

Environmental Utilities Engineering Division

2005 Hilltop Circle Roseville. California 95747

September 14, 2007

Dannas Berchtold Central Valley Water Quality Control Board 11020 Sun Center Drive #200 Rancho Cordova, CA 95670-6114

Subject: City of Roseville FY 2006/2007 Annual Report

Dear Ms. Berchtold,

In compliance with the provisions of the State General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems, please find the City of Roseville's 2006-2007 Annual Progress Report. To assist with your review, we have provided a status summary table, attached, which identifies the following:

- Each best management practice (BMP) within our stormwater program.
- The annual report page number where information on that particular BMP can be found.
- The status of the BMP as either complete, in progress, or not initiated.
- Information as to whether or not the BMP is being modified in any way.
- Color-coding that indicates which BMPs have been advanced and which BMPs are not due for completion during this reporting period.

I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions or comments regarding this report, please feel free to contact me at (916) 774-5552.

Sincerely,

Kelye A. McKinney Engineering Manager

Table of Contents

Section 1 Overview and Contact Information

Section 2 Implementation Schedule

Section 3 Minimum Control Measures

Section 4 Responsible Party Assignments

Section 1: Overview and Contact Information

For questions regarding this report contact:

Date Prepared: 9/14/2007

Kelye McKinney 2005 Hilltop Circle Roseville, CA 95747

Stormwater Program Permit Information

1. Permitting Authority: California State Water Resources Control Board

2. Permit Number: CAS0000043. Permit Type: General

4. Permit Name: City of Roseville Stormwater Management Program

5. Date Issue: 7/6/2004 **6. Date Expire:** 6/30/2008

General Information for MS4 Operator

Operator Name: Robert Jensen
 Operator Title: Public Works Director

3. Represented Entity: City of Roseville, Environmental Utilities

4. Mailing Address: 2005 Hilltop Circle **5. Mail City, State, Zip:** Roseville, CA 95747 **6. Phone Number:** (916) 774-5349

7. E-Mail Address: rjensen@roseville.ca.us

8. Population: 104,655 Area (sq mi): 31

9. Official Website: www.roseville.ca.us

General Information for Primary Contact Person

Name: Kelye McKinney
 Title: Engineering Manager

3. Phone Number (916) 774-5552

4. E-Mail Address: kmckinney@roseville.ca.us

General Information for Secondary Contact Person

Name: Delyn Ellison-Lloyd
 Title: Senior Engineer
 Phone Number (916) 746-1748

4. E-Mail Address: dellison-lloyd@roseville.ca.us

General Information for Receiving Waters

Receiving Water Lists: Listed below are all the identified receiving waterbodies to which identified outfalls discharge.

Receiving Streams Receiving Waterbodies (creek, stream, river, etc.) (lake, wetland, ocean, etc.) Receiving Watersheds

North Branch Pleasant Grove Creek Kaseberg Creek South Branch Pleasant Grove Creek Dry Creek Miners Ravine Linda Creek Sacramento River Watershed

Section 2: Implementation Schedule

Public Education and Outreach		
PO-1: Early Implementation Program	7/1/2003	6/30/2008
PO-2: Strategic Outreach Program	7/1/2004	6/30/2008
PO-3: Construction, New Development, and Redevelopment Outreach	7/1/2003	6/30/2008
Public Participation/Involvement		
PI-1: Stormwater Website	7/1/2003	6/30/2008
PI-2: Watershed Management	7/1/2004	6/30/2008
PI-3: Public Body Updates	7/1/2003	6/30/2008
PI-4: Storm Drain Labeling	7/1/2004	6/30/2008
Illicit Discharge Detection and Elimination		
IDDE-1: Illicit/Non-Stormwater Discharge Detection	7/1/2003	6/30/2008
IDDE-2: Address/Eliminate Illicit Connections and Non-Stormwater Discharges	7/1/2004	6/30/2008
IDDE-3: Storm Sewer System Map	7/1/2003	6/30/2008
IDDE-4: Stormwater Ordinance	7/1/2004	6/30/2008
IDDE-5: Utilize Existing Programs	7/1/2003	6/30/2008
IDDE-6: Long-Term Outreach	7/1/2004	6/30/2008
Construction Site Runoff Control		
CSR-1: Revised Ordinances	7/1/2003	6/30/2008
CSR-2: City Standards	7/1/2004	6/30/2008
CSR-3: Design Review Guidance for City Staff	7/1/2004	6/30/2008
CSR-4: Enhanced Reporting System	7/1/2004	6/30/2008
CSR-5: Inspection and Enforcement Program	7/1/2003	6/30/2008
CSR-6: Outreach and Training Program	7/1/2003	6/30/2008

New Development and Redevelopment

ND-1: Development Review Process	7/1/2005	6/30/2008
ND-2: Critical Criteria	7/1/2004	6/30/2008
ND-3: Post-Construction Ordinance	7/1/2005	6/30/2008
ND-4: Regulatory Requirements for Privately Owned Controls	7/1/2006	6/30/2008
ND-5: Outreach and Technical Assistance	7/1/2004	6/30/2008
Municipal Operations		
MO-1: Inventory and Assess the Potential for Stormwater Pollution in O&M Activities at City-Owned Facilities and in City Field Operations	7/1/2004	6/30/2008
MO-2: Review and Assess the O&M Practices Identified in MO-1 as Potential Stormwater Pollution Sources for the Selection and Incorporation of BMPs to the Maximum Extent Practicable	7/1/2006	6/30/2008
MO-3: Review Construction and Development Procedures for City-Owned Facilities for Inclusion of Stormwater BMPs as Necessary	7/1/2005	6/30/2008
MO-4: Develop and Expand City O&M Training Programs to Include Stormwater Pollution Prevention	7/1/2004	6/30/2008

Section 3: Minimum Control Measures

Public Education and Outreach

The City of Roseville must educate the public within its jurisdiction about the importance of the stormwater program and the public's role in it. In order to elevate the public's awareness of the impacts that stormwater discharges may have on waterways, the City must develop a public education program that provides educational materials to the community within its boundaries. Based on the results of a community awareness survey, the City will develop a long-term strategy for educating the public and businesses regarding the impacts of stormwater pollutants to local waterways. These educational materials will include brochures, fact sheets and alternative information sources, which describe the proper use, storage, and disposal of materials that contribute to stormwater runoff pollution.

Non-point sources such as the residential and commercial sectors are significant sources of water quality degradation in the United States. The incremental contributions that each of these individual sources make via stormwater runoff to a receiving water body can combine to create a substantial source of water pollution.

The most effective way to elicit compliance and support from a decentralized audience such as the residential and business communities is through a targeted education and outreach program. To develop a compelling program, these dischargers should be surveyed to determine their awareness level and their preferred means of receiving stormwater pollution prevention information. The City's educational materials will be tailored to the results of an awareness survey and, therefore, the preferences of the audience will be recognized and the materials will be better received and acted upon.

Number of BMPs Associated with Control Measure: 3

Important Dates:

Earliest Start Date: 7/1/2003 End Date: 6/30/2008

PO-1: Early Implementation Program

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2003

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 X Year 2 Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

The early implementation program builds on the existing outreach activities of the City of Roseville by adding stormwater messages to those efforts. The program involves adding stormwater messages to the Water Conservation, Household Hazardous Waste, Used Oil Drop-Off, Composting Program, Dog Park, Creek Week, Fire Department Inspection, and Neighborhood Services programs, utilizing their existing mediums for disseminating information. Early implementation also utilizes two grant-funded activities to address stormwater pollution: the construction of two signs at Mahany Park, a highly used regional park, and preparation of a creekside landowner's guide. The program also includes providing stormwater information on the City's website and implementing a storm drain stenciling program. The City has committed to:

a) Include Articles on Stormwater Impact and New Phase II Program in City Newsletters

The City has agreed to publish and mail directly two articles per year on stormwater impacts and the new Phase II program via the City's Roseville Reflections and Environmental Utilities Today newsletters.

b) Adding Stormwater Specific Information to Existing Education and Outreach Materials

The City has agreed to add a stormwater message to the education and outreach materials of existing programs such as Water Conservation, Household Hazardous Waste, Used Oil Drop-Off, Composting, Dog Park, Creek Week, Fire Department Inspection and Neighborhood Services. The City has agreed to amend or create three educational and outreach materials per year. Existing media will be used for the dissemination of this information.

c) Construct Two Signs at Mahany Park

The City has agreed to utilize available educational signs at Mahany Park for stormwater education.

d) Develop and Implement Creekside Landowner Education Materials

The City has agreed to develop and implement creekside landowner's educational materials through Roseville's Creeks Management Plan.

e) Expand the City Stormwater Web Page

The City has agreed to enhance and update the stormwater content on its stormwater web page on a regular basis.

f) Implement Storm Drain Labeling Program

The City has agreed to enact a storm drain labeling program through the City's construction standards for new development and citizen volunteers for existing development. All of the new storm drains will be stamped each year and 200 existing storm drains will be labeled each year.

g) Identify and Participate in Local Community Outreach Events

The City has agreed to participate in minimum of three community outreach events each year.

APPROPRIATENESS:

This BMP is appropriate to the City's stormwater program. Public education is a critical to raising public awareness and understanding of the impacts of stormwater pollution in the community. In turn, the City's goal is to effect changes in public behavior and reduce pollutant loads on the City's local creeks. To accomplish this, the Stormwater Program employs a variety of educational avenues such as outreach events, newsletters and public service announcements.

EFFECTIVENESS:

The City has performed a baseline survey to determine the current status of public awareness and behaviors. The Stormwater Program has focused its outreach efforts towards the residential community and school age children. The City will perform a follow-up survey at the beginning of the next permit term to numerically quantify the effectiveness of the activities associated with this minimum control measure.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

PO-1.a: Include Articles on Stormwater Impacts and New Phase II Program in City Newsletters

Three stormwater articles were published in the "Environmental Utilities Today" newsletter. An article entitled "Creek Week, Come Meet Your Wild Neighbors" was published in the April 2007 issue. Two more articles were published in the June 2007 issue entitled "Car Washing Tips" and "Charity Carwash Kit Available." The "EU Today" newsletter is distributed to 35,000 Roseville residents. It is mailed out as an insert in the residential utility bill. It is also available on most public counters in City buildings. An article called "Green Guide to Car Washing" also ran in the 2007 summer edition of the City's general newsletter, Roseville Reflections.

The City's website is updated periodically to include new issues of the "EU Today" and Roseville Reflections newsletters which contain aforementioned articles. To access these newsletters go to the City's website at www.roseville.ca.us and under the heading of "Most Visited," go to Newsletters.

The City's Stormwater Program continues to partner with Our Water Our World to bring information regarding integrated pest management to the public. The City has sponsored two literature racks at two retail landscape nurseries: Green Acres and Sierra Nursery. Each rack holds approximately 24 individual fact sheets relating to specific pest management problems.

See appendix for: Copy of EU Today articles Copy of Roseville Reflections articles

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

PO-1.b: Add Stormwater Specific Information to Existing Education and Outreach Materials

Approximately one hundred and fifty Trina Trout magnets and pool discharge brochures were distributed at a City Fire Department Smoke Detector event on May 19, 2007. Both a magnet and a pool brochure were placed in each outreach bag distributed by the Fire Department. A bag was given to each household in the Country Villa Mobile Home Park. The magnet is intended to promote the illicit discharge hotline phone number. It reads "Report illegal discharges...call 746-1000".

The Stormwater Management Program contributed to the newly created open space management brochure. The brochure called "Doing Your Part to Care for Our Open Space". Information pertaining to the management of non-stormwater discharges such as wastewater from car washing, pool and spa discharges, painting activities and rinsing down hard surfaces. This brochure will be mailed out during the next permit term to residential properties that abut the City's Open Space.

The City Building Department also distributes the "Need to Drain Your Pool" brochure via all building permits for pools. This is done on an ongoing basis. Between July 1st, 2006 and June 30th 2007, approximately 210 building permits for pools were issued.

During this permit term, the Stormwater Management Program produced a public service announcement aimed at the "Do-It-Yourselfer" called "Stop That Funky Runoff." The 60-second PSA ran on Comcast on ESPN and TNT during Monday Night Football and the Sacramento King's NBA seasons. The PSA played more than 90 times. The target audience was adult men who conduct improvement projects at their homes. The main character, Eugene, a fictitious Roseville resident, demonstrated home projects such as painting, landscaping and cement work, and how they can impact local water quality. The direct connection between the City's storm drains and our local creeks and the impact non-stormwater discharges can have on local wildlife and their habitat was also stressed. The spot ran on the City's Public Access Cable Channel 14/73 as well.

The Stormwater Program also began production on a 30-second public service announcement and training video for the city's newly developed Charity Car Wash Kit during this permit term. The intent of the PSA was to inform local charities of the availability and details of the city's newly created charity car wash kit. The PSA will air on local television stations during the next permit term.

The Stormwater Program also coordinates with the City's Water, Wastewater, Solid Waste and Electric Departments to design and construct indoor and outdoor educational displays at the Mahany Center. A new facility is under construction at the Mahany Complex. This facility will house a new library and the new Roseville Utility Education Center (RUEC). This center will take an integrated approach to educating the public about sustainable lifestyles and their impact on environmental resources. Currently, the target audience is 4th, 5th and 8th graders and Roseville residents. Concepts specific to the stormwater program such as the connection between discharges to the storm drains and the creeks and the relationship between runoff and infiltration will also be demonstrated at the RUEC.

The Stormwater Program is also working on a stormwater model that depicts Roseville in a rain event and the contaminants associated with various land uses such as residential, commercial and construction. The City of Sacramento donated their old stormwater model to Roseville's program and we are in the process of updating its internal components and its external appearance to reflect Roseville topography and morphology. Initially, this model will be placed in City buildings in areas that the public can access such as public counters in the Corporation Yard and the Civic Center as well as the City libraries. We will also seek approval from local schools to display the model at their facilities.

See appendix for:
Hotline Trina Trout magnet
CD of "Stop That Funky Runoff" public service announcement

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

PO-1.c: Construction of Two Signs at Mahany Park

Two signs, incorporating the Trina Trout mascot, were installed at Mahany Park during the 2005-2006 reporting period. These signs read, "Hi! I'm Trina Trout. This is Kaseberg Creek. Roseville's creeks and fields are home to me, and all my furry and feathered friends. Please keep our home clean by tossing your trash in this can. Thank you, Stormwater Management Program." These signs are located at a creek bridge that is heavily traveled by pedestrians accessing both sides of the Park. This bridge is located behind Mahany Center and is part of the City's bike trail system.

See appendix for: Picture of signs

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

PO-1.d: Develop and Implement Creekside Landowner Educational Materials

The "Roseville Creek Awareness Map" and the "Roseville Creek Stewardship Resource Guide" were updated to conform to City's outreach standards during the 2005-2006 reporting period. Seventeen hundred and fifty of the "Roseville Creek Awareness Map" and five hundred of the "Roseville Creek Stewardship Resource Guides" were printed. The Creek Awareness Map is designed to be a wall poster and a brochure. The Stewardship Resource Guide is designed to be a tri-fold. Both discuss the City's Stormwater Management Program and its implications to activities in the residential community.

See appendix for: Roseville Creek Awareness Map Roseville Creek Stewardship Resource Guide

Date: 7/1/2003 Responsible Party: Mark Morse, Environmental Coordinator

PO-1.e: Expand the City Stormwater Web Page

The City's Stormwater website is updated periodically to provide both the residential and business communities with the most recent information on the City's Stormwater Management Program. During this permit term, the City's New Stormwater Design Standards for Development, the Stormwater Quality BMP Guidance Manual for Construction, and the City's New Stormwater Ordinance were uploaded to the site for the public's use. A link to the Our Water Our World Program's integrated pest management information was added to the stormwater webpage under the *Stormwater At Your Home* section.

See appendix for: Screen shots of website updates

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

PO-1.f: Implement Storm Drain Labeling Program

During this reporting period, the City completed a study to evaluate a new method of marking existing storm drains. This study documented the effectiveness of this proposed method, which consists of fastening a stainless steel disc that states "No Dumping Flows to Creek" to the concrete immediately adjacent to the storm drain inlet. These markers have a 30-year life span and will be a viable replacement for painted stencils, which tend to wear off within a year or two. The markers will be fastened using adhesive only or with adhesive and a nail depending on durability of the installation.

Staff concluded a study of 500 newly installed storm drain markers. Approximately one year prior to the study, the markers were installed as an Eagle Scout Project by a Boy Scout volunteer. The Scout installed a total of 500 markers. Approximately two hundred and eighty (280) of them were installed using adhesive and two hundred twenty (220) were installed using adhesive and a nail. City staff performed a spot check to verify proper installation of the markers. The Eagle Scout also provided an electronic spreadsheet delineating the location and the method installation for each marker. The markers were evaluated for their durability as compared to stenciled markings. The removal rates of the two installation methods were compared as well.

The results of the study concluded that the markers were far superior in durability to the stenciled markers. Four hundred and ninety-six markers remained in place and were in good condition. The four markers that were removed were installed using the adhesive only. Therefore, it was concluded that it would be advisable to use adhesive and a fastener if the markers were to remain in place for the intended lifespan of the marker.

All newly constructed storm drain inlets are required under the City's Construction Standards to have the "Do Not Dump" message stamped into the adjacent concrete sidewalk. Therefore, a storm drain marker will not be installed at these new drain inlets.

See appendix for:

Excel spreadsheet of evaluation of storm drain markers

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

PO-1.g: Identify and Participate in Local Community Outreach Events

The City's Stormwater Management Program participated in fourteen (14) community and school outreach opportunities during this reporting period.

The Stormwater Management Program's first outreach event this season was a multi-day home and garden show at the Placer County Fair Grounds. It was held on April 13, 14 and 15. The Stormwater Program distributed information on residential stormwater pollution as well as integrated pest management. Promotional giveaways such as umbrellas, trout can coolers, dustpans and dog poop bag dispensers were also distributed.

The City's Stormwater Program also participated in Hewlett Packard's Earth Day events at their campus on April 17, 2007. Most of the attendees were employees of HP and were very knowledgeable and interested in the environmental impacts of stormwater pollution. The Creek Awareness Map, the pool discharge brochure, hotline magnet and the trout can cooler were distributed. This event provided an opportunity to present stormwater pollution prevention information to a receptive and informed audience.

The Stormwater Management Program also participated in Kaiser's Earth Day event on April 26, 2007 by providing information for the Environmental Utilities booth. The residential stormwater brochure, *Stormwater Pollution at Your Home*, as well as the hotline magnet were distributed at this event.

The Stormwater Management Program also participated in the Dry Creek Conservancy's Creek Week celebration on April 28, 2007. The Stormwater Management Program also supported the Dry Creek Conservancy by participating in the Creek Week planning committee and by designing and producing the Creek Week announcement flyer.

The Stormwater Management Program also participated in Environmental Utilities' Blue Oaks School Fair. On May 3, 2007, approximately 95 first graders came to the City's Corporation Yard to view a presentation put on by the entire Environmental Utilities Department. The Stormwater Management Program also gave a presentation on stormwater pollution and the kids played the stormwater game as well. A bottle of bubbles and a stormwater magnet was given to each child.

The Stormwater Management Program participated in five of Roseville's Downtown Tuesday Nights during this reporting period. The Stormwater Program booth was used on six nights (July 11 & 25 of 2006, May 1 & 15 and June 6 & 10 of 2007). The booth includes a "carnival" type game, which visually demonstrates the connection between a storm drain and Roseville's creeks. The Trina Trout hotline magnets were distributed at these events. "Bags-on-Board" dog waste clean-up bags with the City's mascot, Trina Trout, a trout can cooler and a rubber mallard duck were also distributed at these events. Other smaller prizes for children such as fish bubbles, small kites, pinwheels and other frog and fish themed items were also distributed as prizes for the stormwater game. An average of 100 prizes were awarded at each of the event dates listed above. The City determined that an average of 3,500 people attend each Downtown Tuesday Night event.

The Stormwater Management Program staff also headed the development of a large walk-through display for the entire Environmental Utilities Department. The display is a roll-off box that had designated display space for each of the department's divisions including stormwater. The stormwater display included a tabletop game demonstrating the connection between the storm drain inlets and our local creeks.

The Stormwater Program also participated in the Fire Department's smoke detector outreach event on May 19, 2007. One hundred Trina Trout magnets and *Stormwater At Your Home* flyers were distributed at that event. Both a magnet and a flyer were placed in each give away bag. A kit was given to each household in the Country Villa Estates neighborhood. The magnet intended to promote the illicit discharge hotline phone number reads as follows "Report illegal discharges...call 746-1000". The *Stormwater At Your Home* brochure highlights stormwater pollution prevention tips for homeowners.

On June 12, 2007 the Stormwater Program made a presentation to the Crestmont Adventure Club. It is a childcare facility run by the City of Roseville. Approximately 40 kids ranging in age from kindergarten (5 years) to sixth grade (12 years) attended the forty-five-minute-long presentation.

Approximately 2,750 outreach materials were distributed to the public during this permit term. They were distributed through the outreach events mentioned above and other avenues such as the public counters and City offices. This includes approximately 1,500 hotline magnets. In addition, approximately 1,250 giveaways such as the can cooler, rubber duck and other game prizes were also given away through these events. All these items were intended to reinforce the Stormwater Program's central message of preserving the water quality Roseville's creeks through the management of stormwater runoff.

See appendix for: Hotline Trina Trout magnet Pictures of other giveaways Creek Week flyer

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

PO-2: Strategic Outreach Program

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2004 End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 X Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

The Strategic Outreach program is meant to educate the community on the impacts of stormwater pollution and the steps people can take to reduce or eliminate pollution from reaching area waterways. The program is also intended to assess which outreach materials are most appropriate for use within the community, including residents and businesses. The City has committed to:

a) Work with Neighboring Communities to Develop Partnerships

The local stormwater program managers from Placer County (Placer Regional Stormwater Coordinating Group) conduct monthly meetings at which the group which includes the City of Roseville evaluates opportunities to partner in the education and outreach efforts.

b) Conduct a Public Stormwater Awareness Survey

The City will use a public awareness survey to evaluate the community's existing level of stormwater knowledge, determine the need for additional stormwater information, identify target audiences, and establish effective messages. In addition, the City has agreed to use the survey to gather data on how the community obtains knowledge on stormwater issues and the effectiveness and desirability of various educational media.

c) Update the SWMP Public Outreach Program to Reflect the Strategic Plan

The City will revise the Public Outreach MCM of the SWMP based on the findings of the community awareness survey and the resulting strategic outreach plan. Outreach activities that include identified key messages, targeted audiences, and preferred media will be implemented. The new education and outreach program will capitalize on already developed materials wherever possible.

APPROPRIATENESS:

The City has found that building partnerships with neighboring communities is an appropriate method of information sharing, however not all the municipal programs do not have the same BMP implementation schedule making project coordination difficult at times.

EFFECTIVENESS:

The city has completed a public awareness survey. This survey will serve a baseline to gauge the appropriateness and the effectiveness of the City's BMPs in the Public Outreach Minimum Control Measure. The City plans to conduct a follow-up survey during the next permit term.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

PO-2.a: Work with Neighboring Communities to Develop Partnerships

The City attends local stormwater meetings such as those of the Dry Creek Water Council (DCWC) and the Placer Regional Stormwater Coordinating Group (PRSCG) in an attempt to develop partnerships with other watershed stakeholders and Phase II communities in the area. The City has determined that creating a memorandum of understanding (MOU) with PRSCG membership to provide a mechanism for funding coordinated activities infeasible due to the variation in the BMP implementation schedule of each MS4.

Roseville stormwater program staff attended the PRSCG meetings on 7-20-06, 10-19-06, 1-25-07 and 4-19-07. The topics discussed included regulatory dates, construction stormwater runoff workshops, and the development of a stormwater component to the already existing food facility inspection program through Placer County Environmental Health. Attending participants usually included representatives from the City of Roseklin, Town of Loomis, City of Lincoln, City of Auburn, Placer County, as well as the City of Roseville. These meetings provide the City with an opportunity to benefit from information sharing. The frequency of these meetings has been reduced to quarterly due to limitations in staff time of the participating agencies.

Date: 7/1/2004 Responsible Party: Kelye McKinney, Engineering Manager

PO-2.b: Conduct a Public Stormwater Awareness Survey

Roseville's residents were surveyed regarding their awareness of stormwater quality issues during this reporting period. The survey was developed and the results compiled by Data Cycles in April 2005. The survey was administered via Roseville's website to citizens who had previously agreed to respond to a wide variety of Roseville related topics. The survey questionnaire assessed the knowledge level of approximately 300 residents on the following subjects:

Drainage in their neighborhood
Use and disposal of building materials
Use and disposal of landscaping materials and/or pool maintenance
Use and disposal of auto maintenance materials
Sources of stormwater information
Business/government/resident responsibility

Individual comments were solicited for several survey questions. The survey demographics were also compiled through a series of general household questions.

Generally speaking, the survey results of the web-based survey indicate that the public is not knowledgeable about the specifics of the final destination of stormwater discharged from their neighbor (i.e., which creek). Most of the respondents seemed to believe that government and business should bear the responsibility of preventing stormwater pollution rather than the residential community. Most described their waste disposal practices as environmentally responsible. These results will be given the utmost consideration when formulating the program's long term public outreach strategy.

This best management practice has been completed.

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

PO-2.c: Update the SWMP Public Outreach Program to Reflect the Strategic Plan

The Stormwater Program contracted with a consultant, Lucy and Co. to develop a long-term public outreach strategy based on the public stormwater awareness survey. The long-term outreach strategy is being used to guide the efforts of the Public Education and Outreach minimum control measure of the City's Stormwater Management Plan.

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

PO-3: Construction, New Development, and Redevelopment Outreach

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2003 End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 X Year 2 Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

The Construction, New Development, and Redevelopment Outreach Program each contain an outreach component directed to construction professionals and other interested parties during development of the Construction Site Runoff (CSR) and the New Development/Redevelopment (ND) programs. It also involves training construction professionals and City staff on the specifics of the two newly adopted programs. The City has committed to:

a) Conduct Workshops During Construction Stormwater Runoff and New Development/Redevelopment Programs Creation.

The City has agreed to conduct three half-day workshops to solicit public input during the creation of the Construction Stormwater Runoff and New Development/Redevelopment programs for a total of six workshops.

b) Conduct Annual Training Workshops on Construction and Improvement Standards During New Development Program Creation.

The City has agreed to conduct annual training workshops on the City's Construction Stormwater Runoff and New Development programs once they are in place.

APPROPRIATENESS:

The workshops conducted by the City are an appropriate way to educate and receive input from the construction and development community about the stormwater management program and their responsibilities to prevent stormwater pollution from construction site and new development projects.

EFFECTIVENESS:

Initial indicators tend to validate the presumed effectiveness of this BMP. Through tailgate workshops, detailed information specific to Roseville's Construction Stormwater Management program is distributed to a number of field staff in the construction industry making the financial resources committed to this BMP very effective. The public workshops also provide an excellent opportunity for the development community to have input into the City's new stormwater quality design manual.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

PO-3.a: Conduct Workshops During Construction Stormwater Runoff and New Development/Redevelopment Program Creation

The City's Construction Stormwater Runoff program is fairly well established. The City is currently enforces the criteria of State General Permit for Construction by requiring Stormwater Pollution Prevention Plans (SWPPP) from construction sites one acre or greater and inspecting those construction site for an effective combination of erosion and sediment control as well as best management practices for non-stormwater discharges.

The New Development and Redevelopment program is still in its developmental phase. The City coordinated with the Sacramento Stormwater Quality Partnership to development the Region's new Stormwater Quality Design Manual. A series of public meeting were held to solicit input from the regulated community on this design manual. They were as follows:

- Sacramento Stormwater Management Partnership (includes Roseville) organized and held two 4 hour Focus Groups for Developers from the Sacramento County and South Placer County regions: (12/11/07 & 1/18/07)
- (2) City Staff hosted a Public Outreach Workshop March 8th, 2007 at Woodcreek Oaks (4 hours) for the Sacramento Stormwater Management Partnership
- (3) Roseville participated in the Elk Grove Public Outreach Workshop March 20th, 2007 (4 hours) with the Sacramento Stormwater Management Partnership
- (4) As members of the Sacramento Stormwater Management Partnership, Staff has met with and continues to work with, the northern chapter of the Building Industry Association (BIA) to discuss implementation of the new SWQ Design Standards: (2/14/07, 3/14/07, 4/11/07)

Date: 7/1/2003 Responsible Party: Guy Howes, Senior Engineer

PO-3.b: Conduct Annual Training Workshops on Construction and Improvement Standards

The City's Public Works Department has conducted several Construction Site Tailgate Workshops during this permit term. A series of four one-half hour workshops were held on February 20 (2), March 1, and March 16, 2007. A total of forty-six (46) construction site staff attended these workshops. In addition, one 1 hour Construction Site Tailgate Workshop was held on July 31, 2006. Forty-six (46) construction site staff attended that workshop.

Date: 7/1/2004 Responsible Party: Guy Howes, Senior Engineer

Public Participation/Involvement

The City must implement a minimum control measure (MCM) designed to engage and involve the regulated community in the development, implementation and periodic review of its stormwater management program. This MCM is intended to alleviate the legal challenges and the acceptance issues usually accompanying a newly implemented regulatory program. The Public Participation and Involvement Minimum Control Measure accomplishes this by providing the public an opportunity to play an active role in the stormwater management program, thereby creating ownership in the outcomes of the program.

The public can provide valuable input and assistance to a regulated small MS4's municipal stormwater management program. Therefore, inclusion of the public in the creation and stewardship of its stormwater management program is critical to the MS4. Public participation and involvement ensures broader public support since citizens who participate in the development and decision-making process are partially responsible for the success of the program and, therefore, may be less likely to raise legal challenges to the program and more likely to take an active role in its implementation. Usually, shorter program implementation schedules are realized due to fewer obstacles in the form of public opposition and legal challenges. In addition, citizen volunteers provide increased resources to implement program components. Citizens can bring enhanced expertise and economic benefits to the program.

In addition, citizens can act as a conduit to other programs to provide important cross-connections and relationships with other community and government programs. This benefit is particularly valuable when trying to implement a stormwater program on a watershed basis, as encouraged by EPA.

Number of BMPs Associated with Control Measure: 4

Important Dates:

Earliest Start Date: 7/1/2003 End Date: 6/30/2008

PI-1: Stormwater Website

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2003

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 X Year 2 Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

The City's stormwater website is an important aspect of its Public Involvement Program. The website provides an opportunity to keep the public updated on the stormwater program and offering a forum for educating the public on pollution prevention techniques. It also provides a way for the community to get involved in the program through feedback and the reporting of illicit discharges. The City has committed to:

a) Create Stormwater Content for Web Page

The City has agreed to develop stormwater pollution prevention content for the stormwater web page and post information as it becomes available.

b) Post Technical Assistance Documents

The City has agreed to post technical documents relating to the Construction Stormwater Runoff Minimum Control Measure (MCM), the New Development and Redevelopment MCM, and the Illicit Discharge Detection and Elimination MCM on the stormwater web page. To further assist the regulated community, the City has agreed to post documents relating to the City's policies and procedures pertaining to each MCM.

c) Provide for the Submittal of E-mails Via the Web Page

The City has agreed to establish a link on the stormwater web page to allow the regulated community to submit comments regarding the program and to report illicit discharges and connections.

APPROPRIATENESS:

The stormwater website is an appropriate outreach mechanism for cost-effective public education. It provides an excellent conduit of information between the City and the residential and business communities.

EFFECTIVENESS:

The City has received numerous reports of illicit discharges via the website from the regulated community. The Stormwater Management Staff has responded to these reports and mitigated the non-stormwater discharge. In addition, the website provides a good opportunity to provide the public with detailed information regarding the program.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

PI-1.a: Create Stormwater Content for Web Page

This minimum control measure has been accomplished. A web page for the stormwater program has been created and content has been posted. The stormwater program web pages had more than 6,950 visits during the last reporting period. At this time, the City continues to update the web page with new and pertinent information as necessary.

To provide both the residential and business communities with the most recent information on stormwater runoff management, a links to a wide variety of state and regional documents were added to the City's stormwater web page. On the Stormwater homepage, links were provided for the City's New Stormwater Design Standards Manual for Development, the new Stormwater Ordinance and the Stormwater Quality BMP Manual for Construction. To enable the public to access a draft of the post-construction best management manual, a link to Sacramento's Stormwater Quality Partnership was added to the stormwater website. The final version of the Stormwater Ordinance was posted on the website for public review. A link to the State Water Resources Control Board's website for updates and workshops on the draft general construction permit was also added to the stormwater web page.

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

PI-1.b: Post Technical Assistance Documents

Currently, there are more than a dozen "technical compliance" related documents posted on the website, either directly or by link. These resources provide public and regulated industries with information on topics such as the city policies and procedures, annual reporting, general/municipal permits, pollution prevention, stormwater compliance, required forms, BMPs, and industry specific issues.

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

PI-1.c: Provide for the Submittal of E-mails Via the Web Page

The "Contact Stormwater" page of the website provides several options for making contact with Stormwater Management staff. They are as follows:

"Report a current stormwater-related incident: Stormwater Hotline (916) 746-1000

Contact the Stormwater Management Program (916) 774-5751 or stormwater@roseville.ca.us"

All e-mails from the public were received during this reporting period were addressed by City staff.

The Trina Trout mascot, displayed here also, adds continuity to the stormwater message.

See appendix for: Screen shot of "Contact Stormwater" web page

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

PI-2: Watershed Management

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2004

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 X Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

The Watershed Management Program includes the development of several regional watershed management plans, including the Dry Creek Coordinated Resource Management Plan and the Pleasant Grove Creek Coordinated Management Plan. Although both these plans are being developed by Placer County, stakeholder coordination occurs through the Dry Creek Watershed Council (DCWC). The City has committed to:

a) Attend Dry Creek Watershed Council Meetings

The City has agreed to attend at least two DCWC meetings per year.

b) Support Efforts to Establish a Coordinated Resource Management Plan

The City has agreed to support all efforts to establish a Coordinated Resource Management Plan for the Pleasant Grove Creek watershed (PG CRMP).

c) Develop a Citywide Creek and Riparian Management and Restoration Plan

The City has agreed to develop a Citywide Creek and Riparian Management and Restoration Plan. This plan is to be directed at urban watershed issues unique to the City.

d) Support Pollution Prevention Programs

The City has agreed to actively promote water quality protection by co-sponsoring stormwater pollution prevention activities such as Creek Week cleanups and citizen monitoring programs.

APPROPRIATENESS:

The Watershed Management is a particularly appropriate best management practice in the stormwater management program. This BMP has tangible implications to the protection of the City's waterways. By supporting the City's Creek Restoration Plan and the Open Space Management Program, the Stormwater Management Program can have direct impact to the health of Roseville's creeks.

EFFECTIVENESS:

Anecdotal evidence (i.e. trash removal and fish barrier passage removal) points to a positive impact to the water quality of Roseville's creeks.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

PI-2.a: Attend Dry Creek Watershed Council Meetings

Dry Creek Watershed Council meetings were attended on a monthly basis by the City's Parks and Recreation Department staff. Staff from other departments also attended meetings on an as needed basis depending on agenda topics.

Date: 7/1/2004 Responsible Party: Shayna Carney, Open Space Manager

PI-2.b: Support Efforts to Establish a Coordinated Resource Management Plan

The City has supported efforts by Placer County to develop a Coordinated Resource Management Plan for Pleasant Grove Creek. This included attending and commenting on the Plan at Dry Creek Watershed Council meetings where the draft plan was discussed and debated. The City's Environmental Coordinator also served on the Technical Advisory Committee (TAC) for the Coordinated Resource Management Plan. This TAC provided direction on key issues during plan development.

The City continues to support the Pleasant Grove Creek Plan and other watershed planning efforts lead by the County by attending monthly meetings for the American Basin Council of Watersheds. This is a newly created watershed group with a regional emphasis and replaces the Dry Creek Watershed Council. The City's Open Space Division intends to remain engaged in these watershed processes by continuing to attend monthly American Basin Council of Watersheds meetings.

Date: 7/1/2004 Responsible Party: Shayna Carney, Open Space Manager

PI-2.c: Develop a Citywide Creek and Riparian Management and Restoration Plan

The City's Creek and Riparian Management Plan was completed and approved by the City Council on June 1, 2005. This year the Plan was used as a guidance document for City programs and activities that occur within the creek zone.

Date: 7/1/2004 Responsible Party: Shayna Carney, Open Space Manager

PI-2.d: Support Pollution Prevention Programs

Creek Week was again a focus of our support this year. The Stormwater Management Program and the Open Space Division participated in Dry Creek Conservancy's planning meetings for Creek Week, the City contributed resources to the week's restoration events and to the design and printing of the announcement flyer. The City also collected garbage and debris from the clean-up sites. The City also contributed funds through the Parks and Recreation Department to purchase t-shirts for clean-up day participants. The Stormwater Management Program also participated in the celebration event at Royer Park at the culmination of Creek Week.

We continue to collaborate with Dry Creek Conservancy (DCC) regarding water quality monitoring and restoration activities through out the year. This reporting period the City is partnering with the DCC to secure grant funding for creek awareness signs. This project will include the design and installation of signs at creek access points. Installation of the signs is scheduled for 2007.

Date: 7/1/2004 Responsible Party: Shayna Carney, Open Space Manager

PI-3: Public Body Updates

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2003 End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 X Year 2 Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

Providing updates on the stormwater program to the general public is another important step in both educating the public on the City's stormwater program and also offering a forum for public feedback. This BMP consists of providing periodic updates during Public Utilities Commission, Planning Commission, and City Council Meetings. The City has committed to:

a) Provide Public Body Updates

The City has agreed to provide two updates per year to the public regarding the activities conducted under the SWMP.

APPROPRIATENESS:

Public body updates are appropriate to the stormwater management program because they provide an opportunity for the City's governing bodies and the public in general to hear about the activities of the program and to comment on them.

EFFECTIVENESS:

This minimum control measure is an effective means of communicating to the City's decision makers. As with most Phase II program, the City's program is funding by the general fund. Therefore, the program must compete with other general fund activities such as emergency response and safety activities. It is important that the elected officials and the general electorate are acquainted with the goals and activities of the Stormwater Management Program when making funding decisions.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

PI-3.a: Provide Updates

Updates to City Council and Commission are provided on an as required basis.

Date: 7/1/2003 Responsible Party: Kelye McKinney, Engineering Manager

PI-4: Storm Drain Labeling

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2004

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 X Year 3 X Year 4 X Year 5

Has Goal Been Accomplished: YES

General Summary

The Storm Drain Labeling program is aimed at raising the public's awareness of direct connection between the storm drain inlet and the receiving water it serves. It is presumed that once armed with this knowledge the public will be less likely to dump waste into the storm drains. The program is an effort to label all of the City's storm drains with a message alerting the public that water discharged to storm drains flows directly to creeks and streams. In addition to raising public awareness, the program provides an opportunity for local citizens and community service groups to get involved in the stormwater management plan. The City has committed to:

a) Label or Stencil Storm Drains

The City has agreed to label or stencil 200 storm drains per year in areas of existing development using community groups.

b) Evaluate Storm Drain Labeling Versus Stenciling

The City has agreed to evaluate the longevity and cost effectiveness of storm drain labeling versus storm drain stenciling that has been traditionally used in the past.

APPROPRIATENESS:

The storm drain labeling program is an appropriate way of continuously reminding the public of the connection between the storm drain inlets and the City's creek. In addition, it is important for the residential and business communities to realize the threat of non-stormwater discharges pose to the City's waterways.

EFFECTIVENESS:

The City has not performed a follow-up survey in a statistically significant manner to ascertain the effectiveness of the storm drain labeling program. Program staff often hears anecdotal accounts of the impact of the storm drain labels on prohibiting non-stormwater discharges.

PROPOSED MODIFICATIONS:

The City will continue to require that all storm drain inlets in new communities be labeled by the project proponent and will continue to solicit volunteers to assist with labeling efforts in the established communities.

Status of Measurable Goals

PI-4.a: Label or Stencil Storm Drains

The City initiated a study during this permit term to evaluate the effectiveness of a new method of marking existing storm drains. The proposed method consists of fastening a stainless steel disc that states "No Dumping Flows to Creek" to the concrete immediately adjacent to the storm drain inlet. These markers have a 30-year life span and will be a viable replacement for painted-on stencils, which tend to wear off within a year or two. The half of these markers were fastened using adhesive only and the other half with adhesive and a nail.

City staff developed a pilot study that involved the installation of 500 of these new storm drain markers. Approximately, half (220) of the markers were to be installed using adhesive only and the rest (280) were installed using a nail and the adhesive. The markers were evaluated for their overall durability and their rate of removal.

The markers were installed an Eagle Scout project by a Boy Scout volunteer. He installed a total of 500 markers. Approximately two hundred and eighty (280) of them were installed using adhesive and two hundred twenty (220) were installed using adhesive and a nail. City staff performed a spot check to verify proper installation of the markers. The Eagle Scout also provided an electronic spreadsheet delineating the location and the type of materials used to install each marker. Approximately four hundred and ninety six markers remained in place and in good condition with all the writing legible over one year after installation. The four markers that were removed were installed using adhesive only, so the Stormwater Management Program has decided use a nail and adhesive to install the markers in the future.

Volunteers marked over nine hundred existing storm drains this permit term. Three Eagle Scouts candidates installed approximately 300 markers in three separate projects during this permit term. Two additional groups, William Jessup University (approximately 40 markers) and Hewlett Packard (approximately 15 markers), participated in two much smaller marker installation projects this permit term as well.

All newly constructed storm drain inlets are required under the City's Construction Standards to have the "Do Not Dump" message stamped into the adjacent concrete sidewalk.

Details of stenciling events are as follows: Storm drains stenciled - 900 Number of participants - 75

See appendix for: Map of drains stenciled Picture of new marker

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

PI-4.b: Evaluate Storm Drain Labeling Versus Stenciling

Due to limited life span of a painted stencil, approximately 1 to 1.5 years, and the potential for deleterious effect to the creek environment from the stencil paint, the City evaluated other options for labeling storm drains during this permit term. The City chose to use stainless steel markers, which have an estimated life span of 30 years. These markers proved to be very cost effective and are visually appealing.

A pilot program to install 580 of these markers was initiated during this reporting period. The metal markers were installed using an Eagle Scout candidate community volunteer group in the spring of 2006. The markers were installed using two methods: 220 markers were installed with adhesive only, and 280 markers were installed with adhesive and a concrete nail fastener. City Street staff drilled concrete fastener holes in advance for the markers needing them. Then the Eagle Scout volunteer completed the installation. City staff inspected each installation site approximately one year after the initial installation date. The purpose of the study was to evaluate the durability of the markers and the installation method. It was found that the markers were in good condition with only four markers missing. The four markers were installed with adhesive only. Therefore, it was determined that glue and a nail would be used in future installation.

See appendix for: Picture of stainless steel marker on storm drain Map of installation locations

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

Illicit Discharge Detection and Elimination

The IDDE Program is intended to identify and eliminate all discharges and connections to the Small Municipal Separate Storm Sewer Systems (MS4) that are not composed entirely of stormwater, except for discharges allowed under the National Pollutant Discharge Elimination System (NPDES) permit, authorized non-stormwater discharges or fire fighter flows.

IDDE-1, detecting illicit/non-stormwater discharges, and IDDE-5, utilizing existing City programs, were the focus of fiscal year 2003/2004. The goal of IDDE-1 is to detect illicit/non-stormwater discharges by incorporating stormwater pollution prevention in the activities of both City personnel and the public. IDDE-1 is also meant to increase public awareness. The goal of IDDE-5 is inform public employees, businesses, and the general public of hazards associated with illicit discharges.

The minimum control measures, IDDE-2, address/eliminate illicit connections and non-stormwater discharges, IDDE-4, stormwater ordinance, and IDDE-6, long-term outreach were scheduled for to be implementation in the 2004/2005-permit year. The goal of IDDE-2 is to address or eliminate illicit connections and non-stormwater discharges. This includes instituting policies and procedures for their detection, providing technical guidance for staff, enacting proper enforcement, and improving spill response and cleanup activities.

IDDE-3, stormwater sewer system map was not assigned a specific implementation schedule. The City already a stormwater map developed prior to receiving its stormwater NPDES permit from the State and the implementing the Stormwater Management Program. Therefore, under IDDE-3, the City's storm sewer map will be continually updated and refined over the entire term of permit.

Discharges from MS4s often contain wastes and wastewater from non-stormwater sources. A study conducted in 1987 in Sacramento, California, found that almost one-half of the water discharged from a local MS4 was not directly attributable to precipitation runoff. A significant portion of these dry-weather flows were from illicit and/or inappropriate discharges and connections to the MS4. Illicit discharges enter the system through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by drain outlets, or pollutants such as paint or used oil dumped directly into a drain). The result is untreated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving water bodies. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

Number of BMPs Associated with Control Measure: 6

Important Dates:

Earliest Start Date: 7/1/2003 End Date: 6/30/2008

IDDE-1: Illicit/Non-Stormwater Discharge Detection

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2003

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 X Year 2 Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

The Illicit/Non-Stormwater Discharge Detection program involves inspection of discharge sources throughout the City that may contribute pollutants to the City's creeks such as businesses and outfalls. This BMP is targeted towards commercial and industrial facilities, businesses, residential neighborhoods, construction sites, and municipal facilities. The program also includes a means of responding to these illicit discharges and a means of enabling citizens to report illicit discharges they witness. The City has committed to:

a) Perform Inspections

The City has agreed to incorporate a stormwater component into the Fire Department's existing hazardous materials/waste inspection program. While on-site, fire inspection staff reviews operating procedures at businesses throughout the City with the intent of locating and curtailing illicit discharges. The City committed to a minimum of 250 inspections per year.

b) Create Spill Response Procedure

The City has agreed to create a procedure to respond to illicit discharges that coordinates the City's response programs with the stormwater program to report location, frequency, and number of spills.

c) Create a Means of Enabling Citizen Reporting

The City has agreed to expand the City's website and create a hotline to provide for citizen reports of observed illicit stormwater discharges.

d) Review Site and Building Plans for Possible Illicit Connections

The City has agreed to review all site and building plans to detect and mitigate illicit connections and places where illicit discharges are most likely to occur.

e) Provide Annual Training to Appropriate City Departments and Staff

The City has agreed to provide annual training to the Streets, Water, Wastewater, Parks, Fire, and Police Departments as well as to Utility Meter Readers and other appropriate personnel to observe and report illicit discharges and connections while performing their normal field duties.

f) Assess Dry Weather Flows

The City has agreed to commit two full-time equivalent staff from EU and/or Public Works to perform visual or chemical monitoring one day per month during the dry weather season (May-October).

APPROPRIATENESS:

Illicit/Non-Stormwater Discharge Detection is an appropriate means of locating and mitigating illicit discharges. Eliminating non-stormwater discharges is presumed to have a positive impact to water quality in local waterways.

EFFECTIVENESS:

By performing inspections at commercial and industrial facilities and responding to illicit discharge complaints, the City's Stormwater Management Program is able to reduce the number of non-stormwater discharges that reach our local creeks. In addition, both of these activities provide opportunities to educate the residential and business communities of the impacts of non-stormwater discharges to local waterways.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

IDDE-1.a: Perform Inspections

The City's Fire Department has inspected approximately 300 businesses for illicit stormwater discharges. These inspections are conducted as a component to the Fire Department's hazardous materials business plan and hazardous waste generator inspections. As a result of these inspections, fourteen (14) businesses were given a written warning by the Fire Department via their inspection report regarding the discharge of pollutants to the stormwater conveyance system. The Fire Department refers stormwater dischargers requiring assistance with BMP implementation to the Stormwater Management Program (SMP) for follow-up and further site review.

The City is coordinating with Placer County Environmental Health Department through the Placer Regional Stormwater Coordinating Group (PRSCG) to include a stormwater component in the annual health inspections at retail food facilities. It is anticipated that Placer County will begin a pilot study at restaurants located in the unincorporated area in spring of 2008.

The Stormwater Management Program (SMP) has developed an enforcement policy and procedures to allow for the issuance of penalties for non-stormwater discharges. Under the City's newly adopted stormwater ordinance, a city representative may issue an infraction citation or a compliance order for violations. The Stormwater Management Program may issue an infraction citation for one-time discharges or a compliance order for ongoing discharges. The newly developed enforcement policy specifies the steps SMP staff must take to issue an enforcement action. Upon finding a violation of the stormwater ordinance, SMP staff will require the discharger to cease the discharge and issue a Notice of Non-Compliance in cases of ongoing discharges. In addition, the discharger will be required to submit an Action Plan that delineates BMPs that the dischargers will implement to mitigate the discharge and the timeframe of their implementation. SMP staff will review and comment on the proposed BMPs and distribute the plan to other affected City departments for their comment. SMP staff will also inspect the facility after the proposed BMP implementation date to verify their installation and effectiveness. If the BMP is deficient in either of these parameters, then SMP will issue a Compliance Order. This Order reiterates the requirements of the Notice of Non-Compliance with new compliance dates. A city issued Compliance Order carries a monetary penalty of \$50 to \$500 a day retroactive to the day of issuance for non-compliance. The average compliance term is thirty days in length. If the dischargers fails to implement effective BMP as delineated in the action plan within the timeframes specified by the Compliance Order monetary penalties may be assessed. In addition, the discharger may request a hearing before the City's hearing panel if the requirements and penalties of the Compliance Order are contested.

See appendix for: Roseville Municipal Code Chapter 14.20 Roseville Municipal Code Chapter 2.52 Flow chart of enforcement procedure Enforcement policy

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-1.b: Create Spill Response Procedure

During the '05-'06 reporting period, a spill response procedure was created for all incidents reported via 911, the city's stormwater hotline, the Stormwater Management Program (SMP) office number, and the Stormwater website e-mail. A flow chart of the response procedure indicates the appropriate responder for each of the following categories: known substances with no personal protective equipment (PPE), hazardous materials or unknowns, and wastewater. The Environmental Utilities Department will respond to service requests that involve known substances or sanitary sewer overflows. The Fire Department will respond to incidents that involve hazardous materials or unknowns. Public Works Department will respond to service requests that involve construction sites. The City's Streets Division will provide mutual aid to all City departments in the event clean up of the stormwater conveyance system is necessary.

The Stormwater Management Program created a more detailed Incident Response Procedure for City responders. This procedure defines responsibilities and appropriate notifications once SMP receives notification of an incident. It describes the steps that SMP will follow when City Fire refers a discharger to SMP for enforcement or compliance assistance. It also defines the steps to determine the type of spill (hazardous vs. non-hazardous) and which department will have clean-up oversight responsibility. SMP has budgeted a modest level of funds to pay for the clean-up of both types spills. Provisions have also been made for cost recovery from the discharger.

The Stormwater Program has developed an incident report form to document the details of the discharge and the enforcement actions taken by EU staff at each event. Each incident is then logged into the Hansen and GIS databases for tracking, trending and reporting purposes.

See appendix for: Visio flow chart of response procedures Draft of Stormwater Management Program Incident Response Procedures Incident report form Incident Response Reimbursement Sheet Notice of Non-Compliance

Compliance Order

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-1.c: Create Means of Enabling Citizen Reporting

As of April 2005, Roseville citizens have been able to report illicit discharges to the City's Stormwater Hotline (916-746-1000). The hotline number has been posted on the website for widespread reference. Additionally, it is promoted in print through the distribution of public outreach materials such as the Trina Trout magnets. Approximately 1500 magnets that advertise the Stormwater Hotline were distributed during this reporting period.

The stormwater hotline is located at the City's emergency dispatch center. This allows for a central intake of calls 24 hours per day, 7 days per week. Additionally, this set-up provides for the dispatch of emergency personnel in the event of a hazardous materials spill.

Roseville residents may also report illicit discharges and request information about the program through the 'Contact Us' link on the stormwater webpage.

See appendix for:

Screen shot of Stormwater Hotline web page (see Public Participation & Involvement attachments) Hotline Trina Trout magnet (see Public Education and Outreach attachments)

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-1.d: Review Site and Building Plans for Possible Illicit Connections

The plan check staff of the City's Public Works and Environmental Utilities Engineering Divisions review building site plans for potential illicit connections to the stormwater conveyance system such as decorative fountains and swimming pool connections. Public Works Engineering and Building Division staff plan to work

together to review civil site plans and building plans to eliminate the occurrences of illicit connections. The Stormwater Management Program also coordinates with Environmental Utilities' plan check staff to identify potential illicit connections and possible illicit discharge points.

The City began attaching the "Need to Drain Your Pool" flyer to all new pool building permits beginning March 1, 2005. This procedure continued throughout this reporting period, July 1, 2006 through June 30, 2007. More than two-hundred pool construction permits were issued each had an accompanying pool flyer attached this reporting period.

See appendix for:

Need to Drain Your Pool flyer

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-1.e: Provide Annual Training for Appropriate City Departments and Staff

Per the specifications of MO-4, City staff is trained on the specifics of the Stormwater Management Program including the concept of what constitutes an illicit discharge and how to report a discharge to the proper authorities. Stormwater awareness training including an illicit discharge detection and elimination component was provided to the City's Facilities Maintenance staff on 12/07/06, the Streets Maintenance staff on 05/17/07, and the Wastewater Collection Crew on 06/21/07. Each participant was given stormwater hotline magnet with the 24 hour reporting number.

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-1.f: Assess Dry Weather Flows

Weekly outfall evaluations were scheduled during the dry season. Dates and number of outfalls observed were as follows:

2006: 07/06/06 - 21 07/07/06 - 15 07/13/06 - 25 07/20/06 - 15 07/28/06 - 09 08/10/06 - 08 08/17/06 - 23 08/24/06 - 18 09/06/06 - 02 09/07/06 - 06 09/14/06 - 12 09/21/06 - 07 09/22/06 - 04 10/05/06 - 10 10/12/06 - 12 10/31/06 - 01 11/03/06 - 02 2007: 05/24/07 - 06 06/25/07 - 24 Total 220

The data collected include condition of outfall and surrounding area, equipment accessibility, illicit discharges, digital photograph and GPS location.

No illicit discharges were identified this reporting period.

See appendix for:

Map of outfalls evaluated

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-2: Address/Eliminate Illicit Connections and Non-Stormwater Discharges

Responsible Party: Kelye McKinney, Engineering Manager

End Date: 6/30/2008

Start Date: 7/1/2004

Permit years scheduled for initial implementation:

Year 1 Year 2 X Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

This program is intended to address or eliminate illicit connections and non-stormwater discharges detected in IDDE-1. The program includes two general activities, investigation and enforcement. The City has committed to:

a) Create New Investigation Procedures

The City has agreed to create new investigation procedures to address and track illicit discharges and connections.

b) Create Enforcement Procedures

The City has agreed to conduct annual training for enforcement staff to help eliminate illicit discharges. The City has also agreed to develop and implement different levels of enforcement actions: a warning citation, Notice of Violation (NOV), Cease & Desist, administrative fines, and possible referral to the District Attorney.

c) Enhance existing spill response activities to include the cessation and remediation of illicit/nonstormwater discharges,

The City has agreed to enact through local ordinance the means to improve stormwater discharge response by including the means to cease and remediate non-stormwater discharges.

APPROPRIATENESS:

In order to improve water quality, it is imperative that the City investigates and eliminates illicit connections and non-stormwater discharges.

EFFECTIVENESS:

Addressing illicit connections and non-stormwater discharges is an effective way to improve water quality in the City's creeks. By mitigating the discharge points of various non-stormwater discharges the pollutant load on local waterways is reduced.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

IDDE-2.a: Develop Policy to Address Illicit/Non-Stormwater Discharges and Connections

On July 7, 2006, the Roseville Municipal was amended to include Chapter 14.20 of Title 14, the "Urban Stormwater Quality Management and Discharge Control Ordinance" The development of new policy pertaining to illicit/non-stormwater discharges and connections has been tied to the adoption of new Roseville Stormwater Ordinance.

The Stormwater Management Program (SMP) has developed an enforcement policy that allows for the issuance of penalties for non-stormwater discharges. Under the City's newly adopted stormwater ordinance, a City representative may issue an infraction citation or a compliance order for violations. The Stormwater Management Program may issue an infraction citation for one-time discharges or a compliance order for ongoing discharges. The newly developed enforcement policy specifies the steps SMP staff must take to issue an enforcement action. Upon finding a violation of the stormwater ordinance, SMP staff will require the discharger to cease the discharge and issue a Notice of Non-Compliance in cases of ongoing discharges. In addition, the discharger will be required to submit an Action Plan that delineates BMPs that the dischargers will implement to mitigate the discharge and the timeframe of their implementation. SMP staff will review and comment on the proposed BMPs and distribute the plan to other affected City departments for their comment. SMP staff will also inspect the facility after the proposed BMP implementation date to verify their installation and effectiveness. If the BMP is deficient in either of these parameters, then SMP will issue a Compliance Order. This Order reiterates the requirements of the Notice of Non-Compliance with new compliance dates. A City issued Compliance Order carries a monetary penalty of \$50 to \$500 a day retroactive to the day of issuance for non-compliance. The average compliance term is thirty days in length. If the dischargers fails to implement effective BMP as delineated in the action plan within the timeframes specified by the Compliance Order monetary penalties may be assessed. In addition, the discharger may request a hearing before the City's hearing panel if the requirements and penalties of the Compliance Order are contested.

See appendix for:

Chapter 14.20 of Title 14 Roseville Municipal Code, Urban Stormwater Quality Management and Discharge Control Ordinance

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-2.b: Develop Monitoring Guidelines for Inspection Staff

Outfall monitoring criteria for the detection and elimination of illicit discharges has been developed in conjunction with the City's weekly dry weather monitoring. An "Illicit Discharge & Detection Elimination" form was created to document and report findings. Staff performs See IDDE-1.f for dates and other information regarding outfall monitoring.

See appendix for:

Illicit Discharge & Detection Elimination form

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-2.c: Enhance Existing Spill Response Activities to Include the Cessation and Remediation of Illicit/Non-stormwater Discharges

In order to effectively apply the mandates of the newly adopted stormwater ordinance, the City has developed incident response and tracking procedures. Incidents coming into the Environmental Utilities Department via the website, hotline, or City staff are routed via an incident report form to a staff member for immediate response. Staff then travels to the discharge location. Once on site, the discharger is directed to stop the discharge and, based on the nature of the discharge, the discharger is given information on alternative disposal methods and BMP implementation. If necessary, a follow-up visit is made to the site to verify compliance.

Hard copy documentation is maintained on each incident. Pertinent information for each incident such as location and discharge type is also logged electronically in a Hansen database along with a narrative. Incidents are also entered into a GIS database. This allows for incident tracking and categorization to detect trending in discharge types and location. Associated enforcement actions are also tracked in this database.

During this reporting period, July 2006 through June 2007, the Environmental Utilities Department responded to a total of eighty-seven (87) discharge incidents and Hazardous Materials Officer of Roseville's Fire Department responded to twenty-five (25) discharge incidents during this reporting period for a total of one hundred twelve (112) discharge incidents. These discharges are broken into the following discharge types:

Environmental Utilities Depar	tment		Fire Department	
		•		
Chemical		3	Chemical	1
Concrete		15	Concrete	1
Dirt		10	Dirt	2
Food Waste		10	Food Waste	-
Landscape Debris		8	Landscape Debris	-
Miscellaneous		5	Miscellaneous	-
Pool Discharge		2	Pool Discharge	-
Paint		4	Paint	3
Pet Waste		2	Pet Waste	-
Trash		3	Trash	-
Waste Oil/Petroleum Hydrocarbons		11	Waste Oil/Petroleum Hydrocarbons	11
Vehicle and Power Washing	;	14	Vehicle and Power Washing	7
Subtotal		87	Subtotal	25
	Total		112	

This information will aid in the development of outreach and education programs for the residential and business communities. This will assist the City in its long-term outreach program.

See appendix for:

Chapter 14.20 of Title 14 of the Roseville Municipal Code-Urban Stormwater Quality Management and Discharge Control Ordinance.

Incident report form

Hansen report of Stormwater discharge Incidents 07/06-6/07 ("DD" Service Request Counts)

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-3: Storm Sewer System Map

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2003

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 X Year 2 Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

Mapping the storm sewer system is important to stormwater management because it provides the locations of all the outfalls that drain into the City's creeks and the name of the U.S. receiving water each outfall discharges into. Mapping the storm sewer system and the outfalls can be beneficial in helping the City to maintain the outfalls and search for any illicit discharges entering the creeks. The City has committed to:

a) Update the City's Storm Sewer Map

The City has agreed to update the storm sewer map, including the location of all outfalls and the name and location of the waters of the U.S. that receive discharges from the outfalls.

APPROPRIATENESS:

The storm sewer map is an appropriate means of determining the origination point of an illicit discharge. Using the stormwater map, SMP staff can trace a discharge at an outfall back to its origin and vice versa.

EFFECTIVENESS:

The updated City Storm Sewer map is an effective tool for the Stormwater Management Program. It aids in tracing the path an illicit discharge may take as it makes its way to the receiving water. Staff has used the map numerous times to track and clean up an illicit discharge.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

IDDE-3.a: Update City's Storm Sewer Map

The City continues to update its storm sewer map using a Global Positioning System device to refine the accuracy of the mapped outfalls and to add unmapped outfalls and infrastructure to the map. This update of the stormwater map is performed in conjunction with the City's dry weather outfall monitoring program, which is conducted from May to October.

Weekly outfall evaluations were scheduled during the dry season. Dates and number of outfalls observed and mapped were as follows:

```
2006: 07/06/06 - 21
       07/07/06 - 15
       07/13/06 - 25
       07/20/06 - 15
       07/28/06 - 09
       08/10/06 - 08
       08/17/06 - 23
       08/24/06 - 18
       09/06/06 - 02
       09/07/06 - 06
       09/14/06 - 12
       09/21/06 - 07
       09/22/06 - 04
       10/05/06 - 10
       10/12/06 - 12
       10/31/06 - 01
       11/03/06 - 02
2007: 05/24/07 - 06
       06/25/07 - 24
Total
                220
```

The data collected include condition of outfall and surrounding area, equipment accessibility, illicit discharges, digital photograph and GPS location.

See appendix for: Map of new stormwater outfalls CD of new stormwater outfalls

Date: 7/1/2003 Responsible Party: Roy VanNess, Mapping Manager

IDDE-4: Stormwater Ordinance

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2004

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 X Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

Roseville Municipal Code Section 14.12.025, Storm Drains, states that it is unlawful to discharge any illicit waste, discharge, or garbage into any storm drain. Using this existing ordinance as a basis, the City plans to create a separate stormwater ordinance. Creating a stormwater ordinance is important to the Stormwater Management Program because it provides guidelines for inspection of facilities that may discharge to the storm sewer system and enforcement of any discharge violations. The City has committed to:

a) Create a Stormwater Ordinance

The City has agreed to create a comprehensive stormwater ordinance that addresses the following:

- 1) Prohibition of discharges to the storm drains other than stormwater or authorized non-stormwater discharges, or a cross-reference to an existing discharge prohibition ordinance.
- 2) Prohibition of unauthorized connections to the storm drain system, with a requirement to eliminate or secure approval for any non-stormwater connection.
 - 3) Right of access for inspections and monitoring of facilities suspected of illicit discharges and connections.
 - 3) Cross-reference to the State's General Permit for industrial and construction stormwater discharges.
 - 4) Requirements and procedures for notification of spill and emergency response.
- 5) Enforcement procedures, e.g., NOV, public nuisance, and public hearing.
- 6) Remedies, e.g., recovering the cost of abatement, monetary penalties, and suspension of storm drain service.

APPROPRIATENESS:

The creation of a stormwater ordinance is an appropriate best management practice for the Stormwater Management Program because it establishes parameters for managing stormwater & non-stormwater discharges that public must abide by and City enforcement officials may impose.

EFFECTIVENESS:

The Stormwater Management Program has used the criteria of the City's stormwater ordinance to effectively curtail stormwater discharges from businesses and residential properties thereby lessen the pollutant load on the City's receiving waters.

PROPOSED MODIFICATIONS:

None.

IDDE-4.a: Create Stormwater Ordinance

On July 7, 2006, the Roseville Municipal Code was amended to include Chapter 14.20 of Title 14, the "Urban Stormwater Quality Management and Discharge Control Ordinance." Therefore, this best management practice has been accomplished.

See appendix for:

Chapter 14.20 of Title 14 Roseville Municipal Code, Urban Stormwater Quality Management and Discharge Control Ordinance

IDDE-5: Utilize Existing Programs

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2003

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 X Year 2 Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

This program is meant to inform employees, businesses, and the general public of hazards to water quality associated with illicit discharges by including stormwater information in appropriate existing outreach programs. The City has committed to:

a) Publish Stormwater Articles

The City has agreed to include articles addressing stormwater impacts and the new Phase II program in the Roseville Reflections and Environmental Utilities Today newsletters.

b) Add Stormwater Information to Inspection Programs

The City has agreed to add stormwater specific information to the Water Conservation, Fire Department inspection and Neighborhood Services programs and utilize their existing media for disseminating information. In addition, the City will add stormwater specific information to the education and outreach materials of the City's existing programs that do not involve inspections such as Household Hazardous Waste, Used Oil Drop-Off, Compost Bin, Dog Park, and Creek Week activities.

c) Utilize Educational Signs

The City has agreed to install two stormwater information education signs at Mahany Park.

d) Develop and Implement Creekside Land Owner Education

The City has agreed to educate creekside landowners through the Citywide Creek and Riparian Management and Restoration plans.

e) Expand City Stormwater Web Page

The City has agreed to expand the City's Stormwater Web Page to include information on illicit discharges and other stormwater issues.

f) Implement Storm Drain Stenciling

The City has agreed to implement storm drain labeling through the requirements for concrete stamping in the City's Construction Standards for new development and storm drain stenciling by citizen volunteers for existing development.

APPROPRIATENESS:

This BMP is an appropriate and cost-effective means of disseminating information regarding the Stormwater Management Program to the public.

EFFECTIVENESS:

It is an effective use of City resources to disseminate information about the City's Stormwater Management Program using existing City program. The cost to the City of those outreach programs would be the same whether a stormwater message was included or not.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

IDDE-5.a: Publish Stormwater Articles

Three stormwater articles were published in the "Environmental Utilities Today" newsletter. An article entitled "Creek Week, Come Meet Your Wild Neighbors" was published in the April 2007 issue. Two more articles were published in the June 2007 issue entitled "Car Washing Tips" and "Charity Carwash Kit Available." The "EU Today" newsletter is distributed to 35,000 Roseville residents. It is mailed out as an insert in the residential utility bill. It is also available on most public counters in City buildings. An article called "Green Guide to Car Washing" ran in the 2007 summer edition of the City's general newsletter, Roseville Reflections.

The City's website is updated periodically to include new issues of the "EU Today" and "Roseville Reflections" newsletters which contain the aforementioned articles. To access these newsletters go to the City's website at www.roseville.ca.us, then under the heading of "Most Visited," go to Newsletters.

The City's Stormwater Program continues to partner with Our Water Our World to bring information regarding integrated pest management to the public. The City has sponsored two literature racks at two retail landscape nurseries: Green Acres and Sierra Nursery. Each rack holds approximately 24 individual fact sheets relating to specific pest management problems.

See appendix for:

Copy of EU Today articles (see Public Education and Outreach attachments)
Copy of Roseville Reflections articles (see Public Education and Outreach attachments)

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-5.b: Add Stormwater Information to Inspection Programs

The City's Fire Department inspected approximately 300 businesses for illicit stormwater discharges during this reporting period. These inspections were conducted as a component to the Fire Department's hazardous materials business plan and hazardous waste generator inspections. As a result of these inspections, fourteen (14) businesses were given a written warning by the Fire Department via their inspection report regarding the discharge of pollutants to the stormwater conveyance system. The Fire Department refers stormwater dischargers requiring assistance with BMP implementation to the Stormwater Management Program (SMP) for follow-up and further site review.

The City is coordinating with Placer County Environmental Health Department through the Placer Regional Stormwater Coordinating Group (PRSCG) to include a stormwater component in the annual health inspections at retail food facilities. It is anticipated that Placer County will begin a pilot study at restaurants located in the unincorporated area in spring of 2008.

IDDE-5.c: Utilize Educational Signs

Two signs incorporating the Trina Trout mascot were installed at Mahany Park during the 2005-2006 reporting period. These signs read, "Hi! I'm Trina Trout. This is Kaseberg Creek. Roseville's creeks and fields are home to me, and all my furry and feathered friends. Please keep our home clean by tossing your trash in this can. Thank you, Stormwater Management Program." These signs are located at a creek bridge that is heavily traveled by pedestrians accessing both sides of the Park. This bridge is located behind Mahany Center and is part of the City's bike trail system.

See appendix for:

Picture of signs (see Public Education and Outreach attachments)

Date: 7/1/2003 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-5.d: Develop and Implement Creekside Land Owner Education

The "Roseville Creek Awareness Map" and the "Roseville Creek Stewardship Resource Guide" were updated to conform to City's outreach standards during the 2005-2006 reporting period. Seventeen hundred and fifty of the "Roseville Creek Awareness Map" and five hundred of the "Roseville Creek Stewardship Resource Guides" were printed. The Creek Awareness Map is designed to be a wall poster and a brochure. The Stewardship Resource Guide is designed to be a tri-fold. Both discuss the City's Stormwater Management Program and its implications to activities in the residential community.

In addition, the City's newly created Open Space Division created an Open Space brochure. This Division lies within the City's Parks Department and is responsible for managing the City's 4,000 acres of open space. Much of this land lies immediately adjacent to the City's creeks. The Open Space brochure was intended for distribution to the landowners immediately adjacent to the open space. The Stormwater Management Program contributed to this brochure with tips regarding the proper management of non-stormwater discharges.

See appendix for:

Roseville Creek Awareness Map (see Public Education and Outreach attachments)
Roseville Creek Stewardship Resource Guide (see Public Education and Outreach attachments)
Open Space Brochure

Date: 7/1/2004 Responsible Party: Shayna Carney, Open Space Manager

IDDE-5.e: Expand City Stormwater Web Page

The City's Stormwater website is updated periodically to provide both the residential and business communities with the most recent information on the City's Stormwater Management Program. During this permit term, the City's New Stormwater Design Standards for Development, the Stormwater Quality BMP Guidance Manual for Construction, and the City's New Stormwater Ordinance were uploaded to the site for the public's use. A link to the Our Water Our World Program's integrated pest management information was added to the stormwater webpage under the *Stormwater At Your Home* section.

See appendix for:

Screen shots of website updates (see Public Education and Outreach attachments)

IDDE-5.f: Implement Storm Drain Stenciling

Volunteers marked over nine hundred (900) existing storm drains this year using a newly adopted method of installing storm drain markers. Five different groups participated in projects to install the markers. Three Boy Scouts pursuing their Eagle Scout badge installed the markers. Each of the scouts installed approximately three hundred (300) markers. Students from William Jessup University and staff from Hewlett Packard installed markers as well. The students from William Jessup installed approximately 30 markers and the Hewlett Packard employees installed approximately 15 markers.

In addition, during this permit term, the City completed the study evaluating the new method of marking existing storm drains. The new method consists of fastening a stainless steel disc that states "No Dumping Flows to Creek" to the concrete immediately adjacent to the storm drain inlet. These markers tout a 30-year lifespan and were considered a much-improved replacement for painted-on stencils that tend to wear off within a year or two. The markers were fastened down using two methods. The first used adhesive only and the second used adhesive and a nail.

In the study, an Eagle Scout candidate installed 500 of these new storm drain markers. Approximately two hundred-eighty (280) of them were installed using adhesive and two hundred-twenty (220) were installed using adhesive and a nail. City staff performed a spot check to verify proper installation of the markers after the initial installation. The Eagle Scout also provided an electronic spreadsheet delineating the location and the type of materials used to install each marker. The markers were evaluated approximately one year after their installation date for their durability and their rate of removal by City staff. It was found that the removal rate was lower for the markers installed using adhesive and a nail. Due to the initial expense associated with the markers, it was decided to use the second installation method.

All newly constructed storm drain inlets are required under the City's Construction Standards to have the "Do Not Dump" message stamped into the adjacent concrete sidewalk.

Details of stenciling events are as follows: Storm drains stenciled - 900 Approximate number of participants - 115

See appendix for:

Picture of new marker (see Public Participation & Involvement attachments)
Map of areas where markers were installed and locations of storm drain (see Public Participation & Involvement attachments)

IDDE-6: Long-Term Outreach

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2004

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 X Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

The Long-Term Outreach Program is intended to develop a focused, strategic program to educate the community on the impacts of stormwater and the steps people can take to reduce pollutants in stormwater. This BMP addresses activities that develop a variety of educational products, media outreach campaigns, and business outreach. The City has committed to:

a) Work to Develop Partnerships

The City has agreed to work to develop partnerships with neighboring communities.

b) Evaluate the Level of Stormwater Knowledge

The City has agreed to conduct a survey to evaluate the level of stormwater knowledge in the community and find out how the public gets their stormwater knowledge.

c) Identify Needs for Stormwater Information

The City has agreed to identify the needs for general stormwater information in the community.

d) Identify Target Audiences

The City has agreed to identify the target audiences, e.g., industry, businesses, and minority communities, and determine the specific messages and appropriate media to reach those audiences.

e) Update the SWMP Public Outreach Program

The City has agreed to use the survey and demographic information identified in items c and d above to update the Stormwater Public Outreach Program.

APPROPRIATENESS:

It is appropriate that the City creates and implements a long-term education and outreach program for the public and the business communities. Water quality of the City's creek system will benefit through an increased public awareness of stormwater pollution prevention concepts.

EFFECTIVENESS:

A long-term outreach strategy will increase the effectiveness of the Stormwater Management Program's outreach program. By defining target audiences and their associated stormwater knowledge level, SMP can more effectively deliver a stormwater pollution prevention message.

PROPOSED MODIFICATIONS:

None.

IDDE-6.a: Work to Develop Partnerships

The City attends local stormwater meetings such as those of the Dry Creek Water Council (DCWC) and the Placer Regional Stormwater Coordinating Group (PRSCG) in an attempt to develop partnerships with other watershed stakeholders and Phase II communities in the area.

Roseville stormwater program staff attended the PRSCG meetings on 7/20/06, 10/19/06, 1/25/07 and 4/19/07. The topics discussed included regulatory updates, construction stormwater runoff workshops, and the development of a stormwater component to the already existing food facility inspection program through Placer County Environmental Health. Attending participants usually included representatives from the City of Roseklin, Town of Loomis, City of Lincoln, City of Auburn, Placer County, as well as the City of Roseville. These meetings provide the City with an opportunity to benefit from information sharing. The frequency of these meetings has been reduced to quarterly due to limitations in staff time of the participating agencies.

See appendix for:

Placer Regional Stormwater Coordination Group (PRSCG) agendas

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-6.b: Evaluate Level of Stormwater Knowledge

To assess the level of the citizen's stormwater knowledge, Roseville's residents were surveyed regarding their awareness of stormwater issues. The survey was developed and the results compiled by Data Cycles in April 2005. The survey was administered via Roseville's website to citizens who previously agreed to respond to surveys pertaining to a wide variety of Roseville related topics. The survey questionnaire assessed the knowledge level of a statistically representative sample (approximately 300 residents) regarding the following subjects:

Stormwater drainage in their neighborhood
Use and disposal of building materials
Use and disposal of landscaping materials and/or pool maintenance
Use and disposal of auto maintenance materials
Sources of stormwater information
Business/government/resident responsibility

Narrative comments were also solicited from the survey participants for several questions. The survey demographics were also complied through a series of general questions pertaining to the statistics of each household.

Generally speaking, the survey results of the web-based survey indicate that the public is not knowledgeable about the specifics of the final destination of stormwater discharged from their neighborhood (i.e., which creek). Most of the respondents seemed to believe that government and business should bear a greater responsibility in preventing stormwater pollution as opposed to residents. Most described their own waste disposal practices as environmentally responsible. These results are given the utmost consideration when formulating the program's public outreach activities. See Roseville's 2004-2005 annual report for copies of survey and survey results. It is anticipated that this survey will be repeated at the beginning of the next permit term, so that the outreach strategy can be further refined.

IDDE-6.c: Identify Needs for Stormwater information

The web-based stormwater awareness survey indicates that generally speaking, Roseville's residents are not aware of the final destination of stormwater discharged from their neighborhoods (i.e. which creek). Most respondents believed that government and business should bear a greater responsibility of preventing stormwater pollution as opposed to the residential community. Most described their own waste disposal practices as environmentally responsible. These results are given the utmost consideration when formulating the program's outreach activities. See Roseville's 2004-2005 annual report for copies of survey and survey results.

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-6.d: Identify Target Audiences

Target audiences will be identified for long-term public outreach efforts based on the discharge types noted as a result of the City's incident response as shown in IDDE-2.c. It appears that waste oil discharges, concrete discharges and vehicle and power washing water discharges are were observed most frequently by the City's incident response program. Therefore these waste streams will receive the greatest focus for public outreach efforts during the next reporting period.

Specific messages for public outreach materials have been developed from the results of the web-based survey performed in the 2004-2005 reporting period. The survey indicated that the greatest residential public knowledge gap occurred in understanding the direct connection between the stormwater conveyance system and the City's creeks. In addition, the public was not aware of the impact of their actions on the local waterways. Those concepts are currently being addressed through the City's written and electronic outreach mediums.

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

IDDE-6.e: Update the SWMP Public Outreach Program

The web-based public awareness survey was completed in April of 2005 and the results have been tabulated. The public relations firm Lucy & Co suggested long-term public outreach activities for the stormwater program. These activities such as community events and storm drain marking have been included in the City's stormwater outreach program. The plan also includes the implementation of smaller focus groups and outreach activities targeted to specific audiences. Based on the availability of resources, the outreach efforts will be expanded to reflect these long-term outreach strategies.

Construction Site Runoff Control

The Construction Site Runoff Control element of the Stormwater program is intended to reduce Pollutants in Stormwater runoff due to construction activities. This Minimum Control Measure (MCM) Includes development of a new Stormwater ordinance, revision to existing City standards, as well as the Guidance, outreach, and training to implement the revised standards. In addition, the program will Improve the complaints reporting system and modify the inspection and enforcement program. The Construction site runoff program will also determine appropriate best management practices (BMPs) for Construction site related activities and create sanctions to ensure their implementation. The program Will establish measures for inspecting and enforcing the use of BMPs on construction sites and for Imposing proper erosion and sediment controls.

Polluted Stormwater runoff from construction sites often flows directly to the storm drains and into our Waterways impacting aquatic life. In fact, the amount of sediment that flows into the creeks from Construction sites can contribute more silt than naturally accumulates over many decades. Excessive Amounts of sediment in the water can destroy the aquatic habitat. In addition, the non-stormwater discharges from construction sites are not naturally occurring, e.g., concrete washout, fertilizers and pesticides, and can cause serious harm to City waterways.

The use of BMPs on construction sites can greatly reduce the amount of sediment and other pollutants that enter the stream through stormwater runoff, better preserving the aquatic habitat for wildlife in and around creeks and streams.

Number of BMPs Associated with Control Measure: 6

Important Dates:

Earliest Start Date: 7/1/2003 End Date: 6/30/2008

CSR-1: Revised Ordinances

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2003

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 X Year 2 X Year 3 X Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

The goal of stormwater ordinance development is the development of regulatory requirements for the management of construction sites to reduce the runoff of sediments and various pollutants from construction activities. The City has committed to:

a) Develop and Adopt a Stormwater Ordinance

The City has agreed to develop and adopt a stormwater ordinance that:

- 1) Sets performance standards for construction site runoff
- 2) Covers grading, land clearing, or other disturbances of greater than or equal to one acre
- 3) Requires BMPs for erosion, sediment control, construction materials and wastes
- 4) Requires financial guarantees for compliance and site stabilization
- 5) Refers to technical guidance, e.g., Construction Standards
- 6) References enforcement mechanisms

APPROPRIATENESS:

Revising current ordinances and writing a new stormwater ordinance provide an appropriate first step in preventing polluted stormwater runoff from entering the city's waterways.

EFFECTIVENESS:

The City is currently in the initial stages of its newly adopted Stormwater Ordinance management program, yet has observed positive indicators associated with better effectiveness, less State Regional Board involvement, and quicker response from the development community in terms of BMP compliance.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

CSR-1.a: Develop and Adopt a Stormwater Ordinance

The City's Stormwater Ordinance was adopted by the Roseville City Council. For more information, please see IDDE-4.

Date: 7/1/2003 Responsible Party: Guy Howes, Senior Engineer

CSR-2: City Standards

Responsible Party: Chris Kraft, Engineering Manager

Start Date: 7/1/2004

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 X Year 3 X Year 4 X Year 5

Has Goal Been Accomplished: YES

General Summary

The City Standards BMP is intended to provide technical and regulatory guidance to City staff and project applicants on City requirements for construction site runoff control. This BMP includes reviewing existing technical guidance for construction site BMPs, analyzing its current suite of BMPs and adopting changes to the standards. The City has committed to:

a) Update Existing CSR Control Measures in City Standards

The City has agreed to update its Design/Construction Standards to include provisions for construction site runoff control measures, including submittal requirements, erosion and sediment control BMPs, and materials. Additionally, the City created a Stormwater Quality BMP Guidance Manual for Construction.

b) Implement CSR Control Measures

The City has agreed to implement these construction site runoff control measures through City development review process.

APPROPRIATENESS:

It is appropriate to establish construction standards to provide technical and regulatory guidance to City staff and the development community for compliance with construction site run-off control requirements.

EFFECTIVENESS:

The City has generated documents providing necessary direction to the development community for minimum BMP guidelines and Stormwater requirements.

PROPOSED MODIFICATIONS:

None

Status of Measurable Goals

CSR-2.a: Update Existing CSR Control Measures in City Standards

The City has revised its Design/Construction Standards to include provisions for construction site runoff control measures, including submittal requirements, erosion and sediment control BMPs, and materials. Additionally, the City created a Stormwater Quality BMP Guidance Manual for Construction. Both documents were completed in March, 2007, and made available on the City's website.

See appendix for:

Stormwater Quality BMP Guidance Manual for Construction (cover sheet and table of contents) City of Roseville Design & Construction Standards (cover sheet)

Date: 7/1/2004 Responsible Party: Guy Howes, Senior Engineer

CSR-2.b: Implement CSR Control Measures

The City implemented a Stormwater Quality BMP Guidance Manual for Construction and the revised Design/Construction Standards. Both documents were completed in March, 2007, and made available on the City's website.

Date: 7/1/2004 Responsible Party: Guy Howes, Senior Engineer

CSR-3: Design Review Guidance for City Staff

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2004

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 X Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

This BMP is intended to develop guidance for City staff to implement the revised ordinance and standards. The program is also intended to assist the City Planning and Public Works staffs in implementing construction site runoff control during development review. The City has committed to:

a) Create Submittal Requirements Checklist

The City has agreed to create a submittal requirements checklist.

b) Create Plan Review Checklist

Revised the SWPPP review documents/policy to include more definitive requirements of the current General Permit.

c) Provide Staff Training

The City has agreed to provide training to staff on the use of guidance documents.

APPROPRIATENESS:

The development of design review guidance materials is an appropriate means to assist city planning and plan review staff in evaluating projects and implementing construction site run-off control measures at those projects.

EFFECTIVENESS:

The City is currently in the initial stages of its stormwater management program and has not yet gathered enough data to gauge the effectiveness of its programs.

PROPOSED MODIFICATIONS:

Yes. With the revised procedures and processes, continuing education of staff will be implemented.

Status of Measurable Goals

CSR-3.a: Create Submittal Requirements Checklist

The City initially developed a seven item Stormwater Pollution Prevention Plan (SWPPP) review checklist during the last permit reporting year. This checklist was initially derived from Regional Board staff guidance. The checklist review document and policy were revised to include more definitive requirements of the current General Permit. The City requires SWPPPs be submitted in a three ring binder concurrent with improvement plan submittal for projects with disturbance of one acre or more. A City acknowledgement sheet and inspection form binder tab is added to each reviewed SWPPP. SWPPPs are logged in as received.

Review of SWPPPs has been transferred from Stormwater Inspection staff to the City's Public Works Engineering land development staff. The development staff now reviews submittal requirements for new developments over one acre.

See appendix for:

Revised SWPPP review checklist form

Date: 7/1/2004 Responsible Party: Guy Howes, Senior Engineer

CSR-3.b: Create Plan Review Checklist

The Public Works Engineering land development staff has assumed responsibility for enforcing submittal requirements of development SWPPs. This transition was made since they are knowledgeable of drainage patterns and familiar with the entire development under review including the projects drainage characteristics. Staff utilized the SWPPP review checklist update revised this permit year.

Date: 7/1/2004 Responsible Party: Guy Howes, Senior Engineer

CSR-3.c: Provide Staff Training

Stormwater Inspection staff currently trains new staff in inspecting and enforcing stormwater quality compliance. This ongoing procedure will continue to be expanded to include training of staff from other City departments such as Parks and Recreation as well as staff managing Capital Improvement projects and hired consulting firms with the goal of providing continuity and consistency within the City.

Date: 7/1/2004 Responsible Party: Guy Howes, Senior Engineer

CSR-4: Enhanced Reporting System

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2004

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 Year 3 X Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

The goal of this BMP is to provide ways for the public to report suspected violations of the City's regulatory stormwater programs, including the construction site runoff control program. The City has committed to:

a) Establish Telephone Line

The City has agreed to establish a telephone line answered by city staff where citizens can report suspected violations at construction sites.

b) Establish an E-Mail Link

The City has agreed to establish an e-mail link on the stormwater web page where citizens can e-mail suspected violations at construction sites.

c) Provide Procedures for Referral to Public Works

The City has agreed to provide procedures for referral to Public works for the investigation of construction site violation.

d) Track Reports and Follow-Up Actions

The City has agreed to track reports and follow up actions for construction site violations.

e) Advertise Telephone Line and E-Mail Address

The City has agreed to advertise its reporting telephone line and e-mail address so citizens will know how to report suspected construction site violations.

APPROPRIATENESS:

A reporting system is an effective means for the public to report suspected violations of the City's stormwater program, including the construction site runoff control element.

EFFECTIVENESS:

The City is currently in the initial stages of its stormwater management program and has not yet gathered enough data to gauge the effectiveness of its programs.

PROPOSED MODIFICATIONS:

None.

CSR-4.a: Establish Telephone Line

The City has created a stormwater incident complaint hotline in the City's police dispatch. It is a non-emergency line that is staffed 24 hours per day 7 days per week. Based on the type of the discharge, the appropriate City staff will be dispatched. The Public Works Department has been identified as the first responder for stormwater discharges that originate from a construction site and/or construction related activities. The Public Works Stormwater Inspection staff met with the committee to develop incident response procedures with regards to the hotline.

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

CSR-4.b: Establish E-Mail Link

The City's stormwater web page includes a link to a stormwater e-mail address where citizens can comment on the stormwater program and report illicit discharges to the storm sewer system.

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

CSR-4.c: Provide Procedure for Referral to Public Works

The City has developed policies and procedures for the intake of stormwater complaints from city residents through a non-emergency hotline number located in city police dispatch. There are also procedures in place that delineate the referral of complaints to the appropriate city department based on discharge type. Public Works is listed as the department responsible for responding to construction site related stormwater discharges.

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

CSR-4.d: Track Reports and Follow-Up Actions

The City responds to all reports of illicit stormwater discharges to the stormwater hot-line. Those requests for service received by the Environmental Utilities Department are tracked in a Hansen database. Staff findings and enforcement actions are logged on hardcopy incident form and input in the database when the incident is concluded.

To date, the City Public Works Department does not have a specific mechanism of tracking incidents which are responded to from the hotline or otherwise. However, the Public Works does track SWPPP required projects through stormwater inspection reports. When inspection staff determines two consecutive non-compliant stormwater events at a construction site, he/she will then initiate standard enforcement procedures, i.e. citations, Roseville notice of violations, (RNOV). If compliance is still not met, City Stormwater staff then contacts the SWRCB for assistance.

Date: 7/1/2005 Responsible Party: Guy Howes, Senior Engineer

CSR-4.e: Advertise Telephone Line and E-Mail Address

The City advertises the stormwater hotline through its public outreach materials. The City promotes the stormwater hotline and the stormwater email on the program general outreach brochure. This outreach brochure is distributed at all of the outreach events attended by stormwater management staff. It is also given to dischargers at incidents where Environmental Utility staff responds. Another outreach tools created to advertise the telephone hotline is a magnet urging residents to report non-stormwater discharges to the City via the new hotline number. Several articles published in the Environmental Utilities Department's EU Today also featured the hotline number and the stormwater programs email address.

CSR-5: Inspection and Enforcement Program

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2003

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 X Year 2 Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

The City's Inspection and Enforcement BMP is intended to ensure that construction sites are operated in accordance with the City ordinances, Design/Construction Standards, Stormwater Quality BMP Guidance Manual for Construction. and the State General Permit for Stormwater Discharges from Construction Related Activities. This BMP involves implementing a stormwater inspection and enforcement agenda for construction sites. The City has committed to:

a) Establish Inspection Policy and Frequency

The City has agreed to set inspection policy setting frequencies for inspections based on a set criteria.

b) Establish Inspection Procedures

The City has agreed to set inspection procedures, including contractor self-inspection and a government inspector checklist.

c) Set up a Enforcement Actions

The City has agreed to setup a tiered system of enforcement actions.

d) Set up Tracking System

The City has agreed to set up a tracking system for violations including those reported by the public.

e) Train Inspection and Enforcement Staff

The City has agreed to train inspection and enforcement staff to address stormwater issues and implement new procedures.

APPROPRIATENESS:

The Construction Stormwater Runoff Inspection and Enforcement Program is an appropriate means of enforcement for the new and revised stormwater ordinances. Inspection and Enforcement ensures that the stormwater ordinances are followed and non-stormwater discharges are minimized.

EFFECTIVENESS:

The City has consistently increased it's effectiveness in terms of meeting its 90% inspection goal. By increasing the number of SWPPP inspections, we have decreased the number and severity of Stormwater violations. Additionally, we have collectively worked together with the development community to educate and implement sound Stormwater education and outreach.

PROPOSED MODIFICATIONS:

None.

CSR-5.a: Establish Inspection Policy Setting Frequency

The City's construction stormwater runoff enforcement program continues to improve in efforts of meeting the permit's goal of 90% inspection rate for the high priority projects on a weekly basis. The City's policy for Construction Site Runoff is in effect and has been the basis for reporting over this past year. This year all projects were classified as high priority projects requiring weekly inspections. The City performed 3,142 Stormwater inspections, resulting in an 81.5 % inspection record, a 3.5% effective increase, thus, resulting in an improvement from the previous year. The City continues to refine their procedures and program structure for improvement.

Date: 7/1/2003 Responsible Party: Guy Howes, Senior Engineer

CSR-5.b: Establish Inspection Procedures

Currently, staff's administrative policies were revised as mentioned above. The existing SWPPP Inspection Form was revised to make it more effective, will accommodate a future electronic documentation system, and reinforces the City's enforcement procedures.

See appendix for:

Final draft of revised City of Roseville Public Works Department Construction Site Stormwater Runoff Control Inspection and Supplemental Forms

Date: 7/1/2003 Responsible Party: Guy Howes, Senior Engineer

CSR-5.c: Set Enforcement Actions

Last year, the City's Stormwater Ordinance was finalized. In addition to that document, we have developed procedures, including defining violations and penalties, creating an enforcement flow chart, and creating a Roseville Notice of Violation (RNOV). The result: (5) Citations (\$100.00 fine) were issued to a developer or contractor for Stormwater Ordinance violations; (5) Roseville Notice of Violation (RNOV) letters sent to developers/owners for compliance issues. In those cases, compliance was gained and no further enforcement action was necessary; finally, (0) State Notice of Violations received for development projects.

See appendix for: SWPPP Violation Enforcement flow chart Roseville Notice of Violation

Date: 7/1/2003 Responsible Party: Guy Howes, Senior Engineer

CSR-5.d: Set Up Tracking System

In keeping up-to-date, the City's IT Department has developed new database software which tracks all WDID's issued by the State. In terms of data retrieval, report generation, and depth of information, this software is more effective and accurate than previous versions. This is an ongoing effort to better track and substantiate our enforcement.

See appendix for:

Screen shot of new Public Works database

Date: 7/1/2003 Responsible Party: Guy Howes, Senior Engineer

CSR-5.e: Train Inspection and Enforcement Staff

The City held one 2-hour in-house inspection session on 9/21/06. Attendees included enforcement staff from Public Works Engineering and Public Works Building, along with consultant staff. Guest speakers from the Regional Board (CVRWQCB) also shared new material pertinent to stormwater inspections of advanced treatment systems.

The City hired one full time Construction Inspector to perform SWPPP inspections exclusively. One part time Building Inspector has assisted in SWPPP inspections during heavy workload periods. This eliminated the need for bi-yearly in-house Stormwater meetings as the Stormwater Inspection team mow meet daily to discuss Stormwater issues.

See appendix for: In-house meeting agenda and sign-in sheet

Date: 7/1/2003 Responsible Party: Guy Howes, Senior Engineer

CSR-6: Outreach and Training Program

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2003

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 X Year 2 Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

The Outreach and Training Program is meant to train construction professionals and City staff on construction-specific stormwater issues. By training concerned parties on how to prevent stormwater runoff, this program offers a cost-effective solution to construction stormwater runoff. The City has committed to:

a) Conduct Workshops

The City has agreed to conduct three half-day workshops during CSR program development and post draft documents and workshop information on the website.

b) Conduct Annual Training Workshops

The City has agreed to conduct annual training workshops for construction industry professionals and City staff on the adopted ordinances and updated Construction and Improvement Standards.

c) Train City Staff

The City has agreed to train City staff on the new Design Review Guidance.

d) Update Website to Include Technical Assistance Materials

The City has agreed to provide technical assistance materials to the regulated community on the City's website.

APPROPRIATENESS:

The Outreach and Training Program is an appropriate method of preventing illicit discharges from construction sites by training construction professionals and City staff on the environmental concerns of stormwater runoff and various BMPs that can be used to prevent polluted discharge from entering local waterways.

EFFECTIVENESS:

As previously proposed refinement to annual training includes a series of tailgate trainings in the field in lieu of one all-day workshop. It is intended to reach more field personnel who are actually responsible for the installation and maintenance of SWPPP best management practices. This provides for more effectiveness.

PROPOSED MODIFICATIONS:

In its conceptual stage, Stormwater Inspection Staff, along with Environmental Utilities Engineering Staff, will work together to develop Handout Informational Material to be distributed at Tailgate Workshop sessions.

CSR-6.a: Conduct Workshops

The City hosted several informal tailgate training sessions for contractors working in the area. Discussions included proper BMP installation, assessment of necessary BMP's, and upcoming enforcement procedures. The City also conducted multiple pre-job SWPPP information presentations for the development community. Expanded comments were developed to enhance and provide awareness of the City's expectations of compliance. In addition to tailgate workshops, and as part of the City's outreach program, Public Works Staff drafted its own "rainy season reminder letter" which is scheduled for distribution in September to property owners with active projects. City inspection staff will also distribute rainy season reminder letters to project superintendents on their job sites. The goal being to generate discussion and awareness on compliance responsibilities.

See appendix for: Rainy season reminder letter Revised City of Roseville Prejob Agenda Expanded Prejob SWPPP Comments

Date: 7/1/2003 Responsible Party: Guy Howes, Senior Engineer

CSR-6.b: Conduct Annual Training Workshops

Stormwater Inspection Staff conducted a series of tailgate trainings in the field in lieu of one all-day workshop. It is intended to reach more field personnel who are actually responsible for the installation and maintenance of SWPPP best management practices. The sessions were as follows:

- (1) 1 hour Stormwater Tailgate Workshop: (7/31/06, Westpark Vil 3 & 4, Pulte / Centex, 46 Attendees, Topic: Gen SWPPP)
- (4) ½ hour Stormwater Tailgate Workshops: (2/20/07, Rock of Roseville, Sierra View Co., 9 Attendees, Topic: Controlling Mortar Wastewater) (2/20/07, Mahaney Library, City of Roseville, Topic: Controlling Mortar Wastewater) (3/1/07, Westpark Vil 5 & 6, Lennar, 5 Attendees, Topic: Home Building Issues) (3/16/07, Rock of Roseville, Sierra View Co., 5 Attendees, Topic: Mortar and Concrete Waste Management)

See appendix for:

Stormwater tailgate workshop attendance sheets

Date: 7/1/2003 Responsible Party: Guy Howes, Senior Engineer

CSR-6.c: Train City Staff

City Stormwater Inspection staff attended the following:

Public Works Stormwater Staff attended SWRCB "Draft General Permit Comment Workshop" held in Sacramento, CA. In addition, submitted comment package to the SWRCB shortly thereafter.

Sr. Construction Inspector completed the following training/education:

10/11/2007, AEP SWPPP Seminar, 3 hrs

11/28/2007, Citation Training - Roseville City Attorney's Office 1 hr

1/23/2007, Engeo "Soil Classification Class", 2 hrs

Jan, 07, CSUS/OWP Stormwater BMP Course, New Development & Redevelopment, 2 Continuing Education Units

3/9/2007, CASQA – Quarterly Membership Meeting, 6 hrs City of Roseville Stormwater Management Program Associate Civil Engineer completed the following training/education:

10/5/2006, Stormwater and Erosion Control Workshop, 3hrs-hosted by Placer County, City of Auburn, and the RWQCB

10/11/2006, AEP SWPPP Seminar, 3hrs

Construction Inspector completed the following training/education:

9/2/2006 NPDES Compliance Workshop (Yuba City) 5 Hours

10/5/2006, Stormwater and Erosion Control Workshop, 3hrs-hosted by Placer County, City of Auburn, and the RWQCB

1/23/2007, Engeo "Soil Classification Class", 2 hrs

10/11/2007, AEP SWPPP Seminar, 3 hrs

11/28/2007, Citation Training - Roseville City Attorney's Office 1 hr

Date: 7/1/2003 Responsible Party: Guy Howes, Senior Engineer

CSR-6.d: Update Website to Include Technical Assistance Documents

The City continues to update the information on the website pertaining to its construction stormwater runoff program. Specifically, new user friendly pull down menus were utilized and links to the State's 2005 Wet Season Reminder and Monitoring Requirements for Advanced Treatment System documents were included.

New Development and Redevelopment

The New Development program is intended to prevent runoff from new development and redevelopment projects. The City will develop structural and non-structural control standards. The City will also monitor the long-term operation and maintenance of these runoff controls, creating maintenance and inspection schedules for all sites that disturb more than one acre.

Non-structural controls are policies and procedures developed to modify human activities in order to lessen the impact of urban development and redevelopment activities. The City will educate review staff, developers and owners to successfully implement these controls.

Areas undergoing new development or redevelopment offer the perfect opportunity for the implementation of cost-effective methods to prevent harmful pollutants from entering local waterways. Contaminated stormwater runoff from developed areas can be harmful to wildlife in and around our creeks and streams. Developed areas can facilitate the collection of harmful pollutants such as oil, heavy metals, and excess sediment in the runoff, which travels directly to the creeks when unmitigated.

Developed areas turn porous land, which can absorb toxins from the runoff before it enters the creeks, into impervious land like asphalt and concrete, which transports the water straight to the storm drain. By implementing structural controls, such as porous landscaped areas for water to penetrate, we can prevent harmful stormwater runoff before it reaches a receiving waterway, protecting the environment and saving money in the long run.

Number of BMPs Associated with Control Measure: 5

Important Dates:

Earliest Start Date: 7/1/2004 End Date: 6/30/2008

ND-1: Development Review Process

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2005

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 Year 3 X Year 4 X Year 5

Has Goal Been Accomplished: YES

General Summary

All development and redevelopment plans are reviewed by the City's Community Development Department. The City plans to evaluate its review policies and procedures in an attempt to improve the review process to include stormwater quality issues. This BMP is dependent upon completion of ND-2 and ND-3. The City has committed to:

a) Assess Development Plan Review

The City has agreed to evaluate development review procedures with Public Works Engineering, Community Development, and Planning for post-construction runoff control as well as develop amendments to policies and procedures for plan review.

b) Integrate Technical Criteria

The City has agreed to integrate technical criteria developed under ND-2 into its regulatory process.

c) Provide Design Review Guidance and Training

The City has agreed to provide design review guidance and training to City staff for flood control facilities, detention designs, infiltration facilities and other structural or non-structural controls in conjunction with revision of Improvement and Construction Standards, and adoption of a new Stormwater Ordinance (ND-3) and technical guidance (ND-2).

d) Develop System for Feedback

The City has agreed to develop a system for continual feedback from department staff to further refinement of post-construction best management practices and increase program effectiveness.

APPROPRIATENESS:

Integration of stormwater quality issues into the City's development review processes is an effective means to identify appropriate BMPs and incorporate them into site designs of projects during the early stages of design development.

EFFECTIVENESS:

The City is currently in the initial stages of its stormwater management program, and has not yet gathered enough data to gauge the effectiveness of this best management practice.

PROPOSED MODIFICATIONS:

BMP completed this permit year. No proposed modifications.

ND-1.a: Assess Development Plan Review

A Stormwater Quality Design Manual was adopted by City Council August 1, 2007. The new Design Manual requires all projects coming to the City for approval to adhere to the stormwater quality design standards described within this document. New procedures and submittal requirements for the City's Planning Department and Engineering Department were established the same week the Manual was adopted. New submittal requirements include a "Preliminary Stormwater Quality Compliance Form" that must be completed as part of the Planning Department application process. Also, a "checklist" detailing information needed for evaluation has been created for engineers and owners submitting Improvement Plans to the City. These new documents have been added as attachments to this Annual Report.

See appendix for:

Preliminary Stormwater Quality Compliance Form Checklist for Stormwater Management Design Plan Submittals

Date: 8/8/2007 Responsible Party: Chris Kraft, Engineering Manager

ND-1.b: Integrate Technical Criteria

During the development of the Stormwater Quality Design Manual technical criteria was evaluated to scope, size and locate BMP's to meet the permit objectives. Fact sheets have been developed to relate the technical findings to practical design. See ND-1a.

Date: 8/8/2007 Responsible Party: Chris Kraft, Engineering Manager

ND-1.c: Provide Design Review Guidance and Training

Stormwater quality design review training continued throughout the permit year. Training was intensified just before the City adopted the new design standards, and is continuing in development staff meetings for the improvement plan reviewers. Also, staff attended State sponsored workshops on the following topics: Hydromodification, Urban Runoff Hydrology Modeling, and Low Impact Development. Several staff members attended the California Stormwater Quality Association conference and workshops on New Development/Redevelopment topics. One staff member attended four vendor sponsored workshops on porous pavement and stormwater treatment devices. Information is being disseminated to other staff members.

Date: 8/8/2007 Responsible Party: Chris Kraft, Engineering Manager

ND-1.d: Develop System for Feedback

Feedback from the City's plan reviewers is occurring in the development section staff meetings. Also, City staff is attending ongoing meetings with the Building Industry Association (BIA) along with other agency stormwater quality representatives from surrounding area. BIA meetings are addressing implementation goals and challenges with the new design standards.

Date: 8/8/2007 Responsible Party: Chris Kraft, Engineering Manager

ND-2: Critical Criteria

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2004

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 Year 3 X Year 4 X Year 5

Has Goal Been Accomplished: YES

General Summary

This BMP involves the development and implementation of structural and non-structural control strategies through improvement and construction standards. Structural controls are manmade facilities constructed for the storage, detention, infiltration, or treatment of stormwater runoff. They may include detention ponds, vegetative areas, or runoff pretreatment. Non-structural controls are policies and procedures that lessen the impacts of development on water quality. They may include alternative construction, site design, or zoning. By using control strategies, the City can effectively lessen the impacts of stormwater runoff. The City has committed to:

a) Review Technical Guidance Programs

The City has agreed to review existing technical guidance programs such as the CASQA BMP Handbook for Post-Construction Control, the Sacramento Guidance Manual for Onsite Stormwater Quality Control Measures, and the EPA's National Menu of Best Management Practices for Stormwater Phase II for controls to be included into the stormwater plan and City Standards.

b) Develop Technical Criteria

The City has agreed to develop technical criteria for structural and non-structural controls specific to the City of Roseville, including siting, design, and maintenance considerations.

c) Amend City Improvement and Construction Standards

The City has agreed to amend the City's Improvement and Construction Standards.

APPROPRIATENESS:

Establishing technical criteria is an appropriate measure to ensure structural and non-structural controls are properly incorporated into development projects.

EFFECTIVENESS:

The City is currently in the initial stages of its stormwater management program and has not yet gathered enough data to gauge the effectiveness of this best management practice.

PROPOSED MODIFICATIONS:

BMP completed this permit year. No proposed modifications.

ND-2.a: Review Technical Guidance Programs

Post-construction stormwater design standards from other communities and organizations have been reviewed, and information has been evaluated for inclusion in the City's Stormwater Quality Design Manual. Some of the community design standards reviewed include: the Bay Area Stormwater Management Agencies Manual, City of Portland Stormwater Management Manual, Virginia Stormwater Management Program Handbook, and the Denver Urban Storm Drainage Criteria Manual. The California Stormwater Quality Association Handbook for New Development and Redevelopment, and the Stormwater Managers Resource Center were non-agency programs reviewed for technical guidance. Finally, the EPA's National Menu of Best Management Practices for Stormwater Phase II controls was also reviewed and material considered in the development of the City's stormwater quality standards.

Date: 8/8/07 Responsible Party: Chris Kraft, Engineering Manager

ND-2.b: Develop Technical Criteria

The City of Roseville worked with the Sacramento Stormwater Management Partnership to develop a regionally consistent design manual to aid with the selection, sizing, operation and long-term maintenance of stormwater quality control measures (BMPs). The partnership design manual was finalized May 2007, and was adopted by all of the agencies involved (City and County of Sacramento, City of Folsom, City of Elk Grove, City of Citrus Heights, City of Rancho Cordova, City of Galt and the City of Roseville) shortly thereafter. The manual addresses source control, run-off reduction control and treatment control measures, and includes Fact Sheets for each post-construction BMP. The City is utilizing the Sacramento Stormwater Management Partnership's Stormwater Quality Design Manual as it's "functionally equivalent program" to address design standards required by this NPDES Permit.

See appendix for:

Stormwater Quality Design Manual cover and table of contents

Date: 8/8/07 Responsible Party: Chris Kraft, Engineering Manager

ND-2.c: Amend City Improvement and Construction Standards

March, of 2007, the City updated and published new Engineering Design & Construction Standards. In addition to other updates that were made, a reference to the new Stormwater Quality Design Manual was added to the being of the Grading Sections and the Drainage Sections in both the Design Standards and the Construction Standards. All stormwater quality design criteria and standards that the City has adopted can be found in this manual.

Date: 8/8/07 Responsible Party: Chris Kraft, Engineering Manager

ND-3: Post-Construction Ordinance

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2005

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 Year 3 X Year 4 X Year 5

Has Goal Been Accomplished: YES

General Summary

The City's Stormwater Ordinance is in part intended to include provisions addressing post-construction runoff from new development and redevelopment and requirements for long-term maintenance of structural controls. The ordinance will allow the City to require post-construction controls on new development and will provide the authority to inspect and require maintenance on privately owned controls approved by the City. The City has agreed to:

a) Develop Stormwater Ordinance

The City has agreed to develop a Stormwater Ordinance with requirements for post-construction controls that include:

- 1) Authority to require post-construction controls for new development and redevelopment
- 2) Reference to a technical standard such as Improvement and Construction Standards to guide design and installation
- 3) Requirements for perpetual maintenance of structural controls
- 4) The right of program staff to enter private property and inspect controls
- 5) The authority to require maintenance and repairs to structural controls
- 6) Enforcement remedies for non-compliant control maintenance

APPROPRIATENESS:

A City ordinance addressing post-construction stormwater management provides appropriate guidelines for stormwater pollution prevention from post-construction and new development sites.

EFFECTIVENESS:

The City is currently in the initial stages of its stormwater management program and has not yet gathered enough data to gauge the effectiveness of its programs.

PROPOSED MODIFICATIONS:

The City has decided to amend the current City "Urban Stormwater Quality Management and Discharge Control Ordinance". Amendment will further clarify post-contraction design requirements. It will also mandate a maintenance agreement and annual stormwater management permit. The amendment will be adopted by City Council in year five of the permit.

ND-3.a: Develop Stormwater Ordinance

The City adopted a Stormwater Ordinance July 7th, 2006. This initial ordinance discusses the development of a new design manual that will cover stormwater quality designs for post-construction control measures.

The City will amend the current Stormwater Ordinance to include recognition of the new Stormwater Quality Design Manual. The amendment will also address post-construction engineering submittals, maintenance agreements, an annual stormwater management permit, inspection procedures and BMP access requirements. The post-construction stormwater quality amendment will be adopted by City Council in year five of the permit.

Date: 8/8/07 Responsible Party: Chris Kraft, Engineering Manager

ND-4: Regulatory Requirements for Privately Owned Controls

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2006

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 Year 3 Year 4 X Year 5 X

Has Goal Been Accomplished: NO

General Summary

When stormwater facilities are neglected or improperly maintained after construction, it can lead to a dramatic decrease in treatment efficiency. Therefore, it is necessary to establish regulatory requirements for privately owned controls, including project approval conditions, O&M guidance for control owners, and a tracking and enforcement program. This BMP is intended to utilize development review, database tracking, and enforcement to ensure the maintenance of privately owned controls. The City has committed to:

a) Include Maintenance Requirements in Project Approval

The City has agreed to include maintenance requirements in project approval of privately owned structural controls.

b) Provide Maintenance Guidance

The City has agreed to provide maintenance guidance for owners of approved structural controls through specifications in Improvement and Construction Standards.

c) Include Structural Controls in Database

The City has agreed to include structural controls in its database, e.g., GIS, to facilitate tracking and ownership and to enforce proper operations and maintenance.

d) Utilize Self-Certification Program

The City has agreed to utilize a self-certification program for structural control maintenance with required annual reporting and spot inspections.

e) Include Structural Control Inspections

The City has agreed to include structural control inspections in the Fire Department's business inspections.

APPROPRIATENESS:

Establishment of regulatory requirements for privately-owned structural controls is an appropriate method to ensure said controls are maintained and continue to function and perform as designed.

EFFECTIVENESS:

The City is currently in the initial stages of its stormwater management program and has not yet gathered enough data to gauge the effectiveness of this best management practice.

PROPOSED MODIFICATIONS:

None.

ND-4.a: Include Maintenance Requirements in Project Approval

Project work outlined to be completed in year four.

Date: 7/1/2006 Responsible Party: Chris Kraft, Associate Engineer

ND-4.b: Provide Maintenance Guidance

This work was completed in year four. As part of the new Stormwater Quality Design Manual, maintenance of stormwater post-construction BMPs is addressed within the various Fact Sheets of the Manual. New engineering submittal requirements include that a separate "Maintenance Plan" be submitted with all improvement plan sets. This document shall detail long-term maintenance requirement for each BMP proposed for the project.

Date: 8/8/2007 Responsible Party: Chris Kraft, Engineering Manager

ND-4.c: Include Structural Controls in Database

Time was spent in this permit year investigating a number of database options for tracking post-construction structural BMPs. Working closely with the City's IT department, it has been decided, to utilize software that the City has already in-house. To track the stormwater management permits and BMP inspections the City will use Permits Plus. This software is currently being used by the Fire Department to track inspections and permits. It is also used by many other departments including Engineering and Planning. In addition to Permits Plus, the City will also utilize its GIS software to track the location of BMPs that are privately owned. Some of this information has already been entered into the GIS program. In permit year five, information on new and existing stormwater quality structures will be entered into these two programs. In the next few years the City plans to purchase an asset management software to track all of the City's assets. At that time, both the information in Permits Plus and the information in GIS on Post-construction BMPs will be migrated to the new asset management software.

Date: 8/8/2007 Responsible Party: Chris Kraft, Engineering Manager

ND-4.d: Utilize Self-Certification Program

The City is in the process of setting-up an annual permitting program for post-construction BMPs. This program will require property owners that have runoff reduction control measures and/or treatment control measures on their property that they inspect, clean, and repair them as needed. Renewal of this annual permit will require that a self-certification be completed and signed by the property owner before renewal is approved. The City's Annual Stormwater Management Permit program will activate in the fifth year.

Date: 8/8/2007 Responsible Party: Chris Kraft, Engineering Manager

ND-4.e: Include Structural Control Inspections

The City will amend the current Stormwater Ordinance within one year to include City inspection procedures, enforcement procedures, and BMP access requirements. The post-construction stormwater quality amendment will be adopted by City Council in year five of the permit.

Date: 8/8/2007 Responsible Party: Chris Kraft, Engineering Manager

ND-5: Outreach and Technical Assistance

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2004

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 Year 3 X Year 4 X Year 5

Has Goal Been Accomplished: YES

General Summary

In order for post-construction runoff control to be successful, the City will provide information to those responsible for compliance--landowners, project designers, project developers, and contractors. These concerned parties must be educated on the importance of the stormwater program, its requirements, and the sanctions for non-compliance. This BMP includes information posting ordinances, Construction Standards, and various construction workshops on the City's website. As the program develops, other potential media will be explored. The City has committed to:

a) Include Interested Parties in Program Development

The City has agreed to incorporate project designers and developers and other interested parties in program development, including workshops and outreach on the City's website, to develop controls consistent with community goals.

b) Conduct Annual Training

The City has agreed to conduct annual training for project designers and developers on adopted ordinance and revised standards.

APPROPRIATENESS:

Outreach and technical assistance programs provide an appropriate means to educate stakeholders in the design and inclusion of structural and non-structural controls in development projects.

EFFECTIVENESS:

The City is currently in the initial stages of its stormwater management program and has not yet gathered enough data to gauge the effectiveness of this best management practice.

PROPOSED MODIFICATIONS:

This BMP will be continued into the fifth year of the permit term.

ND-5.a: Include Interested Parties in Program Development

In this past permit year (2006/2007), City staff has participated with the Sacramento Stormwater Management Partnership in two focus groups with stakeholders from the development community. The City also participated in two half-day Public Workshops on the new Stormwater Quality Design Manual. In addition to these four events, City staff participated with the partnership in several meetings with the Building Industry Association (BIA) to discuss the new standards and concerns with implementation. The BIA meetings are planned to continue quarterly.

See appendix for:

Stormwater Design Manual Workshop flyer

Date: 8/8/2007 Responsible Party: Chris Kraft, Engineering Manager

ND-5.b: Conduct Annual Training

The City will provide information to those responsible for compliance--landowners, project designers, project developers, and contractors via the City's website and publications that are available at the City's Permit Center. City stormwater representatives are always available to meet with landowners or consultants upon request. Formal trainings will be developed and scheduled for both City employees and other groups and individuals responsible for compliance in the fifth year of the permit.

Date: 8/8/2007 Responsible Party: Chris Kraft, Engineering Manager

Municipal Operations

The Municipal Operations Program requires the City to implement and maintain an operations and maintenance program that will prevent or reduce polluted stormwater runoff from municipal operations. Not only will this program determine and identify best management practices (BMPs) appropriate to city O&M operations, it will also ensure the training of City employees on pollution prevention so they can better assess and manage stormwater related issues.

Preventing harmful stormwater runoff from reaching the waterways is not just the responsibility of the residential and business communities. One of the most important aspects of pollution prevention is the maintenance of municipal operations. The municipal operations program addresses both maintenance of the storm sewer system and stormwater pollution prevention at City maintained sites, i.e., streets, parking lots, parks, and City-owned pools and buildings. Pollution prevention at these City-owned properties can reduce the amount of polluted runoff that enters our waterways. Also, educating City staff and maintaining the storm sewer system and stormwater BMPs can be a cost-effective method of preventing pollution in the City's creeks and streams.

Number of BMPs Associated with Control Measure: 4

Important Dates:

Earliest Start Date: 7/1/2004

End Date: 6/30/2008

MO-1: Inventory and Assess the Potential for Stormwater Pollution in O&M Activities at City-Owned Facilities and in City Field Operations

Responsible Party: Kelye McKinney, Engineer Manager

Start Date: 7/1/2004 End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 X Year 3 X Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

This BMP is intended to develop an inventory of municipal facilities and field operations that may contribute to stormwater pollution. This program includes creating a database of City operated facilities, containing fundamental stormwater quality management information on each City facility. This program also consists of reviewing operations and maintenance (O&M) activities at each catalogued facility, assessing these practices for pollutant discharge potential, and selecting appropriate BMPs to mitigate stormwater pollution. The City has committed to the following:

a.) Maintain Stormwater Pollution Prevention Plans (SWPPPs)

The Stormwater Management Program maintains, and submits annual reports for the SWPPPs at the City's Dry Creek Wastewater Treatment Plant, Pleasant Grove Waste Water Treatment Plant, the City's Corporation Yard and the Roseville Energy Park. During the 07-08 rainy season, the Stormwater Management Program will assume responsibility for conducting runoff monitoring as required by the General Industrial Permit.

b) Continue Pollution Prevention BMPs

The City is continuing the practice of discharging chlorinated water from city-owned swimming pools to the wastewater conveyance system.

d) Include Other Facilities in SWPPP Program

The City evaluates new City facilities as they are brought on-line to determine need for inclusion in the State's NPDES Industrial Permit program. A SWPPP has been developed for the new Roseville Energy Park and submitted to the Central Valley Regional Water Quality Control Board for review and comment.

e) Identify City-owned Properties and City Field Operations with Stormwater Pollution Potential

The City has identified, prioritized and inspected City-owned properties to evaluate facility and field operations for stormwater pollution potential.

f) Review O&M Policies and Procedures at City Sites with Identified Pollution Generating Activities

The City has evaluated operations and maintenance policies and procedures at City facilities identified in item (e) above and identified opportunities for incorporation of stormwater BMPs in these City activities.

APPROPRIATENESS:

Evaluation and documentation of all City facilities, operations, and activities is an appropriate means to prioritize City departments and divisions for implementation of BMPs to reduce or eliminate pollutants from stormwater runoff. The prioritization will ensure that the City's resources are spent in the most effective way possible.

EFFECTIVENESS:

The actions taken by the City have proven to be highly effective. Through conducting facility inspections the stormwater awareness of City employees increased drastically. This is evidenced by an increased number of stormwater complaints originating from City staff, as well as an increase requests from other City departments for additional stormwater compliance assistance.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

MO-1.a: Maintain SWPPP at Dry Creek Wastewater Treatment Plant

The Stormwater Management Program maintains the SWPPP at the Dry Creek wastewater treatment plant.

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

MO-1.b: Maintain SWPPP at Roseville Corporation Yard

The Stormwater Management Program maintains the SWPPP at the Roseville Corporation Yard.

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

MO-1.c: Continue Pollution Prevention BMPs

All water from City-owned pools is discharged to the sanitary sewer.

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

MO-1.d: Include Other Facilities in SWPPP Program

The City has obtained a NPDES permit for the new Pleasant Grove Wastewater Treatment Plant. The Stormwater Management Program maintains this SWPPP

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

MO-1.e: Identify City-owned properties and City field operations with stormwater pollution potential

An inventory of City-owned facilities and properties was created using a GIS relational database, which includes maps showing the locations for each City facility. The maps help to prioritize facility inspections by determining which facilities are proximate to environmentally sensitive areas.

Activity forms were completed during interviews with the City's departments and divisions including: Parks and Recreation, Streets, Electric, Facilities Management, Solid Waste, Water, Electric and Waste Water. Each activity form was entered into a Microsoft Excel database that was used to prioritize training needs and determine each division or department's stormwater pollution potential.

See appendix for: GIS map of department facilities Location inventory list Activity database

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

MO-1.f: Review O & M policies and procedures at City sites with identified pollution generating activities.

The Stormwater Management Program met with representatives from Water, Streets, Facilities Management and Parks and Recreation to assist in the identification of specific BMPs for the activities described in the Excel database.

MO-2: Review and Assess the O&M Practices Identified in MO-1 as Potential Stormwater Pollution Sources for the Selection and Incorporation of BMPs to the Maximum Extent Practicable

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2006 End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 Year 3 Year 4 X Year 5 X

Has Goal Been Accomplished: NO

General Summary

This program is intended to finalize and document the inclusion of stormwater BMPs for O&M procedures based on the findings of MO-1. BMPs selected for O&M programs may include stormwater pollution prevention alternatives such as source controls, treatment controls, and materials management procedures. Among these, treatment controls rank the lowest and will only be implemented as a last resort. This program is meant to assess the effectiveness of BMPs currently in place and identify and select any additional BMPs necessary to protect water quality. The City has committed to:

a) Assess BMPs for Street Cleaning and Repair

The City's Streets department has implemented an aggressive street sweeping program. Every commercial street is swept 2 times per month, and every residential street is swept once per month. The Streets Department is expecting the addition of two more street sweeping units to hopefully allow residential streets to be swept once every three weeks. The street sweepers are cleaned at the Dry Creek wastewater treatment plant in an area that drains to the plant's head works.

b) Assess BMPs for Stormwater System Maintenance

The City's Streets department has assessed and implemented BMPs during storm drain system maintenance. While performing storm drain line flushing activities the effluent is captured by a Vactor truck and disposed of at the Dry Creek Waste Water Treatment Plant. 190,000 feet of storm drainpipe was inspected and flushed in the 06-07 fiscal year. In the coming months, an additional Vactor truck is expected to be procured and will allow an increased amount of cleaning and inspection of the storm drain system

c) Assess BMPs for Parks and City-Maintained Properties

The City's Parks and Recreation department has agreed to assess and implement BMPs for landscaping, fertilizing, and pest control at parks and other City maintained properties. The Stormwater Management Program has also advised the Parks and Recreation Department on the placement and maintenance of portable toilets, and equipment wash areas.

d) Assess BMPs for Storing Cleaning and Maintenance Materials

The City stores all facility cleaning and maintenance materials indoors away from any drain inlets.

e) Assess BMPs for Trenching, Service Repairs, and Emergency Work

The Stormwater Management Program has worked with the water department and is in the process of developing a response plan to address water main breaks and the associated BMPs that will be applied to all dewatering activities.

f) Assess BMPs for Pet Waste Management

The City has agreed to assess and implement BMPs for pet waste management and the enforcement of City ordinances 7.14.010 and 8.02.240 to avoid contaminated runoff to the stormwater system.

APPROPRIATENESS:

The Stormwater Management Program has documented a number of activities that could have potential impacts to water quality. Documenting these activities is appropriate because it assists in tracking the progress of implementing BMPs for each identified activity. It is appropriate that the City review its O&M procedures for impacts to local creeks and streams. It is also fitting that activities identified as potentially polluting stormwater are mitigated through the inclusion of best management practices.

EFFECTIVENESS:

The City's approach is effective because it has identified and addressed many activities that have a high potential to contribute pollution to the stormwater conveyance system.

PROPOSED MODIFICATIONS:

None.

Status of Measurable Goals

MO-2.a: Assess BMPs for Street Cleaning and Repair

The Stormwater Management Program has interviewed the Streets division in regards to the BMPs implemented while conducting street cleaning and repair. The Streets division currently sweeps all arterial roads two times monthly, and sweeps residential streets once per month. In the '07-'08 fiscal year, the Streets division will procure additional street sweepers and attempt to sweep every residential street once every three weeks.

Pollutants generated during street repair and maintenance are controlled to the MEP. BMPs implemented include increased sweeping of areas being repaired as well as the installation of drain inlet protection where applicable. Implementing an aggressive sweeping program will usually negate the need for drain inlet protection. The implementation of BMPs for each project is determined on a case-by-case basis.

The next step in this goal is to address work performed by contractors for the City. Currently, the Stormwater program is inspecting street repairs performed by contractors to identify additional sources of pollution and require the implementation of the respective BMPs.

From a stand point of municipal operations, this goal has been accomplished, but the method for repairing and maintaining streets is an ever evolving process. BMPs will be prescribed and implemented as new repair and maintenance methods are identified

Date: 7/1/2006 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

MO-2.b: Assess BMPs for Stormwater System Maintenance

The stormwater management program has interviewed and trained the personnel in the Streets department who perform the storm drain cleaning and maintenance. Effluent from storm drain flushing activities is collected to the maximum extent practicable and disposed of at the Dry Creek wastewater treatment plant. The Parks and Recreation Department performs maintenance in the creeks and streams to prevent flooding due to beaver dams, and vegetation overgrowth. Their activities have been documented and entered into the activity spreadsheet identified in MO-1.e.

During the '07-'08 fiscal year, the Stormwater management program intends to observe the Parks and Recreation maintenance procedures and prescribe BMPs for the activity. Once this is accomplished, all the maintenance activities associated with the City's stormwater conveyance system will be assigned respective BMPs.

MO-2.c: Assess BMPs for Parks and City-Maintained Properties

The Stormwater Management Program has interviewed the Park and Recreation program to identify activities with the potential to discharge pollution to the storm drain system. The activities were entered into the spreadsheet identified in MO-1.e. Equipment washing activities and the location of portable toilets have been addressed and the BMPs identified are currently being implemented on a case-by-case basis.

Date: 7/1/2006 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

MO-2.d: Assess BMPs for Storing Cleaning and Maintenance Materials

The City currently stores all cleaning and building maintenance materials indoors preventing contact with stormwater and away from drain inlets.

Date: 7/1/2006 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

MO-2.e: Assess BMPs for Trenching, Service Repairs, and Emergency Work

The Stormwater Management Program has interviewed the Electric and Water Divisions to determine the potential for their activities to result in a discharge of pollutants to the storm drain system. The activities have been logged into the spreadsheet mentioned in MO-1.e. BMPs that will address the pollutants of concern will be developed and implemented during the 07-08 Fiscal year

Date: 7/1/2006 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

MO-2.f: Assess BMPs for Pet Waste Management

The City plans to achieve this measurable goal in the fifth year of its stormwater management program.

MO-3: Review Construction and Development Procedures for City-Owned Facilities for Inclusion of Stormwater BMPs as Necessary

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2005

End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 Year 3 X Year 4 Year 5X

Has Goal Been Accomplished: NO

General Summary

This program is intended to monitor City construction and redevelopment to ensure that these projects conform to City Standards, and that stormwater controls are included and not overlooked during City project development. This program also involves including stormwater quality provisions in City contract documents and requiring that all contractors hired by the City comply with established BMP controls. The program also includes a formalized structure for stormwater BMP inspection at municipal construction and redevelopment projects. The City has committed to:

a) Monitor City Projects and Verify BMP Implementation

The City has agreed to monitor City construction and redevelopment projects for conformance with the State General Construction Permit. The Construction Stormwater Runoff element of the Stormwater program is developing contract language and an internal policy to give the City's SWPPP inspectors jurisdiction over all City construction projects. The Inspectors will be responsible for verifying that stormwater BMPs are implemented and maintained at each construction site.

b) Require SWPPP and Require Contractors to Comply with BMP Requirements

The Stormwater Management Program has developed language to include in the City's Services Agreement that will require contractors to implement stormwater BMPs. The Services Agreement is a contract used for smaller contracted jobs such as painters, and pressure washers.

The Construction Stormwater Runoff (CSR) staff of the Stormwater Management Program is currently developing language to include in contracts for capital improvement projects. This language should be completely developed and implemented by the end of the 07-08 Fiscal year. The new contract language is expected to require the submission of a Stormwater Pollution Prevention Plan prior to the beginning of any construction activities. The City has also agreed to require that all contractors hired by the City must comply with the stormwater BMP requirements of the General Construction Permit. This goal is currently being accomplished in co-operation with the Construction Stormwater Runoff (CSR) and New Development elements of the Stormwater Management Program.

c) Develop Procedure for Inspections

The Construction Management element will develop a procedure for the City's SWPPP inspectors to conduct stormwater BMP inspections at all City projects. The City has also agreed to document the inspection of City construction sites.

APPROPRIATENESS:

The internal review of construction and development procedures for City-owned facilities is an appropriate means to ensure stormwater runoff controls are incorporated into the design and construction of City financed or constructed facilities. The inspections and reviews will be held to the same standards that private developments are expected to achieve. This will ensure consistency regardless of whether the development is a public or private project.

EFFECTIVENESS:

This an effective approach to achieving stormwater compliance at City owned projects due to the experience of City inspectors in regulating with large developments. Originally the City's contractors were responsible for ensuring stormwater compliance at City projects, but this resulted in many compliance issues being noted by City inspectors. In the 07-08 fiscal year, a policy will be developed that will engage City stormwater staff in City projects.

PROPOSED MODIFICATIONS:

The City proposes to complete these BMPs during the fifth year of its permit term.

Status of Measurable Goals

MO-3.a: Monitor City Projects and Verify BMP Implementation

The City's policy for maintaining stormwater compliance at City construction sites is currently updated to provide the City SWPPP inspectors jurisdiction over City construction projects. This policy closely parallels the City's procedures for private construction projects with the development of a construction site SWPPP and inspection of the implemented BMPs.

Date: 7/1/2005 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

MO-3.b: Require SWPPP and Require Contractors to Comply with BMP Requirements

The Construction element is developing a policy that would require the project manager to ensure that a SWPPP is developed prior to construction. The contractual language will also require compliance with the State's General Construction Permit, and local stormwater regulations. This contract language is expected to developed and fully implemented by the end of the 07-08 Fiscal Year.

See appendix for: Service Agreement

Date: 7/1/2005 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

MO-3.c: Develop Procedures for Inspections

The Construction Stormwater Runoff element is in the process of developing a policy that would require all City construction sites to be inspected for compliance with the stormwater regulations. This will ensure that all City projects are completed with the minimal impact to stormwater quality. This goal is expected to be completed by the end of the 07-08 fiscal year.

MO-4: Develop and Expand City O&M Training Programs to Include Stormwater Pollution Prevention

Responsible Party: Kelye McKinney, Engineering Manager

Start Date: 7/1/2004 End Date: 6/30/2008

Permit years scheduled for initial implementation:

Year 1 Year 2 X Year 3 Year 4 Year 5

Has Goal Been Accomplished: YES

General Summary

This program is intended to develop an employee training program to inform staff and maintenance personnel of issues related to stormwater management, including spill prevention, source control, treatment control, materials management, and the concepts of BMP implementation and preventative maintenance. The program involves adding more in-depth training program to those previously offered to personnel in City Fire, Public Works, and Environmental Utilities Departments. The City has committed to:

a) Train City staff on SWPPP

The City has agreed to distribute existing SWPPP manuals to facility managers, provide additional copies to facility staff on an as-needed basis, and provide training to familiarize facility staff with the BMPs of the existing SWPPP. Stormwater awareness training has been provided to the Streets, Facilities Maintenance, and Waste Water Conveyance Crews. During the '07-'08 fiscal year, the Storm Water Management Program will provide stormwater awareness training to the Solid Waste, Parks and Recreation, Electric, and Transportation divisions.

b) Enhance City Training Programs

The City has agreed to enhance existing City training programs for staff by including updated policies and procedures that include stormwater BMPs. The City has also agreed to partner with other jurisdictions and the public or private sector on training in an attempt to minimize costs.

APPROPRIATENESS:

Training programs are an effective way to increase awareness and active participation of city personnel to stormwater related activities.

EFFECTIVENESS:

The effectiveness of the trainings is evident in the increased amount of stormwater complaints that are received by the Stormwater Management Program from City employees. Currently a majority of the City's stormwater complaints are received from City employees.

PROPOSED MODIFICATIONS:

None.

MO-4.a: Train City Staff on SWPPP

Stormwater awareness training was provided to the Facilities Maintenance (12/7/2006), Streets Maintenance (5/17/2007), and Wastewater Collections Staff (6/21/2007). These trainings were detailed to each group's specific activities and included specific BMPs that should be implemented in order to prevent prohibited discharges to the storm drain system. Staff was trained on mandates of the stormwater management program and their impact on the activities of City employees/departments.

See appendix for: Waste Water Collections Crews training slides Training attendance roster

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Senior Engineer

MO-4.b: Enhance City Training Programs

The Stormwater awareness training will be provided to City employees on a routine basis. The training will be improved and updated through meetings with each division's management personnel. The City plans to maintain a computer database of required trains for City staff. Stormwater pollution prevention training will be included in this list of trainings.

See appendix for:

Stormwater Management Program presentation 4/3/2007

Section 4: Responsible Party Assignments

Public Education and Outreach

Kelye McKinney

Engineering Manager
(916) 774-5552

kmckinney@roseville.ca.us

Delyn Ellison-Lloyd
Senior Engineer
(916) 746-1748
dellison-lloyd@roseville.ca.us

Public Participation/Involvement

Kelye McKinney

Engineering Manager
(916) 774-5552

kmckinney@roseville.ca.us

Delyn Ellison-Lloyd
Senior Engineer
(916) 746-1748
dellison-lloyd@roseville.ca.us

Illicit Discharge Detection and Elimination

Kelye McKinney

Engineering Manager
(916) 774-5552

kmckinney@roseville.ca.us

Steve Anderson

Hazardous Materials Officer
(916) 774-5821

sanderson@roseville.ca.us

Construction Site Runoff Control

Kelye McKinneyGuy HowesEngineering ManagerAssociate Engineer(916) 774-5552(916) 774-5430kmckinney@roseville.ca.usghowes@roseville.ca.us

New Development and Redevelopment

Kelye McKinney Chris Kraft
Engineering Manager Associate Engineer
(916) 774-5552 (916) 774-5339
kmckinney@roseville.ca.us ckraft@roseville.ca.us

Municipal Operations

Delyn Ellison-Lloyd
Senior Engineer
(916) 746-1748
dellison-lloyd@roseville.ca.us

Delyn Ellison-Lloyd
Senior Engineer
(916) 746-1748
dellison-lloyd@roseville.ca.us