



**REPORT TO MAYOR AND CITY COUNCIL**

AGENDA ITEM

TO: THE HONORABLE MAYOR  
AND CITY COUNCIL

DATE: November 6, 2007

SUBJECT: Municipal Storm Water Permit Annual Update and Construction Site  
Runoff Enforcement Procedures

**Report in Brief**

On September 10, 2007, an annual report was submitted to the Regional Water Quality Control Board (RWQCB) to comply with the National Pollutant Discharge Elimination System General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems, Order No. 2003-0005-DWQ (General Permit). The annual report documents the City's efforts for implementing the best management practices (BMPs) in the City's Storm Water Management Program for the reporting period of July 1, 2006 through June 30, 2007. This report to the Mayor and City Council also provides a summary of the City's enforcement procedures that will be implemented to prevent storm water pollution from construction sites during the 2007/2008 rainy season.

Staff recommends that the City Council receive this report.

**Background**

The City is required to have a municipal Storm Water Permit and received coverage under the General Permit in October 2004. The General Permit expires in March 2008 (the City will need to reapply for coverage under the new General Permit once it is adopted by the State Water Resources Control Board). As part of the municipal Storm Water Permit requirements, the City needed to prepare (and later implement) a 5 year Storm Water Management Program that identifies BMPs for the following areas: Public Education and Outreach, Public Involvement and Participation, Illicit Discharge Detection and Elimination, Construction Site Runoff Control, Post Construction Runoff Control, and Municipal Operations. One requirement of the City's Storm Water Management Program, BMP 2B, is to update the City Council on the previous years efforts for implementing the storm water BMPs. Additionally, because of the timing of this report and critical nature of construction site runoff control, the Mayor and City Council are also being briefed on the City's construction site storm water pollution prevention plan inspection and enforcement procedures.

## **Discussion**

### **Storm Water Management Program Year 4 Update**

Key highlights of BMPs implemented during Year 4 include:

Public Education and Outreach: The City booth at the Yolo County Fair in 2006 highlighted the Storm Water Management Program. Various media sources also were used to educate the public on protecting storm water quality and to provide general information on the Storm Water Management Program. Storm water educational information was included in “Earth Capades” performances at elementary schools (20 performances were conducted). Mulching mower, composting bins, and wood chipper rebates and composting demonstrations were offered as a means for reducing the amount of green waste placed in the street. Staff, along with Yolo County, created and distributed 3,000 environmental calendars for 2007 focusing on recycling and storm water pollution prevention. Outreach items were also distributed at the Hot Rod Reunion, Arbor Day, Yolo County Fair, at various thrift stores, and City buildings.

Public Involvement and Participation: A Storm Water Citizen Advisory Committee was formed in early 2007, focusing on whether the City should pursue raising storm drain utility rates (and undergo the Proposition 218 process). The Citizen Committee learned the breadth of storm water issues from how facilities operate and need to be maintained, regulatory requirements, and funding for operation, maintenance, and new capital needs. Several public tours of the storm water facilities were also provided.

The City Council received a May 1, 2007 Citizen Advisory Committee report confirming the fact that program needs have outpaced revenues and that a rate increase is needed. Council voted unanimously to start the process for a property owner vote on an initial increase to \$5.00 per month, per home, from the current \$0.48 established in 1994.

Subsequently, City Council directed staff to initiate the Proposition 218 process to increase the rates from \$0.48 to \$5.00 (and incrementally to \$9.50). *(The ballots have since been certified and the measure did not pass).*

Additionally, students from UC Davis and City staff installed storm drain markers and handed out storm water literature to educate the public that only rain should enter the storm water system.

Illicit Discharge Detection and Elimination: A six-year plan to inspect and clean the storm water conveyance system was developed. Four known agricultural discharge locations were inspected and photos were taken on a quarterly basis. Staff inspected open channels bi-monthly and documented the findings. Monthly meetings were held to review the prior month’s illegal discharges, including sanitary sewage overflows. Staff reviewed the corrective actions that were implemented and evaluated trends in illegal discharges. City field staff handed out educational materials, including a new bilingual brochure, to residents and educational flyers were also distributed to households during the Storm Drain Marker event.

Construction Site Runoff Control: The City held an annual Pre-Wet Season Workshop to educate staff, contractors, and developers on appropriate BMPs at construction sites. Additionally, City staff held a mandatory Storm Water Pollution Prevention Plan (SWPPP) training sessions discussing the inspection and enforcement requirements for construction sites as well as the use of appropriate BMPs. SWPPP construction site inspections were conducted for all construction sites within the City that disturb more than one acre or are smaller than an acre but are part of a larger development project.

Post Construction Runoff Control: Projects that require post-construction BMPs were reviewed to ensure that the appropriate measures are included to reduce, improve, and treat storm water runoff. Project sites that have storm water pre-treatment devices are maintained (pumped out) and inspected at least once a year. A fact sheet stating that post-construction BMPs are required for certain types of development projects was included in each development application packet distributed by the Community Development Department.

Municipal Operations: The City Council approved a green waste container program to start in January 2008. The new green waste collection program will reduce the amount of green waste placed in the street. Currently all green waste can be placed in the street year-round. Under the new program, pruned remnants and leaves (all green waste except grass which needs to go in the container) can only be placed in the street once a month from January 16 through October 14<sup>th</sup>. Pruned remnants and leaves (all green waste except grass which goes in the container) will be able to be placed in the street weekly the remainder of the year. The placement of grass in the street will be prohibited year-round, beginning January 2008 when the new green waste carts are distributed.

Training sessions on BMPs to be used during regular job duties and BMPs at construction sites were conducted for all Public Works Operations and Maintenance staff. During the preparation of the Year 4 annual report, it became apparent that requirements for BMPs 6C-6I were not being fully implemented. However, the lack of fully implementing these BMPs did not result in storm water quality degradation because the facilities did not have runoff that entered the storm water conveyance system. Inspections of the facilities outlined in BMPs 6C-6I were fully implemented in September 2007. Park maintenance practices also have been monitored to minimize irrigation runoff. The City was also awarded nearly \$1 million in grant funding to upgrade City park facility irrigation systems. Green waste, with the exception of leaves during the leaf drop season, is no longer placed in the street at City parks. Parks staff has been implementing BMPs at the Community Swim Center and the Grace Hiddleston Pool. Employees were trained on pesticide application practices to reduce and/or eliminate pesticides from entering the storm drain system. Inspections of the open channels and storm water pump stations as well as cleaning key storm drain inlets were also conducted and are required by the Storm Water Management Program.

Attachment 1 identifies the BMPs that will be implemented in reporting Year 5 (July 1, 2007 through June 30, 2008).

### **Storm Water Management Program Construction Requirements**

As part of the permit requirements, the City must have a construction site runoff control program. The City's construction site runoff control program includes:

- educating contractors, developers, and staff on ways to prevent runoff at construction sites,
- inspecting construction sites that disturb more than one acre of soil,
- enforcing the Storm Water Ordinance to prevent runoff from construction sites,
- ensuring that construction sites over one acre have a permit from the RWQCB, and
- incorporating measures to prevent construction-related runoff in the standard specifications and design details.

Highlights of the program that will be implemented in Year 5 (July 1, 2007 through June 30, 2008) are provided below.

#### Construction Outreach and Education

**Pre-Wet Season Workshop:** On September 4, 2007, the City co-hosted its fourth Pre-Wet Season Workshop for staff, developers, and contractors at UC Davis. The purpose of the workshop was to bring developers, contractors, and agency representatives to a common place to discuss ways to prepare construction sites for the rainy season. The workshop was co-hosted by Woodland, the City of Davis, Yolo County, UC Davis and the RWQCB. At the workshop, contractors and developers were informed that City staff and RWQCB staff will be inspecting their construction sites during the rainy season to ensure that the appropriate measures are in place to prevent construction-related storm water impacts.

**Mandatory City Inspector Training:** On September 21, 2007 the City conducted a mandatory SWPPP Training session for City and hired SWPPP inspectors. The purpose of the training session was to ensure that inspectors use a consistent approach for SWPPP inspections and enforcement procedures (as outlined below).

**Joint City/RWQCB Field Inspections:** On October 2, 2007, City SWPPP inspectors and RWQCB inspectors conducted field inspections of the active construction sites disturbing more than one acre of soil. Results of the inspections were conveyed to the developers and reinspections, when necessary, were conducted to ensure compliance. The purpose of the inspection is to ensure that all project sites are ready for the upcoming rainy season. Construction sites must have an effective combination of erosion and sediment control measures to prevent runoff from the site to the storm water conveyance system. Practices for waste handling must also be in accordance with federal Clean Water Act requirements. Sites are inspected to ensure that erosion, sediment control, and waste handling BMPs are in place.

Construction Site Enforcement Procedures

City construction site inspectors will coordinate and implement the following procedures for construction projects if potential or actual violations of storm water BMPs are observed:

**Step 1a:** Issue VERBAL Notice of Correction: staff would discuss the corrective measures that need to be implemented before a given date/time.

**Step 1b:** Issue WRITTEN Notice of Correction: this type of notice would specify what types of practices need to be corrected before a given date/time.

**Step 2:** Issue Notice of Violation to Correct Measures: this type of notice would specify what types of practices need to be corrected before a given date.

**Step 3:** Issue Notice of Violation to Stop Work: if necessary, staff will issue a Notice of Violation to Stop Work in the project area contributing to storm water pollution if measures identified previously have not been corrected or water quality is imminently at risk. Work in the area contributing to storm water pollution would not be able to resume until the practices contributing to storm water pollution are corrected.

Although we are assuming that most problems at construction sites will be corrected during Steps 1 and 2 of the enforcement process, it may be necessary to issue Notice of Violations to Stop Work. As shown in the above enforcement procedures, stopping work at a construction site would only occur after two written warnings have been issued (unless a reoccurring problem continues). We do not anticipate stopping work at construction sites on a regular basis but we will use this action when necessary to obtain compliance with the federal Clean Water Act and the City's Storm Water Ordinance.

It should be noted that if the City does not enforce construction site storm water runoff procedures, the City could also be subject to enforcement actions by the RWQCB. The RWQCB has a number of ways it can respond to storm water violations, including informal enforcement (verbal warnings, staff enforcement letter, and notice of violations) and formal enforcement (clean up and abatement order, administrative civil liability, joint enforcement with Department of Fish and Game and/or US Environmental Protection Agency, and referral to District Attorney, Environmental Circuit Prosecutor, or Attorney General).

Past Region 5 RWQCB storm water administrative civil liabilities include:

<b>Discharger</b>	<b>Administrative Civil Liabilities</b>	<b>County/City</b>
Fiddymment Ranch	\$600,000	Placer
PL Roseville LLC	\$900,000	Placer
JMC	\$500,000	Placer
D.R. Horton	\$200,000	Solano

Ochoa & Shehan	\$100,000	Redding
Ken Knighten and Al Naticchion	\$600,000	City of Lake Shasta

We intend to work closely with the RWQCB during the rainy season to ensure that the appropriate BMPs are installed at all construction sites that disturb more than an acre of soil to protect storm water quality and to reduce the risk for enforcement actions to be taken on the City and Developer's subject to these requirements.

We believe that through continuing education of our staff and developers/contractors and regular construction site inspections, the need for formal enforcement actions, both to the City and to Developers in the City, should be greatly reduced.

**Fiscal Impact**

Implementation of the Year 4 BMPs was conducted with existing budget funds when possible and also while going into negative reserves to implement some BMPs. As previously stated, the existing funds do not cover the operations and maintenance needs for the storm water conveyance system, construction inspections, and program administration/outreach. We are also uncertain as to any new permit requirements that could occur when our permit is renewed in 2008. Given the failure of the storm drain utility rate increase, a plan to fund the program requirements, operations, maintenance, and capital needs will be presented to the City Council at a later date.

**Public Contact**

Posting of the City Council agenda.

**Recommendation for Action**

Staff recommends that the City Council receive this report.

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## Year 5 Best Management Practices and Measurable Goals

BMP No.	BMP Title and Measurable Goal
1A	<p><u>BMP:</u> Participate in Public Outreach Events <u>Measurable Goal:</u> A minimum of two events will be attended each year beginning in Year 1.</p>
1C	<p><u>BMP:</u> Conduct Presentations for Stakeholder Groups, Service Clubs and Schools <u>Measurable Goal:</u> A minimum of two presentations will be conducted each year beginning in Year 2.</p>
1D	<p><u>BMP:</u> Create and Update Storm Water Internet Page <u>Measurable Goal:</u> The storm water web page will be added to the City's Internet site during Year 1. The web page will be updated when necessary during the year. However, an annual review of the webpage will be conducted to ensure that the appropriate updates have been made. The Storm Water Hotline (described in BMP 3I) will be implemented in Year 3.</p>
1E	<p><u>BMP:</u> Discuss Storm Water Protection at Industrial/Commercial Compliance Inspections <u>Measurable Goal:</u> Staff will discuss ways to protect storm water at 80 percent of industrial compliance inspections.</p>
2A	<p><u>BMP:</u> Install Storm Drain Markers <u>Measurable Goal:</u> Storm drain marker installation events will be conducted in Years 2, 3, 4, and 5 (at least one event each year).</p>
2B	<p><u>BMP:</u> Obtain Public Input and Update Public on Comprehensive Storm Water Management Plan <u>Measurable Goal:</u> One advertisement in Year 3 and Year 5 will be placed in the newspaper soliciting input on the Comprehensive Storm Water Management Plan. One update to the City Council will be done annually beginning in Year 2.</p>
3A	<p><u>BMP:</u> Update Storm Water Conveyance System Map <u>Measurable Goal:</u> The storm water conveyance system map will be reviewed and updated annually by the City Engineer and Infrastructure O&amp;M Manager.</p>
3B	<p><u>BMP:</u> Update Storm Water Ordinance <u>Measurable Goal:</u> The ordinance will be reviewed annually and updated as needed (beginning in Year 2)</p>
3C	<p><u>BMP:</u> Develop and Implement Plan to Clean and Video Inspect Storm Water Conveyance System. <u>Measurable Goal:</u> Year 4: Develop written plan to clean and video inspect storm water conveyance system Year 5: Implement Plan</p>
3D	<p><u>BMP:</u> Identify Agricultural Discharges <u>Measurable Goal:</u> Agricultural discharge inspections will be conducted quarterly</p>
3E	<p><u>BMP:</u> Identify Illegal Discharges into Open Channels <u>Measurable Goal:</u> Ninety-percent of the open channels will be monitored twice a month.</p>
3F	<p><u>BMP:</u> Eliminate and Correct Illicit Connections <u>Measurable Goal:</u> Procedures for eliminating and correcting illicit connections per the ordinance will be followed for ninety percent of the illicit connections identified.</p>

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BMP No.	BMP Title and Measurable Goal
3G	<p><u>BMP:</u> Distribute Educational Material on Illegal Discharges <u>Measurable Goal:</u> Education material will be created in Year 3 to supplement the literature that the City already has. The topic of the educational material will be based on the types of illegal discharges observed during routine inspections and will be distributed in Years 4 and 5.</p>
3H	<p><u>BMP:</u> Advertise Illegal Discharge/Dumping Phone Number <u>Measurable Goal:</u> The phone number will be advertised in Years 2, 3, 4, and 5.</p>
4A	<p><u>BMP:</u> Review and Develop Requirements to Control Discharges (Sediment and Non-Storm Water) from Construction Sites <u>Measurable Goal:</u> The Grading Ordinance and Standard Specifications will be reviewed and revised as needed in Years 4 and 5.</p>
4B	<p><u>BMP:</u> Ensure Compliance under Construction Activity General Permit <u>Measurable Goal:</u> Storm water construction site inspectors will ask each building superintendent for proof of a SWPPP and compliance with the Construction Activity General Permit BMP will be implemented in Years 1,2,3,4, and 5.</p>
4C	<p><u>BMP:</u> Review, Revise, and Implement Procedures for Site Plan Review <u>Measurable Goal:</u> Implement Revised Procedures</p>
4D	<p><u>BMP:</u> Inspect Construction Sites and Implement Enforcement Measures when Necessary <u>Measurable Goal:</u> Construction sites over one acre with SWPPPs will be inspected at least monthly unless follow-up inspections are necessary. Follow-up inspections to ensure that corrective actions have been implemented will occur on a weekly basis until the issues requiring correction has been addressed (inspections could be more frequent depending on the nature of the infraction).</p>
4E	<p><u>BMP:</u> Educate Staff, Developers, and Contractors on Construction Related Storm Water Impacts <u>Measurable Goal:</u> A Pre-Wet Season workshop will be held in Year 2. If workshop is successful (well attended), workshops will be held in Years 3, 4, and 5. Literature related to protecting storm water at construction sites will be developed in Year 2 and distributed in Years 3, 4 and 5.</p>
5A	<p><u>BMP:</u> Review and Update Storm Water Ordinance <u>Measurable Goal:</u> The review and update of the Storm Water Ordinance will be conducted in Years 2, 3, 4, and 5.</p>
5C	<p><u>BMP:</u> Educate Developers on Storm Water Quality Control Measure to Prevent Post-Construction Runoff <u>Measurable Goal:</u> A fact sheet/brochure will be developed in Year 1 and updated in Years 2,3,4, and 5 if necessary. The internet link to the Storm Water Quality Technical Guidance Manual will be added in Year 1.</p>
5D	<p><u>BMP:</u> Ensure Incorporation of Storm Water Quality Control Measures <u>Measurable Goal:</u> Staff will review documents and/or plans for all applicable projects.</p>
5E	<p><u>BMP:</u> Conduct Long-Term Maintenance and Monitoring <u>Measurable Goal:</u> Annual inspections of each development with storm water quality control features will be conducted.</p>

## Year 5 Best Management Practices and Measurable Goals

BMP No.	BMP Title and Measurable Goal
6A	<p><u>BMP:</u> Educate and Train City Staff at Municipal Service Center</p> <p><u>Measurable Goal:</u> Bi-annual training dates will be recorded on a training log. Biannual training will be conducted in Years 2, 3, 4, and 5.</p>
6B	<p><u>BMP:</u> Develop and Implement Spill Prevention and Remediation Plan (SPRP)</p> <p><u>Measurable Goal:</u> The SPRP will be developed during Year 2, reviewed and updated if necessary, in Years 3 through 5.</p>
6C	<p><u>BMP:</u> Maintain Fueling Site</p> <p><u>Measurable Goal:</u> Monthly inspections and maintenance will begin in Year 1 and will continue in subsequent months for Years 2, 3, 4, and 5. A BMP sheet will be prepared in Year 2.</p>
6D	<p><u>BMP:</u> Maintain Bulk Oil Storage Area and Equipment and Customer Oil Dispersion Area and Equipment.</p> <p><u>Measurable Goal:</u> Monthly inspections and maintenance will begin in Year 1 and will continue in Years 2, 3, 4, and 5. A BMP sheet will be prepared in Year 2.</p>
6E	<p><u>BMP:</u> Maintain Equipment Wash Area</p> <p><u>Measurable Goal:</u> Monthly inspections will begin in Year 1. Monthly inspections will continue in Years 2, 3, 4, and 5. A BMP sheet will be prepared in Year 2.</p>
6F	<p><u>BMP:</u> Maintain Used Tire Collection Area</p> <p><u>Measurable Goal:</u> The used tire collection area will be inspected monthly in Years 1, 2, 3, 4, and 5. A BMP sheet will be prepared in Year 2.</p>
6G	<p><u>BMP:</u> Maintain Equipment Storage Area</p> <p><u>Measurable Goal:</u> The equipment storage area will be inspected monthly beginning in Year 1. A BMP sheet will be prepared in Year 2.</p>
6H	<p><u>BMP:</u> Maintain Hazardous Materials Storage Area</p> <p><u>Measurable Goal:</u> The hazardous materials storage area will be inspected monthly in Years 1, 2, 3, 4, and 5. A BMP sheet will be prepared in Year 2.</p>
6I	<p><u>BMP:</u> Maintain Hazardous Waste Collection Area</p> <p><u>Measurable Goal:</u> The log will be developed in Year 2. The log will be reviewed at the end of Years 3, 4, and 5. Any necessary revisions will be made. A BMP sheet will be prepared in Year 2.</p>
6J	<p><u>BMP:</u> Conduct Routine Building Maintenance</p> <p><u>Measurable Goal:</u> Each month a different facility will be inspected so that each City facility is inspected once per year.</p>
6K	<p><u>BMP:</u> Reduce "Green Waste" Placed in the Street from City Park Maintenance Operations</p> <p><u>Measurable Goal:</u> A plan to reduce the amount of green waste placed in the street will be developed in Year 2 and implemented during Years 3, 4, and 5.</p>
6L	<p><u>BMP:</u> Reduce Irrigation Run Off from Park Facilities</p> <p><u>Measurable Goal:</u> Strategies to reduce irrigation run off will be implemented annually.</p>
6M	<p><u>BMP:</u> Reduce the Opportunities for Fertilizer to Enter the Storm Water System.</p> <p><u>Measurable Goal:</u> Operational practices will be implemented to reduce the opportunity for fertilizer products to enter the storm water system in Year 3. The operational practices will be reviewed and updated as needed in Years 4 and 5.</p>

## Year 5 Best Management Practices and Measurable Goals

BMP No.	BMP Title and Measurable Goal
6N	<p><u>BMP:</u> Reduce Opportunities for Pesticides to Enter the Storm Water System</p> <p><u>Measurable Goal:</u> Institute pesticide application practices that will minimize or eliminate the potential for these chemicals to enter the City's storm water system in Year 3. The City will review and update as necessary the operational procedures for pesticides in Years 4 and 5.</p>
6O	<p><u>BMP:</u> City Swimming Pool Maintenance.</p> <p><u>Measurable Goal:</u> Pool staff will ensure that pool chemicals are not stored near storm drain inlets during routine maintenance activities. Monthly inspections will be conducted in Years 3, 4, and 5. An annual inspection report will be submitted to the Storm Water Administrator.</p>
6P	<p><u>BMP:</u> Inspect Open Channels and East Main Street Storm Water Lift Pump Stations</p> <p><u>Measurable Goal:</u> Visual inspections will be conducted weekly.</p>
6Q	<p><u>BMP:</u> Maintain Bubble-up Drain Inlets (Inverted Siphons), Covered Gutters (under the walk), and Storm Drain Inlets at Key Locations on the Major Trunk Lines</p> <p><u>Measurable Goal:</u> The maintenance of these facilities will be conducted biannually in Years 1 and 2, and annually in Years 3, 4, and 5. Results of the maintenance of each facility will be recorded on inspection sheets.</p>
6R	<p><u>BMP:</u> Respond to Sanitary Sewer Overflows (SSOs)</p> <p><u>Measurable Goal:</u> Respond immediately to SSOs.</p>
6S	<p><u>BMP:</u> Monitor Street Sweeping Operations</p> <p><u>Measurable Goal:</u> City and Waste Management staff will meet twice a year, beginning in Year 1 to discuss the street sweeping program.</p>
6T	<p><u>BMP:</u> Review Yard Waste Collection Program</p> <p><u>Measurable Goal:</u> The City will meet at least twice a year with Waste Management to review the yard waste collection program. Additional meetings will be conducted if issues need to be resolved prior to the regularly scheduled meeting. Meetings will begin in Year 1. Staff will explore extending the green waste container program to other portions of the City in Year 2.</p>
6U	<p><u>BMP:</u> Review Road Maintenance Program.</p> <p><u>Measurable Goal:</u> Evaluate Road Maintenance Program (Year 3), Prepare BMP fact sheets (Year 4), Implement and Review BMPs with Staff (Year 5).</p>