

**ANNUAL REPORT
2007-2008**

**General Permit for the Discharge of Storm Water
From Small Municipal Separate Storm Sewer Systems (General Permit)**

(See Small MS4 Annual Report Guidance for additional guidance on completing this Annual Report Form)

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

A. Permittee Information

1. Permittee (Agency Name): City of Chico
2. Contact Person: Richard Burgi
3. Mailing Address: P.O. Box 3420
4. City, State, and Zip Code: Chico, CA 95927
5. Contact Phone Number: (530) 879-6950
6. WDID #: 5A04MSW2002
7. Have any areas been added to the MS4 due to annexation or other legal means?

YES NO

If YES:

Outfall	Has map been updated?		Has SWMP been updated?		Receiving Water Name
	YES	NO	YES	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 section D.5 of this Annual Report form.

B. Reporting Period (check one): Coverage Commencement 7/1/04 to 6/30/05 **-or-**

July 1, 2004 to June 30, 2005

*(Report is due by September 15
each year)*

July 1, 2005 to June 30, 2006

July 1, 2006 to June 30, 2007

July 1, 2007 to June 30, 2008

C. Executive Summary

The City of Chico is committed to improving the quality of urban storm water runoff through the implementation of the City’s Storm Water Management Program (SWMP).

This report presents the accomplishments of the entire five-year program of the City’s SWMP. The purpose of this annual report is to provide the State with a summary of how the City met, failed, or proposed modifications to the SWMP, and to keep the California Regional Quality Control Board (RWQCB), City officials, and the public up to date on the City’s performance on meeting what it intended to under the program. The BMP requirements implemented through the last five years continue to be implemented until a new State permit is issued. Some of the BMP’s scheduled for implementation as shown in the SWMP as originally envisioned have changed. Along with this report, an updated SWMP will be attached with all changes indicated. The reasons for not meeting these BMP’s is mainly in implementing them in the originally envisioned time frames. Some time frames were too aggressive to make. Proposed action to be taken is addressed in the “Status of Measurable Goals” section following each table. The SWMP is a "living" document and therefore may need changes throughout the permit term. Any changes made will be indicated in this annual report.

D. Minimum Control Measures

Report on the status and effectiveness of Best Management Practices.

1. Public Education and Outreach

BMP	Description	Status					
		Implemented	Not Applicable	Modified	Effective	Unknown	Not Effective
Storm Drain Inlet Stenciling (PE I-A)	Require 100% of new storm drain inlets to be stenciled	X					
Storm Drain Inlet Stenciling (PE I-A)	Stencil 20% of existing storm drain inlets per year	X					
Storm Drain Inlet Stenciling (PE I-A)	Develop maintenance program and inspect 20% of storm drain inlets per year to replace missing stencils	X					
Clean Water Business Partners (PE I-B)	Develop a list of types of businesses to be targeted	X					
Clean Water Business Partners (PE I-B)	Develop a mailing list of businesses to be targeted	X					
Clean Water Business Partners (PE I-B)	Develop one brochure for each type of business identified	X					
Clean Water Business Partners (PE I-B)	Distribute one brochure to <u>as many</u> 100% of the businesses listed and make available on the City website	X					

Community Events (PE I-C)	Develop a list of local environmental and watershed groups for possible partnering	X					
Community Events (PE I-C)	Contact local environmental and watershed groups about partnering for community events	X					
Community Events (PE I-C)	Develop at least one locally appropriate brochure for handout at community events and make available on the City website and then one each year thereafter until three per year is reached	X					
Community Events (PE I-C)	Attend at least one community event per year	X					
Storm Water Website (PE I-D)	Create initial City storm water website	X					
Storm Water Website (PE I-D)	Continue to modify, update, and add new features to the website	X					
Media Campaigns (PE I-E)	Research cost for newspaper ads, radio spots, TV spots, and billboards	X					
Media Campaigns (PE I-E)	Develop a list of potential community groups, businesses, and other agencies for partnering and cost sharing	X					
Media Campaigns (PE I-E)	Research partnering and cost sharing opportunities with community groups, businesses, and other agencies & develop a media campaign	X					
Media Campaigns (PE I-E)	At a minimum, implement two storm water message newspaper ads per year	X					
Media Campaigns (PE I-E)	Mail one brochure with storm water message with water bill at least once per year	X					
Pet Waste Control (PE I-F)	Continue to post pet waste information and collection bag stations at public trails and parks at a rate of at least one per year	X					
Public Knowledge Measurement Survey (PE I-G)	Research existing public knowledge surveys created by other agencies.	X					
Public Knowledge Measurement Survey (PE I-G)	Develop a locally appropriate public survey	X					
Public Knowledge Measurement Survey (PE I-G)	<u>Conduct city wide phone survey beginning in October 2005 and then conduct a follow-up city wide survey in May 2007 and document results.</u> Distribute public survey at community events, collect them, and analyze the results at least once a year at the community events	X					
Storm water Classroom Presentation (PE II-A)	Investigate and determine what classroom presentations are currently being done by the school district and/or other groups	X					
Storm water Classroom Presentation (PE II-A)	Review current presentation for appropriate content and frequency of message.	X					
Storm water Classroom Presentation (PE II-A)	Incorporate existing classroom presentations, if necessary, into City programs or vice versa			X			

Storm water Classroom Presentation (PE II-A)	Attend at least two events per year with informat booths where school aged children attend			X			
Storm water Classroom Presentation (PE II-A)	Implement program into one K-6th grade class per school once per year			X			
City Officials (PE III-A)	Provide information to City Council regarding upcoming community events and encourage Council participation starting with one event in 04/05 up to three events per year	X					
Annual City Council Update (PE III-B)	Provide City Council with copies of the annual report as they are submitted to the RWQCB once per year	X					
Storm Water Quality Task Force (PE IV-A)	Continue participation in the California Storm Water Quality Task Force at least two meetings per year	X					
Storm Water Quality Task Force (PE IV-A)	Continue to work with other Chico Area NPDES II permittees. Attempt to set up regular meetings with a minimum of two meetings per year	X					

a. BMPs

i. GENERAL SUMMARY

The Public Education and Outreach Element is the cornerstone of the City’s Storm Water Management Program (Program). The goal of the Public Education and Outreach Element is to: (1) generate awareness of storm water pollution by educating people about the storm drain system and its relationship to the health of local waterways; (2) change behavior patterns through education and encouragement of active participation in water pollution prevention; and (3) let the public know what steps they can take to reduce pollutants in storm water runoff.

ii. STATUS OF MEASURABLE GOALS

Storm Drain Stenciling

- 1) *Require 100% of new storm drains to be stenciled*

City staff have been attaching storm drain markers to new storm drain inlets for the past three years. New Design Standards have been developed and require every new storm drain to be installed with a permanent metal stencil. See Appendix PE I-A-1 for updated City Drop Inlet Standard.

- 2) *Stencil 20% of existing storm drain inlets per year*

The City’s storm drain system has been mapped on its Geographic Information System (GIS). The mapping shows storm drain inlets and manholes as nodes. There are 6,666 nodes within the current City sphere of influence. As inlets are marked and maintenance activities take place, manhole and inlets will be distinguished from one another on the maps. For now, the City is assuming that 60% of the nodes are manholes. This assumption gives the City an estimated 4,000 inlets to mark. In August 2002, the City (in conjunction with

the California Conservation Corps) installed 1,114 markers which equates to roughly 26% of inlets being marked. In the second year, 2004-05, the City worked with the Chico High School Rotary Club and a local group called “Kids and Creeks” to install storm drain markers. These two groups were only able to place 147 markers. To catch up, the City has contracted with a local environmental group (Big Chico Creek Watershed Alliance) who will use volunteers to install at least 1,200 markers a year and have all of the storm drain inlets marked by the end of the permit. In 2005-2006, Big Chico Creek Watershed Alliance marked 1,226 inlets with help from citizens, Chico State Student Groups, and private citizen groups. Advertisements for storm drain marking events were placed in the Chico Enterprise-Record and Chico News & Review. Local TV Channel 12 News and the Chico Enterprise-Record covered the storm drain marking event held in May. In 2006-2007 the City continued to contract with Big Chico Creek Streams Alliance (BCCSA). In 2006-2007, BCCSA got volunteers from the following organizations and schools to install 1,242 stencils: Big Chico Creek Stream Team, CSU Chico Community Action Volunteers in Education, Pleasant Valley High School, North Community High School, and Four Winds Charter School. Big Chico Creek Watershed Alliance continued its efforts in the 2007-2008 year and marked an additional 1,295 storm drain drop inlets. A total of 5,024 markers have been installed. This exceeds the City’s original estimate of drop inlets. The City will conduct an audit in 2008-2009 to determine if we have more inlets than assumed or if the citizen group has been marking manholes in addition to drop inlets. See Appendix PE I-A2 for inlet marking contracts.

- 3) **In 2007-2008, even before all the storm drain inlets have been marked, City maintenance staff will begin to stencil or re-stencil inlets that are missing markers that are routinely maintained by the City. City staff will also add replacement of stencils to the “service request form” for citizens who call to report missing stencils. The SWMP will be revised to indicate this approach to maintenance of the stencils.**

Clean Water Business Partners

- 1) *Develop a list of types of businesses to be targeted*

Three classes of businesses have been listed: dry cleaners, carpet cleaning companies, and landscapers. The City has identified all of the above companies that advertise in the phone book.

- 2) *Develop a mailing list of business to be targeted*

The City hired Butte Environmental Council through the Chico USA Grant to develop the list.

- 2-4) *Develop one brochure for each type of business identified and distribute it to as many of the businesses as possible and make available on city website*

The City hired Butte Environmental Council through the Chico USA Grant to

develop brochures for carpet cleaning companies and landscape/nursery businesses. The City has chosen to invite each identified business to an informational breakfast meeting on August 22nd and 24th 2006. An article in the local news paper was written up and also indicated the time and date of the meeting. We had twelve businesses attend the Tuesday meeting and six on Thursday. A Clean Water Business Partner Pledge form was developed and those businesses that completed and filled out the pledge were acknowledged on the CUSA website and also on a “flyer” that was mailed out with the water bills. At the informational meeting they were given brochures and shown how to become a Clean Water Business Partner and receive the free advertising benefits. The “flyers” and brochures are available on the BEC website and are accessible by link from the City’s website.

Also, the City is working with OSH and supplying handouts in the pesticide section of the store. We have a handout on how to use less toxic pest management techniques for fleas, aphids, snails and slugs, cockroaches, yellowjackets, spiders, ants, how to control weeds, mosquitoes, and healthy gardens.

The City has created an extensive Clean Water Business Partnership (CWBP) program. Since 2006 the City contacted as many carpet cleaners, landscape contractors, and nurseries as possible. The City has created a CWBP pledge for which any possible polluting business can use and pledge to use best management practices and receive free advertisement from the city. Business owners can view and download brochures from the website www.keepchicoclean.org. Business owners can also download the pledge form.

See Appendix PE I-B for the brochures, Cal Water Mailers, pledge forms, and print media advertisements.

Community Events

1. *Develop a list of local environmental and watershed groups for possible partnering*

Eighteen environmental and watershed groups have been identified by City staff for possible partnering.

2. *Contact local environmental and watershed groups about partnering for community events*

The City has worked with Butte Environmental Council on public education and outreach, and with Big Chico Creek Streams Alliance for citizen stream monitoring, outfall monitoring, and storm drain stenciling. We have also included any group that wishes to partner with the City such as schools, community groups, neighborhoods, etc.

3. *Develop at least one locally appropriate brochure for handout at community events and make available on City website*

The City had Butte Environmental Council develop three locally appropriate brochures for handouts at community events. One brochure targets children about water pollution, one targets homeowners, and one is a general handout entitled “What’s in your Gutter”? Magnets were also produced to give out at community events along with reusable shopping bags.

4. *Attend at least one community event per year*

The City manned a booth at thirty-four community events in the 2005-07 year. These events included the Endangered Species Fair, the Chico Thursday Night Markets, Chico Teen Awareness event, CSUC environmental outreach events, Clean water Business Partnership, Murals sidewalk reception, Green Creek events, CUSD at-risk student group, CSUC Country Day School group, CSUC public policy classes, CSUC maintenance staff, CSUC earth month events, high school events, and Upward Bound students at CSUC. The booths had a storm water related DVD playing on a computer and three educational brochures.

For the 2007-2008 year, the City attended three events. These events were:

- 1) Home and Garden Show – March 15th & 16th, 2008
- 2) Thursday night Farmers Market - May 15, 2008
- 3) Silver Dollar Fair – May 21st through 26th, 2008

At these events the City runoff pollution prevention outreach and education materials were distributed such as the Chico Clean Creeks 2008 Calendar, Keep Chico Clean Postcards, and Chico USA Homeowners brochures. One-on-one outreach to booth passerby included information on BMP’s for prevention of runoff pollution. An EnviroScape watershed model was displayed and interactive demonstrations were conducted. Booth attendees were encouraged to participate in a questionnaire designed to determine program effectiveness.

See Appendix PE I-C for Community Events details and handouts/giveaways.

Storm Water Website

- 1) *Create initial City storm water website*

City staff has created a storm water website that will evolve as the City’s program evolves. The City has the official City of Chico web site where individuals can find phone numbers for City personnel to report storm water related problem. There is also a link to the City’s Storm Water Website www.keepchicoclean. This website domain name is owned by the City and is where storm water

information developed by the City will be located. This website is being actively advertised on all City produced media.

Media Campaigns

1) *Research cost for newspaper ads, radio spots, TV spots, and billboards*

City staff have contacted several local television stations, eleven local radio stations, four local outdoor advertising agencies, and two local newspapers and requested advertising cost information.

2) *Develop a list of potential community groups, businesses and other agencies for partnering and cost sharing*

The City has identified and obtained addresses for 31 groups and organizations. Currently the City is working with Butte Environmental Council and Big Chico Creek Watershed Alliance.

3) *Research partnering and cost sharing opportunities with community groups, businesses, and other agencies to develop a media campaign*

The City has contacted TV, billboard, and radio stations about possible cost sharing. The TV and radio stations have indicated they will use some of their public service time to broadcast our storm water message. We have created three thirty-second TV PSA's and a radio PSA. Both the TV and Radio PSA's have been translated into Spanish.

4) *At a minimum, implement two storm water message newspaper ads per year*

The City has placed one ad entitled "What's In Your Gutter," in two newspapers promoting the April 8, 2006 public storm drain marking event and one story about the Chico Water Quality Survey. A local artist was hired to paint two storm drain murals in downtown Chico. They are located on 4th Street at the corner of Main Street, and on 3rd Street between Main and Broadway. Two articles in the Chico Enterprise Record were printed in 06-07. One entitled "Artist's murals with a message about storm drains are complete" dated August 28, 2006 and one entitled "Critters remind people to keep creeks clean" dated September 6, 2006 .

Newspaper ads were run in the Chico Enterprise Record on June 6, 2008 and one in the Chico News and review in the June 5-10, 2008 issue. The ads included visual images adapted from outreach media developed under the Chico USA program. In addition to promoting the website, they included the following educational messages:

- Water that flows into the gutter drains directly to the creek.
- Keep Chico clean

- No dumping; Drains to creeks

The three Television PSA's that were developed under the Chico USA were broadcast between 4/28/08 and 5/25/08. The three PSA's were broadcast in English 130 times and in Spanish 46 times for a total 176 times in a four week period.

The 60-second radio PSA that was developed under the Chico USA was broadcast between 4/14/08 and 4/27/08. The radio PSA was broadcast in English twenty times a day in English and 12 times a day in Spanish for a total of 852 times in a two week period.

- 4) *Mail one brochure with storm water message with water bill at least once per year.*

In May, 2006, the City placed a flyer in every water bill to homeowners warning them of impacts of using fertilizers, pesticides, car washing, and pet waste. In the 2006-07 year two California Water Service mailings were made, with one including a message to homeowners on one side and a list of the Clean Water Business that made the pledge to use clean water practices. The second one was to target homeowners reminding them that storm drains flow to the creeks and also included a message about the use and proper disposal of fertilizers.

In June of 2008, roughly 27,000 Inserts were mailed with the Cal Water bills. The insert included a listing of the 2008 Clean Water Business partners along with an educational message; Water that flows into the gutter drains directly to our creeks.

A poster was developed to address the need for public awareness of the impact of cigarette butts on local waterways. 100 posters were posted throughout the City of Chico with the majority throughout the downtown area. The poster stated "Keep your Butt Out of the Gutter"

See Appendix PE I-E for the TV and radio PSA's, Poster, and the Cal water insert.

Pet Waste Control

Continue to post pet waste information and collection bag stations at public trails and parks at a rate of at least one per year

The City is continuing to install pet waste stations. This year (2006-07), four new stations were installed; two at City Plaza, one at Ceres Neighborhood Park, and one at the north end of Potter road.

Public Knowledge Measurement Survey

- 1) *Research existing public knowledge surveys created by other agencies*

The City surveyed other cities to determine what they had done in the way of public knowledge surveys. The City contacted the City of Sacramento and searched the web for other city surveys, resulting in a large list of questions that would be appropriate for the City of Chico.

2) *Develop a locally appropriate public survey*

A public knowledge survey was created by the Butte Environmental Council as part of the Chico USA Proposition 13 Grant, and was distributed to local groups, CALFED, and other interested parties to determine the appropriateness of the survey for Chico residents. The first portion of the survey was finished in October 2005 with 300 surveys completed. This will give the City a base line for the next survey, which is scheduled to be completed in May, 2007.

3) *Conduct city wide phone survey beginning in October of 2005 and a follow city wide survey in May of 2007 and document results*

The city had a Consultant conduct a major telephone public knowledge survey. The Consultant conducted two Public Knowledge of Water Quality Surveys (2005 and 2007). These two surveys consisted of at least 300 random participants. The purpose of the first surveys was to see where public knowledge and awareness need to be improved. This first survey helped form the basis and focus for the public education and outreach portion of this program. The second survey in 2007 was to determine how successful the public education and outreach program was working, and where changes need to be made. It also helped determine where future public surveys need to be focused.

The two surveys conducted in 2005 and 2007 allowed the City to develop a “convenience survey” developed for people to complete at booth presentations. The purpose of the Convenience survey was three fold. First, the City sought to gauge the public knowledge of the storm water disposal system. Second, to determine the public education and outreach effectiveness in raising public awareness of the storm water disposal system, increase knowledge of how to prevent runoff pollution, and foster behavior changes. And third, to open dialog with individuals through which to educate them about the connection between the storm drain system and the health of our local waterways.

The survey results were analyzed and it was found that our program is working as intended. The analysis also made some changes to the survey that will be conducted in 2008-2009.

See Appendix PE I-G for the survey and survey results.

Water Wise Pest Control

We have combined this activity with the Clean Water Business Partnership

Storm Water Classroom Presentation

- 1) *Investigate and determine what classroom presentations are currently being done by the school district and/or other groups*

During the last half of the 07-08 year of the City's permit term, the City's Contractor was able to gain access into some Chico classrooms. In the past the City's efforts to gain access to the local schools were not been successful and we proposed to eliminate this element from the City's program. The City is proposing to contract out this segment of our program to organizations that can gain entrance to school classrooms. The City is going to put this part of the program back into effect.

During the last year of our permit term, the City has implemented a classroom program. The program was implemented in three public schools, with seven 3rd grade classroom presentations. Third grade students were targeted due to the curriculum compatibility with the California State 3rd grade educational science standards.

The curriculum included watershed awareness lessons, hands-on activities, and a field trip to Bidwell Park for water quality testing and riparian zone awareness activities. The lessons and activities were correlated to the following third grade California State Educational Science Standards: Life Science 3.c, 3.d; Investigation and Experimentation 5.a, 5.c, 5.e, 5.d.

Classroom presentations included the following:

1. General introduction to a watershed using maps, stories, and a "brainstorming session".
2. Students created their own dioramas of their local watershed. The dioramas were displayed at various public venues.
3. Instruction on the characteristics of Big Chico Creek Watershed, using the custom made 36" x 48" map.
4. Introduction to the concept of stewardship and a discussion with students on why and how one should care for their watershed.
5. Interactive Enviroscape model demonstrations to educate students on how storm water runoff pollution occurs through our storm water drainage system, and what we can do to prevent runoff pollution (BMPs)
6. Interactive "build your own watershed" activity using only newspaper print and water.
7. Workshop was conducted on how to monitor the water quality of local creeks and streams (Field trip component)
8. During the field trip to Bidwell Park students learned about riparian ecology and how the stewardship of that habitat can help to prevent runoff pollution.
9. A Chico Clean Creeks Calendar was disseminated to all participating students and they were encouraged to share the information contained therein with their

parents and families.

10. Students and parents were invited to volunteer to mark storm drains in the Chico urban area.

The classroom curriculum included collaborative components for the field trip and water monitoring activities. The Kids & Creeks Program provided the riparian zone awareness activities through their already developed curriculum. Students and parent chaperones participated in the activities during their field trip to Bidwell Park. Due to the collaboration with the Kids & Creeks Program the Classroom Program was able to reach an additional 300 students. Big Chico Creek Watershed Alliance, Monitoring Coordinator, Timmarie Hamill provided the monitoring equipment, adapted the Citizen Monitoring program to fit a 3rd grade level curriculum, and co-conducted the monitoring station with Jennifer Oman at the field trip site in Bidwell Park (5-Mile recreation area). The classroom program was implemented in three Chico public schools: Parkview Elementary School; Hooker Oak Elementary School; and Chico Country Day School (CCDS). Six 3rd grade classrooms and one 5th /6th classroom (approximately 140 students) participated in the program [Note: While the curriculum was developed for third grade level instruction, it is adaptable to other grade levels, and due to these two classrooms special interest in the program, they were included.]: Two 3rd classes at CCDS (Ms. Ely's and Ms. Miller's classes); Three 3rd grade classes at Parkview (Mr. Woodward's, Mr. Hollingsworth's and Ms. Sarcona's classes); and 2 class groups at Hooker Oak Elementary School (3rd grade – Ms. Storz's class, and Mr. Knaver's 5th /6th class with their buddy-class, - Ms. Irick's 1st /2nd grade) Each class received three classroom instruction days and one field trip.

Total program classroom visits spring 2008 was 21

Total field trips spring 2008 was 4 (classes combine for field trips)

In addition a condensed adaptation of the Clean Creeks in the Classroom curriculum was provided to:

- 1) 300 students via the collaboration with the Kids & Creeks Program and Big Chico Creek Watershed Alliance. A runoff pollution prevention/ water monitoring station was conducted at four additional Kids & Creeks field trips for classes that did not receive the Clean Creeks in the Classroom Program classroom instruction.
- 2) 240 students were provided with the Enviroscope Model demonstration and key educational messages of the Clean Creeks in the Classroom Program curriculum at the Chico Science Fair in April 2008.

See Appendix PE II-A

City Officials

Provide information to City Council regarding upcoming community events and encourage City Council participation starting with one event in 04-05 and up to three events per year

On August 20, 2007, the City Council was given a list of all the public events for the year and all were invited to attend.

See Appendix PE III-A

Annual City Council Update

Provide City Council with copies of the annual report as they are submitted to the RWQCB once per year

The City Council was provided with a copy of last year's report and will receive a copy of this report.

See Appendix PE III-B

Department Partnership

City Staff have e-mailed the dates of booth events and also community creek clean-up events to Department Heads. To date no Department heads have participated in any booth events. The community creek clean-up events are advertised in local papers and media.

Storm Water Quality Task Force

1) *Continue participation in the California Storm Water Task Force*

The City is proposing to modify this element requiring attendance at two meetings per year to attending only those meetings having topics of interest to the City. The California Storm Water Quality Task Force (CASQA) used to hold four meetings per year, two in Sacramento and two in Southern California, but this is no longer the case. During this permit term, the City did attend the CASQA Conference in September of 2007. See Appendix PE IV-A

2) *Continue to work with other Chico Area NPDES II Permittees. Attempt to schedule regular meetings with a minimum of two meetings per year*

Only one other NPDES permit holder in the Chico area exists - Butte County. We met once in the 2005-06 fiscal year and plan to schedule regular meetings starting in the 2006-07 year. Since there is only the City and Butte County, meetings have taken place over the phone and not in person. Discussions take place as needed.

iii. APPROPRIATENESS

Storm Drain Stenciling

Storm drain stenciling is an important part of the program. Many people are not aware that storm drains flow directly to creeks. Some people think that the storm drains flow to the City's Water Pollution Control Plant. Storm drain stenciling is appropriate in that it helps educate Chico's population on the final destination of storm drain flow.

Clean Water Business Partners

Businesses can be a significant source of urban runoff pollution. Developing a list of these businesses is the first step in contacting and educating them on the importance of the proper use and disposal of their chemicals.

Community Events

Targeting citizens at community events is a good way to help educate the public. Developing a list of local environmental and watershed groups is an important first step in combining efforts to produce a successful community event program that includes the input from a number of groups.

Storm Water Website

The storm water website is a great way to keep Chico citizens informed about current programs and to obtain feedback for proposed programs. The majority of people today have computers, so this is a convenient way for them to find information.

Media Campaigns

Reaching the public through the media is a valuable tool in helping educate the public on the importance of clean water. The first step in creating a media campaign is to research costs to determine the most cost-effective way to reach the public.

Pet Wastre Control

It is important to educate the public that pet waste is a pollutant. Installing pet waste stations and informational signs help to educate the public of this pollutant

Public Knowledge Measurement Survey

The public knowledge measurement survey is one of the best tools to determine the effectiveness of the NPDES program. Results of this survey can then be tailored to meet the needs of the City's program.

City Officials

It is important to keep city officials informed of the program that we are implementing and its importance. We need to do this to help them understand how important the funding of the program is and to have them participate in events when they occur.

Storm Water Quality Task Force

In order to stay abreast of current technologies, it is important for the City to participate in the California Storm Water Quality Association (CASQA) and with other local Phase II permit holders. Working with other Phase II permittees will provide the opportunity to work together and share expenses whenever possible.

iv. EFFECTIVENESS

The effectiveness of an individual BMP can be difficult to determine. For many of the individual BMPs, such as the Clean Water Business Partners, it is much easier to quantify them than it is to measure their effectiveness. The number of contacts with the businesses and the number of brochures handed out can be counted, but their effect on the business owners and employees' behavior is difficult to determine; i.e., are the number of reported illicit discharges due to storm drain stenciling or from handouts at community events? At this point it is too early to determine the collective effectiveness of our BMPs.

Storm Drain Stenciling

The intended effectiveness of placing storm drain markers on storm drain inlets is to remind people that what they put into the inlet will end up in a creek and not the Water Pollution Control Plant.

Clean Water Business Partners

The intended effectiveness is to educate the potential polluting businesses not to pollute by the proper application of products and/or the proper disposal of substances to keep our local creeks clean.

Community Events

The intended effectiveness of participating in community events is to educate the residents of the community what they can do to help keep our local creeks clean.

Storm Water Website

The Storm Water website is intended to be a tool for keeping the Chico citizens informed about current programs and to obtain feedback for proposed programs.

Media Campaigns

The effectiveness of media campaigns is to educate the citizens of the community how or what they can do to help keep our local creeks clean.

Pet Waste Control

The intended effectiveness of installing pet waste stations is to educate and encourage the public to clean up after their pets.

Public Knowledge Measurement Survey

The public measurement survey is one of the best ways to determine the effectiveness of the NPDES Program, in part or in whole, which is why it is appropriate for the City’s Program.

Storm Water Quality Task Force

In order to keep abreast of current technologies, it is important for the City to participate in CASQA and other local Phase II permit holders. Working with other Phase II permittees will provide the opportunity to work together and share expenses when possible. This year three City employees attended the Annual CASQA Conference in Sacramento

2. PUBLIC INVOLVEMENT AND PARTICIPATION

BMP	Description	Status					
		Implementation	Not Applicable	Modified	Effective	Unknown	Not Effective
Public Meetings	Information about programs will be discussed at public meetings and made available on the City’s website to encourage participation and allow input to all programs being developed as part of the SWMP	X					
Community Water Body Cleanups	Continue to partner with local groups and sponsor two creek cleanups per year	X					

a. BMPs

i. GENERAL SUMMARY

The Public Participation Element of the City’s SWMP will allow the public to provide valuable input and assistance in implementing the program. Since the activities of the public within the Chico Urban Area produce the pollution, and the public funds the municipality, it is imperative that the public is given opportunities to play an active role in both the development and implementation of the NPDES Program. An active and involved community is crucial to the success of the City’s program. In 2006-2007 the

City started a Clean Water Business Partnership. Prior to starting the partnership, the City scheduled a meeting to gather input from the business owners to better understand their needs and problems and develop the clean water program in such a way that the businesses will be able and willing to participate.

ii. STATUS OF MEASURABLE GOALS

Public Meetings

- 1) *Information about programs discussed at public meetings or made available on the City's website*

The City is continuing to place items on the City's website for public comment. More important items, such as changes to City ordinances, will require public meetings. Two public meetings were held that focused on carpet cleaning and landscape companies.

Community Water Body Cleanups

- 1) *Continue to partner with local groups and sponsor two creek cleanups per year*

The City helps sponsor two creek cleanups a year. The City collaborated with Butte Environmental Council on a creek cleanup in September 2006 and April 2007. The creek clean-ups are performed by local environmental groups and volunteers. Butte Environmental Council estimates that over 8,000 lbs of trash are collected at these events.

iii. APPROPRIATENESS

Public Meetings

Public meetings and input are extremely important and appropriate to the success of the City's program. Since activities of the public within the Chico Urban Area produce pollution, and the public funds the municipality, it is imperative that the public be given opportunities to play an active role in both the development and implementation of the program.

Community Water Body Cleanups

Partnering and sponsoring creek cleanups is a good way to get the public involved. Partnering with local citizen groups helps foster a good working relationship between the City and these groups.

iv. EFFECTIVENESS

Public Meetings

Public meetings are the most effective way to allow citizens to present various

viewpoints and provide input concerning appropriate storm water management policies and program activities. Allowing the public to participate in the development of the NPDES Program ensures public buy-in and support.

Community Water Body Cleanups

The City has been participating in creek cleanups for many years. This has proved to be an effective way to involve the community and keep the creeks clean.

3. ILLICIT DISCHARGE DETECTION AND ELIMINATION

BMP	Description	Status					
		Implemented	Not Applicable	Modified	Effective	Unknown	Not Effective
Create Ordinance	Review current ordinances and determine where changes/additions are necessary	X					
Create Ordinance	Changes /additions made to ordinances and approved by Council			X			
Create Ordinance	Develop and implement an enforcement procedure and guidelines	X					
Identify Priority Areas	Review storm drain maps and identify outfalls which include industrial and manufacturing facilities within their tributary areas	X					
Identify Priority Areas	During dry weather, visually inspect and PH test all priority outfalls for illicit discharges and identify them for further investigation and enforcement as necessary	X					
Identify Priority Areas	Identify all non-priority outfalls and visually inspect and PH test	X					
Find the source	Trace any Illicit discharge identified upstream of initial discovery by visually inspecting manholes and drop inlets until the source is found			X			
Find the source	Make City website available for reporting illicit discharges that will automatically notify storm water personnel	X					
Find the source	Develop a 24-hour telephone reporting procedure for receiving illicit discharge reports	X					
Hazardous Waste Collection	Continue to promote the availability of the regional Household Hazard Waste Collection Facility	X					
Hazardous Waste Collection	Include one brochure promoting facility in water bill once per year	X					
Waste Oil Collection	Continue to promote the availability of the used oil collection facilities	X					

Waste Oil Collection	Include one brochure indicating hazards of illegal disposal of oil in water bill once per year	X					
Develop Storm Drain System Map	Continue to update the existing storm drain system map to show facilities as they are connected	X					

a. BMPs

i. GENERAL SUMMARY

The goal of the Illicit Discharge Detection and Elimination Element is to prevent non-storm water sources from entering the drainage system and from reaching waterways.

ii. STATUS OF MEASURABLE GOALS

Create/Revise Ordinances

1) *Review current ordinances and determine where changes/additions are necessary*

A section in the Chico Municipal Code (Code) dealing with the disposal of waste in creeks, channels, or other watercourses was reviewed in 03-04 and will require some changes/additions.

2) *Changes/additions made to the ordinance and approved by Council*

The Ordinance has been created and is going to the City Council in August of 2008. The new ordinance incorporates all items required by the State permit plus items indicated in Attachment 4 of the State permit.

See Appendix ID I-A for the proposed Ordinance

3) *Develop and implement an enforcement procedure and guidelines*

The City currently employs a Code Enforcement Department which enforces all City codes. Inspection staff have the authority to “stop work” on a property which does not implement or maintain BMP’s. As the Code is revised, Code Enforcement will enforce the new rules.

Identify Priority Areas

1) *Review storm drain maps and identify outfalls which include industrial and manufacturing facilities within the tributary area*

The City has mapped its entire storm drain system within the sphere of influence and identified each outfall and its tributary area. Using GIS, all parcels zoned as industrial and manufacturing have been identified and overlaid on the outfall tributary areas. All outfalls having manufacturing and industrial areas within their tributary areas have been identified.

- 2) *During dry weather flow, visually inspect and PH test all priority outfalls for illicit discharges and identify them for further investigation*

In September 2005, all priority outfalls were inspected. Of the forty priority outfalls, fourteen had a flow but did not have a high PH, odor, or sheen.

- 3) *Identify all non-priority outfalls and visually inspect and PH test for illicit discharges*

All outfalls within the City's sphere of influence have been mapped and all non-priority outfalls identified. The non-priority outfalls were inspected in 2006-2007

See Appendix ID II-A For outfall reports

Find the Source

- 1) *Trace any illicit discharge identified upstream of the initial discovery until the source is found*

No non-priority outfalls had odor, or sheen. After reviewing the inspection sheets and discussing with Timmarie Hamill who preformed the outfall inspection and also is in charge of the Citizen monitoring Program, has indicated the PH levels of the outfalls are "inline" with the PH of the creeks. City staff has determined from the results of the monitoring, that at the time of the monitoring, there were no illicit discharges taking place and no further inspections were needed at that time.

The City has developed a 24 hour "hotline" 530-891-6459 to take illicit discharge reports. The City also has a website to report illicit discharges.

See Appendix ID II-A for outfall reports

Hazardous Waste Collection

- 1) *Continue to promote the availability of the regional Household Hazardous Waste Collection Facility*

In 1996 the City opened the Household Hazardous Waste Collection Facility. The opening of the facility was promoted by newspaper ads and a brochure included in water bills. In 2002, Butte County took over the facility. Information about the facility has been added to the City's website.

- 2) *Include one brochure in the water bill once per year promoting the facility*

Last year the City included one brochure promoting the Household Hazardous Waste Collection Facility with local water bills. In 2006-2007 a Cal Water brochure was mistakenly not sent out regarding the Hazardous Waste.

Waste Oil Collection

- 1) *Continue to promote the availability of the used oil collection facilities*

The City has listed and mapped all facilities that accept used oil and made this information available on the City's website.

- 2) *Include one brochure in the water bill once per year promoting the facilities and inform the public of the hazards with illegal disposal of waste*

This year the City included one brochure informing the public of the hazards associated with illegal dumping, but did not send out a flyer with the locations listed. But the facilities are identified on the City's website.

Develop Storm Drain System Map

Continue to update the existing storm drain system map to show facilities as they are constructed

The City has mapped all of the storm drain facilities in its sphere of influence and will continue to update the map as construction plans are completed.

iii. APPROPRIATENESS

Create/Revise Ordinance

With an ordinance that addresses illicit discharges, the City will have the means to enforce illicit discharge laws. Reviewing the City's ordinances is the first step in determining if changes in the Code are required.

Identify Priority Areas

Manufacturing and industrial sites have a higher likelihood of having illicit discharges. The City has identified those outfalls having manufacturing and industrial uses within their tributary areas as being priority outfalls.

Find the Source

The whole purpose of this section is to find illicit discharges and stop them from occurring. Only by locating them can they be stopped.

Hazardous Waste Collection

With the promoting of the Household Hazardous Waste Collection Facility, the City is attempting to inform and educate the public of the proper way of disposing of many of the chemicals found around their homes.

Waste Oil Collection

With the promoting of those facilities willing to take used oil, the City is trying to inform and educate the public of the proper means to dispose of used oil.

Develop Storm Drain System Map

The development and upkeep of the City's storm drain map will help the City find illicit discharges when they occur.

iv. EFFECTIVENESS

Create/Revise Ordinance

The effectiveness of reviewing the City's ordinances is to determine those areas needing revision to give the City the tools it needs to enforce and eliminate illicit discharges.

Identify Priority and Non-Priority Areas

The effectiveness of identifying priority and non-priority outfalls establishes a starting point for inspecting outfalls.

Find the Source

The effectiveness of finding the source defines this part of the permit. Finding illicit discharges and stopping them will help keep the creeks clean.

Hazardous Waste Collection

The effect of promoting the existence of the Household Hazardous Waste Collection Facility on the City's website is to educate the public on its existence.

Waste Oil Collection

The effect of promoting the used oil collection facilities on the City's website is to educate the public on its existence.

Since the storm drain maps show both the storm drain lines and tributary areas, they allow the search for the source of an illicit discharge detected at the outfall to be limited to a certain area.

2. CONSTRUCTION SITE STORM WATER CONTROL

BMP	Description	Status					
		Implemented	Not Applicable	Modified	Effective	Unknown	Not Effective
Update Ordinances	Review existing ordinances to determine where changes/additions need to be made	X					
Update Ordinances	Create ordinance to include construction site runoff including erosion/sediment control and construction site materials and waste controls	X					
Update Development Standards	Review existing construction Development Standards to determine where changes/additions are required	X					
Update Development Standards	Revise development standards to include construction related erosion, sediment and pollution control BMP's	X					
Update Development Standards	Implement attachment 4 design standards			X			
Plan Review and Approval	Require certification of land disturbance of a project	X					
Plan Review and Approval	Review and ensure that improvement plans meet City Development Standards	X					
Inspection/Training	Inspect construction sites for compliance with approved SWPPP's and inspectors trained in proper installation of BMP's	X					
Enforcement	Beginning enforcement of ordinance	X					
Record Keeping	Develop record keeping and data management procedure for evaluating construction element activities and reporting	X					
Developer Assistance	Keep developers informed about technical resources, policies and requirements	X					
City Staff Assistance	Keep City staff informed about technical resources, policies and requirements	X					

a. BMPs

i. GENERAL SUMMARY

The goal of the Construction Site Storm Water Runoff Control Element is to reduce the discharge of storm water pollutants to the maximum extent practicable by requiring construction sites to reduce sediment in onsite runoff and to require construction sites to reduce other pollutants such as litter and concrete wastes through good housekeeping procedures and proper waste management.

ii. STATUS OF MEASURABLE GOALS

Update Ordinances

- 1) *Review existing ordinances and determine where changes/additions need to be made*

With an ordinance that addresses construction site storm water control, the City will have the means to enforce that adequate BMPs are in place. A review of the City's ordinances was completed in year 03-04. The City currently requires all developments of one acre or more to have a SWPPP approved by the State prior to beginning construction. The City has developed a BMP manual that requires the contractor to install BMP's.

- 2) *Create Ordinance to include construction site runoff controls*

The City already requires construction site BMP's. The City code is more stringent than State requirements and requires BMP's for all construction sites regardless of size.

Update Development Standards

- 1) *Review existing construction Development Standards and determine where changes/additions are required*

The Development Standards as addressed in Attachment 4 have been reviewed. It has been determined that additions are required.

- 2-3) *Revise Development Standards to include construction related erosion, sediment and pollution BMP's*

Revisions to Development Standards are being reviewed by the City Attorney and are scheduled to go to the City Council in December, 2007.

Plan Review and Approval

- 1) *Require certification of land disturbance of the project*

When projects are submitted to the City, the size of the area and amount of grading are already required. The City code already requires a grading permit for any land disturbance.

- 2) *Review and ensure that improvement plans meet City standards*

The City currently reviews all development and building plans for compliance with City standards.

Inspection/Training

- 1) *Inspect construction sites for compliance with approved SWPPPs and inspectors trained in proper installation of BMP's*

In October 2006, the City and County of Butte held a joint meeting to train inspectors through a course put on by the National Stormwater Center. The National Stormwater Center issued each participant a Certified Stormwater Inspector card as evidence of the training.

Enforcement

Begin enforcement procedures

The City is currently enforcing the storm water discharge violations to the ability of the Chico Municipal Code.

Developer Assistance

Keep developers informed about technical resources, policies, and requirements

The City has sponsored many training classes for developers and contractors to train them in the proper installation of BMP's and to educate them on City and State requirements. Trained City staff also help educate them when something is found to be a violation in the field. The City has another developer/contractor training class scheduled for September 26 and 27, 2007.

City Staff Assistance

Keep developers informed about technical resources, policies, and requirements

In October 2006, the City and County of Butte held a joint meeting to train inspectors in the proper installation of BMP's.

iii. APPROPRIATENESS

Update Ordinances

The appropriateness of reviewing the City ordinances is to determine the need for revisions in order to give the City the tools necessary to properly enforce construction site runoff.

Update Development Standards

The appropriateness of reviewing the City's Development Standards is to determine the need for revisions that will give the City the tools it needs to enforce them. Over the next three years, the Development Standards will be revised to include items identified in Attachment 4 of the General Permit.

Plan Review and Approval

The appropriateness of reviewing development plans is to make sure they meet City standards. The City currently conducts plan reviews.

Inspection/training

Inspection and training is required so inspectors can determine whether BMP's are installed correctly.

Enforcement

Without the ability to enforce the BMP requirements, the City has no leverage to force a developer/contractor to comply with City code.

Developer Assistance

It is extremely important to make the developers more aware of what needs to be done to comply, rather than taking enforcement action against them. If positive approaches are taken to help the developers, they will be more willing to comply.

iv. EFFECTIVENESS

Update Ordinances

The effectiveness of reviewing the City ordinances is to determine the need for revisions in order to give the City the tools it needs to enforce construction site runoff violations.

Update Development Standards

The effectiveness of reviewing the City Development Standards is to determine the need for revisions in order to give the City the tools it needs to enforce the Development Standards. Over the next three years, Development Standards will be revised to include the items identified in Attachment 4 of the General Permit.

Plan Review and Approach

The effectiveness of reviewing development plans is to make sure that they meet City standards. The City currently conducts plan reviews.

Inspection/training

Inspection and training are required so inspectors can determine whether BMP's are installed correctly.

Enforcement

Without the ability to enforce the BMP requirements, the City has no leverage to force a developer/contractor to comply with City Code.

Developer Assistance

It is extremely important to make the developers more aware of what needs to be done to comply, rather than taking enforcement action against them. If positive approaches are taken to help the developers, they will be more willing to comply.

5. POST-CONSTRUCTION STORM WATER MANAGEMENT

If your community is subject to Attachment 4 (Supplemental Provisions) of the General Permit, note your compliance with and progress implementing the Design Standards in this section, if applicable.

BMP	Description	Status					
		Implemented	Not Applicable	Modified	Effective	Unknown	Not Effective
Regulatory mechanism	Review current ordinance/policies requiring implementation of post construction storm water runoff controls and determination if changes/additions are required	X					
Regulatory mechanism	Changes/Additions to Design Standards			X			
Regulatory mechanism	Enforcement of Attachment 4			X			
Review and Approval Procedures	Continue to require post construction BMPs for new development or redevelopment that disturbs one acre or more of land	X					
Review and Approval Procedures	Train plan reviewers on Attachment 4			X			
Update Standards in Accordance with Attachment 4 of the General Permit	Review current City Design Standards	X					
Update Standards in Accordance with Attachment 4 of the General Permit	Determine what changes/additions to Design Standards are required	X					
Update Design Standards in Accordance with Attachment 4 of the General Permit	Meet with each City department affected by changes to Design Standards and gather input on changes/additions	X					
Update Design Standards in Accordance with Attachment 4 of the General Permit	Implement Attachment 4 additions			X			

Update Design Standards in Accordance with Attachment 4 of the General Permit	Provide Staff with attachment 4 training			X			
Construction Inspection	Continue to inspect construction of water quality facilities to ensure they are installed according to specifications	X					
Monitoring Long Term Compliance	Develop a GIS database to map locations and type of structural BMP's	X					
Monitoring Long Term Compliance	Create ordinance/policy to require annual inspections of BMP's			X			
Monitoring Long Term Compliance	Develop enforcement procedure for non-compliance with inspection/repair			X			
Developer Assistance	Update developers/contractors on proper design installation and inspection of BMP's	X					
Staff Assistance	Update developers/contractors on proper design installation and inspection of BMP's	X					
BMP Research	Research alternative and innovative BMP's	X					

a. **BMPs**

i. **GENERAL SUMMARY**

Post-construction storm water management in areas undergoing new development or significant redevelopment is necessary because runoff from these areas has been shown to significantly affect receiving water bodies. Many studies indicate that prior planning and design for the minimization of pollutants in post-construction storm water discharges are the most cost-effective approaches to storm water quality management.

ii. **STATUS OF MEASURABLE GOALS**

Regulatory Mechanism

- 1) *Review current ordinance/policies requiring implementation of post-construction storm water runoff controls and determine where changes are required, if any*

The City currently requires all new development and redevelopment, even less than one acre, to treat the first one-half inch of rainfall for water quality.

- 2) *Changes/additions to ordinance/policies made and in place*

Changes are being reviewed by the City Attorney and are scheduled to go to Council in December, 2007.

- 2) *Inspection and enforcement procedures for Attachment 4 in place*

As soon as the code is approved by the City Council it will go into effect where the City's code enforcement and plan checkers will implement and enforce Attachment 4.

Review and Approval Procedures

- 1) *Continue to require post-construction BMPs for new development or redevelopment that disturbs one acre or more of land*

The City currently requires all new development and redevelopment, even less than one acre, to treat the first one-half inch of rainfall for water quality. This is a requirement of the Development process.

- 3) *Train plan reviewers on Attachment 4 requirements*

Affected City staff who review plans have been provided with a copy of Attachment 4 to review. When Council approves the additions to the Code, a reminder along with a copy of the code and Attachment 4 will be distributed.

Update Standards in Accordance with Attachment 4 of the General Permit

1) *Review current Design Standards*

The City code addressing design standards has been reviewed, and major additions will be required as indicated in Attachment 4 of the General Permit.

2) *Determine what changes/additions to the Design Standards are required*

The design standards as set forth in the Chico Municipal Code have been reviewed with changes to be made by year 2006/07. Changes and additions have been determined this year and are going to Council for approval.

4) *Meet with each City Department affected by the changes to Design Standards and gather input on changes/additions*

This item was not accomplished in 2005-06. Attachment 4 was circulated to all City Departments in the Fall of 2006.

4-5) *Implement changes/additions to design standards*

City staff that review plans have all been given Attachment 4 to review. When Council approves the additions to the Code, a reminder along with a copy of the code and Attachment 4 will be distributed

Construction Inspection

1) *Continue to inspect construction of water quality facilities to ensure that they are installed according to specifications*

City inspectors currently inspect water quality BMP facilities to ensure that it complies with what was approved plans.

Monitoring Long Term Compliance

1) *Develop a GIS database to map locations and type of structural BMP's*

The City has created a GIS layer into which BMP information can be entered. The City is actively entering new BMP's on the layer and researching the locations where existing private BMP's exist.

2) *Create Ordinance/policy to require annual inspection of BMP's*

Changes are being reviewed by the City Attorney and are scheduled to go before the City Council in December, 2007.

- 3) *Develop enforcement procedure for non compliance with inspections/repairs*

As soon as the code is approved by the City Council it will go into effect where the City's code enforcement and plan checkers will implement and enforce Attachment 4.

Developer Assistance

- 1) *Keep developers/contractors up to date on proper design installation and inspection of BMP's*

In March 2005, the City and County of Butte held a joint meeting to train inspectors and developers/contractors in the proper installation of BMP's and to establish expectations. The City also has informational flyers at the front counter to help educate developers and contractors. City inspectors help inform developers when they inspect and find deficiencies. On September 26 and 27, 2007 another joint training course will be conducted for local developers and contractors.

Staff Assistance

- 1) *Inform and update staff on proper design installation and inspection of BMP's*

In March 2005, the City and County of Butte held a joint meeting to train inspectors and developers/contractors in the proper installation of BMP's and to establish expectations. In October, 2006 City inspectors were trained and received a Certified StormWater Inspector Certificate. City staff will also attend the training course in September, 2007.

BMP Research

- 1) *Research alternative and innovative BMP's*

The City attends CASQA meetings to keep up with current BMP technologies.

iii. APPROPRIATENESS

Regulatory Mechanism

Without a regulatory mechanism in place, the City would be unable to enforce the installation of post-construction BMP's.

Review and Approval Procedures

It is appropriate to require and plan check BMPs to ensure they meet the City's standard of treating the first half-inch of runoff.

Update Standards in Accordance with Attachment 4 of the General Permit

Reviewing the City's current Design Standards is appropriate for determining where revisions are needed in order to provide the tools the City needs to implement them.

Construction Inspection

It is appropriate to inspect the construction of the BMPs to ensure they are constructed to plan specifications and will work properly.

Monitoring Long Term Compliance

If BMPs are not maintained, they will not function as required; therefore regular maintenance is important.

Developer Assistance

It is extremely important to make the developer more aware of what needs to be done to keep their BMP in good working order.

BMP Research

Learning about new and evolving technologies is important so that the most economical means of keeping storm water clean is achieved.

iv. EFFECTIVENESS

Regulatory Mechanism

Without a regulatory mechanism in place, the City would be unable to enforce the installation of post-construction BMP's.

Review and Approval Procedures

The review and approval process is effective in ensuring that each development includes water quality facilities that are sized appropriately.

Update Standards in Accordance with Attachment 4 of the General Permit

Implementing Design Standards will help reduce non-storm water from entering the storm drain system. When fully implemented, they will have an effect on water quality coming from all future developments.

Construction Inspection

Construction inspection assures that the BMPs are being installed correctly. It is appropriate to inspect all work to ensure that construction is in conformance with the plans.

Monitoring Long Term Compliance

If BMPs are not maintained, they will not function as required; therefore, regular maintenance is important.

Developer Assistance

It is extremely important to make the developer more aware of what needs to be done to keep their BMP in good working order.

BMP Research

Learning about new and evolving technologies is important so that the most economical means of keeping storm water clean is achieved.

6. POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

BMP	Description	Status					
		Implemented	Not Applicable	Modified	Effective	Unknown	Not Effective
Municipal Facility SWPPs	Develop a list of all City facilities	X					
Municipal Facility SWPPs	Conduct review of all City facilities and determine which ones need SWPPP's developed	X					
Municipal Facility SWPPs	Develop SWPPP's for City facilities Identified	X					
Municipal Activity Education	Review City facilities and develop a list of activities that may contribute to storm water pollution	X					
Municipal Activity Education	Develop/obtain information for each type of activity identified	X					
Municipal Activity Education	Disseminate information to city maintenance staff	X					
New Facility BMPs	Require storm water BMPs on all new City facilities	X					
Non-Storm Water Discharges	Identify and characterize non-storm water discharges	X					
Non-Storm Water Discharges	Obtain Regional Water Quality Control Board approval for non-storm water discharges when recognized	X					
Street Sweeping	Continue the City's street-sweeping program and document number of miles swept	X					
Drainage System Maintenance	Continue storm drain maintenance activities and document activities	X					

Structural Control Operation and Maintenance	Continue to maintain City-owned water quality facilities and document activities	X					
Employee Training Program	Research the availability of training material for reducing pollution for employee activities	X					
Employee Training Program	Conduct one training session per year for each activity that has the potential for adding pollution	X					
Employee Feedback Program	At each training session provide City staff the opportunity to make suggestions on how to reduce pollution for the activities they perform	X					

a. BMPs

i. GENERAL SUMMARY

The purpose of the Municipal Operation Section is to develop an operation and maintenance program that will prevent or reduce pollutant runoff from municipal operations.

ii. STATUS OF MEASURABLE GOALS

Municipal Facility SWPPPs

1) *Develop a list of all City facilities*

Staff compiled a list of all City facilities, three of which are currently covered under separate NPDES permits. These facilities include the Chico Municipal Airport, Water Pollution Control Plant, and the Municipal Services Center, leaving the Fire and Park Departments, Chico Municipal Center, and Municipal Parking Lots.

4) *Conduct review of all City facilities and determine which ones need SWPPP's developed*

We have reviewed City facilities and determined that SWPPP's are not required unless areas larger than an acre are disturbed. SWPPP's will be obtained on an individual project basis since projects can not be anticipated ahead of time. This plan of obtaining SWPPP's applies to all new City facilities, the park, and two regional water quality facilities. As stated above, three large city facilities are covered by their own NPDES permit. The Chico Municipal Center was constructed with water quality features. The municipal parks are best covered by employee training on proper maintenance practices. The Municipal Parking lots will be retrofitted with water quality devices as reconstruction of the facilities begin. In the meantime any spills will be cleaned up under current City of Chico practice. These practices usually evolve hiring a company such as A-C Industrial Services to conduct the clean-up and file all required reports to the State of California.

Municipal Activity Education

- 1) *Review City facilities and develop a list of activities that may contribute to storm water pollution*

The City obtained training material for Municipal Services Center (MSC) crews, including various departments such as park and street maintenance. This information is presented once a year to the MSC employees during one of their monthly meetings. Fire Department personnel are trained in spill prevention and clean-up.

New Facility BMPs

Require storm water BMPs on all new City facilities

The City currently requires all new development and redevelopment to construct storm water BMPs. This requirement extends to City facilities.

Non-Storm Water Discharges

Obtain Regional Water Quality Board approval for non-storm water discharges when recognized

The City will obtain approval from the Regional Water Quality Control Board for non-storm water discharges when recognized. A list of approved non-storm water discharges are indicated in the proposed Code changes that will go to the City Council for approval in December of 2007.

Street Sweeping

Continue the City's street-sweeping program and document activities

The City has an extensive street-sweeping program that covers the entire City. The zones and days of the week streets are swept are available on the City's website. Some City streets do not have shoulder paving and are therefore not swept. On average, the City sweeps roughly 215 miles per year.

Drainage System Maintenance

Continue storm drain maintenance activities and document activities

The City's maintenance crew maintains the City's storm drain system. During the past year City crews cleaned 108 storm water hydrodynamic separators, 123 manholes/catch basins/drywells, 350 drop inlets, 18,281 liner feet of storm drain line, and removed 395.75 cubic yards of debris

Structural Control Operation and Maintenance

Continue to maintain City-owned water quality facilities and document activities

The City's maintenance crew maintains the City's storm water quality facilities. Each

City-owned BMP is within a maintenance district which was formed for the purpose of maintaining the BMP. The City Parks Department contracts for maintenance and cleaning of detention basins. Maintenance of other types of storm water quality devices is completed by City crews on an annual basis.

Employee Training Program

The City's Municipal Services Department conducts a training program that consists of training materials for each type of activity they are involved with.

iii. APPROPRIATENESS

Municipal Facility SWPPs

It is appropriate to develop a list of all the City facilities in order to determine which facilities have the potential for contributing to pollutant runoff and to create a storm water pollution prevention plan for these sites.

New Facility BMPs

All new facilities are required to install water quality facilities that will treat the first half-inch of storm water runoff. This is appropriate to help reduce first-flush pollutants.

Non-Storm Water Discharges

It is appropriate to keep the State informed of all recognized non-storm water discharges.

Street Sweeping

Trash and litter in the street end up being washed into the storm drains. It is appropriate to sweep the streets to remove as much of this trash and litter as possible before it reaches the storm drains.

Drainage System Maintenance

Trash and litter making their way into the storm drain system need to be cleaned out. Since the downtown area has the highest concentration of street litter, City crews concentrate on cleaning those storm drain lines prior to the first seasonal rainfall.

Structural Control Operation and Maintenance

The structural control BMPs need to be maintained in order to operate correctly and continue to treat the first-flush pollutants.

iv. EFFECTIVENESS

Municipal Facility SWPPs

In order to determine which City facilities require SWPPs, the first step is to inventory all City facilities.

New Facility BMPs

Treating the first half-inch of runoff is effective in helping reduce first-flush pollutants.

Non-Storm Water Discharges

If the City recognizes a non-storm water runoff caused by the City, the City will notify the Regional Water Quality Control Board.

Street Sweeping

Street sweeping is an effective way to reduce trash and litter from getting into the storm drain system and therefore into the streams.

Drainage System Maintenance

Maintaining and cleaning the storm drain system is an effective way to reduce trash and litter that has made its way into the storm drain system from getting into the streams.

Structural Control Operation and Maintenance

Maintaining and cleaning the storm water structural controls is an effective way to keep the facilities working correctly.

E. 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."

Signature of Permittee (legally responsible person)

Date Signed

Name (printed)

Title