attachment 4. Incorporate Attachment 4 SWMP requirements into site plan review and plan checks.	June-07 Dec-07 June-06	- Plan Checkers - Field Inspectors - Educate City Engineers (provide Attachment 4 document MS4)	Identify the number of projects with Attachment 4 requirements/year	Public Works Engineering Div.
7.1.4	Establish regulatory requirements for maintenance of privately-owned controls. Develop a database for tracking private and public structural controls.	Dec-07	Plan in place	Tracking of structural controls and inspections	Field Services Water Utilities Supt. & City Engineer
7.1.5	Provide outreach and guidance to the development community through site plan review process and include Attachment 4 requirements in discussion and requirements.	June – 06	100% by June-06	Procedures established and number of attendees and records of sessions	Field Services Water Utilities Supt. & City Engineer
7.2.1	Train staff on post-construction requirements and conditions of approval.	Dec-06	Procedures established and 2 training sessions/year	Procedures established and number of attendees and records of sessions	Public Works & Field Services

<b>Task #</b>	<b>BMP Description</b>	<b>Timeline</b>	<b>Goal</b>	<b>Assessment</b>	<b>Responsible</b>
7.2.2	Train staff in maintenance of BMPs, long-term operation and tracking	Dec-06	2 training sessions/year	Number of attendees and records of sessions	Filed Services Water Utilities Supt.
7.3.1	Establish procedures for tracking maintenance activities. (Hotline) Database will tabulate entries and proper responses implemented. (i.e. responses and follow up actions, etc.)	Dec-06	Procedures established and 2 training sessions/year	Procedures established and summarized periodically	Public Works & Field Services
8.1.1	Establish Storm Water Pollution Prevention Team and inspect City facilities	March - 06	Establish team 50% of city facilities per year	Team established	Field Services Water Utilities Supt.
8.1.2	Storm Water Team will survey city departments and & record activities to determine areas for improvement	Dec-07	50% of sites annually	Number of problems detected versus corrected	Field Services Water Utilities Supt
8.2.1	Employee educational program. Develop and implement a program for municipal maintenance of structural storm water controls	Dec-07	50% employees / year Remainder the following year	Number of employees recorded & reached	Field Services Water Utilities Supt
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8.3.2	Continue implementation of corporation yard SWPPP	Ongoing	Reduction in maintenance indicates better daily control	Record number of BMPs and maintenance. Periodic review.	Field Services Water Utilities Supt
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8.4.1	Implement SWMP/BMPs into regularly scheduled staff meetings	Jan 06	Reduction in input indicates better daily control and opens for additional training	Record issues and improvements	Field Services Water Utilities Supt



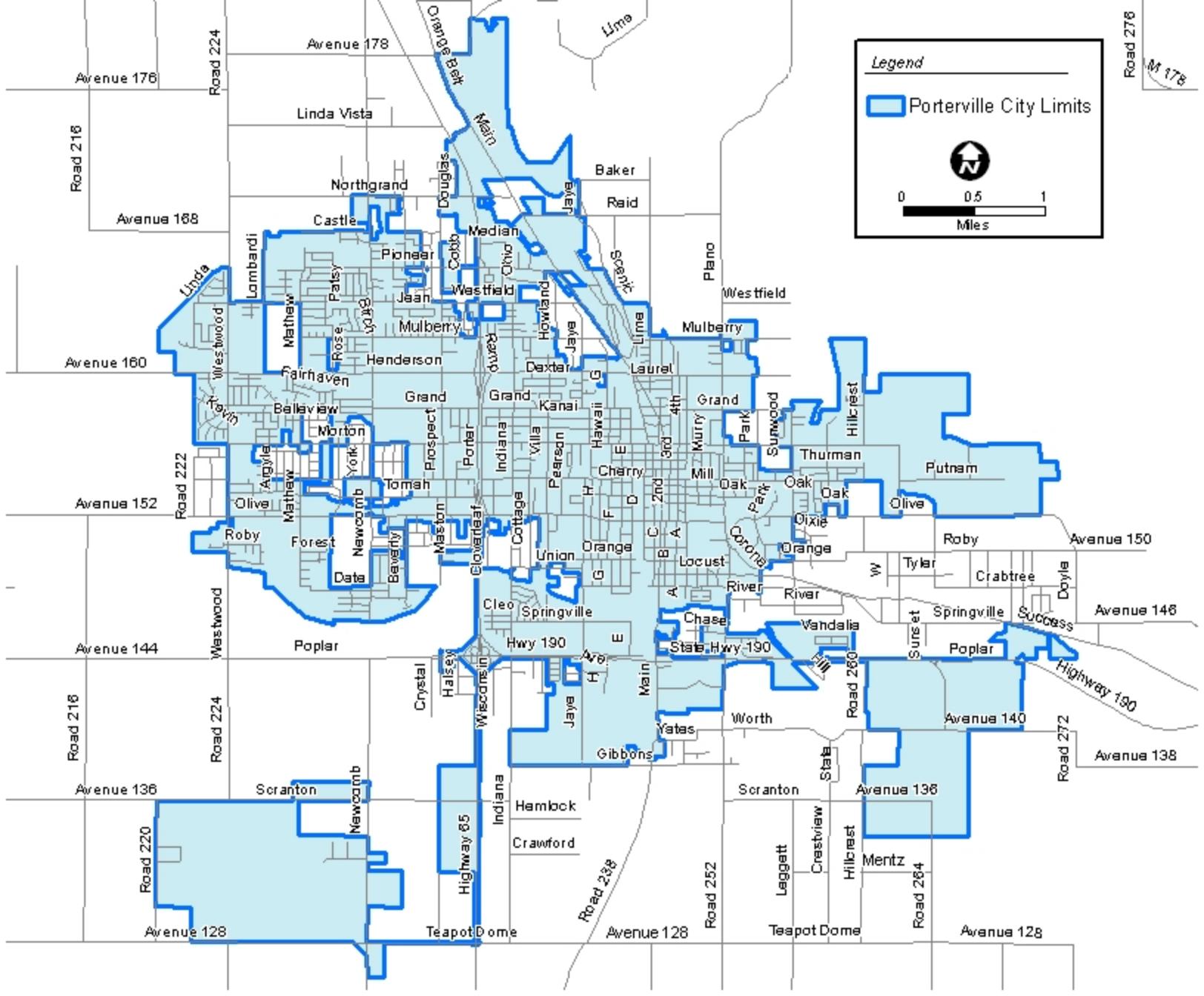
## **10.0 ABBREVIATIONS**

As used in this report, the following abbreviations have the specified meaning.

<b>BMP</b>	<b>Best Management Practice</b>
<b>CASQA</b>	<b>California Stormwater Quality Association</b>
<b>CEQA</b>	<b>California Environmental Quality Act</b>
<b>COC</b>	<b>Constituents of Concern</b>
<b>CWA</b>	<b>Clean Water Act</b>
<b>EIR</b>	<b>Environmental Impact Report</b>
<b>EPA</b>	<b>Environmental Protection Agency</b>
<b>ESC</b>	<b>Erosion and Sediment Control</b>
<b>FOG</b>	<b>Fat, Oil and Grease</b>
<b>GIS</b>	<b>Geographic Information System</b>
<b>HHW</b>	<b>Household Hazardous Waste</b>
<b>MCM</b>	<b>Minimum Control Measure</b>
<b>MEP</b>	<b>Maximum Extent Practicable</b>
<b>MS4</b>	<b>Municipal Separate Storm Sewer System</b>
<b>NOI</b>	<b>Notice Of Intent</b>
<b>NPDES</b>	<b>National Pollutant Discharge Elimination System</b>
<b>RWQCB</b>	<b>Regional Water Quality Control Board</b>
<b>SDMP</b>	<b>Storm Drain Master Plan</b>
<b>SSO</b>	<b>Sanitary Sewer Overflow</b>
<b>SWMP</b>	<b>Storm Water Management Program</b>
<b>SWPPP</b>	<b>Storm Water Pollution Prevention Plan</b>
<b>SWRCB</b>	<b>State Water Resource Control Board</b>
<b>TMDL</b>	<b>Total Maximum Daily Load</b>
<b>WPCD</b>	<b>Water Pollution Control Drawing</b>

## **APPENDICES**

**APPENDIX A  
PORTERVILLE CITY**



Legend

Porterville City Limits



**APPENDIX B**  
**CITY OF PORTERVILLE FLYER “DUMP ON US”**

2nd Annual Fall

City of Visalia

# Dump-On-Us

The Sound of His Voice Church

525 S. Atwood

Saturday

October 1, 2005

7:00 a.m. - 11:00

Information: 713-4500

## REFUSE ITEMS NOT ACCEPTED

- **Concrete** - Take to Glen Wells, Goshen, 625-0695
- **Hazardous Waste**  
Take to Household Hazardous Waste 335 N. Cain St. 713-4531 or 733-6441  
Open: Saturdays only 10am - 3pm
- **Tires with Rims**

## ACCEPTED ITEMS

- Air Conditioning/Heating Units
- Bamboo
- Cactus
- Cell Phones
- Dryers
- Fencing Material
- Furniture
- Mattress
- Palm Fronds
- Scrap Metal
- Small Appliances
- Tires - Rims MUST be REMOVED
- Printer Toner Cartridges
- Washers
- Yucca Trees

## GREEN WASTE ACCEPTED

- Branches
- Grass Clippings
- Leaves
- Lumber
- Prunings
- Yard Trimmings
- Wood

## NOT ACCEPTED AS GREEN WASTE

These items are accepted as refuse. Please keep separate from green waste.

- Palm Fronds
- Treated Wood
- Yucca Leaves

## Dump-On-Us Requirements

- Limited to City of Visalia Residents
- Proof of Visalia Residency is Required
- Doors MUST be REMOVED from all Large Appliances
- Limited to One Visit
- Limited to One Small Truck and/or Small Trailer per Event
- Commercial Waste is NOT accepted
- Limit to 4 Tires without Rims per Event

## **ELECTRONIC**

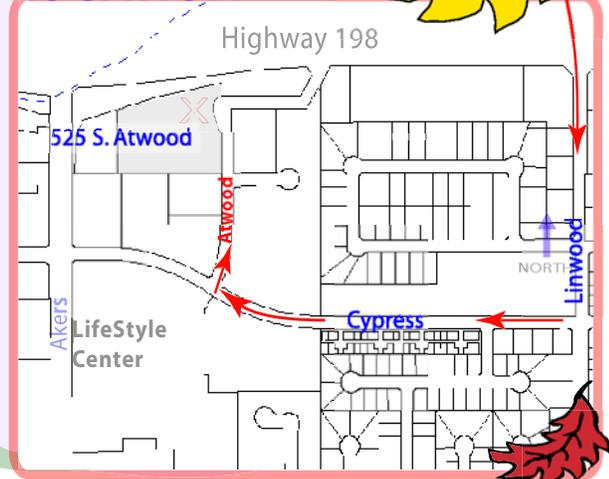
Get Rid of Your E-Waste!

C-SET is collecting computer monitors, CPUs, keyboards, laptops, TVs, and toner cartridges at this Dump On Us event.

**WASTE**



## LOCATION



**APPENDIX C**  
**TCAG FLYER “PROTECT YOUR WATER”**

# Tulare County Clean Storm Water Program

## Contacts

### City of Visalia Public Works

5961 S. Mooney Blvd.

### County of Tulare Resource Management Agency

5961 S. Mooney Boulevard

Visalia, CA 93277

(559) 733-6291

### City of Woodlake Public Works

350 N. Valencia Avenue

Woodlake, CA 93286

(559) 564-2317

### Quad-Knopf Engineering

5110 W. Cypress Avenue

Visalia, CA 93278

(559) 733-0440



### TCAG

5961 S. Mooney Blvd.

Visalia, Ca 93277

### City of Lindsay Public Works

5961 S. Mooney Blvd.

### City of Tulare Public Works

5961 S. Mooney Blvd.

Tulare, CA 93275

(559) 684-4311

### City of Porterville Field Services Dir.

291 N. Main Street

Porterville, CA 93257

(559) 782-7462

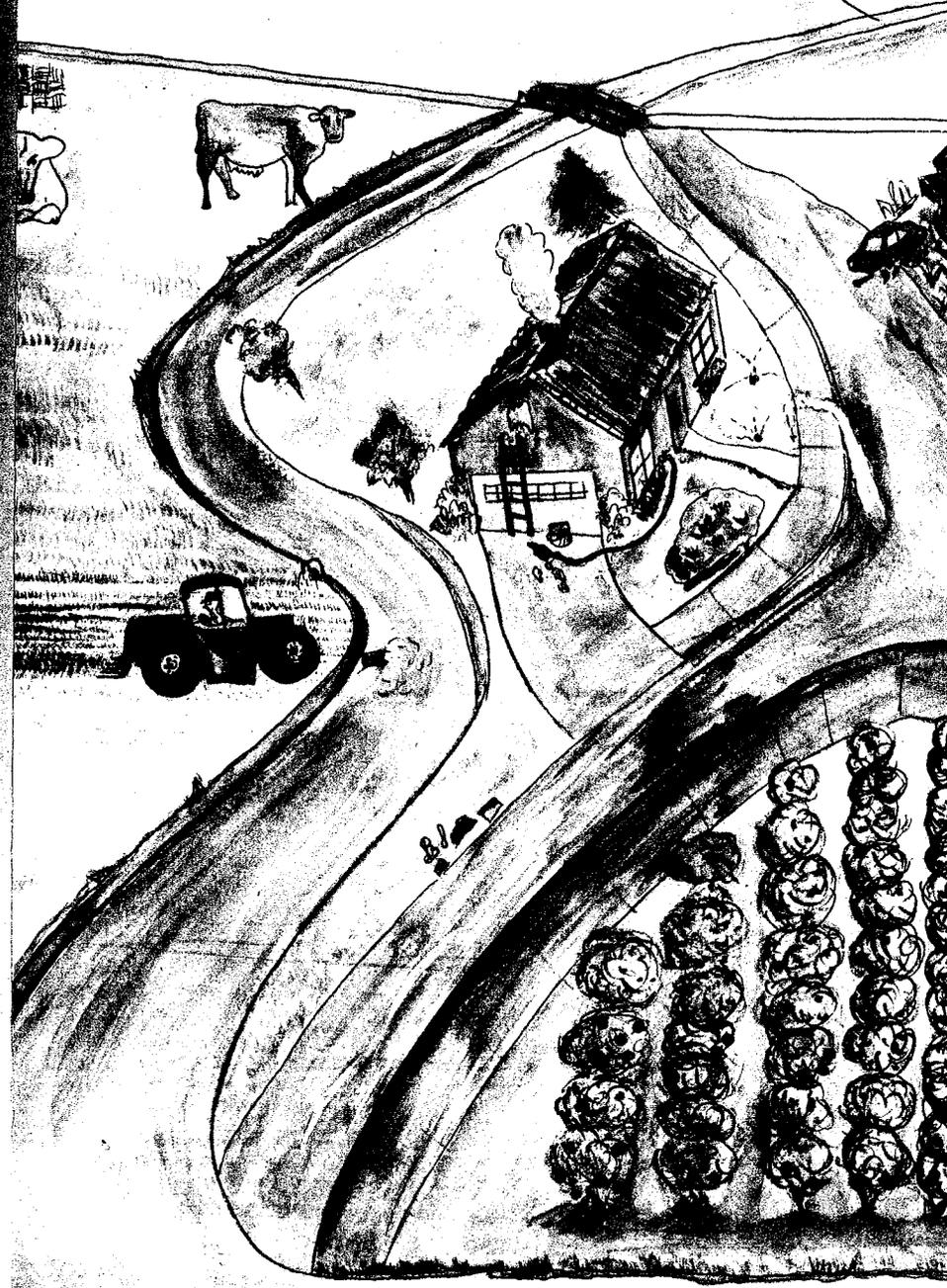
### TCAG

5961 S. Mooney Boulevard

Visalia, CA 93277

(559) 733-6291

# Protect Your Water



## Tulare County Clean Storm Water Program

### *For Agriculture*

Water is delivered through a network of canals that is managed by individual water districts. Water from rivers flows through our community – providing water for food that feeds a nation.

### *For Industry*

Businesses in our community depend on clean water for food processing, manufacturing, health care and other related industries. A clean and reliable water source is necessary to support a healthy economy.

Every day we need clean water for drinking and bathing. Our communities depend on water that is supplied primarily from groundwater. Protecting groundwater is essential to protecting public health.

Our urban environment needs clean water in streams, lakes and ponds to provide nesting habitat for birds and other wildlife.

## Tulare County Clean Storm Water Program

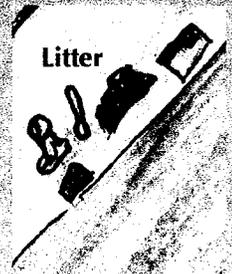
### *Where Does the Storm Water Go?*

In most basins and waterways, runoff seeps through the soil and into groundwater – our drinking water supply. That's why it's important to keep storm drains and runoff clean.

### *Loose Litter*

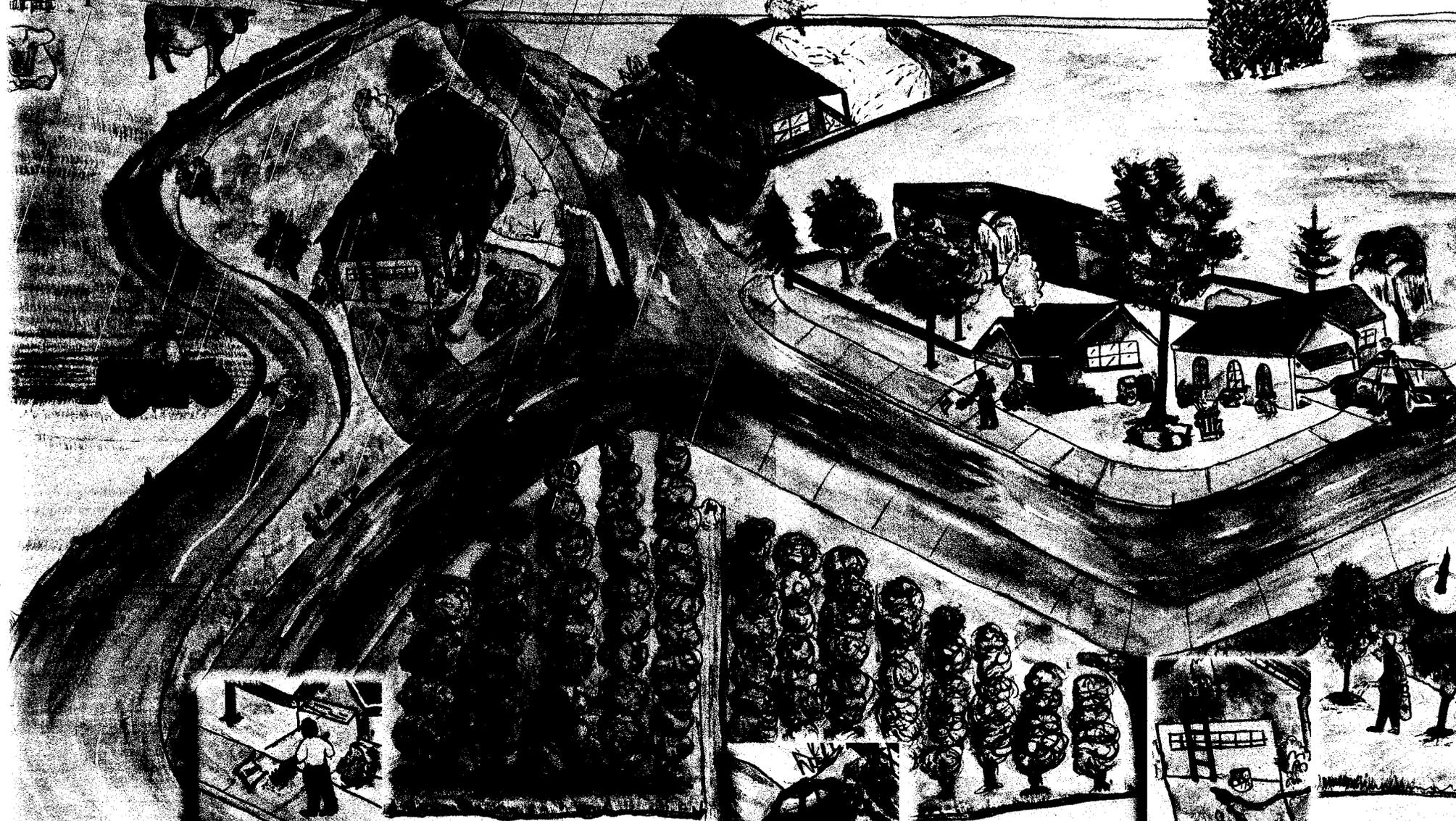
Litter hurts our community. It contaminates our water resources and clogs storm drains – causing floods in our neighborhoods. Be sure to properly dispose of garbage, pet waste and cigarette butts! For more information on litter control, go to [www.dontrashcalifornia.info](http://www.dontrashcalifornia.info).

Maintaining our homes and gardens is necessary, but overusing chemicals is not. Buy household and garden products only in the amount needed and read and follow the label directions. Better yet, use alternative products. Avoid using lawn and garden products when rain is forecast! Take all unused products to a Household Hazardous Waste drop-off center. For information, call 733-6441.



# It's up to us!

We need clean water today and for future generations.  
Preventing storm water pollution is important. We will help  
keep our communities clean.



*Accidental spills*

Cover a hazardous material spill (such as used motor

*Car Fluids*

*Paint*

Paint keeps our homes looking beautiful, but i

## How Does Storm Water Become Polluted?

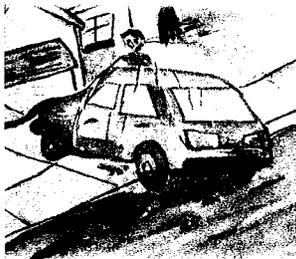
When it rains, storm water flows across driveways, streets and lawns. As it flows, it can pick up pollutants such as oil, pesticides, cigarette butts and trash. This runoff carries these pollutants through the storm drain system. The pollutants then can affect wildlife habitats, outdoor recreation and our water supply.

Even when it's not raining, water from sprinklers, car washing, pool draining and other sources can carry pollutants into the storm drain system.



Rain gathers oil and other toxic fluids from leaky cars.

Runoff collects litter and yard waste.



Rain turns air pollution into storm water pollution.

Runoff picks up detergent and grime from car washing.



Overusing pesticides means money and pollutants down the drain. (The storm drain, that is!)

Overwatering creates runoff that can carry fertilizers and pesticides into the storm drain system.

## How Can You Help?

We're all responsible for keeping our water clean – for the future of the Valley, our communities and our children. And it starts at home.

By doing a few simple things, you can help protect the water beneath our feet. Look inside to find out what you can do.

Bag, seal and throw away pet waste – it keeps runoff and streets clean.

Put litter in trash cans. It keeps our storm drains and community clean.

Carpool to reduce air pollution, so it also helps reduce water pollution.

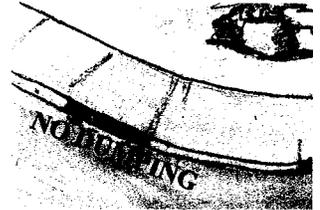
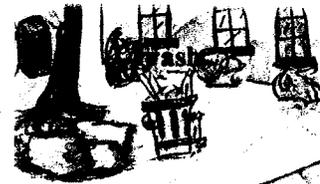
Set sprinkler timers to reduce contamination of runoff water from pesticides and fertilizers and help maintain a clean water supply. Use a shutoff nozzle to avoid unnecessary runoff.

Volunteer to help label storm drains with "No Dumping!" signs.

Recycle waste to keep litter off our streets and ease the strain on our landfills.

Instead of hosing, sweep driveways and sidewalks. This prevents storm water pollution and conserves water.

Take unused paint, pesticides, fertilizers and other hazardous items to a Household Hazardous Waste drop-off center. For information, call 733-6441.



**APPENDIX D**  
**CITY STANDARD DATABASE ENTRY FORM "SAMPLE"**

**SWMP**  
**STORM WATER QUALITY CONTROL DATA ENTRY**

Entered By: \_\_\_\_\_ Date: \_\_\_\_\_ Source:  Call  
 Inspection  
 Review

Call into: **Hotline**  
Department \_\_\_\_\_ Received by: \_\_\_\_\_

Information:

Name of caller: \_\_\_\_\_ (not required)  
Address: \_\_\_\_\_ (not required)  
Phone: \_\_\_\_\_ (not required)  
Follow up date: \_\_\_\_\_ Issue corrected date: \_\_\_\_\_

- Type of Issue:  Illegal Dumping - Trash  
 Illicit Discharge  
 Household Hazardous Waste  
 Water Conservation (Runoff)  
 Construction

General Description:

<u>Public Participation</u>	<u>Illicit Discharge</u>	<u>Construction</u>	<u>Pollution Prevention</u>
<input type="checkbox"/> Fall Drop Off	<input type="checkbox"/> Mapping GIS		<input type="checkbox"/> Street Sweeping
<input type="checkbox"/> Flyers	<input type="checkbox"/> Restaurants		<input type="checkbox"/> Basins
<input type="checkbox"/> Signage	<input type="checkbox"/> Auto Repair		<input type="checkbox"/> Sewer System
<input type="checkbox"/> Events	<input type="checkbox"/> Auto Supply		<input type="checkbox"/> Septic
<input type="checkbox"/> Stenciling	<input type="checkbox"/> Hotline		
<input type="checkbox"/> Bark Parks			
<input type="checkbox"/> Household Haz Mat			
<input type="checkbox"/> Water Conservation			
<input type="checkbox"/> Illegal Dumping – Trash			

**APPENDIX E**  
**SWRCB MS4 - ATTACHMENT 4**

**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 WQs. 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**

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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 85<sup>th</sup> 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 85<sup>th</sup> 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 85<sup>th</sup> 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 runoff 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

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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 STORM WATER MANAGEMENT PLAN BUDGET**

**Storm Water Management Plan Budget**  
 (specific to storm water quality management permit compliance)

<b><u>REQUIREMENTS</u></b>	<b><u>03-04</u></b>	<b><u>04-05</u></b>	<b><u>05-06</u></b>	<b><u>06-07</u></b>	<b><u>07-08</u></b>
Public Education and Outreach*	\$15,500	\$17,000	\$16,200	\$17,000	\$18,500
Public Involvement and Participation	\$8,750	\$8,900	\$6,100	\$6,300	\$6,550
Illicit Discharge Detection and Elimination	\$9,000	\$6,700	\$7,000	\$7,250	\$7,525
Construction Site Runoff Controls	\$12,500	\$6,200	\$6,500	\$6,700	\$7,900
Post-Construction Runoff Controls	\$4,500	\$3,875	\$4,000	\$4,125	\$4,250
Pollution Prevention and Good Housekeeping	\$21,000	\$12,900	\$13,400	\$14,000	\$14,500
Municipal Operations and Maintenance Program	\$52,500	\$47,775	\$48,200	\$45,675	\$47,775
<b>Total Costs per Fiscal Year</b>	<b>\$123,750</b>	<b>\$103,350</b>	<b>\$101,400</b>	<b>\$101,050</b>	<b>\$107,000</b>

\*TCAG Budget for fliers printed in 2004/2005 was \$10,000 noted as a portion of the total above.