Section 1: Overview and Contact Information

Date Prepared: 9/13/2005

For questions regarding this report contact:

Kelye McKinney

2005 Hilltop Circle

Roseville, CA 95747

1. Permitting Authority:	California State Water Resources Control Board		
2. Permit Number:	CAS000004	**3. Permit Type:**	General
4. Permit Name:	City of Roseville Stormwater Management Program		
5. Date Issue:	7/1/2003	**6. Date Expire:**	6/30/2008

1. Operator Name:	Robert Jensen		
2. 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@rosevile.ca.us		
8. Population:	96,900	**Area (sq mi):**	31
9. Official Website:	www.roseville.ca.us		

General Information for Primary Contact Person

1. Name:	Kelye McKinney
2. Title:	Engineering Manager
3. Phone Number	(916) 774-5552
4. E-Mail Address:	kmckinney@roseville.ca.us

General Information for Secondary Contact Person

1. Name:	Delyn Ellison-Lloyd
2. Title:	Associate Engineer
3. Phone Number	(916) 746-1748
4. E-Mail Address:	dellison-lloyd@roseville.ca.us

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

Receiving Streams	Receiving Waterbodies	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

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 education and outreach materials per year. Existing media will be used for the dissemination of this information. In addition, the stormwater program has agreed to participate in three community outreach events per year.

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 three community outreach events each year.

APPROPRIATENESS:

This BMP is an appropriate part of the beginning stages of the City's stormwater program. It helps the community to understand, appreciate and accept the necessity of the stormwater program and its associated activities. In turn, utilization of these various community educational opportunities aid the City in its successful implementation of the initial phases of the stormwater management program. The City may reduce or eliminate the use of citizen volunteers for storm drain stenciling. The City is moving towards the installation of permanent storm drain markers as opposed temporary painted stencils.

EFFECTIVENESS:

This 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. It is difficult at this time to determine cause and effect relationships through out the various elements of the program.

PROPOSED MODIFICATIONS:

The City proposes to complete PO-1.c during the third year of the permit term.

Status of Measurable Goals

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

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

2004-2005

Three stormwater articles were published in the "Environmental Utilities Today" newsletter. Two were published in the August 2004 issue entitled "Are there fish down there?", and "Stormwater Permit in Place". A stormwater article entitled "What Goes Down the Storm Drain Could Cost You $$$" was published in the December 2004 issue. 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 availability on virtually every counter in the City of Roseville government buildings.

The website was revised in May 2005 to include the "EU Today" articles (with issues back to April 2003 included). The link to the newsletter is http://www.rosevile.ca.us/eu/news_n_information/eu_today_newsletter.asp or in website click on City Government, then Environmental Utilities, then News and Information.

See appendix for:
Copy of newsletter articles

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

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

2004-2005

A new stormwater flyer was designed entitled "Stormwater Pollution at Your House", with subheadings: "What you can do: washing your car; painting your house; caring for your pets; watering your lawn; cleaning your driveway; draining your pool". The flyer includes Spanish translation. Three hundred of these flyers were distributed during a Fire Department Outreach Event on April 30, 2005.

A Trina Trout magnet was designed as a means of making the hotline phone number easily accessible. The magnet reads "Report illegal discharges...call 746-1000". Three hundred of these were also distributed during the Fire Department event.

Two flyers entitled "Need to Drain Your Pool?" and "Swimming Pool Discharge and the Environment" were designed to inform pool owners and pool service companies of the necessity for the proper disposal of pool water. Twenty seven pool businesses were contacted by phone initially, and then through a mailing with an informative letter from Kelye McKinney, Engineering Manager, which included several copies of the pool flyers. Most were very receptive to the program. Two retail pool suppliers were also contacted by phone and with an on site visit to deliver the pool flyers. They agreed to display the materials and take an active role in informing their customers of the City's pool water discharge procedures.

The City began attaching the "Need to Drain Your Pool" flyer to all pool permits beginning March 1, 2005. This will be done on an ongoing basis. Between March 1st and June 30th 2005, 220 permits were issued.

A booth was created for participation in Roseville's Downtown Tuesday Nights (DTN). The Stormwater Program booth was used at 5 of the DTN events. (July 6th & 20th of 2004, and June 7th, 21st, and 28th of 2005). The booth includes a "carnival" type game which visually demonstrates that the City's storm drains are connected to the creeks, and that discharges to the storm drains can impact wildlife and their habitat. The "Stormwater Pollution at Your House" flyer, the "Need to Drain Your Pool?" flyer and the Trina Trout hotline magnet were distributed at these events. Other items with the recognizable Trina Trout mascot provided at these events include: umbrellas, dust pans, and "bags-on-board" doggie clean-up bags. A big attraction for children were the tropical fish bubbles prize with the message, "Keep Our Creeks Clean!". An average of 120 prizes were awarded at each of the event dates listed above.

Additionally during this permit term, the City created a 60 second public service announcement that highlighted Trina Trout. This PSA was produced for television. Trina appeared in an animated form. She informed the other characters, and indirectly the public, that the City's storm drains are connected directly to the creeks and that non-stormwater discharges such as solid waste can impact local wildlife and their habitat. The spot ran on the City's Public Access Cable Channel 14/73. The City is considering purchasing additional air time on local cable channels to display the spot as well.

See appendix for:
Fire Department Outreach notice
Pool Flyers
Stormwater Pollution at Your House flyer
Hotline Magnet
Pictures of Downtown Tuesday Nights booth
Pictures of Trina Trout umbrella, dustpans, doggie-bags, and tropical fish bubbles
List of pool businesses contacted
Letter sent to pool businesses
Copy of the public service announcement

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

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

2004-2005
The two Mahany Park signs, incorporating the Trina Trout mascot, were designed and fabricated. 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"

Arrangements have been made with the City's Parks Department for the installation of these signs 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 sign and proposed location

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

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

2004-2005
The Community Development Department in conjunction with the consulting firm, Foothills Associates, has completed the development and production of the "Roseville Creek Awareness Map" and the "Roseville Creek Stewardship Resource Guide". The Creek Awareness Map is designed to be a wall poster and the Stewardship Resource Guide is a tri-fold. Currently, both are being reproduced for distribution. The Stewardship Guide discusses the City's Stormwater Management Program and its implications to activities in the residential community. For more detail see report appendices.

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

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

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

2004-2005
A revised Stormwater website went online in April 2005. The most significant change includes the expansion of the site from a single page with links to element specific information to a multi-page site with element specific information on each page. See PI-1a for more detailed information.

The website was also revised in May 2005 to include the "EU Today" articles (with issues back to April 2003 included). The link to the newsletter is http://www.rosevile.ca.us/eu/news_n_information/eu_today_newsletter.asp or in website click on City Government, then Environmental Utilities, then News and Information.

See appendix for:
Screen shots of website features
Site map of Stormwater pages

PO-1.f: Implement Storm Drain Labeling Program

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

2004-2005
A new storm drain stencil stating, "No Dumping Flows to Creek", was designed, manufactured and used to label storm drain inlets in several of the City's residential neighborhoods. Volunteers such as church groups, Boy Scouts and individuals from the community applied paint in a two step process using the stencil to over 800 storm drains during the 2004-2005 fiscal year. The City limits the storm drain stenciling season to May through October to provide for the possibility of inclement weather such as wind and rain. See the appendices for more detailed information on stencil configuration, the covered

areas and the exact storm drain locations.

See appendix for:
Picture of storm drain with new stencil design
Pictures of existing stencil design and stamped drain
Document of improved materials and methods
Map of areas where stencil was applied and storm drain locations

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

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

2004-2005
The City's Stormwater Program participated in Hewlett Packard's Earth Day events at their campus on Tuesday, April 19th, 2005. Most of the attendees were employees of HP as such they were very knowledgeable and interested in the environmental impacts of stormwater pollution prevention. Materials distributed were the general stormwater flyer, "Stormwater at Your Home" and the pool discharge brochure. This event provided an opportunity to present stormwater pollution prevention information to a very receptive audience. It also generated several follow-up phone calls.

A booth was created for participation in Roseville's Downtown Tuesday Nights. The Stormwater Program booth was used on 5 nights (July 6th & 20th of 2004, and June 7th, 21st, and 28th of 2005). The booth includes a "carnival" type game which visually demonstrates that the storm drain connects to the creek habitat. The "Stormwater Pollution at Your House" flyer, the "Need to Drain Your Pool?" flyer and the Trina Trout hotline magnet were distributed at these events. Other items with the recognizable Trina Trout mascot provided at these events include: umbrellas, dust pans, and "bags-on-board" doggie poop clean-up bags. A big attraction for children were the tropical fish bubble prize with the message, "Keep Our Creeks Clean!". An average of 120 prizes were awarded at each of the event dates listed above.

the Stormwater Program was scheduled to attend Kaiser Permanante Earth Day which was cancelled due to rain.

See appendix for:
Pictures of portable public outreach booth
Pool Flyers
Stormwater Pollution at Your House flyer
Hotline Magnet
Pictures of Downtown Tuesday Nights booth
Pictures of Trina Trout umbrella, dustpans, doggie-bags and tropical fish bubbles

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 water ways. 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 resource sharing, however not all the municipal programs have agreed to the same BMP implementation schedule making coordination difficult at times.

The city anticipates that developing a long term strategic outreach plan will help to focus its resources in the most effective ways to educate target audiences.

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:

The City plans to continue to develop partnerships with proximate Phase I and Phase II jurisdictions and sharing resources through these partnerships as appropriate. The City has completed the public stormwater awareness survey and is in the process of developing a strategic public outreach plan. The City will update the SWMP's public outreach program once the strategic plan (PO-2.c) is completed (estimated January 2006).

Status of Measurable Goals

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

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

2004/2005
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 Phase II communities in the area. The City is also in the process of creating a memorandum of understanding (MOU) with PRSCG membership to provide a mechanism for funding coordinated activities.

Roseville stormwater program staff attended the PRSCG meetings on 5-19-05, 12-16-2004, 11-18-04, 9-16-04, 8-19-04, & 7-15-04. The topics discussed included regulatory dates, Memorandum of Understanding development, BMP sizing technical subcommittee, 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 Rocklin, 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 coordinate program development and benefit from information sharing. The frequency of these meetings has been reduced from every month to every other month due to staff time limitations of the participating agencies.

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

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

2004-2005
Roseville's residents were surveyed regarding their awareness of stormwater quality issues during this permit year. The survey was developed and the results compiled by DataCycles 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 o 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 complied 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 shoul 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 up-most consideration when formulating the program's long term public outreach strategy.

See appendix for:
Copy of survey results

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

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

2004-2005
The web-based public awareness survey was completed in April of 2005 and the results have been tabulated. This information has been turned over to the public relations firm Lucy & Co who has been hired by the City to develop the long term public outreach strategy for the stormwater program. The plan is expected to be completed in the 2005-2006 fiscal year. The Stormwater Management Program will be up-dated then to reflect the results of the long term outreach strategy.

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 consists of outreach 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 development community about the stormwater management program and their responsibilities to prevent stormwater pollution.

EFFECTIVENESS:

Because the City is currently in the initial stages of its stormwater management program, it is difficult to gauge the effectiveness of its stormwater programs. However, initial indicators tend to validate this BMPs presumed effectiveness. Through public workshops, detailed information specific to Roseville's Construction Stormwater Management program is distributed to a large number of individuals in the development community making the financial resources committed to this BMP very effective.

PROPOSED MODIFICATIONS:

In the Construction Stormwater Runoff program, next year the City may conduct tailgate trainings to educate the construction community on the practical aspects of construction BMP installation and maintenance.

For the New Development/Redevelopment minimum control measure, the City has moved the creation of New Development and Redevelopment design standards to year three of the permit term. As such, workshops have not been held for New Development related issues.

Status of Measurable Goals

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

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

2004-2005
The development phase of the construction stormwater runoff minimum control measure is complete. The City is currently implementing the Stormwater Pollution Prevention Program (SWPPP) for Construction Related Activities. Therefore, this BMP is complete. The City will hold up-date workshops as necessary.

Workshops have not been held for the New Development Program creation as this BMP will be accomplished during year three of the permit term.

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

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

2004-2005
The City held an annual training on its Construction Stormwater Program on September 30th, 2004 at Roseville's Woodcreek Golf Course Conference facility. The workshop covered the Federal, State and local aspects of SWPPP compliance and implementation. The workshop included a site visit to four active construction sites that had stormwater BMPs installed. There were approximately 120 participants from the construction community, government and the BMP vendor industry present. Certificates of completion were awarded to each workshop participant.

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 assuage the legal challenges and the acceptance issues usually accompanying a new 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 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.

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.

Status of Measurable Goals

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

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

2004-2005
The City's revised website went online in April of 2005. Stormwater program staff was given enhanced administrative rights to update information and upload documents as necessary. At that time, the stormwater site was expanded from a single page of information linked to technical documents to a multi-page website with program specific information on each page. The new stormwater website includes a page of information with the following headings; About Our Program, Construction & Development News, Contact Stormwater, Essential Business Tips, Public Involvement Opportunities, Related Links, Stormwater at Your Home and Up-Coming Events & Workshops. Each page consists of text, pictures and links to relevant technical support data and pertinent websites external to the City.

The stormwater website is updated frequently with information necessary to keep the public abreast of up-coming events and training opportunities as well as volunteer opportunities. All of the public outreach events held in association with the City's Downtown Tuesday Nights were advertised on the website. Information such as the City's SWPPP Policies and Procedures, the SWPPP inspection form and a link to the CASQA manuals for the construction and development industries is also posted on the new website and updated as necessary.

Due to technology constraints, the Trina Trout webpage as well as the Creek Tour were removed from the website. The City has interviewed and selected a website consultant to write a flash animation piece that would combine both of those pages into one dynamic page. Staff plans to develop and implement this new webpage in the 2005-2006 fiscal year.

PI-1.b: Post Technical Assistance Documents

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

2004-2005
Currently, there are 19 "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.

See appendix for:
List of "Technical Compliance Assistance Documents Available Via Website"

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

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

2004-2005
The "Contact Stormwater" page of the website provides several options for making contact with Stormwater Management personnel as follows:

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

(916) 774-5751
stormwater@roseville.ca.us"

Seven emails from the public were received during this reporting period. All emails 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

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	Year 3	Year 4	Year 5
	X			

Has Goal Been Accomplished: YES

General Summarv

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, Adopt-A-Stream, and citizen monitoring programs.

APPROPRIATENESS:

The Watershed Management BMP is particularly appropriate to the stormwater management program in its attempts to protect the City's waterways by supporting a creek restoration plan and pollution prevention programs.

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 will continue to implement all of its ongoing measurable goals in year two with the exception of co-sponsoring an Adopt-A-Stream. The City proposes to remove this best management practice (PI-2.d) from our work program.

Status of Measurable Goals

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

Date: 7/1/2004 Responsible Party: Mark Morse, Environmental Coordinator

2004-2005
Dry Creek Watershed Council meetings were attended on a monthly basis by the City's Community Development Department staff.

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

Date: 7/1/2004 Responsible Party: Mark Morse, Environmental Coordinator

2004-2005
The City supported efforts to develop the Dry Creek Coordinated Resource Management Plan. The plan was prepared by consultants under contract to Placer County. It was put up for public review on September 15, 2003 and completed in early 2004. The City is currently supporting efforts by Placer County to develop a Coordinated Resource Management Plan for Pleasant Grove Creek.

The City collaborated on development of the Coordinated Resource Management Plan for Pleasant Grove Creek by 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.

We continue to provide input on the Pleasant Grove Creek Plan by attending the Pleasant Grove/Curry Creek monthly CRMP meetings. The draft plan is currently circulating for review and comment. The City's Community Development Department intends to remain engaged in this process.

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

Date: 7/1/2004 Responsible Party: Mark Morse, Environmental Coordinator

2004-2005
The final Creek Plan and Initial Study/Mitigated Negative Declaration was approved and adopted respectively by the Roseville City Council on June 1, 2005.

PI-2.d: Support Pollution Prevention Programs

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

2004-2005
Creek Week was a focus of our support this year. We posted Creek Week on the City's website calendar announced the event on Channel 14 at the Public Utilities Commission meeting and contributed $1000 through the Parks and Recreation Department to purchase t-shirts for clean-up day participants. The City also made clean-up sites available and collected garbage and debris from the sites.

We continue to collaborate with Dry Creek Conservancy on monitoring activities and this past year approved an agreement with DCC that allowed them to place stream loggers at two locations in the City. The stream loggers record water quality data.

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 four 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 general public to comment on the program.

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 will continue to provide stormwater management program updates to the public bodies such as the Public Utilities Commission on an as-needed basis. The City proposes to reduce the frequency of public body up-dates from four per year to twice per year.

Status of Measurable Goals

PI-3.a: Provide Updates

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

2004-2005
City staff made two presentations to the Public Utility Commission during this reporting period. In October 2004, a presentation on the key objectives for the stormwater program for FY 04-05 year was presented. In April 2005, staff provided a brief presentation on Creek Week activities and provided contact information for residents or other interested parties to get involved. Both presentations were aired on the City's public access channel.

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	Year 3	Year 4	Year 5
	X			

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 hoped 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 increasing public awareness of the threat of stormwater pollution to the City's waterways.

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 initiated PI-4.b and proposes to complete this BMP in the third year of our permit term.

Status of Measurable Goals

PI-4.a: Label or Stencil Storm Drains

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

2004-2005

Over eight hundred additional storm drains were stenciled this year using volunteer groups. A newly designed stencil stating "No Dumping Flows to Creek", and improved materials and methods were employed.

Details of stenciling events are as follows:
Storm drains stenciled - 829
Number of participants - 54

See appendix for:
Map of drains stenciled
Statistical chart showing status and types of storm drain labeling

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

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

2004-2005
The City's storm drains are labeled, as in the past, with stamped concrete in new subdivisions or stenciled with paint in the older areas of town. This year we continued to develop and improved our volunteer stenciling program, as well as requiring new developments to stamp storm drains. 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 researched other options for labeling storm drains. Online inquiries from other stormwater management programs throughout the country gave us insight into the use of permanent markers. A chart of responses showing favorable and unfavorable benefits were tabulated. Additionally, we evaluated using stainless steel markers which have an estimated life span of 30 years. They proved to be very cost effective and have a visual appeal that other methods lack. A pilot program to install 600 metal markers using a community volunteer group is currently scheduled for the fall of 2005. Two methods of installation will be evaluated: 300 markers will be applied with adhesive only, and 300 markers will be applied with adhesive and a concrete nail fastener. City Street employees will drill concrete fastener holes in advance. Then the Eagle Scout volunteer will complete the installation. Each site will be revisited at the end of the rainy season for evaluation of the condition of the marker.

Attachments:
Graphic of marker
Map of installation locations

See appendix for:
Picture of stainless steel marker on storm drain
Chart of research on plastic markers

Illicit Discharge Detection and Elimination

The IDDE Program is intended to identify and eliminate all discharges and connections to the Smal 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 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 to be implement in the 2004/2005 permit year include IDDE-2 , address/eliminate illicit connections and non-stormwater discharges, IDDE-4, stormwater ordinance, and IDDE-6, long-term outreach. 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 developed a stormwater map prior to receiving its stormwater NPDES permit and the corresponding implementation of the Stormwater Management Program. Therefore, under IDDE-3, the City's storm sewer map will be updated and refined over the permit term.

Discharges from MS4s often include wastes and wastewater from non-storm water 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 waterbodies. 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 areas around the city, e.g. businesses and outfalls, that could discharge illicit materials to the City's creeks. This BMP is targeted toward commercial and industrial facilities, businesses, residential neighborhood, 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 will review 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 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 illicit discharge so they can be mitigated in a timely manner.

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.

Status of Measurable Goals

IDDE-1.a: Perform Inspections

Date: 7/1/2003 Responsible Party: Steve Anderson, Hazardous Materials Officer

2004-2005
The City's Fire Department has inspected 271 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, 6 businesses were given a written warning via their inspection report regarding the discharge of pollutants to the stormwater conveyance system.

The City is also coordinating through in a Placer Regional Stormwater Coordinating Group (PRSCG) to include a stormwater component in the annual health inspections performed by Placer County Environmental Health Department.

Currently, under local ordinance stormwater BMPs are not inspected for or required at industrial facilities. It is anticipated that this may change once the new local stormwater ordinance is adopted and its accompanying guidance manuals are developed.

IDDE-1.b: Create Spill Response Procedure

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

2004-2005
A spill response procedure has been created for all incidents reported via 911, the Stormwater hotline, the Stormwater Management Program office number, and the Stormwater website email form. 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 support all City departments in the event clean-up of the stormwater conveyance system is necessary.

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 a database for tracking and reporting purposes.

See appendix for:
Flow chart of response procedure
Incident report form

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

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

2004-2005
As of April 2005, Roseville citizens have been able to directly 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 has been promoted in print form through the distribution of the "Stormwater Pollution at Your House" flyer, and the Trina Trout magnet. The "Environmental Utilities Today", December 2004 issue, publicized the "illicit stormwater discharges" hotline number to 35,000 residents.

The hotline is located at the City's emergency dispatch center. This allows for ease of tracking of calls and the dispatch of emergency personnel in the event of a hazardous materials spill.

Citizens continue to 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
Stormwater Pollution at Your House flyer
Trina Trout magnet
Environmental Utilities Today newsletter
Chart of Public Outreach Materials Distributed and Means of Distribution

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

Date: 7/1/2003 Responsible Party: Gene Paolini, Chief Building Inspector

2004-2005
The City began attaching the "Need to Drain Your Pool" flyer to all pool permits beginning March 1, 2005. This will be done on an ongoing basis. Between March 1st and June 30th 2005, 220 permits were issued.

See appendix for:
Need to Drain Your Pool flyer

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

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

2004-2005
A power point presentation was created to instruct City staff in the detection and reporting of illicit discharges and connections. Department workshops were held on the following dates:
1/18/05 Public Works
2/1/05 Parks and Recreation (44 attendees)
3/9/05 Wastewater
6/7/05 Water
6/23/05 Public Works (2nd meeting)

See appendix for:
Copy of power point presentation

IDDE-1.f: Assess Dry Weather Flows

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

2004-2005
Weekly outfall evaluations were scheduled during the dry season. Dates and number of outfalls observed were as follows:
2004: 7/1/04 - 19
7/8/04 - 17
7/13/04 - 15
7/15/04 - 11
7/22/04 - 13
7/27/04 - 15
7/29/04 - 14
2005: 6/16/05 - 3
6/24/05 - 6
6/30/05 - 8
The data collected include condition of outfall and surrounding area, equipment accessibility, illicit discharges, digital photograph and GPS location.

On one occasion, pool water discharge was detected by the odor of chlorine and the volume of water discharging. It was traced back to the source of an apartment complex pool being drained for repairs. Staff informed the property manager of Roseville's procedures to discharge pool water. The discharge was eliminated and an incident report written. No other illicit discharges were identified during the inspections.

See appendix for:
Map of outfalls evaluated

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

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	Year 4	Year 5
	X			

Has Goal Been Accomplished: NO

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/non-stormwater 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:

The City is currently in the initial stages of its stormwater permit and has not yet gathered enough data to gauge the effectiveness of this minimum control measure.

PROPOSED MODIFICATIONS:

The City has initiated IDDE-2.c and proposes to complete this BMP in the third year of our permit term.

Status of Measurable Goals

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

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

2004-2005
The development of new policy pertaining to illicit/non-stormwater discharges and connections has been addressed by the development of a new City of Roseville Stormwater Ordinance. The draft ordinance was circulated for internal review to all impacted city departments. All city-generated comments were incorporated in to the draft ordinance. Additionally, the draft ordinance was presented as a power point presentation to the Building Industry Association of California on May 10, 2005 and to the Roseville Chamber of Commerce on May 24, 2005 for questions and comments. Copies of the draft ordinance were given to the attendees for further review and a means of submitting comments was provided to both groups. In addition, the draft ordinance was also posted on the stormwater website for public comment and review. City staff anticipate adoption of the ordinance by the City Council prior to July 1, 2006.

See IDDE-1.b for new response policies applicable to the detection and reporting of illicit discharge via City Stormwater phone numbers and email.

See appendix for:
City of Roseville Draft Stormwater Ordinance
Draft Stormwater Ordinance power point presentation

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

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

2004-2005
Outfall monitoring criteria for the detection and elimination of illicit discharge has been developed in conjunction with the City's weekly outfall evaluations. An "Illicit Discharge & Detection Elimination" form was created to document and report such findings. See IDDE-1.f for dates and other information regarding outfall monitoring.

On one occasion, pool water discharge was detected by the odor of chlorine and the volume of water discharging. It was traced back to the source of an apartment complex pool being drained for repairs. Procedures were followed to eliminate and report the discharge.

See appendix for:
Illicit Discharge & Detection Elimination form
Map of outfalls evaluated

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

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

2004-2005
The draft City of Roseville Stormwater Ordinance includes policy pertaining to the cessation and remediation of illicit/non-stormwater discharges. Cessation and remediation will be most effective once the stormwater ordinance is put into effect due to the enhancement of the city's authority to issue citations and compliance orders. The new city stormwater ordinance will also provide for the clean-up of illicit discharges both by the dischargers and by the city. It will also allow the City to recover any expenses it incurs in association with such clean-up activities. This will enhance existing response activities by giving stormwater personnel additional tools for effectively dealing with illicit discharge cessation and remediation. The ordinance is anticipated to be adopted by the City Council prior to July 1 2006.
See IDDE-4.a for additional information regarding the new City of Roseville Stormwater Ordinance.

See appendix for:
City of Roseville Draft Stormwater Ordinance

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 detecting illicit discharges and tracing them to their origination point.

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 will continue to update its storm sewer map by verifying the positions of all outfalls draining into U.S. waters using a global positioning system (GPS).

Status of Measurable Goals

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

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

2004-2005

The City continued to up-date its storm sewer map using a Global Positioning System device to refine the accuracy of the mapped outfalls and to add unmapped outfalls to the map. This up-date of the stormwater map is performed in conjunction with the City's dry weather outfall monitoring program

City of Roseville Stormwater Management Program

which is conducted from May to October. Due to an extended rainy season this year, the start of the outfall mapping and dry weather monitoring were pushed back from May to June.

The City is also up-dating the GIS mapping reference platform to NAD-83.

Appendix:
CD of new stormwater outfalls

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	Year 3	Year 4	Year 5
	X			

Has Goal Been Accomplished: NO

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 drain 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.

4) Cross-reference to the State's General Permit for industrial and construction stormwater discharges.

5) Requirements and procedures for notification of spill and emergency response

6) Enforcement procedures, e.g. NOV, public nuisance, and public hearing

7) Remedies, e.g. recovering the cost of abatement, monetary penalties, and suspension of storm drain service

APPROPRIATENESS:

The creation of a stormwater ordinance is appropriate to the stormwater program because it sets guidelines for the management stormwater & non-stormwater discharges that public must abide by.

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 minimum control measure.

PROPOSED MODIFICATIONS:

The City will adopt the stormwater ordinance in year third year (2005-2006) of its permit term.

Status of Measurable Goals

IDDE-4.a: Create Stormwater Ordinance

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

2004-2005

The City is in the public review and comment period of it draft stormwater ordinance. The ordinance was distributed for internal review and comment through out the impacted City departments. Comments were received and incorporated into the current draft ordinance,

On May 10, 2005, the City made a presentation to the Building Industries of Northern California regarding the draft ordinance. The City gave the same presentation to Roseville's Chamber of Commerce on May 24, 2005. The draft ordinance was made available for review to both groups and comments were solicited. The City is scheduled to make similar presentations to the City's Economic Development Advisory Committee (EDAC) and Roseville's Coalition of neighborhood Associations in the fall of the 2005-2006 permit year.

At the conclusion of the public comment period, the draft ordinance will be presented to the City's local Public Utilities Commission board for review and comment. From there, the ordinance will go on to the monthly meetings of the Roseville's City Council for two successive readings before the public. If there is no significant objection from the public, the ordinance will be subjected to a vote for approval by the Council. It is anticipated that these steps will be completed by the end of this calendar year (2005) and adoption will follow soon after.

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:

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 minimum control measure.

PROPOSED MODIFICATIONS:

The City has initiated IDDE-5.c and proposes completion in the third year of its permit term.

Status of Measurable Goals

IDDE-5.a: Publish Stormwater Articles

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

2004-2005
The City has published several articles in Environmental Utilities' bi-monthly newsletter, EU Today, and also in the City's newsletter, Roseville Reflections. Three stormwater articles were published in the "Environmental Utilities Today" newsletter. Two were published in the August 2004 issue entitled "Are there fish down there?", and "Stormwater Permit in Place". A stormwater article entitled "What Goes Down the Storm Drain Could Cost You $$$" was also published in the December 2004 issue. The "EU Today" newsletter is mailed directly to 35,000 Roseville residents. It is included as an insert in each residential utility bill. It is also available on most of the City's public counters.

See Appendix for:
August 2004 Environmental Utilities Today
December 2004 Environmental Utilities Today
Roseville Reflections

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

Date: 7/1/2003 Responsible Party: Steve Anderson, Hazardous Materials Officer

2004-2005
A stormwater component was included in the City Fire Department's inspections for hazardous materials and hazardous wastes at industrial and commercial facilities. Over 270 business inspections were performed this fiscal year. From those inspections, six businesses were given written notice to cease discharging pollutants to the stormwater conveyance system.

As programs develop in accordance with the adoption of the stormwater ordinance and the corresponding stormwater BMP guidance series, additional inspection points will be added to the Fire Department's routine hazardous materials and hazardous waste inspections and programs will develop for various discharge categories.

IDDE-5.c: Utilize Educational Signs

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

2004-2005
The City has developed two educational signs to be installed at one of the City's regional park, the Mahany Complex. The signs feature Trina Trout and her animal friends asking park visitors to dispose

of their solid waste properly. The signs are scheduled to be installed adjacent to a foot bridge that crosses over Kaseberg Creek. The trail is also part of the City's bike trail system. The bridge receives a significant volume of pedestrian traffic from park visitors traveling from one side of the park to the other. These signs are scheduled to be installed during the 2005-2006 permit year.

See appendix for:
Copies of the Mahany Complex signs

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

Date: 7/1/2004 Responsible Party: Mark Morse, Environmental Coordinator

2004-2005
The Community Development Department in conjunction with the consulting firm, Foothills Associates, has completed the development and production of the "Roseville Creek Awareness Map" and the "Roseville Creek Stewardship Resource Guide". The Creek Awareness Map is designed to be a wall poster and the Stewardship Resource Guide is a tri-fold. Currently, both are being reproduced for distribution. The Stewardship Guide discusses the City's Stormwater Management Program and its implications to activities in the residential community. For more detail see report appendices.

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

IDDE-5.e: Expand City Stormwater Web Page

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

2004-2005
A revised Stormwater website went online in April 2005. The most significant change includes the expansion of the site from a single page with links to element specific information to a multi-page site with element specific information on each page. See PI-1a for more detailed information.

The website was also revised in May 2005 to include the "EU Today" articles (with issues back to April 2003 included). The link to the newsletter is http://www.rosevile.ca.us/eu/news_n_information/eu_today_newsletter.asp or in website click on City Government, then Environmental Utilities, then News and Information.

See appendix for:
Screen shots of website features
Site map of Stormwater pages

IDDE-5.f: Implement Storm Drain Stenciling

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

2004-2005
A new storm drain stencil stating, "No Dumping Flows to Creek", was designed, manufactured and used to label storm drain inlets in several of the City's residential neighborhoods. Volunteers such as church groups, Boy Scouts and individuals from the community applied paint in a two step process using the stencil to over 800 storm drains during the 2004-2005 fiscal year. The City limits the storm drain stenciling season to May through October to provide for the possibility of inclement weather such as wind and rain. See the appendices for more detailed information on stencil configuration, the covered areas and the exact storm drain locations.

See appendix for:
Picture of storm drain with new stencil design

Pictures of existing stencil design and stamped drain
Document of improved materials and methods
Map of areas where stencil was applied and storm drain locations

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	Year 3	Year 4	Year 5
	X			

Has Goal Been Accomplished: NO

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 be greatly benefit through an increased public awareness of stormwater pollution prevention concepts.

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 minimum control measure.

PROPOSED MODIFICATIONS:

The city proposes to up-date its stormwater program's long-term outreach strategy during the third year (2005-2006) of its permit term.

Status of Measurable Goals

IDDE-6.a: Work to Develop Partnerships

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

2004-2005
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 stakeholders such as the Phase II communities in the area. The City is also in the process of creating a memorandum of understanding (MOU) with PRSCG membership to provide a mechanism for funding coordinated projects.

Roseville stormwater program staff attended the PRSCG meetings on 5-19-05, 12-16-04, 11-18-04, 9-16-04, 8-19-04, & 7-15-04. The topics discussed included regulatory dates, Memorandum of Understanding development, creation of post-construction BMP sizing criteria, and the development of a stormwater component in Placer County Environmental Health's already existing food facility inspection program. Participants attending usually included representatives from each of the following: the City of Rocklin, 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 coordinate program development and benefit from information sharing. The frequency of these meetings has been reduced from every month to every other month due to staff time limitations of the participating agencies.

IDDE-6.b: Evaluate Level of Stormwater Knowledge

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

2004-2005
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 had 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 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 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 waste disposal practices as environmentally responsible. These results will be given the up-most consideration when formulating the program's long term public outreach strategy.

See appendix for:
Copy of survey results

IDDE-6.c: Identify Needs for Stormwater information

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

2004-2005
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 waste disposal practices as environmentally responsible. These results will be given the up-most consideration when formulating the program's long term public outreach strategy.

See appendix for:
Copy of survey results

IDDE-6.d: Identify Target Audiences

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

2004-2005
Based on the 2005 survey of Roseville's residents, the City will identify the public audiences with the greatest needs for education regarding stormwater quality issues. The survey included a demographic component that can be correlated with the water quality questions to determine target audiences and their gaps in stormwater knowledge. 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 a representative cross section of approximately 300 residents

Narrative comments were also solicited for several of the survey questions. The survey demographics were also complied 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 final destination of stormwater discharged from their neighborhoods (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 up-most consideration when formulating the program's long term public outreach strategy.

See appendix for:
Copy of survey results

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

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

2004-2005
The web-based public awareness survey was completed in April of 2005 and the results have been tabulated. This information has been turned over to the public relations firm Lucy & Co hired by the City to develop the long term public outreach strategy for the stormwater program. The plan is expected to be completed in the 2005-2006 fiscal year. The Stormwater Management Program will be up-dated at that time to reflect the results of the long term outreach strategy

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	Year 4	Year 5

Has Goal Been Accomplished: NO

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 stormwater management program and has not yet gathered enough data to gauge the effectiveness of its programs.

PROPOSED MODIFICATIONS:

The City will adopt the new stormwater ordinance in the third year of its stormwater management program (prior to July 1, 2006).

Status of Measurable Goals

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

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

2004-2005

The Stormwater Ordinance is in draft form and is anticipated to be adopted by City Council later this year. Additional information on the status of the stormwater ordinance can be found under IDDE-4.

CSR-2: City Standards

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	Year 4	Year 5
	X			

Has Goal Been Accomplished: NO

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 the existing construction site runoff control measures in City Standards, including submittal requirements, erosion and sediment control BMPs, and materials and waste control BMPs.

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

PROPOSED MODIFICATIONS:

A Guidance Manual for implementing construction site BMPs will be developed during the third year of the permit term.

Status of Measurable Goals

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

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

2004-2005
The City has determined it will reference best management practice (BMP) requirements of the up-coming Construction Standard revision to an independent Guidance Manual which will be prepared this next year. A draft document has been prepared. City departments and the development community will have an opportunity to review the document during the third year of the permit term. Once the draft document is finalized full implementation will follow.

CSR-2.b: Implement CSR Control Measures

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

2004-2005
Following completion of the Guidance Manual (CSR 2-a), the City will enforce the requirements through the City's design review process. In the meantime, the City is referencing the CASQA Construction Handbook.

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	Year 3	Year 4	Year 5
	X			

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

The City has agreed to create a plan review checklist for Planning (BMPs such as stream setbacks) and Public Works (BMPs such as slope protection).

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:

None.

Status of Measurable Goals

CSR-3.a: Create Submittal Requirements Checklist

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

2004 - 2005
The City has developed a seven item Stormwater Pollution Prevention Plan (SWPPP) review check list which was initially derived from Regional Board staff guidance. The City requires SWPPP's 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. SWPPP's are logged in as received.

See Appendices for:
SWPPP review procedures

CSR-3.b: Create Plan Review Checklist

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

2004 - 2005
The City has developed a seven item SWPPP review check list which was initially derived from the Regional Board staff. The check list identifies the minimum requirements for each submitted SWPPP. City staff review the SWPPP to verify all items are included in the SWPPP document. It should be noted that staff do not perform a technical review of the document. Information in the SWPPP is then used by the Stormwater Inspector to determine if the sites fall in the High, Medium or Low categories for stormwater inspections.

See Appendices for:
SWPPP Review Procedures

CST-3.c: Provide Staff Training

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

2004 - 2005
The city's stormwater inspector met with the management of the city development staff to discuss SWPPP review policies and procedures. On July 28, 2005, the City's Stormwater Inspector met with the entire Development plan check staff to train for SWPPP review. Several other engineers who are involved in city capital improvement projects and traffic projects were also present. Individual training sessions have been held as each plan checker has needed to review SWPPP's. Plan check staff currently reviews improvement plans for grading and drainage and are experienced with stormwater runoff mitigation measures.

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:

This BMP has been advanced and completed in the second year of the City's permit term.

Status of Measurable Goals

CSR-4.a: Establish Telephone Line

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

2004-2005
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 is slated to be dispatched to stormwater discharges that originate from a construction site and construction related activities.

CSR-4.b: Establish E-Mail Link

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

2004 - 2005
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.

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

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

2004 - 2005
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.

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

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

2004 - 2005
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 on-compliant stormwater events at a construction site, he/she will then inform the supervising Stormwater Inspector for further enforcement. If compliance is still not met, the Stormwater Inspector then contacts the SWRCB for assistance.

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

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

2004-2005
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, Improvement and Construction Standards, 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 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.

Status of Measurable Goals

CSR-5.a: Establish Inspection Policy Setting Frequency

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

2004-2005
The City's policy for Construction Site Runoff is in effect and has been the basis for reporting over this past year. This year there were 1,895 high priority weekly inspections made. This resulted in a 55.7% inspection record. There was 134 low/medium priority monthly inspections made. This resulted in a 20.36% inspection record. The programs goal is 90%. Although these results seem low, they represent an improvement to the prior year. The City continues to refine their procedures and program structure for improvement.

CSR-5.b: Establish Inspection Procedures

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

2004-2005
Administrative procedures have been refined to include inspection, report writing, and documentation. In SWPPP Inspection form was generated for this purpose.

CSR-5.c: Set Enforcement Actions

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

2004 -2005
Enforcement actions have been defined in the draft Storm Water Ordinance and will be enforced once approved. Code Enforcement Officers also issue citations under the current Roseville Municipal Code for illicit discharge into the City's stormwater conveyance system.

CSR-5.d: Set Up Tracking System

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

2004 - 2005
The City uses a database that tracks all SWPPP inspections for every construction site that disturbs one acre or greater with Waste Discharge Identification Number (WDID#). The State's Regional Board staff has informed the City they are changing software to Oracle this coming year. The City's IT Department will in turn be in contact with the State for database transfer information and coordination with the State's proposed changes to confirm the existing tracking system remains functional.

CSR-5.e: Train Inspection and Enforcement Staff

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

2004 - 2005
The City held three - 2 hour in-house inspection sessions on 9/23/04, 1/18/05, and 6/23/05. Guest speakers from the Regional Board also shared new material pertinent to stormwater inspection with City staff at these sessions.

See appendices for:
Training session sign-up sheets

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:

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.

Status of Measurable Goals

CSR-6.a: Conduct Workshops

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

2004-2005
The City hosted an all day stormwater workshop held at Woodcreek Oaks Golf Course on September 30, 2004. Industry vendors and field BMP demonstrations were held at four different sites. Approximately 120 people from the development, construction, and consultant community were in attendance as well as several City staff.

CSR-6.b: Conduct Annual Training Workshops

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

2004-2005
In August, 2004, the City conducted a full-day workshop for SWPPP preparation and BMP implementation. Approximately 125 members from the development community attended.

CSR-6.c: Train City Staff

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

2004-2005
City stormwater inspection staff were provided training material relating to proper BMP installation, sampling, and on-site detention practices during the in-house training sessions conducted and listed in CSR-5.e.

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

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

2004-2005
The City has continued to update the information on the website pertaining to its construction runoff minimum control measure of the stormwater management plan.

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 impacts 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 water 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	Year 5

Has Goal Been Accomplished: No - not required during this reporting period.

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:

None

Status of Measurable Goals

ND-1.a: Assess Development Plan Review

Date: 7/1/2005 Responsible Party: Chris Kraft, Associate Engineer

2004-2005
Project work outlined to be completed next year. Staff has scheduled time to work on task.

ND-1.b: Integrate Technical Criteria

Date: 7/1/2005 Responsible Party: Chris Kraft, Associate Engineer

2004-2005
Project work outlined to be completed next year. Staff has scheduled time to work on task.

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

Date: 7/1/2005 Responsible Party: Chris Kraft, Associate Engineer

2004-2005
Project work outlined to be completed next year. Staff has scheduled time to work on task.

ND-1.d: Develop System for Feedback

Date: 7/1/2005 Responsible Party: Chris Kraft, Associate Engineer

2004-2005
Project work outlined to be completed next year. Staff has scheduled time to work on task.

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	Year 4	Year 5
	X			

Has Goal Been Accomplished: NO

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:

The City has initiated but not completed this BMP. The City proposes to complete this work in the third year of it permit term.

Status of Measurable Goals

ND-2.a: Review Technical Guidance Programs

Date: 7/1/2004 Responsible Party: Chris Kraft, Associate Engineer

2004-2005
Staff has reviewed post construction control methods currently adopted by other Phase I communities.

ND-2.b: Develop Technical Criteria

Date: 7/1/2004 Responsible Party: Chris Kraft, Associate Engineer

2004 - 2005
The City is working with the Sacramento Water Quality Partnership to establish technical criteria in the form of a guidance manual. This document is expected to be completed in Spring 2006.

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

Date: 7/1/2004 Responsible Party: Chris Kraft, Associate Engineer

2004 - 2005
New and updated standards will be produced pending completion of ND-2b.

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: NO - not required during this reporting period

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 will adopt its stormwater ordinance in the third year of its stormwater management program.

Status of Measurable Goals

ND-3.a: Develop Stormwater Ordinance

Date: 7/1/2005 Responsible Party: Kelye McKinney, Engineering Manager

2005-2006

The City has drafted a Stormwater Ordinance that addresses post-construction controls. The Ordinance guides design and installation, requires maintenance, allows for inspection, and outlines enforcement procedures. The Ordinance is currently awaiting public outreach and adoption. See BMP IDDE-4 for additional information.

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 - not required during this reporting period

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.

Status of Measurable Goals

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

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

2004-2005
Project work outlined to be completed in year four. Staff has scheduled time to work on task.

ND-4.b: Provide Maintenance Guidance

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

2004-2005
Project work outlined to be completed in year four. Staff has scheduled time to work on task.

ND-4.c: Include Structural Controls in Database

Date: 7/1/2006 Responsible Party: Delyn Ellison-Lloyd, Associate Engineer
2004-2005
The City plans to accomplish this measurable goal in the fourth year of its stormwater program.

ND-4.d: Utilize Self-Certification Program

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

2004-2005
The City plans to accomplish this measurable goal in the fourth year of its stormwater program.

ND-4.e: Include Structural Control Inspections

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

2004-2005
The City plans to accomplish this measurable goal in the fourth year of its stormwater program.

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	Year 4	Year 5
	X			

Has Goal Been Accomplished: NO

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:

The City proposes to complete this BMP during the third year of the permit term as this BMP is dependent on ND-2.

Status of Measurable Goals

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

Date: 7/1/2004 Responsible Party: Chris Kraft, Associate Engineer

2004 -2005
This task is being moved to the third year of the permit term.

ND-5.b: Conduct Annual Training

Date: 7/1/2004 Responsible Party: Chris Kraft, Associate Engineer

2004 - 2005
This BMP will be initiated upon completion of ND5-a, scheduled for the third year of the permit term.

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 job of the citizens. 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, Engineering Manager

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

Permit years scheduled for initial implementation:

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

Has Goal Been Accomplished: NO - completion not required duirng this reporting period

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, consisting of fundamental statistics on each City facility pertinent to stormwater quality management. 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:

a,b) Maintain Stormwater Pollution Prevention Plans (SWPPPs)

The City has agreed to maintain the SWPPPs at the City's Dry Creek Wastewater Treatment Plant and at the City's Corporation Yard.

c) Continue Pollution Prevention BMPs

The City has agreed to continue 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 has agreed to evaluate new City facilities as they are brought on-line to determine need for inclusion in the State's NPDES Industrial Permit program.

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

The City has agreed to identify, prioritize and inspect all City-owned properties and evaluate field operations for stormwater pollution potential.

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

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

APPROPRIATENESS:

Evaluation of City facilities, and operations is an appropriate means to determine the appropriateness of BMPs, both structural and non-structural, to reduce or eliminate pollutants from stormwater runoff.

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:

This BMP is scheduled to be accomplished over a two year period. No modifications are proposed at this time.

Status of Measurable Goals

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

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

2004/2005
The City continues to maintain its SWPPP at the Dry Creek wastewater treatment plant.

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

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

2004/2005
The City continues to maintain its SWPPP at the Roseville Corporation Yard.

MO-1.c: Continue Pollution Prevention BMPs

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

2004-2005
All chlorinated water from City-owned pools has been drained to the sanitary sewer.

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

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

2004-2005
The City is exploring the necessity of obtaining a NPDES permit for the new Pleasant Grove Wastewater Treatment Plant.

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

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

2004-2005
An initial list of City-owned facilities and properties was generated using data available to stormwater staff. This data was combined with GIS information to create maps showing locations for each City department or division.

Feedback from each department either confirmed, modified or added the properties with the possibility of potential stormwater pollution resulting in a updated set of City facilities

A list of typical municipal field operations with the potential of generating stormwater pollution was identified for each City department and added to the inventory list. As with the fixed City facilities, this list of field activities was forwarded to each pertinent City department for review and comment.

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

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

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

2004-2005
This best management practice was not initiated in this reporting period.

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 - not required during this reporting period

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 has agreed to assess and implement BMPs for street cleaning/sweeping and repair.

b) Assess BMPs for Stormwater System Maintenance

The City has agreed to assess and implement BMPs for stormwater system maintenance

c) Assess BMPs for Parks and City-Maintained Properties

The City has agreed to assess and implement BMPs for landscaping, fertilizing, and pest control for parks and City maintained properties.

d) Assess BMPs for Storing Cleaning and Maintenance Materials

The City has agreed to assess and implement BMPs for storing cleaning and maintenance materials for City owned buildings.

*e) Assess BMPs for Trenching, Service Repairs, and Emergency Wor*k

The City has agreed to assess and implement BMPs for trenching, service repairs, and emergency work.

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 City performs a number of activities that could have potentially impacts to water quality. 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 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.

Status of Measurable Goals

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

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

2004-2005
The City plans to achieve this measurable goal in the fourth year of its stormwater management program.

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

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

2004-2005
The City plans to achieve this measurable goal in the fourth year of its stormwater management program.

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

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

2004-2005
The City plans to achieve this measurable goal in the fourth year of its stormwater management program.

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

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

2004-2005
The City plans to achieve this measurable goal in the fourth year of its stormwater management program.

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

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

2004-2005
The City plans to achieve this measurable goal in the fourth year of its stormwater management program.

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

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

2004-2005
The City plans to achieve this measurable goal in the fourth 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 5

Has Goal Been Accomplished: NO - not required during this reporting period

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 City has also agreed to verify that stormwater BMPs are implemented and maintained at each construction site.

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

The City has agreed to include language in City contract documents that requires 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.

c) Develop Procedure for Inspections

The City has agreed to develop a procedure for construction stormwater runoff inspections at City projects. The City has also agreed to document the inspection of City construction sites.

APPROPRIATENESS:

The 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.

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.

Status of Measurable Goals

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

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

2004-2005
Although this BMP was not called for until the third year of the City's permit term, the City did create policies and procedures for the inclusion and inspection of stormwater BMPs into capital improvement projects. This policy closely parallels the city's procedures for private construction projects with the development of a construction site SWPPP the inspection of the implemented BMPs.

Attachments:
CIP SWPPP Policies

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

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

2004-2005
The contractual language between the City and its contractors specifies a SWPPP must be submitted prior to construction and the requires compliance with the State's General Construction Permit. Refer to CSR 3.a for additional information.

MO-3.c: Develop Procedure for Inspections

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

2004-2005
The City plans to achieve this measurable goal in the third year of its stormwater management program.

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

Responsible Party: Delyn Ellison-Lloyd, Associate Engineer

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

Permit years scheduled for initial implementation:

Year 1	Year 2	Year 3	Year 4	Year 5
	X			

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.

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 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:

This BMP has been initiated. The City recognizes the need to enhance this work pending completion of MO-1 and MO-2 to allow for identification of appropriate training topics and materials for City staff.

Status of Measurable Goals

MO-4.a: Train City Staff on SWPPP

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

2004-2005
Presentations for various city departments were conducted to describe the activities of the stormwater management program and how city employees/departments are effected by the current stormwater regulations.

Parks Department - 2/1/05, 44 attendees
Public Works Department - 1/18/05
Public Works Department - 6/23/05
Wastewater Department - 3/9/05
Water Department - 6/7/05

Additionally, stormwater pollution prevention (SWPPP) topics will be identified and incorporated into city staff training programs based on the results of the municipal operations O&M inventory and assessment. SWPPP topics will be included in existing routine training courses as well. A schedule will be developed for these SWPPP trainings as the depth and breadth of the training subject matter is better defined.

After the municipal operations O&M inventory and assessment is completed, these training courses will become more fully defined and comprehensive. Bi-annual surveys of City staff in each targeted department will assess the effectiveness of the on-going trainings.

MO-4.b: Enhance City Training Programs

Date: 7/1/2004 Responsible Party: Delyn Ellison-Lloyd, Associate Engineer
2004-2005
The city did has begun this BMP. However, the city intends to enhance this element when the inventory and inspection of the city's fixed facilities and field operations, as called for by this minimum control measure, are complete. This will provide a strong foundation for specific training by allowing stormwater pollution prevention and best management practices to be directly incorporated into the standard operating procedures of each city department.

Section 4: Responsible Party Assignments

Primary Contact	Secondary Contact
Public Education and Outreach	
Kelye McKinney Engineering Manager (916) 774-5552 kmckinney@roseville.ca.us	Delyn Ellison-Lloyd Associate Engineer (916) 746-1748 dellison-lloyd@roseville.ca.us
Public Participation/Involvement	
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