### ANNUAL REPORT GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (GENERAL PERMIT)

Reporting Period July 1, 2009 to June 30, 2010



CITY OF ROCKLIN Department of General Services 3970 Rocklin Road Rocklin, California 95677 (916) 625-5500 This page intentionally left blank.

### **Annual Report**

### General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (General Permit)

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### **ANNUAL REPORT**

### General Permit for the Discharger of Stormwater from Small Municipal Separate Storm Sewer Systems (General Permit)

Check box if this is a new name, address, etc.

### **PERMITTEE INFORMATION**

1. Permittee (Agency Name):	City of Rocklin	_
2. Contact Person:	Kent L. Foster	. 🗆
3. Mailing Address:	4081 Alvis Court	
4. City, State and Zip Code:	Rocklin, CA 95677	
5. Contact Phone Number:	(916) 625-5510	
		-

6. WDID #

7. Have any areas been added to the MS4 due to annexation or other legal means?  $\Box$  YES  $\boxtimes$  NO

Outfall	Has map be	een updated?	Has SWMP been updated?		Receiving Water Name
		NO		NO	

8. Are you subject to the Design Standards contained in Attachment 4 of the General Permit? ∑ YES □ NO

If yes, report on the implementation of the Design Standards in MCM V of this Annual Report Form.

### **REPORTING PERIOD**

(Check one):	Coverage Commencement (March 10, 2003) to June 30, 2004
	-or-
	July 1, 2004 to June 30, 2005
(Report is due by September 15	July 1, 2005 to June 30, 2006
each year)	July 1, 2006 to June 30, 2007
	July 1, 2007 to June 30, 2008
	July 1, 2008 to June 30, 2009
	July 1, 2009 to June 30, 2010

### **CERTIFICATION**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Think 2 Frank

Signature of Permittee (legally responsible person)

**9/15/2010** Date Signed

Kent L. Foster

Name (printed)

Director of General Services

Title

### Acknowledgments

# The following Staff have been instrumental in the implementation of the SWMP during permit year 2009-2010:

Sherri Abbas, Development Services Manager Dayna Amboy, Information Technology Lance Boroja, Department of General Services Karon Bowers, Police Shawn Darling, Department of General Services Dara Dungworth, Planning/Department of General Services Bret Finning, Planning Rick Forstall, Department of General Services Kent Foster, Director of General Services Nanette Herron, Department of General Services Russell Hildebrand, City Attorney Tom Jaenke, Department of General Services Judy LaPorte, Director Administrative Services Carmel Linder, Human Resources Kathy Long, Department of General Services Sergeant Lon Milka, Police/Animal Control Jared Montney, Department of General Services David Mohlenbrok, Planning Justin Nartker, Department off General Services Mike Nottoli, Police

Joe Pacheco, Engineering
Dave Palmer, Engineering
Sherry Palmer, Building
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Scot St. Denis, Department of General Services
Patty Tash, Human Resources
Lyle Waite, Department of General Services
Laura Webster, Planning
Debbie Welhoelter, Department of General Services
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### **Responsible Party Assignments/Implementing & Coordinating SWMP**

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# **Executive Summary**

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### **Executive Summary**

### **REGULATORY OVERVIEW**

This Annual Report has been prepared in compliance with the State Water Resources Control Board (SWRCB) permitting requirements for small municipal separate storm sewer systems (MS4s). Rocklin has been designated a regulated MS4, along with other Placer County Municipalities, based on population and residential densities. Under Phase II NPDES (National Pollution Discharge Elimination System) requirements, MS4s must apply for a general permit in order to be authorized to discharge stormwater into "waters of the United States". Figure 1 illustrates the City of Rocklin's permit coverage area and watershed boundaries. This permit requires MS4s to develop, implement, and enforce a Stormwater Management Program (SWMP) designed to reduce the discharge of pollutants from the storm sewer system to the maximum extent practicable.

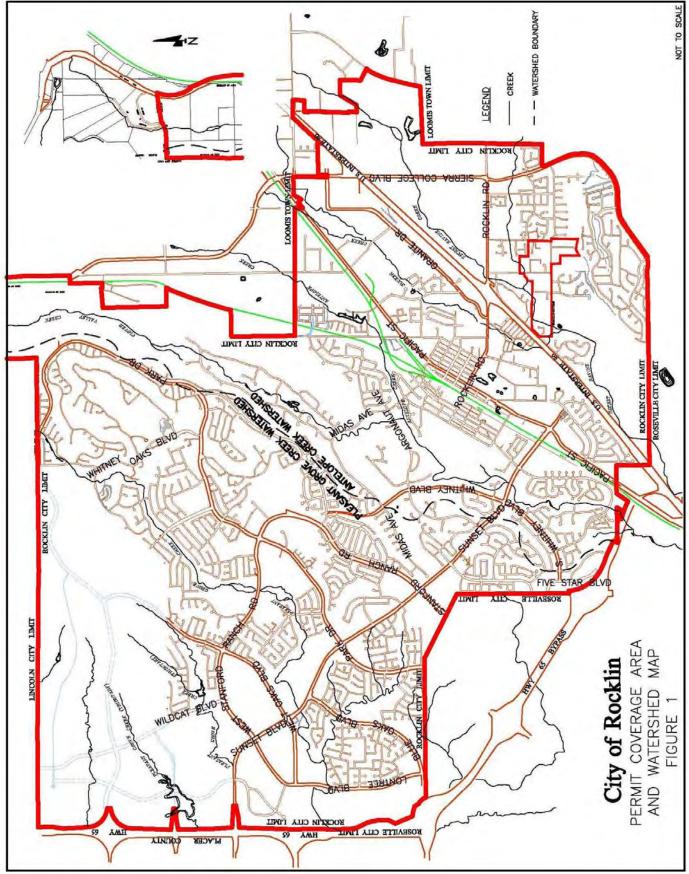
Municipalities have five years to achieve complete implementation of the program, but each year they must show incremental progress towards accomplishing that goal. To monitor progress on each municipality's SWMP, the SWRCB requires regulated MS4s to conduct an annual evaluation and submit the results in the form of an annual report. This document has been prepared to satisfy this requirement and is due September 15 of each year.

In March 2003, the City of Rocklin submitted a Notice of Intent (NOI), the NPDES permit application, and the proposed Stormwater Management Program to the RWQCB. The City received permit coverage in December 2003. Rocklin's original stormwater management proposal incorporated six minimum control measures (MCMs):

- 1. Development of public education and outreach programs/activities.
- 2. Public involvement and participation in development and ongoing implementation of the Stormwater Management Program.
- 3. Development, implementation, and enforcement of an illicit discharge detection and elimination program.
- 4. Development, implementation, and enforcement of a program for construction site runoff.
- 5. Development, implementation, and enforcement of a program for post-construction runoff.
- 6. Development and implementation of pollution prevention and good housekeeping practices at City operated facilities.

### CHANGES FROM PREVIOUS YEARS

The City has made steady progress on implementing MCMs of the Stormwater Management Program. These six MCMs formed the basis of the City's original stormwater program. However, as the City monitored its stormwater program, some changes needed to be made to protect not only water quality, but the watershed as a whole. The City's Basic Message, "The water that flows into the storm drain is not treated water" was incorporated into several city and





regional public events, as well as increased public education and outreach efforts. The face to face contact is essential to getting the basic message out. As in past years, the purpose of this document is twofold: first; to report what was accomplished during the last reporting period of the General Permit; and second, to identify the nexus between a healthy watershed and water quality. The City continues to take a more comprehensive approach to stormwater management by making stormwater management a component of the watershed. Watershed management will include the following activities:

- 1. Provide opportunities for the community to volunteer in educational activities such as Creek Week clean up and tree planting projects.
- 2. Incorporate the Attachment 4 development conditions into City projects for the City's public hearing and review process. Examples of City Design Standards, typical conditions and policy relating to Attachment 4 are included in Appendix 4.1 of this report. 1
- 3. Inspect construction sites for effective erosion and sediment control measures and document permit compliance efforts.
- 4. Condition projects to provide funding for open space operations and maintenance. Continue to inspect and monitor structural and non-structural stormwater BMPs. Continue to map and identify all drainage systems and outfalls using GPS technology.
- 5. Develop maintenance procedures that minimize water quality impacts. Training staff to identify impacts to water quality.

The City continues to collect and test water samples to establish a baseline for water quality. The baseline parameters enable staff to direct education, enforcement and maintenance efforts where these activities will improve water quality. The City also quantifies several assessment parameters during each reporting period. The data is used to establish pollutant trends so educational or enforcement programs can be developed or updated.

### **IDENTIFICATION OF WATERSHED MANAGEMENT STRENGTHS AND WEAKNESSES**

With the implementation of any program, the City will be strong in some areas and weak in other areas. The goal is to identify both and build on the strengths and improve in weak areas. Below is a rating of the City's overall effectiveness of the program as evaluated for the 2009-2010 permit year:

Strengths

- Ability to track the enforcement process and follow through with enforcement action.
- Use of volunteers for projects such as storm drain marking, litter removal, and tree planting.
- Public outreach and participation through partnerships with local non-profit organizations, the school district, and the business community.

<sup>1</sup> Attachment 4 is one of nine attachments to State Water Resources Control Board (SWRCB) Water Quality Order No. 2003 – 0005 – DWQ National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000004 Waste Discharge Requirements (WDRS) For Stormwater Discharges From Small Municipal Separate Storm Sewer Systems (General Permit). Attachment 4 identifies design standards to land use and is typically implemented at the project approval process.

- Use of the City's website for public outreach, education, and participation.
- Public outreach through frequent attendance of the Pollution Prevention and Stormwater Education Booth at regional events including Placer County Celebrate the Earth Festival hosted by the Roseville Utility Exploration Center and Rocklin Chamber of Commerce's Hot Chili Cool Cars and community events such as Rocklin Chamber of Commerce's Evenings in the Park.
- Reorganization of Public Works and Parks and Facilities into combined General Services Division will provide more integration and better coordination between similar and complementary programs (i.e. Urban Forest, volunteer events, integrated pest management, pollution prevention/solid waste reduction, etc.) which will further support the City's holistic approach to watershed health.

### Weaknesses

- Program emphasis in construction runoff and illicit discharge and detection including the infrastructure (maps and databases) to document and analyze data.
- Need more outreach on a regional basis, although collaboration and coordination through the Placer Regional Stormwater Coordination Group (PRSCG), Regional Recycling Group (RG), and the Placer Sustainable Business Certificate Program task force have made great strides in this area. Watershed management is routinely based on political or jurisdictional boundaries; however, these boundaries are often not associated with actual ecosystem functions and distribution of human and natural resources. Planning and management on a watershed basis makes practical sense with regard to natural resources and ecosystem functions; in particular, the quality and quantity of water and their effect on the local human, biological, and physical environment.
- Budget constraints and loss of staff require stretching resources even further. Hard choices about competing priorities have slowed down BMP completion, placed BMPs on hold for the foreseeable future, and eliminated a few aspects of the SWMP (Creek Week 2010) for the current permit year.

### **FUTURE VISION**

The future vision for the City is to continue to identify the many variables that impact water quality and focus on developing regional partnerships to address them. Examples of these partnerships include:

- Air Quality control of dust and airborne particles will reduce polluted runoff that is caused when small particles enter the watershed. Partnerships could include air quality districts and the construction industry.
- Urban Forest a healthy urban forest and other bio-treatment methods can help reduce runoff times and treat pollutants on site before entering the watershed. Partnerships include Rocklin Unified School District, local native California plant nurseries, and the Sacramento Tree Foundation.
- Public Participation expand public involvement in activities such as Creek Week which promote stewardship of the City's watersheds. Partnerships include the Chamber of Commerce, local colleges and universities, and neighboring jurisdictions.

• Water Conservation – efforts to reduce urban runoff from irrigation sources could involve water districts, school districts, and other institutional users.

### SUMMARY OF BMP COMPLIANCE

Over the current permit year, the City continued to increase efforts to comply (and to document compliance) with Public Education and Outreach and Public Participation MCMs. Partnership arrangements established during the 2008-2009 permit year began to bring results and move towards creating mostly self-sustaining programs. Descriptions of increased public education and outreach activities are discussed in Chapter 1 while public participation BMPs are described in Chapter 2.

The City worked towards completing several BMPs and continuing implementation of others within the Illicit Discharge Detection and Elimination and the Construction Site Stormwater Runoff Control MCMs. Ordinances and procedures for inspections, maintenance, and enforcement have been in place for several of the past permit years, so the focus is now on increasing compliance with documentation requirements to better show compliance. Chapter 3 provides an overview of the illicit discharge related BMPs and Chapter 4 provides a description of construction site runoff BMPs.

Post Construction Stormwater Management and Pollution Prevention and Good Housekeeping for Municipal Operations MCMs also are areas that the City maintains ongoing compliance through continued implementation. Regular inspections and maintenance of stormwater infrastructure ensures compliance with the General Permit. Descriptions of post construction and municipal good housekeeping BMPs are in Chapters 5 and 6, respectively.

### EFFECTIVENESS AND APPROPRIATENESS OF BMPS

As noted above, the City continues to work toward complete implementation of the SWMP. However, the SWMP is an adaptable document and through the Annual Report can and should be modified to ensure appropriate stormwater management BMPs are included. This permit year, the City began re-evaluating the appropriateness and effectiveness of its BMPs to be able to better document these aspects of the SWMP. This permit year, the City added a few new BMPs to better address stormwater quality and overall watershed health, in Public Education and Outreach, Public Participation, and Post Construction Stormwater Management BMPs. Some BMPs have been modified to respond to constraints such as reductions in budget and Staff levels and some were modified to provide better anticipated effectiveness. A few BMPs were determined to not be effective and will not be part of the ongoing implementation of the SWMP.

The new General Permit has not yet been adopted and although the new Construction General Permit was adopted this reporting year, the City did not modify or add BMPs specifically to address (anticipated) changes to the Permits. Going forward, the City will continue to monitor and analyze the SWMP relative to the new Permits and will modify appropriate BMPs to comply with new requirements set forth within the new Permits, as needed.

As noted in the 2008-2009 Annual Report, the City did not build into its original SWMP a program effectiveness assessment methodology and beginning with the 2008-2009 Annual Report the City henceforth will attempt to document the effectiveness or desired effectiveness of

the program elements within each BMP. The City uses the California Stormwater Quality Association's (CASQA) "Municipal Stormwater Program Effectiveness Assessment Guidance" (Guidance Document) Outcome Level method to estimate the effectiveness of the various program elements. Where qualitative data has been collected for a particular element, it is included in the report and will be used as a baseline for future effectiveness assessments.

The following is a brief synopsis from the Guidance Document of the Outcome Levels and their meaning:

Outcome Level 1—Documenting Activities

Level 1 Outcomes are assumed to be beneficial to water quality and reflect program implementation. They are not indicators of the impact of implementation on the environment.

Outcome Level 2-Raising Awareness

Similar to Level 1, raising awareness about stormwater pollution and BMPs is generally assumed to be beneficial to the environment because increased awareness and attitudinal changes provide the basis for behavioral change. Measuring Level 2 Outcomes is a useful way of gauging whether educational efforts are progressing toward these behavioral and environmental changes.

Outcome Level 3—Changing Behavior

Both quantitative (i.e. empirical data) and qualitative methods can be used to measure behavior changes. Level 3 Outcomes build upon the attitudinal changes from Level 2 and may take the form of a percent and/or change in the percentage of the target audience who demonstrates that behavior change has occurred.

Outcome Level 4—Reducing Loads from Sources

Many control measures are intended to reduce the loading of pollutants from targeted sources. Load reductions should, in turn, result in improvements to discharge and receiving water quality. If a large enough portion of the target audience is moved to take action (Level 3), loads into the storm drain system are prevented.

### Outcome Level 5—Improving Runoff Quality

A primary focus of stormwater management programs is to reduce pollutants in stormwater and to ensure that discharges do not cause or contribute to violations of water quality standards in receiving waters. Over time, as loads are prevented from entering stormwater drainage systems, urban runoff and discharge quality should improve. Level 5 Outcomes may be measured as reductions in one or more specific pollutants and may reflect effectiveness at a variety of scales ranging from site-specific to programmatic. Outcomes at Level 5 may be difficult to distinguish from Outcomes at Level 4.

### Outcome Level 6—Protecting Receiving Water Quality

The ultimate objective of stormwater management programs is the protection of water bodies. At Level 6, the focus is on compliance with water quality standards, protection of biological integrity, and beneficial use attainment. Beneficial use is described in the Sacramento and San Joaquin River Basin Plan. State law defines beneficial uses of California's waters that may be protected against quality degradation to include (and not be limited to) "...domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves" (Water Code Section 13050(f)). Regardless of the Outcomes targeted, receiving water quality usually reflects more than the quality of stormwater discharges alone. Other influences may also have a significant impact on the receiving water quality including sanitary sewer overflows, rising groundwater, agricultural and other non-point discharges. Changes in receiving waters and the environment resulting from stormwater programs may only be seen over long periods of time that allow the cumulative impacts of multiple control measures and program elements to result in a measurable change in water quality.

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# Chapter 1 – MCM I

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### Chapter 1. MCM I - Public Education and Outreach

### NARRATIVE OVERVIEW

The City of Rocklin's Public Education and Outreach program meets the requirements of the NPDES General Permit for Stormwater Discharge. Since 2003, the City has joined with the Dry Creek Conservancy and other jurisdictions within the Dry Creek and Pleasant Grove watersheds to co-sponsor Creek Week activities to inform residents about non-stormwater discharges. In addition, the City partners with other organizations carry out educational and outreach programs related to stormwater issues, including the Placer Regional Stormwater Coordination Group (PRSCG), American Basin Council of Watersheds (ABCW), STAR Education, Rocklin Unified School District, re-Create, and the City of Roseville's Utility Exploration Center. City residents have benefited from the work of non-profit organizations such as the Dry Creek Conservancy, Citizen's Involved Means Better Living (CIMBL), and other citizen volunteers through activities such as tree planting, litter pick-up, and habitat restoration.

The City has also developed printed educational and outreach material that can be picked up at various City buildings and/or downloaded from the City's website. Materials include brochures that target the construction industry, residential yard maintenance, pet waste pickup and disposal, and disposal of household hazardous waste, all underscoring the City's basic message that, **"Water that enters Rocklin's storm drain system is not treated."** 

### BEST MANAGEMENT PRACTICE (BMP) STATUS

This chapter discusses the BMPs identified in the City's *Storm Water Management Plan* (SWMP), along with their associated measurable goals.

The numbering of the individual Public Education and Outreach BMP tasks correspond with their initial year of implementation as they are listed on Table 1-A of the City's SWMP. New BMP tasks added to the City's Stormwater Management Program in permit year 2009-2010 use the same nomenclature, thus are numbered with year seven (7).

The status of implementation for each BMP and a summary of how the City complied with each BMP are provided. In addition, the next year's reporting period goal is included here rather than formally updating the City's SWMP. Appendix 1 includes supporting materials for Public Education and Outreach BMPs.

During the 2009-2010 fiscal/reporting year, the City added two new BMPs not originally included in the SWMP, and continued to expand on existing BMPs. This reporting year, the City continued to focus its limited resources on its Public Education and Outreach efforts to more fully comply with this minimum control measure (MCM) and added two new BMPs.

### BMP 1 – "THE BASIC MESSAGE"

"Develop and distribute written materials to get the message out, that **the storm drain does not lead to a wastewater treatment plant, but to a creek or open space area**. Materials will be designed to make the public aware of what ordinary daily activities can result in discharges to the storm drains, and that discharges into the storm drains result in impacts to wildlife, water quality, health, and eventually the quality of life in the community. These materials will also teach the vocabulary related to urban runoff issues. For the residential population, the materials will target home auto maintenance activities, landscape and home maintenance activities, pet waste management, pest control, and swimming pools, all of which are common sources of pollution in the residential community. For the commercial and industrial population, an emphasis will be placed on lawn care businesses, carpet care businesses, and pool maintenance businesses. Methods to distribute the materials will include the City of Rocklin's *Annual Report to the Community*, the City of Rocklin's web page, press releases, developing partnerships with the local school district to distribute educational material, developing partnerships with local businesses to educate and achieve 'buy in' in support of the Basic Message, conducting workshops and training seminars with homeowners, distributing materials during Creek Week and other community activities."

# 1.a. Incorporate "The Basic Message" into the *City of Rocklin Annual Report to the Community* and distribute to 100% of Rocklin residents and businesses by December 31 each year.

**Status:** Modified. Using BMP item 1.b. in place of BMP item 1.a.

# 1.b. Develop and publish stormwater information and outreach on City website by September 2004.

Status: Ongoing implementation.

In the current reporting year, the SWMP published a total of twenty-two web articles and other "temporary" content on the City homepage. Of these, two were interactive web surveys, one about dog licensing and pet waste management and one about Earth Day environmental priorities, which provided links to additional web content on the City website and external websites. The remaining twenty were web articles accessed from the homepage via a City News Item (i.e. homepage headline), which also linked to internal and external webpages.

(See Appendix 1-1 for the Web Content Tracking Temporary Posts spreadsheet and copies of many of the web articles listed in the spreadsheet. Other web articles listed are included in individual BMP items in other sections of this chapter.)

Also, some preliminary modifications were made to the Public Works Stormwater Pollution Prevention page with the addition of new Construction General Permit and Adopt-an-Inlet information. Additionally, the City posted the 2008-2009 Annual Report on its webpages and announced its availability via a City News Item. These are permanent content that are modified or updated infrequently. Last, a new recurring stormwater and watershed health column was introduced in the City's award-winning e-Biz Newsletter.

See Appendix 1-2 for a copy of the updated Public Works' Stormwater Pollution Prevention page, Annual Report page, and e-Biz Newsletter.

**Goal for 2009-2010:** Plans for further permanent website enhancements include: 1) reorganizing and reformatting the collection of stormwater pages (e.g., pollution prevention for contractors, residents, and food service, recycling, NPDES annual reports and others) into a more user-friendly format; 2) adding a kids activity and information page; 3) adding a creek map that shows landmarks, public facilities, parks and neighborhoods in relation to the City's watersheds, creeks, streams, and open space; and 4) adding hyperlinks to local and regional stormwater quality-related agencies and organizations. Not achieved due to competing priorities for staff time.

**Goal for 2010-2011:** Continue updates and enhancement to website as noted in 2009-2010 goal above.

**Measurable Goal:** Track the number of total visits and unique visits to individual stormwater related pages, the number of visits to City News items and press release links, and number of City Survey participants.

**Appropriateness:** The City's website is the most cost-effective method to facilitate public outreach. In the current reporting year, the City of Rocklin's website had an average of:

- **90, 900 Visits per month** (Down from 114,900 in 2008-2009) This means that people visited the City website 90,900 times. (*What is a visit?* Example: A person might go to the website once at work, and then once when they get home. This counts as two visits.)
- **33,400 Unique Visitors** (Down from 48,000 in 2008-2009) This means that 33,400 people visited the City's website.
- **6,000 Repeat Visitors** (Unchanged: 6,000 in 2008-2009) This means that 6,000 people came back to look at the website twice or more times during the month.
- **470,000 Pageviews** Down from 645,900 in 2008-2009) This means that people looked at the City's website pages 470,000 times.

**Effectiveness:** To be determined as staff resources allow. Ongoing effectiveness may be determined through one or more of the following methods: a) conducting an online poll, City Survey, or other interactive response method on the website to gauge any increase in stormwater awareness; b) tracking the number of visits and pageviews to stormwater pages; and/or c) comparing changes to the number of visits and pageviews before and after revamping the stormwater pages.

The Public Works Events page had 2,000 views in the reporting year. The Household Hazardous Waste page had 1,047 views in the reporting year. The Pollution Prevention page had 958 views in the reporting year. The Recycling page had 6,200 views in the reporting year. This is the first year these stats have been kept.

The goal is to achieve an Outcome Level 2 - Raising Awareness.

## **1.c.** Prepare press reports twice yearly that address wet and dry season activities that residents and businesses can perform to improve water quality.

Status: Ongoing implementation.

The Wet Season 2009 press release was published on October 8, 2009 and was sent to the Placer Herald, the Sacramento Bee, and WAVE Broadband. In addition, a City News Item ran on the Homepage with a link to the full press release in October and again in January.

The Dry Season 2010 press release was published on June 15, 2010 (due to the late, wet spring weather) and was sent to the Placer Herald, the Sacramento Bee, and WAVE Broadband. In addition, a City News Item ran on the Homepage with a link to the full press release for the remainder of June.

**Goal for 2009-2010:** Prepare and publish Wet Season and Dry Season press releases as specified. **Achieved**.

**Goal for 2010-2011:** Prepare and publish Wet Season and Dry Season press releases as specified. Work with local media outlets to get consistent coverage. As time allows, create a spreadsheet to track press release effectiveness.

**Measurable Goal:** Number of publications that pick up the press release and publish a story. Number of visits to online versions of the press releases on the City's website.

**Appropriateness:** Harnessing local media outlets' readership means the City can reach even more residents and businesses than by relying solely on the City's website for public outreach.

**Effectiveness:** This reporting year was the first the City published two press releases with associated web publicity. For the tracking and a comparison of the 2008-2009 press release with the two 2009-2010 press releases, see Appendix 1-3. Copies of the press releases are also located at Appendix 1-3, as well as the Placer Herald article that was published on October 29, 2010.

As staff resources allow, year-to-year tracking of popularity of press release web content will be analyzed. Also, ongoing effectiveness may be determined with an online poll, City Survey, or other interactive response method on the website to gauge any increase in stormwater awareness. The goal is to achieve an Outcome Level 2 - Raising Awareness.

### 2.b. Distribute educational material during Creek Week activities in April.

Status: Not yet implemented.

Past Creek Week activities have focused on work parties of citizen volunteers picking up litter and planting trees, which provided no opportunity to hand out brochures.

The stakeholders that work with Dry Creek Conservancy to plan Creek Week decided in late 2009 to move Creek Week to the fall so as to not compete with other local and regional Earth Day activities. Fall is also a better time of year for creek clean ups, invasive species removal and similar work since the water levels are lower and fall is a better season during which to plant. As of the publish date of this report, no Fall Creek Festival dates or activities had been set, other than the American Basin Council of Watersheds (ABCW) LID Conference on October 6, 2010.

**Goal for 2009-2010:** Create a more central, organized event hub or festival-type event near a work site or park where a Stormwater Education booth can be set up and stocked with stormwater brochures. If remaining California Department of Conservation grant funds allow, provide Rocklin Creek Week volunteers with a recycled material tote bag with stormwater and pollution prevention messages printed on it, stuffed with brochures and Bags on Board pet waste promotional items. (See Chapter 2 - Public Participation, BMP item 1.d.) **Not achieved** due to budget constraints.

**Goal for 2010-2011:** Evaluate this BMP for appropriateness and potential effectiveness in light of possible future changes to Rocklin's participation with Creek Week and the nature of Creek Week activities. Examine whether other existing outlets provide adequate opportunity for outreach or others should be explored.

**Measurable Goal:** Number of brochures distributed to Creek Week and other clean-up event participants.

**Appropriateness:** Creek Week's activities are the ideal venue to spread the word about pollution prevention and watershed health in Rocklin and the region.

**Effectiveness:** To be determined with an online poll, City Survey, or other interactive response method on the website to gauge any increase in stormwater awareness. The goal is to achieve an Outcome Level 2 - Raising Awareness.

# 2.c. Develop partnership agreement with Rocklin Unified School District (RUSD) to distribute educational material.

Status: Initial implementation.

Through the RUSD's Service Learning program, the City introduced some stormwater curricula associated with Adopt-an-Acorn, Adopt-an-Inlet, and public outreach projects. In addition to classroom presentations, stormwater related materials were distributed to students. Also see BMP item 3.d. below.

(Please see Appendix 1-4 for the RUSD Service Learning, Outreach, Education, and Participation Project Tracking spreadsheet along with some documentation of some of the projects undertaken by the students and teachers.)

**Goal for 2009-2010:** California Department of Conservation grant funding has been severely reduced and the City will be unable to assist the ReCreate program as during the 2008-2009 school year (see BMP item 3.d. below). Staff will contact Rocklin Unified School District (RUSD) to determine whether the school district would have an interest in a partnership and, if so, work together to develop a program and the necessary materials. Achieved.

**Goal for 2010-2011:** Continue successful initial implementation of stormwater education in the RUSD. Expand program to middle and high school levels. Evaluate this BMP for appropriateness and effectiveness and consider whether this BMP can be combined with 3.d below.

**Measurable Goal:** Number of children participating and number of handouts/packets of material distributed during school year.

**Appropriateness:** Partnering with agencies outside the City allows for pooling and increased effectiveness of resources. Providing school-aged children with stormwater education helps to ensure that the next generation of real estate, land use, and design professionals (e.g., developers, urban planners, traffic engineers, civil engineers, landscape architects, site designers, etc.) and homeowners are knowledgeable about the impacts of urban runoff on local waterways and the world's oceans.

**Effectiveness**: Conduct surveys of teachers and possibly students to obtain feedback about the program/materials and whether awareness has been raised and/or behavior changed (outside of the classroom activities). The goal is to achieve an Outcome Level 3 - Changing Behavior.

# 2.d. Conduct two workshops/training seminars per year targeting homeowner associations and residential maintenance activities that impact creeks, wetlands, and open space areas.

Status: Not yet implemented.

In spring of 2009, interest was expressed by a president of a homeowners association (HOA) to have the City present these topics to his HOA. This task is a priority for 2009-2010, due to additional interest expressed from residents. However, due to scheduling conflicts this task was not implemented. Additional feedback from Code Enforcement and Public Works Inspectors indicates this task should be a higher priority because it would provide direct education and outreach to HOAs and residents.

**Goal for 2009-2010:** Research presentation topics; obtain department head approval for workshop topics, staffing, etc.; prepare workshop agenda and materials; contact HOAs for interest and scheduling; hold at least one workshop before close of reporting year. **Not achieved** due to staff and scheduling constraints.

**Goal for 2010-2011:** Research presentation topics; obtain department head approval for workshop topics, staffing, etc.; prepare workshop agenda and materials; contact HOAs for interest and scheduling; hold at least one workshop before close of reporting year

Measurable Goal: Number of HOAs contacted and scheduled for workshops.

**Appropriateness:** Outreach and education through HOAs will allow the City to target specific topics, good housekeeping practices, and regulatory requirements geared specifically to individual subdivisions and the distinct natural features within the development that may have unique maintenance requirements.

**Effectiveness:** A survey or other method will be developed in conjunction with the workshop program and materials so that residents and/or HOA boards can provide feedback to City staff regarding the usefulness and appropriateness of the workshop. The goal is to achieve Outcome Level 2 - Raising Awareness.

# **3.c.** Develop partnership program with local lawn care businesses that pledge and act to support "The Basic Message."

Status: Not implemented.

**Goal for 2009-2010:** Staff will explore potential effectiveness of this task relative to other activities that may provide more effective outreach. **Not achieved**. Additionally, staff will audit City landscape maintenance contracts for Integrated Pest Management (IPM) practices and requirements and may propose to modify the task to place IPM requirements on City contracted landscape maintenance activities in lieu of pursuing the program as originally tasked. **Not achieved**.

**Goal for 2010-2011:** Staff will analyze potential effectiveness of this task relative to other activities that may provide more effective outreach. Additionally, Parks and Facilities and Stormwater staff will audit City landscape maintenance contracts for IPM practices and requirements for compliance. The audit results will be used to modify existing and future contracts as necessary.

**Measurable Goal:** Number of business contacted; number of business that take the pledge; number of City landscape contracts that utilize IPM practices.

**Appropriateness:** IPM outreach is an important component of stormwater management because education and outreach that works to reduce sources of urban (residential, commercial/industrial, and institutional) runoff and pollutants improves the health of urban open spaces, creeks, and streams.

**Effectiveness**: Number of businesses that take and actively uphold the pledge. The goal is to achieve an Outcome Level 3 - Changing Behavior.

### **3.d.** School curricula developed and distributed to area schools by December 31, 2006.

**Status:** Ongoing modified implementation.

In reporting year 2008-2009 a modified version on this task was implemented. Funded through a California Department of Conservation grant the City receives annually and uses to support recycling and pollution prevention programs, the City underwrote the cost to bring the ReCreate, waste reduction education program to all third graders in RUSD. The ReCreate curriculum is based on the California Integrated Waste Management Board educational lessons and covers both environmental science and art at State educational standards for the appropriate grade level. The ReCreate curriculum was integrated into the RUSD's existing Service Learning program. (See Appendix 1-3 in the 2008-2009 Annual Report for a description of the ReCreate program and curriculum.)

With the anticipated reduced and delayed, or even discontinued, funding from the California Department of Conservation grant for fiscal year 2009-2010, the City endeavored to replace some of the ReCreate programming and still provide Service Learning opportunities that benefited the community and provided for pollution prevention and watershed health education in the schools. Projects that RUSD teachers used as part of their Service Learning curriculum included Adopt-an-Acorn, Adopt-an-Inlet, creek litter clean ups, as well as a classroom art contest and public service announcement in the local paper, Placer Herald. In conjunction with Adopt-an-Inlet and stormwater publicity, staff developed a watershed health presentation. The interactive (Q & A) presentation included discussion about how Rocklin's stormwater conveyance system operates as part of a watershed or basin.

See Appendix 1-4 for the RUSD Service Learning, Outreach, Education, and Participation Project Tracking.

**Goal for 2009-2010:** The California Department of Conservation grant money has been reduced or eliminated for fiscal year 2009-2010 due to the State of California's budget situation. As of the preparation of this report, the certainty of receiving a reduced level of funding was still unclear. Please see BMP item 2.c. above.

**Goal for 2010-2011:** Continue to develop and refine a Service Learning Watershed Health classroom project list and work with the RUSD to promote the City's SWMP in elementary, middle, and high schools. Use some of the Department of Conservation grant money to again fund ReCreate in the RUSD classrooms, with a new pollution prevention and watershed health component.

Measurable Goal: Number of children participating.

**Appropriateness:** Providing school-age children with pollution prevention and scienceand art-based education ensures that they understand the impacts humans have on the environment, delivered in a creative and interpretive way. Anecdotally, reductions in the creation of solid waste translate to reductions in pollution in general, which in turn means watersheds are healthier. **Effectiveness:** ReCreate provided programming for 75 classrooms, for a total of 2,000 children within the RUSD in the 2008-2009 school year. The City's Pollution Prevention and SWMP related programs were utilized in 22 classrooms, for a total of 516 students participating in one or more activities. The goal is to achieve an Outcome Level 3 - Changing Behavior.

### 4.a. Brochures updated to be distributed in Auburn Placer Disposal garbage bills.

Status: Ongoing modified implementation.

By City Ordinance, all residences and commercial properties are required to subscribe to weekly solid waste collection from Auburn Placer Disposal Service. The City's residents and businesses receive in their monthly bill inserts with various messages about the Western Placer Waste Management Authority (WPWMA) and the Materials Recovery Facility (MRF), the Reduce, Reuse, Recycle and related programs. Beginning in June 2009, the One Big Bin program has been promoted in the monthly billing materials (see BMP item 6.b. below).

In 2005-2006 and 2006-2007 *Recycling Rocklin Style* and *Clean & Green* flyers were published and promoted. (Please see Appendix 1-4 from the 2008-2009 Annual Report for copies of the flyers.)

**Goal for 2009-2010:** Through the Regional Recycling Group, the City will make an effort to work more closely with WPWMA staff and Auburn Placer Disposal Service to establish or document an effectiveness assessment.

**Goal for 2010-2011:** Continue tracking and evaluating for effectiveness. Analyze whether a stormwater/watershed health insert is an effective outreach method and if it is financially feasible.

**Measurable Goal:** Number of inserts and/or flyers distributed and number of promotional messages on billing materials.

**Appropriateness:** Any outreach that presents a message about recycling and/or solid waste reduction is relevant to stormwater quality management as the message parallels that regarding keeping watersheds clean and healthy by not polluting.

Effectiveness: The goal is to achieve an Outcome Level 2 - Raising Awareness.

# 6.a. Collaboration with STAR ECO Station for development of a stormwater education exhibit and sponsorship of World Ocean Day event in 2009 and each year thereafter.

Status: Ongoing implementation.

Science Theater Art Recreation (STAR) Education is a 501(c)3 non-profit charitable education company headquartered in Southern California with a second location in Rocklin. STAR partners with local school districts to provide high quality before- and after-school care on campus, as well as enrichment programs through classroom curricula, field trips, and traveling assemblies. STAR Eco Station, a subsidiary of STAR Education, is an environmental science museum and exotic wildlife rescue facility in Rocklin.

In March 2009, STAR approached the City with an invitation to partner on a Storm Drain Exhibit under development and the associated grand opening event. STAR designed and constructed in the museum a full-size mock-up of an urban stormwater pipe, complete with graphic displays and interactive simulated pollution sources. At one end of the pipe are mountains and at the other end is an ocean. The guided tour through the exhibit provides an excellent synopsis of the "Summit to Sea" concept and how everyone, everywhere, lives in a watershed that needs protection. The City's initial contributions to STAR's program included providing a local watershed map and a household battery recycling collection tube with associated pick-up coordination (See Chapter 2 - Public Participation, BMP item 6.d.). Continuing support includes providing brochures and promotion of the exhibit at the Pollution Prevention and Stormwater Education booth.

On June 5, 2010, STAR hosted the second annual Children's World Ocean Day event, complete with life size whale and educational exhibits and hands on activities promoting watershed and ocean stewardship. The City supported the event through the City Council's waiving of the special event permit fee in 2009, promotion of the event on the City's website, and by providing a Stormwater Education booth at the event. (See Appendix 1-5 for a copy of the 2010 Children's World Ocean Day event flyer.)

**Goal for 2009-2010:** Continue collaboration with STAR ECO Station and explore development of a draft memorandum of understanding (MOU) to define and confirm an ongoing partnership in stormwater public education. **Achieved**. Through early planning, increase the number of attendees at the World Ocean Day event. Despite efforts, attendance was not as high. Promote the Storm Drain Exhibit at the City's Stormwater Education booth. Achieved. Partner to promote Adopt-An-Inlet program (see Chapter 2 - Public Participation, BMP item 3.b.). **Achieved**.

**Goal for 2010-2011:** Continue collaboration with STAR ECO Station. Continue development of a draft memorandum of understanding (MOU) to define and confirm an ongoing partnership in watershed health and stormwater education. Work to increase the number of attendees at the World Ocean Day event through better publicity. Increase promotion visibility of the Storm Drain Exhibit at the City's Stormwater Education booth and online. Continue partnership to promote Adopt-An-Inlet program (see Chapter 2 - Public Participation, BMP item 3.b.).

**Measurable Goal:** Increased attendance at World Ocean Day event; track number of museum visitors, classrooms, and after school programs that experience the Storm Drain Exhibit.

**Appropriateness:** Partnering with STAR is an excellent method to increase and improve the quality of education and outreach opportunities, particularly to school-age children in Rocklin and surrounding jurisdictions, all of whom share the Dry Creek and Pleasant Grove watersheds. STAR has developed a stormwater and watershed education program in their facility and their curricula; they will reach a very large number of children, as well as some teachers and parents. As budget constraints allow, the City will continue to find ways to actively collaborate with STAR's Storm Drain Exhibit as a way to educate the public about stormwater runoff.

**Effectiveness**: Approximately 250 adults and children attended the second World Ocean Day Event, most of who went through the Storm Drain Exhibit. Since the exhibit opened in June 2009, through promotions, presentations, school assemblies, school field trips, summer and day camps, after school programs, and events, approximately 100,000 visitors and STAR participants have heard about or toured the exhibit have toured the exhibit (through August 31, 2010). The goal is to achieve an Outcome Level 3 - Changing Behavior.

### 6.b. Ongoing collaboration with the Placer County Regional Recycle Group (RRG).

Status: Ongoing implementation.

The RRG is comprised of representatives from member agencies within the Western Placer Waste Management Authority (WPWMA) including Rocklin, Placer County, Auburn Placer Disposal, Loomis, Colfax, Lincoln, Auburn, and Roseville. The RRG is a program developed and implemented through funding from the California Integrated Waste Management Board (CIWMB) Used Oil Recycling Block Grant Program and is supported by the member agencies.

Rocklin staff regularly attends the RRG meetings and collaborates within the group to create and promote waste reduction and recycling public outreach opportunities.

In the current reporting year, staff continued participation and collaboration with the RRG in many ways beyond attending quarterly meetings.

- Medical Waste and Sharps: included message about proper pharmaceutical disposal at Pollution Prevention and Stormwater Education booth; included message about sharps disposal at booth; sharps clips and syringe disposal containers available at booth and at Corporation Yard; assisted with funds from Department of Conservation grant for sharps bill inserts.
- Assisting with One Big Bin booth: staffed booth shifts at Placer Recycles Day at the Mountain Mandarin Festival in November and Roseville School District Foundation Fun Run in May.
- One Big Bin Promotion: used Department of Conservation grant funds to purchase supplies for button badges as give-aways at the City's booth.

(See Appendix 1-6 for a sample of the One Big Bin promotional materials.)

**Goal for 2009-2010:** Continue collaboration within group. Achieved expanded collaboration. Participate in as many joint events as possible (e.g., Mountain Mandarin Festival in November, 2009 and Placer County Recycles Day in Roseville in October, 2009). Achieved. Continue promoting One Big Bin and proper medical waste disposal programs through the Stormwater Education booth at local events such as Hot Chili, Cool Cars in September, 2009. Achieved; both messages are standard at the City's booth.

Goal for 2010-2011: Continue collaboration with the group.

**Measurable Goal:** Number of activities group is participating in and/or collaborating on; number of handouts distributed; and number of visits to the One Big Bin website. Increase in the percentage of Rocklin's recycling and solid waste diversion rates.

**Appropriateness:** The RRG's goal is to reduce regional solid waste and with a uniform message throughout Western Placer County. The RRG is attempting to stretch diminishing resources among all member agencies by pooling and sharing resources and costs and using them as efficiently and effectively as possible.

**Effectiveness**: The RRG is currently not collecting data relative to assessing effectiveness of individual promotions or for the general One Big Bin program. The goal is to achieve Outcome Level 3 - Changing Behavior.

# 6.c. Establish Stormwater Education booth to provide outreach at City-sponsored and community events in 2009 and each year thereafter.

Status: Ongoing implementation.

In the 2009-2010 reporting year, the booth was at several local and regional events. The material offered at the booth included: Adopt-and-Acorn; Adopt-an-Inlet; One Big Bin; Scoop the Poop (Bags on Board give away); STAR's Storm Drain Exhibit; Our Water, Our World; and the children's Clean Up the Creek game ("fishing" garbage out of a kiddie pool). In addition, students from a 6<sup>th</sup> grade Cobblestone Elementary class assisting with staffing the booth. Also at the booth, the City began collecting email addresses to create a listserve for stormwater, pollution prevention, and community service outreach.

See Appendix 1-7 for Pollution Prevention and Stormwater Education Booth Tracking spreadsheet.

**Goal for 2009-2010:** Continue collaboration with STAR, Rocklin Chamber of Commerce (e.g., Hot Chili Cool Cars in September 2009, Trash Bash in the Spring of 2010), Placer County Regional Recycle Group (RRG), Placer Regional Stormwater Coordination Group (PRSCG), and other groups as appropriate to plan community events and to participate individually and/or jointly at events. Achieved. Continue collaboration with Department of General Services to increase the scope of City-sponsored events such

as Creek Week to improve community participation and increase stormwater outreach effectiveness. In progress.

**Goal for 2010-2011:** Continue collaboration with appropriate internal groups, stakeholders, and community partners to ensure maximum outreach. Train student and public volunteers to assist with staffing the booth. Continue gathering email addresses to build a listserve.

**Measurable Goal:** Number of events; attendance at events; interest at Stormwater Education booth.

**Appropriateness:** Participation at community events with a consistent message will increase public awareness.

**Effectiveness**: In the current reporting year, the booth was at nine events with an estimated attendance of 26,550. The booth frequently has a wait for children to play the Creek Clean Up Game and has high interest levels in Scoop the Poop and acorn adoption (seasonally). Outcome Level 2 - Raising Awareness, has been achieved.

# 6.d. Create new and update existing pollution prevention and stormwater brochures in 2009 and as needed in future.

Status: Ongoing implementation.

In May 2009, five brochures were newly created or updated, including *Pollution Prevention for Residents, Household Hazardous Waste, Managed Grazing, Pet Waste Management*, and *Discharging Pool & Spa Water*. All brochures were formatted for continuity within the Department of General Services and for use as stormwater public outreach materials. The initial printing order was for 1,000 of each brochure (2,000 for *Pet Waste Management*). Three of the brochures (*Pollution Prevention for Residents, Household Hazardous Waste*, and *Pet Waste Management*) were printed using funds from the Department of Conservation grant. (See Appendix 1-8 for copies of pollution prevention brochures.)

Literature display cases are located at the public counters in General Services, City Hall, the Police Department, the Community Development Department, the Finance Department, the Sunset Community Center, the Chamber of Commerce's office, and as part of STAR's Storm Drain Exhibit. The brochures are also available at the Stormwater Education booth during events. In addition, brochures are distributed in conjunction with school presentations and as give-aways for community partner-sponsored events such as the Chamber of Commerce's Business Walk and Welcome Back Teachers and the Police Department's National Night Out.

**Goal for 2009-2010:** Develop an Integrated Pest Management (IPM) brochure to complement the stormwater quality "Basic Message." **Achieved**, but not printed due to staff and budget constraints. Maintain adequate supply of all brochures (as funding allows). No re-order needed. Distribute brochures through Rocklin's National Night Out

block parties (August 4) and Chamber of Commerce activities such as Business Walk (July 1) and Welcome Teachers Luncheon (August 11). Achieved. Revise the current process for distributing the *Discharging Pool & Spa Water* brochure to new and remodeled pool owners through the encroachment permit process, which is administered by the Department of General Services, rather than through the building permit process, to ensure the owners who actually use the pools receive the brochure, instead of the contractors, who build them. Achieved.

**Goal for 2010-2011:** Print the Integrated Pest Management (IPM) brochure and distribute to brochure holders. Review content of brochures and update and re-print as necessary. Keep brochure holders stocked. Continue to use community partners to distribute brochures as appropriate and feasible. Add PDF versions of brochures to updated City stormwater webpages.

**Measurable Goal:** New IPM brochure printed. The number of brochures that are restocked at various displays throughout the City.

**Appropriateness:** Distribution with a consistent message at public information points and at community events and activities will increase public awareness of stormwater quality management.

Effectiveness: The goal is to achieve an Outcome Level of 2 - Raising Awareness.

# 7.a (New) Develop and maintain listserve email list and use it for watershed health and pollution prevention related outreach and education.

**Status:** Initial implementation.

Through Stormwater Education booth outreach at community events, the City began collecting interested citizen email addresses.

**Goal for 2010-2011:** Continue building list. Use email list for "e-blast" type messages regarding community volunteer and clean up events such as Community Service Day and Clean Up Day; watershed health related events such as acorn harvest time and Creek Week; and general outreach such as bi-annual press releases and reminders about stormwater management BMPs. Prepare and distribute approximately one e-message per month as time and need dictate.

Measurable Goal: Number of emails collected. Number of e-messages sent annually.

**Appropriateness:** Using electronic media to achieve outreach is very cost and staff-time effective with the potential to reach thousands of Rocklin citizens with various watershed health related information.

**Effectiveness:** To be determined through assessments such as a survey distributed via the listserve itself. The goal is to achieve an Outcome Level 3 - Changing Behavior.

#### BMP 2 – PET WASTE MANAGEMENT

"Develop pet waste management brochures to be handed out at the City's dog license counter, and install pet waste management signs in parks and neighborhoods."

# 1.d. Prepare Pet Waste Management brochures to be handed out at the City's dog license counter (currently Police Department) and by Animal Control Officers by September 1, 2004, and each year thereafter.

Status: Ongoing implementation.

The Pet Waste Management brochure was updated in May 2009, together with the other updated brochures on stormwater quality. Two thousand were printed for distribution with dog licenses through Animal Control and at public outreach outlets (see BMP item 6.d. above).

**Goal for 2009-2010:** Monitor distribution points for replenishing, re-print as necessary and as funding allows. **Achieved**. Expand distribution points to include local pet stores, veterinarian offices, and other pet related service outlets. **Not achieved** due to limited staff resources.

**Goal for 2010-2011:** Monitor distribution points for replenishing, re-print as necessary and as funding allows. Expand distribution points to include local pet stores, veterinarian offices, and other pet related service outlets.

**Measurable Goal:** Annually, the number of brochures printed and the number of brochures distributed and replenished at the various displays.

**Appropriateness:** Consistently repeating the pet waste management message reminds pet owners to be responsible for their pets and that they make a direct difference in the City's stormwater quality and the health of the City's watersheds every time they Scoop the Poop.

**Effectiveness:** Two thousand brochures were printed in May 2009. In reporting year 2009-2010, approximately 800 were distributed. The goal is to achieve an Outcome Level 2 - Raising Awareness.

# 1.e. / Install Pet Waste Management signs in Parks, Class III bikeways, and Landscape3.f. Parkways by December 31, 2006.

**Status:** Ongoing implementation. In previous reporting years, pet waste signs have been installed in highly visible areas of heavily used trails and parks.

**Future Goal:** As funding allows in the future, more signs may be purchased and installed throughout the City's parks and trails.

Measurable Goal: Number of signs installed.

**Appropriateness:** Reducing and hopefully eliminating dog waste contamination from City-owned facilities not only benefits the health of the City's watersheds, it also provides a model for behavior of dog owners when they are not on City-owned property.

**Effectiveness:** Six signs have been installed. Six more are in storage for future placement. Due to limited staffing, staff has not tracked whether there has been a discernible reduction in pet waste left on or near the trails in the vicinity of the signs. The goal is to achieve an Outcome Level 3 - Changing Behavior.

## 6.e. Develop and launch Scoop the Poop campaign, utilizing "Bags on Board" Pet Waste Management Promotional Materials.

**Status:** Initial implementation.

The Scoop the Poop promotion was launched in June 2009. Using Department of Conservation grant funds, 2,400 Bags on Board pet waste disposal canisters were purchased with grant funding from the California Department of Conservation. A local business, Rocklin Family Pet Shop, initially partnered with the City to provide refills for the canisters and fulfilled that commitment for approximately half of the reporting year. The Bags on Board canisters are given to every dog owner in the City who licenses (new or renewal) their dog. In addition, Animal Control Officers, Parks Maintenance, and other General Services staff have supplies to distribute at their discretion to dog owners they encounter in the field. Bags on Board are also available at the Corporation Yard public counter and are one of the most popular give-aways at the Stormwater Education booth. (See Appendix 1-9 for copies of the Scoop the Poop promotional materials.)

**Goal for 2009-2010:** Through feedback from Animal Control officers and the Police Department licensing data, determine dog owners' response to the promotion and determine whether to continue it in the 2010-2011 fiscal/reporting year as funding allows. **Achieved**, with very positive feedback. In addition, the Bags on Board are very popular giveaways at the Stormwater Education booth.

**Goal for 2010-2011:** Continue Scoop the Poop promotion. As needed, and Department of Conservation funding allows, continue to purchase Bags on Board labeled with City stormwater management message.

Measurable Goal: Number of canisters purchased and distributed.

**Appropriateness:** This promotion provides dog owners with a way to collect and dispose of their dog's waste and is a tangible reminder that they make a direct difference in the City's stormwater quality and the health of the City's creeks and streams when they Scoop the Poop.

**Effectiveness:** Two additional shipments on 2,400 Bags on Board were ordered during the reporting year due to dwindling supplies and popularity of the promotion. The Police Department reports that dog licensing increased approximately 20 percent over 2008-

2009 during the current reporting/fiscal year (1,238 in 2008-2009 and 1,535 in 2009-2010). Since the Police Department does not track the origin or motivation of licensees, they are unable to attribute this increase in licensing to the Bags on Board campaigning. Nonetheless, anecdotally, the Bags on Board are popular and requested often at the Police counter and at the Stormwater Education booth at events. As staff resources allow, may be determined with online poll, City Survey, or other interactive response method on the website to gauge any increase in stormwater awareness/pet waste awareness. The goal is to achieve an Outcome Level 3 - Changing Behavior.

#### **BMP 3 – VOLUNTEERS**

"Identify, recruit, and train volunteers to help implement the educational outreach efforts. Volunteer educators can be used to present educational materials to local businesses, school groups, and neighborhoods. Volunteers can also be used to hand out educational materials at festivals, farmer's markets, and other public events."

#### **3.b.** Train volunteer educators by December 31, 2006.

**Status:** Initial implementation.

In April 2010, at the Placer County Celebrate the Earth Festival in Roseville, several 6<sup>th</sup> grade students from Cobblestone Elementary assisted with staffing the Stormwater Education booth.

See Appendix 1-10 for a flyer of the Cobblestone Celebrate the Earth booth.

**Goal for 2009-2010:** Staff will evaluate whether a formal volunteer program is a cost effective way to increase public outreach and education effectiveness and compliance. **Achieved**. Rocklin currently does not have a formal volunteer program and for the foreseeable future, will not have resources (funding and staff) to create and coordinate one.

**Goal for 2010-2011:** Continue to recruit students and expand to scout organizations and other appropriate groups for assistance with the City's education and outreach efforts. Include booth staffing, watershed health presentations, and watershed/habitat tours in the Service Learning Watershed Health project list.

Measurable Goal: Number of volunteers recruited. Number of volunteer hours.

**Appropriateness:** Using the public to outreach and educate the public is an effective method to improve the City's ability to reach increasing numbers of the public. In addition, when the watershed health and stormwater quality information comes from peers, the message is more likely to be received and considered. Also, using volunteers has the potential to reduce paid staff time required at community events and the like.

**Effectiveness:** To be determined after the initial implementation. Goal is to achieve an Outcome Level 2 –Raising Awareness.

#### BMP 4 – STORM DRAIN INLET MARKING

"Establish a program to mark all catch basins and drainage inlets in the City, with appropriate notification that the drain leads directly to the local receiving waters, not a treatment plant. Typical stencils say: 'No Dumping - Flows to Creek'."

## 2.a. All unmarked storm drain inlets in the City's rights-of-way shall be stenciled or labeled by the end of the permit term.

**Status:** Ongoing implementation.

In 2007, a Boy Scout den mother approached the Public Works' Inspector about volunteering with the City and began placing storm drain markers in neighborhoods in which drains were not marked. The first year (2007) the troop marked inlets on fifteen streets, as well as a school parking lot and a bus stop. In May 2009, the troop marked a total of twenty-eight inlets on seven streets.

Since 2007, Public Works has marked inlets in City's rights-of-way and City facilities using the fish and water design marker and kept track of the locations, but not quantity, of inlets marked.



In the current reporting year, a total of 139 inlets were marked by the same Boy Scout den and community volunteers and approximately twenty by Adopt-an-Inlet program participants in several Rocklin neighborhoods. Also, a total of 72 inlets were marked on three RUSD campuses through Service Learning Adopt-an-Inlet projects (see Chapter 2 Public Participation BMP items 3.b and 4.a for additional information).

**Goal for 2009-2010:** Promote inlet marking as part of the Adopt-An-Inlet program. **Achieved.** Continue to recruit service groups to mark un-adopted inlets. **Achieved.** Use new storm drain system map to track marked inlets (as constructed or by volunteers) and adopted inlets. **Not achieved.** Set a goal to mark a reasonable number of unmarked inlets during the reporting year. **Achieved** greater than 150 inlets.

**Goal for 2010-2011:** Continue to promote inlet marking as a stand-alone activity and as part of the Adopt-an-Inlet program. Specifically recruit volunteers for inlet marking at annual watershed health and community volunteer events such as Community Service Day and Creek Week. Use new storm drain system map to track marked inlets (as constructed or by volunteers) and adopted inlets. Set goal to mark 300 unmarked inlets during the reporting year.

Measurable Goal: Number of inlets marked in reporting year.

**Appropriateness:** Prominently marking the inlet itself provides a clear message about pollution and how waterways become polluted by urban runoff and illicit discharges.

**Effectiveness:** The goal is to achieve an Outcome Level 3 – Changing Behavior. To date, the City has not compared data between locations of marked inlets and locations of illicit discharges to see if there is any correlation between inlet marking and either public awareness or modified behavior (reduction in illicit discharges at marked inlets).

#### BMP 5 – CREEK IDENTIFICATION PROGRAM

"Develop and implement a creek and creek tributary identification sign program."

### 3.a./ Develop a creek and creek tributary sign program by December 31, 2006 and install4.b. signs at each creek, roadway, and bike trail crossing by December 31, 2007.

Status: Ongoing preliminary implementation.

staff continued to research the feasibility of this BMP over the permit term, including the cost to design and purchase signs and sign placement locations. Late in the reporting year, Dry Creek Conservancy (DCC) and the City of Roseville who indicated interest in establishing a regional creek identification program approached staff.

**Goal for 2009-2010:** Complete research, including developing a design/logo/motif either particular to the City's stormwater program (consistent with other materials) or consistent with regional signage on the same waterways (Placer County and/or Roseville). **Not achieved** due to staff and budget constraints. Determine if program is feasible given the current City budget situation. **Achieved**; not possible in the near term.

**Goal for 2010-2011:** Collaborate with DCC and Roseville to continue explorations into developing a watershed/regional program.

Measurable Goal: Number of sites identified; number of signs purchased.

**Appropriateness:** Identifying local waterways and habitats brings attention to Rocklin's watersheds and their health.

**Effectiveness:** Number of signs installed in reporting year. To be determined with online poll, City Survey, or other interactive response method on the website to gauge any increase in stormwater awareness. The goal is to achieve an Outcome Level 2 - Raising Awareness.

#### (NEW) BMP 6 – FOSTER REGIONAL COLLABORATION

"Develop relationships and work collaboratively whenever feasible with local and regional stakeholders and other jurisdictions and agencies to increase opportunities for public education and outreach."

For a complete list of Local Partner Outreach activities for the reporting year, please see Appendix 1-11.

#### 7.b. Develop a collaborative LID grant project under the sponsorship of the American Basin Council of Watersheds (ABCW) to construct LID demonstration projects in Rocklin, Roseville, and Loomis.

**Status:** Preliminary implementation.

Staff worked with the City of Roseville, the Town of Loomis, Dry Creek Conservancy, Rocklin Unified School District, STAR Education, United Natural Foods, Inc, (UNFI) and other stakeholders and contributors to create a LID demonstration and education project for which to apply for several grants. Over just six weeks, the participants developed a project that included the construction of four LID demonstration projects as well as various public education and outreach curriculum, student field trips and public self-guided tours to name a few.

Goal for 2009-2010: Submit grant requests on time in acceptable format. Achieved, but no funding received.

**Goal for 2010-2011:** Continue to explore other potential funding sources for which the LID demonstration project or a very similar one would fit grant guidelines.

**Measurable Goal:** Implementation of Phase I of the grant project including construction of all four sites and implementation of associated public outreach and education.

**Appropriateness:** Regional and watershed-based collaboration ensures a sharing of very limited resources and a consistent message throughout the watershed. Having LID demonstration projects with associated education and outreach will be a critical method for providing "real-life" feasibility information to homeowners, developers, and consultants.

**Effectiveness:** To be determined with assessments given through the education component of the project. The goal is to achieve an Outcome Level 3 – Changing Behavior.

# 7.c. Participate with regional stakeholders to create a Placer Sustainable Business certificate and recognition program.

**Status:** Preliminary implementation.

Staff also participated on the Placer Sustainable Business Program task force to develop a program in conjunction with Sacramento Business Environmental Resource Center's (BERC) existing sustainable business certification and recognition program. The task force is lead by the City of Roseville and includes members of Loomis, Auburn, Lincoln staff and representatives of other stakeholders including United Natural Foods, Inc., PG&E, Roseville Chamber of Commerce, Rocklin Area Chamber of Commerce, Loomis Chamber of Commerce, to name a few. Through collaboration with BERC staff the task force created a program that complements and integrates with the existing BERC program. The program includes a list of pollution prevention, stormwater quality, and

watershed health actions that businesses may implement to be a better environmental steward and receive recognition through the program. At the time of this report writing, program materials were not finalized and task force members were actively working on obtaining sponsorship support from regional businesses to raise the needed funds to launch the program in the Fall of 2010.

Goal for 2009-2010: Participate as resources allow to help create the Program. Achieved.

Goal for 2010-2011: Continue to participate as resources allow.

**Measurable Goal:** Implementation of the Program. Increased regional participation over the life of the Program.

**Appropriateness:** Regional and watershed-based collaboration ensures a sharing of very limited resources and a consistent message throughout the watershed. The business recognition program will provide stakeholders additional outreach and education opportunities on an ongoing basis to promote the program. In addition, the program creates a reward system for behavioral changes of the actions taken by participating businesses to received the recognition.

**Effectiveness:** To be determined by the task force. The goal is to achieve an Outcome Level 3 – Changing Behavior.

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# Chapter 2 – MCM II

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#### Chapter 2. MCM II - Public Participation

#### NARRATIVE OVERVIEW

The City of Rocklin's public involvement and public participation program meets the requirements of the permit through legally required, formal, and more informal opportunities for citizens and businesses to be involved in matters and activities related to watershed health. As a matter of policy, the City provides ongoing formal opportunities for public participation in land use and development decisions. The City provides written legal notice beyond what is legally required and publishes legal notices for public hearings in the local newspaper for all entitlements, including design reviews and subdivisions, as well as other important actions taken by the City such as General Plan updates. The City provides opportunities for public comment at Council, Planning Commission, Committee, and neighborhood/project workshop meetings. In addition, the City has worked to increase its existing community volunteer program for both organized events and individual work projects.

Policies the City intends to adopt and has adopted in the course of the permit term all allowed for public input. The General Plan Update, for which the City held public workshops, contains policies and action steps that ensure compliance with the provisions of the permit, including Attachment 4. (For information regarding the General Plan Update please see Chapter 5, BMP item 1.a.) The City Council's review of all stormwater management related ordinances were noticed so the public had opportunities to review and comment on them. Ordinance 901, Ordinance of the City Council of the City of Rocklin Adding Chapter 8.30 to the Rocklin Municipal Code Relating to Stormwater Runoff Pollution Control, became effective on November 25, 2005. Ordinance 904, Ordinance of the City Council of the City of Rocklin Adding the Control of Erosion and Sediment in the City of Rocklin, became effective February 10, 2006.

#### BEST MANAGEMENT PRACTICE (BMP) STATUS

This chapter discusses the BMPs identified in the City's Storm Water Management Plan (SWMP) along with their associated measurable goals.

During the 2008-2009 fiscal/reporting year, the City added several new BMPs not originally included in the SWMP and expanded on BMPs that were included.

The numbering of the individual BMP tasks correspond with their initial year of implementation as they are listed on Table 2-A of the City's SWMP. New BMP tasks added to the City's Stormwater Management Program in permit year 2008-2009 use the same nomenclature, thus are numbered with year six (6).

The status of implementation for each BMP and a summary of how the City complied with each BMP are provided. In addition, the next year's reporting period goal is included here rather than formally updating the City's SWMP. Appendix 2 includes supporting materials for Public Participation BMPs.

This reporting year, the City continued to focus on expanding our Public Participation programs to fully comply with this MCM and to identify and report on activities not reported in previous years' Annual Reports.

#### **BMP 1 – PUBLIC MEETINGS**

"Conduct regular annual public meetings with the City Council to report on implementation of the Storm Water Management Plan. Hold public meetings with regulatory agencies and interested stakeholders on the progress of the Storm Water Management Program, the evaluation of existing and development of new BMPs, and activities for the ensuing year. Conduct residential neighborhood meetings to specifically focus on the development of the illicit discharge detection and elimination portion of the Storm Water Management Program."

## **1.a** Update the City Council on SWMP progress at the end of each year during the permit term.

Status: Ongoing modified implementation.

Staff reported to City Council at the Annual Retreat in February 2005.

**Goal for 2009-2010:** Provide a bi-annual report to the Council for the first and second halves of the reporting/fiscal year on the status of the City's SWMP implementation and compliance. Achieved through staff reports and requests for support of SWMP related programs (Creek Week and RUSD Commendation).

**Goal for 2010-2011:** Update City Council on progress of the City's Stormwater Management Program based on comments received from the Regional Water Quality Control Board on the Annual Report.

**Measurable Goal:** New: The number of public meetings where City officials are updated on Stormwater Management Plan progress. (Old: Dates of meetings reports are given.)

**Appropriateness:** Providing information to the City's elected officials either at a Retreat or in a public meeting regarding ongoing and updated SWMP objectives, compliance with the General Permit, status of the new General Permit, etc. ensures that the Council is educated about the City's stormwater permit, the periodic regulatory changes, and the City's compliance program. Also, any information presented at a Council Meeting is public record and retrievable through the City's online document archive, thus the information would be searchable on the City's website and through outside search engines and available to Rocklin residents online (or through a public records request).

**Effectiveness:** To be determined. The goal is to achieve an Outcome Level 2 - Raising Awareness.

# **1.b.** Hold at least three public meetings to involve stakeholders in the BMP development process within twelve months of the permit approval date (March 10, 2003). Include City staff, City Council, and Chamber of Commerce officials.

Status: Ongoing modified implementation.

One meeting with the Rocklin Chamber of Commerce was held November 12, 2004, during the development of the BMPs. Currently, stakeholders such as the Chamber of Commerce, Rocklin Unified School District (RUSD), homeowner associations, and local businesses (e.g., STAR ECO Station and United Natural Foods, Inc.) are involved in the ongoing development, modification, and implementation of several Public Education and Outreach and Public Participation BMPs as the City's SWMP evolves.

**Goal for 2009-2010:** Ongoing collaboration with stakeholders through individual BMP implementation. **Achieved.** 

**Goal for 2010-2011:** Ongoing collaboration with stakeholders through individual BMP implementation.

**Measurable Goal:** Completion of this activity; number of stakeholder groups involved in collaborative activities that support the City's SWMP.

**Appropriateness:** Involving stakeholders ensures a broader perspective, more appropriate measures and tasks, and, most importantly, buy-in and support from the stakeholders themselves.

**Effectiveness:** To be determined. In the current reporting year, staff began tracking community partner collaboration in an effort to quantify and quality these efforts. The goal is to achieve an Outcome Level 2 - Raising Awareness.

# 1c. Attend at least three neighborhood meetings to involve the residential community in the development of the illicit discharge detection and elimination program within the first two years of the permit approval date (March 10, 2003).

Status: Not implemented.

No neighborhood meetings were scheduled. Residents have had an opportunity to participate in the public discussion and development of the General Plan Update and the Urban Forest Plan. Residents have also had the opportunity to participate in the modifications of projects to achieve water quality goals through the public hearing process for discretionary permitting of development projects.

Goal for 2009-2010: Not applicable.

**Measurable Goal:** Completion of this BMP and how many of the measurable parameters are formally incorporated into the SWMP.

**Appropriateness:** Involving residential property owners ensures a broader perspective, more appropriate measures and tasks, and, most importantly, buy-in and support from the citizens themselves.

Effectiveness: Not applicable.

## 2.a. Prepare public announcements promoting program and public participation beginning January and continuing until the end of the permit term.

Status: Ongoing implementation.

Since the beginning of the permit term, the City's website has been used to publish announcements about volunteer opportunities and citizen participation activities (e.g., Creek Week, Acorn Collecting, Rocklin Clean Up Day, Community Service Day, Universal Waste collection events, etc.).

For details of SWMP publicity on the City's website for the current reporting year, please see individual BMP activities under Chapter 1 Public Outreach and Education and in this chapter and refer to Appendix 1-1 for information on watershed health-related web content for the reporting year.

For details about the watershed health-related volunteer activities that took place this reporting year, see Appendix 2-1. For details about volunteer projects that were undertaken through the RUSD's Service Learning program, see Appendix 1-4.

**Goal for 2009-2010:** Continue to use website as the most efficient and effective tool to publicize the City's SWMP. **Achieved**.

**Goal for 2010-2011:** Continue to use website as the most efficient and effective tool to publicize the City's SWMP.

**Measurable Goal:** Number of articles and news releases published each year of the permit term.

**Appropriateness:** Public announcements on the City's website are the most efficient and effective method to reach the largest number of Rocklin citizens and businesses.

**Effectiveness:** See respective BMP activities for documented or desired individual Outcome Levels. The number of unique visits to specific webpages must be captured within a few calendar days of the dates of information requested, otherwise, the City's web software does not have the capability to track historical information. This constraint, combined with very limited staff resources, makes it extremely difficult to capture and document effectiveness in terms of number of visits to webpages.

# 2.b. The City will hold an annual coordination meeting involving co-permittees, regulatory agencies, and interested stakeholders to discuss progress of the stormwater management program and the next year's activities.

**Status:** Modified ongoing implementation.

Since 2002, the Placer Regional Stormwater Coordination Group (PRSCG) has met quarterly to facilitate communication and coordination between neighboring jurisdictions' stormwater programs, including Lincoln, Loomis, Placer County, Roseville, and Rocklin. Currently, El Dorado County is participating in the group as well, so the meetings provide for a broader regional approach beyond western Placer County. Coordination among the group provides for sharing of regulatory updates and other information, as well as pooling resources such as advertising for and participating in training workshops put on by member jurisdictions. In addition, the group is currently reviewing a memorandum of understanding (MOU) that would allow for cost sharing of various types of BMPs and collaboration on related activities.

In October 2009, PRSCG sponsored a regional industry workshop on the new Construction General Permit. Rocklin hosted the workshop and assisted with registration, design of marketing materials, promotion on the City website, and event follow-up. For additional discussion see Chapter 4 Construction Site Stormwater Runoff Control BMP item 1.e and related web content at Appendix 4-3.

**Goal for 2009-2010:** Continue active participation at meetings and collaboration for sharing of resources. Achieved. Work with the group to prepare the MOU for final review by member jurisdictions during the reporting year. Achieved; MOU not adopted yet.

**Goal for 2010-2011:** Continue active participation at meetings and collaboration for sharing of resources. Work with the group to continue MOU preparation for final review and adoption by member jurisdictions during the reporting year.

**Measurable Goal:** Current: Number of meetings Rocklin has participated in; number of regional workshops and other programs the group collaborates on. (Previous: Completion of this BMP, how many stakeholders attend the meeting, and how many of the measurable parameters are formally adopted for the following year.)

**Appropriateness:** Regional coordination of jurisdictions' efforts for Public Education and Outreach and Public Participation BMPs, along with mandated industry and staff training is an effective method to maximize resources and provide a regional perspective on stormwater quality management.

Effectiveness: The goal is to achieve an Outcome Level 2 - Raising Awareness.

#### BMP 2 – WATER QUALITY MAINTENANCE AND MONITORING

"Establish a Water Quality Maintenance and Monitoring Program involving the public. This program may include sponsoring an annual Creek Week, during which time the public would be involved in creek cleanup activities and tree plantings, and establishment of an 'Adopt A Stream' and an 'Adopt An Inlet' program to involve citizens in monitoring discharges into the inlets and creeks, and in measuring the quantity of trash and debris removed."

#### **3.a.** Train citizen volunteer watch group(s) to monitor and report water quality data.

Status: Partial implementation - discontinued.

Initial attempts to train volunteers were not very successful. The process is time consuming and expensive while the commitments from volunteers and the reporting consistency are not reliable.

The City does not intend to pursue this BMP for the foreseeable future.

See BMP item 3.b. below for a similar volunteer activity that shows early signs of being successful.

Goal for 2009-2010: Not applicable.

Goal for 2010-2011: Not applicable

Measurable Goal: Number of volunteers that complete monitor training.

**Appropriateness:** In theory, a good way to create more community involvement in the principles and practices of the SWMP and gain manpower for implementation of the SWMP. However, the City determined that this task was not an effective BMP.

**Effectiveness:** Not effective.

#### **3.c.** Establish volunteer monitoring stations and monitoring protocol.

Status: Modified implementation.

The monitoring stations have been established but City staff collects the samples and processes them for analysis and tracking. Staff control over the sampling and processing maintains the chain of custody and ensures the accuracy and consistency of the testing.

Monitoring protocols have been established by the Dry Creek Conservancy. Protocols fall under one of the three categories:

- a. Chemical Analysis
- b. Benthic Macro Invertebrate Diversity
- c. Site Condition Analysis

Please see Chapter 3 – Illicit Discharge Detection and Elimination, BMP item 3.a. for a more detailed discussion of the City's water quality monitoring activities.

In the current reporting year, staff began working with RUSD Service Learning staff to explore the feasibility of a student water quality testing project or ongoing program. Goal was to determine feasibility and possibly establish a pilot program for First Flush 2010.

Goal for 2009-2010: Not applicable.

**Goal for 2010-2011:** Explore and determine feasibility of pilot student water quality testing project for First Flush 2010 and possibly throughout the school year in coordination with RUSD.

**Measurable Goal:** Number of watershed monitoring stations that are established and the number of citizens that participate in water quality data collection.

**Appropriateness:** In theory, a good way to create more community involvement in the principles and practices of the SWMP and gain manpower for implementation of the SWMP. However, the City determined that this task was not an effective BMP.

**Effectiveness:** Not effective (original). To be determined if modified student pilot project is implemented (new).

#### **BMP 3 – VOLUNTEERS**

"Through public announcements promoting public participation in the SWMP, identify, recruit, and train in proper protocol citizen volunteers to monitor water quality and participate in Creek Week, Adopt a Stream, and Adopt an Inlet programs."

# 1d. Sponsor a Creek Week event including clean up activities and tree plantings within the City of Rocklin at least once each year of the permit term.

Status: Ongoing implementation.

Since 2007, the City has participated in Creek Week, a community-driven public education and volunteer work event organized by the Dry Creek Conservancy (DCC). The surrounding jurisdictions of Roseville, Placer County, Lincoln, and Loomis participate as well, making the week-long event a regional watershed-supporting collection of local public outreach and community events. Recent years' activities in Rocklin include:

- In April 2008, City staff and a total 150 volunteers planted eighty trees at Twin Oaks Community Park and worked in Johnson Springview Park to build a native plant nursery with five raised beds and work bench within a tubular steel enclosure, planted 400-500 native plants, planted six trees , and cleared out a natural spring areas to create the Huff Springs interpretive exhibit.
- On April 18, 2009, City staff and 25 volunteers planted eighteen (18) trees at Lone Tree Neighborhood Park in the Sunset West area of Rocklin.
- In 2010, the City participated with a monetary contribution towards Creek Week and staff time to help the planning committee put together the overall event, but due to budget and staff constraints, was unable to plan or host any volunteer events or other activities. Focus was instead placed on the City's own Community Service Day, scheduled for October 2010.

(See Appendix 1-1 for City web content related to Creek Week 2010.)

The Creek Week committee decided to begin holding Creek Week in the Fall starting in 2010, since Fall is a better time for volunteer projects due to lower water levels in creeks and successful Autumn planting. The new Fall Creek Festival dates may coincide with Rocklin's Community Service Day on October 23, 2010, which will accommodate joint publicity and volunteer recruiting and allow the City to coordinate promotion.

**Goal for 2009-2010:** Have a more central, organized event "hub" near a Rocklin clean up site that may include festival-like vendors and booths from the community. **Not achieved** due to budget constraints. Actively promote volunteer participation with information on the City's website and through partnerships with the Chamber, STAR, RUSD, and local service organizations. **Not achieved** since there were no Rocklin events to promote.

**Goal for 2010-2011:** Assist DCC and other stakeholders as much as feasible to plan future Creek Week and/or other watershed health and community education and volunteer events (e.g., moving Creek Week to Fall, American Basin Council of Watersheds-sponsored LID Conference, etc.).

**Measurable Goal:** Number of volunteers that attend a Creek Week event and the number of creek miles cleaned up. Number of sites worked on and/or cleaned up; number of trees planted; square yards of mulch spread; number of vendors/booths at festival; number of visitors to festival.

**Appropriateness:** To date, Creek Week has been the most promoted and most attended volunteer opportunity related to watershed health in the City. The intent is to harness that recognition and the momentum and expand the City's regional participation as well as increase the number of Rocklin participants.

**Effectiveness:** The City considers that the level of previous years' participation was acceptable. No qualitative or quantitative analysis has been done, other than to track the activities and the number of volunteers. Should the City again actively participate, future assessments will attempt to qualify the effectiveness of any events. The goal is to achieve an Outcome Level 3 - Changing Behavior.

# 2.c. Begin measuring the quantity of trash and debris removed by Adopt-A-Stream and/or Adopt-A-Watershed volunteers.

Status: Modified implementation through new BMP item 5.a. (see below).

Because the City has not yet implemented an Adopt-A-Stream or Adopt-A-Watershed program, this BMP has been modified to report the solid waste amounts that Western Placer Waste Management Authority (WPWMA) tracks for their reporting requirements to the Integrated Waste Management Board.

**Measurable Goal:** Number of volunteers that attend a Creek Week (clean up) event, the number of creek miles that are cleaned up, and the quantity of trash and debris removed by volunteers.

**Appropriateness:** Not applicable. See 5.a below.

**Effectiveness:** Not applicable. See 5.a below.

#### 3.b. Develop an "Adopt A Storm Drain Inlet" program by December 31, 2006.

Status: Ongoing implementation.

In June 2009, the Adopt-An-Inlet program had a "soft launch" with sign up sheets available at the Stormwater Education booth at two events. By the close of that reporting year, forms and flyers for the program were ready.

Inlets were adopted by one Boy Scout doing an individual badge project and a Scout Troop of four 6<sup>th</sup> graders. (See Appendix 2-1 for volunteer activities that took place this reporting year.)

A total of 82 inlets were adopted by RUSD elementary classrooms on three campuses beginning mid-mark through the school year. See Appendix 1-4 for details about volunteer projects that were undertaken through the RUSD's Service Learning program.

(See Appendix 2-2 for copies of the Adopt-An-Inlet program materials.)

**Goal for 2009-2010:** Recruit "adoptees" (participants in the program) by partnering with STAR Education, the Chamber of Commerce, and RUSD. Achieved. Target potential adoptive groups such as Boy and Girl Scouts, community service groups, local businesses, local religious groups, and public and private school classrooms. Achieved. Promote program on City website on enhanced stormwater pages, through a City News item, and through a Wet Season Survey on the home page. Not achieved due to staff constraints. Promote program at City's Stormwater Education booth. Achieved. Have 50 storm drain inlets adopted by June 30, 2010. Achieved; a total of 90 inlets adopted during the first year of the program.

**Goal for 2010-2011:** Recruit "adoptees" (participants in the program) by partnering with STAR Education, the Chamber of Commerce, and RUSD. Target potential adoptive groups such as Boy and Girl Scouts, community service groups, local businesses, local religious groups, and public and private school classrooms. Increase promotion of program on City website on enhanced stormwater pages, through a City News item, and through a Survey on the home page. Promote program at City's Stormwater Education booth. Have 100 storm drain inlets adopted by June 30, 2011.

**Measurable Goal:** Number of inlets adopted in reporting year; number of inlets actively supervised (e.g., cleaned and/or monitored by adopters).

**Appropriateness:** Garnering Rocklin residents' and businesses knowledge and hands-on support of storm drain operations and maintenance directly affects public awareness and the actual cleanliness of the system.

**Effectiveness:** Through volunteer reporting and staff monitoring and tracking, over time a trend toward reduced amounts of (and cleaner) runoff is expected. The goal is to achieve an Outcome Level 3 - Changing Behavior.

# 4.a. Establish and administer a volunteer program for marking storm drain inlets until all inlets in the City are marked.

**Status:** Ongoing implementation (first reported 2008-2009).

In 2007, a Boy Scout den mother approached the Public Works' Inspector about volunteering with the City and began placing storm drain markers in neighborhoods in which drains were not marked. The first year (2007) the troop marked inlets on fifteen streets, as well as a school parking lot and a bus stop. In May 2009, the troop marked a total of twenty eight inlets on seven streets. In Spring 2009, the troop marked a total of 99 inlets in one neighborhood.

Also in Spring 2009, a local family volunteered and marked 21 inlets, for a grand total of 120 inlets marked in two areas of the City this reporting year. See Appendix 2-1 for a spreadsheet of Volunteer Tracking for the reporting year.

In addition, the 90 inlets that were adopted through the Adopt-an-Inlet program (see BMP item 3.b above) were marked if they were not already.

**Goal for 2009-2010:** For groups and individuals who do not wish to commit to Adopting-An-Inlet (see BMP item 3.d. above), continue to offer the inlet marking project as a less intense volunteer opportunity. **Achieved**.

**Goal for 2010-2011:** Continue to offer and promote the inlet marking project as a less intense volunteer opportunity as individual and group projects and as part of community volunteer events (e.g., Creek Week and Community Service Day).

Measurable Goal: Number of inlets marked in reporting year.

**Appropriateness:** Garnering Rocklin residents' knowledge and hands-on support of storm drain maintenance and watershed knowledge directly affects public awareness and the actual cleanliness of the storm drain system. Inlet marking is a lesser commitment than adopting an inlet (see BMP item 3.b. above) and is still an excellent way to achieve both the outreach and education and participation BMPs.

Effectiveness: The goal is to achieve an Outcome Level 2 - Raising Awareness.

#### 4.b. (New) Native Oak Woodland Stewardship. (Old) Acorn Gathering and Planting.

Status: Ongoing implementation (first reported 2008-2009).

Since 2006, the Public Works and Parks Departments (reorganized in 2010 to the Department of General Services) have collaborated to conduct volunteer acorn gathering and planting events. Volunteers have planted propagated acorns in open space parcels along Pleasant Grove Creek, Breen Park, Lonetree Park and Johnson Springview Park. There are three native plant nurseries with automatic irrigation and stands or beds where more than 100 saplings and trees are growing. There is room for approximately 3,000 acorns/seedlings between the three nurseries.

This reporting year, four RUSD elementary classrooms participated in the new Adopt-an-Acorn program by adopting approximately 100 acorns. The program was rolled out to the RUSD in conjunction with Service Learning and with support from the Sacramento Tree Foundation, who provided literature and support. Approximately 20 acorns sprouted. Due to a fortuitous location, staff was able to work with one teacher to plant her class' three seedlings in a park adjacent to the school to replace mitigation oaks that had died.

In addition, the Parks Department continued an ongoing project to have 4<sup>th</sup> graders transplant seedlings into 1-, 5-, and 15-gallon pots and plant sprouted acorns in the newly vacated deep pots, thus providing more than 100 volunteer hours in one morning to support the City's oak nursery. The students transplanted more than 100 seedlings and planted more than 300 sprouted acorns. The saplings transplanted by the students replaced inventory that was used to replace mitigation oak trees that had been damaged in open space areas.

Finally, the City increased collaboration with the Sacramento Tree Foundation (STF) and began taking steps to fulfill its Greenprint Initiative commitment. The STF provided educational materials in support of the City's Adopt-an-Acorn program which was distributed to the adopting classrooms. The STF also has committed to assisting with tree planting projects at the City's Community Service Day in October.

Increased oak woodland stewardship in an important component of watershed health. For additional discussion about the City's efforts to preserve native oak trees, please see Appendix 2-3 for a description of Rocklin's Urban Forest Plan.

**Goal for 2009-2010:** Continue collaboration with Parks Department for collection, sharing of nursery space and saplings, and outreach and volunteer opportunities. **Achieved**. Hold acorn gathering and planting events in late summer and early fall to collect and plant acorns in grow tubes. **Achieved** without a formal event. Care for saplings and prepare them for planting in City sponsored events such as Creek Week and Community Service Day and in the City's Parks, Facilities, and Public Works projects. **Achieved**. Actively publicize annual event on Public Works' Events webpage and through partnerships with STAR Education, RUSD, and the Chamber of Commerce. **Achieved**.

**Goal for 2010-2011:** Actively promote acorn gathering and acorn adoptions in late Summer and early Fall at the City's Stormwater Education booth, on General Services' Events webpage, and through partnerships with STAR Education, RUSD, and the Chamber of Commerce. Target other education and care facilities such as the City's Kids Junction before and after school program, private and charter schools, and local preschools. Maintain and prepare seedlings and saplings for planting in City sponsored events such as Creek Week and Community Service Day and in the City's Parks, Facilities, and Public Works projects.

**Measurable Goal:** Number of acorns collected; number of citizen volunteers participating; number of saplings eventually planted.

**Appropriateness:** Helping nature re-propagate native oaks from their own acorns helps to ensure the long-term viability of the urban stands of native oaks within the City. Oak trees provide shade, habitat, and relative to stormwater, stabilize soil and improve permeability in Rocklin's rocky soil, which improves ground water filtration and in turn improves the health of the watershed.

Effectiveness: The goal is to achieve an Outcome Level 2 - Raising Awareness.

#### 5.a. Implement a pollution prevention/solid waste reduction program. Begin tracking the quantity of solid waste collected and diverted from the landfill through sorting at the Materials Recovery Facility and through resident volunteer collection activities.

**Status:** Ongoing implementation (first reported 2008-2009).

Since 2007, the City has conducted Universal Waste Collection events and provided Christmas tree pick up and drop off sites to residents and businesses. The universal and E-waste is redirected from the landfill to recyclers who salvage and dispose of the waste properly. Christmas trees are diverted from the landfill and used in the MRF's composting operation.

In the 2008-2009 reporting year, the City sponsored three Universal Waste Collection events on July 19, 2008, October 18, 2008, and January 17, 2009. In late 2008 and early 2009, the City provided Christmas tree drop off locations.

In the current reporting year, the City discontinued sponsoring periodic Universal Waste Collection events due to budget constraints and because Recology Auburn Placer (formerly Auburn Placer Disposal) began offering ongoing curbside universal waste pickup to Rocklin residents free of charge. (See Appendix 2-4 for copies of the News Item webpage publicizing Recology's curbside pick up service.) Also, the City publicized three free e-waste and paper shredding events for Placer County residents (see Appendix 1-1 for copies of the News Item webpage publicizing the e-waste events.)

The City continued to hold Rocklin Clean Up Day, an annual city-wide solid and e-waste collection event in which three locations were provided for residents to drop off large items, appliances and universal waste free of charge. Recology was on site to haul the items to the MRF. A total of 168.91 tons was collected. As additional outreach, 300 stormwater information flyers were distributed to the vehicles that checked in at one of the three locations to promote other watershed health related events. (See Appendix 2-5

for a copy of the Clean Up Day Watershed flyer that was handed out and Appendix 2-6 for the spreadsheet detailing the waste collected.)

WPWMA tracks solid waste amounts diverted from the landfill for their reporting requirements to the Integrated Waste Management Board. Spreadsheets for the City's 2008 and 2009 solid waste collection are included in Appendix 2-7. In summary, many of the commodities tracked saw decreases in calendar year 2009 over calendar year 2008. One section of the spreadsheet specifically tracks the amounts of waste collected during the City's annual Clean Up Day .The amounts collected for two major community events, Hot Chili Cool Cars and the Rocklin Jubilee (replaced in 2009 with a privately sponsored event called Celebrate America), are also tracked independently.

Household batteries were collected for the first time in 2008 and collection rates and numbers of tubes continue to increase (please see BMP item 6.d. below).

**Measurable Goal:** Number of collection dates. Steady or increasing annual amounts of Christmas trees, tires, e-waste, batteries, etc., collected and diverted from the landfill.

**Appropriateness:** Any activity that raises awareness of and increases public participation in pollution prevention and solid waste reduction would impact stormwater quality if the increased awareness or activity itself serves to reduce or eliminate illegal dumping, or to divert solid waste either from the watershed or from the landfill where it can damage the environment. The City's efforts to encourage residents to voluntarily participate in the collection of e-waste ensures that pollutants do not enter the waterways.

**Effectiveness:** The City will continue to monitor and analyze the annual collection data from the WPWMA. Over the 2008-2009 period tracked, while e-waste collection decreased by nearly 50%, battery collection increased over 100% and the City continues to consistently exceed the State mandated minimum diversion rates for the past several years. The goal is to achieve an Outcome Level 4 - Reducing Loads from Sources.

#### 6.a. Develop an Adopt-A-Creek/Open Space/Trail program during reporting year 2009-2010. Fold in newly launched Adopt-an-Inlet program. Develop program in coordination with General Service's not-yet-launched Adopt-A-Park program.

Status: Ongoing implementation.

In reporting year 2008-2009, staff conducted preliminary research into other jurisdictions' similar programs (e.g., City of Oakland's Adopt-A-Spot program) and had preliminary discussions with the Parks and Facilities Division to combine/coordinate programs.

In the current reporting year, staff had preliminary discussions with Dry Creek Conservancy and City of Roseville representatives to explore the development of a watershed/regional Adopt-a-Creek program.

**Goal for 2009-2010:** Continue working with City maintenance divisions to create a combined program and launch it. Recruit "adoptees" (participants in the program) by partnering with STAR ECO Station, the Chamber of Commerce, and RUSD. Target potential adoptive groups such as Boy and Girl Scouts, community service groups, local businesses, local religious groups, and public and private school classrooms. Promote program on City Website through enhanced stormwater pages and on City webpages, through a City News item, and through a Wet Season Survey on the home page. Promote program at City's Stormwater Education booth. Have five facilities adopted by June 30, 2010. Not achieved due to budget constraints and competing staff priorities.

**Goal for 2010-2011:** Continue discussions with internal and external partners and stakeholders to explore development of a regional program.

**Measurable Goal:** Complete development of program; launch of program; number of facilities adopted.

**Appropriateness:** Partnerships across jurisdictions and watersheds harness greater resources and ensure consistency in programs across the watershed. Garnering Rocklin and other Placer County residents' knowledge and hands-on or financial support of watershed-related facilities maintenance and watershed knowledge directly affects public awareness and the actual cleanliness of the watershed.

**Effectiveness:** To be determined. The goal is to achieve an Outcome Level 2 - Raising Awareness.

#### 6.b. Install Wetland Preserve Informational Signs in City-owned open space.

**Status:** Initial implementation in 2008-2009.

In late 2008, Eagle Scout candidate James Whistler contacted Public Works staff to determine if he could place wildlife wetland habitat signs in City-owned open space to alert and educate the public about local wildlife as an Eagle Scout project. City staff worked with James to identify three locations within the Pleasant Grove watershed to place three Rocklin Wetland Preserve Area signs. The signs include information about how suburban wetlands help with drainage, flood control, and water quality.

In classroom presentations given in association with inlet adoptions and public service announcement projects students have indicated their familiarity with the signs in nearby open space areas.

(See Appendix 2-5 from the 2008-2009 Annual Report for photographs of the signs and an aerial map of the sign locations.)

**Goal for 2009-2010:** Facilitate the signs being placed in the approved locations and complete the project. **Achieved**. The City does not have the funds to continue this project, though it will remain an option for volunteer citizen participation to provide labor and materials for a similar project.

**Goal for 2010-2011:** Offer this type of project only to very motivated volunteers who will uphold the high production standards of the original project and signs.

Measurable Goal: Number of signs placed per year.

**Appropriateness:** This project is aimed at educating residents who use the trails through public open space about the animals and their wetland habitats located within the City. A more intimate awareness of the ecosystem existing "right in their backyard" would hopefully increase residents' desire to care for that ecosystem.

Effectiveness: Outcome Level 2 - Raising Awareness, has been achieved.

#### 6.c. Sponsor an annual Community Service Day.

**Status:** Ongoing implementation (first reported 2008-2009).

The First Annual Rocklin Community Service Day was held on Saturday, October 11, 2008. More than two hundred oak trees were planted in five Rocklin parks (Johnson-Springview Community Park, Lone Tree Community Park, Mansion Oaks Neighborhood Park, Sonora Neighborhood Park, and Twin Oaks Community Park). These trees will benefit the environment by helping to improve the health of the City's watersheds and air quality, as well as benefit the community by providing shade and adding to the character of the parks. Also, existing native oak trees received new applications of mulch to abate weeds and keep the soil cool.

The Second Annual Rocklin Community Service Day was held on Saturday, October 17, 2009. Approximately 60 volunteers assisted with planting projects. Maple trees were planted at two regional parks - Johnson-Springview and Twin Oaks - to provide additional shade near playing fields. Native plants were planted on a large embankment overlooking Pleasant Grove Creek at Whitney Park to replace non-native landscaping that had been eaten by wildlife

Official sponsors for Community Service Day 2008 included Auburn Placer Disposal Service, Omni-Means, PG&E, and UNFI (United Natural Foods, Inc.). Official sponsors of Community Service Day 2009 included Psomas, Omni-Means, PG&E, and Teichert. See Appendix 2-8 for a copy of the flyer and Appendix 4-3 for a copy of the web content advertising the event. Also see BMP item 1.d., above.

**Goal for 2009-2010:** Schedule a Second Annual Rocklin Community Service Day. **Achieved**. Include wet season preparation activities and other watershed-related clean up activities in addition to tree planting. Plant other native species; double the number of volunteers; partner with Chamber of Commerce to promote business sponsorship and volunteerism; partner with STAR and RUSD to promote volunteerism. **Not achieved** due to staff constraints to plan and supervise additional activities. Create database of volunteer contact information for possible future use such as surveys, promotion of volunteer events, etc. **Not achieved** due to staff constraints and competing priorities. **Goal for 2010-2011:** Hold Third Annual Rocklin Community Service Day and include watershed-related activities such as storm drain marking, acorn collecting and planting, and creek and open space litter pick up. Recruit double the number of volunteers through partnerships with Chamber of Commerce to promote business sponsorship and volunteerism and STAR and RUSD to promote student and family volunteerism. From online registration, create database of volunteer contact information for possible future use such as surveys, promotion of volunteer events, etc.

**Measurable Goal:** Number of trees planted; number of volunteers; number of and level of support from local businesses.

**Appropriateness:** The promotion of volunteer events provides a public education opportunity, even if only a fraction of the target audience actually volunteer. Volunteers will be given some training.

**Effectiveness:** To be determined. Staff will continue to track participation, types and success of various activities, and amount of corporate sponsorship in 2010 and 2009 for comparison with the first event in 2008. The goal is to achieve an Outcome Level 3 - Changing Behavior.

#### 6.d. Implement a household battery collection recycling program.

Status: Ongoing implementation.

In late September 2008, through a grant from the Saxton Family Foundation, the City launched its consumer battery collection program. Other communities participating in the program include Roseville, Auburn, Loomis, and Granite Bay. The Saxton Foundation provides battery collection tubes and City staff have arranged for the tubes to be prominently placed in high traffic areas throughout Rocklin such as grocery stores, drug stores, K-mart, Radio Shack, and RC Willey. In addition, the City has placed tubes at its own facilities including City Hall, the Administration Building, Sunset Community Center, and the City Corporation Yard office. As part of the City's partnership with STAR ECO Station's stormwater education efforts, a collection tube was placed in the Museum concurrent with the opening of their Storm Drain Exhibit in June 2009. Rocklin citizens and businesses may simply drop their used batteries in the collection tubes when running other errands. The City has partnered with Recology Auburn Placer, the City's solid waste hauler, who collects the batteries from the tubes and transports them to the Western Placer Waste Management Authority's (WPWMA) Materials Recovery Facility (MRF). See Appendix 2-9 for a copy of the City News Item promoting the program and the City's webpage with battery collection information.

During this reporting year, the City received approval from RUSD to place an additional 19 collection tubes on campuses and at operational facilities and from Recology to pick up from these additional locations. Staff was unable to complete research and obtain funding for the additional tubes. In addition, two RUSD teachers expressed interest in a program to augment their Service Learning curriculum.

**Goal for 2009-2010:** Maintain successful program. **Achieved**. Do additional (annual or more frequent) promotions to remind residents and businesses. **Achieved**. Explore adding tubes at middle and high schools for kids and the campus to collect batteries used in personal electronic devices and school equipment. **Achieved**.

Goal for 2010-2011: Maintain successful program.

Measurable Goal: Weight of batteries collected.

**Appropriateness:** The removal of household batteries as litter and from the solid waste stream ensures a healthier watershed.

**Effectiveness:** WPWMA reported that the City collected 0.81 tons (approximately 1,620 pounds) of batteries for calendar year 2008. That averages out to over 506 pounds of batteries per month collected in the first three months of the program.

As of June 30, 2009, the City had collected 0.862 tons (approximately 1,724 pounds) of batteries. That averages out to over 287 pounds of batteries per month collected in the first half of the calendar year.

During reporting year 2009-2010, the City was credited with collecting 2.43 tons (4,855.8 pounds) of batteries. That averages out to over 404.6 pounds of batteries per month collected.

(See Appendix 2-9 for the battery collection spreadsheet excerpted from Recology's data documenting Rocklin collection data for the reporting year.)

Based on the number of batteries collected, and thus not polluting, going into the landfill or dumped illegally, it appears that an Outcome Level 3 - Changing Behavior, has been achieved with a growing portion of the Rocklin population.

# 6.e. Inclusion of litter pick up requirement in all organized sports park facilities use contracts.

**Status:** Ongoing implementation (first reported 2008-2009).

For the past several years, the Recreation Division has included a requirement for litter pick up in all of its "Use" contracts for organized sports. The organizations include Tri-City Softball at Johnson-Springview Park, Little League at Twin Oaks, Girls Fast Pitch Softball at Lonetree Park, Pony Baseball at Whitney Park, a soccer club at eight parks throughout the City, and the disc golf club at Johnson-Springview Park. All together, these organizations encompass several thousand players, coaches, supporters, and family members, all of whom are responsible through the "Use" contracts for picking up after each event. **Goal for 2009-2010**: Maintain successful program. **Achieved**. Consider preparing a thank you and "did you know" flyer to further educate the sports participants about the role they are playing in helping to keep Rocklin's watershed healthy. **Not achieved** due to staff constraints and competing priorities.

**Goal for 2010-2011**: Maintain successful program. Consider preparing a thank you and "did you know" web-based information to educate sports participants about the role they are playing in helping to keep Rocklin's watershed healthy.

Measurable Goal: Every park facility "Use" contract will have the litter pick-up requirement.

**Appropriateness**: The responsibility for self-policing litter pick up ensures that litter does not end up in City creeks as pollution. Making the participants accountable for litter pick up teaches good habits to not litter and to pick it up no matter who may have dropped it. Over many years, successive groups of youth will be taught these good habits which will hopefully stay with them throughout their lifetime.

**Effectiveness:** The organizations are self-policing and are responsible for clean up which City staff no longer has to perform. Parks facilities are kept virtually litter free by the organizations using them. Outcome Level 3 - Changing Behavior, has been achieved.

# 6.f. Provide Rocklin Unified School District teachers with Service Learning opportunities for their classes.

Status: Ongoing implementation.

In Spring of 2009, City staff was contacted by a Rocklin Elementary teacher who wished to do a creek clean up project as part of a watershed protection curriculum and as a Service Learning project. The fourth grade Rocklin Elementary class spent a morning identifying native and non-native plants and animals, journaling their observations, and cleaning a section of Sucker Ravine Creek, a tributary of Secret Ravine Creek in the Dry Creek watershed. The class filled approximately six large garbage bags with litter and debris including cigarette butts, wood construction debris, glass and plastic bottles, paper wrappers, and plastic bottle tops.

With Department of Conservation grant funding uncertain, the City was unable to subsidize the Re-Create program for RUSD as was done in 2008-2009. City staff endeavored to "fill the gap" with other opportunities for environmental stewardship and education. In the current reporting year, Service Learning projects included Adopt-an-Inlet, Adopt-an-Acorn, oak nursery support with seedling transplanting, creek clean-ups, student newspaper articles, and an art contest/public service advertisement project. As a thank you to the Service Learning Coordinator and teachers that supported the City's programs, the City Council officially commended them at a Council meeting in June. Each of the five participating campuses will receive commemorative frames and copies of the City Council's Resolution of Commendation (Appendix 2-10).

For details about the Service Learning projects, see Appendix 1-4. Also, see Chapter 1 - Public Outreach and Education, BMP 3.d.

**Goal for 2009-2010:** Collaborate further with RUSD's Service Learning coordinator to provide an expanded program and reach greater number of students. **Achieved.** Also, see Chapter 1 - Public Outreach and Education, BMP 3.d.

**Goal for 2010-2011:** Continue to collaborate with RUSD's Service Learning coordinator to provide an expanded program and reach a greater number of students.

**Measurable Goal:** Number of activities and projects coordinated through Service Learning for RUSD students.

**Appropriateness:** Service Learning is a teaching strategy that combines meaningful service with curriculum-based or program-based learning. Students learn and develop through active participation in thoughtfully organized service to the community. Service Learning's goals align with the City's public education and public participation outreach efforts and a partnership will be mutually beneficial to both programs - and more importantly - to the students and the community.

**Effectiveness:** To be determined as the collaboration continues and as staff resources allow. Teachers or the Service Learning Coordinator will be surveyed after every project to ascertain the effectiveness (and enjoyment!) of the activity. However, unsolicited feedback to date has been positive. The goal is to achieve an Outcome Level 3 - Changing Behavior.

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# Chapter 3 – MCM III

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#### Chapter 3. MCM III - Illicit Discharge Detection and Elimination

#### NARRATIVE OVERVIEW

The City of Rocklin's illicit discharge detection and elimination program continues to meet the requirements of the permit. "Illicit discharge" refers to discharges to a municipal separate storm sewer that is not composed entirely of stormwater. Examples of direct illicit discharges include a home's sanitary sewer pipe that has been mistakenly connected to the storm sewer system, or a shop floor drain that is connected to the storm sewer, and improper disposal of automobile and household toxics. Examples of indirect illicit discharges would be an old and damaged sanitary sewer line or a failing septic system that are leaking fluids into a cracked storm sewer line.

The City will continue efforts to map the entire city, with the goal of creating a complete GIS database and map of all outfalls and receiving waters that is updated regularly. The updated data is entered into an electronic map using GIS software, and when complete, will be used by City maintenance staff and first responders. This information will help City staff during outfall inspections and first responders in the event of a hazardous material spill.

The ordinance to prohibit illicit discharges and connections to the city storm drain system was passed by the City Council and made effective November 25, 2005. The City continues in its development of outreach materials for the public and of educational/training materials for staff that will enable field crews to identify illicit discharges. Much of the criteria and information can be found on the City's website.

#### BEST MANAGEMENT PRACTICE (BMP) STATUS

This chapter discusses the BMPs identified in the City's SWMP along with their associated measurable goals. The status of implementation for each BMP and a summary of how the City complied with each BMP are provided. Appendix 3 includes supporting materials for Illicit Discharge Detection and Elimination BMPs.

The numbering of the individual BMP tasks correspond with their initial year of implementation as they are listed on Table 3-A of the City's SWMP.

#### BMP 1 – STORM SEWER LOCATION MAP

"Develop a storm sewer location map showing the number, location, and relationship of the major components of the City's storm drain system, including all out falls and the names of all receiving waters. This map is an analytical tool for identifying pollutant sources and prioritizing opportunities for water quality improvements (both structural and non-structural measures) in a geographical manner."

# **1.a.** Complete a citywide storm sewer map of all outfalls and the names of all receiving waters by December 31, 2003, and update each year thereafter.

**Status**: Ongoing modified implementation.

Since March 2008, staff and a volunteer from the community have been working to create an accurate, scaled GIS/aerial based mapping system of the City's stormwater system. The base map is justified to the state-wide California Coordinated System which is based on the NAD83 geographical coordinate system so that other agencies such as Placer County Water Agency (PCWA) and South Placer Municipal Utility District (SPMUD) can coordinate the maps of their respective infrastructure and vice versa. The mapping includes locations of all manholes, drain inlets, outfalls, and receiving waters. Each facility will be numbered to correspond with a record in the accompanying database. The database is comprised of an inventory of the infrastructure to document the size and type of pipe (plastic, metal, terra cotta, etc.) used throughout the system, and will log the construction date, maintenance, and inspections performed on the various components (inlets, outfalls, pipes, manholes, etc.) of the system. In addition, the database will include the elevations, slopes, and distances of the system's components.

Ongoing work to the stormwater system map this reporting year was expanded to include the location of manholes as well as the locations of oil and sand traps on private property. The mapping also included locating bridges (i.e. culverts and other types of waterway crossings) greater than twenty feet wide.

The map is also based on the county-wide fire grid system, so that it correlates with the fire hydrant locator map and makes it easy for hazardous materials responders to locate inlets and manholes.

Goal for 2009-2010: Continue to update the map and database to keep information current. Achieved.

Goal for 2010-2011: Continue to update the map and database to keep information current.

Measurable Goal: Ongoing maintenance of the storm drain system map.

**Appropriateness:** Having an accurate map and database of the City's entire stormwater conveyance system will allow maintenance staff to better track maintenance and repair.

**Effectiveness:** The goal is to achieve an Outcome Level 4 - Reducing Loads from Sources.

# **1.b.** Distribute storm sewer map to emergency responders by December 31, 2003 and updates every year thereafter.

Status: Ongoing implementation.

Since December 2003, emergency responders (e.g., Battalion Chiefs) have carried the outfall map in case of a Hazmat spill. This BMP is still being implemented due to the ongoing construction in the City. All outfalls have been identified. Sub-drainage areas are now being identified to determine the surface to storm drain inlet to receiving water path.

**Goal for 2009-2010**: Continue to provide the Fire and Police Departments with the enhanced storm drain system map and database as they are updated (see BMP item 1.a. above). Achieved.

**Goal for 2010-2011:** Continue to provide the Fire and Police Departments with the enhanced storm drain system map and database as they are updated (see BMP item 1.a. above).

**Measurable Goal:** Continued updates and distribution of the storm drain map to first responders in the City.

**Appropriateness:** The ability for emergency responders to know where inlets, man holes, and outfalls are and respond appropriately is crucial during incidents involving hazardous materials so that illicit discharges can be prevented.

**Effectiveness:** The goal is to achieve an Outcome Level 4 - Reducing Loads from Sources. Reports from staff indicate that the map is an effective resource for first responders. In 2010, only two hazardous materials spills occurred. Both were in parking lots on private property and were handled appropriately and did not result in illicit discharges.

#### BMP 2 – PUBLIC INVOLVEMENT – STORMWATER HOTLINE

"Establish a Rocklin Stormwater Hotline number that residents can call to receive information about recycling, garden and pesticide waste disposal alternatives, swimming pool draining tips, car washing tips, and other good housekeeping practices, as well as to report illegal discharges and dumping incidents. Information obtained from the hotline may be entered into a database to identify incidents of illicit discharges. In conjunction with this program, brochures may be developed and distributed each year at the annual Rocklin Cleanup Day further informing the public of the hazards associated with illegal discharges and improper disposal, and of the availability of the hotline."

# 1.c. Stormwater Hotline in place by December 31, 2004. Develop procedures to respond to 100% of the calls received by December 31, 2003, and each year thereafter.

Status: Modified ongoing implementation.

Since March 2005, the online reporting process, known as Access Rocklin, allows residents to send an electronic mail message to staff. The link to Access Rocklin is included throughout the City's website and is at the bottom of all relevant Public Works web pages (approximately twenty). There is also an Environmental FAQ webpage that provides information about reporting polluters, flooding, and illegal dumping. (See Appendix 3-1 for a copy of this webpage.) Also, reports can be called in at the main Public Works number, 916-625-5500.

Staff is trained to respond appropriately to any report, regardless of the reporting method. In the 2008-2009 reporting year, a total of eight reports were received for illegal dumping (five for dumping and three for illicit discharges). In the current reporting year, a total of twelve citizen reports were received and responded to (eight for illegal dumping and four for illegal discharges).

Goal for 2009-2010: Continue effective reporting process. Achieved.

Goal for 2010-2011: Continue effective reporting process.

**Measurable Goal:** New in 08-09: Number of illicit discharges reported either on the main Public Works number or through Access Rocklin online. (Previous: Establishment of the stormwater hotline and staff response to each call. All calls will be categorized and response documented. Advertising the hotline will improve public involvement and will serve as an educational tool to inform the public about the hazards of illicit discharges and illegal dumping.)

**Appropriateness:** The public can be the best resource of "additional eyes" out in the community watching for illicit discharges and dumping. Making it fast, easy - and even anonymous - to report incidences and being responsive helps ensure the public will continue to make reports.

**Effectiveness**: One hundred percent of all calls and Access Rocklin reports are responded to and acted upon appropriately. The goal is to achieve an Outcome Level 4 - Reducing Loads from Sources.

#### **1.d.** Train staff that answer phones to properly direct calls to appropriate staff.

**Status:** Ongoing implementation.

Staff was initially trained with the installation of the hotline. As new staff has been hired, they have received training for how to respond to "hotline" type calls on the regular business line and from the online Access Rocklin system. Due to staff reassignments in this reporting year, a new administrative support staff member came to General Services and was trained.

Goal for 2009-2010: Continue effective reporting and response process. Achieved.

**Goal for 2010-2011:** Continue effective reporting and response process. Provide training, updates, and refresher information as needed.

**Measurable Goal:** Number and type of calls received. Identify number of calls that result in investigation of discharge or enforcement action (verbal, written, citation) being taken. All calls will be categorized and responses documented.

**Appropriateness:** The public can be the best resource of "additional eyes" out in the community watching for illicit discharges and dumping. Making it fast and easy for the public to report incidences and being responsive to reports helps ensure the public will continue to make them.

**Effectiveness:** All staff responsible for answering phones are trained. Outcome Level 1 - Documenting Activities, has been achieved.

# 2.e. Distribute brochures at the annual Rocklin Clean Up Day to inform the public of hazards associated with illegal discharges and improper disposal of waste.

**Status:** Modified initial implementation.

Rocklin Clean Up Day is an annual Spring event that provides City residents with free and convenient solid waste disposal by allowing drop-off of non-hazardous and electronic waste at designated locations within the City. At this year's event on April 17, staff gave to each vehicle arriving at drop-off sites an informational flyer to thank residents for participating in Clean Up Day and to inform them of upcoming pollution prevention and watershed health events. The Clean Up Day event is further described in Chapter 2 - Public Participation, BMP item 5.a., and a copy of the flyer is included in Appendix 2-5.

**Goal for 2009-2010:** Corrected: Work with staff to identify appropriate opportunities to distribute brochures for the Annual Clean Up Day in April, 2010. Achieved. (Previous: Work with maintenance staff to identify appropriate opportunities to distribute brochures for the Second Annual Community Service Day in October, 2009.)

**Goal for 2010-2011:** Continue to use Clean Up Day as a method to promote pollution prevention and watershed health messages.

**Measurable Goal:** Number of personal contacts made each year and number of brochures distributed to residents at each Clean Up Day drop-off site.

**Appropriateness:** Corrected: Citizens participating in Clean Up Day are considered to be more receptive to the pollution prevention and watershed health messages since they are actively participating in a pollution prevention event. Providing written materials reinforces the message and provides participants with language they can use when talking to others about their experience and its importance to the community (Previous: Volunteers at Community Service Day are probably more inclined to be receptive to educational materials about the very work they have volunteered to do. Providing written materials reinforces the message and provides volunteers with language they can use when talking to others about their volunteer experience and its importance to the community.)

**Effectiveness**: The goal is to achieve Outcome Level 2 - Raising Awareness. All 300 flyers were distributed to citizens who participated in Clean Up Day, thus the goal Outcome Level was achieved.

### BMP 3 – INSPECTION AND DETECTION

"Train City staff on how to detect and address non-stormwater discharges and institute an inspection program with the goal of inspecting 100% of storm drains outfalls at least once each

year for illicit connections and non-stormwater discharges. In addition, for areas in the City known for dumping, conduct inspections at least one time per month."

# **1.e.** For areas in the City known for dumping, conduct inspections at least one time per month.

Status: Ongoing implementation.

Due to limited staff time and resources, dumping investigations by inspectors are complaint driven by reporting from the community. Over the permit term beginning in 2003, dumping in remote and vacant locations has decreased by virtue of the increase in development of these properties. The City installed gates on two properties with chronic dumping. One property was the site of proposed development and Planning staff used the entitlement process to require the dumping be cleaned up by the property owner as a condition of approval on both a tentative subdivision map and a conditional use permit. Illegal dumping is also addressed by the City's General Services Streets and Facilities maintenance crews, who, if they see a dump site, will clean it up, without a citizen complaint coming in.

Often, dumping incidents are single large items such as sofas or refrigerators or trash dumped on the side of the road or vacant property. These items are collected by City staff and hauled to an approved disposal site.

During this reporting year, the previously chronic dumping sites did not have incidents.

**Goal for 2009-2010:** Continue to respond to complaints of dumping and clean up sites as they are discovered by City crews. Record and track incidents to monitor for expected declines in occurrences and numbers of sites. **Achieved**.

**Goal for 2010-2011:** Continue to respond to complaints of dumping and clean up sites as they are discovered by City crews. Record and track incidents to monitor for expected declines in occurrences and numbers of sites.

**Measurable Goal**: Reduction in amount of trash collected in known dumping sites; reduction in number of sites being used for dumping.

**Appropriateness:** Monitoring and removing illegal dumping helps reduce the number of incidences and helps to ensure that dumping does not pollute the City's watershed. Over time, dumping occurrences should continue to decline.

**Effectiveness**: Staff will continue to monitor dumping and identify if dumping reoccurs in new areas. Staff believes that public awareness is increasing indicated by the increase in number of reports (eight up to twelve) over the past two reporting years. Because the City cleans up illegal dumping every time it is reported, Outcome Level 4 - Reducing Loads from Sources, has been achieved.

# 2.b. Inspect 100% of storm drain outfalls at least once each year for illicit connections and non-stormwater discharges.

Status: Ongoing modified implementation.

Regular, scheduled inspections have been taking place on a rotating basis due to limitations of staff time. The City has one Stormwater Inspector. Currently, outfalls are inspected once every three years.

City maintenance crews do not consistently log or report their incidental inspections and/or clean up activities of outfalls associated with other types of maintenance such as weed abatement, however these casual inspections occur regularly throughout the year.

Goal for 2009-2010: Continue inspections as scheduled. Achieved.

Goal for 2010-2011: Continue inspections as scheduled.

**Measurable Goal:** Number of storm drain outfalls inspected for illicit connections and the type of non-stormwater flows observed.

**Appropriateness:** The City has not experienced any illicit connections to its storm drain system and is able to track the low number of non-stormwater discharges (illicit and permitted), thus the current schedule of inspections is considered adequate.

**Effectiveness:** The City continues to inspect the storm drain outfalls to identify any possible illicit connections. To date, none have been discovered. Outcome Level 4 - Reducing Loads from Sources, has been achieved.

# 2.c. Develop procedures for City staff to address non-stormwater discharges by December 31, 2005, and each year thereafter. Procedures shall include enforcement of violations and a tracking system for inspections and violations.

Status: Ongoing implementation.

This function within General Services overlaps with the Code Compliance activities within the Community Development Department. The Stormwater Inspector and Code Compliance Officer work together when non-authorized discharges occur. Enforcement is provided by the Code Compliance function through a successive enforcement response: verbal warning, written warning, citation. Within a calendar year, multiple citations for the same code violation incur increasing fines: first is \$100, second is \$200, and third is \$500. Continued violations are referred to the City Attorney's office for further enforcement and possible legal action.

**Goal for 2009-2010:** Re-evaluate tracking system to ensure it is up-to-date and providing adequate information to support Inspection, Code Compliance, and Administrative staff. **Achieved** (see BMP item 2.d. below).

**Goal for 2010-2011:** Re-evaluate tracking system as needed to ensure it is up-to-date and providing adequate information to support Inspection, Code Compliance, and Administrative staff (see BMP item 2.d. below).

**Measurable Goal:** Completion of procedures. Number of City employees that are trained each year to address non-stormwater discharges. Employees properly following enforcement procedures in the tracking and enforcement of violations.

**Appropriateness:** Consistent enforcement gives "teeth" to the policy set forth by the Illicit Discharge and Detection Ordinance.

**Effectiveness:** Procedures are complete. Currently, all employees involved in Code Compliance are trained and properly following the enforcement procedures. Outcome Level 4 - Reducing Loads from Sources, has been achieved through consistent and ongoing inspection and coordinated enforcement.

# 2.d. Establish a database to identify incidents of illicit discharges. The database will be used in conjunction with the storm drain hotline.

Status: Ongoing Modified Implementation.

In permit year 2008-2009, five illicit discharges were reported and investigated by the Stormwater Inspector. One involved landscaping material (dirt) left in the gutter, one involved improper pet waste disposal, one involved a vehicle leaking fuel on the street, and two involved washing out concrete in the storm drain. Two of these reports were phoned in and three were received via Access Rocklin.

In permit year 2009-2010, four illicit discharges were reported through Access Rocklin and an additional five illicit discharges were found by City staff. All were investigated and resolved by the Stormwater Inspector.

Due to the consistently low number of illicit discharges and to the lack of staff and staff time, the City determined that the current system of documentation and record keeping is adequate. For the foreseeable future, the City does not anticipate needing a database to identify and track incidents of illicit discharges.

**Goal for 2009-2010:** Modified: Maintain records and track incidents of illicit discharges. **Achieved**. (Previous: Not applicable.)

**Goal for 2010-2011:** Maintain records and track incidents of illicit discharges. Reevaluate tracking system as needed to ensure it is up-to-date and providing adequate information to support Inspection, Code Compliance, and Administrative staff (see BMP item 2.c. below).

**Measurable Goal:** Modified: Number and type of reports received by all reporting methods and by City staff. Identify the number of reports that result in investigation of discharge or enforcement actions (verbal, written, citation) being taken.

**Appropriateness:** Modified: Due to the low number of illicit discharge reports and staff resources, the City determined that the current method of documentation and record keeping is adequate and does allow staff to track violations, inspections, and Code Compliance actions, analyze any trends, and identify needed modifications to public outreach, education, and participation efforts (see BMP item 2.c. above). (Previous: Creation of a database would allow staff to more easily track violations, inspections, and Code Compliance actions, analyze any trends, and identify needed modifications to public outreach, education, and participation efforts (see BMP item 2.c. above).

**Effectiveness:** The current tracking system has been deemed adequate. Staff responds appropriately to reports of illicit discharges thus, Outcome Level 4 - Reducing Loads from Sources, has been achieved.

### **3.a.** Evaluate authorized non-stormwater discharges to classify impact(s) at outfalls.

Status: Ongoing Implementation.

Non-chlorinated pool and spa water and private, residential car washing are the major types of authorized discharges in the City. Investigations of possible non-authorized discharges are complaint driven so public awareness is key (see Chapter 1 - Public Education and Outreach, BMP item 6.d., regarding the distribution of brochures on swimming pool water discharge).

In the 2008-2009 permit year, permanent water quality test stations were established to test for the following parameters:

Physical Characteristics	Petroleum	
Temperature	Oil and Grease	
Specific Conductance		
Total Dissolved Solids	Metals (CAM 17 <sup>5</sup> )	
Hardness	Antimony	Lead
	Arsenic	Mercury
Sediment	Barium	Molybdenum
Turbidity	Beryllium	Nickel
Total Suspended Solids	Cadmium	Selenium
Settleable Solids	Chromium	Silver
	Cobalt	Thallium
Biological Factors	Copper	Vanadium
Nitrate	Zinc	
Nitrite		
Ammonia		
Phosphate		
Biological Oxygen Demand		

Testing has been done as staff time and budget resources have allowed. The cost for various tests on water samples range from \$300 to \$1,200. A schedule of testing times

and locations has been established. In addition, some limited velocity testing was done in the current permit year, as staff and budget resources have allowed.

(See Appendix 3-2 for copies of testing results from the permit year, a map of test locations A-1, A-2, A-3, PG-1, PG-2 and PG-3, and copies of results for the velocity testing conducted.)

**Goal for 2009-2010:** Continue using existing testing schedule and modify as needed and resources allow. Create a database with baseline data from initial testing to ensure that data can be compared and trends identified and analyzed over longer periods of time. **Not achieved.** Staffing levels have not permitted statistical analysis of data to establish as baseline for pollutants. However, data continues to be collected and published.

**Goal for 2010-2011:** Continue using existing testing schedule and modify as needed and resources allow. Create a database with baseline data from initial testing to ensure that data can be compared and trends identified and analyzed over longer periods of time.

**Measurable Goal:** Monitoring and education programs for authorized non-stormwater discharges, and ability to classify impacts to receiving waters.

**Appropriateness:** Testing water quality is single most effective way to determine whether all other BMPs within the SWMP are being effective by reducing pollution in the City's waterways. Testing water quality is also another tool to help identify from where pollution sources are coming and address those sources to eliminate the pollution.

**Effectiveness:** To be determined once baseline data is entered into a database and subsequent data is added. The goal is to achieve an Outcome Level 4 - Reducing Loads from Sources.

# BMP 4 – Illicit Discharge Ordinance

"Develop, adopt, and implement an illicit discharge ordinance that will, among other things, identify the types of non-stormwater discharges that can and cannot enter the City's storm drain system. Development of the ordinance will include an analysis of common non-storm discharges to determine if they are a significant source of pollution, and then either ban their discharge or require implementation of controls."

# 1.f. Complete a Draft Illicit Discharge Ordinance to prohibit non-stormwater discharges by December 31, 2003. Ordinance will include provisions for enforcement.

Status: Complete.

Draft Stormwater Runoff Pollution Control Ordinance completed in the Fall of 2005.

Goal for 2009-2010: Not applicable.

Goal for 2010-2011: Not applicable.

### Measurable Goal: Completion of draft.

**Appropriateness:** A stormwater pollution control ordinance is mandated by the Environmental Protection Agency (EPA) and is a required component of the MS4 General Permit to ensure compliance.

Effectiveness: Not applicable.

# 2.a. Adopt Illicit Discharge Ordinance to prohibit non-stormwater discharges by December 31, 2004. Ordinance will include provisions for enforcement.

Status: Complete.

On October 25, 2005, the Stormwater Runoff Pollution Control Ordinance (Ordinance 901) was adopted as Chapter 8.30 of the Rocklin Municipal Code. The Ordinance became effective on November 25, 2005. Link to Municipal Code from City website: <u>http://www.rocklin.ca.us/government/city\_hall/city\_clerk/city\_municipal\_code.asp</u>

Goal for 2009-2010: Not applicable.

Goal for 2010-2011: Not applicable.

Measurable Goal: Adoption of ordinance.

**Appropriateness:** A stormwater pollution control ordinance is mandated by the Environmental Protection Agency (EPA) and is a required component of the MS4 General Permit to ensure compliance.

**Effectiveness:** The Ordinance provides Inspectors and Code Compliance Officer with an enforcement tool. Without an enforcement tool, there is little to no deterrent to chronic violators. The goal is to achieve an Outcome Level of 6 - Protecting Receiving Water Quality.

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# Chapter 4 – MCM IV

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# Chapter 4. MCM IV - Construction Site Stormwater Runoff Control

### NARRATIVE OVERVIEW

The City's stormwater program has been able to address some of the requirements of the permit through existing construction standards and practices. The City standards are enforced by City staff and site plan and subdivision reviews, which include erosion and sediment control plans. The City inspects construction sites to ensure that effective erosion and sedimentation control is being implemented. A grading ordinance and requirements for construction site operators to control waste was adopted by City Council effective February 10, 2006. Training materials and workshops are being developed by City staff for construction site operators, inspectors, and City maintenance personnel. The adoption of the grading ordinance has helped enforcement efforts on construction projects.

The City saw a significant reduction in construction projects occur during the past reporting year, with only a handful of active commercial, multi- and single-family construction sites. The greatest common problem identified by City Inspectors in their regular inspections was the General Construction Permit holder's failure to keep their Storm Water Pollution Prevention Plan (SWPPP) updated, their BMPs maintained properly, and their inspections current. No Notices to Comply or Stop Work Orders were issued.

Project plans developed during the site plan or subdivision approval process addressed erosion and sedimentation controls that would be necessary. The City required developers to use the most current and effective practices available. The City also required effective erosion and sediment control practices on City projects (road construction, structure construction, park and trail development) as necessary and will continue to use the most current and effective practices that are most appropriate for each project.

In addition, City staff began preparing for the implementation of the New Construction General Permit that went into effect July 1, 2010. Staff prepared and presented an informational memo to management to ensure General Services and Community Development staff are informed about important dates and new requirements. The City helped coordinate, publicize and hosted the Placer Regional Stormwater Coordination Group (PRSCG) Construction General Permit Workshop in October 2009 (see further discussion below under BMP item 1.c). Fifteen Rocklin staff attended representing the Building, Engineering, Planning, and Public Works Divisions. The City also posted information on the Stormwater webpage.

### BEST MANAGEMENT PRACTICE (BMP) STATUS

This chapter discusses the BMPs identified in the City's SWMP along with their associated measurable goals. The status of implementation for each BMP and a summary of how the City complied with each BMP are provided. Appendix 4 includes supporting materials for Construction Site Stormwater Runoff Control.

During the 2009-2010 reporting year, the City did not add any new BMPs not originally included. The numbering of the individual BMP tasks correspond with their initial year of implementation as they are listed on Table 4-A of the City's SWMP.

4-1

### BMP 1 – STAFF TRAINING

"Establish annual training programs for all m staff involved in both City and private development projects. City staff includes: maintenance employees; plan checkers; and inspectors. The training shall focus on the development, implementation, and contents of Storm Water Pollution Prevention Plans and the implementation and maintenance of BMPs during and after construction."

# **1.a.** Procedures for review of site plans that incorporate water quality impacts have been developed and shall be implemented during the full permit term.

Status: Ongoing modified implementation.

The City requires erosion and sediment control measures (SWPPPs) on all project plans. Construction standards also require installation of sand and oil traps on all new construction projects.

Goal for 2009-2010: Continued implementation. Achieved.

Goal for 2010-2011: Continued implementation.

**Measurable Goal:** Development of procedures to annually train City staff by December 31, 2003.

**Appropriateness:** Because there has been very little Plan Check staff turnover, annual training has not been necessary. As technology and regulations change, it will be imperative that the City provide timely updates to its staff. Partnering with PRSCG and/or member jurisdictions to provide regional staff-level training opportunities ensures that neighboring agencies are not duplicating efforts and that the information presented is consistent within the region (see BMP item 1.e. below).

**Effectiveness:** Plan Check staff are fully trained. Outcome Level 4 - Reducing Loads from Sources, has been achieved since all new development projects being reviewed are required to comply with current requirements.

# **1.c.** Procedures in place by December 31, 2004 to annually train City staff in development of construction projects. Construction development will include preparation of conditions of approval, plan and specification development, and SWPPP preparation.

Status: Ongoing modified implementation.

Standard conditions of approval are applied to every discretionary entitlement including conditional use permits, design review, and tentative subdivision maps. Conditions of approval implement effective erosion and sediment control measures on all projects greater than one acre. Planners use a list of standard conditions as a starting point and work with Engineering and Maintenance staff to customize the recommended conditions of approval to fit a particular project. Standard plans include sand and oil traps on all new projects or projects that propose drainage modifications.

Standard conditions address stormwater quality and watershed health from numerous areas including landscaping (water conservation), trash enclosures and litter pick-up (pollution prevention), oak tree preservation/mitigation and open space requirements (general watershed health through retention of native species and protection of waterways), to traditional structural BMPs. These conditions of approval are applied on a project-by-project basis to achieve the maximum compliance with Attachment 4. The City's standard Engineering drawings and project notes also provide Attachment 4 compliance. (Please see Appendix 4-1 for a list of standard conditions of approval that are stormwater related and copies of standard Engineering project notes.)

During the reporting year, Engineering, Building, Public Works, and Planning staff held several task force meetings to review and evaluate (self-audit) the City's ongoing compliance with Attachment 4 in response to previous comments received from the Regional Board. In addition, the task force began discussions about ways to incorporate Low Impact Development (LID) techniques into the City's development requirements. After completing a straw poll of neighboring jurisdictions and reviewing our requirements and methods of implementation and obtaining compliance, staff concluded that current methods are achieving compliance with Attachment 4 and decided, due to staff resource constraints, to wait for additional feedback from the Regional Board (on the 2008-2009 Annual Report) before undertaking additional steps.

Also included in the task force's discussions was consideration of adopting or otherwise beginning to use the Sacramento Stormwater Partnership's Stormwater Quality Design Manual for the Sacramento and South Placer Regions. This discussion was also tabled for the near-term due to staff constraints and lack of new development applications coming in, on which new requirements could be applied or at least explored. However, when Planning receives inquiries about new development, the need to incorporate LID techniques is included in the discussion. A few of the inquires about potential projects seemed very receptive to using LID concepts.

**Goal for 2009-2010**: Continued implementation with staff training, as needed. Achieved. The Director of General Services, Chief Building Official, and the Stormwater Coordinator (who is also an Associate Planner) are well-versed in LID concepts and applications and will work with other staff to ensure that knowledge transfer is ongoing. Achieved. Explore working with PRSCG to provide internal (staff) workshops in addition to industry workshops. Achieved through working with American Basin Council of Watersheds (ABCW) to plan the October 2010 LID Conference.

**Goal for 2010-2011**: Provide staff training, as needed. Have as many staff as possible attend the ABCW LID Conference in October 2010.

Measurable Goal: Number of personnel completing the training program.

**Appropriateness:** Partnering with PRSCG and/or member jurisdictions to provide regional staff-level training opportunities ensures that neighboring agencies are not

duplicating efforts and that the information presented is consistent within the region (see BMP item 1.e. below).

**Effectiveness:** All General Services, Engineering, Building, and Planning staff involved in the early review of proposed development projects have a working understanding of NPDES requirements and LID concepts and techniques. Effectiveness is to be determined since there have not yet been any projects entitled (or built) that incorporate any LID features. The goal is to achieve an Outcome Level 5 - Improving Runoff Quality.

7.a. (New) Educate Planning Commission and City Council about Low Impact Development (LID) concepts and techniques that are required under the City's Stormwater Discharge Permit. (Old) Educate Planning Commission and City Council about Low Impact Development (LID) concepts and techniques so they are prepared to properly evaluate projects that incorporate LID.

Status: Initial implementation.

In the later half of the reporting year, staff began developing an LID presentation to give to a joint workshop of Planning Commission and City Council members. Due to scheduling and staff resource constraints, the workshop was delayed into the 2010-2011 reporting year and is scheduled for November, 2010.

Staff also has and will continue to participate on the ABCW Conference planning committee to continue to develop regional solutions for LID implementation.

**Goal for 2010-2011**: Present LID design criteria to City Council and Planning Commission members attend the LID Conference.

**Measurable Goal:** Develop a menu of regional LID design standards that can be incorporated into new development and redevelopment projects.

**Appropriateness:** Partnering with PRSCG and/or member jurisdictions to provide regional staff-level training opportunities ensures that neighboring agencies are not duplicating efforts and that the information presented is consistent within the region (see 1.e. below).

**Effectiveness:** To be determined after the Workshop and Conference through a survey or other communication. The goal is to achieve an Outcome Level 5 - Improving Runoff Quality.

# **1.d.** Training program in place by December 31, 2004 to annually train plan check staff to check structural and non-structural BMPs.

Status: Ongoing modified implementation.

Plan Check staff have been trained. Ongoing training has been deemed unnecessary since there has been no staff turnover during the last four reporting periods.

**Goal for 2009-2010**: Assess whether refresher training is needed for existing staff that received initial training in 2004 and provide updated training if deemed necessary. **Achieved**.

**Goal for 2010-2011**: Assess whether refresher training is needed for existing staff that received initial training in 2004 and provide updated training if deemed necessary.

**Measurable Goal:** Number of training sessions offered and the number of personnel trained in plan checking of structural and non-structural BMPs.

**Appropriateness:** As technology and regulations change, it is imperative that the City provide timely updates to its staff. Partnering with PRSCG and/or member jurisdictions to provide regional staff-level training opportunities ensures that neighboring agencies are not duplicating efforts and that the information presented is consistent within the region (see 1.e. below).

**Effectiveness:** All Plan Check staff are trained. Through consistent requirement of structural and non-structural BMPs, Outcome Level 5 - Improving Runoff Quality has been achieved.

## 1.f. Public Works inspectors trained annually to inspect construction BMPs.

Status: Ongoing modified implementation.

Public Works Inspectors have been trained. Ongoing training has been deemed unnecessary since there has been no staff turnover during the last four reporting periods.

**Goal for 2009-2010**: Assess whether refresher training is needed for existing staff that received initial training prior to the permit being issued. Achieved.

**Goal for 2010-2011**: Assess whether refresher training is needed for existing staff that received initial training prior to the permit being issued

Measurable Goal: Number of personnel completing the training program.

**Appropriateness:** As technology and regulations change, it is imperative that the City provide timely updates to its staff. Partnering with PRSCG and/or member jurisdictions to provide regional staff-level training opportunities ensures that neighboring agencies are not duplicating efforts and that the information presented is consistent within the region (see 1.e. below).

**Effectiveness:** All Public Works Inspectors are trained. Through consistent and regular inspections of construction BMPs, Outcome Level 5 - Improving Runoff Quality has been achieved.

# **1.g.** Develop procedures to respond to 100% of the calls received by the Stormwater Hotline identified in Table 3-A by June 30, 2009 and each year thereafter.

Status: Ongoing modified implementation.

All stormwater related calls are routed through the City's web-based program known as Access Rocklin. The system is designed to track all calls, e-mails, and other correspondence until they are resolved and closed. Citizens may directly report stormwater related concerns through Access Rocklin from various webpages including the Homepage and several General Services webpages.

Public Works Inspectors are fully trained to respond to all construction-related reports. See Appendix 4-2 for flowcharts illustrating the processes for reporting and enforcing construction-related discharges.

**Goal for 2009-2010**: Continue successfully responding to all construction site stormwater related reports through Access Rocklin. **Achieved**.

**Goal for 2010-2011**: Continue successfully responding to all construction site stormwater related reports through Access Rocklin.

**Measurable Goal:** New: Number of reports received and responded to. (Previous: Number of calls received; number of calls responded to.)

**Appropriateness:** More people are using web based methods for communication so providing both telephone and online reporting ensures that the public can communicate in their preferred method.

**Effectiveness:** All Public Works Inspectors are trained to respond to construction site stormwater reports. Through rapid and consistent responses, Outcome Level 4 - Reducing Loads from Sources, has been achieved.

# 2.c. Plan Checkers will review 80% of the plans for compliance with new procedures identified in 1.d. and 100% each year thereafter.

Status: Ongoing implementation.

Plan Check staff now review 100% of the plans for every development project for compliance with the City's requirements for structural and non-structural BMPs.

Goal for 2009-2010: Continue successful implementation. Achieved.

Goal for 2010-2011: Continue successful implementation.

**Measurable Goal:** Number of plans checked/submitted for compliance with approved BMPs.

**Appropriateness:** Early detection of construction and post-construction runoff problems is a cost-effective water quality control measure.

**Effectiveness:** Plan Check staff review plans for every development project for compliance with the City's requirements for structural and non-structural BMPs. Through consistent requirement of structural and non-structural BMPs, Outcome Level 5 - Improving Runoff Quality, has been achieved.

### BMP 2 – CONSTRUCTION INDUSTRY TRAINING

"Establish bi-annual training for private industry contractors and engineers as described (above) for City staff."

# **1.e.** Continue to sponsor biannual training for construction industry, City inspection and maintenance staff, and development engineers each year of the permit period.

Status: Ongoing modified implementation.

As a member of Placer Regional Stormwater Coordination Group (PRSCG), the City is working to partner with other organizations to provide industry training. The City helped coordinate, publicize and hosted the PRSCG Construction General Permit Workshop on October 21, 2009, which was attended by nearly 100 local engineers, consultants, and staff from Auburn, Lincoln, Loomis, Placer County, Rocklin Unified School District, Roseville, and Rocklin. See Appendix 4-3 for the City's publicity promoting the workshop.

In addition, the City's website was updated to provide information about the New Construction General Permit, including important dates and requirement changes (see Appendix 1-2).

**Goal for 2009-2010**: Continue to research various methods to provide industry training including collaborating with other organizations.

**Goal for 2010-2011**: As resources allow, continue to research various methods to provide industry training including collaborating with other organizations.

**Measurable Goal:** Number of personnel completing the trainings. Number of workshops held, number of participants from each identified group.

**Appropriateness:** As technology and regulations change, it is imperative that the City provide timely updates to the development industry. Partnering with PRSCG and/or member jurisdictions to provide regional training opportunities ensures that neighboring agencies are not duplicating efforts and that the information presented is consistent within the region.

**Effectiveness:** To be determined via surveys or other assessment method. The goal is to achieve an Outcome Level 4 - Reducing Loads from Sources.

### BMP 3 – GRADING AND SEDIMENT CONTROL ORDINANCE AND GUIDELINES

"Develop and adopt a grading and sediment control ordinance and erosion and sediment control guidelines addressing the following principles:

- Use of good site planning
- Minimization of soil movement
- Capture sediment to the greatest extent possible
- Good housekeeping practices
- Minimization of impacts of post-construction stormwater discharges"
- 1.b. Procedures for inspection and enforcement of construction control measures for construction sites greater than 1 acre have been developed and shall continue throughout the permit term. Establish additional criteria to identify high priority sites by December 31, 2004. Visit each construction site at least twice a month, and each high priority site once a week.

Status: Ongoing implementation.

A checklist has been developed for inspectors on construction sites. Inspection areas include erosion and sediment control, constructions entrances, material handling, and good housekeeping. Inspectors use checklist at every inspection and work with Code Compliance staff for enforcement.

**Goal for 2009-2010**: Continue implementation and visit all construction sites a minimum of one time per week. **Achieved** 

**Goal for 2010-2011**: Continue implementation and visit all high-risk construction sites a minimum of one time per week. Stabilized, low-risk construction sites will be inspected on an "as-needed" basis.

**Measurable Goal:** Number of construction sites complying with the construction site runoff programs.

**Appropriateness:** Use of a checklist ensures all inspection areas are consistently covered at each inspection and provides documentation for the City and the contractor/developer of areas of concern and/or violations.

**Effectiveness:** Through consistent inspections and enforcement Outcome Level 4 - Reducing Loads from Sources, has been achieved.

# 1.h. Draft Grading Ordinance in place by December 31 (2004). Draft grading ordinance will include controls for non-sediment waste discharges. Ordinance will include provisions for enforcement.

Status: Complete.

The Grading and Erosion and Sedimentation Control Ordinance (Ordinance 904) was approved by City Council on December 13, 2005 and went into effect on February 10, 2006. The Grading Ordinance is codified as Chapter 15.28 of the City Code.

Goal for 2009-2010: Not applicable.

Goal for 2010-2011: Not applicable.

Measurable Goal: Completion of draft grading ordinance.

**Appropriateness:** A grading and erosion control ordinance is mandated by the Environmental Protection Agency (EPA) and is a required component of the MS4 General Permit to ensure compliance.

Effectiveness: Not applicable.

# 2.a. Adopt Grading Ordinance by December 31 (2005). Ordinance will include provisions for enforcement.

Status: Complete.

The Grading and Erosion and Sedimentation Control Ordinance (Ordinance 904) was approved by City Council on December 13, 2005, and went into effect on February 10, 2006. The Grading Ordinance is codified as Chapter 15.28 of the City Code.

Link to Municipal Code from the City's website: <u>http://www.rocklin.ca.us/government/city\_hall/city\_clerk/city\_municipal\_code.asp</u>)

Goal for 2009-2010: Not applicable.

Goal for 2010-2011: Not applicable

Measurable Goal: Adoption of the grading ordinance.

**Appropriateness:** A grading and erosion control ordinance is mandated by the Environmental Protection Agency (EPA) and is a required component of the MS4 General Permit to ensure compliance.

**Effectiveness:** The Ordinance provides Inspectors and Code Compliance Officers with an enforcement tool. Without an enforcement tool, there is little to no deterrent to chronic violators. Enforcement of the Grading Ordinance follows the procedures outlined in Appendix 4-2. The goal is to achieve an Outcome Level of 4 - Reducing Loads from Sources.

2.b. Develop Erosion and Sediment Guidelines for the development / construction community by June 30, 2009. Guidelines will include procedures for construction site operators to control non-sediment waste. Status: Complete.

**Goal for 2009-2010**: Continue to ensure compliance through regular inspections and enforcement actions when necessary. **Achieved**.

Goal for 2010-2011: Continue to ensure compliance through regular inspections and enforcement actions when necessary

**Measurable Goal:** All construction projects being covered by either a current, up-todate SWPPP or controls to reduce stormwater pollution as outlined in the guidelines.

**Appropriateness:** Guidelines ensure consistent application of inspection procedures on construction projects. Inspection procedures include standardized construction inspection forms used by City inspectors. An example of this form is shown in Appendix 4-4.

**Effectiveness:** To be determined through feedback from City Inspectors and from the development/construction industry. The goal is to achieve an Outcome Level 4 - Reducing Loads from Sources.

### BMP 4 – GOALS

"By year three of the permit term (2006), strive for the following goals:

- 100% compliance with local and SWRCB's construction site runoff control programs.
- 100% compliance with inspection checklists and measurable parameters.
- Zero complaints from the public regarding water quality impacts from construction sites."

# **3.a.** Strive for 100 percent compliance with local and SWRCB's construction site runoff control programs.

# **3.c.** Strive for full compliance with inspection checklists (i.e. inspection checklists show that all construction sites are implementing BMPs and meeting permit requirements) and measurable parameters.

Status: Ongoing implementation.

The City inspectors adhere to the required inspection schedule and to the required inspection documentation. (See Appendix 4-5 for a spreadsheet logging the inspections performed in 2009-2010 and the actions taken, and Appendix 4-4 for a sample of an inspection report form.)

Goal for 2009-2010: Continue achieving high percentage of compliance. Achieved.

Goal for 2010-2011: Continue achieving high percentage of compliance.

**Measurable Goal:** Number of construction sites complying with the construction site runoff programs. Number of construction and building sites complying with inspection checklists.

**Appropriateness:** Project improvements for erosion control are the first line of defense for stormwater management; project improvements for sediment control are the second line of defense. Erosion and sediment control provide the most efficient and effective water quality protection at the source.

**Effectiveness:** The City achieved 98 percent compliance with construction site runoff control programs during the 2008-2009 reporting year, thus an Outcome Level 4 - Reducing Loads from Sources, was achieved.

# **3.b.** Strive for zero complaints from the public regarding hydrological and water quality impacts from construction sites.

Status: Ongoing implementation.

During reporting year 2008-2009, the City received zero complaints from the public regarding construction site runoff. This may be due, in some part, to the decrease in the number of active construction sites caused by the economic slowdown.

During reporting year 2009-2010, the City received zero complaints from the public regarding construction site runoff. However, one citizen report was received about a home builder's equipment leaking oil onto residential streets.

**Goal for 2009-2010**: Continue to ensure, through full compliance as described above in BMP items 3.a./3.c., that no complaints regarding construction site runoff are received. Achieved.

**Goal for 2010-2011**: Continue to ensure, through full compliance as described above in BMP items 3.a./3.c., that no complaints regarding construction site runoff are received

**Measurable Goal:** A reduction in the number of construction and building-related complaints regarding water quality.

**Appropriateness:** The public can be the best resource of "additional eyes" out in the community watching for illicit discharges and dumping. Making it fast and easy to report incidences and being responsive to reports helps ensure the public will continue to make them.

**Effectiveness:** The City fully achieved this goal, receiving zero complaints for the past several years in a row, thus an Outcome Level 4 - Reducing Loads from Sources, was achieved.

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# Chapter 5 - MCM V

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# Chapter 5. MCM V - Post Construction Stormwater Management

### NARRATIVE OVERVIEW

The City's stormwater management program has addressed many of the requirements of the permit through revised construction standards and by developing conditions of approval that require the new development to annex into a Community Facilities District (CFD) in order to finance the ongoing maintenance of the development. The City has been supporting watershed assessments for various creeks in the Dry Creek watershed. The City, through the subdivision and development improvement plan check process, conducts reviews to make sure permanent stormwater facilities are included in every project, and that easements leading to outfalls are wide enough to provide an area for the inspection and maintenance programs for permanent facilities.

The City of Rocklin is subject to *Attachment 4* (Supplemental Provisions) of the General Permit. Implementation of these provisions include new design standards, open space conservation, replacement of landscape turf and overhead irrigation with drought resistant vegetation and drip irrigation. The following are items that the City implemented in order to comply with the Attachment 4 Provisions:

- 1. The City requires all new projects to provide detention/retention so post development stormwater runoff rates do not exceed predevelopment runoff flow rates.
- 2. The City requires developers to set aside open space areas and prepare an open space maintenance and operation plan along with a viable financing plan for the operation and maintenance of open space areas.
- 3. In October 2006, the City Council adopted an Urban Forest Plan that identifies activities for a sustainable tree canopy in city parks, street landscape, and open space areas. The plan also identifies tree species most compatible within Rocklin public and private landscape areas and goals and objectives for native oak tree propagation.
- 4. The City has taken steps to minimize pollutants of concern. At the beginning of the permit term, the pollutants that staff had identified were associated with the following activities:
  - a. Concrete that was being washed or dumped into storm drains. Concrete pollution was primarily associated with new construction, homeowner remodeling, or swimming pool construction. Public education and construction inspection BMPs have reduced this pollutant of concern.
  - b. Erosion and sediment pollution have been reduced through a combination of outreach, inspection, structural controls and natural vegetative filtration techniques.
  - c. Recent water sampling and benthic macro invertebrate population diversity suggests that water quality impacts in Rocklin are due to sediment loads and nutrient loads. As noted in 4a and 4b above, City staff will rely on education and outreach to the construction and residential community. Staff has established permanent sampling stations within the city and at the city boundaries to determine if pollutants are entering the

city, or originating within the city. In October 2005, the City Council adopted an illicit discharge and detection ordinance.

- d. Construction related dust is a pollutant of concern. Air borne dust when settled or washed by rain into drainage systems contributes to total suspended solids found in the drainage system. Conditions of approval for all new construction projects and redevelopment projects have been added to projects that require dust control measures such as the covering of loads when transporting materials, and when wind speeds are greater than 25mph, grading and earth-moving operations must cease and dust control measures take precedence on the job site.
- 5. Project plans that require City approval include slope protection, energy dissipaters, and drought tolerant vegetation and/or native grasses to protect manufactured slopes. Projects also must locate pipe outfalls away from the low flow level of creeks. This permits storm runoff to flow over vegetation before entering creeks.
- 6. All new construction within the city requires storm drain stenciling/labels/concrete stamps that state "No Dumping Flows to Creek" or "No Dumping Flows to Wetlands". Older areas of the city are retrofitted with a graphic decal that contains the same message. The decals are attached to curbs immediately adjacent to the storm drain inlets through ongoing volunteer programs (see Chapter 2 Public Participation BMP item 4.a).
- 7. The City' standard conditions of approval require that all commercial trash enclosures shall be enclosed.
- 8. Public Works staff annually inspects sand and oil traps and maintains the traps every two to three years.
- 9. Draft design standards for structural or treatment control BMPs have been developed in partnership with other jurisdictions in the region. Both volumetric treatment and flow based standards have been developed and will be in place by the end of the current reporting period. Retail gasoline outlets are required to comply with the requirements of Attachment 4.
- 10. The City participates in the Placer County Flood Control and Water Conservation District, which was formed to solve flood and water conservation problems in Placer County. In addition, the City has adopted a Flood Hazard Ordinance to restrict or prohibit unsafe land uses in flood-prone areas, to control alteration of natural floodplains, control developments activities that would increase flood danger, and control the diversion of flood waters (Rocklin Municipal Code, Chapter 15,16).

The City is committed to implementing the requirements of Attachment 4 by the end of the permit term. Not all of the Post Construction BMP goals have been met, yet. Very little construction of new projects occurred in the City during this reporting year: some single family homes in existing subdivisions and one stand alone commercial building. Of those projects started, all required either improvement to an existing stormwater facility or development of new permanent facilities. Since these permanent facilities are so new, having been constructed in only the past two to three years or less, the ultimate effectiveness may not be known for several years. Similar facilities developed as part of older projects have been working properly. The City will continue to require developers to use the most current and effective practices available.

## BEST MANAGEMENT PRACTICE (BMP) STATUS

This chapter discusses the BMPs identified in the City's SWMP along with their associated measurable goals. The status of implementation for each BMP and a summary of how the City complied with each BMP are provided. Appendix 5 includes supporting materials for Post Construction Stormwater Management BMPs.

During the 2009-2010 fiscal/reporting year, the City added one new BMP not originally included in the SWMP or previously added in prior reporting years.

The numbering of the individual BMP tasks correspond with their initial year of implementation as they are listed on Table 5-A of the City's SWMP. New BMP tasks added to the City's SWMP use the same nomenclature, those in permit year 2008-2009 are numbered with year six (6); the one in permit year 2009-2010 is numbered with year seven (7).

## BMP 1 - MAINTAIN GENERAL PLAN POLICIES THAT SUPPORT OBJECTIVES OF THE SWMP

"...The City is currently preparing a comprehensive General Plan Update, which includes draft policies addressing stormwater quality protection. As the General Plan Update progresses, policies promoting stormwater management should continue to be developed to address the following:

- Minimize impervious area.
- Control pollutants by eliminating or reducing potential new sources.
- Install treatment controls, as appropriate to the site.
- Participate in the funding of regional/city level BMPs in accordance with a regional/city level plan."

# **1.a.** Develop policies that include structural and/or non-structural BMPs that will be incorporated in the City's General Plan update. Policies will include the following:

- Minimize impervious area.
- Control pollutants by eliminating or reducing potential new sources.
- Install treatment controls, as appropriate to the site.
- Participate in the funding of regional/city level BMPs in accordance with a regional/city level plan.

### Status: Ongoing implementation.

The General Plan Update is still underway, as reported last reporting year. As of the end of this reporting year, the Administrative Draft Environmental Impact Report (ADEIR) was being reviewed by City staff from all applicable departments. In the interim, staff has had to focus on preparing a Climate Action Plan, as well. The City anticipates that the EIR will be completed by the end of calendar year 2010 and that public hearings with the Planning Commission and the City Council would occur in the first half of 2011.

The following Draft Flood Policies (as included in the 2008-2009 annual report) are intended to encompass the concepts included in this BMP:

- S-7 To consult with the Placer County Flood Control and Water Conservation District and other appropriate entitles regarding regional approaches for the planning, construction, operation and maintenance of drainage and flood control facilities.
- S-10 To require that new development detain on-site drainage such that the rate of runoff flow is maintained at pre-development levels, except where detention is not recommended in plans and policies adopted by the Placer County Flood Control and Water Conservation District (PCFCWCD), and to require coordination with other projects' master plans to ensure no adverse cumulative effects. In lieu of detention, the City may require retention and/or off-site drainage improvements that are more beneficial to the community's overall drainage system.
- S-12 To require new development to annex into an existing drainage maintenance district where warranted.

In addition, to the above Draft Flood Policies, the General Plan Update contains numerous Draft Policy Action Steps within the Open Space, Conservation and Recreation Element that will create a robust foundation on which to continue to build a strong SWMP. Because the General Plan Update is not yet published, the Policies and Action Steps within each General Plan Element could not be included in this report. Next year's report will contain excerpts of all the applicable Policies and Action Steps.

Goal for 2009-2010: Adopt the General Plan update. Not achieved.

**Goal for 2010-2011**: Adopt the General Plan update. Implement Action Plan according to timeframe included for each item in the Plan.

**Measurable Goal:** Number of projects with conditions of approval requiring the implementation of structural and non-structural BMPs.

**Appropriateness:** The General Plan is one of the City's fundamental policy documents and is the underlying guidance document for all land use within the City. As such, all projects requiring discretionary entitlements must be consistent with it to be supported by staff and approved by Planning Commission and/or City Council. Its language is broad to allow regulating documents such as the Zoning Ordinance, Subdivision Ordinance, and the Design Guidelines to provide more specific direction on and requirements of individual projects.

**Effectiveness:** Virtually all development projects requiring discretionary entitlements are reviewed for consistency with General Plan Goals and Policies, as well as for consistency with the Zoning Ordinance, the Subdivision Ordinance, the Grading Ordinance, Design Review Guidelines, and all other applicable regulating documents. Outcome Level 6 - Protecting Receiving Water Quality, has been achieved.

# 1.c. Develop draft enforcement guidelines to help enforcement personnel. Guidelines will incorporate Illicit Discharge and Detection and Grading Ordinances identified in Tables 3A and 4A.

Status: Completed.

(See additional discussion in Chapter 4 - Construction Site Stormwater Runoff Control, BMP item 2.b.)

Goal for 2009-2010: Not applicable.

Goal for 2010-2011: Not applicable

Measurable Goal: Completion of draft enforcement guidelines.

**Appropriateness:** Guidelines involve consistent application of inspection procedures on construction projects. Inspection procedures include standardized construction inspection forms used by City inspectors. An example of the Construction Erosion & Sediment Control Field Inspection form is provided in Appendix 4-4.

Effectiveness: Enforcement guidelines have been adopted. See BMP item 2.c. below.

### 2.c. Adopt enforcement guidelines developed in BMP item 1.c.

Status: Completed.

(See additional discussion in Chapter 4 - Construction Site Stormwater Runoff Control, BMP item 2.b.)

Goal for 2009-2010: Not applicable.

Goal for 2010-2011: Not applicable

Measurable Goal: Completion of draft enforcement guidelines.

**Appropriateness:** Guidelines involve consistent application of inspection procedures on construction projects. Inspection procedures include standardized construction inspection forms used by City inspectors. An example of the Construction Erosion & Sediment Control Field Inspection form is provided in Appendix 4-4.

**Effectiveness:** Enforcement is accomplished through the cooperation and coordination of staff from various departments, including Building Inspectors, Engineering Inspectors, Public Works Inspectors, the Stormwater Inspector, the Code Compliance Officer (Building), Police Code Enforcement. The guidelines, along with ongoing communication, have provided consistent and effective enforcement of construction site stormwater runoff control. Outcome Level 4 - Reducing Loads from Sources, has been achieved.

# BMP 2 – PRIVATE DEVELOPMENT DESIGN

"The land use and building permit process provides the City with the opportunity to review new development and redevelopment projects during the planning stage and to direct the design and development in regard to urban runoff issues. To take advantage of this opportunity, zoning ordinance requirements and design review criteria should be reviewed and amended as appropriate to incorporate controls that address runoff quantity and quality. These efforts may include the application of the California Environmental Quality Act (CEQA) to identify and develop appropriate mitigation for project related stormwater impacts, requiring grassed swales or filter strips between impervious surfaces and stormwater inlets, and development of stormwater guidance or design manual that includes standards designed to control runoff impacts."

# **1.b.** Apply the California Environmental Quality Act (CEQA) to identify and mitigate project impacts on stormwater as part of the approval process.

## Status: Ongoing implementation.

As part of the approval process for discretionary entitlements such as subdivisions, conditional use permits, and design review, staff analyzes potential stormwater and drainage impacts for each proposed project. Through the environmental review process, staff determines what type of environmental document will meet the CEQA requirements for the project and works with the project applicant to craft mitigation measures that will reduce project impacts to less than significant levels. Mitigation measures are required of the project by the conditions of approval and implementation is ensured by a mitigation monitoring plan.

In recent Environmental Impact Reports for very large commercial projects, the City has used new language that goes beyond the previous typical "obtain a NPDES permit and comply with its conditions." The following new mitigation language ensures long-term maintenance of structural and non-structural BMPs: "Long-term functionality of the stormwater quality BMPs shall be provided for through a maintenance and inspection program. Prior to issuance of the first occupancy permit, the applicant shall submit to the City of Rocklin Department of Public Works a Maintenance and Monitoring Plan for all stormwater BMPs. The Maintenance and Monitoring Plan shall 1) identify a schedule for the inspection and maintenance of each BMP, 2) identify methods and materials for maintenance of each BMP, 3) and include provision for repair or replacement of BMPs.

(See Appendix 5-1 for a sample condition of approval relating to water quality and sediment monitoring and remediation.)

**Goal for 2009-2010**: Continue performing environmental review on all discretionary projects and placing appropriate mitigation requirements on each project. Achieved.

**Goal for 2010-2011**: Continue performing environmental review on all discretionary projects and placing appropriate mitigation requirements on each project.

**Measurable Goal:** Number of projects each year that identify and mitigate the water quality impacts under CEQA.

**Appropriateness:** The California Environmental Quality Act requires the environmental review of a broad range of projects including various types of land use entitlements to ensure that environmental impacts, such as drainage and stormwater quality, are adequately analyzed prior to the approval of a project.

**Effectiveness:** One hundred percent of the discretionary entitlements approved for development projects during the permit year 2009-2010 included conditions of approval to mitigate for impacts on stormwater quality, if necessary. Outcome Level 5 - Improving Runoff Quality, has been achieved.

# 2.a. Reduce directly connected impervious surfaces in new developments and redevelopment projects by requiring that grassed swales or filter strips be incorporated into the project design.

**Status**: Initial implementation.

Planning and Stormwater staff have collaborated to draft a preliminary 'Pre-Application Meeting Low Impact Development and Stormwater Pre-treatment Information Sheet and Checklist.' The final version of this form will be attached to and become an integral part of the Universal Application Form, which is used for every discretionary entitlement (subdivision, conditional use permit, design review) to submit for review and approval. Future pre-application meetings would include a discussion regarding the City's SWMP and the requirement to at least address the use of low impact development (LID) features and techniques in the proposed development. The checklist was not finalized during the reporting year; however, no applications for new major development projects were received. Whenever possible, Planning staff communicate to potential developers and consultants the City's desire to see LID concepts incorporated into even small new or infill development, with the intent that design standards and requirements will be forthcoming in the near future.

(See Appendix 5-2 for a draft of the Pre-Application LID Checklist.)

**Goal for 2009-2010**: Finalize the 'Pre-Application Meeting Low Impact Development and Stormwater Pre-treatment Information Sheet and Checklist.' and include it in the Universal Application Form. **Not achieved**. Include LID and pre-treatment discussion in every pre-application meeting with potential project applicants, as appropriate. **Achieved**.

**Goal for 2010-2011**: Finalize the 'Pre-Application Meeting Low Impact Development and Stormwater Pre-treatment Information Sheet and Checklist.' and include it in the Universal Application Form. Include LID and pre-treatment discussion in every preapplication meeting with potential project applicants, as appropriate.

**Measurable Goal:** Number of projects that incorporate natural and man-made grassed swales and filter strips (or other LID features) into the project design.

**Appropriateness:** The pre-application meeting is the first opportunity during which staff and the prospective developer discuss in a fair amount of detail a proposed project's site or subdivision design, grading and drainage, and architectural design. This meeting is also the first chance to discuss possible mitigations for drainage and stormwater impacts. Providing prospective developers the earliest possible notification that the City has begun requiring LID and pre-treatment techniques helps ensure that these types of features are designed into the project from the outset. Attempting to "retrofit" an already-designed project with LID features is not generally feasible given monetary and site design constraints, and thus far the City's attempts to persuade developers to redesign have not been successful.

**Effectiveness:** To be determined; the goal is to achieve an Outcome Level 5 - Improving Runoff Quality, through increased use of LID and pre-treatment features in all future new development and with infill and redevelopment projects whenever feasible.

# **3.b.** Develop and/or adopt stormwater design guidelines that include standards designed to control runoff impacts. Building site designs will comply with the criteria specified in the [City Construction Design Standards] manual.

Status: Initial implementation.

Since the beginning of the permit term, the City referred potential developers to the *Start at the Source—Design Guidance Manual for Stormwater Quality Protection*, 1999 Edition by the Bay Area Stormwater Agencies Association. In addition, the City's Construction Design Standards and Standard Conditions of Approval are applied, as appropriate, to every development project within the City.

(Please see Appendix 4-1 for the City's Sample Construction Design Standards and Standard Conditions of Approval.)

**Goal for 2009-2010**: Research and consider joining the Sacramento Stormwater Quality Partnership (SSQP) or begin process of developing stormwater design guidelines for the City; ensure consistency with the City's adopted Design Review Guidelines and, if necessary, begin process of updating Design Review Guidelines to ensure consistency with either City's guidelines or those from SSQP. Achieved.

**Goal for 2010-2011**: Continue research and consideration of joining the Sacramento Stormwater Quality Partnership (SSQP) or beginning the process of developing stormwater design guidelines for the City; ensure consistency with the City's adopted Design Review Guidelines and, if necessary, begin process of updating Design Review Guidelines to ensure consistency with either City's guidelines or those from SSQP.

**Measurable Goal:** Completion of site design guidelines or manual and the number of new building permits issued each year that incorporate new practices. Completion of draft stormwater design guidelines and adoption of or process to use the SSQP Design Manual.

**Appropriateness:** Attachment 4 of the City's NPDES General Permit requires the City to "adopt an ordinance or other document to ensure implementation of the Design Standards included herein or a functionally equivalent program..." The ordinance or other document must be adopted and effective prior to the expiration of this General Permit.

**Effectiveness:** The City's current requirements ensure that Attachment 4 requirements are being met by all applicable projects. Outcome Level 5 - Improving Runoff Quality, has been achieved.

## BMP 3 – MAINTENANCE OF STRUCTURAL CONTROLS

"Most post-construction runoff controls require maintenance and may fail when maintenance is inadequate. A program for the maintenance of structural stormwater controls will be developed to include conducting and maintaining an inventory of all structural runoff controls within the City, and scheduling regular inspections and maintenance of these controls to insure continued efficient operation."

1.d. The City has updated existing construction plans and specifications to include structural controls in new development, which begin in December 2002. Beginning in January 2003 to the end of the permit period, the City will incorporate the new standards in new and redevelopment projects.

Status: Ongoing implementation.

All projects requiring discretionary entitlements are required to incorporate the City's updated standard specifications.

Goal for 2009-2010: Continue successful implementation. Achieved.

Goal for 2010-2011: Continue successful implementation.

Measurable Goal: Number of projects incorporating revised construction standards.

**Appropriateness:** Structural controls are a fundamental component of the City's stormwater management program. Including them in the City's standard specifications ensures that adequate structural controls will be incorporated into every project, as appropriate.

**Effectiveness:** 100 percent of projects requiring discretionary entitlements are required to incorporate the City's updated standards, thus. Outcome Level 5 - Improving Runoff Quality, has been achieved.

2.b. Adopt Operation & Maintenance (O&M) procedures for maintenance of structural and non-structural stormwater controls by December 31 (2005). The O&M procedures will include, but not be limited to, maintenance procedures for grass swales, sand and oil traps, and detention/sedimentation basins.

Status: Ongoing implementation.

All structural controls within the City right of way are inspected annually. (Please see Appendix 5-3 for a copy of a Sand and Oil Trap Inspection Checklist and a Storm Drain Map.)

**Goal for 2009-2010**: Continue inspections and maintenance of all structural and nonstructural stormwater controls as described in BMP item 3.a. below. Achieved.

**Goal for 2010-2011**: Continue inspections and maintenance of all structural and nonstructural stormwater controls as described in BMP item 3.a. below

**Measurable Goal:** Adoption of O&M procedures; development of an identification and maintenance program for all structural and non-structural runoff controls located within the City; development of inspection procedures for structural controls on private property.

**Appropriateness:** Regular maintenance of structural controls is necessary to ensure that they continue to function as they were designed to and protect water quality in the City's watersheds.

**Effectiveness:** Through regular inspections and maintenance of all structural and nonstructural stormwater controls Outcome Level 6 - Protecting Receiving Water Quality, has been achieved.

# **3.a.** Conduct two inspections per year, and conduct regular maintenance on City owned structural controls as prescribed in the O&M procedures in BMP item 2.b., for each type of control structure for the remainder of the permit term.

Status: Ongoing modified implementation.

The City began implementation of this BMP in 1997. Bridges and drains are inspected regularly during the rainy season.

(Please see Appendix 5-4 for a sample Illicit Discharge Detection Field Data Sheet inspection report).

Goal for 2009-2010: Continued implementation. Achieved.

Goal for 2010-2011: Continued implementation.

**Measurable Goal:** Maintenance and inspection records will be kept on all structural control appurtenances and included in the annual report to the RWQCB.

**Appropriateness**: Scheduled inspections and regular maintenance are imperative to keep structural controls functioning properly and removing the maximum possible amount of pollutants from runoff before it reaches open space or receiving waters.

**Effectiveness**: Through regular inspections and maintenance of all structural stormwater controls, Outcome Level 6 - Protecting Receiving Water Quality, has been achieved.

### (New) BMP 4 – Implement New Methods to Protect Watersheds by Reducing Quantity and Improving Quality of Urban Runoff

Rocklin's boundaries fall within two watershed areas. To the north is the Pleasant Grove Watershed and to the south is the Dry Creek Watershed. Both of these watershed areas eventually drain into the Sacramento River and on to the Pacific Ocean. The City's watershed management program includes factors that impact water quality such as air, vegetation, biological treatment, public awareness and development of an "institutional memory and awareness" at the staff level. From a geographical perspective, the City's creeks and drainage areas are the low areas where all environmental debris is concentrated. This includes even the airborne particulates trapped by vegetation and washed away by rain. The City is working to place more emphasis on **preventive** action (e.g., industry workshops and pollution prevention outreach) to reduce the necessity for **corrective** action (e.g., construction inspections and creek clean up projects). To that end, the City is incorporating into its own operations new methods that will improve watershed health, to be a good neighbor, model behavior, set an example, and lead the way.

# **2.c.** Incorporate water conservation into municipal operations as a method for reducing urban runoff.

**Status**: Ongoing implementation (added as a BMP in 2008-2009 report; previously had been included in annual reports in the narrative section).

In permit year 2004-2005, the City undertook a Landscape Efficiency Project (see article below) with support from Placer County Water Agency (PCWA). It's estimated that since this permit period took effect, between 4 and 5 million gallons have been saved by converting City landscape areas from overhead sprinklers irrigating turf to subterranean drip irrigation that supplies water to drought resistant landscape. By doing this, the City demonstrated to the community that a water efficient garden doesn't have to look like a desert. Also, the City discovered that the trees, which no longer compete with the turf for water and nutrients, are much healthier. This in turn contributes to a healthy urban forest, improved soil conditions, increased natural infiltration, and a healthier watershed.



**Goal for 2009-2010**: Continue to implement water conservation activities including reviewing municipal operations and looking for additional landscape areas that can be converted to lower-irrigation need plantings. Achieved.

**Goal for 2010-2011**: Continue to implement water conservation activities including reviewing municipal operations and looking for additional landscape areas that can be converted to lower-irrigation need plantings.

**Measurable Goal:** Number of operations and landscape areas that can be modified to conserve water.

**Appropriateness:** Water conservation is a component of water quality, watershed protection, and involves all of the General Permit's minimum control measures. Wasted water can show up as urban runoff resulting in non-stormwater related discharges at stormwater outlets.

**Effectiveness:** Due to continued water conservation and associated lower levels of runoff, Outcome Level 4 - Reducing Loads from Sources, has been achieved.

6.a. Incorporate LID features in municipal capital improvement projects whenever feasible. Use these projects as examples of successful implementation of LID techniques within the City.

Status: Ongoing implementation (added in 2008-2009 Annual Report).

During the permit term, the City initiated the Civic Center Drive project to build a new collector street within the Downtown. Through the same internal review process that private development goes through, Planning, Public Works, and Engineering staff collaborated on a LID design for this new road. The design incorporates a vegetative swale and a natural drainage basin to collect and filter water before it flows into the storm drain system. The landscape design includes native and drought-tolerant plants and incorporates many native oak trees that are to be planted as mitigation for removal of those necessary to build the road. Due to budget constraints, the Civic Center Drive project was shelved for at least the 2010-2011 fiscal year.

Beginning this reporting year, staff began work designing a second project to incorporate LID techniques. Planning and Engineering staff have collaborated on the Finn Hall parking lot upgrade to include vegetated swales, low water usage plants, and possibly other LID elements. The process has been as noted above for the Civic Center Drive project. Construction is slated for 2011.

**Goal for 2009-2010**: Complete review process for the (Civic Center Drive) project. **Achieved**. Use the road as a model project for private developers who want to see LID principles applied in Rocklin. **Not achieved**.

**Goal for 2010-2011**: Complete review process for the Finn Hall project. When constructed, use City projects as models of LID principles applied in Rocklin for both private developers and residents.

**Measurable Goal**. Modified: Completion of a project. Number of developers and/or residents referred to the project as examples of LID development.

**Appropriateness:** The City is taking a lead role by incorporating LID techniques into municipal projects whenever possible to both improve stormwater quality and to demonstrate techniques and show feasibility of techniques used.

**Effectiveness:** To be determined once a model project is constructed through surveys or other means of assessment. The goal is to achieve both Outcome Level 5 - Improving Runoff Quality, and Outcome Level 3 – Changing Behavior.

### 6.b. Establish a managed grazing program.

Status: Ongoing implementation (added in 2008-2009 annual report).

In the summer of 2008, the City began laying the groundwork for a managed goat and sheep grazing program on City and privately owned open space through the Open Space Fire Prevention and Vegetation Management Task Force. This program is a proactive approach to watershed protection through fire prevention and vegetation management.

In permit year 2008-2009, the City amended the municipal code to allow grazing livestock within the city limits for the purpose of vegetation management (Ordinance 950.)

In this permit year, approximately 140 acres of City-owned open space preserve and 150 acres of private land were grazed beginning in March. The primary purpose of grazing the preserve was to reduce fuel load, thus minimizing the potential for catastrophic damage to the watershed and wildlife habitat should a fire event occur. Many private property owners also opted to use managed grazing for weed abatement and vegetation management.

Also, as of this permit year, Grazing Management Plans have been developed for all City-owned open space preserves in Rocklin.

A Learning Tour on the Benefits of Managed Grazing is available online at <u>http://www.rocklin.ca.us/grazing</u>.

The *Managed Grazing* brochure is among the five newly updated/created stormwater quality-related brochures (see Chapter 1 - Public Education and Outreach, BMP item 6.d.).

**Goal for 2009-2010**: Continue to promote managed grazing as an environmentally sound alternative to vegetation management and weed abatement and incorporate managed grazing in City-owned open space O&M plans as funding allows. Achieved.

**Goal for 2010-2011**: Continue to promote managed grazing as an environmentally sound alternative to traditional mechanical and chemical vegetation management and weed abatement methods. Continue to incorporate managed grazing in all future O&M plans.

Measurable Goal: Number of acres grazed.

**Appropriateness:** Managed grazing promotes water quality and watershed health by improving carbon sequestration and soil water infiltration:

- Grazing is an alternative to traditional weed abatement methods such as herbicides and mechanical methods, which can disturb and compact soil, emit exhaust or leak fluids, all of which can eventually pollute groundwater.
- Grazing can reduce or remove invasive species, allowing native plant species to flourish.
- Hoof action of goats and sheep break up plant litter and animal waste to create mulch, which mixes nutrients into the mineral soil (carbon sequestration).
- As organic matter in the soil increases, water holding capacity increases.
- Improved root growth and soil health leads to better water infiltration. Water infiltration improvement results in less surface runoff.
- Surface soil structure becomes more stable and thus less prone to crusting and erosion.
- Water quality improves as sediment and nutrient loads decline in surface water.

(Information compiled on City website using material from Conservation Research Center of Teton Science Schools and Iowa State University Extension, *Integrated Crop Management*).

**Effectiveness:** The goal is to achieve an Outcome Level 5 - Improving Runoff Quality. Published data supports this conclusion, however, extensive soil sampling and data collection are cost-prohibitive.

# 7.a. Incorporate LID features in municipal facilities projects (new and retro-fits) whenever feasible. Use these projects as examples of successful implementation of LID techniques within the City.

**Status**: Initial implementation (added in this annual report).

During this reporting year, Planning and Maintenance staff collaborated to redesign a landscape area at the Administration Building. The intent is to remove inappropriate plant material and re-landscape using plants and mulch appropriate for under native oak trees and to create a "Living Under Oaks" demonstration landscape complete with signage from which both residents and developers can learn. Installation is slated for fall 2010. **Goal for 2010-2011**: Complete the design and installation of the "Living Under Oaks" demonstration landscape. When constructed/installed, use City projects as models of LID principles applied in Rocklin for both private developers and residents.

**Measurable Goal:** Completion of a project. Number of developers and/or residents referred to the project as examples of LID development.

**Appropriateness:** The City is taking a lead role by incorporating LID techniques into municipal projects whenever possible to both improve stormwater quality and to demonstrate techniques and show feasibility of techniques used.

**Effectiveness:** To be determined once a model project is constructed through surveys or other means of assessment. The goal is to achieve both Outcome Level 5 - Improving Runoff Quality, and Outcome Level 3 – Changing Behavior.

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# Chapter 6 – MCM VI

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# Chapter 6. MCM VI - Pollution Prevention & Good Housekeeping

### NARRATIVE OVERVIEW

The City's stormwater program continues to meet the requirements of pollution prevention and good housekeeping for municipal operations. The majority of requirements in this section involve existing practices, facilities, and equipment used by the City's General Services Department. The City currently cleans drain inlets, sand and oil traps, and creeks.

Used oil and other fluids from Maintenance operations are collected in containers that are equipped with overflow preventers. A recycler picks up all waste fluids. The Fleet Services Division recycles antifreeze on site. The City will continue to clean oil separator units as needed and maintain the storage facilities on site. The City completed training for emergency responders using the incident command system. Public Works staff attended this training along with the Fire and Police Department. Battalion Chiefs carry a copy of the city storm drain map in the event of a Hazmat spill. In the event of a major spill, the City would establish an emergency operations center using the incident command system.

Field crews currently use fiber rolls, catch basin and sand-oil trap cleaning, and specialized seed mixes that match the ecological conditions for post-construction maintenance activities, and will continue to use the most current and effective practices available.

### BEST MANAGEMENT PRACTICE (BMP) STATUS

This chapter discusses the BMPs identified in the City's SWMP along with their associated measurable goals. The status of implementation for each BMP and a summary of how the City complied with each BMP are provided. Appendix 6 includes supporting materials for Pollution Prevention and Good Housekeeping for Municipal Operations BMPs.

During the 2008-2009 fiscal/reporting year, the City added several new BMPs not originally including in the SWMP or expanded on BMPs that were included. During the 2009-2010 reporting year, no new BMPs were added.

The numbering of the individual BMP tasks correspond with their initial year of implementation as they are listed on Table 3-A of the City's SWMP. New BMP tasks added to the City's Stormwater Management Program in permit year 2008-2009 use the same nomenclature, thus are numbered with year six (6).

# BMP 1 – CITY FACILITIES INSPECTION AND MAINTENANCE

"Due to the nature of activities conducted at the Corporation Yard and at other municipal operation areas, pollutants can easily be released into runoff. To address these sources, the City will conduct monthly inspections of the Corporation Yard and other areas to determine the need for improving the operation and maintenance of existing controls, or providing additional controls. In addition, an inspection and maintenance program will be established for catch basins and storm drain inlets at least once before the onset of the rainy season. A similar inspection and maintenance program will be established for the annual cleaning of sand and oil traps. In

conjunction with these efforts, procedures will be developed for the proper disposal of waste gathered from these systems. The City will also identify areas within the City that have suffered repeated illegal dumping incidences, and make these areas known to the City's cleanup crews and first responders."

1.a. Inventory City facilities and operations to determine what operations and facilities may impact water quality. Inventory will also include identification of City facilities where hazardous material is kept. Develop BMPs for these facilities by December 31 (2004).

Status: Complete.

. The City Corporation Yard has been identified as the only facility where hazardous material is stored. The City's Corporation Yard uses appropriate BMPs to keep hazardous material out of the environment.

Goal for 2009-2010: Continue to use BMPs as appropriate. Achieved.

Goal for 2010-2011: Continue to use BMPs as appropriate.

Measurable Goal: Completion of a hazardous facilities map and inventory.

**Appropriateness:** For the City to minimize its own potential operational impacts to water quality staff needs to have a complete record of what types of possible pollutants are stored and used in operations.

**Effectiveness:** BMPs are in use so Outcome Level 4 - Reducing Loads from Sources, has been achieved.

# 1.b. Conduct monthly inspections of City facilities and operations to identify possible water quality impacts. Complete first set of inspections by December 31 (2004) and continue to the end of the permit term.

Status: Implementation not yet begun.

During the permit term, the City has not experienced any water quality problems at City owned facilities.

**Goal for 2009-2010**: Review this BMP for appropriateness and effectiveness given past history of no problems as well as current and anticipated future staffing and budget shortfalls. Achieved.

Goal for 2010-2011: Continue to monitor this BMP for appropriateness and effectiveness.

Measurable Goal: Correction of any water quality problems at City facilities.

Appropriateness: To be determined.

**Effectiveness:** To be determined.

# **1.d.** Establish inspection and maintenance program for catch basins and storm drain inlets once before the onset of the wet season (before October 1 of each year).

Status: Complete.

Goal for 2009-2010: Not applicable.

Goal for 2010-2011: Not applicable.

**Measurable Goal**: Completing annual inspections by October 1; reduction in the amount of floatables and debris in sand and oil traps and catch basins.

**Appropriateness**: Regular inspection and maintenance ensure that catch basins and inlets are free of debris that could be washed downstream and are functioning properly before the rainy season begins when stormwater flows will be highest.

**Effectiveness**: To be determined. The goal is the achieve Outcome Level 4 - Reducing Loads from Sources.

# **1.e.** Develop procedures for the proper disposal of waste from storm sewer system maintenance.

Status: Ongoing implementation.

Liquid waste is discharged to the sanitary sewer system. Solid waste and floatables are sent to the landfill.

**Goal for 2009-2010**: Hold refresher training or e-mail reminders to appropriate staff on proper procedures. Not needed.

Goal for 2010-2011: As needed, hold refresher training or e-mail reminders to appropriate staff on proper procedures.

**Measurable Goal**: Develop process to train maintenance employees on the proper procedures for disposing of waste from the storm sewer system.

**Appropriateness**: The proper disposal of debris and waste removed from the storm drain system ensures hat the very waste removed from the system does not make its way back into the system.

**Effectiveness:** Waste is being disposed of properly thus Outcome Level 4 - Reducing Loads from Sources, has been achieved.

# **1.g.** Identify areas within the City with repeated illegal dumping incidences for distribution to first responders and clean up crews by December 31 (2004).

Status: Ongoing implementation.

Dumping areas have been identified, some have been rendered inaccessible over the permit term, and those that remain with chronic dumping incidences are inspected periodically. Also see Chapter 3 - Illicit Discharge Detection and Elimination, BMP item 1.e. regarding illegal dumping.

Goal for 2009-2010: Continued implementation. Achieved.

Goal for 2010-2011: Continued implementation.

**Measurable Goal**: Reduction in annual number of illegal dumping incidences and a reduction in the amount of debris being dumped.

**Appropriateness**: Monitoring and removing illegal dumping helps reduce the number of incidences and helps to ensure that dumping does not pollute the City's watershed. Over time, dumping occurrences should continue to decline.

**Effectiveness**: Over future permit reporting periods, staff will continue to monitor and track reductions in dumping incidences at each site and reductions in the number of sites. The goal is to achieve an Outcome Level 4 - Reducing Loads from Sources.

### 2.a. Implement annual cleaning program of sand and oil traps.

Status: Ongoing implementation.

Goal for 2009-2010: Continued implementation. Achieved.

Goal for 2010-2011: Continued implementation.

**Measurable Goal**: Measure changes in the amount (volume) of trash, sediment, and debris found in the City's sand and oil traps.

**Appropriateness**: Regular inspection and maintenance ensure that sand and oil traps are free of debris that could be washed downstream and are functioning properly.

Effectiveness: The goal is to achieve an Outcome Level 4 - Reducing Loads from Sources.

# 6.a. Measure, test, record, and track amounts and types of gross pollutants being diverted by sand and oil traps within Dry Creek and Pleasant Grove watersheds.

Status: Ongoing.

In the 2008-2009 permit year, staff began documenting the amount of sediment, debris and floatables being removed from sand and oil traps throughout the City. There were nine (9) cubic yards of floatable debris and 38 cubic yards of sediment removed.

Due to budget and staff constraints during the current reporting year, sand and oil traps have not yet been maintained. They will be cleaned before the rainy season begins in Fall 2010.

**Goal for 2009-2010**: Expand the program to include testing for constituents in the sediment caught in the sand and oil traps before they are pumped out. Not achieved. Create a schedule for clean out that adjusts for reduced levels of construction in built-out sections of the City and maintains or increases clean out frequency for areas that still have higher amounts of pollutants found in the traps. Not achieved. Also, track facilities that continuously have higher amounts of pollutants and take steps to identify the source and reduce the load. Not achieved.

**Goal for 2010-2011**: Clean sand and oils traps before rainy season in fall 2010 and document amount of sediment, debris, ad floatables. Track facilities that continuously have higher amounts of pollutants and take steps to identify the source and reduce the load

**Measurable Goal**: Number of sand and oil traps cleaned annually; reduction in gross pollutants found over time as other BMPs continue to raise awareness and change behavior.

**Appropriateness**: Measuring sediment and monitoring gross pollutants is also another tool to help identify from where pollution sources are coming and address those sources to eliminate the pollution.

**Effectiveness**: To be determined. The goal is to achieve an Outcome Level 4 - Reducing Loads from Sources.

# 2.d. Establish a maintenance and inspection schedule for BMP compliance at City facilities.

Status: Ongoing implementation.

Regular inspections and maintenance occur for all BMPs at City facilities.

Goal for 2009-2010: Continued implementation on established schedule. Achieved.

Goal for 2010-2011: Continued implementation on established schedule.

Measurable Goal: Increase in BMP compliance at City facilities. Adherence to established schedule.

**Appropriateness**: Regular inspection and maintenance ensure that all BMPs are installed and functioning properly and in compliance with the General Permit.

**Effectiveness**: All BMPs are inspected and maintained per the schedule thus Outcome Level 4 - Reducing Loads from Sources, has been achieved.

# 2.e. Develop a two-tiered training program utilizing employee feedback. The first part is to develop BMPs using employee input. The second part will provide specific training on municipal procedures and BMPs by December 31 (2005).

Status: Ongoing implementation.

BMPs have been developed and are operational. There has been no staff turnover during the reporting year, thus no additional training was necessary.

Goal for 2009-2010: Continued implementation. Hold refresher training or use e-mail reminders to appropriate staff on proper procedures, as needed. Achieved.

**Goal for 2010-2011**: Continued implementation. Hold refresher training or use e-mail reminders to appropriate staff on proper procedures, as needed.

**Measurable Goal**: Number of employees completing the training program and implementation of employee feedback to foster continuous improvements of the City's BMPs.

**Appropriateness**: Employee feedback and training is vital to the ongoing efficient and smooth operations of the City's stormwater BMPs.

**Effectiveness**: With continued employee participation through feedback and training, the City's BMPs function optimally. Outcome Level 4 - Reducing Loads from Sources, has been achieved.

### BMP 2 – HAZARDOUS MATERIALS

"Identify the location of all City facilities where hazardous material is stored, and establish a program for the handling and storage of hazardous waste, including appropriate training for City personnel."

2.b. Incorporate reporting and prevention procedures from the City's Hazmat spill response program into the City's SWMP by December 31 (2005).

Status: Ongoing implementation.

By virtue of the inclusion of Hazmat reporting and prevention procedures into the Public Works Inspection process, these procedures have been incorporated into the SWMP. This BMP is in coordination with the Fire Department.

**Goal for 2009-2010**: Continued effective responses to Hazmat spills to prevent polluted runoff. **Achieved**.

Goal for 2010-2011: Continued effective responses to Hazmat spills to prevent polluted runoff.

**Measurable Goal**: Responding to reported hazmat spills and preventing hazardous material from entering the City's storm drain system.

**Appropriateness**: Hazardous material spill response is critical to reducing potential hazardous discharges into the storm drain system. Incorporating Hazmat reporting and prevention procedures into the SWMP documents the importance of this component and provides for ongoing effectiveness assessments.

**Effectiveness**: The Hazmat spill response program is an integral part of the ongoing operations of the City and Hazmat procedures are followed whenever appropriate. Outcome Level 4 - Reducing Loads from Sources, has been achieved.

# 2.c. Establish a program for handling and storage of hazardous waste, and train City employees by July 2 (2005).

Status: Ongoing implementation.

Initial training was conducted. Ongoing training occurs through Safety Meetings, Pesticide Applicator Professional Association (PAPA) seminars, and NPDES training programs.

**Goal for 2009-2010**: Continued implementation. Hold refresher training or e-mail reminders to appropriate staff on proper procedures, as needed. **Achieved**.

**Goal for 2010-2011**: Continued implementation. Hold refresher training or e-mail reminders to appropriate staff on proper procedures, as needed.

**Measurable Goal**: Number of employees trained each year and the number of training sessions offered by the City.

**Appropriateness**: Ongoing proper handling and storage of hazardous waste ensures that spills from City operations are reduced, and ideally, eliminated.

**Effectiveness**: Training has been on an as needed basis, when new staff is hired and when existing staff needs a refresher. All staff is trained on the proper handling and storage of hazardous waste. Outcome Level 4 - Reducing Loads from Sources, has been achieved.

### BMP 3 – STREET SWEEPING

"The City of Rocklin oversees a street sweeping and garbage collection franchise agreements to insure safe and clean streets. To enhance the effectiveness of this program, a regular street sweeping schedule should be established."

### **1.c.** Continue to sweep streets for duration of the permit term.

Status: Ongoing implementation.

Since before the City's General Permit was issued, the City has contracted with Recology Auburn Placer (formerly Auburn Placer Disposal Service) for weekly refuse collection and street sweeping. The street sweeping schedule is as follows:

Residential streets – once per month.

Major arterial and collector streets - once per week.

In addition, Recology will sweep upon request if there is a need to clean up a larger spill or illicit discharge.

Goal for 2009-2010: Continued street sweeping at existing frequency. Achieved.

Goal for 2010-2011: Continued street sweeping at existing frequency.

Measurable Goal: Frequency of sweeping.

**Appropriateness**: Street sweeping helps to keep the vehicle lanes and gutters free of debris that would otherwise be blown or washed into the storm drain system.

**Effectiveness**: The City has found that the frequency of the street sweeping is adequate for the respective road types. Outcome Level 4 - Reducing Loads from Sources, has been achieved.

# BMP 4 – PUBLIC OUTREACH

"To promote the prevention of pollution of municipal facilities, efforts will be directed to the public to educate and enlist their cooperation. The City's web page may be used to inform the public about the proper storage and/or disposal of hazardous materials in the home, and appropriate options for discharging swimming pool water. A similar promotion could address recycling to minimize street litter."

# **1.f.** Develop a web page brochure for storage and/or disposal of hazardous materials in the home by December 31 (2004).

6-8

Status: Ongoing modified implementation.

Content on household hazardous waste was added to the Public Works webpage in 2006 (<u>http://www.rocklin.ca.us/government/works/pollution/waste\_n\_recycling.asp</u>). A copy of the webpage content is provided in Appendix 6-1.

Additionally, *Household Hazardous Waste* is one of the five brochures updated during the current permit year in June. (See Chapter 1 - Public Outreach and Education, BMP item 6.d., and Appendix 1-8 for a copy of the brochure.)

**Goal for 2009-2010**: Updating the Household Hazardous Waste and Recycling webpage will be part of the project to update and enhance all of the City's stormwater and pollution reduction/prevention webpages. Not achieved due to staff resource constraints.

**Goal for 2010-2011**: Updating the Household Hazardous Waste and Recycling webpages will be part of the project to update and enhance all of the City's stormwater and pollution reduction/prevention webpages.

**Measurable Goal**: Number of unique visits to the Household Hazardous Waste and Recycling webpage. Number of brochures distributed.

**Appropriateness**: Informing residents and business about the proper storage and disposal of hazardous materials is the first step towards changing behavior and thereby reducing potential stormwater and urban runoff pollution.

Effectiveness: The goal is to achieve Outcome Level 2 - Raising Awareness.

# 2.f. Develop a web page brochure informing pool owners of their options for discharging pool water by June 30, 2006.

Status: Ongoing modified implementation.

Content on discharging pool and spa water was added to the Public Works webpage in 2006. (<u>http://www.rocklin.ca.us/government/works/pollution/pool\_water.asp</u>). A copy of the webpage content is provided in Appendix 6-2.

Additionally, *Discharging Pool & Spa Water* is one of the five brochures updated during the current permit year in June. (See Chapter 1 - Public Outreach and Education, BMP item 6.d., and Appendix 1-8 for a copy of the brochure.)

During the current reporting year, staff analyzed the current process for providing the City's *Discharging Pool & Spa Water* brochure to new pool and/or spa owners. Staff determined that attaching the brochure to the building permit was not an effective way to deliver this maintenance information to the actual home/pool owner. More often than not, a permit runner couriers the permit paperwork between the contractor and the Building Department. Staff felt it was highly unlikely that the brochure was making it to the contractor and even less likely that if the contractor did receive it, the brochure would be passed on to the home/pool owner. Accordingly, the *Discharging Pool & Spa Water* brochure is now attached to the encroachment permit that is issued by the Public

Works/Stormwater Inspector. With every permit, the Inspector attempts to make contact with the home/pool owner to personally deliver the encroachment permit and discuss the permit terms and how to safely discharge pool water.

**Goal for 2009-2010**: Updating the Pool Water webpage will be part of the project to update and enhance all of the City's stormwater and pollution reduction/prevention webpages. Not achieved due to staff resource constraints.

**Goal for 2010-2011**: Updating the Pool Water webpage will be part of the project to update and enhance all of the City's stormwater and pollution reduction/prevention webpages.

**Measurable Goal**: Number of unique visits to the Pool Water webpage; reduction in number of pool owners draining pool water directly into the storm drain system.

**Appropriateness**: Informing residents and business about the proper discharge of chlorinated pool and spa water is the first step towards changing behavior and thereby reducing potential stormwater and urban runoff pollution.

**Effectiveness**: The goal was to achieve Outcome Level 2 - Raising Awareness. Because no illicit discharges caused by incorrect pool or spa water draining were reported in this reporting year, Outcome Level 3 – Changing Behavior, has been achieved.

### **3.a.** Promotion of recycling to minimize street litter.

Status: Ongoing implementation.

Content on recycling was added to the City of Rocklin's website in 2007 (<u>http://www.rocklin.ca.us/residents/new\_to\_the\_city/recycling.asp</u>). A copy of the web content is provided in Appendix 6-3.

*Pollution Prevention for Residents* is one of the five brochures updated during the current permit year in June. (See Chapter 1 - Public Outreach and Education, BMP item 6.d., and Appendix 1-8 for a copy of the brochure.)

In addition, the City instituted a Household Battery Collection Program in 2008 (see Chapter 2 - Public Participation, BMP item 6.d.) and is actively partnering with the Regional Recycling Group (RG) and its member jurisdictions to promote the One Big Bin campaign and other recycling and waste reduction public awareness efforts (see Chapter 1 - Public Education and Outreach, BMP item 6.b.).

In the current reporting year, the City increased the number of battery recycling tubes in place by two. One was placed at the City's Corporation Yard public office and in total collected nearly 130 pounds of batteries in four months of pick ups. The other tube was placed at a SWMP partner, STAR ECO Station, who generated 141 pounds of batteries in its first month of pick up and a total of nearly 261 pounds in fourth months during this reporting year. A Rocklin Boy Scout Troop did a fundraiser for STAR by going door to

door asking for recyclables (for the CRV to redeem) and collected household batteries, as well.

Also, staff began work to gain approval from the Rocklin Unified School District and Recology (contract solid waste hauler that picks up batteries) to place an additional 19 collection tubes on each of the School District campuses and operations facilities. Approvals were received, but funding was not yet obtained by the end of the reporting year.

Recycling was also a component of some Service Learning curricula in the Rocklin schools during the 2008-2009 school year. As staff resources allow, we will work with teachers and Service Learning staff to identify more opportunities to promote recycling.

**Goal for 2009-2010**: Updating the Recycling webpage will be part of the project to update and enhance all of the City's stormwater and pollution reduction/prevention webpages. Not achieved due to staff resource constraints. Also, continued collaboration with RG to promote One Big Bin and other campaigns. Achieved. Continued promotion of the Household Battery Collection program. Achieved.

**Goal for 2010-2011**: Updating the Recycling webpage will be part of the project to update and enhance all of the City's stormwater and pollution reduction/prevention webpages. Continued collaboration with RG to promote One Big Bin and other campaigns. Continued collaboration with other organizations like the School District and STAR Education. Continued promotion of the City's Household Battery Collection program and other recycling programs.

**Measurable Goal**: Reduction in the amount of litter picked up by volunteers during Citysponsored clean up days and a reduction in the quantity (volume) of floatables found in sand and oil traps system. Number of unique visits to Recycling webpage; number of community events that include promotion of One Big Bin at the Stormwater Education booth (Step Up to Health Picnics, Hot Chili Cool Cars, etc.); amount of household batteries collected in permit year.

**Appropriateness**: Informing residents and business about the various options for recycling is the first step towards changing behavior and thereby reducing potential stormwater and urban runoff pollution.

**Effectiveness**: During the reporting year, the City participated with the booth at nine local community events (with estimated total of 26,550 attendees) to promote the dual message of pollution prevention and watershed health, including One Big Bin information. In total, Recology reports that a total of 4,855.6 pounds were collected from all of the household battery tubes within the City of Rocklin. Outcome Level 2 - Raising Awareness, has been achieved.

### BMP 5 – INTEGRATED PEST MANAGEMENT

"Develop an integrated pest management program with appropriate training for City employees."

# **3.b.** Develop an Integrated Pest Management Program training program for City employees by December 31 (2006).

Status: Ongoing implementation.

A draft Integrated Pest Management (IPM) Program has been completed by City maintenance staff in preparation for approval by the City Council. (See Appendix 6-4 for a copy of the Draft IPM Program.) All contractors are required to follow it in its draft form. City staff will be trained once the IPM Program is formally adopted, but all City Maintenance staff have Qualified Applicator Certificates (QACs) through the California Department of Pesticide Regulation and follow the State's regulations and Best Practices. Staff has held QACs for more than fifteen years.

Pesticide spraying is done on an as needed basis depending on rainfall and other conditions, so the same areas are not sprayed each year. It is therefore not feasible to quantify any reductions in pesticide use per acre based on a regular application schedule.

**Goal for 2009-2010**: Finalize the City's IPM Program. **Not achieved** due to staff resource constraints. Collaborate with maintenance staff to ensure a consistent message with the IPM public outreach tri-fold brochure to be developed. **Not achieved** due to staff resource constraints. Re-evaluate whether the Measurable Goal should be modified to reflect a more measurable parameter. **Not achieved** due to staff resource constraints.

**Goal for 2010-2011**: Finalize the City's IPM Program. Collaborate with maintenance staff to ensure a consistent message with the IPM public outreach tri-fold brochure. Re-evaluate whether the Measurable Goal should be modified to reflect a more measurable parameter.

**Measurable Goal**: Reduction in pesticide use per acre on City-owned facilities. Number of acres where landscape is mulched to reduce weed growth and subsequent pesticide use.

**Appropriateness**: Chemical components of pesticides are frequently found in urban waterways. Reducing the use of pesticides using an IPM approach helps reduce the amount and number of chemicals that potentially can run off into the storm drain system and upset the ecological balance of the watershed.

**Effectiveness**: Since all contractors have been using the IPM program an Outcome Level 4 - Reducing Loads from Sources, has been achieved.