

**NAPA COUNTY STORMWATER MANAGEMENT PROGRAM
(NCSWMP)**

ANNUAL REPORT

FY05/06

MEMBER AGENCIES

CITY OF NAPA
TOWN OF YOUNTVILLE
CITY OF ST. HELENA
CITY OF CALISTOGA
NAPA COUNTY

FOR MORE INFORMATION, PLEASE CONTACT THE
NAPA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
AT 707-259-8600.

TABLE OF CONTENTS

INTRODUCTION	1
BACKGROUND	3
SUMMARY AND EVALUATION FOR FY04/05	3
ELEMENT I – PUBLIC EDUCATION AND OUTREACH	3
ELEMENT II – PUBLIC INVOLVEMENT AND PARTICIPATION	12
ELEMENT III – ILLICIT DISCHARGE DETECTION AND ELIMINATION	14
ELEMENT IV – CONSTRUCTION SITE RUNOFF CONTROL	24
ELEMENT V – POST-CONSTRUCTION RUNOFF MANAGEMENT	30
ELEMENT VI – MUNICIPAL OPERATIONS	36
GOALS AND MODIFICATIONS FOR FY05/06	44
GLOSSARY	48
ABBREVIATIONS	49

TABLES.

OVERVIEW OF MEASURABLE GOALS FOR FY04/05

TABLE 1. OVERVIEW OF MEASURABLE GOALS (COUNTY-WIDE PROGRAM)

TABLE 2. OVERVIEW OF MEASURABLE GOALS (LOCAL PROGRAMS)

TABLE 3. GOALS AND MODIFICATIONS FOR FY06/07.

APPENDIXES

APPENDIX A – CREEK CARE BROCHURE

APPENDIX B – CARING FOR CREEKS CALENDAR

APPENDIX C – COAST AND CREEK CLEANUP DAY REPORT

APPENDIX D – NAPA COUNTY ILLICIT DISCHARGE RESPONSE REPORT

APPENDIX E – NAPA COUNTY CONSTRUCTION BMP IMPLEMENTATION REPORT

APPENDIX F – POST-CONSTRUCTION BMP PRESENTATION

APPENDIX G – SWIMMING POOL, FOUNTAIN AND SPA MAINTENANCE BMPs

INTRODUCTION

The Cities of Napa, St. Helena, Calistoga, Town of Yountville, and Napa County, collectively referred to as the Napa County Stormwater Management Program (NCSWMP) agencies, submitted an NOI and a Stormwater Management Plan (SWMP) to the Regional Water Quality Control Board (RWQCB) on March 10, 2003 to comply with the Phase II Municipal Stormwater regulations. This was the initial phase of the process to gain coverage under the Phase II Stormwater Permit (Phase II Permit).

After reviewing the SWMP, the RWQCB submitted comments and a request for clarifications regarding the content of the SWMP. These comments were used to improve the clarity of the plan and to add goals that were deemed lacking. The plan was resubmitted to the RWQCB in December of 2003 and the RWQCB staff approved the SWMP. The SWMP was posted on the State Water Resources Control Board (SWRCB) website for public review and comment before adoption by the RWQCB. Public notices also ran in three local newspapers once per week for three weeks during the 60-day public comment period. Baykeeper requested a public hearing near the end of the comment period to request a public hearing. Baykeeper requested that two programs be added to the SWMP, an outfall monitoring program and an Integrated Pest Management (IPM) program. The NCSWMP agencies did not wish to modify the SWMP to include an outfall monitoring program because the Phase II permit does not require such monitoring, the SWMP already includes a voluntary water quality monitoring program, and the large variability in pollutant concentrations in outfall samples requires that many samples be taken to gather meaningful data. The NCSWMP agencies also did not want to modify the SWMP to include an IPM program because many of the SWMP elements include IPM practices, such as landscape and park maintenance and corporation yards. As a result of these clarifications, Baykeeper withdrew its request for a public hearing and the RWQCB issued coverage under the Phase II permit to the NCSWMP co-permittees for a Napa County-wide Stormwater Management Program (County-wide Program) on May 20, 2004.

In order to fund the County-wide Program, each of the Local Programs entered into a Joint Powers Authority (JPA) administered by the Napa County Flood Control and Water Conservation District (NCFWCWD). The JPA was adopted with an initial (first-year) budget of \$100,000 and each Local Program provided funds based upon population and BAU. The purpose of the JPA is to allow the Local Programs to combine their resources to implement programs that promote pollution prevention practices within each of their jurisdictions.

This Annual Report covers the period from July 1, 2005 through June 30, 2006, which represents the 3rd year of the program. The majority of the 3rd year measurable goals involved continued program development and training. As the program matures, evaluation of the effectiveness of these and future accomplishments at reducing water pollution in Napa County will become part of the annual goals for the program.

Overview of Major Accomplishments for FY03/04.

The majority of the 1st year measurable goals involved program development and training. The major accomplishments included:

1. Developed lesson plans and activities and piloted them at 3 schools.
2. Sponsored two Kids in Creeks workshops to provide teachers resources and training on creek and water quality.
3. Participated in the Our Water Our World program to encourage the use of less-toxic pest control methods.
4. Hosted 3 creek cleanup events that had over 300 participants and removed more than 8,000 pounds of trash from Napa County waterways.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

5. Collected over half a million pounds of household hazardous waste at the Napa-Vallejo Collection Facility and at upvalley collection events.
6. Developed a draft BMP field guide for surface cleaners.
7. Established authority to prohibit illicit discharges and require runoff controls for development projects
8. Developed an enforcement response plan for enforcing the local stormwater ordinances.
9. Provided outreach materials and explained stormwater requirements to all the restaurants in Napa County.
10. Co-sponsored a Construction Site Planning and Management workshop in Napa and sponsored an additional workshop in Calistoga.
11. Developed a draft Stormwater Standards Maintenance Manual that includes standards and BMPs for street sweeping, storm drain maintenance, stormwater pump stations, road and street maintenance, and creek and ditch maintenance. Local Program staff were trained on the standards and the BMPs in the manual.

Overview of Major Accomplishments for FY04/05.

1. Gave lessons on water quality and pollution prevention to 13 elementary school classes, 1 middle school class, 4 high school classes, and 2 college classes.
2. Staffed a booth with water quality-related information at nine community events.
3. 309 volunteers removed 6,640 pounds of trash and debris from Napa County waterways on Coast and Creek Cleanup Day.
4. Stormwater inspection checklists for food service and business plan facilities were piloted and revised based upon feedback from the inspectors.
5. An illicit discharge database was developed to track complaints, investigations, and follow-ups and to evaluate the effectiveness of the SWMP.
6. A draft construction Site Runoff Control Policy was developed and is in the process of being adopted by Local Program.
7. Local Programs began to implement the construction inspection program.
8. A database and checklist for construction site inspections was developed.
9. A draft Post-Construction Runoff Control Requirements policy was developed and the City of St. Helena adopted it.
10. A design, construction, and maintenance of rural roads workshop was held for municipal staff and the general public.
11. Operation and maintenance standards were developed for park and recreation facilities.

Overview of Major Accomplishments for FY05/06

1. Gave lessons on water quality and pollution prevention to 21 elementary school classes, 4 middle school classes, and 2 college classes reaching over 600 students.
2. Staffed a booth with water quality-related information at 5 community events.
3. 400 volunteers removed 5,410 pounds of trash and debris from Napa County waterways on Coast and Creek Cleanup Day.
4. Continued inspections of Food Service Facilities and Business Plan Facilities.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

5. Local Programs continued implementation of the construction inspection program.
6. The City of Napa adopted the Post-Construction Runoff Control Requirements developed by the County-wide Program.
7. Operation and maintenance standards were developed for swimming pool, fountain, and spa maintenance.

BACKGROUND

Napa County encompasses 754 square miles of land and has a population of 124,279 with approximately 78% of its citizens living in the incorporated areas of American Canyon, Napa, Yountville, St. Helena, and Calistoga. There are two major watersheds in Napa County: the Napa River and Putah Creek Watersheds. Most of Napa County's citizens (approximately 95%) live in the Napa River watershed. For this reason, most of the NCSWMP activities are focused in the Napa River Watershed. The Napa River is 55 miles long and drains an area of 426 square miles. With the exception of 35 square miles in Solano County, the entire Napa River watershed is within the boundaries of Napa County. It is bordered by Mt. St. Helena to the north, Coastal Range and Mayacamas Range mountains to the west and east, respectively, and ultimately discharges to the San Pablo Bay to the south.

SUMMARY AND EVALUATION FOR FY05/06

ELEMENT I – PUBLIC EDUCATION AND OUTREACH

1. CHARACTERIZE GENERAL PUBLIC

TASK 1D – CONDUCT SURVEY

COUNTY-WIDE PROGRAM

Performance: Method of conducting survey developed. Measurable goal modified to conduct survey in FY06/07.

Two methods of establishing baseline data on the public's knowledge of stormwater issues were evaluated. The first was to distribute a survey in garbage bills and the second was to conduct a phone survey similar to the one conducted in Sonoma County. It was determined that the phone survey would provide the most accurate results and also provide the opportunity compare stormwater knowledge across the North Bay Area. The method of distributing the survey in garbage bill would not provide a representative sample of the county-wide education and outreach efforts because it is not possible to provide inserts into garbage bills outside the City of Napa. It was also determined that in order to determine the effectiveness of the county-wide program's education and outreach programs it is not necessary to obtain statistically valid samples within each of the Local Program's jurisdictions. By conducting the survey to target the County as a whole significant cost-savings will result and not compromise the usefulness of the survey at establishing baseline data to measure public awareness of stormwater issues over time.

The County-wide Program did not have sufficient funds to conduct the survey in FY05/06, however, the survey costs were included in the FY06/07 budget. The total cost of conducting the survey is \$20,000.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

Effectiveness: Not applicable.

2. OUTREACH TO LOCAL GOVERNMENT OFFICIALS

TASK 2C – ANNUAL PROGRESS REPORTS

COUNTY-WIDE PROGRAM

Performance: One presentation was given to the Napa County Flood Control and Water Conservation District Board.

The Flood Control Board includes the five Napa County Board of Supervisors, the Mayors from each of the five cities, and one council member from the City of Napa.

A power point presentation was given to the Flood Control Board on June 13, 2006. The presentation highlighted the SWMP accomplishments to date and major goals for FY 06/07. The presentation included examples of Post-Construction BMP (i.e. bioretention) to inform the Board of the post-construction BMP requirements that were adopted or are in the process of being adopted in their municipalities.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF NAPA

Performance: One presentation was given to the City Council.

Department of Public Works staff gave a presentation to the City Council on November 15, 2005 regarding stormwater issues.

The presentation covered the Phase II General Permit requirements, gave an overview of the SWMP accomplishments to date, and addressed potential costs for implementing future activities in the SWMP. SWMP issues were also presented prior to the City Council adopting the Post-Construction Stormwater Pollution Prevention Design Standards on June 20, 2006.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: One presentation was given to City Council after the annual report was completed.

Department of Public Works staff gave a presentation to the City Council on September 13, 2005 for the proposed Review and Approval of Policy for Storm Water Standards and Post Construction Site Runoff (Public Works Director)

The presentation reaffirmed the City's partnership in the Napa County Stormwater Management Program, reported on the quantifiable goals and stated the objectives of the policy to effectively prohibit non-stormwater discharges and minimize pollution in stormwater.

Effectiveness: Indeterminate.

LOCAL PROGRAM: NAPA COUNTY

Performance: One presentation was given to the Napa County Flood Control and Water Conservation District Board. All five members of the Napa County Board of Supervisors have seats on the Flood District Board.

A power point presentation was given to the Flood Control Board on June 13, 2006. The presentation highlighted the SWMP accomplishments to date and major goals for FY 06/07. The presentation included examples of Post-Construction BMP (i.e. bioretention) to inform the

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

Board of the post-construction BMP requirements that were adopted or are in the process of being adopted in their local jurisdictions.

Effectiveness: Unknown.

3. STORMWATER WEBSITE

TASK 3B – EVALUATE WEBSITE

COUNTY-WIDE PROGRAM

Performance: Website evaluated.

The County-wide Program continued to work with the Watershed Information Center and Conservancy (WICC) in developing and maintaining their website. Several modifications were made to better organize watershed information on the WICC website. The most useful feature on this website is the calendar in which groups can post upcoming workshops and events. Those who sign up as a user of the WICC website are sent e-mail notifications when new events are posted. The County-wide Program has used the WICC calendar to post a number of events including the Construction and Post-Construction Runoff Management workshops.

Although the WICC website is a useful tool for disseminating watershed-related information to the public, it does not provide enough emphasis on stormwater-related issues. To provide a one-stop shop for stormwater information applicable to Napa County businesses, the development community, and residents, the County-wide Program developed a stormwater website (www.napastormwater.org). The website includes stormwater-related information organized into five main sections: residential, commercial, development, schools, and creeks. The content for the first three categories is complete with the completion of the schools and creek elements scheduled for the summer of 2006.

Effectiveness: Unknown.

The development of a stormwater website is expected to be a useful tool for disseminating information. Residences, businesses, developers and contractors, and schools will be able to access stormwater hotlines, BMPs, and related regulations that are applicable to Napa County. The website will include a counter to tally the number of visits to the website. This will enable the County-wide Program to evaluate the public's awareness of the website or interest in stormwater issues in general.

4. COMMUNITY EVENTS

TASK 4A – DEVELOP BOOTH

COUNTY-WIDE PROGRAM

Performance: Two booths were developed to educate the public about water quality-related issues.

Our Water Our World (OWOW)

A booth on less toxic pest control was developed with the assistance of Annie Joseph of the OWOW program. The booth included the following OWOW factsheets: Ants, Mosquitoes, Snails and Slugs, Yellow Jackets, Healthy Lawns, Healthy Roses, and Healthy Gardens. Free samples of Sluggo were provided to the public to try at home. A collection of common "beneficial" and "pest" insects was also on display at the booth.

Non-native Invasive Weeds

A booth was developed to educate the public about the threat of non-native invasive weeds. The booth included samples of common weeds found in Napa County, including several

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

invasive weeds that invade riparian habitats. The riparian weed samples included Arundo, Tree of Heaven, Periwinkle, Himalayan Blackberry, Poison Hemlock, Tamarisk, and Acacia. The booth also included outreach materials on the impacts and control methods for specific weeds.

Effectiveness: Unknown.

TASK 4B – STAFF BOOTHS AT EVENTS

COUNTY-WIDE PROGRAM

Performance: Staffed booths at five community events.

Non-native Invasive Weeds (NIW)

The non-native invasive weeds booth was staffed at the St. Helena Farmer's Market in July of 2005 and the Napa Sustainable Winegrowers Group fundraiser in August 2005. There was a great deal of interest in the weed samples and many were surprised to learn that some of these plants are invasive weeds. Staff answered questions and informed the public on the origin of the weeds, their impacts, and how to control them. Many of the weed samples at the booth were of riparian weeds and special emphasis was given to how they degrade the riparian zone and often impact water quality by increasing bank erosion and stream temperatures.

Our Water Our World (OWOW)

The OWOW booth was staffed by the County-wide Program Coordinator at four events including Earth Day (Napa), Salvador Creek Watershed Awareness Day (Napa), "No-Tax Day" at Orchard Supply and Hardware, and the Napa Sustainable Winegrowers Group fundraiser. Annie Joseph, OWOW Program Coordinator, assisted with staffing the OSH "No-Tax Days" event and Earth Day. The insect collection was the strongest attraction to the OWOW booth. Many people recognized several insects in the collecting, but did not know what they were or whether they should kill them or not. The collection was organized into plant feeders, predators, and parasites and the CWPC answered questions about insects in the home and garden and espoused the virtues of beneficial insects at controlling pests. In cases where physical and management control methods are unsuccessful, staff recommended less-toxic products that are labeled with the OWOW shelf marker.

Several hundred OWOW booklets were handed out to visitors to these booths. One booklet is targeted for children and includes puzzles and games illustrate the importance of encouraging and protecting beneficial insects in the garden.

Effectiveness: Unknown.

The effectiveness of the booths at the community events may be evaluated over the long term with data collected from the public awareness surveys and from the illicit discharge response program.

TASK 4C – EVALUATE BOOTH

COUNTY-WIDE PROGRAM

Performance: Booths evaluated.

The booth was evaluated for its effectiveness at increasing awareness of stormwater-related issues despite not having public survey information. The public survey was rescheduled to FY06/07 (see Task 1D) and in the interim, some improvements were identified and will be incorporated into future booths at community events. The first is the need to broaden the public's awareness of the Local Program's stormwater hotlines. Future booths will include a

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

poster that encourages the public to report incidents of water pollution and provides examples of common illicit discharges. The booth will also provide business cards with the stormwater hotlines for each of the Local Programs. The stormwater website will also be included on the business card to provide the public with other information including BMPs and local regulations.

5. OUTREACH TO GENERAL PUBLIC

TASK 5B – TRASH CAN DECALS

LOCAL PROGRAM: CITY OF NAPA

Performance: The City of Napa working ,with the Napa-Vallejo Waste Management Authority, prints and installs trash can details with the following messages in English & Spanish.

- “DO NOT DUMP IN TRASH! THESE ITEMS ARE TOXIC” with drawing of paint can, antifreeze container, pain thinner can battery, bug spray etc.
- “TAKE TOXICS HERE FREE” with map showing location of Household Hazardous Waste Collection Facility.
- Information on the new curbside recycling for used motor oil and filters
- “Only rain in the Drain”

Effectiveness: Unknown.

TASK 5C – NAPA-VALLEJO HOUSEHOLD HAZARDOUS WASTE FACILITY

LOCAL PROGRAM: CITY OF NAPA

Performance he Napa-Vallejo Hazardous Waste Collection facility provides a safe, no cost, and legal disposal site for unusable household hazardous products. The facility is open every Friday and Saturday from 9am -4pm. This facility also provide hazardous waste disposal site for small quantity businesses for a fee on an appointment basis.

Effectiveness: Unknown

TASK 5D – UPVALLEY HOUSEHOLD HAZARDOUS WASTE COLLECTION

COUNTY-WIDE PROGRAM

Performance: a household hazardous waste collection event was held in Calistoga in November 2005 and an event was held in Rutherford in May 2006.

Effectiveness: Unknown.

TASK 5G – MAIL YARDWASTE AND CREEKBANK BROCHURE

COUNTY-WIDE PROGRAM

Performance: Brochure mailed to all (5,218) creek-side residents in Napa County.

The County-wide Program provided comments on a creek care guide developed by the RCD. The guide includes information on caring for creek banks, managing debris, and minimizing pollutants in runoff.

Due to the large size of the creek care guide (50 pages), it was not practicable to mail the entire guide to all creekside property owners. Instead, the County-wide Program and the RCD developed and mailed a brochure (Appendix A) to each of the creekside property owners in Napa County. The brochure included seven tips on caring for creeks including a warning not to

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

dump yardwaste and other debris onto stream banks and a list of stormwater hotlines for each of the Local Programs. The brochure also stated where an electronic copy of the full creek guide brochure could be obtained.

Effectiveness: Unknown.

There are three tools that may be used to evaluate the effectiveness of this outreach effort. The first is to use the public survey (Task I-1D) to measure the public's understanding creeks and caring for them. The second and third methods are to use verified reports from the stormwater hotline (Task III-2G) and stream surveys conducted by the Flood Control District (Task VI-7). These three methods of measuring the effectiveness of the creek care outreach effort have will not be useful to evaluate the immediate results, but may be used to measure the public's awareness and practice of creek care over the long-term.

TASK 5I – USED OIL RECYCLING

COUNTY-WIDE PROGRAM

Performance: A special 18 page, bilingual, tabbed recycling guide was published in the SBC Yellow pages Napa Valley July 2005 and July 2006 Issues. The Recycling guide provides information on: reduce and reuse, reuse by donation, recycling buyback and drop-off locations, curbside recycling, yard waste & composting, construction related recycling, appliance recycling, household hazardous wastes, electronic wastes, recycling motor oil, and recycling batteries, anti-freeze and paint.

Radio ads were run on the local radio station (KVON) in April 2006 to encourage the public to properly dispose of used motor oil. The ad included a message on the hazards of improper disposal and a list of many of the locations where used oil may be recycled in Napa County.

Effectiveness: Unknown.

The effectiveness of providing the public with information on the proper disposal of household hazardous wastes and used oil is expected to be very high since everyone with a land phone in Napa County receives a phone book each year. People also tend to hold on to their phonebooks, so this is an excellent method of reaching out to the public.

TASK 5J – USED OIL RECYCLING

COUNTY-WIDE PROGRAM

Performance: The program to provide point of purchase information at stores was not expanded in FY05/06 the past year because City staff was focused on the implementation of single stream recycling, and electronic waste recycling (The City of Napa had the 2nd highest rate of electronic waste recycling per capita in the entire United States). In addition, the new garbage contracts for the cities and the unincorporated areas provide for free curbside oil recycling for all Napa County residents with garbage service. During the upcoming year it is planned to devote staff time to promotion of the oil point of purchase information effort.

Effectiveness: Unknown.

TASK 5K – PRIORITIZE FUTURE OUTREACH

COUNTY-WIDE PROGRAM

Performance: Two additional outreach publications were prioritized for development.

The following are the NCSWMP outreach materials developed to date.:

- 1) Stormwater Pollution Prevention for New Development and Redevelopment (FY03/04)

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

- 2) Industrial Facilities BMPs (FY03/04)
- 3) Food Service Facility BMPs (FY03/04)
- 4) Yard Waste and Creek Banks (FY03/04)
- 5) Pollution Prevention for Surface Cleaning (FY04/05)
- 6) Stormwater Door-hanger (FY04/05)
- 7) Restaurant BMP Poster (FY04/05)
- 8) Creek Care Guide and Brochure (FY05/06)
- 9) Pollution Prevention for Swimming Pools, Fountains, and Spas (FY05/06)

Based upon reports from municipal staff and the public it was determined that a brochure on working with concrete and stucco should be developed in FY06/07. The need to increase the public's awareness of the Local Programs' stormwater hotlines was also identified as a high priority. One idea is to develop a business card with each of the Local Program's hotline and include the URL to the NCSWMP stormwater website and WICC.

Effectiveness: Unknown.

TASK 5L – DEVELOP MATERIALS

COUNTY-WIDE PROGRAM

Performance: Two outreach materials were developed.

The County-wide Program collaborated with the RCD to develop and distribute a Creek Care guide and brochure. Refer to Task 5G above for more information about the guide and brochure. The County-wide Program and RCD also developed a Swimming Pool, Fountain, and Spa Maintenance brochure with input from the Local Programs, NSD, DFG, and RWQCB. Due to the sensitivity of aquatic life to chlorine, bromine, copper, and silver, it was determined that pool, fountain, and spa water may only be discharged to a stormwater conveyance system only if sanitary sewer or land disposal are not possible and the wastewater is below critical thresholds for toxicity to aquatic life.

Evaluation:

TASK 5M – DISTRIBUTE MATERIALS

COUNTY-WIDE PROGRAM

Performance: Materials distributed by various methods.

The County-wide Program provided copies of the outreach material per request. Materials are mostly distributed during inspections of businesses and construction sites and in response to illicit discharge incidents. Some materials such as the Pest or Pal book and OWOW brochures are distributed at community events and at the six participating stores in Napa County.

Effectiveness: Unknown.

6. OUTREACH TO SCHOOLS

TASK 6C – CONDUCT PRESENTATIONS

COUNTY-WIDE PROGRAM

Performance: The Pollution Soup lesson plan was presented to 21 elementary school classes; 2 power point presentations on pollution and the Clean Water Act were given at

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

Environmental Studies classes at Pacific Union College; and 5 classes participated in the BMI and stream ecology lesson plan and activities.

The Napa County RCD education coordinator, with funding from the County-wide Program, presented the Pollution Soup lesson plan at 21 elementary school classes with a total of 468 students reached. The grades of the classes ranged from 3rd through 5th grade. The Pollution Soup lesson plan was developed by The Watershed Project and is part of the Kids in Creeks education program. The lesson discusses the importance of protecting water quality, the sources of stormwater pollution and how it enters local creeks, and some BMPs that can be used at home to protect our creeks. The lesson includes an activity where students add substances to a bowl of water to illustrate the harm that pollution causes and some lessons use a stormwater diorama to illustrate how runoff from homes, farms, and businesses can contaminate waterways.

The CWPC gave two power point presentations at two environmental studies classes at Pacific Union College. The presentation covered the history of the Clean Water Act, the status of the health of the nation's waters and local water bodies including the San Francisco Bay and the Napa River, and the common pollutants impairing water bodies and their impacts and sources. The presentation ended with an overview of using biotic indicators to measure water quality and included BMI data collected by the Friends of the Napa River from two local creeks. The data from the two creeks illustrate how the biotic community reflects the chemical and physical characteristics of the stream. The BMIs made the presentation more interesting and more relevant to a college-level environmental studies class.

In partnership with the RCD and Acorn Soupe, a local environmental education organization, four classes from Robert Louis Stevenson Middle High School in St. Helena each spent a day at Salvador Creek to learn about the life history of salmon, characteristics of healthy and unhealthy creeks, and the sources and impacts of water pollution. Each of the four days included a couple hours of planting native riparian trees and shrubs as part of a restoration project along the creek.

The County-wide Program also led a field trip to Redwood Creek and to Salvador Creek to learn about healthy and unhealthy creeks. The Redwood Creek site is high in the watershed with little development upstream. Salvador Creek is an urban creek located in the City of Napa. The field trip began with several lesson and activities on water quality, the salmon life cycle and habitat requirements, and concluded with water quality monitoring using BMIs. The water quality score obtained by collecting the BMIs reflected the conditions in the two creeks and some ideas to improve Salvador Creek were discussed (e.g. plant trees for shade and bank stability, minimize pollutants entering storm drains).

Effectiveness: Unknown.

TASK 6D – EVALUATION

COUNTY-WIDE PROGRAM

Performance: Students completed a short survey before and after six of the Pollution Soup lessons presented by the Napa County RCD education coordinator.

The survey results were a valuable tool for evaluating the effectiveness of the lessons. The education coordinator at the RCD reviewed the surveys and used the results to add emphasis where needed to ensure that students understood to key points of the lessons.

Effectiveness: Unknown.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

TASK 6E – PROGRAM IMPROVEMENT

COUNTY-WIDE PROGRAM

Performance: Pest or Pal lessons developed.

In November of 2005 the County-wide Program participated in a workshop sponsored by the OWOW program. From the workshop and materials provided, the County-wide Program developed a set of lessons to increase student's understanding of the potential harm that pesticides can have on water quality and our health. The lessons include several activities that demonstrate the importance of beneficial insects and management techniques that can be used to minimize or avoid the use of pesticides.

Effectiveness: Unknown.

ADDITIONAL ACCOMPLISHMENTS

A. WATERSHED INFORMATION CENTER AND CONSERVANCY

LOCAL PROGRAM: NAPA COUNTY

On May 21, 2002 the County Board of Supervisors passed Resolution No. 02-103 creating the joint Watershed Information Center and Conservancy (WICC) Board. The mission of the WICC is to guide and support community efforts to maintain and improve the health of Napa County's watershed lands.

A Strategic Plan was developed for the WICC in April 2004 and revised in August 2004 to address a number of key questions and to refine and clarify the WICC's mission and goals. The WICC Strategic Plan guides the short (immediate), medium (one to three years) and long (three years and beyond) term actions of the WICC. The Strategic Plan can be downloaded from <http://www.napawatersheds.org/Content/10112/about.html>.

The major accomplishment of the WICC in FY04/05 was the development of the WICC website (www.napawatersheds.org). The website was launched and opened to the general public in April of 2005. The goal of the WICC website is to collect, organize, and make available to the public, environmental data and information to support community efforts to understand and better manage the County's watersheds. The website has the unique feature of giving watershed groups (i.e. Friends of the Napa River, Carneros Creek Stewardship Group, Napa County RCD, Napa County Stormwater Management Program, etc.) the ability to upload information to their group in the WICC Library or to the WICC Calendar. The website also features a discussion board and an interactive GIS tool with many layers the user can use to identify streams, watershed boundaries, fish barriers, and other watershed features.

Even in its immature state, the website has already become the most comprehensive resource for sharing information about Napa County's watersheds with the public. The website will be continuously updated with new information and revised to make the site easier to navigate. A survey of the pilot users of the website was conducted to get their feedback on what they liked and disliked about the website. This information as well as other comments from users will be used to improve the usefulness of the website.

B. WATERSHED CALENDAR

LOCAL PROGRAM (NAPA COUNTY) AND COUNTY-WIDE PROGRAM

The Napa County RCD created a calendar titled “Caring for Napa County’s Creeks” with funding from the Napa County CDPD. The County-wide Program supported the development of the calendar by providing pictures and comments on the narrative. The calendar has an opening section with a map of Napa County’s watersheds and a list of all the named creeks in Napa County. Each month highlights a creek-related subject including the characteristics of healthy and unhealthy creeks, protecting stream banks, creek-friendly gardening, invasive plants, hillside and road erosion, water pollution, getting involved. A copy of the calendar is provided in Appendix B. Approximately 2,000 calendars were distributed to residents throughout Napa County in FY05/06.

ELEMENT II – PUBLIC INVOLVEMENT AND PARTICIPATION

2. STORM DRAIN STENCILING

TASK 2B. STORM DRAIN STENCILING PROGRAM

COUNTY-WIDE PROGRAM

Performance: Four storm drain stenciling events were conducted in FY05/06.

The County-wide Program contracted with the RCD to coordinate volunteers to mark storm drains in the Cities of Napa and Calistoga, and the unincorporated areas of Napa County. American Canyon, Yountville, and St. Helena already have all their storm drains marked with a no dumping message. Two storm drain marking events were held in the unincorporated area, one in Calistoga and one in the City of Napa. A total of 265 storm drains were marked. A story was printed in the Napa Register on the Storm Drain marking performed by the Pueblo Vista Elementary School students.

It is estimated that >70% of the storm drains are marked in Calistoga and unincorporated areas of Napa County. It is estimated that approximately half of the storm drains are marked in the City of Napa.

Effectiveness: Unknown.

The effectiveness of the storm drain marking event may be evaluated in the future by comparing the number of illicit discharges in neighborhoods with and without storm drain markers. The illicit discharge database is able to track illicit discharges by parcel number and the storm drains that have been marked are tracked by the volunteers. In order to conduct this evaluation, GIS shapefiles will have to be generated for the parcels with illicit discharges and the storm drains marked. This evaluation will be conducted in the future if sufficient staff time is available to create and update the shapefiles.

3. WATER QUALITY MONITORING

TASK 3E – TRAIN VOLUNTEERS

COUNTY-WIDE PROGRAM

Performance: Training program implemented.

The County-wide Program contracted with the RCD to supplement their existing volunteer water quality monitoring program. The RCD trains each of its volunteers at least annually on the protocol for sampling and measuring water quality parameters.

Effectiveness: Not applicable.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

TASK 3F – MONITORING

COUNTY-WIDE PROGRAM

Performance: Monitoring program implemented; 9 volunteers monitored 20 sites during FY05/06.

In addition to collecting data from volunteers, the RCD worked with the County-wide Program to develop reports from the water quality database on the minimum, maximum, and average values for each of the water quality parameters evaluated. Furthermore, to improve our knowledge of the impacts of stormwater runoff and to acquire information that can be used to better prioritize outreach and inspection efforts, the County-wide Program and RCD are developing protocols to collect first flush samples from outfalls. Volunteers will collect samples from outfalls during the first significant storms of the year and the samples will be evaluated for the presence and relative concentration on various pollutants (e.g. BOD, nitrogen, phosphates, turbidity). Due to the high variability in stormwater samples (e.g. storm event size and duration and random incidents of illicit discharges) the data will not be useful to evaluate the effectiveness of the stormwater program as a whole, but the data may be useful to identify commercial and residential areas with high pollutant loads and these areas can be targeted for outreach.

Effectiveness: Unknown.

The effectiveness of the monitoring program is difficult to evaluate at this time because the database lacks adequate reports to analyze the data. The effectiveness of the monitoring program will be evaluated in future years as reports are developed.

4. CREEK CLEANUP

TASK 4A – COAST AND CREEK CLEANUP DAY

COUNTY-WIDE PROGRAM

Performance: Coast and Creek Cleanup Day sponsored.

The County-wide Program contracted with the RCD to coordinate and support cleanup efforts in Napa County at eight sites for Coast and Creek Cleanup Day on September 17, 2005. Approximately 400 volunteers participated in the event and removed a total of 4,280 pounds of trash and 1,130 pounds of recyclables from local waterways. The number of volunteers that participated was the highest yet with a 29% increase over the previous year. The amount of trash and recyclables declined significantly, 11% and 28% decrease respectively and a combined decrease of 16%. A detailed report on the 2004 Coast and Creek Cleanup Day is provided in Appendix C.

Effectiveness: A total of 5,410 pounds of trash and debris was removed from local waterways.

The data collected during the cleanup event in 2005 suggests that the amount of trash in local waterways declined over the previous year. This decline in the amount of trash and debris collected over the previous year (16%) appears to be significant and extra weight is given to the fact that the number of sites increased from seven to eight in and the number of volunteers increased from 309 volunteers to approximately 400 volunteers.

5. STEWARDSHIP GROUPS

Task 5A – Salvador Creek Stewardship

LOCAL PROGRAM: CITY OF NAPA

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

Performance: The City of Napa contracted with the Napa County Resource Conservation District (RCD) to facilitate and support the Salvador Stewardship Group. The Napa County Flood Control and Water Conservation District provided funding to the City for this contract. The RCD developed agendas for stewardship meetings, acted as moderator at meetings, compiled questions and answers for issues brought up at meetings and produced minutes of meetings. The stewardship group interests during the past year included; compiling storm observations after the New Years flood, development in the watershed, hydraulic modeling results for the creek done by the RCD, and creek maintenance. City and Flood District staff attended and participated in all group meetings. It is expected that in the future this group will be self- supporting and self -led like other stewardship groups in Napa County.

Effectiveness: The meetings have been successful in bringing stakeholders together to discuss the opportunities for and challenges of managing Salvador Creek. The meetings have served the important function of providing a forum for both residents and agency representatives to continue to ask questions, voice concerns, and share ideas. They have helped to improve communication between the different agencies, between departments within agencies, and between agency staff and residents. Meeting discussions have led to better working relationships and an increase in understanding of the challenges of channel maintenance, hydrologic modeling, and development issues in the watershed.

TASK 5B – RUTHERFORD DUST RESTORATION TEAM (RDRT)

LOCAL PROGRAM: NAPA COUNTY

Performance: The Flood Control District, with use of Measure A funding for the unincorporated areas of Napa County, has continued to assist the Rutherford dust Restoration Team with the development of a restoration plan for a 4-mile reach of the Napa River. The project is now in its 2nd phase of design and funding is currently being sought to start the construction phase of the project.

Effectiveness: Unknown.

The effectiveness of the RDRT project will be determined after the plan is developed and construction begins. The project has a monitoring and maintenance plan to evaluate the effectiveness of the restoration design and to ensure that eroding stream banks and in-stream habitat features are repaired after storm events.

ELEMENT III – ILLICIT DISCHARGE DETECTION AND ELIMINATION

TASK 1B EVALUATE EFFECTIVENESS OF ORDINANCE

LOCAL PROGRAM: CITY OF NAPA

Performance: Ordinance evaluated.

City staff evaluated the effectiveness of the Stormwater Runoff Pollution Control ordinance, which is Chapter 8.36 of the Napa Municipal Code. The ordinance was adopted in June 2004 based on the available model stormwater ordinances and with input from other Napa County Phase II programs.

The exceptions to the discharge prohibitions were evaluated and it was determined that all but one of the exemptions satisfactorily met the MEP standard. In the course of developing BMPs for disposing of swimming pool, fountain, and spa wastewater it was determined that the City should not permit discharges from these sources into the stormwater conveyance system if the discharge is toxic to aquatic life. The City is currently considering revision of the stormwater ordinance to require the issuance of an encroachment permit for these discharges on the

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

condition that all other options for discharge have been adequately considered and lab results verify that aquatic life will not be harmed. The County-wide Program worked with the DFG to develop thresholds for chlorine, bromine, copper, and silver concentrations that are harmful to aquatic life. This update to the stormwater ordinance is expected to be completed in FY06/07.

In the future the ordinance may be modified to change the appeal process to be consistent with changes being made to other City ordinances dealing with public nuisances. Language regarding notification of spills, 8.36.100, may require study and modification because of self incrimination concerns. The Boards suggestions on ways to improve the City's ordinance are welcome.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Ordinance evaluated, no amendments necessary.

The Department of Public Works applied the Stormwater and Runoff Pollution Control ordinance, Chapter 13.32, St. Helena Municipal Code, and determined no amendments were necessary for FY 2005/2006.

Effectiveness: Thus far the ordinance has effectively prohibited discharges to the stormwater conveyance system to the MEP, no amendments required.

LOCAL PROGRAM: NAPA COUNTY

Performance: Ordinance evaluated.

Napa County's stormwater ordinance has been effective at prohibiting all illicit discharges encountered to date. The definition of an illicit discharge is clear and still provides for discharges to the stormwater conveyance system provided the discharge is free of pollutants to the MEP. Although MEP may seem vague to many, the definition emphasizes the use of source control measures over treatment control measures and the proper use and maintenance of BMPs. This has allowed enforcement personnel to clearly distinguish between most prohibited and allowable discharges.

To clarify MEP for particular activities, the ordinance allows the Director of Public Works to establish specific BMP requirements. Napa County follows the BMPs developed by the County-wide Program or the CA BMP Stormwater BMP Handbooks for establishing the MEP standard. For example, the Surface Cleaner Guide requires that wastewater be collected and properly disposed of, but allows for discharges to the stormdrain in cases of retail car washing and pre-swept sidewalk washing provided no soap or other additives are used. This authority in the ordinance allows the County to provide clear direction to the public and enforcement officials as to what constitutes MEP.

The exceptions to the discharge prohibitions were evaluated and it was determined that all but one of the exemptions satisfactorily met the MEP standard. In the course of developing BMPs for disposing of swimming pool, fountain, and spa wastewater it was determined that the County should not permit discharges from these sources into the stormwater conveyance system if the discharge is toxic to aquatic life. The County is currently considering revision of the stormwater ordinance to require the issuance of an encroachment permit for these discharges on the condition that all other options for discharge have been adequately considered and lab results verify that aquatic life will not be harmed. The County-wide Program worked with the DFG to develop thresholds for chlorine, bromine, copper, and silver concentrations that are harmful to aquatic life. This update to the stormwater ordinance is expected to be completed in FY06/07.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

Effectiveness: Thus far the ordinance has effectively prohibited all discharges to the stormwater conveyance system that are not free of pollutants to the MEP. Although no swimming pool, fountain, or spa wastewater discharges have been reported, revision of the ordinance to require an encroachment permit will provide clear enforcement of future discharges should they occur.

TASK 1D TRAIN STAFF – EMERGENCY RESPONSE PLAN FOR ILLICIT DISCHARGES

LOCAL PROGRAM: CITY OF NAPA

Performance: On June 5, 2006 training was conducted on hazardous material/illicit discharge response coordination. Seven people attended this training ; with representatives from: Public Works Bridges & Urban Drainage Division, Fire Department, Public Works Water Division, Public Works Street Maintenance, Napa County Department of Environmental Management, and the Napa County Flood Control and Water Conservation District. This training included spill notification, spill response, safety, cleanup, notification of outside agencies, record keeping and billing.

Additional informal training was conducted during the year on data base entry and in field investigation techniques.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Training held for all enforcement staff.

The County-wide Program provided training to each of the DPW staff responsible for enforcement of the stormwater ordinance in October 2005. The training included a power point presentation that provided an overview of the discharge prohibitions and enforcement authority in the stormwater ordinance. The power point presentation also included many examples of illicit discharges from construction sites that provided the opportunity to discuss appropriate enforcement actions.

Effectiveness: Indeterminate.

LOCAL PROGRAM: NAPA COUNTY

Performance: Training held for all enforcement staff.

Napa County has 11 staff members that enforce the stormwater ordinance from two different departments. Four food service facility inspectors and four business plan facility (CUPA) inspectors from the DEM enforce the provisions of the storm water ordinance at their respective regulated facilities in response to discharges found during routine stormwater inspections or through complaints reported from the public. The DPW has three enforcement personnel that are responsible for enforcement of the stormwater ordinance for all other discharges.

Seven of the DEM enforcement personnel were trained by the County-wide Program in July 2005 on BMPs applicable to commercial facilities, discharge prohibitions, and enforcement procedures. A pre-survey was given at the beginning of the training to establish a baseline for staffs understanding of stormwater issues. The survey questions and scenarios were discussed during the training. The results of the survey were evaluated by the county-wide Program and the results were sent back to each of the program supervisors to review with their staff. A follow-up meeting was held in August with four of the CUPA inspector to go over the survey again and to discuss some specific issues that they had encountered during their

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

routine stormwater inspections. A third training and survey was given to three of the CUPA inspectors in April 2006.

The County-wide Program also discussed enforcement procedures during team inspections with three of the DEM inspectors at two food service facilities in July 2005 and with a food and CUPA at a team inspection in October 2005. These team inspections provided an opportunity to discuss the application and enforcement of the stormwater ordinance in the real world. In the case of one of the food service facilities it was noticed that the dumpster area was exceptionally clean and the business manager admitted to washing the area with bleach and an order to cease and desist from future discharges was issued. In the case of the inspection in October the MEP standard was discussed with respect to cleaning of the Wine Train. It was determined that washing on the tracks will not result in an illicit discharge provided all wash water is absorbed into the ground and degreasers are not used.

The County-wide Program provided training to each of the DPW staff responsible for enforcement of the stormwater ordinance in December 2005. The training included a power point presentation that provided an overview of the discharge prohibitions and enforcement authority in the stormwater ordinance. The power point presentation also included many examples of illicit discharges from construction sites that provided the opportunity to discuss appropriate enforcement actions.

Effectiveness: Unknown.

TASK 1E – EVALUATE AND AMEND ENFORCEMENT RESPONSE PLAN (ERP)

LOCAL PROGRAM: CITY OF NAPA

Performance: The effectiveness of the ERP was evaluated with respect to ensuring compliance with the SW ordinance. The enforcement response plan does not accurately describe the Fire Department's role in responding to illicit discharges and of coordination required for enforcement of the SW ordinance.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: The Department of Public Works applied the Enforcement Response Plan and enforcement staff have successfully gained compliance from violators. Therefore no necessary amendments were proposed in FY 2005/2006.

Effectiveness: Indeterminate.

LOCAL PROGRAM: NAPA COUNTY

Performance: ERP evaluated and amended.

The ERP was evaluated for effectiveness based upon the experience gained thus far with enforcing the provisions of the stormwater ordinance. Thus far, enforcement staff have successfully gained compliance from violators by following the ERP, but it was modified to eliminate a "verbal warning" as an acceptable enforcement practice. Verbal warnings are less enforceable than an order in writing and are often vulnerable to interpretation and recollection by the responsible party and the inspector. To eliminate potential confusion, all enforcement actions must be in the form of a written order to comply.

Effectiveness: The elimination of "verbal warning" as an enforcement option will ensure that the discharge prohibitions and BMP requirements established by the stormwater ordinance and enforcement official are clearly communicated to the responsible party and eliminate the potential for illicit discharges to continue as a result of misunderstandings.

2. SPILL RESPONSE

TASK 2E – STAFF TRAINING

LOCAL PROGRAM: CITY OF NAPA

Performance: On June 5, 2006 training was conducted on hazardous material/illicit discharge response coordination. Seven people attended this training ; with representatives from: Public Works Bridges & Urban Drainage Division, Fire Department, Public Works Water Division, Public Works Street Maintenance, Napa County Department of Environmental Management, and the Napa County Flood Control and Water Conservation District. This training included spill notification, spill response, safety, cleanup, notification of outside agencies, record keeping and billing.

Additional informal training was conducted during the year on data base entry and in field investigation techniques.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: All relevant staff trained.

Enforcement staff from the Department of Public Works were trained on non-hazardous spill containment and cleanup procedures during routine inspection and enforcement trainings conducted in October 2005. These discharges are contained and cleaned-up by the responsible party or County Roads Division staff under the inspection of enforcement staff. CDF/City Fire Department hazardous spill response staff attend routine trainings and certifications in accordance with State law.

As a result of a potential illicit discharge reported to the stormwater hotline, it was realized that the City's Police Department Dispatch also needed training on processing and directing the call to the correct responding party. The DPW worked with the Police Department to train the dispatchers on how to direct the reported discharge to the correct department.

Effectiveness: Staff achieved passing marks on training quiz.

LOCAL PROGRAM: NAPA COUNTY

Performance: All relevant staff trained.

Napa County has 11 enforcement personnel from two departments that respond to illicit discharges and direct the cleanup of non-hazardous materials. Four food service facility inspectors and four business plan facility (CUPA) inspectors from the DEM enforce the provisions of the storm water ordinance at their respective regulated facilities in response to discharges found during routine stormwater inspections or through complaints reported from the public. The DPW has three enforcement personnel that are responsible for enforcement of the stormwater ordinance for all other discharges. In the case of hazardous materials, cleanup is directed by the CFP/Napa County Fire Department staff specially trained in containment and cleanup of hazardous materials.

Enforcement staff from the DEM and DPW were trained on non-hazardous spill containment and cleanup procedures during routine inspection and enforcement trainings conducted in July 2005 and December 2005 respectively. These discharges are contained and cleaned-up by the responsible party or County Roads Division staff under the direction of enforcement staff. CDF/County Fire Department hazardous spill response staff attend routine trainings and certifications in accordance with State law.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

As a result of an illicit discharge reported to the stormwater hotline, it was realized that the County's volunteer fire department staff also need training in illicit discharge response. Prior to this incident the County's stormwater coordinator was not aware that dispatch occasionally refers calls to volunteer fire departments to respond incidents in remote areas of the County. In this particular case, one of the volunteer fire departments improperly characterized a spill of latex paint into a local creek and the discharge was washed downstream during a rain event before the DPW received the complaint. Due to the large number of volunteer fire districts and firefighters in Napa County it was not possible to develop and implement in FY05/06. The DPW is considering various options for ensuring that all the volunteer fire districts receive training on illicit discharge response procedures in FY06/07.

Effectiveness: With the exception of the one paint spill identified above, all illicit discharges were cleaned up to the MEP. Additional training will be developed and implemented in FY06/07 to ensure that all volunteer firefighter staff understand the appropriate response procedures for illicit discharges.

TASK 2G – RECORD KEEPING

LOCAL PROGRAM: CITY OF NAPA

Performance: Public Works staff maintains and updates spill response data in a data base developed by Napa County Flood Control and Water Conservation District. The Fire Department uses a separate data base for data on Fire Department responses to spills. Significant sanitary sewer spills occurred at numerous locations during the New Years Eve flooding, and when an 8" sewer line was damaged in April 2006. Sanitary Sewer overflow spill data is maintained by the Napa Sanitation District.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: Annual report on illicit discharges prepared.

The DPW emulates the illicit discharge database developed by the County-wide Program to track complaints and ensure that incidents are abated. The report is based upon all complaints received and investigations and enforcement actions taken during FY05/06. Additional work needs to be done to the database to reflect all complaints, investigations, and follow-ups during any particular FY.

Effectiveness: Report data is compiled for future outreach. 2 out of 3 spills were prevented from reaching waters of the State.

LOCAL PROGRAM: NAPA COUNTY

Performance: Annual report on illicit discharges prepared.

Due to the involvement of three departments, DEM, DPW, and Napa County Fire, in illicit discharge response, the County has had to work with existing tracking systems used by the DEM and Napa County Fire and develop and implement new procedures for tracking incident response in the DPW. Having three data tracking system to report illicit discharges is not ideal, but it would be impracticable for the DEM and County Fire to use the database developed by the County-wide Program since it would require some duplicate data entries and it's not possible to integrate the databases since they operate on different program software.

Much of the focus in FY05/06 has been to adapt the DEM's tracking system to develop reports on incidents reported to the stormwater hotline. Several extra fields were added to DEM's FilePro database that could be exported into the illicit discharge database developed by the

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

County-wide Program. At this time an Excel spreadsheet of each of the stormwater-related complaints was exported from the FilePro database, but problems with consistent use of the fields and some data incompatibilities have made it impossible to import this data into the County-wide Program database to generate a report summary. The stormwater coordinator will continue to work with the DEM in FY06/07 to work out the bugs in the data transfer to the illicit discharge database and train inspectors on the proper tracking of all illicit discharge incidents. Based on the data extracted from the FilePro database, the DEM received and responded to 139 stormwater-related complaints. Due to the inconsistent use of the fields in the database it is not always clear what resulted from the investigation or enforcement actions taken, however, based upon a review of the data provided by DEM, the majority of the incidents were abated.

The DPW uses the illicit discharge database developed by the County-wide Program to track complaints and ensure that incidents are abated. A summary report is provided in Appendix D. The report is based upon all complaints received and investigations and enforcement actions taken during FY05/06. In some cases where the complaint was received at the end of FY05/06 investigations and abatement may not be reported in this annual report. Additional work needs to be done to the database to reflect all complaints, investigations, and follow-ups during any particular FY. The totals for the types of activities, pollutants, etc. are based upon the investigations and not what was reported by the complainant.

A total of 18 complaints were received by the DPW in FY05/06 and 17 were investigated. The majority of these complaints were related to construction/grading and illegal work in streams. Incidents related to illegal work in streams is referred to the DFG and RWQCB for enforcement since the County has no authority in this area. These incidents are not checked off as abated until the violations are corrected which can often take up to a year.

The DPW will work with Napa County Fire in FY06/07 to develop reports from their incident response tracking system for hazardous materials. County fire has not been a focus for developing stormwater reports up to this time because there are strict response and reporting requirements from the State.

Effectiveness: Unknown.

TASK 2H – DEVELOP A ROAD KIT

COUNTY-WIDE PROGRAM

Performance: Road kit developed. Each of the local programs' stormwater inspectors and illicit discharge investigators were provided with a road kit.

The County-wide Program has developed a road kit with the following outreach materials: Pollution Prevention for Surface Cleaning (NSSSA), Yardwaste Dumping and Disposal (NCSWMP), Pollution Prevention for Development and Re-Development (NCSWMP), Blueprint for a Clean Bay, and several factsheets from the Commercial/Industrial and Construction California BMP Handbooks. An additional outreach material on swimming pool, fountain and spa maintenance was added to the road kit in FY05/06. These materials are supplied to the Local Programs on an as needed basis.

Effectiveness: Unknown.

3. STORM DRAIN SYSTEM MAPPING

TASK 3B - IDENTIFY DATA GAPS

LOCAL PROGRAM: CITY OF NAPA

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

Performance: Data gaps in the City of Napa's geographic information system for storm drain outfalls were identified. The following gaps were noted: the location of all Waters of the State are not clearly identified on storm drain maps, a unique tag for outfalls needed to be established so that an outfall map can be identified, a data base for storm drain outfalls needs to be created. Some outfalls are difficult to locate in the field because they are submerged during high tides or because of vegetation. A marking or location system needs to be established for hard to find outfalls. In order to locate these hard to find outfalls, the Flood Control District has included outfall mapping in its routine stream maintenance surveys. The City will incorporate this data into its storm drain system map as it is provided by the Flood Control District.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: Identify data gaps.

The Department of Public Works maintains a storm drain system map that reflects all the existing information on the location of storm drain outfalls.

Effectiveness: The use of CADD technology makes this very effective because the map is updated as conditions change, knowledge is gained and outfalls are added or deleted.

LOCAL PROGRAM: NAPA COUNTY

Performance: No data gaps identified. Regular updates made as outfalls are constructed; use of Flood Control District stream maintenance surveys to locate outfalls not part of the County's storm drain system.

The DPW makes updates to its storm drain system maps as they are constructed. There are very few storm drain systems in the unincorporated areas due to limited zoning for industrial, commercial, and urban residential development. In order to capture any outfalls that could be missing from the County's storm drain system maps, the County uses outfall mapping data provided by the Flood Control District collected during routine stream maintenance surveys.

Effectiveness: Unknown.

TASK 3E - MUNICIPAL STORM DRAIN SYSTEM, IDENTIFY DATA GAPS

LOCAL PROGRAM: CITY OF NAPA

Performance Data gaps in the City of Napa's geographic information system (GIS) for the municipal storm drain system were identified. The following gaps were noted: the location of all Waters of the State are not clearly identified on storm drain maps, new development project and capital improvement project s storm drains need to be added to the stormwater GIS, errors and omissions noted by field crews need to be fixed as they are discovered, and additional training on using the GIS is needed for City staff.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: Identify data gaps.

The Department of Public Works maintains a storm drain system map that reflects all the existing information on the location of storm drain facilities.

Effectiveness: The use of CADD technology makes this very effective because the map is updated as conditions change, knowledge is gained and facilities are added or deleted.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

LOCAL PROGRAM: NAPA COUNTY

Performance: No data gaps identified, regular updates made as storm drains are constructed.

The DPW makes updates to its storm drain system maps as they are constructed. There are very few storm drain systems in the unincorporated areas due to limited zoning for industrial, commercial, and urban residential development. The County also maintains a stream layer that includes most natural drainages in the County. GIS stream map layer is continuously updated as refinements are made. The County GIS department is working with other agencies and departments in the County to develop a master stream layer file that will incorporate each entity's refinements as they are made. The County also has two LIDAR datasets that can be used to find smaller drainages not included in the stream layer.

Effectiveness: Unknown.

4. BUSINESS INSPECTIONS

TASK 4B – DISTRIBUTE FOOD FACILITY BMP BOOKLETS

LOCAL PROGRAMS: ALL LOCAL PROGRAMS

Performance: Outreach materials are distributed to Food Service Facilities on an as needed basis.

This measurable goal is proposed for modification because each Food Service Facility was provided with the Food Facility BMP booklets developed by the DEM in FY03/04. It does not make sense to redistribute this guide to each food service facility each year. There are also other appropriate outreach materials (Pollution Prevention for Surface Cleaning) that have been developed and are distributed on an as needed basis.

Effectiveness: Unknown.

TASK 4D – TRAINING

LOCAL PROGRAMS: CITY OF NAPA, CALISTOGA, AND NAPA COUNTY

Performance: Training held for all Food Facility and Business Plan Facility (CUPA) inspection staff.

Napa County has four food service facility inspectors and four business plan facility (CUPA) inspectors from the DEM that conduct inspections at their respective regulated facilities in the Cities of Napa and Calistoga and the unincorporated areas of Napa County. In the case of the cities, a contract with the DEM permits the DEM to collect fees from regulated businesses within their jurisdiction and conduct inspections. In the agreement with the cities, the DEM conducts annual stormwater inspections at each Food Service Facility and inspects each CUPA facility every three years. At least one follow-up inspection is conducted by DEM to verify that violations are corrected and refers the case to the City for further action if additional follow-ups are required.

DEM inspectors were trained by the County-wide Program in July 2005 on BMPs applicable to commercial facilities, discharge prohibitions, and enforcement procedures. A pre-survey was given at the beginning of the training to establish a baseline for staffs understanding of stormwater issues. The survey questions and scenarios were discussed during the training. The results of the survey were evaluated by the county-wide Program and the results were sent back to each of the program supervisors to review with their staff. A follow-up meeting was held in August with the CUPA inspectors to go over the survey again and to discuss some

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

specific issues that they had encountered during their routine stormwater inspections. A third training and survey was given to three of the CUPA inspectors in April 2006.

The County-wide Program also attended two team inspections with three of the DEM Food Service Facility inspectors in July 2005 and one team inspection with a Food Service Facility inspector and CUPA inspector in October 2005. These team inspections provided an opportunity to discuss the application and enforcement of the stormwater ordinance in the real world. In the case of one of the food service facilities it was noticed that the dumpster area was exceptionally clean and the business manager admitted to washing the area with bleach and an order to cease and desist from future discharges was issued. In the case of the inspection in October the MEP standard was discussed with respect to cleaning of the Wine Train. It was determined that washing on the tracks will not result in an illicit discharge provided all wash water is absorbed into the ground and degreasers are not used.

Effectiveness: Unknown.

TASK 4E – INSPECTIONS (FOOD SERVICE FACILITIES)

LOCAL PROGRAMS: CITY OF NAPA, CALISTOGA, NAPA COUNTY

Performance: 93 Food Service Facilities were inspected in the City of Napa and 2 were inspected in the City of Calistoga in FY05/06. This represents 30% and 4% of the facilities within each jurisdiction respectively. None of the food service facilities were inspected in the unincorporated areas of Napa County.

In FY05/06 the DEM switched to using tablets to collect electronic inspection data in the field that could be transferred to a central database. Unfortunately there were many kinks to work out from the tablets themselves to developing a mechanism to transfer the data to a database. This work took most of FY05/06 to complete and there are still some kinks to work out. The final process of getting the data into the database will be completed in FY06/07.

Without the database it is difficult to analyze and summarize the inspection data for Food Service Facilities, but based on a preliminary look at the inspection forms the most common violation is unclosed dumpster lids. In each case these violations were corrected immediately.

Effectiveness: Unknown.

TASK 4G – INSPECTIONS (BUSINESS PLAN FACILITIES)

LOCAL PROGRAMS: CITY OF NAPA, CALISTOGA, NAPA COUNTY

Performance: 103 inspections stormwater inspections were conducted at business plan facilities (CUPA) in the City of Napa, Calistoga, and the unincorporated area of Napa County. This represents 34% of the regulated facilities not exempt from the stormwater inspection program.

Due to the concern of some businesses, the DEM and County-wide Program developed criteria to exempt business plan facilities from the stormwater inspection program and associated fees if: 1) the operations of the facility do not have significant potential to generate non-stormwater discharges or, 2) all potential sources are adequately addressed by the CUPA inspections. The goal of creating these exemptions was to avoid unnecessary costs to the business owner save time for DEM inspectors. Examples of facilities that met these exemptions included facilities with only propane tanks to power wind machines and facilities where activities are conducted indoors.

In FY05/06 it was expected that the CUPA inspectors would be collecting electronic inspection data that could be analyze in a database, but due to the problems encountered with the use of

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

the tablet with the Food Service Facility inspections the CUPA inspectors continued to use the paper forms. Without the database it is not practicable to sort out which are in the unincorporated areas. For this reason the inspections were lumped together to report a performance measure for number of inspections conducted. Without electronic data it is also not practicable to summarize the violations noted and corrective actions implemented as a result of these inspections. To remedy this situation in the future, tablets were purchased for the CUPA inspection team in the Spring of 2006 and the County-wide Program is working with the DEM to develop a data transfer system to a master database to generate reports.

Effectiveness: Unknown.

TASK 4H – NEWSLETTER

COUNTY-WIDE PROGRAM

Performance: Not implemented.

The newsletter was not sent to businesses in FY05/06 due to preoccupation with working out the bugs with the electronic inspection forms and data transfer system. The business newsletter will resume in FY06/07.

Effectiveness: Not applicable.

ELEMENT IV - CONSTRUCTION SITE RUNOFF CONTROL

TASK 1. LEGAL AUTHORITY

TASK 1B - EVALUATE ORDINANCE

LOCAL PROGRAM: CITY OF NAPA

Performance City staff evaluated the effectiveness of the Stormwater Runoff Pollution Control ordinance, which is Chapter 8.36 of the Napa Municipal Code, and found no necessity for amendments in FY 2005/2006. This ordinance was adopted in June 2004 based on available model stormwater ordinances and with input from other Napa County Phase II programs.

In the future the ordinance may be modified to change the appeal process to be consistent with changes being made to other City ordinances dealing with public nuisances. Language regarding notification of spills, 8.36.100, may require study and modification because of self incrimination concerns. The Boards suggestions on ways to improve the City's ordinance are welcome.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: Ordinance evaluated, no amendments necessary.

The Department of Public Works applied the Stormwater and Runoff Pollution Control ordinance, Chapter 13.32, St. Helena Municipal Code, and determined no amendments were necessary for FY 2005/2006.

Effectiveness: Thus far the ordinance has effectively limited construction site runoff to the MEP, no amendments required.

LOCAL PROGRAM: NAPA COUNTY

Performance: Ordinance evaluated, but no revisions necessary.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

Napa County's stormwater ordinance has been effective at prohibiting all illicit discharges encountered to date. The definition of an illicit discharge is clear and still provides for discharges to the stormwater conveyance system provided the discharge is free of pollutants to the MEP. Although MEP may seem vague to many, the definition emphasizes the use of source control measures over treatment control measures and the proper use and maintenance of BMPs. This has allowed enforcement personnel to clearly distinguish between most prohibited and allowable discharges.

To clarify MEP for particular activities, the ordinance allows the Director of Public Works to establish specific BMP requirements. Napa County follows the BMPs developed by the County-wide Program or the CA BMP Stormwater BMP Handbooks for establishing the MEP standard. This authority in the ordinance allows the County to provide clear direction to the public and enforcement officials as to what constitutes MEP. This ordinance also grants authority to the Director of the DPW to require construction sites to prepare and submit plans for review and approval by the DPW if they disturb one acre or more or are located on slopes 5% and greater.

Effectiveness: Thus far the ordinance has effectively prohibited all discharges to the stormwater conveyance system that are not free of pollutants to the MEP.

TASK 1D - ERP TRAINING

LOCAL PROGRAM: CITY OF NAPA

Performance: The primary City stormwater construction inspector and two alternates were trained on ERP procedures and policies on October 21, 2005.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: Training held for all enforcement staff.

The County-wide Program provided training to each of the DPW staff responsible for enforcement of the stormwater ordinance in October 2005. The training included a power point presentation that provided an overview of the discharge prohibitions and enforcement authority in the stormwater ordinance. The power point presentation also included many examples of illicit discharges from construction sites that provided the opportunity to discuss appropriate enforcement actions.

Effectiveness: Indeterminate.

LOCAL PROGRAM: NAPA COUNTY

Performance: Training held for all stormwater construction site enforcement staff.

Enforcement of Napa County's stormwater ordinance at construction sites is enforced by the stormwater inspector and 2 engineering staff who review stormwater plans for adequacy. The County-wide Program provided training on the enforcement response plan and procedures for each of the DPW staff responsible for enforcement of the stormwater ordinance in December 2005. The training included a power point presentation that provided an overview of the discharge prohibitions and enforcement authority in the stormwater ordinance. The power point presentation also included many examples of illicit discharges from construction sites that provided the opportunity to discuss appropriate enforcement actions.

Effectiveness: Unknown.

TASK 1E - EVALUATE AND AMEND ERP

LOCAL PROGRAM: CITY OF NAPA

Performance: Inspection of construction project is currently done by staff from two City departments-Communities Development for private projects, and Public Works for City funded projects. To increase efficiency combining inspection under one City Department is being studied. After inspection staff issues are resolved the ERP will be amended to match the reorganization. The issue of stormwater enforcement and inspection during dry weather is also being studied.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: The Department of Public Works applied the Enforcement Response Plan and enforcement staff successfully gained compliance. Therefore no necessary amendments were proposed in FY 2005/2006.

Effectiveness: Indeterminate.

LOCAL PROGRAM: NAPA COUNTY

Performance: ERP evaluated and amended.

The ERP was evaluated for effectiveness based upon the experience gained thus far with enforcing the provisions of the stormwater ordinance. Thus far, enforcement staff have successfully gained compliance from violators by following the ERP, but it was modified to eliminate a “verbal warning” as an acceptable enforcement practice. Verbal warnings are less enforceable than an order in writing and are often vulnerable to interpretation and recollection by the responsible party and the inspector. To eliminate potential confusion, all enforcement actions must be in the form of a written order to comply.

Effectiveness: The elimination of “verbal warning” as an enforcement option will ensure that the discharge prohibitions and BMP requirements established by the stormwater ordinance and enforcement official are clearly communicated to the responsible party and eliminate the potential for illicit discharges to continue as a result of misunderstandings.

2. PLAN REVIEW

TASK 2C. IMPLEMENT TRAINING PROGRAM

LOCAL PROGRAM: NAPA COUNTY

Performance: A meeting was held specifically to discuss the plan review process in April 2006.

The engineering staff in the DPW and the stormwater coordinator met in March 2006 to discuss solutions to improve the tracking of projects subject to stormwater inspections (> 1 acre or >5% slope). The main difficulty is receiving notification of when construction begins and ends. Applicants are required under the existing policy to notify the DPW when construction starts and is finished, however, the applicants tend to notify only the Building Department and not the DPW. Several options of tracking construction in progress was discussed and it was determined that making this requirement more clear in the application packet and communicating with the building department would improve the situation. After these steps are taken, enforcement action in the form of a citation may be necessary in order to ensure that the DPW is aware of all active construction sites.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

A pre and post survey is not appropriate for plan review training since thorough and detailed checklists for project applicability and plan completeness have been developed and are used by plan review staff. These checklists help to eliminate arbitrary and incorrect application of the plan review requirements. This task is proposed to be modified to eliminate the surveys from the plan review trainings.

Effectiveness: Unknown.

TASK 2D. IMPLEMENT PLAN REVIEW PROCESS

ALL LOCAL PROGRAMS

Performance: The Local Programs continued to implement the plan review process adopted in FY04/05 to require BMPs at construction sites.

3. INSPECTIONS

TASK 3D. IMPLEMENT TRAINING PROGRAM

LOCAL PROGRAM: CITY OF NAPA

Performance: The primary City stormwater construction inspector and two alternates were trained on stormwater construction inspection on October 21, 2005.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Training held for all enforcement staff.

The County-wide Program provided training to each of the DPW staff responsible for enforcement of the stormwater ordinance in October 2005. The training included a power point presentation that provided an overview of the discharge prohibitions and enforcement authority in the stormwater ordinance. The power point presentation also included many examples of illicit discharges from construction sites that provided the opportunity to discuss appropriate enforcement actions.

Effectiveness: Indeterminate.

LOCAL PROGRAM: NAPA COUNTY

Performance: All construction site stormwater inspectors trained.

The County-wide Program provided training to each of the two DPW staff responsible for stormwater inspections of construction sites in December 2005. The training included a power point presentation that provided an overview of the discharge prohibitions and enforcement authority in the stormwater ordinance. The slideshow also included 30 pictures of construction sites where the trainees evaluated BMP performance on a survey sheet. The BMP evaluations were discussed after the inspector filled out the survey form for each slide and the evaluations were discussed as a group. This was very useful to ensure that BMPs are evaluated consistently among the inspectors. The power point presentation also included many examples of illicit discharges from construction sites that provided the opportunity to discuss appropriate enforcement actions. In order to evaluate the effectiveness of the training, the inspectors' responses on the last three slides were evaluated and the results indicate that by the end of the training the BMPs were evaluated correctly.

Effectiveness: Unknown.

TASK 3E. IMPLEMENT INSPECTION PROGRAM

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

LOCAL PROGRAM: CITY OF NAPA

Performance: During the 16 rain events in FY05/06, 13 (81%) of the events had five or more inspections.

Most of the sites inspected had compliance issues. Additional sites were inspected by Water Board staff. Fines were collected for violations on two occasions. Due to a federally-declared flood emergency inspections were not conducted during the New Years' flood event or immediately afterwards.

Effectiveness: Some contractors and owners responded well to City inspections and took required corrective action while others did not. The City of Napa's stormwater program was audited by the EPA; one of the preliminary findings was that enforcement efforts need to be increased at construction sites.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Measurable Goal 3E requires the inspection of 5 construction sites. Typically the City of St. Helena does not have 5 construction sites open in the wet season so the goal was modified to all open construction sites less than 5 or a minimum of 5 if they are available.

Effectiveness: The average number of inspections within 48 hours of a storm even was 1 (one) which constituted 100 % of the permitted sites open during the rainy season.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: 5 inspections at the only project > 1 acre.

The City of Calistoga conducted inspections of the one new permit that had an NOI on almost a daily basis. A contract inspector was hired by the City for this purpose and was trained with the full time Public Works crew during a training provided at the City by Todd Adams of the Flood Control Board. The other site was not inspected with this same regularity. At the beginning of winter the site was winterized and already had curb, gutter and sidewalk installed. The drain inlets were properly protected and the roads were shaled. The site conditions did not change from day to day after the contractor fine tuned the erosion control measures early on. Due to the lack of changes in the on site work the project was visited but reports were not always written. During the January floods a nearby stream flooded and washed a considerable amount of the road base to one end of the project. Both City forces and the contractor were on site all night long to control the situation. Within a short time after the City wide flooding the contractor was able to re-rock the roadways and the City worked with him to allow paving of the roads as quickly as possible to eliminate the potential of a repeat if more strong storms moved into the area as they did in 1995.

LOCAL PROGRAM: NAPA COUNTY

Performance: 5 or more inspections were conducted within 48 hours of a major storm event (0.25 inches/hour) 11% of the time. The average number of inspections within 48 hours of a major storm event was 1.8.

Napa County did not achieve its performance measure for inspecting 5 sites within 48 hours of a major storm event due to the loss of the stormwater inspector during most of the rainy season. The inspector left for maternity leave in the Summer of 2005 and it was expected that she would return to work in the Fall of 2005. For this reason the DPW did not backfill the position. Due to medical reasons, the inspector did not return to work until December 2005 and was not allowed to drive a vehicle. Unfortunately, the inspector resigned from her position to spend time with her new family and the DPW was not able to refill the position until after the rainy season.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

There is no plan to modify the performance measure. Based upon experience from the rainy season in FY04/05 it was not difficult to meet the measurable goal when the stormwater inspector position was filled.

- A total of 51 construction site inspections were documented in FY05/06. Thirty-four of the inspections were conducted in response to rain events and 17 were conducted during dry periods.
- Eight illicit discharges were detected from 7 construction sites and 11 potential illicit discharges were detected from 9 construction sites.
- There were 35 different projects inspected at least once and 20% of them had at least one illicit discharge and 26% of them had at least one potential illicit discharge.

Effectiveness: Unknown.

A report is provided in Appendix E that summarizes the results of the BMP performance at construction sites during FY04/05 and FY05/06. Due to the lack of a full-time stormwater inspector during this period and the sporadic documentation of inspections by other staff, it is not valid to make comparisons in BMP implementation with the previous year. However, it appears that this report will serve as an important tool to measure the effectiveness of the construction site runoff control program in the future.

4. OUTREACH

TASK 4B. PROVIDE BMP MATERIALS TO THE PUBLIC

COUNTY-WIDE PROGRAM

Performance: Outreach materials provided to public upon request.

The County-wide Program provides BMP guides to Local Programs and contractors by request. These BMP guides are mostly distributed through inspections conducted by Local Programs, but occasionally the County-wide Program is contacted directly by contractors. In addition to the brochures and factsheets routinely distributed through inspections, the County-wide Program loaned a video called "Keep it Clean" to a contractor to use during their training of their workers and subcontractors.

Effectiveness: Unknown.

TASK 4D. CONSTRUCTION SITE WORKSHOP

COUNTY-WIDE PROGRAM

Performance: Workshops advertised by providing brochures at front counters of each of the Local Programs and distributing them during construction site inspections.

The SFEP/RWQCB construction site planning workshops in the Fall of 2005 were advertised by providing brochures at front counters of each of the Local Programs and distributing them during construction site inspections. The workshop in Napa was held on September 8th and was attended by 48 developers, contractors, and municipal staff. The County-wide Program coordinator gave a presentation at the workshop that gave an overview of local stormwater requirements for construction sites gave a slideshow of pictures from inspections entitled "The Good, the Bad, and the Ugly".

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

Due to the many years of holding this annual workshop, the SFEP and RWQCB have decided to discontinue holding the workshop annually and will only hold them every other year. For this reason, this task is proposed to be modified to sponsor this workshop every other year.

Effectiveness: Unknown.

The effectiveness of this outreach effort may be evaluated in the future by evaluating the effectiveness of BMPs implemented by contractors that have or have not attended the workshop in the past. This work will require a lot of effort, but it could be done by analyzing data from the construction inspection database.

TASK 4E. CONSTRUCTION SITE EROSION CONTROL WORKSHOP

LOCAL PROGRAM: CITY OF NAPA

Performance: Two members of the community Development Department (planning) and one member of the Public Works department attended construction site erosion workshop held in Napa on September 8, 2005.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: One building official from the Building Department and one junior engineer from the Public Works Department attended a workshop in FY05 /06.

Effectiveness: Indeterminate.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: Erik Lundquist of the Calistoga Planning Department, Bill McBride and John Montelli of the Public Works Department attended The Post Construction training workshop in Yountville that was provided by the Regional Water Control Board. Todd Adams of the Napa County Flood Control Board also provided training for the Public Works crew and the contract inspector the City retained. That training covered construction inspections.

LOCAL PROGRAM: NAPA COUNTY

Performance: One inspector and one plan review staff from the DPW attended the workshop in Napa in September 2005.

Effectiveness: Unknown.

TASK 4F. EVALUATE AND REVISE OUTREACH MATERIALS.

COUNTY-WIDE PROGRAM

Performance: Materials evaluated; revisions not necessary.

The County-wide Program evaluated the outreach materials provided to developers and contractors and determined that the existing materials, "CA BMP Stormwater BMP Handbook - Construction" and "Phase II Requirements for New Development and Redevelopment", are comprehensive and reflect current requirements and BMP practices for construction sites.

Effectiveness: Unknown.

ELEMENT V – POST-CONSTRUCTION RUNOFF MANAGEMENT

1. LEGAL AUTHORITY

TASK 1D - ERP TRAINING

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

LOCAL PROGRAM: CITY OF NAPA

Performance: This task is proposed for modification because the final post-construction BMP requirements were not adopted until June 2006. Training on the ERP will be implemented in FY06/07.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: Training held for all enforcement staff.

The Department of Public Works conducted in-house training to implement the adopted post-construction stormwater standards.

Effectiveness: Indeterminate.

LOCAL PROGRAM: NAPA COUNTY

Performance: This task is proposed to be modified to conduct the training next FY because the County has not adopted its draft post-construction requirements.

Effectiveness: Not applicable.

TASK 1E - EVALUATE AND AMEND ERP

LOCAL PROGRAM: CITY OF NAPA

Performance. The ERP for post-construction BMP maintenance is proposed for modification because the post-construction BMP requirements were not adopted until June 2006. The ERP will be evaluated in FY06/07.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: City reviewed the Development Manual of Stormwater Standards which includes post-construction standards and determined no necessary amendments for FY 2005/2006.

Effectiveness: Indeterminate

LOCAL PROGRAM: NAPA COUNTY

Performance: The ERP was evaluated and no revisions were recommended. The ERP will be evaluated in the future when the County implements it's Post-Construction BMP requirements and inspections.

Effectiveness: Not applicable.

2. DESIGN STANDARDS

Task 2E – Protect Slopes and Channels.

LOCAL PROGRAM: CITY OF NAPA

Performance: The final Post-Construction Stormwater Pollution Prevention Design Standards were adopted by the City of Napa on June 20, 2006. The requirement to maintain pre-development rainfall runoff characteristics is included on page 10-11 of the standards.

Effectiveness: Unknown.

TASKS 2B THROUGH 2V. ADOPT STANDARDS IN ATTACHMENT 4.

LOCAL PROGRAM: NAPA COUNTY

Performance: Napa County developed a 3rd draft of Post-Construction Runoff Management requirements, but did not adopt them in FY05/06. The adoption of these standards will be postponed until after the Construction Site Runoff Control requirements go through the full public review and comment process and are adopted by the BOS. Due to the political sensitivity and strong objection of a local property rights group, the DPW has taken great care to work with stakeholders to minimize costs to developers while maintaining the maximum protection of water quality. A final draft of the Construction Site Runoff Control requirements was prepared and is expected to be introduced for adoption by the BOS in the summer of 2006. The public review and comment period for the post-construction BMP requirements will begin shortly after the construction requirements are adopted.

Effectiveness: Not applicable.

3. PLAN REVIEW

TASK 3A. DEVELOP PLAN REVIEW PROCESS

LOCAL PROGRAM: NAPA COUNTY

Performance: An internal draft of Post-Construction Runoff Management requirements was developed, but was not implemented.

The plan review process for incorporating post-construction BMPs into development projects is developed but has not been implemented because the post-construction BMP requirements have not been adopted. The plan review process will be implemented upon adoption.

Effectiveness: Not applicable.

TASK 3B. DEVELOP TRAINING PROGRAM

LOCAL PROGRAM: CITY OF NAPA

Performance. The City of Napa adopted the training program developed by the County-wide Program for use in training planning and engineering staff on the proper design and use of Post-Construction BMPs. The training is a Power Point slideshow (Appendix F) that provides some background on why post-construction BMPs are important to protect water quality and introduces the concept Start at the Source design techniques which incorporate site design BMPs first, source control BMPs second, and treatment control BMPs last.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Training program developed.

Napa County adopted the training program developed by the County-wide Program for use in training planning and engineering staff on the proper design and use of Post-Construction BMPs. The training is a Power Point slideshow (Appendix F) that provides some background on why post-construction BMPs are important to protect water quality and introduces the concept Start at the Source design techniques which incorporate site design BMPs first, source control BMPs second, and treatment control BMPs last.

Effectiveness: Unknown.

TASK 3C. IMPLEMENT TRAINING PROGRAM

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

LOCAL PROGRAM: CITY OF NAPA

Performance. Community Development and Public Work planners and engineers attended a Post Construction BMP Workshop for phase II Municipalities on June 7, 2006 in Yountville. Additional in-house training using the Power Point presentation developed by the County-wide Program is planned for FY 06/07.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Training program implemented.

The County-wide Program gave the Post-Construction BMP training to 2 planners from CDPD and 4 engineers from the DPW. This training was very useful because all staff agreed, after the training, that post-construction BMPs need to be incorporated into the planning process as early as possible to avoid conflicts with other land use regulations.

Effectiveness: Unknown.

TASK 3D. IMPLEMENT PLAN REVIEW PROCESS

LOCAL PROGRAM: NAPA COUNTY

Performance: An internal draft of Post-Construction Runoff Management requirements was developed, but was not implemented. This task is proposed for modification because the post-construction BMPs requirements were not adopted

The plan review process for incorporating post-construction BMPs into development projects is developed but has not been implemented because the post-construction BMP requirements have not been adopted. The plan review process will be implemented upon adoption.

Effectiveness: Not applicable.

4. LONG-TERM MAINTENANCE

Task 4C Develop Inspection and Maintenance Schedule

LOCAL PROGRAM: CITY OF NAPA

Performance. Post Construction Stormwater Pollution Prevention Design Standards were adopted by the City of Napa on June 20, 2006. The City of Napa does not operate any structural controls. Maintenance of structural controls for private development is done by home owners associations, maintenance districts or by property owners. Maintenance schedule requirements are listed in Appendix F of the design standards.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Task modified due to delay in Post-Construction BMP adoption.

Inspection and maintenance schedules for Post-Construction BMPs are still in development, but will be complete when the post-construction BMPs are adopted in FY06/07.

Effectiveness: Not applicable.

Task 4D Train Maintenance Staff

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

LOCAL PROGRAM: CITY OF NAPA

Performance. The City of Napa did not have any post-construction BMPs to inspect in FY05/06 because the post-construction requirements and BMP maintenance mechanisms were not adopted until June 20, 2006. Annual trainings of inspectors will be implemented as maintenance agreements are executed for post-construction BMPs.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Task modified due to delay in Post-Construction BMP adoption.

Inspection and maintenance schedules for Post-Construction BMPs are still in development, but will be complete when the post-construction BMPs are adopted in FY06/07.

Effectiveness: Not applicable.

Task 4E - Implement Inspection and Maintenance Schedule

LOCAL PROGRAM: CITY OF NAPA

Performance. The City of Napa did not have any post-construction BMPs to inspect in FY05/06 because the post-construction requirements and BMP maintenance mechanisms were not adopted until June 20, 2006.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: The Department of Public Works Inspects and maintains structural controls according to the manufacturer's implementation schedule.

Effectiveness: All structural controls have been maintain to the specifications and are performing to the expectations of the manufacturer.

LOCAL PROGRAM: NAPA COUNTY

Performance: Task modified due to delay in Post-Construction BMP adoption.

Inspection and maintenance schedules for Post-Construction BMPs are still in development. Inspection program will be implemented when the post-construction BMPs are adopted in FY06/07.

Effectiveness: Not applicable.

TASK 4G. IMPLEMENT POLICY TO ENSURE LONG TERM MAINTENANCE

LOCAL PROGRAM: CITY OF NAPA

Performance: Agreements for maintenance of post construction BMPs were developed by City staff (Appendix K).

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Maintenance policy for all new post-construction BMPs implemented for new development and redevelopment projects.

The Post-Construction Runoff Management policy adopted by the City Council on June 28, 2005 establishes mechanisms for ensuring long-term operation and maintenance of structural

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

treatment control BMPs. These mechanisms may include establishing conditions on use permits and executing maintenance agreements.

Effectiveness: NA

The effectiveness of the long-term maintenance requirements in the Post-Construction Runoff Management policy cannot be evaluated at this time because the requirements took effect at the end of fiscal year. The effectiveness may be evaluated in the future as BMPs are approved and the inspection program is implemented.

LOCAL PROGRAM: NAPA COUNTY

Performance: Maintenance policy for new development and redevelopment projects implemented for projects that require a use permit.

The long-term operation and maintenance of structural post-construction BMPs is ensured through the use of conditions of approval with use permits. The majority of the use permit projects approved with structural BMPs are businesses regulated and inspected by the DEM. The stormwater inspection program for restaurants and CUPA facilities includes a requirement on the checklist to verify that structural BMPs are properly operated and maintained. A database and procedures are currently being developed to provide the inspectors with information on all approved structural BMPs and their maintenance requirements. The database and procedures will be implemented in FY05/06.

Additional post-construction BMP maintenance mechanisms will be implemented when the Post-Construction Runoff Management Requirements are adopted in FY05/06.

Effectiveness: Unknown.

TASK 5A. WORKSHOPS

COUNTY-WIDE PROGRAM

Performance: Two workshops/presentations held.

The County-wide Program partnered with the Napa-Solano-Sonoma Stormwater Agencies (NSSSA) and the RWQCB to host a full day post-construction BMP workshop on June 7, 2006 in Yountville. A speaker from the RWQCB gave an overview presentation of site design and treatment control BMPs and their relative effectiveness and two speakers from Geosyntec Consultants gave presentations on how to design and size treatment control BMPs using flow and volume-based criteria and how to use site design features and structural to meet runoff criteria to minimize downstream erosion. The workshop concluded with a break-out session where the participants worked on sizing BMPs for example development projects. The workshop was attended by nearly 100 developers, engineering consultants, and municipal staff.

The County-wide Program also gave a presentation on post-construction BMPs to the Napa Engineers Society luncheon. The luncheons are attended by local engineers from the public and private sectors.

Effectiveness: Unknown.

The workshop received much positive feedback from participants. Many had been looking forward to learning about how to actually design BMPs to meet treatment and runoff control standards. The runoff control portion of the workshop went a little too long and may have been

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

too technical for some of the audience members. The County-wide Program and its NSSSA partners will make improvements to future workshops based upon what was learned from this workshop.

ELEMENT VI – MUNICIPAL OPERATIONS

1. Street Sweeping

TASK 1A. STREET SWEEP ACCORDING TO TABLE 8.

ALL LOCAL PROGRAMS

Performance: Each of the Local Programs implemented the street sweeping schedule according to Table 8.

Effectiveness: Unknown.

TASK 1E. SWEEPING PROGRAM EVALUATION

ALL LOCAL PROGRAMS:

Performance: Each of the Local Programs evaluated their sweeping programs and determined that the sweeping frequency is adequate to maintain streets free of litter and debris.

Effectiveness: Unknown.

Each Local Program receives complaints from the public when additional sweeping is needed. This is a very effective means of increasing sweeping in certain areas since the public is very concerned with the cleanliness of their local streets.

TASK 1G - STAFF AND CONTRACTOR TRAINING

ALL LOCAL PROGRAMS:

Performance: Each of the local programs trained staff on the street sweeping schedule and the BMPs established for street sweeping in the Stormwater Maintenance Standards (see RS-1).

Effectiveness: Unknown.

TASKS 1I-L - PILOT PROGRAM TO REDUCE INTERFERENCE WITH CARS ON STREETS.

LOCAL PROGRAM: NAPA COUNTY

Performance: Tasks related to parked cars on streets are proposed for elimination.

Napa County has few areas that require street sweeping (curb and gutter). Based upon site visits to these areas there are very few parked cars that obstruct sweeping operations. For example, the industrial area near the airport has little to no parking on the streets. Residential areas such as the Silverado Country Club also have few cars parked on the streets. Most of these residences use their driveways and garages to park their cars and have high expectations for street cleanliness.

Effectiveness: Not applicable.

TASKS 1 O, P, Q - PILOT PROGRAM TO REDUCE LEAVES ON STREETS.

LOCAL PROGRAM: NAPA COUNTY

Performance: Tasks related to removing leaves on streets are proposed for elimination.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

The County's method of removing leaves from streets was evaluated and it was determined that the existing methods are effective at removing leaves. Front-loaders work ahead of sweepers in the leaf season to remove most leaf material so that sweepers can efficiently clean the streets. The frequency of leaf removal and sweeping is also increased during the leaf season keep up with the leaf-fall.

Effectiveness: Not applicable.

TASKS 1 T, U, V - PILOT PROGRAM TO REDUCE INTERFERENCE FROM TREES

LOCAL PROGRAM: NAPA COUNTY

Performance: Tasks related to removing branches and trees that obstruct sweeping operations are proposed for elimination.

The County's method of removing branches and trees that obstruct street sweeping was evaluated and it was determined that the existing methods are effective. Street sweeper operators notify the Roads Division of branches and trees that need to be pruned. The Roads Division also routinely trims vegetation to ensure that the flow of traffic is not obstructed.

Effectiveness: Not applicable.

2. Storm Drain Maintenance

TASK 2B. STORM DRAIN MAINTENANCE TRAINING

LOCAL PROGRAM: CITY OF NAPA

Performance: Annual training completed on June 20, 2005.

City of Napa street crews participated in a stormwater training session on June 20, 2005. At the training, staff watched the Excal video and completed the stormwater survey.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: All relevant staff trained annually.

The City of St. Helena's Street Department conducts an informal training at the beginning of every rainy season to review standard storm drain maintenance procedures.

Effectiveness: Indeterminate.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: Annual training completed in June 2005.

All Public Works maintenance personnel were given the Excal Visual survey as a pre-test in June of 2005. The pre-test was given with no prior discussion. The average score on the pre-test was 86.6% correct which is very good considering it was a pre-test. Prior to the start of the fall cleaning of storm drains Public Works crew members participated in a review of the importance of storm drain cleaning and BMPs

LOCAL PROGRAM: NAPA COUNTY

Performance: Training not implemented.

Due to the federally-declared emergency after the New Year's flood, the Roads Division was focused on repairing roads throughout the County for the rest of the FY. Annual training will resume in FY06/07.

Effectiveness: Not applicable.

TASK 2C. ROUTINE INSPECTION AND CLEANING

LOCAL PROGRAM: CITY OF NAPA

Performance: The City of Napa maintains all critical storm drains prior to the wet season and maintains the entire drainage system throughout the year as needed. Critical drainage locations are noted on computer generated maps which are part of the City's geographic information system (GIS).

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: St. Helena inspects all storm drains prior to the wet season and cleans them out as needed. Storm drains are also periodically inspected throughout the year and cleaned as needed.

Effectiveness: Indeterminate.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: All storm drains were inspected prior to the winter months and cleaned as needed throughout the year. In the weeks following the January flooding in Calistoga a private contractor was hired to provide a Vacuum truck which was used to clean the storm drains that had been impacted by the heavy rains so that they would be clean prior to additional rain.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: All storm drains were inspected prior to the wet season and cleaned out as needed. Storm drains were also periodically inspected throughout the year and cleaned as needed.

Effectiveness: Unknown

TASK 2D. EVALUATE NEED FOR MORE CLEANING

Local Program: City of St. Helena

Performance: Assess the need for more frequent cleaning of storm drains. The Department of Public Works assesses the need for increased frequency of storm drains periodically throughout the rainy season. Trouble spots are identified if any and frequency increased as necessary.

Effectiveness: Recommendations made.

LOCAL PROGRAM: NAPA COUNTY

Performance: The need to clean storm drains is routinely evaluated based upon inspections by road division staff and complaints from the public.

Effectiveness: Unknown.

3. Stormwater Pump Stations

TASK 3B-3D STORMWATER PUMP STATIONS

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

LOCAL PROGRAM: CITY OF NAPA

Performance: City maintenance crews responsible for storm water pump station maintenance were educated about maintenance standards by their supervisor. The wet well was cleaned as part of the pump station's annual maintenance. Records of inspections for June, August and October-April are not available.

Effectiveness: Unknown.

4. Litter Control

TASK 4A. SERVICES

LOCAL PROGRAM: CITY OF NAPA

Performance: Napa has litter receptacles at parks and in the downtown area. The receptacles are emptied by City crews on a regular basis.

The Community Services Department (parks) maintains 42 parks all of which have litter receptacles that are maintained bi-weekly. High use areas are monitored maintained daily if required. Parks staff works seven days a week including holidays to maintain litter pickup and removal. All litter is removed from public parks, facilities, landscaped areas etc. and is then transferred to a designated trash dumpster in the City Corporation Yard. All recycle litter receptacles have anti-littering/ recycle information messages on each receptacle and receptacle lid.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: St. Helena has litter receptacles throughout the City and Public Works staff completed daily pick ups, including on the weekends.

Effectiveness: Indeterminate.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: The City of Calistoga provided litter receptacles at public streets and parks and serviced them throughout the year.

All street garbage containers (with the exception of six) are picked up three days per week by the local garbage contractor, Upper Valley Disposal. These cans are monitored by Public Works staff to assure the service is provided as per contract. The remaining six and the park receptacles are picked up three days per week by Public Works staff. The cans are monitored for needed frequency of pick-up and it has been determined that an additional pickup was required during periods of heavy tourism. City forces are now picking up the downtown cans on Sunday mornings. We will continue to monitor and pick up on Sunday as needed.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: The DPW collected litter from the trash receptacles at the Yountville Ecological Preserve on a weekly basis.

Effectiveness: Approximately 100 cubic yards of trash is collected at the Yountville Ecological Preserve each year.

The exact quantity of trash collected at the Yountville Ecological Preserve is not tracked, but a rough estimate of 100 cubic yards is based the assumption that each receptacle is $\frac{3}{4}$ full,

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

based on observations, when it is collected each week. The litter collection service is likely to reduce some of the trash in the active channel of the Napa River and a lot of garbage in the parking lot which could reach the Napa River by wind or flooding.

In FY05/06 a recycling bin was also provided at the ecological preserve through a contract with the garbage service.

TASK 4B. ASSESSMENT

LOCAL PROGRAM: CITY OF NAPA

Performance: Assessment completed; recommendation implemented.

Staff monitors public areas for litter and evaluates if receptacles are needed or if any more receptacles are required for high use areas. Special event or group picnic areas may require extra litter receptacles for temporary use. All new parks or public areas are evaluated for litter potential and appropriate receptacles installed as needed.

Effectiveness: Unknown.

5. Corporation Yard

TASK 5B. DEVELOP SWPPP

LOCAL PROGRAM: CITY OF NAPA

Performance: The city operates one corporation yard at 77 Jackson Street. Work has begun on developing a storm water pollution prevention plan. The SWPPP will be completed in FY06/07.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: Develop a plan for SW management, includes necessary capital improvements, O&M standards, and budget.

The City of St. Helena has prepared a Stormwater Pollution Prevention Plan for the Corporation Yard. The annual budget includes the necessary capital improvements. The highlight of the SWPPP is a combination Sanitary Sewer / Stormwater Lift Station that will collect the surface runoff from the yard and pump it to the sanitary sewer system where the runoff will be treated at the city owned treatment works. Implementation of the SWPPP and necessary improvements is included in the flood recovery efforts as the yard was inundated during last season's flood.

Effectiveness: Indeterminate.

LOCAL PROGRAM: NAPA COUNTY

Performance: Task modified to develop SWPPP for Corporation Yards in FY06/07.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

Due to the federally-declared emergency after the New Year's flood, the Roads Division was focused on repairing roads throughout the County for the rest of the FY. SWPPPs for all corporation yards will be developed in FY06/07.

Effectiveness: Not applicable.

TASK 5C. IMPLEMENT SWPPP

LOCAL PROGRAM: CITY OF NAPA

Performance: During the past year a storm drain was constructed in Jackson Street providing a point of connection for the corporation yard. A loading ramp was constructed at the corporation yard to reduce water pollution from soil hauled to the yard. Street sweepers are dumping directly into dumpsters rather than onto the pavement as was previously done. Because of the City's deficit funding for capital improvement projects at the yard is limited.

Local Program: City of St. Helena

Performance: Implement items from SWPPP

The City of St. Helena has prepared a Stormwater Pollution Prevention Plan for the Corporation Yard. Implementation of the SWPPP and necessary improvements is included in the flood recovery efforts as the yard was inundated during last season's flood.

Effectiveness: Implementation is underway with the Phase 1 improvements out to bid at the time of this report.

LOCAL PROGRAM: NAPA COUNTY

Performance: Task modified to implement SWPPP for Corporation Yards in FY06/07.

Due to the federally-declared emergency after the New Year's flood, the Roads Division was focused on repairing roads throughout the County for the rest of the FY. SWPPPs for all corporation yards will be developed in FY06/07.

Effectiveness: Not applicable.

6. Road Maintenance

TASK 6C. TRAINING

LOCAL PROGRAM: CITY OF NAPA

Performance: Street crews were trained on suing BMPs during tailgate training sessions held throughout the year and on the job as needed.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Training not implemented.

Due to the federally-declared emergency after the New Year's flood, the Roads Division was focused on repairing roads throughout the County for the rest of the FY. Annual training will resume in FY06/07.

Effectiveness: Not applicable.

7. Creek and Ditch Maintenance

TASK 7C. TRAINING

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

LOCAL PROGRAM: CITY OF NAPA

Performance: On-site training provided by the Flood Control District.

The city works with the Napa County Flood Control and Water Conservation District when creek or ditch maintenance is required. On site guidance and training is provided by the District as required by the maintenance situations found.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: All relevant staff trained.

The Watershed Project Coordinator at the NCFWCWD continues to provide annual training for staff and contractors performing maintenance within ditches and creeks throughout the county. The training includes the conditions of all applicable State and Federal permits and the maintenance standards developed in FY03/04.

Effectiveness: Unknown.

8. Parks & Recreation Facilities

TASK 8A. ASSESS THE CONDITION OF PARKS AND RELATED

LOCAL PROGRAM: CITY OF NAPA

Performance: All City Parks are inspected weekly. Chemical use is limited to turf fertilizer applications twice a year following best management practices. Pesticide use is done following State of California Department of Pesticide Regulations. Monthly summary reports of all pesticide use are made to the Napa County Agricultural Commissioner's office. Pesticide application on City parks are done by licensed State of California applicators on staff.

Effectiveness: Unknown.

Local Program: City of St. Helena

Performance: Assess the condition of parks and related facilities.

During FY 05-06 the City reassigned the responsibilities of the parks department from Public Works to the Parks and Recreation. As a result the assignment of duties and responsibilities is still underway, including assignment of the park assessment task. The park assessment for FY 05-06 did not occur by the end of FY 05-06 but is still on the task list.

Effectiveness: Park assessment did not occur within the confines of FY 05-06. The City will include the park assessment in the next annual report.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: Assessment completed for Logvy Park.

The City of Calistoga maintains eight parks within the City limits. An Assessment of Logvy park was done in 05/06 and BMPs were identified to minimize pollutant discharge. Many of these BMPs are appropriate for all parks.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Not applicable at this time.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

Napa County does not have a parks department and does not own or operate any parks. There is currently a commission appointed by the BOS to investigate the possibility of creating a parks and open space district in the County. The County will conduct assessments of future parks if a parks and open space district is created.

Effectiveness: Not applicable.

TASK 8C. TRAINING

LOCAL PROGRAM: CITY OF NAPA

Performance: The Park Department staff held a Stormwater BMP training class on 6/20/2006

LOCAL PROGRAM: NAPA COUNTY

Performance: Not applicable at this time.

Napa County does not have a parks department and does not own or operate any parks. There is currently a commission appointed by the BOS to investigate the possibility of creating a parks and open space district in the County. The County will conduct trainings of all appropriate staff if a parks and open space district is created.

Effectiveness: Not applicable.

9. Other Municipal Activities

TASK 9A. PRIORITIZE.

LOCAL PROGRAM: CITY OF NAPA

Performance: All other municipal activities prioritized.

The following other municipal activities were reviewed:

Water treatment-the City operates three water treatment plants whose storm water pollution prevention is covered by a separate Board permit.

Water Distribution-There are approximately 350 miles of pipelines, 2,400 fire hydrants and 23,000 water meters in the City of Napa water system which must be kept working, as much as possible, every minute of every day of the year. This crucial duty and immense responsibility falls on the shoulders of the Distribution section of the Water Division. It is the main priority of this section to assure a continuous flow of potable water at a reasonable water pressure through a metered system. When water main breaks occur, chlorinated water and sediment can enter the storm drain system. To minimize impacts of water main breaks and repairs crews use dechlorination tablets to minimize chlorinated water entering storm drains. Crews also use straw waddles or gravel bags along gutters to filter sediment out of water being pumped out of trenches. During the next year a stormwater protection field manual will be prepared for field crews.

Solid Waste, Recycling & Composting Facility: The City of Napa owns a, contractor operated, solid waste transfer station, composting, and recycling facility south of the City in American Canyon. These facilities storm water pollution activities are covered by a separate Board permit.

Fire Department Fire Department staff reviewed their activities that might affect stormwater and came up with the following pritorized list:

- Washing apparatus at the stations (the City of Napa has four fire stations)
- Washing out apparatus bays

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

- Washing hose after structure fires
- Hose evolutions using foam during training
- Watering lawns and shrub beds
- Weed and grass pest control

Building Maintenance Building maintenance staff maintains nine City buildings in the downtown area and at the corporation yard. There is potential for storm water pollution from outside surface cleaning, exterior painting, roof maintenance, outside storage, and garbage handling.

Garbage Collection Napa Recycling & Waste Services collects garbage, single-stream recycling materials, and yard waste at curb side. This franchise is administered by the City of Napa's Finance Department. There is a potential for stormwater pollution from material spillage during collects and from oil leaks from hydraulic lines and engines.

Local Program: City of St. Helena

Performance: Municipal activities prioritized.

The Department of Public Works is continually aware of potential stormwater issue and prioritizes them as needed. Staff discusses any stormwater issues at weekly staff meetings where the Director has the opportunity to prioritize any current or future activity.

Effectiveness: Activities prioritized as part of standard operating procedure.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF NAPA

Performance: All other municipal activities prioritized.

The following other municipal activities were evaluated and prioritized for future BMP development, training, and implementation:

Building and Landscape Maintenance: Building maintenance staff maintains several county facilities. These activities are the top priority because the building maintenance staff have not yet had any training on stormwater BMPs. There is potential for storm water pollution from outside surface cleaning, exterior painting, roof maintenance, outside storage, and garbage handling. BMP development, training, and implementation for building and landscape maintenance will be conducted in FY06/07.

Fire Department: County Fire Department activities that may have an impact on water quality were identified. BMP development, training, and implementation for building and landscape maintenance will be conducted in 07/08.

GOALS AND MODIFICATIONS FOR FY06/07

I. PUBLIC EDUCATION AND OUTREACH

GOALS FOR FY06/07

See Table 3.

MODIFICATIONS TO MEASURABLE GOALS

TASK 1D. CONDUCT SURVEY

COUNTY-WIDE PROGRAM

Performance Measure: Collect 300 responses to survey.

Two methods of establishing baseline data on the public's knowledge of stormwater issues were evaluated. The first was to distribute a survey in garbage bills and the second was to conduct a phone survey similar to the one conducted in Sonoma County. It was determined that the phone survey would provide the most accurate results and also provide the opportunity compare stormwater knowledge across the North Bay Area. The method of distributing the survey in garbage bill would not provide a representative sample of the county-wide education and outreach efforts because it is not possible to provide inserts into garbage bills outside the City of Napa. It was also determined that in order to determine the effectiveness of the county-wide program's education and outreach programs it is not necessary to obtain statistically valid samples within each of the Local Program's jurisdictions. By conducting the survey to target the County as a whole significant cost-savings will result and not compromise the usefulness of the survey at establishing baseline data to measure public awareness of stormwater issues over time.

The County-wide Program did not have sufficient funds to conduct the survey in FY05/06, however, the survey costs were included in the FY06/07 budget. The total cost of conducting the survey is \$20,000.

ADDITIONS TO MEASURABLE GOALS

No additions are proposed for the Public Education and Outreach measurable goals.

II. PUBLIC INVOLVEMENT AND PARTICIPATION

GOALS FOR FY06/07

See Table 3.

MODIFICATIONS TO MEASURABLE GOALS

No modifications are proposed for the Public Involvement and Participation measurable goals.

ADDITIONS TO MEASURABLE GOALS

No additions are proposed for the Public Involvement and Participation measurable goals.

III. ILLICIT DISCHARGE DETECTION AND ELIMINATION

GOALS FOR FY06/07

See Table 3.

MODIFICATIONS TO MEASURABLE GOALS

ALL LOCAL PROGRAMS

This measurable goal is proposed for modification because each Food Service Facility was provided with the Food Facility BMP booklets developed by the DEM in FY03/04. It does not make sense to redistribute this guide to each food service facility each year. There are also other appropriate outreach materials (Pollution Prevention for Surface Cleaning) that have been developed and are distributed on an as needed basis.

Effectiveness: Unknown.

ADDITIONS TO MEASURABLE GOALS

No additions are proposed for the Illicit Discharge Detection and Elimination measurable goals.

IV. CONSTRUCTION SITE RUNOFF CONTROL

GOALS FOR FY06/07

See Table 3.

MODIFICATIONS TO MEASURABLE GOALS

No additions are proposed for the Construction Site Runoff Control Measurable Goals.

ADDITIONS TO MEASURABLE GOALS

No additions are proposed for the Construction Site Runoff Control Measurable Goals.

IV. POST-CONSTRUCTION RUNOFF MANAGEMENT

GOALS FOR FY06/07

See Table 3.

MODIFICATIONS TO MEASURABLE GOALS

TASK 2B – 2V. ADOPT DESIGN STANDARDS

LOCAL PROGRAMS: YOUNTVILLE, CALISTOGA, NAPA COUNTY

The draft Post-Construction Runoff Management requirements were not adopted in FY04/05 because they had not been fully reviewed by stakeholders in the community. The adoption of these requirements are rescheduled for FY05/06 to allow adequate time for stakeholder groups to review and comment on the proposed requirements. The public participation in the development of the requirements is essential to ensure that post-construction requirements are clear and easy to understand, are fairly consistent from agency to agency, and maximize the reduction of pollutants in stormwater runoff to the MEP.

TASK 3A. ADOPT PLAN REVIEW PROCESS

LOCAL PROGRAMS: YOUNTVILLE, CALISTOGA, NAPA COUNTY

Performance Measure: Adopt plan review process to incorporate design standards.

The draft plan review process is included in the draft post-construction runoff control requirements and will be implemented when the requirements are adopted and take effect.

TASK 4 C, D, AND E. ENSURE LONG-TERM MAINTENANCE.

LOCAL PROGRAMS: CITY OF NAPA, YOUNTVILLE, CALISTOGA, NAPA COUNTY

Inspection and maintenance schedules for Post-Construction BMPs are still in development. Inspection program will be implemented when the post-construction BMPs are adopted in FY06/07.

ADDITIONS TO MEASURABLE GOALS

No additions are proposed for the Post-Construction Runoff Management Measurable Goals.

IV. MUNICIPAL OPERATIONS

GOALS FOR FY06/07

See Table 3.

MODIFICATIONS TO MEASURABLE GOALS

TASKS 1I-L - PILOT PROGRAM TO REDUCE INTERFERENCE WITH CARS ON STREETS.

LOCAL PROGRAM: NAPA COUNTY

Napa County has few areas that require street sweeping (curb and gutter). Based upon site visits to these areas there are very few parked cars that obstruct sweeping operations. For example, the industrial area near the airport has little to no parking on the streets. Residential areas such as the Silverado Country Club also have few cars parked on the streets. Most of these residences use their driveways and garages to park their cars and have high expectations for street cleanliness.

TASKS 1 O, P, Q - PILOT PROGRAM TO REDUCE LEAVES ON STREETS.

LOCAL PROGRAM: CITY OF NAPA AND NAPA COUNTY

Tasks related to removing leaves on streets are proposed for elimination. The County's method of removing leaves from streets was evaluated and it was determined that the existing methods are effective at removing leaves. Front-loaders work ahead of sweepers in the leaf season to remove most leaf material so that sweepers can efficiently clean the streets. The frequency of leaf removal and sweeping is also increased during the leaf season keep up with the leaf-fall.

TASKS 1 T, U, V - PILOT PROGRAM TO REDUCE INTERFERENCE WITH TREES.

LOCAL PROGRAM: NAPA COUNTY

Tasks related to removing branches and trees that obstruct sweeping operations are proposed for elimination. The City and County's method of removing branches and trees that obstruct street sweeping was evaluated and it was determined that the existing methods are effective. Street sweeper operators notify the Streets/Roads Division of branches and trees that need to be pruned. The Streets/Roads Division also routinely trims vegetation to ensure that the flow of traffic is not obstructed.

TASK 5B. DEVELOP SWPPP

LOCAL PROGRAM: CITY OF NAPA, NAPA COUNTY

Task proposed to be modified to develop SWPPP for Corporation Yards in FY06/07. Due to the federally-declared emergency after the New Year's flood, the Streets/Roads Division was focused on repairing roads and cleaning up debris for the rest of the FY. SWPPPs for all corporation yards will be developed in FY06/07.

TASK 5C. IMPLEMENT SWPPP

LOCAL PROGRAM: CITY OF NAPA, NAPA COUNTY

Task modified to implement SWPPP for Corporation Yards in FY06/07. Due to the federally-declared emergency after the New Year's flood, the Street/Roads Division was focused on repairing roads for the rest of the FY. SWPPPs for all corporation yards will be developed in FY06/07.

ADDITIONS TO MEASURABLE GOALS

No additions are proposed for the Municipal Operations Measurable Goals.

GLOSSARY

1. **Best Management Practices (BMPs)** – Best management practices means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of “waters of the United States.” BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (40 CFR § 122.2)
2. **Maximum Extent Practicable (MEP)** – A technology-based standard established by congress in CWA §402(p)(3)(B)(iii) that municipal dischargers of stormwater must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve. MEP is generally the result of emphasizing pollution prevention and source control BMPs as the first lines of defense in combination with treatment methods where appropriate serving as additional lines of defense. The MEP approach is an ever evolving, flexible and advancing concept, which considers technical and economic feasibility.
3. **Measurable Goal** – Defined tasks or accomplishments that are associated with implementing best management practices.
4. **Minimum Control Measure** – A stormwater program area that must be addressed by all regulated MS4s. The following six minimum control measures are required to be addressed by the regulated Small MS4s: Public Education and Outreach, Public Involvement/Participation, Illicit discharge Detection and Elimination, Construction Site Runoff Control, Post-Construction Runoff Management, Municipal Operations.
5. **New Development** – land disturbing activities, structural development, including construction or installation of a building or structure, creation of impervious surfaces, and land subdivision.
6. **Outfall** – A point source at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States. (40 CFR § 122.26(b)(9))
7. **Point Source** – Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff. (40 CFR § 122.2)
8. **Regulated Small MS4** – A small MS4 that is required to be permitted for discharging stormwater through its MS4 to waters of the U.S. and is designed either automatically by the U.S. EPA because it is located within an urbanized area, or designated by the SWRCB or RWQCB in accordance with the designation criteria listed at Finding 11 of the General Permit.
9. **Redevelopment** - Redevelopment means, on an already developed site, the creation or addition of at least 5,000 square feet of impervious surface. Redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to these SUSMP's, the Design Standards apply only to the addition, and not to the entire development.

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

10. **Restaurant** – A stand-alone facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption.
11. **Small Municipal Separate Storm Sewer System (Small MS4)** – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that are:
 - i. Owned or operated by the United States, a State, city, town, boroughs, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district, or drainage district, or similar entity, or an Native American tribe or an authorized Native American tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
 - ii. Not defined as “large” or “medium” municipal separate storm sewer systems.
 - iii. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings. (40 CFR §122.26(b)(16))

ABBREVIATIONS

1. **BASMAA** – Bay Area Stormwater Management Agencies Association
2. **BAU** – Benefit Assessment Unit
3. **BMI** – Benthic Macroinvertebrate
4. **BMP** – Best Management Practice
5. **CCC** – California Conservation Corps
6. **CDPD** – Napa County Conservation, Development, and Planning Department
7. **CWA** – Clean Water Act
8. **CWPC** – County-wide Program Coordinator
9. **DEM** – Napa County Department of Environmental Management
10. **DFG** – Department of Fish and Game
11. **ECP** – Erosion Control Plan
12. **FONR** – Friends of the Napa River
13. **FY** – Fiscal Year
14. **JPA** – Joint Powers Authority
15. **MEP** – Maximum Extent Practicable
16. **MS4** - Small Municipal Separate Storm Sewer System
17. **NA** – Not Applicable

NAPA COUNTY SWMP – ANNUAL REPORT FY 05/06

18. **NCFCWCD** – Napa County Flood Control and Water Conservation District
19. **NCSWMP** – Napa County Stormwater Management Program
20. **NSSSA** – Napa-Solano-Sonoma Stormwater Agencies
21. **NOI** – Notice of Intent
22. **NPDES** – National Pollutant Discharge Elimination System
23. **OWOW** – Our Water, Our World
24. **RCD** – Napa County Resource Conservation District
25. **RDRT** – Rutherford Dust Restoration Team
26. **RWQCB** – San Francisco Bay Regional Water Quality Control Board
27. **SFEP** – San Francisco Estuary Project
28. **SWMP** – Stormwater Management Program
29. **SWPPP** – Stormwater Pollution Prevention Plan
30. **SWRCB** – State Water Resources Control Board
31. **TMDL** – Total Maximum Daily Load
32. **WICC** – Watershed Information Center and Conservancy

Table 1. Overview of Measurable Goal Implementation for FY 05/06 (County-wide Program)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Status	Evaluation
ELEMENT I - PUBLIC EDUCATION AND OUTREACH				
1. Characterize general public.				
1D Conduct survey	Evaluate and improve survey as needed. Evaluate options for conducting survey and implement.	PM Get at least 300 responses to the survey. Repeat survey in 5th year.	M	X
2. Outreach to local government officials.				
2C Annual progress reports	Present annual progress report to public officials.	PM Presentations given to local council members, and managers after each annual report is completed.	I	A
3. Stormwater Website				
3B Evaluate website	Receive feedback on website and continue development/updates.	PM Evaluate annually and continued development/updates	I	A
4. Community Events				
4A Develop booth	Develop booth to inform the public on the importance of reducing SW pollution and what they can do to reduce SW pollution.	PM Booth, outreach materials, and activities developed.	I	A
4B Staff booth at events	Staff SW booth at community events.	PM Attend at least 3 events per year. (e.g. Earth Day, Home and Garden Show, Symphony on the River, etc.)	I	A
4C Evaluate booth	Use the results from the public surveys to assess the need to target additional pollutants/activities.	PM Continue booth development as needed.	I	A
5. Outreach to general public				
5B Trash can decals	Provide bilingual (English and Spanish) trash can decals about proper disposal of hazardous waste and used oil. Include message "only rain down the drain".	PM Include with all cans provided by garbage service.	I	
5C Napa-Vallejo Household Haz Waste Facility	Continue to provide	PM Open to the public every Fri and Sat, (May-Oct) and two weekends per month (Nov-Apr). EM Quantity and types of waste collected.	I	A
5D Upvalley hazardous waste collection	Continue to hold hazardous waste collection days for the upvalley community.	PM 2-4 events per year	I	A
5G Creek Dumping Brochure	Mail to property owners adjacent to streams.	PM Mailed to > 80% of property owners adjacent to streams.	I	A

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 1. Overview of Measurable Goal Implementation for FY 05/06 (County-wide Program)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Status	Evaluation
5I	Place ad in Yellow pages and purchase "used Oil Recycling in Napa County" radio advertisement	PM Advertisement placed	I	A
5J Used oil recycling (cont)	Provide Point of purchase info at stores that sell used oil.	PM 50 percent of businesses selling used oil participating first year. 80 Percent 2nd year. EM Amount of used oil collected.	I	A
5K Prioritize future outreach	Prioritize outreach to address other sources of SW pollution based upon results of illicit discharge data.	PM Outreach priorities established.	I	A
5L Develop materials	Develop priority outreach materials	PM One new message/outreach piece per year.	I	A
5M Distribute materials	Method of distribution will depend on the target audience of the outreach materials.	PM Materials distributed	I	A
6. Outreach to schools				
6C Conduct presentations	Conduct presentations.	PM Present to 5 classrooms by 2nd year, 10 classrooms every year thereafter.	I	A
6D Evaluation	Conduct survey before and after presentation to assess understanding of SW pollution.	PM Survey conducted EM Results analyzed for accomplishments and deficiencies.	I	A
6E Program improvement	Improve program lesson plans and activities based on feedback from students and teachers.	PM Lesson plans and activities revised as needed.	I	A

Element II - Public Involvement and Participation

2. Stormdrain Stenciling				
2B SD stenciling program	Provide materials and supplies to citizens and groups. Advertise program on SW website, SW booth, and at applicable stewardship group meetings.	PM One SD stenciling in each municipality per year (except St. Helena and Yountville) until all storm drains are marked.	I	A
3. Water Quality Monitoring				
3E Train volunteers	Implement training program to ensure data quality.	PM Volunteers trained	I	A
3F Monitoring	Implement volunteer water quality monitoring program.	PM Implement monitoring program. 12 sites FY 04/05; 18 sites FY 05/06. EM Use of data to establish needed programs and characterize water quality.	I	A
4. Creek Cleanups				

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 1. Overview of Measurable Goal Implementation for FY 05/06 (County-wide Program)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Status	Evaluation
4 Coast and Creek Cleanup Day	Promote and facilitate event.	PM Increase garbage collected and number of participants by 10% in 2003. EM Number of participants and amount of garbage collected.	I	A

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 1. Overview of Measurable Goal Implementation for FY 05/06 (County-wide Program)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Status	Evaluation
ELEMENT III - ILLICIT DISCAHRGE DETECTION AND ELIMINATION				
2. Spill Response				
2H Develop a road kit.	Develop appropriate outreach materials for distributing to violators (e.g. creek dumping, paint and other haz waste disposal, surface cleaning, construction BMP's, etc.)	PM Materials developed. Provide a road kit for every vehicle used for inspection and maintenance purposes. Distribution of materials tracked with spill investigation form. EM # of repeat offenses.	I	A
4. Business Inspections				
4H Business Newsletter	Produce and mail annual newsletter to businesses which includes a message on SW regulations and preventing SW pollution.	PM Annual newsletter mailed to all regulated businesses.	NI	NA
ELEMENT IV - CONSTRUCTION SITE RUNOFF CONTROL				
4. Outreach				
4B Provide BMP fact sheet(s) for construction activities	Provide BMP fact sheets, guidance documents, and handbooks to contractors and developers	PM Informational materials (Stormwater BMP Handbooks, ESC Field manual, Guidelines for Construction Projects, etc.) provided to public upon request. EM # distributed.	I	A
4D Construction site erosion control workshop	Encourage planners, inspectors, municipal staff, contractors, and architects to attend annual construction workshops held by the Regional Board and SFEI.	PM Advertisement posted in Solano-Napa Builders Exchange newsletter, brochures provided at planning and building departments. EM Attendance	I	NA
4F Evaluate and Revise	Receive feedback on outreach materials and revise materials as needed.	PM Evaluate annually EM Revise as needed.	I	A
ELEMENT V - POST-CONSTRUCTION RUNOFF MANAGEMENT				
2. Design Standards, * = standards in Attachment 4 of State Municipal General Permit.				
2A Introductory training	Develop training materials and curricula.	PM Materials and curricula developed.	I	A
5. Outreach				
5A Workshop	Hold annual workshop explaining new requirements and the appropriate use and maintenance of structural and nonstructural control measures.	PM Annual workshops held. EM Attendance.	I/M	A

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 1. Overview of Measurable Goal Implementation for FY 05/06 (County-wide Program)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Status	Evaluation
ELEMENT VI - MUNICIPAL OPERATIONS				
9. Other Municipal Activities				
9C Develop maintenance standards	Compile BMP factsheets	PM Two municipal activities targeted per year.	I	A

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 2. Overview of Measurable Goal Implementation for FY 05/06 (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	American Canyon		Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
			Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation

ELEMENT I - PUBLIC EDUCATION AND OUTREACH

2. Outreach to local government officials.																
2C Annual progress reports	Present annual progress report to public officials.	PM Presentations given to local council members, and managers after each annual report is completed.			I	A					I	A			I	A

ELEMENT II - PUBLIC INVOLVEMENT AND PARTICIPATION

5. Stewardships																
5A Salvador Creek Stewardship	Hire the RCD to coordinate and support activities in the stewardship group.	PM Stewardship meeting held, mission statement adopted, and group activities conducted.			I	A	X	X	X	X	X	X	X	X	X	X
5B Rutherford Dust Restoration Team	Provide staff to support restoration efforts along the Napa River in Rutherford.	PM Conceptual restoration plan developed.			X	X	X	X	X	X	X	X	X	X	I	A

ELEMENT III - ILLICIT DISCHARGE DETECTION AND ELIMINATION

1. Legal Authority																
1B Evaluate and amend	Evaluate effectiveness of ordinance w.r.t pollutants addressed.	PM Ordinance evaluated and amended as necessary. EM Recommendations made.			I	A					I	A			I	A
1D ERP Training	Train appropriate staff on the policies and procedures of the ERP.	PM All relevant staff trained annually.			I	A					I	A			I	A
1E Evaluate and amend ERP	Evaluate effectiveness of ERP w.r.t. ensuring compliance with the SW ordinance.	PM ERP evaluated and modified as necessary. EM % of violators improving pollution prevention practices. Number and type of discharges not abated.			I	U					I	A			I	A

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 2. Overview of Measurable Goal Implementation for FY 05/06 (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	American Canyon		Napa (City)		Yountville		St. Helena		Calistoga		Napa County		
			Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	
2. Spill Response															
2E Staff Training	Implement training program. Administer a survey at the beginning of the training to gauge staff's understanding of illicit discharges. At the end of the training, give case studies as a quiz to ensure staff can recognize illicit discharges and understand the procedures for responding to them.	PM All relevant staff trained. EM Staff performance on quiz.			I	A			I	A				I	NA
2G Record keeping	Dedicated staff will maintain and update data base and generate reports as requested. Reports used to determine common pollutants, activities contributing to non SW discharges, and repeat offenders. Information used to prioritize PEO efforts, business inspections, and conduct enforcement.	PM Annual reports generated on time. EM Use of reports to prioritize outreach and business inspections. Number of spills prevented from reaching waters of the State.			I	A			I	NA				I	A
3. SD System Mapping															
3B Identify data gaps.	Identify data gaps.	PM Data gaps identified.			I	A			I	A				I	A
3F Identify data gaps.	Identify data gaps.	PM Data gaps identified.			I	A			I	A				I	A
4. Business Inspections															
4B Distribute BMP booklets	Distribute BMP guides during routine restaurant inspections and all restaurant permit applications.	PM Distributed to all restaurants inspected and with all restaurant permit applications. EM % of businesses in compliance	M	NA	M	NA	M	NA	M	NA	M	NA	M	NA	NA
4D Training for inspectors	Develop and implement training program for inspectors. Use post survey to gauge inspector's understanding of the requirements.	PM Annual training for inspectors as appropriate. EM Score on post survey.			I	A			X	X	I	A	I	A	
4E Inspections	Conduct restaurant inspections	PM Inspect at least 90% of restaurants annually. EM % of restaurants in compliance.			I	NA	X	X	X	X	I	NA	I	NA	
		PM Inspect at least 50% of restaurants annually. EM % of restaurants in compliance.			X	X			X	X	X	X	X	X	X
4G Inspections	Implement inspection program for businesses that handle hazardous materials and waste.	PM Inspect at least 25% of business plan facilities per year. EM % of businesses in compliance.			I	A			I	A	I	A	I	A	

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 2. Overview of Measurable Goal Implementation for FY 05/06 (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	American Canyon		Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
			Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
ELEMENT IV - CONSTRUCTION SITE RUNOFF CONTROL														
1. Legal Authority														
1B Evaluate ordinance	Evaluate requirements and compliance with local, state, and federal regulations.	PM Ordinance evaluated and amended as necessary.			I	A			I	A			I	A
1D ERP Training	Train appropriate staff on the ERP procedures and policies.	PM All relevant staff trained annually.			I	A			I	A			I	A
1E Evaluate and amend ERP	Evaluate effectiveness of ERP w.r.t. ensuring compliance with the SW ordinance.	PM ERP evaluated and modified as necessary.			I	A			I	A			I	A
2. Plan Review Process														
2C Implement training program	Train staff on revised plan review process.	PM Relevant staff trained annually. EM All participants understand the process and requirements.											I	A
2D Implement Plan Review Process	Implement plan review process to ensure that construction sites > 1 acre are covered by the NPDES Construction Permit and projects < 1 acre include plans for ESC measures.	PM Plan review process implemented. EM % approved with an ESC plan; % approved in compliance with State and Federal regulations.			I	A			I	A			I	A
3. Inspection Program														
3D Implement training program	Inspectors from each municipality to attend training program.	PM Annual training of all relevant inspectors. EM Use pre and post surveys to ensure that participants understand the requirements.			I	A			I	A			I	A
3E Implement inspection program	Inspect construction sites prior to the onset of the wet season and after major storm events.	PM Inspect 5 construction sites within 48 hours of a major (>0.25 inches) storm event. EM % of sites inspected during wet season; % of sites in compliance.			I	NA	X	X	X	X	X	X	I	NA
		PM Inspect all projects > 1 acre at onset of the wet season; Inspect all projects > 1 acre within 48 hours of a storm event (>0.25 inches/24hours) from April 16th through December 31st; Inspect all projects > 1 acre within 48 hours of a storm event (>1.0 inches/24hours) from January 1 through April 15th. EM % of sites inspected during wet season; % of sites in			X	X			I	A			X	X

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 2. Overview of Measurable Goal Implementation for FY 05/06 (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	American Canyon		Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
			Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
4. Outreach														
4E Construction site erosion control workshop	Attend workshop.	PM At least one planner/inspector and one public works employee shall attend.	I	A	I	A			I	A			I	A

ELEMENT V - POST-CONSTRUCTION RUNOFF MANAGEMENT

1. Legal Authority															
1D ERP Training	Train appropriate staff on the ERP procedures and policies.	PM All relevant staff trained annually.			M	X			I	A			M	X	
1E Evaluate and amend ERP	Evaluate effectiveness of ERP w.r.t. ensuring compliance with the SW ordinance.	PM ERP evaluated and modified as necessary. EM Recommendations made.			M	X			I	A			I	A	
2. Design Standards, * = standards in Attachment 4 of State Municipal General Permit.															
Design Standards Attachment 4* - All categories: Single-Family Hillside Residences, 100,000 sq. ft. Commercial Developments, Automotive Repair Shops, Retail Gasoline															
2B Peak SW runoff discharge rates	Adopt standard in attachment 4 of the State General Permit	PM Design standard adopted			X	X			X	X			M	X	
2C Conserve natural areas					X	X			X	X			M	X	
2D Minimize SW pollutants of concern							X	X			X	X		M	X
2E Protect slopes and channels							I	A			X	X		M	X
2F Provide SD system stenciling and signage	Adopt standard in attachment 4 of the State General Permit	PM Design standard adopted			X	X			X	X			M	X	
2G Properly design outdoor material storage areas					X	X			X	X			M	X	
2H Properly design trash storage areas							X	X			X	X		M	X
2I Provide proof of ongoing BMP maintenance							X	X			X	X		M	X
2J Design standards for structural of treatment control BMP's							X	X			X	X		M	X

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 2. Overview of Measurable Goal Implementation for FY 05/06 (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	American Canyon		Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
			Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
Design Standards Attachment 4* - 100,000 sq. ft commercial														
2K Properly design loading/unloading dock areas.	Adopt standard in attachment 4 of the State General Permit	PM Design standard adopted			X	X			X	X			M	X
2L Properly design repair/maintenance bays					X	X			X	X			M	X
2M Properly design vehicle/equipment wash areas					X	X			X	X			M	X
Design Standards Attachment 4* - Restaurants														
2N Properly design equipment/accessory wash areas	Adopt standard in attachment 4 of the State General Permit	PM Design standard adopted			X	X			X	X			M	X
Design Standards Attachment 4* - Retail gasoline outlets														
2O Properly design fueling area	Adopt standard in attachment 4 of the State General Permit	PM Design standard adopted			X	X			X	X			M	X
Design Standards Attachment 4* - Automotive repair shops														
2P Properly design fueling area	Adopt standard in attachment 4 of the State General Permit	PM Design standard adopted			X	X			X	X			M	X
2Q Properly design repair/maintenance bays	Adopt standard in attachment 4 of the State General Permit	PM Design standard adopted			X	X			X	X			M	X
2R Properly design vehicle/equipment wash areas					X	X			X	X			M	X
2S Properly design loading/unloading dock areas.					X	X			X	X			M	X

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 2. Overview of Measurable Goal Implementation for FY 05/06 (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	American Canyon		Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
			Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
Design Standards Attachment 4* - Parking Lots														
2T Properly designing parking areas	Adopt standard in attachment 4 of the State General Permit	PM Design standard adopted			X	X			X	X			M	X
2U Properly design to limit oil contamination and perform maintenance					X	X			X	X			M	X
2V Consider other appropriate design standards.	Identify and develop other design standards appropriate to community.	PM Additional design standards considered to protect water quality identified.			X	X			X	X			M	X
2W Adopt design standards	Adopt design standards identified in task 2X.	PM Design standards adopted			X	X			X	X			M	X
3. Plan Review Process														
3A Develop plan review process	Review and revise plan review process to incorporate new requirements for Post-construction. Plan review process includes a checklist and instructions.	PM Plan review process revised to incorporate new requirements for post-construction.			X	X			X	X			M	X
3B Develop training program	Develop training program on new revised plan review process.	PM Training program developed.			NI	X							I	A
3C Implement training program	Implement training program for revised plan review process.	PM Inspection program implemented. Ensure that 100% of the participants understand the requirements. Hold one training session per year.			NI	X							I	A
3D Adopt plan review process.	Adopt revised plan review process.	PM Process implemented; require all construction sites > 1 acre to incorporate appropriate structural and/or nonstructural controls to the MEP.			X	X			X	X			M	X
4. Long-term Maintenance														
4C Develop inspection and maintenance schedule.	Develop an inspection and maintenance schedule to maximize efficiency and minimize labor requirements.	PM Completed inspection and maintenance schedule.			M	X							M	X

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 2. Overview of Measurable Goal Implementation for FY 05/06 (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	American Canyon		Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
			Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
4D Train maintenance staff.	Develop a training program on proper inspection and maintenance of structural controls, BMPs, and record keeping.	PM Use post test to ensure workers understand training materials and measurable goals. Check records quarterly to ensure compliance with schedule and BMPs 80% of the time.			M	X							M	X
4E Implement maintenance schedule.	Inspect and maintain structural controls according to implementation schedule.	PM Check records to ensure compliance with schedule and BMPs 80% of the time.			M	X							M	X

ELEMENT VI - MUNICIPAL OPERATIONS

1. Street Sweeping														
1A Street sweep according to Table 8.	Street sweep according to schedule in Table 8.	PM Review records quarterly to ensure compliance to schedule in Table 1 80% of the time.			I	A			I	A			I	A
1E Sweeping Program Evaluation	Evaluate effectiveness of program and make recommendations for improvement (e.g. alter scheduling, frequency, address parked cars, etc.) based on data collected.	PM Evaluation completed, report with recommendations produced annually. EM Recommendations made.			I	A			I	A			I	A
1G Staff and contractor	Annually train municipal staff and contract sweepers on O&M standards, measurable goals, implementation plans, and record keeping. Use pre and post survey to gauge staffs knowledge of O&M standards and record-keeping practices.	PM All relevant staff and contractors trained annually. EM Staff understanding of O&M standards and record-keeping practices.			I	A			I	A			I	A
1I	Develop two different outreach programs to reduce parked cars that interfere with sweeping.	PM 2 pilot programs implemented			M	X	X	X	X	X	X	X	M	X
1J	Identify areas to pilot outreach program.	PM Areas identified			M	X	X	X	X	X	X	X	M	
1K	Implement pilot programs in areas with high numbers of parked cars.	PM Pilot programs implemented.			M	X	X	X	X	X	X	X	M	X
1L	Evaluate success of pilot programs to determine if full implementation is desirable. Success = measurable decrease in average number of cars on streets.	PM Completed evaluation. EM % increase in sweepable area.			M	X	X	X	X	X	X	X	M	X
1O	Implement pilot programs to reduce volume of leaves on streets.	PM Measures implemented			M	X	X	X	X	X	X	X	M	X

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 2. Overview of Measurable Goal Implementation for FY 05/06 (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	American Canyon		Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
			Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
1P	Evaluate success of pilot programs	PM Evaluation completed EM Increase sweepable areas by 10%.			M	X	X	X	X	X	X	X	M	X
1Q	Implement most effective program to reduce leaves on streets.	PM Program implemented EM Increase total sweepable areas by 25% over 2 years.			M	X	X	X	X	X	X	X	M	X
1T	Pilot measures to reduce tree interference with street cleaning.	PM Methods implemented			M	X	X	X	X	X	X	X	M	X
1U	Evaluate success of pilot programs	PM Evaluation completed. EM Increase sweepable areas by 25%.			M	X	X	X	X	X	X	X	M	X
1V	Expand pilot programs to other areas if successful.	PM Pilot program implemented. EM Increase total sweepable areas by 25% over 2 years. Evaluate mid-term.			M	X	X	X	X	X	X	X	M	X
2. Storm Drain Maintenance														
2B Training	Train municipals staff on use of BMP's.	PM All relevant staff trained annually			I	A			I	A			NI	NA
2C Routine Inspection and Cleaning	Inspect and clean SD's according to Table 8.	PM Review records quarterly to ensure compliance to schedule in Table 1 80% of the time.			I	A			I	A			I	A
2D	Assess the need for more frequent cleaning of stormdrains.	PM Assessment completed. EM Recommendations made.			I	A			I	A			I	A
3. Stormwater Pump Stations														
3B Train municipal staff	Educate all personnel responsible for SW pump stations about these maintenance standards.	PM All relevant staff trained annually			I	A	X	X	X	X	X	X	X	X
3C Visual Inspections	Inspect wet wells and forebays for oil spills or other pollutant discharges.	PM Once in June and once in August; Once/month Oct - April.			NI	X	X	X	X	X	X	X	X	X
3D Maximize pollutant removal prior to discharge.	Conduct comprehensive cleaning of wet wells.	PM Pump stations cleaned annually; prior to wet season.			I	A	X	X	X	X	X	X	X	X

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 2. Overview of Measurable Goal Implementation for FY 05/06 (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	American Canyon		Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
			Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
4. Litter Control														
4A Services	Provide litter receptacles in litter source areas and empty regularly to prevent spills.	PM Receptacles provided and maintained.			I	A			I	A			I	A
4B Assessment	Document areas targeted for litter removal and assess the need for additional/better trash receptacles or more frequent collection.	PM Assessment completed EM Recommendations made.			I	A	X	X	X	X	X	X	X	X
4C Education	Label litter receptacles with anti-littering message	PM 25% of receptacles by 2nd year; 50% by 4th year.			I	A	X	X	X	X	X	X	X	X
5. Corporation Yards														
5B SWPPP	Develop a plan for SW management. Includes necessary capital improvements, O&M standards, and training programs.	PM SWPPP developed with timeline for implementation.												
5C SWPPP	Implement items from SWPPP.	PM Items implemented over three to five year period. EM Number and types of BMP's impleneted			M	X			I	A			M	X
6. Road Maintenance														
6C Training	Train employees on O&M standards for roads. Post-survey used to evaluate staff understanding of BMP's.	PM All relevant staff trained annually.			I	A			X	X			NI	NA
7. Creek and Ditch maintenance														
7C Training	Train all relevant staff and contractors on maintenance standards.	PM All relevant staff trained annually.			I	A			X	X			I	A
8. Parks and Recreation Facilities														
8A Assessment	Assess the condition of parks and related facilities (e.g. erosion, chemical use, etc.)	PM Assessment completed for one park/agency per year			I	A			I	NA			X	X
8C Training	Train all appropriate employees on O&M standards and use of BMP's. Use a post-training quiz to ensure staff understand use of BMP's.	PM All relevant staff trained annually. EM Staff understanding of O&M standards and use of BMP's.			I	A			X	X			X	X
9. Other Municipal Activities														
9A Prioritize	Prioritize all other municipal activities that could affect SW.	PM Municipal activities prioritized.			I	A			I	A			I	A

Status: I = Implemented; NI = Not Implemented; M = Modified

Evaluation: A = Quantifiable target achieved; NA = Quantifiable target not achieved; U = Unknown; X = Not Applicable

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
Public Education and Outreach					
1. Characterize general public.					
1D Conduct survey	Evaluate and improve survey as needed. Evaluate options for conducting survey and implement.	<i>PM</i> Get at least 300 responses to the survey. Repeat survey in 4th year.			County-wide Program
2. Outreach to local government officials.					
2C Annual progress reports	Present annual progress report to public officials.	<i>PM</i> Presentations given to local council members, and managers after each annual report is completed.	Program achievements and needs.	Local government officials	All Local Programs/ County-wide Program NCFCWCD
3. Stormwater Website					
3B Evaluate website	Receive feedback on website and continue development/updates.	<i>PM</i> Evaluate annually and continued development/ updates			County-wide Program
4. Community Events					
4A Develop booth	Develop booth to inform the public on the importance of reducing SW pollution and what they can do to reduce SW pollution.	<i>PM</i> Booth, outreach materials, and activities developed.	Only rain down the stormdrain; reduce use of water, nutrients, and pesticides; hazardous waste disposal and used oil recycling.	General Public	County-wide Program DEM
4B Staff booth at events	Staff SW booth at community events.	<i>PM</i> Attend at least 3 events per year. (e.g. Earth Day, Home and Garden Show, Symphony on the River, etc.)			
4C Evaluate booth	Use the results from the public surveys to assess the need to target additional pollutants/activities.	<i>PM</i> Continue booth development as needed.			
5. Outreach to general public					
5B Trash can decals	Provide bilingual (English and Spanish) trash can decals about proper disposal of hazardous waste and used oil. Include message "only rain down the drain".	<i>PM</i> Include with all cans provided by garbage service.	Hazardous waste and used oil recycling; "only rain down the drain".	Residences and businesses.	Local Program City of Napa
5C Napa-Vallejo Household Haz Waster Facility	Continue to provide	<i>PM</i> Open to the public every Fri and Sat, (May-Oct) and two weekends per month (Nov-Apr). <i>EM</i> Quantity and types of waste collected.	Pesticides, cleaners, batteries, solvents, paints, thinners, old gasoline, adhesives, syringes.	Residences and businesses.	

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
5D Upvalley hazardous waste collection	Continue to hold hazardous waste collection days for the upvalley community.	PM 2-4 events per year	Paints, solvents, pesticides, etc.	Residences	County-wide Program DEM
5I	Place ad in Yellow pages and purchase "used Oil Recycling in Napa County" radio advertisement	PM Advertisement placed			County-wide Program DEM City of Napa
5J Used oil recycling (cont)	Provide Point of purchase info at stores that sell used oil.	PM 50 percent of businesses selling used oil participating first year. 80 Percent 2nd year. EM Amount of used oil collected.	Why used oil should be recycled, locations in Napa County that accept used oil.	Public	County-wide Program City of Napa DEM
5L Develop materials	Develop priority outreach materials	PM One new message/outreach piece per year.			County-wide Program
5M Distribute materials	Method of distribution will depend on the target audience of the outreach materials.	PM Materials distributed			
6.					
6C Conduct presentations	Conduct presentations.	PM Present to 5 classrooms by 2nd year, 10 classrooms every year thereafter.			County-wide Program
6D Evaluation	Conduct survey before and after presentation to assess understanding of SW pollution.	PM Survey conducted EM Results analyzed for accomplishments and deficiencies.			
6E Program improvement	Improve program lesson plans and activities based on feedback from students and teachers.	PM Lesson plans and activities revised as needed.			
Public Involvement and Participation					
2. Stormdrain Stenciling					
2B SD stenciling program	Provide materials and supplies to citizens and groups. Advertise program on SW website, SW booth, and at applicable stewardship group meetings.	PM One SD stenciling event per year.			County-wide Program

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
3. Water Quality Monitoring					
3E Train volunteers	Implement training program to ensure data quality.	PM Volunteers trained			County-wide Program
3F Monitoring	Implement volunteer water quality monitoring program.	PM Implement monitoring program. 12 sites FY 04/05; 18 sites FY 05/06. EM Use of data to establish needed programs and characterize water quality.	To be determined (e.g. Temp, DO, pH, etc.)		
4. Creek Cleanups					
4 Coast and Creek Cleanup Day	Promote and facilitate event.	PM Increase garbage collected and number of participants by 10% in 2003. EM Number of participants and amount of garbage collected.	Trash and litter	Citizen volunteers	County-wide Program RCD, NCFCWCD, DEM
5. Stewardships					
5A Salvador Creek Stewardship	Hire the RCD to coordinate and support activities in the stewardship group.	PM Stewardship meeting held, mission statement adopted, and group activities conducted.	Stream function, plants and wildlife, invasive species, restoration, creek cleanup events, etc.	Residents in the Salvador Creek Watershed.	Local Program City of Napa Napa County
5B Rutherford Dust Restoration Team	Provide staff to support restoration efforts along the Napa River in Rutherford.	PM Conceptual restoration plan developed.	Enhanced riparian habitat and improved stream function.	Landowners along a 4 mile reach of the Napa River in Rutherford.	Local Program Napa County
Illicit Discharge Detection and Elimination					
1. Legal Authority					
1D ERP Training	Train appropriate staff on the policies and procedures of the ERP.	PM All relevant staff trained annually.		Code enforcement staff.	All Local Programs
2. Spill Response					
2E	Implement training program. Administer a survey at the beginning of the training to gauge staff's understanding of illicit discharges. At the end of the training, give case studies as a quiz to ensure staff can recognize illicit discharges and understand the procedures for responding to them.	PM All relevant staff trained. EM Staff performance on quiz.			All Local Programs

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
2G Record keeping	Dedicated staff will maintain and update data base and generate reports as requested. Reports used to determine common pollutants, activities contributing to non SW discharges, and repeat offenders. Information used to prioritize PEO efforts, business inspections, and conduct enforcement.	PM Annual reports generated on time. EM Use of reports to prioritize outreach and business inspections. Number of spills prevented from reaching waters of the State.		Municipal staff	

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
3. SD System Mapping					
3C	Fill in data gaps. Collect data to fill in data gaps.	PM Data gaps filled.			All Local Programs
3D	Draw final map.	PM Final outfall map completed. EM Use of map to eliminate and detect illicit discharges.			
3G	Fill in data gaps. Collect data to fill in data gaps.	PM Data gaps filled.			
3H	Draw final map.	PM Final storm drain system map completed. EM Use of map to eliminate and detect illicit discharges.			
4. Business Inspections					
4D	Training for inspectors Develop and implement training program for inspectors. Use post survey to gauge inspector's understanding of the requirements.	PM Annual training for inspectors as appropriate. EM Score on post survey.	Phase II requirements; impacts of grease, soaps, and other pollutants potentially generated from restaurants on water quality, proper use of BMP's	Inspectors	All Local Programs
4E	Inspections Conduct restaurant inspections	PM Inspect at least 90% of restaurants annually. EM % of restaurants in compliance.	Meet local and state requirements for SW discharges.	Food service facilities	
4G	Inspections Implement inspection program for businesses that handle hazardous materials and waste.	PM Inspect at least 50% of restaurants annually. EM % of restaurants in compliance. PM Inspect at least 25% of business plan facilities per year. EM % of businesses in compliance.	Legal requirements; Proper use of BMP's to reduce SW pollution.	Commercial facilities	
4H	Business Newsletter Produce and mail annual newsletter to businesses which includes a message on SW regulations and preventing SW pollution.	PM Annual newsletter mailed to all regulated businesses.	Grease, oil, hazardous materials, etc.	Businesses regulated by DEM	County-wide Program

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
Construction Site Runoff Control					
1. Legal Authority					
1B Evaluate ordinance	Evaluate requirements and compliance with local, state, and federal regulations.	PM Ordinance evaluated and amended as necessary.	Ensure that the ordinance provides the most effective prevention of construction site pollutants.	Construction sites.	All Local Programs
1D ERP Training	Train appropriate staff on the ERP procedures and policies.	PM All relevant staff trained annually.	Effective ESC measures and BMPs are necessary to protect water quality.	Code enforcement officers.	
1E Evaluate and amend ERP	Evaluate effectiveness of ERP w.r.t. ensuring compliance with the SW ordinance.	PM ERP evaluated and modified as necessary.		NA	
3. Inspection Program					
3D <i>Implement training program</i>	<i>Inspectors from each municipality to attend training program.</i>	PM <i>Annual training of all relevant inspectors. EM Use pre and post surveys to ensure that participants understand the requirements.</i>	Proper use of BMP's to reduce non SW pollution; sediment, pathogens, oil, paint, etc.	Construction site inspectors	All Local Programs
3E Implement inspection program	Inspect construction sites prior to the onset of the wet season and after major storm events.	PM Inspect 5 construction sites within 48 hours of a major (>0.25 inches) storm event. EM % of sites inspected during wet season: % of sites in compliance.			Local Programs City of Napa Napa County
		PM Inspect all projects > 1 acre at onset of the wet season; Inspect all projects > 1 acre within 48 hours of a storm event (>0.25 inches/24hours) from April 16th through December 31st; Inspect all projects > 1 acre within 48 hours of a storm event (>1.0 inches/24hours) from January 1 through April 15th. EM % of sites inspected during wet season; % of sites in compliance.			Local Programs Yountville St. Helena Calistoga

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
4. Outreach					
4B Provide BMP fact sheet(s) for construction activities	Provide BMP fact sheets, guidance documents, and handbooks to contractors and developers	PM Informational materials (Stormwater BMP Handbooks, ESC Field manual, Guidelines for Construction Projects, etc.) provided to public upon request. EM # distributed.	Sediment, cement, paint, oils, trash, etc.	Contractors and developers	County-wide Program NCFCWCD
4D Construction site erosion control workshop	Encourage planners, inspectors, municipal staff, contractors, and architects to attend annual construction workshops held by the Regional Board and SFEI.	PM Advertisement posted in Solano-Napa Builders Exchange newsletter, brochures provided at planning and building departments. EM Attendance	Phase II requirements, proper use of BMP's to control runoff.	Planners, inspectors, municipal staff, contractors, architects.	County-wide Program NCFCWCD
4E Construction site erosion control workshop	Attend workshop.	PM At least one planner/inspector and one public works employee shall attend.	Phase II requirements, proper use of BMP's to control runoff.	Planners, inspectors, municipal staff, contractors, architects.	All Local Programs
4F Evaluate and Revise	Receive feedback on outreach materials and revise materials as needed.	PM Evaluate annually EM Revise as needed.			County-wide Program NCFCWCD
Post-Construction Runoff Management					
1. Legal Authority					
1D ERP Training	Train appropriate staff on the ERP procedures and policies.	PM All relevant staff trained annually.	Post-Construction BMPs must be properly maintained to ensure that water quality is protected.	New and redevelopment > 1acre.	Local Programs City of Napa Napa County
1E Evaluate and amend ERP	Evaluate effectiveness of ERP w.r.t. ensuring compliance with the SW ordinance.	PM ERP evaluated and modified as necessary. EM Recommendations made.			Local Programs City of Napa
2. Design Standards, * = standards in Attachment 4 of State Municipal General Permit.					
Design Standards Attachment 4* - All categories: Single-Family Hillside Residences, 100,000 sq. ft. Commercial Developments, Automotive Repair Shops, Retail Gasoline Outlets,					
2B Peak SW runoff discharge rates	Adopt standard in attachment 4 of the State General Permit	PM Design standard adopted	<i>PD peak SW runoff discharge rates shall not exceed estimated predevelopment where increased runoff will result in increased potential for downstream erosion</i>	New development and redevelopment	Local Programs Yountville Calistoga Napa County

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
2C <i>Conserve natural areas</i>			<i>Cluster development, limit clearing and grading, maximize trees and other vegetation.</i>		
2D <i>Minimize SW pollutants of concern</i>			<i>Incorporate BMP's or combination of BMP's to reduce runoff of pollutants of concern to the MEP.</i>		

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
2E <i>Protect slopes and channels</i>			<i>Plans must include BMP's to decrease potential of slopes and/or channels from eroding and impacting SW runoff.</i>		Local Programs Napa Yountville Calistoga Napa County
2F <i>Provide SD system stenciling and signage</i> 2G <i>Properly design outdoor material storage areas</i> 2H <i>Properly design trash storage areas</i> 2I <i>Provide proof of ongoing BMP maintenance</i>	Adopt standard in attachment 4 of the State General Permit	PM <i>Design standard adopted</i>	<i>Mark SD inlets with a sign or stencil that includes a brief statement that prohibits dumping into the SD svstem. Ensure outdoor storage areas do not contaminate SW runoff.</i> <i>Ensure trash storage areas do not contaminate SW runoff.</i> <i>Ensure that PD BMP's are adequately maintained for the life of the project through maintenance agreements (see Tasks 3A to 3D below)</i>	New development and redevelopment	Local Programs Yountville Calistoga Napa County
2J <i>Design standards for structural of treatment control BMP's</i>			<i>Require PD treatment control incorporate either a volumetric or flow-based treatment control standard to mitigate SW runoff.</i>		

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
Design Standards Attachment 4* - 100,000 sq. ft commercial					
2K Properly design loading/unloading dock areas.	Adopt standard in attachment 4 of the State General Permit	<i>PM Design standard adopted</i>	<i>Covers, reduce run-on and runoff, prohibit direct connections of depressed loading docks to SD system.</i>	100,000 sq ft commercial.	Local Programs Yountville Calistoga Napa County
2L Properly design repair/maintenance bays			<i>Design to eliminate run-on and runoff of SW, prohibit direct connections to the SD system.</i>		
2M Properly design vehicle/equipment wash areas			<i>Self-contained and/or covered, equipped with pretreatment facility, and properly connected to sanitary sewer or other appropriately permitted disposal facility.</i>		
Design Standards Attachment 4* - Restaurants					
2N Properly design equipment/accessory wash areas	Adopt standard in attachment 4 of the State General Permit	<i>PM Design standard adopted</i>	<i>Self-contained, equipped with grease trap, and properly connected to sanitary sewer; outdoor wash areas must be covered, paved, have secondary containment, and be connected to the sanitary sewer or other appropriately permitted disposal facility.</i>	Food service facilities.	Local Programs Yountville Calistoga Napa County
Design Standards Attachment 4* - Retail gasoline outlets					
2O Properly design fueling area	Adopt standard in attachment 4 of the State General Permit	<i>PM Design standard adopted</i>	<i>Fueling area properly covered, paved with smooth impervious surface, designed to reduce run-on and runoff.</i>	Retail gasoline outlets	Local Programs Yountville Calistoga Napa County
Design Standards Attachment 4* - Automotive repair shops					
2P Properly design fueling area	Adopt standard in attachment 4 of the State General Permit	<i>PM Design standard adopted</i>	<i>Fueling area properly covered, paved with smooth impervious surface, designed to reduce run-on and runoff.</i>	Automotive repair shops.	Local Programs Yountville Calistoga Napa County

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
2Q <i>Properly design repair/maintenance bays</i>	Adopt standard in attachment 4 of the State General Permit	<i>PM Design standard adopted</i>	<i>Must be indoors, designed to eliminate run-on and runoff of SW, prohibit direct connections to the SD svstem.</i>	Automotive repair shops.	Local Programs Yountville Calistoga Napa County
2R <i>Properly design vehicle/equipment wash areas</i>			<i>Self-contained and/or covered, equipped with pretreatment facility, and properly connected to sanitary sewer or other appropriately permitted disposal facility</i>		
2S <i>Properly design loading/unloading dock areas.</i>			<i>Covers, reduce run-on and runoff, prohibit direct connections of depressed loading docks to SD svstem.</i>		
Design Standards Attachment 4* - Parking Lots					
2T <i>Properly designing parking areas</i>	Adopt standard in attachment 4 of the State General Permit	PM <i>Design standard adopted</i>	<i>Reduce impervious surfaces of parking areas; infiltrate or treat runoff.</i>	Parking lots	Local Programs Yountville Calistoga Napa County
2U <i>Properly design to limit oil contamination and perform maintenance</i>			<i>Treat to remove oil and petroleum hydrocarbons at heavily used parking lots; ensure adequate operation and maintenance of treatment svstems</i>		
2V <i>Consider other appropriate design standards.</i>	<i>Identify and develop other design standards appropriate to community.</i>	PM <i>Additional design standards considered to protect water quality identified.</i>	<i>Stormwater quantity and quality from new development and redevelopment</i>	New development and redevelopment.	
2W <i>Adopt design standards</i>	<i>Adopt design standards identified in task 2X.</i>	PM <i>Design standards adopted</i>			
3. Plan Review Process					

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
3A <i>Develop plan review process</i>	<i>Review and revise plan review process to incorporate new requirements for Post-construction. Plan review process includes a checklist and instructions.</i>	<i>PM</i> <i>Plan review process revised to incorporate new requirements for post-construction.</i>	<i>Ensure that new development and redevelopment projects over 1 acre implement BMP's to the MEP to reduce or eliminate long-term nonstormwater runoff</i>	<i>Planners and developers.</i>	<i>Local Programs</i> <i>Yountville Calistoga Napa County</i>

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
3B <i>Develop training program</i>	<i>Develop training program on new revised plan review process.</i>	PM <i>Training program developed.</i>			
3C <i>Implement training program</i>	<i>Implement training program for revised plan review process.</i>	PM <i>Inspection program implemented. Ensure that 100% of the participants understand the requirements. Hold one training session per year.</i>			
3D <i>Adopt plan review process.</i>	<i>Adopt revised plan review process.</i>	PM <i>Process implemented; require all construction sites > 1 acre to incorporate appropriate structural and/or nonstructural controls to the MEP.</i>			
4. Long-term Maintenance					
4C <i>Develop inspection and maintenance schedule.</i>	<i>Develop an inspection and maintenance schedule to maximize efficiency and minimize labor requirements.</i>	PM <i>Completed inspection and maintenance schedule.</i>			Local Programs <i>City of Napa Napa County</i>
4D <i>Train maintenance staff.</i>	<i>Develop a training program on proper inspection and maintenance of structural controls, BMPs, and record keeping.</i>	PM <i>Use post test to ensure workers understand training materials and measurable goals. Check records quarterly to ensure compliance with schedule and BMPs 80% of the time.</i>			
4E <i>Implement maintenance schedule.</i>	<i>Inspect and maintain structural controls according to implementation schedule.</i>	PM <i>Check records to ensure compliance with schedule and BMPs 80% of the time.</i>	Prompt inspection and maintenance of structural controls will reduce discharge of polluted water into the storm drain system and help comply with SWMP.	Maintenance staff	All Local Programs
5. Outreach					
5A <i>Workshop</i>	<i>Hold annual workshop explaining new requirements and the appropriate use and maintenance of structural and nonstructural control measures.</i>	PM <i>Annual workshops held.</i> EM <i>Attendance.</i>	Long-term runoff management requirements for new and redevelopment. Sediment, oil and grease, trash, fertilizer and pesticides.	Planners, developers, contractors, architects.	County-wide Program NCFCWCD

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
Municipal Operations					
1. Street Sweeping					
1A Street sweep according to Table 8.	Street sweep according to schedule in Table 8.	PM Review records quarterly to ensure compliance to schedule in Table 1 80% of the time.	Oil and grease, metals garbage, fertilizer, dirt, and leaves. Contract Sweepers: Comply with terms of contract in order to assure maximum removal of pollutants from streets. Municipal staff: Comply with implementation plans.	Street sweeping department	All Local Programs
1E Sweeping Program Evaluation	Evaluate effectiveness of program and make recommendations for improvement (e.g. alter scheduling, frequency, address parked cars, etc.) based on data collected.	PM Evaluation completed, report with recommendations produced annually. EM Recommendations made.			All Local Programs
1G Staff and contractor	Annually train municipal staff and contract sweepers on O&M standards, measurable goals, implementation plans, and record keeping. Use pre and post survey to gauge staffs knowledge of O&M standards and record-keeping practices.	PM All relevant staff and contractors trained annually. EM Staff understanding of O&M standards and record-keeping practices.		Street sweepers	
2. Storm Drain Maintenance					
2B Training	Train municipals staff on use of BMP's.	PM All relevant staff trained annually			All Local Programs
2C Routine Inspection and Cleaning	Inspect and clean SD's according to Table 8.	PM Review records quarterly to ensure compliance to schedule in Table 1 80% of the time.			
3. Stormwater Pump Stations					
3B Train municipal staff	Educate all personnel responsible for SW pump stations about these maintenance standards.	PM All relevant staff trained annually			Local Program City of Napa
3C Visual Inspections	Inspect wet wells and forebays for oil spills or other pollutant discharges.	PM Once in June and once in August; Once/month Oct - April.			
3D Maximize pollutant removal prior to discharge.	Conduct comprehensive cleaning of wet wells.	PM Pump stations cleaned annually; prior to wet season.			

Table 3. Goals and Modifications for FY06/07.

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience	Implementers
4. Litter Control					
4A Services	Provide litter receptacles in litter source areas and empty regularly to prevent spills.	PM Receptacles provided and maintained.	Litter	Public	All Local Programs Local Programs City of Napa Napa County
4C Education	Label litter receptacles with anti-littering message	PM 25% of receptacles by 2nd year; 50% by 4th year.			
5. Corporation Yards					
5B	Develop a plan for SW management. Includes necessary capital improvements, O&M standards, and training programs.	PM SWPPP developed with timeline for implementation.			Local Programs City of Napa Napa County
5C	Implement items from SWPPP.	PM Items implemented over three to five year period. EM Number and types of BMP's implemented			
6. Road Maintenance					
6C Training	Train employees on O&M standards for roads. Post-survey used to evaluate staff understanding of BMP's.	PM All relevant staff trained annually.			All Local Programs
7. Creek and Ditch maintenance					
7C Training	Train all relevant staff and contractors on maintenance standards.	PM All relevant staff trained annually.			All Local Programs
8. Parks and Recreation Facilities					
8A Assessment	Assess the condition of parks and related facilities (e.g. erosion, chemical use, etc.)	PM Assessment completed for one park/agency per year	Pesticides, nutrients, sediment, organic matter, fuels, oils	Maintenance crews	All Local Programs
8C Training	Train all appropriate employees on O&M standards and use of BMP's. Use a post-training quiz to ensure staff understand use of BMP's.	PM All relevant staff trained annually. EM Staff understanding of O&M standards and use of BMP's.			
9. Other Municipal Activities					
9B Assessment	Assess facility conditions and operating procedures.	PM Assessment completed.			All Local Programs