

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

ANNUAL REPORT

FY04/05

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.

NAPA COUNTY SWMP ANNUAL REPORT FY 04/05

TABLE OF CONTENTS

INTRODUCTION	1
BACKGROUND	2
SUMMARY AND EVALUATION FOR FY04/05	2
ELEMENT I – PUBLIC EDUCATION AND OUTREACH	2
ELEMENT II – PUBLIC INVOLVEMENT AND PARTICIPATION	10
ELEMENT III – ILLICIT DISCHARGE DETECTION AND ELIMINATION	14
ELEMENT IV – CONSTRUCTION SITE RUNOFF CONTROL	20
ELEMENT V – POST-CONSTRUCTION RUNOFF MANAGEMENT	30
ELEMENT VI – MUNICIPAL OPERATIONS	33
GOALS AND MODIFICATIONS FOR FY05/06	43
GLOSSARY	47
ABBREVIATIONS	48

TABLES.

OVERVIEW OF MEASURABLE GOALS FOR FY04/05

- TABLE 1. ELEMENT I – PUBLIC EDUCATION AND OUTREACH (COUNTY-WIDE PROGRAM)
- TABLE 2. ELEMENT I – PUBLIC EDUCATION AND OUTREACH (LOCAL PROGRAMS)
- TABLE 3. ELEMENT II – PUBLIC INVOLVEMENT AND PARTICIPATION (COUNTY-WIDE PROGRAM)
- TABLE 4. ELEMENT II – PUBLIC INVOLVEMENT AND PARTICIPATION (LOCAL PROGRAMS)
- TABLE 5. ELEMENT III – ILLICIT DISCHARGE DETECTION AND ELIMINATION (COUNTY-WIDE PROGRAM)
- TABLE 6. ELEMENT III – ILLICIT DISCHARGE DETECTION AND ELIMINATION (LOCAL PROGRAMS)
- TABLE 7. ELEMENT IV – CONSTRUCTION SITE RUNOFF CONTROL (COUNTY-WIDE PROGRAM)
- TABLE 8. ELEMENT IV – CONSTRUCTION SITE RUNOFF CONTROL (LOCAL PROGRAMS)
- TABLE 9. ELEMENT V – POST-CONSTRUCTION RUNOFF MANAGEMENT (COUNTY-WIDE PROGRAM)
- TABLE 10. ELEMENT V – POST-CONSTRUCTION RUNOFF MANAGEMENT (LOCAL PROGRAMS)
- TABLE 11. ELEMENT VI – MUNICIPAL OPERATIONS (COUNTY-WIDE PROGRAM)
- TABLE 12. ELEMENT VI – MUNICIPAL OPERATIONS (LOCAL PROGRAMS)

GOALS AND MODIFICATIONS FOR FY05/06

- TABLE 13. ELEMENT I - PUBLIC EDUCATION AND OUTREACH
- TABLE 14. ELEMENT II – PUBLIC INVOLVEMENT AND PARTICIPATION
- TABLE 15. ELEMENT III – ILLICIT DISCHARGE DETECTION AND ELIMINATION
- TABLE 16. ELEMENT IV – CONSTRUCTION SITE RUNOFF CONTROL
- TABLE 17. ELEMENT V – POST-CONSTRUCTION RUNOFF MANAGEMENT
- TABLE 18. ELEMENT VI – MUNICIPAL OPERATIONS

NAPA COUNTY SWMP ANNUAL REPORT FY 04/05

APPENDIXES

APPENDIX A – RESTAURANT BMP POSTER

APPENDIX B – ACORN SOUPE NEWSLETTER

APPENDIX C – NAPA COUNTY'S WATERSHEDS CALENDAR

APPENDIX D – COAST AND CREEK CLEANUP DAY REPORT

APPENDIX E – ILLICIT DISCHARGE RESPONSE PLAN

APPENDIX F – ILLICIT DISCHARGE RESPONSE REPORTS

APPENDIX G – STORMWATER INSPECTIONS FOR CUPA FACILITIES

APPENDIX H - CONSTRUCTION INSPECTION TRAINING

APPENDIX I - CONSTRUCTION INSPECTION REPORT

APPENDIX J - POST-CONSTRUCTION DESIGN STANDARDS

INTRODUCTION

The Cities of Napa, St. Helena, Calistoga, Town of Yountville, and Napa County submitted an NOI and a SWMP to the RWQCB on March 10, 2003 to comply with the Phase II Municipal Stormwater regulations. This was the initial phase of the review process to gain coverage under the Phase II permit. After reviewing the SWMP, the RWQCB submitted comments and a request for clarifications regarding the content of the SWMP. The comments received from the RWQCB were very thorough and constructive. The majority of these comments were used to improve the clarity of the plan and to add goals that were lacking.

The plan was resubmitted to the RWQCB in December of 2003 and the RWQCB deemed the SWMP as adequate. The SWMP was posted on the SWRCB website for public review and comment before adoption. Public notices also ran in three local newspapers once per week for three weeks during this 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 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 program elements will include IPM practices, such as landscape and park maintenance and corporation yards. Baykeeper withdrew its request for a public hearing and the RWQCB issued coverage under the Phase II permit to the NCSWMP co-permittees on May 20, 2004.

In order to fund the County-wide Program, each of the Local Programs entered into a JPA administered by the NCFCWCD. The JPA was adopted with a 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.

The majority of the 2nd year measurable goals involved program development and training. The major accomplishments included:

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.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

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.

It is still difficult to evaluate the effectiveness of many of these accomplishments at reducing water pollution at this time because the SWMP is still just beginning to be implemented. It is expected that the effectiveness evaluation for many of these tasks can be performed as the program matures.

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 (perhaps 95% or more) live in the Napa River watershed. For this reason, most of the NCSWMP activities will be 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 contained by Mt. St. Helena to the north, mountains to the west and east, and ultimately discharges to the San Pablo Bay to the south.

SUMMARY AND EVALUATION FOR FY04/05

ELEMENT I – PUBLIC EDUCATION AND OUTREACH

1. CHARACTERIZE GENERAL PUBLIC

TASK 1D – CONDUCT SURVEY

COUNTY-WIDE PROGRAM

Performance: Measurable goal modified.

The method chosen to establish baseline data on the public's knowledge of stormwater issues was to conduct a survey at community events (i.e. Earth Day, Home and Garden Show). While this has worked for some municipalities, especially if they include the opportunity of winning a prize for filling out the survey, community events were found to be a poor venue for conducting surveys. During the course of the year it was determined that there are three main drawbacks to conducting the surveys at community events. First, the survey interfered and greatly limited the effectiveness of the main goal of staffing a booth at events which is to educate the public on stormwater issues. Second, conducting the survey as part of a water quality education booth is likely to influence the participant's answers. Lastly, the people who attend Earth Day or the Home and Garden Show are not a good representative sample of the community at large.

Another method of conducting the survey was investigated and one potential option is to insert the stormwater questionnaire into the garbage bills distributed to every household in the City of Napa. The offer of a prize will be used to encourage participation in the survey. This would be a relatively inexpensive survey to conduct, has the potential to capture a larger sample size, and the sample would be much more representative of Napa County's population.

Effectiveness: Not applicable.

2. OUTREACH TO LOCAL GOVERNMENT OFFICIALS

TASK 2C – ANNUAL PROGRESS REPORTS

COUNTY-WIDE PROGRAM

Performance: Two presentations given to the Napa County Flood Control and Water Conservation District Board.

The annual report was introduced and made available to the public at the Napa County Flood Control Board meeting in January 2005. 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 also given to the Flood Control Board on June 21, 2005. The presentation highlighted the SWMP accomplishments to date and major goals for FY 05/06.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF NAPA

Performance: One presentation was given to the City Council.

DPW staff gave a presentation to the City Council on October 19, 2004 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.

Effectiveness: Unknown.

LOCAL PROGRAM: TOWN OF YOUNTVILLE

Performance: One presentation was given to the Town Council.

DPW staff gave a presentation to the Town Council on November 2, 2004 which included a status report on the Napa County Water Pollution Prevention Program discussing the six elements of the program and included a resolution approving the Emergency Response Plan for Illicit Discharges. This was a public hearing and public testimony was received on the stated action.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: One presentation was given to the City Council.

The Department of Public Works gave the City Council a brief update on the progress of the SWMP when it introduced the Post-Construction Runoff Management Requirements for adoption on June 28, 2005.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: Not implemented.

The County-wide Program gave two presentations to the Flood Control Board (see above). These presentations were attended by the Mayor of Calistoga.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Two presentations given to the Napa County Flood Control and Water Conservation District Board.

The County-wide Program gave two presentations to the Flood Control Board (see above). These presentations were attended by each of the Board of Supervisors for Napa County.

Effectiveness: Unknown.

3. STORMWATER WEBSITE

TASK 3A – DEVELOP WEBSITE

COUNTY-WIDE PROGRAM

Performance: Website developed.

The County-wide Program assisted the Napa County CDPD with the development of the WICC by developing a beta test group for the NCSWMP and by providing comments on the organization and content of the website. The beta test group includes a group of folders in the WICC library where documents can be uploaded by County-wide Program Coordinator and viewed by the general public. The NCSWMP group includes several folders that contain information on topics ranging from BMPs, local stormwater ordinances, IPM practices, and aquatic resources. The County-wide Program Coordinator also has the ability to post information on workshops and other events on the WICC calendar. Those who use the WICC website have the ability to become a member of the NCSWMP group and are notified by e-mail when new content is added to the library or the calendar.

The County-wide Program Coordinator also developed a group in the library that is closed to the public, but is open to NSSSA members. Each of the NSSSA members have the ability to upload ordinances, enforcement response plans, inspection checklists, outreach materials, and other materials that can be shared with other stormwater programs.

While the WICC website is a very comprehensive source for disseminating information about watershed in Napa County, its breadth makes it difficult for the general public to find information related to the NCSWMP. The WICC website may be revised in the future to add stormwater as a major topic on the front page, but in the meantime, the County-wide Program Coordinator is working with Napa County ITS to develop a website specific to stormwater issues. The stormwater website is currently under development and will be launched in FY 05/06.

Effectiveness: Unknown.

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

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

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.

Weed Awareness Week

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 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.

Better Site Design

A booth was developed specifically for the Alternative Energy Conference in St. Helena. The booth included copies of about a dozen site design examples from the SCVURPPP Site Design Manual.

Effectiveness: Unknown.

TASK 4B – STAFF BOOTHS AT EVENTS

COUNTY-WIDE PROGRAM

Performance: Staffed booths at nine events.

Weed Awareness Week

The Weed Awareness Week booth was staffed at the Napa and St. Helena Farmer’s Markets in July of 2004. 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. 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 seven events including Earth Day (Napa), Mother Goose Visits Vintage Farm (Napa), Cinco de Mayo (Calistoga), Alternative Energy Conference (St. Helena), Salvador Creek Watershed Awareness Day (Napa), and two “No-Tax Days” at Orchard Supply and Hardware (Napa). Annie Joseph, OWOW Program Coordinator, also assisted with staffing the “No-Tax Days” events. 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. The most popular OWOW factsheets were also provided at the booths and several of the Spanish versions were provided at the Cinco de Mayo event.

Better Site Design

The CWPC staffed the Site Design BMP booth at the Alternative Energy Conference in St. Helena. In general, the SWPC was surprised at the interest from the public in these site design techniques. Many citizens were very supportive of the idea of retaining and treating stormwater runoff to protect local streams. One couple was impressed with the simple design technique of directing downspouts to landscaping and even said they will use this BMP when

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

they replace their gutters that summer. Based on the response to this booth, the County-wide Program will seek out other appropriate events to educate the public on better site design techniques.

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.

5. OUTREACH TO GENERAL PUBLIC

TASK 5B – TRASH CAN DECALS

Quantifiable Target: Include with all cans provided by garbage service.

LOCAL PROGRAM: CITY OF NAPA

Performance: The City of Napa has a contract with Waste Management Inc. to provide garbage service for its citizens. The contract includes a provision for providing a trashcan decal with all trash cans. The decal includes information in English and Spanish that lists common types of household hazardous waste and where it may be disposed. The City of Napa also negotiated a new garbage collection contract that provides incentives for increasing recycling.

Effectiveness: The effectiveness of the trash can decal program can be partly measured by the number of household drop-offs and the amount of household hazardous waste collected at the Napa Vallejo Household Hazardous Waste Facility.

TASK 5C – NAPA VALLEJO HOUSEHOLD HAZARDOUS WASTE FACILITY

LOCAL PROGRAM: CITY OF NAPA

Performance: The Napa Vallejo Household Hazardous Waste Facility was open every Fri and Sat from 8AM to NOON throughout FY04/05.

Effectiveness: 388,499 pounds of hazardous waste was collected at the Napa-Vallejo Waste Facility in FY04/05.

It is very likely that much of this household hazardous waste would have been dumped into landfills and potentially contaminated groundwater without the existence of the Napa-Vallejo Household Hazardous Waste Facility. There was a 21% reduction in the amount of household hazardous waste collected in FY04/05 compared with the previous FY. There could be a variety of reasons for this reduction including a decrease in the amount of household hazardous waste purchased, an increase in the complete use of these products, the use of other household hazardous waste facilities (see upvalley collection events below) or households are just storing their waste for longer periods before disposing of it. It is not believed that the decrease in waste collected in FY 04/05 is the result of less outreach since the level of existing outreach has continued and even expanded (see Yellow page ads).

TASK 5D – UPVALLEY HOUSEHOLD HAZARDOUS WASTE COLLECTION

COUNTY-WIDE PROGRAM

Performance: Two upvalley household hazardous waste collection events were held in FY04/05.

Effectiveness: 15,020 pounds of hazardous waste was collected at the Rutherford collection event and 23,370 pounds were collected at the Angwin collection event.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

TASK 5G – MAIL YARDWASTE AND CREEKBANK BROCHURE

COUNTY-WIDE PROGRAM

Performance: Not implemented.

The yardwaste and creek dumping that was developed in FY03/04 was not mailed to streamside residences and businesses because the Napa County RCD is developing a creek care guide for the target audience. The County-wide Program is assisting the RCD with the development of the guide and it will cover a variety of topics including: riparian plants and wildlife, the salmon life cycle, caring for creek banks and riparian vegetation, and reducing non-point sources of pollution. This guide will be completed and mailed to streamside residences and businesses in FY05/06. It is expected that this modification will significantly increase the effectiveness of this outreach effort.

Effectiveness: Not Applicable.

TASK 5I – USED OIL RECYCLING

COUNTY-WIDE PROGRAM

Performance: Yellow page and radio ads implemented.

Effectiveness: Unknown.

TASK 5J – USED OIL RECYCLING

COUNTY-WIDE PROGRAM

Performance: The City of Napa continued to sponsor the used oil recycling point-of-purchase program in the first year of the SWMP. The shelf markers encourage consumers to recycle their used motor oil and provide information on where oil can be recycled in Napa County. 100% of the businesses willing to participate were provided with the materials for the point of purchase program.

Effectiveness: Unknown.

TASK 5K – PRIORITIZE FUTURE OUTREACH

COUNTY-WIDE PROGRAM

Performance: Two additional outreach publications were prioritized for development.

The NCSWMP has developed the following outreach materials: 1) Stormwater Pollution Prevention for New Development and Redevelopment, 2) Industrial Facilities BMPs, 3) Food Service Facility BMPs, 4) Yard Waste and Creek Banks, 5) Pollution Prevention for Surface Cleaning, 6) and a door hanger with general information on stormwater, illicit discharge, and residential BMPs. Based upon the existing materials it was determined that a more colorful and easy to read restaurant BMP guide was needed, the surface cleaner guide should be available in letter format for easy downloading, a Spanish version of the surface cleaner guide should be developed, and the yardwaste and creek banks brochure should include some artwork. Two additional outreach materials were also identified as a priority based reports produced by the illicit discharge database: working with concrete and swimming pool maintenance.

The City of St. Helena developed a poster with BMPs in English and Spanish and a trifold with restaurant BMPs in FY04/05 (Appendix A). NCFWCWCD and St. Helena staff developed the Spanish version of the surface cleaner guide and the CWPC created a version of the surface cleaner guide in letter format for easy downloading and printing. The yardwaste and creek

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

banks, swimming pool maintenance, and working with concrete are prioritized for development in FY05/06.

Effectiveness: Unknown.

6. OUTREACH TO SCHOOLS

TASK 6C – CONDUCT PRESENTATIONS

COUNTY-WIDE PROGRAM

Performance: Pollution Soup lesson plan was presented to eight elementary school classes; two power point presentations on pollution and the Clean Water Act were given at Environmental Studies classes at Pacific Union College, two OWOW power point presentations were given at after-school events; four classes participated in the BMI and stream ecology lesson plan and activities; and four was given a lesson on watersheds and pesticides.

The Pollution Soup lesson plan was developed by The Watershed Project and is part of the Kids in Creeks education program. The Napa County RCD education coordinator, with funding from the County-wide Program, presented the Pollution Soup lesson plan at eight elementary school classes with a total of 180 students. The grades of the classes ranged from 3rd through 5th grade. Midway through the school year, the lesson was expanded to include a demonstration with a stormwater diorama.

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 CWPC developed and gave two power-point presentations on common beneficial and pest insects in the home and garden and examples of non-toxic and less-toxic methods of controlling pests. The presentations were developed for a young audience. One presentation was given at the Carolyn Parr Nature Center and had approximately a dozen parents and children in attendance. The other presentation was given at an after-school club and had about 25 elementary school-aged students attending.

Two classes participated in the stream ecology and water quality lesson and activity plan given by the CWPC. One was a 6th-grade class at Silverado Middle School and one was a summer program of elementary school students. The Silverado Middle School class was given a power point presentation on stream ecology and water quality and conducted a bioassessment of BMIs collected from Tulocay Creek near the school. The lesson for the summer school program was given at a site on the Napa River. The stream ecology and water quality lessons emphasized the value of healthy streams, lakes, and wetlands (e.g. drinking water, fish), the types of human-caused pollution and their impacts on aquatic resources, and the adaptations of aquatic insects and what they indicate about water quality. The lesson concluded with a bioassessment of the stream's health by identifying the types of BMIs and discussing restoration and pollution prevention practices that will improve the health of the stream.

The CWPC also assisted Acorn Soupe, a non-profit environmental education organization, with two field trips to local creeks to learn about stream ecology and water quality. These field trips were about four hours long and the Acorn Soupe staff filled up that time with lots of fun lessons and activities on habitat loss and salmon, pollution and water quality, and restoration. Bioassessments were conducted during both field trips and the results from the assessment of

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

Salvador Creek was written up by the CWPC and published in Acorn Soupe's June 2005 newsletter (Appendix B). The newsletter is sent out to a few thousand addresses.

The CWPC also assisted Acorn Soupe with a field trip to Skyline Park for 4 classes from Robert Louis Stevenson Middle High School. The field trip included lessons on watersheds and the hazards of pesticides and how some of them can bioaccumulate in the food chain.

Effectiveness: Unknown.

TASK 6D – EVALUATION

COUNTY-WIDE PROGRAM

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

The survey has limited usefulness because the many of the questions do not produce useful results for evaluating the effectiveness of the lesson plan with respect to stormwater pollution. The most useful questions was: "What can you do to prevent water pollution?" The most common answer during the pre test was "don't litter". The most common answers to the post survey were "don't wash the car in the street", "don't change motor oil in the street", and "don't litter". Of the 53 students who took the pre and post survey, 33 could list one thing they could do to prevent water pollution in the pre-test and 51 could identify at least two things they can do in the post-test. Based on these results the Pollution Soup lesson appears to be effective at getting the message out that pollutants on the streets can wash into the storm drain and into creeks and this pollution is preventable.

The survey will be revised for FY05/06 to improve its use as an evaluation tool.

Effectiveness: Unknown.

TASK 6E – PROGRAM IMPROVEMENT

COUNTY-WIDE PROGRAM

Performance: Pollution Soup lesson plan revised.

A stormwater diorama activity was added to the Pollution Soup lesson plan in the middle of FY04/05.

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>.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

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 "Living in Napa County's Watersheds" 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 that discusses several key watershed concepts and describes the three largest watersheds in Napa County. Each month follows with a topic and narrative that describes a particular resource or land use that is important to Napa County's watersheds. These topics include: Water; Steelhead and Salmon; Agriculture; Riparian Corridors; Vineyards; Forests, Woodlands, and Shrublands; Grazing Lands and Grasslands; Wildlife; Urban Environment; Wetlands; Protected Lands; and People and Partnerships. A copy of the calendar is provided in Appendix C. 3,000 calendars were distributed to residents throughout Napa County.

ELEMENT II – PUBLIC INVOLVEMENT AND PARTICIPATION

2. STORM DRAIN STENCILING

TASK 2B. STORM DRAIN STENCILING PROGRAM

LOCAL PROGRAM: CITY OF NAPA

Performance: Two storm drain stenciling events were conducted in FY 04/05.

A Boy Scout marked approximately 25 storm drains in the residential neighborhood between Trower Ave and Dry Creek Road in the summer of 2004. In addition, employees from Home Depot volunteered their time to mark storm drains and distribute door hangers in the largely Spanish-speaking neighborhood between Coombs and Jefferson Streets. A total of 25 storm drains were marked and approximately 100 door hangers were distributed throughout the neighborhood.

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

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

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.

LOCAL PROGRAM: TOWN OF YOUNTVILLE

Performance: One storm drain stenciling event was conducted in July of 2004.

The County-wide Program Coordinator and the Stewardship Coordinator at the Napa County RCD organized a storm drain marking event in July 2004 with a local Boy and Cub Scout Troupe. Approximately 25 Scouts participated in the event and marked all (110) the public storm drain inlets in the Town of Yountville. The Boy Scouts also distributed approximately 800 door hangers with a message in English and Spanish about the importance of preventing pollution from entering the storm drain system.

Effectiveness: Unknown.

It will be difficult to evaluate the effectiveness of the storm drain marking program because there is little baseline data on illicit discharges in the Town and all the storm drains are now marked.

LOCAL PROGRAM: CITY OF CALISTOGA AND NAPA COUNTY

Performance: Storm drain marking event not implemented.

The City of Calistoga and Napa County did not implement the storm drain marking event because most of the markers that were installed in FY03/04 became dirty and in some cases illegible after only one year. The County-wide Program Coordinator sent samples back to the manufacturer and it was determined that the batch of markers was prepared with a contaminated sample of polyurethane. This made the surface of the marker sticky and porous to dirt and grime. Replacement markers were ordered from the manufacturer under the warranty and the new markers had not arrived by June 30, 2005.

Effectiveness: Not applicable.

3. WATER QUALITY MONITORING

TASK 3A – EVALUATION AND ASSESSMENT

COUNTY-WIDE PROGRAM

Performance: Evaluation and assessment completed.

The existing monitoring program measures dissolved oxygen, specific conductivity, pH, and temperature at each site on a monthly or bi-monthly basis depending on the commitment of the volunteer. Visual observations are also made regarding the water's color and odor. The program was evaluated for the need to collect water quality data for other parameters and additional site locations. Based on the evaluation and assessment, it was determined that adding nitrate monitoring to the program would be helpful in identifying waterways with high levels of nutrients. This data will likely be valuable to the SFRWQCB who is currently preparing a TMDL for nutrients in the Napa River watershed. The assessment also found that most of the monitoring sites are in the unincorporated areas of Napa County and that adding more sites within the cities would make the monitoring program more comprehensive.

Effectiveness: Unknown.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

The effectiveness of the monitoring program can be evaluated in the future by the number of illicit discharges detected and the identification of streams that consistently exceed water quality standards. While some of the testing equipment is not highly accurate (e.g. nitrates), the monitoring program should be able to provide a rough picture of water quality in Napa County and help to direct more rigorous monitoring and cleanup efforts in the future (e.g. Nutrient TMDL).

TASK 3B – DATA MANAGEMENT

COUNTY-WIDE PROGRAM

Performance: Database evaluated, but not improved.

The Napa County RCD uses an Access database developed by the Department of Water Resources to track water quality data statewide. The RCD biologist evaluated the ability of the database to track water quality monitoring data and determined that the existing structure and available fields are adequate. One shortfall of the existing database is that it doesn't have many reports that can summarize trends or analyze data. The RCD biologist and the County-wide Program coordinator will work together in FY05/06 to develop reports that will assist with reporting water quality trends and potential illicit discharges.

Effectiveness: Unknown

The effectiveness of the database will be evaluated in the future based upon its use in directing additional studies (TMDLs), restoration projects, and outreach efforts to reduce illicit discharges.

TASK 3C – RECRUIT VOLUNTEERS

COUNTY-WIDE PROGRAM

Performance: 3 new volunteers were recruited in FY 04/05 bringing the total number of volunteers to 7.

The Napa County RCD is always in search of new volunteers to monitor water quality in Napa County streams. The RCD website includes a page that explains the program, why the data is important and what it means, and directs potential volunteer to contact the RCD to sign up for the program. The RCD also hosted a water quality monitoring training workshop on May 25, 2005 that was open to the general public. The training included the procedures for measuring dissolved oxygen, specific conductivity, pH, temperature, and nitrates. The RCD biologist also demonstrated how to use benthic macroinvertebrates to measure the health of streams. As a result of this workshop, one new volunteer was recruited to monitor water quality at a local stream.

Effectiveness: Unknown.

TASK 3D – DEVELOP TRAINING PROGRAM

COUNTY-WIDE PROGRAM

Performance: Training program developed.

The Napa County RCD biologist developed materials and a quality assurance plan to train the volunteers on how to collect samples, measure, and report water quality parameters monitored.

Effectiveness: Not applicable.

TASK 3E – TRAIN VOLUNTEERS

COUNTY-WIDE PROGRAM

Performance: Training program implemented.

Each of the volunteers were trained at least annually on the protocol for sampling and measuring water quality parameters. In addition, a follow-up training was conducted for two of the volunteers to assess their understanding of the protocol and to answer their questions.

Effectiveness: Not applicable.

TASK 3F – MONITORING

COUNTY-WIDE PROGRAM

Performance: Monitoring program implemented; 7 volunteers monitored 16 sites during FY04/05.

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 coordinated and supported cleanup efforts in Napa County at seven sites for Coast and Creek Cleanup Day on September 18, 2004. A total of 309 volunteers participated in the event and removed a total of 6,440 pounds of trash and debris from local waterways. A detailed report on the 2004 Coast and Creek Cleanup Day is provided in Appendix D.

Effectiveness: A total of 6,440 pounds of trash and debris was removed from local waterways.

5. STEWARDSHIP GROUPS

TASK 5B – RUTHERFORD DUST RESTORATION TEAM (RDRT)

LOCAL PROGRAM: NAPA COUNTY

Performance: The CWPC 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.

Effectiveness: Unknown.

The effectiveness of the RDRT project will be determined after the plan is developed.

ELEMENT III – ILLICIT DISCHARGE DETECTION AND ELIMINATION

2. SPILL RESPONSE

TASK 2C – SPILL RESPONSE PLAN

COUNTY-WIDE PROGRAM

Performance: Spill response plan developed.

The CWPC developed a spill response that that could be adapted by Local Programs. The spill response plan includes a summary of spill and illicit discharge prevention efforts including available outreach materials and the business and construction inspection programs, The procedures for receiving complaints from the stormwater hotline, staff responsible for conducting investigations and cleanup, information on the local program's stormwater ordinance, and criteria to be used for prioritizing response. Each of the Local Programs adapted the spill response plan for their municipality. A copy of the Napa County Illicit Discharge Spill Response Plan is provided in Appendix E as an example.

Effectiveness: Unknown.

TASK 2D – STAFF TRAINING

COUNTY-WIDE PROGRAM

Performance: Training program developed.

Effectiveness: Unknown.

TASK 2E – STAFF TRAINING

COUNTY-WIDE PROGRAM

Performance: The stormwater program coordinators from each municipality were trained on the generic spill response plan developed by the County-wide Program in January of 2005 and they in tern trained appropriate staff on the plan adapted to their municipality. The CWPC also assisted with the training of staff at the City of Calistoga.

Effectiveness: Unknown.

TASK 2F – STORMWATER HOTLINE

LOCAL PROGRAM: CITY OF NAPA

Performance: Stormwater hotline to receive complaints established.

The City of Napa established a stormwater pollution hotline-257-9600. This phone # is included in the City Government Office listings in the SBC phone book July 2005 issue. Callers with an emergency pollution incident to report during non-work hours are directed to call Dispatch (911).

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Stormwater hotline to receive complaints established.

The St. Helena Police Department's (SHPD) non-emergency number, (707) 967-2850, has been designated as the initial point for illicit discharge reporting. The non-emergency hotline is staffed 24 hours per day. Depending on the nature of the incident, the SHPD dispatches the appropriate agency/department, according to the illicit discharge response plan, to investigate and clean-up the incident.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: Stormwater hotline to receive complaints established.

The Calistoga Police Department non-emergency phone line (707) 942-2810 is the contact for illicit discharge reports. This office is manned 24 hours per day and, depending on the nature of the discharge, dispatches the appropriate personnel.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Stormwater hotline to receive complaints established.

Citizens and municipal staff are directed to call Napa County dispatch, (707) 253-4452, to report incidents involving hazardous materials and the Stormwater Program Coordinator, (707) 253-4823, for non-hazardous incidents. The hotline for hazardous materials is staffed 24 hours per day and the hotline for non-hazardous materials is staffed during regular business hours. The complaints are dispatched to the appropriate staff/department for investigations, abatement, and cleanup according to the illicit discharge response plan developed in FY03/04.

A small number of complaints were received by the stormwater hotline in FY04/05. This represents a small fraction of the complaints received by the County because the hotline has only been used for the past two years and advertising of the hotline has been limited. Many citizens are still calling the Conservation, Planning, and Development Department, the Department of Environmental Management, Department of Public Works, and Napa County Fire depending on the nature of the incident. It is expected that the number of complaints that will be directed to the stormwater hotline will increase as outreach efforts improve. Future efforts to advertise the hotline will include publicizing on the county-wide stormwater website and distributing brochures and door-hangers.

Effectiveness: Unknown.

TASK 2G – RECORD KEEPING

LOCAL PROGRAM: CITY OF NAPA

Performance: Annual report on illicit discharges prepared by Sept 15, 2005

The City maintains files on reports of potential illicit discharges. Some information was created electronically (Word) while other was recorded on hand written forms. This information was provided to Napa County for inclusion in their data base. For future years the City Of Napa plans to enter information directly into the Access Data Base developed by the County-wide Program.

LOCAL PROGRAM: TOWN OF YOUNTVILLE

Performance: Annual report on illicit discharges prepared by Sept 15, 2005.

Three local restaurants were given verbal warnings about the discharge of grease and debris into adjacent stormdrain systems. Each operator responded adequately and no further warning or violations were observed.

Effectiveness: Three illicit discharges of grease and debris were abated and cleaned from the storm drain.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Annual report on illicit discharges prepared by Sept 15, 2005.

The City maintains a file of all information pertaining to each illicit discharge. This includes the letter (or documentation of a phone call) notifying the party(ies) of the violation and all related correspondence. A total of six illicit discharges were reported and investigated in FY04/05 and five of these discharges were cleaned up by the responsible party after they were warned by City staff and one illicit discharge reported on May 18, 2005 was still pending on June 30, 2005 and after a fine of \$3,343 was levied against the responsible party.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: All reported illicit discharges are responded to and a report generated as to the nature of the discharge and what, if any, follow up is required. The City maintains a file of these reports.

A total of three complaints were received by the City in FY04/05. Two were found to be illicit discharges from restaurants. Contact was made with both sites at time of investigation. One restaurant was closed immediately and not allowed to re-open until the site was cleaned and inspected by Public Works and Napa County Environmental Management Dept. The other site was sent a letter with timelines for corrective measures, which they complied with. No illicit discharge was found at the third site. An example annual report and case histories from the illicit discharge database developed by the County-wide Program are provided in Appendix F.

Effectiveness: Two of the three illicit discharges in FY04/05 were abated before pollutants reached receiving waters. As of June 30, 2005 the third discharge was not yet abated.

LOCAL PROGRAM: NAPA COUNTY

Performance: Annual report on illicit discharges prepared.

Three complaints regarding construction sites were investigated in FY04/05. Unfortunately, the method of tracking complaints and construction inspections needs improvement to allow the County to prepare a more complete report. Many of the complaints for businesses were not tracked because the DEM is improving the procedures for documenting and responding to these illicit discharge incidents.

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. Additional materials will be added to the road kit as outreach materials are developed.

Although a road kit was provided to each of the Local Programs' stormwater inspectors and illicit discharge investigators, it was not feasible at this time to provide a kit to each maintenance vehicle. Thus far, each Local Programs' maintenance staff is responsible for cleaning up spills, but generally do not engage the public or conduct enforcement. Illicit

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

discharges that are identified by maintenance staff in the field are reported to the stormwater hotline for investigation and enforcement purposes. For the meantime, Task 2H is modified to eliminate the goal of providing a road kit to each maintenance vehicle.

Effectiveness: Unknown.

3. STORM DRAIN SYSTEM MAPPING

TASK 3A – DEVELOP MAP OF OUTFALLS

ALL LOCAL PROGRAMS

Performance: Each of the Local Programs collected all existing information on the location of outfalls maintains maps as CAD drawings.

Effectiveness: Unknown

It is difficult to measure the effectiveness of the outfall maps, but they could be evaluated in the future by tracking the number of illicit discharges that enter the storm drain system, but do not reach receiving waters. This would have to be a qualitative assessment and it could be assumed that the maps are effective if there is no incident where an illicit discharge reached receiving waters because the location of the outfall could not be found.

TASK 3E – DEVELOP MAP OF MUNICIPAL STORM DRAIN SYSTEM

ALL LOCAL PROGRAMS

Performance: Each of the Local Programs collected existing information on their storm drain system and maintains a CAD drawing map of the system.

Effectiveness: Unknown.

The effectiveness of the storm drain system map may be evaluated in the future by tracking the number of illicit discharges that enter the storm drain system, but do not reach receiving waters. A qualitative assessment would be based upon the maps usefulness in tracking down the source of illicit discharges and connections.

4. BUSINESS INSPECTIONS

TASK 4B – DISTRIBUTE BMP BOOKLETS

COUNTY-WIDE PROGRAM

Performance: BMP booklets distributed to businesses during routine inspections and with permit applications.

The food service and CUPA inspectors distributed the appropriate BMP brochure and the NSSSA surface cleaner guide during routine stormwater inspections. Appropriate BMP factsheets from the California Stormwater BMP Handbooks were also distributed on an as needed basis.

Effectiveness: Unknown.

The effectiveness of the BMP booklets may be evaluated in the future by monitoring the compliance of businesses with stormwater BMP requirements.

TASK 4D – TRAINING

COUNTY-WIDE PROGRAM

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

Performance: CUPA and restaurant inspectors trained on the stormwater ordinance, BMP requirements, inspection checklist, and enforcement response plan.

A workshop on the Industrial Stormwater NPDES permit and conducting inspections was held on September 2, 2004. The workshop included presentations by SFRWQCB staff in the morning and site visits at two NPDES-permitted facilities. The presentation covered an overview of the Industrial NPDES requirements, conducting inspections, types of facilities and common problems, BMP selection and implementation, and enforcement options. The site visits were held at a winery (Stagg's Leap Winery) and a pipe manufacturing facility (Oregon Steel Mill). The workshop was attended by approximately 25 local government employees from Napa, Solano, and Sonoma Counties including four Napa County DEM CUPA inspectors, the Stormwater Program Coordinator, and one public works employee from the City of St. Helena.

A Stormwater Inspection Guidance Manual for CUPA Facilities (Appendix G) was developed in December 2005. The manual provides important definitions in the local stormwater ordinances (e.g. illicit discharge) and provides examples of major and minor stormwater violations. The Stormwater Program Coordinator trained the CUPA inspectors on the use of the guidance manual at a staff meeting and attended staff meetings, as needed, to answer questions regarding BMPs, enforcement, and other issues that arose during field inspections.

The restaurant inspectors were trained by DEM managers on the use of the inspection checklist for food service facilities, common stormwater violations associated with restaurants, and the enforcement response procedures.

Effectiveness: Unknown

TASK 4E – INSPECTIONS (FOOD SERVICE FACILITIES)

COUNTY-WIDE PROGRAM

Performance: 2% (14) of the food service facilities were inspected. All of these inspections were conducted in the City of Napa and within the unincorporated area of Napa County.

This task is proposed to be modified to become a Local Program and increase the percent of restaurant inspections. In the first year of the program, the County-wide Program funded the outreach efforts to businesses through Napa County DEM's routine inspection program. The plan for the 2nd year of the SWMP was to include add a checklist and conduct enforcement as needed. The cost of paying for this service was prohibitive for the County-wide Program and it was decided that the inspection program would have to be supported by fees. At this time, the City of St. Helena and Town of Yountville decided that it would be more efficient and effective for them to conduct these stormwater inspections with the waste water/pre-treatment inspection program they plan to implement in the near future. The Napa County DEM will conduct the restaurant inspections on behalf of the City of Napa and the City of Calistoga through a contractual agreement that allows DEM to collect fees from the business, conduct routine stormwater inspections, and at least one follow-up inspection before referring noncompliant businesses to the local jurisdiction for enforcement. Only a few restaurants were inspected in the City of Napa and Calistoga because the contracts with the City of Napa and Calistoga were not signed until the end of the FY. The Napa County DEM conducts the stormwater inspections at restaurants in the unincorporated areas of Napa County and is responsible for all follow-up inspections and taking all enforcement actions necessary to bring businesses into compliance.

Effectiveness: Unknown.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

It is not possible to evaluate the effectiveness of the inspection program at this time because only 14 food service facility inspections were conducted in FY04/05, the inspection checklist was piloted and revised, and a database and mechanism to get the data into the database is still in development.

TASK 4F – HAZARDOUS MATERIAL/WASTE HANDLING AND DISPOSAL

COUNTY-WIDE PROGRAM

Performance: BMP booklets distributed to 13 business plan facilities.

See Task 4G below for reasons why only 13 BMP booklets were distributed.

Effectiveness: Unknown.

TASK 4G – INSPECTIONS (BUSINESS PLAN FACILITIES)

COUNTY-WIDE PROGRAM

Performance: 13 inspections stormwater inspections were conducted at business plan facilities in the City of Napa and the unincorporated area of Napa County.

This task is proposed to be modified to become a Local Program and to decrease the percent of stormwater inspections at business plan facilities. In the first year of the program, the County-wide Program funded the outreach efforts to businesses through Napa County DEM's routine inspection program. The plan for the 2nd year of the SWMP was to include add a checklist and conduct enforcement as needed. The cost of paying for this service was prohibitive for the County-wide Program and it was decided that the inspection program would have to be supported by fees. At this time, the City of St. Helena and Town of Yountville decided that it would be more efficient and effective for them to conduct these stormwater inspections with the waste water/pre-treatment inspection program they plan to implement in the near future. The Napa County DEM will conduct the business plan facility inspections on behalf of the City of Napa and the City of Calistoga through a contractual agreement that allows DEM to collect fees from the business, conduct routine stormwater inspections, and at least one follow-up inspection before referring noncompliant businesses to the local jurisdiction for enforcement. Only a few businesses were inspected in the City of Napa and Calistoga because the contracts with the City of Napa and Calistoga were not signed until the end of the FY. The Napa County DEM conducts the stormwater inspections at business plan facilities in the unincorporated areas of Napa County and is responsible for all follow-up inspections and taking all enforcement actions necessary to bring businesses into compliance.

Effectiveness: Unknown.

It is not possible to evaluate the effectiveness of the inspection program at this time because only 13 business plan facility inspections were conducted in FY04/05, the inspection checklist was piloted and revised, and a database and mechanism to get the data into the database is still in development.

TASK 4H – NEWSLETTER

COUNTY-WIDE PROGRAM

Performance: Not implemented.

The newsletter was not sent to businesses in FY04/05 due to the loss of an employee at the DEM. The business newsletter will resume in FY05/06.

Effectiveness: Unknown.

ADDITIONAL ACCOMPLISHMENTS

A. WATER QUALITY MONITORING.

COUNTY-WIDE PROGRAM AND LOCAL PROGRAM (NAPA COUNTY)

The Stormwater Program Coordinator assisted RWQCB staff with selecting sites and collecting samples for the Pathogen TMDL for the Napa River in May of 2004. The goal of the May 2004 sampling was to investigate the source of pathogens that was detected in previous surveys in Murphy Creek and Brown's Valley Creek. As a result of the May 2004 sampling effort, the source(s) of the pathogens in Brown's Valley Creek was narrowed down to a half-mile reach of the creek. Due to limited access, the upstream extend of pathogens in Murphy Creek was not identified. The May 2004 sampling also revealed a new creek with excessive pathogen levels. The NCSWMP will continue to assist with the identification of the sources of pathogens in these creeks are the pathogen TMDL program is implemented.

ELEMENT IV - CONSTRUCTION SITE RUNOFF CONTROL

2. PLAN REVIEW

TASK 2A – DEVELOP PLAN REVIEW PROCESS

LOCAL PROGRAM: CITY OF NAPA

Performance: Plan review process developed.

Major projects such as parcel maps and subdivisions are reviewed by City Staff before being forwarded to the Planning Commission. A checklist is used to review developer submittals. Item #8h of the design review checklist requires applicants to submit "Stormwater Pollution Best Management Practices-List the Methods". Item 6 calls for the applicant to provide additional information if stream bank stabilization is included in project. Item 7 of additional submittal requirements calls for the applicant to provide additional information if work is proposed in a wetland. Item 4d of the Environmental Information Form notifies the applicant of the requirement to obtain coverage under the NPDES General Permit for Stormwater Associated with Construction Activity if the project disturbs one acre or more.

Project plans are also reviewed prior to issuing permits for construction projects. The Initial Submittal Checklist requires that a Storm Water Pollution Prevention Plan (SWPPP) and proof of filing of Notice of Intent (NOI) be provided if the project disturbs one acre or more. The Improvement Plan Checklist requires a plan view of all specified drainage structures (including structural BMPs) and an erosion and sediment control plan.

Effectiveness: Unknown

LOCAL PROGRAM: TOWN OF YOUNTVILLE

Performance: Plan review process developed.

The Town of Yountville developed a plan review process that requires new development and redevelopment projects greater than 1 acre to provide a SWPPP and proof of filing an NOI with building and grading permit applications. The plan review process also approves all building and grading permits with standard conditions for erosion control, sediment control, and material management.

The overall result of the experience with the Yountville Square Subdivision, see Task 4 for background, was the acknowledgement by the Town that mass grading should not occur over

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

the winter months. The Town Council directed staff to prepare a grading ordinance that accomplishes the following:

- Requires a separate grading permit for all earth disturbances over specified quantities.
- Requires submittal of SWPPPs and ECP's for all mass grading activities regardless of the size or slope of the site.
- Requires "engineered grading" permits for larger projects and bonding of the project.
- Prohibits mass grading from April 15th through October 15th of each year unless an exception is granted for special climatologic conditions determined by the Town Engineer.
- Provides for inspections, violations and penalties in accordance with the Town's Stormwater Discharge System Ordinance, Title 13, Division 5 of the Municipal Code.

The Town Council conducted public hearings and approved Chapter 15.60, the Grading and Excavation Code, on June 7, 2005.

Effectiveness: Unknown.

The Town believes that this ordinance will significantly reduce illicit discharges of sediment during the rainy season. The effectiveness of the plan review process may be evaluated in the future by monitoring the number of illicit discharges from construction activity.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Plan review process developed and adopted.

The City of St. Helena developed a policy with BMP requirements and plan review procedures to control polluted runoff from construction sites. This policy was adopted by the City Council on June 28, 2005..

Any development project subject to the construction site runoff control requirements passes through Public Works for review as a standard Planning Department practice. Internal staff review is followed by a weekly project meeting (internal staff only) to discuss any potential problems or items requiring further attention. Once the project meets the requirements of all departments, the permit is issued by the Building Department.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: Plan review process developed and adopted.

The City of Calistoga has developed a plan review process that requires all development projects that impacts an area greater than one (1) acre to provide the City proof of filing an NOI prior to issuance of a grading or building permit. The City has also implemented standard requirements for all building/grading plans to include a statement that requires the use of BMPs for erosion control, sediment control and material management.

Effectiveness: Unknown.

Although it is difficult to assess at this time, the City believes that the plan review process will reduce the number of illicit discharges from construction sites.

LOCAL PROGRAM: NAPA COUNTY

Performance: Plan review process developed.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

The plan review process implemented in FY04/05 includes procedures for attaching standard conditions of approval to all building and grading permits and reviewing stormwater plans for development projects greater than 1 acre and/or on slopes of 15% or more. A checklist was developed to ensure that stormwater plans include appropriate BMPs to address all pollutant sources.

Napa County is also considering adopting the requirement to prepare stormwater plans for some projects under one acre and less than 5%.

Effectiveness: Unknown.

The objective of the plan review process is to ensure that all approved stormwater plans include BMPs to address all potential pollutants and to ensure that the BMPs selected are appropriate for the site conditions. The effectiveness of the plan review process may be evaluated in the future by tracking the number of failed BMPs. Tracking the failed BMPs will also help to increase the knowledge of PW staff who review and approve stormwater plans. The construction site inspection checklist was amended to include a BMP evaluation code to document all failed BMPs.

TASK 2B. DRAFT TRAINING MATERIALS

Quantifiable Target: PM Training program developed.

LOCAL PROGRAM: CITY OF NAPA

Performance: Training program developed.

The City of Napa training program for implementing the plan review process consists of meetings among the Community Development and Public Works staff to discuss project applicability to the requirements, the use of the plan review checklist, and the appropriate use of BMPs. The training program also includes sending staff to workshops relevant to construction site runoff control.

Effectiveness:

LOCAL PROGRAM: TOWN OF YOUNTVILLE

Performance: Training program developed.

The training program includes regular meetings with staff to discuss the plan review checklist and approving standard conditions with all building and grading permits.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Training program developed.

The training program includes weekly project review meetings with staff to discuss the plan review checklist and approving standard conditions with all building and grading permits. Staff have the opportunity at these meetings to ask questions about the plan review process and BMP requirements.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: Training program developed.

The City of Calistoga conducts project review meetings weekly. These meetings are attended by the Chief of both Police and Fire, Planning & Building Dept., and Public Works staff. At

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

these meetings both individual projects under construction and in plan review are discussed along with discussions about how to better and more thoroughly review plans and educate applicants. (See 2C)

LOCAL PROGRAM: NAPA COUNTY

Performance: Training program developed.

Napa County's training program for implementing the plan review process consists of meetings among the Engineering staff and stormwater program coordinator to discuss project applicability to the requirements, the use of the plan review checklist, and the appropriate use of BMPs. The training program also includes sending staff to workshops relevant to construction site runoff control.

Effectiveness: Not applicable.

TASK 2C. IMPLEMENT TRAINING PROGRAM

LOCAL PROGRAM: CITY OF NAPA

Performance: Weekly project review meetings held.

Weekly development, project interdepartmental review meetings address projects issues including stormwater issues. During this meeting, staff discusses the best way to implement the new construction and post construction policies.

Effectiveness: Unknown.

LOCAL PROGRAM: TOWN OF YOUNTVILLE

Performance: Training program implemented.

Several project review meetings were held to discuss the plan review process for new development and redevelopment projects and to answer questions raised by staff regarding the application of the requirements and the use of the plan review checklist.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Training program implemented.

Several project review meetings were held to discuss the plan review process for new development and redevelopment projects and to answer questions raised by staff regarding the application of the requirements and the use of the plan review checklist. During these meetings, staff discussed the best way to implement the plan review process to ensure that all requirements are met and the plans are processed in an efficient manner. The City of St. Helena will continue to hold weekly project review meetings and address questions and concerns raised by staff involved in the plan review process.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: Training program implemented.

At the City of Calistoga weekly project review meetings the plan review process is discussed to improve the thoroughness and efficiency of the review process. The inspection results from approved projects is also discussed at these meetings. The County-wide Program Coordinator has attended two of these meetings to assist with the trainings.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

LOCAL PROGRAM: NAPA COUNTY

Performance: Approximately 22 meetings were held and two Engineers attended the SFEP/RWQCB construction site runoff control for Phase I and II in the Fall of 2004.

The engineering staff in the DPW and the stormwater coordinator established a schedule of meeting on Thursday afternoons to discuss the plan review process for incorporating BMP requirements and stormwater plan review in the building and grading permit process. These meetings started in September of 2004 and were sometimes attended by CDPD and DEM staff depending on the topic discussed. These meetings were fairly regular from September 2004 through February 2005 to discuss refinement and improvement of the existing plan review process. From February through June 2005 these meetings were held on an as needed basis to discuss issues and questions raised by staff.

Both engineers that are responsible for reviewing and approving stormwater plans attended the SFEP/RWQCB construction site runoff control for Phase I and II in the Fall of 2004.

Effectiveness: Unknown.

TASK 2D. IMPLEMENT PLAN REVIEW PROCESS

LOCAL PROGRAM: CITY OF NAPA

Performance: Plan review process implemented.

The City continues to address stormwater issues through direct review of individual projects, meetings with project applicants as well as internal project review meetings.

Effectiveness:

LOCAL PROGRAM: TOWN OF YOUNTVILLE

Performance: Plan review process implemented in May of 2005.

Two projects greater than 1 acre were approved after submitting an NOI and a SWPPP with the building permit application. One project under 1 acre was approved with the submittal of a SWPPP. Four projects that require an NOI and SWPPP are currently under review by Town staff.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Plan review process implemented.

The City of St. Helena implemented the requirement for all projects greater than 1 acre to provide a copy of the SWPPP and NOI. The plan review process for the Construction Site Runoff Control Requirement took effect when the City Council adopted the policy on June 28, 2005.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: Plan review process implemented.

The City of Calistoga issued two permits for projects greater than one (1) acre in the last year. Both applicants were required to submit a N.O.I. prior to receiving permits. These were the only projects of greater than an acre that were permitted.

LOCAL PROGRAM: NAPA COUNTY

Performance: Plan review process implemented on September 15, 2004.

The plan review process developed by the dept of PW was implemented in September of 2004 and applies to all projects that require a grading or building permit. The process includes attaching standard conditions of approval to all grading and building permits. These standard conditions include requirements for erosion control, sediment control, and materials management BMPs. Furthermore, projects that disturb greater than 1 acre or greater than 15% slope are required to submit a plan (SWPPP or SQMP) for review and approval by dept PW staff. The dept of PW has the authority to require a plan for these categories of projects through the County's Stormwater Management and Discharge Control Ordinance and Conservation Regulations.

In FY 04/05, all projects that applied for a grading or building permit after September 15th 2004 were given standard conditions of approval for the implementation of erosion control, sediment control, and material management BMPs.

Effectiveness: Unknown

The effectiveness of the plan review process is difficult to evaluate at this time. The dept of PW sent comments and requests for additional information on many plans because the plans were incomplete or showed inappropriate BMPs. Furthermore, many of the plans included irrelevant information and the applicants were told to delete this material to improve the readability for the contractor in the field. Many of the SWPPPs that were reviewed were thick binders of CASQA factsheets with very little information applicable to the project or site conditions.

Although there are other factors that determine BMP implementation besides having a good plan (e.g. contractor training, enforcement), the effectiveness of the plan review process may be evaluated in the future by tracking the number/percent of projects with poorly installed or not implemented BMPs. Baseline data for BMP implementation at construction sites was established in FY04/05 through the inspection program.

3. INSPECTIONS

TASK 3C. REVISION OF TRAINING MATERIALS

COUNTY-WIDE PROGRAM

Performance: Training materials revised.

The training program includes a power point presentation that give an overview of the Construction NPDES permit requirements, the quantifiable target in the SWMP for conducting inspections, the prohibitions in the local stormwater ordinances, appropriate enforcement actions for violations and many pictures of good, bad, and ugly construction sites in Napa County in previous years. The slides of the construction sites start with a picture and the inspector fills in a table that identifies the applicable BMP requirement observed and evaluates its implementation as effective, not implemented, poorly installed, or needs maintenance. The inspector also indicates on the form whether or not an illicit discharge occurred. The power point presentation and the form are provided in Appendix I.

Effectiveness: Unknown.

TASK 3D. IMPLEMENT TRAINING PROGRAM

COUNTY-WIDE PROGRAM

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

Performance: The CWPC trained 4 staff from the Napa County DPW, 2 staff from the City of Napa, and 2 staff from the City of Calistoga. The Town of Yountville and City of St. Helena used the training materials to train their own staff.

The training program was very effective based upon the feedback from the trainees. The trainees generally did fair to poorly in the beginning of the slides on the good, bad, and ugly, but show significant improvement in identifying and evaluating BMPs as more and more slides were examined.

Effectiveness: Unknown.

TASK 3E. IMPLEMENT INSPECTION PROGRAM

LOCAL PROGRAM: CITY OF NAPA

Performance: It is unknown if the city met the quantifiable target.

In future years the City of Napa will use the construction site inspection database developed by the County-wide Program. Currently, there is too much paperwork to analyze the performance of the city's inspection program.

- A total of one hundred (100) construction site inspections were conducted in FY/04/05
- There were 20 projects inspected at least once during FY 04/05.

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: TOWN OF YOUNTVILLE

Performance:

The Town of Yountville conducted inspections at two construction projects over 1 acre and one project less than 1 acre during FY 04/05. These projects included the Yountville Flood Barrier Project, the Vintage 1870 Events Center, and the Yountville Square Subdivision. The following is a summary of the inspections and enforcement conducted at these construction sites.

Yountville Flood Barrier Project

This project was constructed by the Town to provide a flood wall around 314 manufactured homes in order to provide relief from the 100-year flood event. The project included the construction and operation of a storm water detention pond located within the floodwall boundary to pump local drainage into the adjacent Beard Ditch. Local drainage off the street of the mobile home parks flows by gravity to the rock-lined detention basin where it is then pump from sumps into Beard Ditch where geotechnical netting and native planting have been installed to reduce the threat of bank erosion. While construction was in progress, and on a daily basis during wet weather, the streets within the parks were swept with a commercial street sweeper. Any sediment that reached the basin was settled out and mechanically removed. Inspections of erosion control features occurred almost daily and during and immediately after each storm event. There were no reported incidents of illicit discharges into either Beard Ditch or Hopper Creek as a result of this project construction.

Vintage Events Center

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

This project was less than 1 acre and was constructed by a private developer adjacent to a drainage swale. The project is still under construction and weekly inspections are being performed by the Town's Enforcement Official. The contractor was given two verbal warnings on the adequacy of the equipment washdown area and has responded adequately. There have been no reports of sediment discharges to the adjacent drainage swale.

Yountville Square Subdivision

This project proved to be a very difficult one for a variety of reasons and resulted in the issuance of several verbal and two administrative orders to comply. The site is relatively flat and not too large so the Town allowed the developer to begin grading in November of 2004. Several problems ensued due to the large amount of rain over the winter months and site specific conditions at the site made sediment control extremely difficult. Normal filter procedures employed on the site was not successful in filtering the fine sediments from the dewatering process. In addition, on-site drainage was not installed prior to the significant rains and essentially, each rainstorm resulted in the failure of the dewatering system to contain adequately filter the fine sediments. Eventually, a stop work order was issued and full erosion and sediment control measures were fully implemented to protect the site through the rainy season. Several site inspection reports were completed until the permanent drainage and post construction measures was installed.

Effectiveness: 2 potential illicit discharges from equipment washing and 1 major discharge of sediment abated.

LOCAL PROGRAM: CITY OF CALISTOGA

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

The City of Calistoga conducted inspections of the one project which was greater than one acre last winter. The project is a large single family residence and is still under construction. The owner/builder is a local contractor who is familiar with the City's NPDES requirements. He was very proactive with his erosion and sediment control measures. Between inspections the owner would regularly improve and add to the measures being implemented. There were no illicit discharges.

In addition to the one site of greater than an acre, City staff inspected and advised five other small projects and were successful in convincing the developers to implement BMPs at these sites. This was verified by follow up contact with the builders.

LOCAL PROGRAM: NAPA COUNTY

Performance: 5 or more inspections were conducted within 48 hours of a major storm event (0.25 inches/hour) 61% of the time. The average number of inspections within 48 hours of a major storm event was 3.8.

- A total of 101 construction site inspections were conducted in FY04/05.
- 16 illicit discharges were detected from 10 construction sites and 29 potential illicit discharges were detected from 14 construction sites.
- There were 34 different projects inspected at least once during FY04/05 and 29% of them had at least one illicit discharge and 85% of them had at least one potential illicit discharge.

Refer to the report in Appendix J for a more detailed report of construction site BMP implementation for FY 04/05.

Effectiveness: Unknown.

TASK 3F. CONSTRUCTION COMPLIANCE HOTLINE

ALL LOCAL PROGRAMS

Performance: Stormwater hotline to receive complaints established for each local program.

See Task 2F, Element III for more information on the stormwater hotline.

Effectiveness: Unknown

4. OUTREACH

TASK 4B. PROVIDE BMP MATERIALS TO THE PUBLIC

COUNTY-WIDE PROGRAM

Performance: Outreach materials provided to public upon request.

Effectiveness: Unknown.

TASK 4C. DEVELOP BROCHURE

LOCAL PROGRAM: CITY OF NAPA

Performance: Plan review checklist and brochure developed.

The Community Development Department posts its plan review process guides on the City's website and provides handouts with a check lists for a complete application at the counter.

The City also provides developers with copies of the brochure: Stormwater Pollution Prevention for New Development and Redevelopment, published by NCSWMP. When appropriate, contractors and owners are provided copies of best management practice handouts from the California Stormwater Quality Association handbook for construction.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Plan review checklist and brochure developed.

The construction and post construction policies are in pamphlet and electronic format for St. Helena applicants and contractors. It is standard practice of the St. Helena Building Department to distribute binders to each applicant outlining *all* the necessary and useful information related to development within City limits. The City has also posted the stormwater policies and interactive forms on the City website. You can view the policies and forms in three places: 1) Building Department page, 2) Pollution Prevention page, and 3) forms and documents provided at the front counter. In addition, the City of St. Helena displays and distributes the NCSWMP brochure of stormwater information related to construction practices.

Effectiveness: NA

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: Plan review checklist and brochure developed.

The City of Calistoga acquired copies of the NCSWMP brochure entitled "Stormwater Pollution Prevention for New Development and Redevelopment." These brochures are made available to project applicants at both the Planning & Building Department and the Public Works Department.

LOCAL PROGRAM: NAPA COUNTY

Performance: Plan review checklist and brochure developed.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

The DPW posted its plan review procedures on its website and provided it to building and grading permit applicants. A brochure was also developed by the CDPD to explain the new process for reviewing stormwater plans as part of the building permit.

Effectiveness: NA

TASK 4D. CONSTRUCTION SITE WORKSHOP

COUNTY-WIDE PROGRAM

Performance: SFEP/RWQCB construction site planning workshop was advertised by providing brochures at front counters of each of the Local Programs and distributing them during construction site inspections. A cover letter, flyer, and brochure was also mailed to 21 contractors and private engineering firms to encourage them to attend the workshop. The flyer did not make it into the Solano-Napa Builder's Exchange newsletter due to miscommunication.

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 requires a lot of effort, but it could be done analyzing data from the construction inspection database.

TASK 4E. CONSTRUCTION SITE EROSION CONTROL WORKSHOP

LOCAL PROGRAM: CITY OF NAPA

Performance: One City staff attended the SFEP/RWQCB construction site runoff control for Phase I and II held in December of 2004.

Additional Staff from the Public Works and Community Development Departments attended the SFEP/RWQCB construction site planning workshop in the Fall of 2003. The staff who attended the workshop were responsible for plan review, managing capital improvement projects, and conducting inspections at construction sites. In addition, two staff from the Dept. of Public Works attended the construction workshop sponsored by NCSWMP in the Spring of 2004. Because of the ample training at workshops in FY03/04 and the NCSWMP construction inspection training attended by two PW staff in the Fall of 2004, it did not seem necessary to send two members of staff to the SFEP/RWQCB workshop in the Fall of 2004. This task is proposed to be modified to send at least one plan preparer and inspector to the SFEP/RWQCB workshop every other year.

LOCAL PROGRAM: TOWN OF YOUNTVILLE

Performance: City staff did not attend the SFEP/RWQCB construction site runoff control for Phase I and II in the Fall of 2004.

Effectiveness: Not applicable.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Planning Department Director Ms. Carol Poole and St. Helena Building Inspector, Mr. Brooks Thompson attended the SFEP/RWQCB construction site runoff control for Phase I and II on December 1, 2004.

Effectiveness: Unknown

LOCAL PROGRAM: CITY OF CALISTOGA

Erik Lundquist of the City of Calistoga's Planning & Building Department attended the San Francisco Bay Regional Water Quality Control Board's Construction Site Planning &

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

Management for Water Quality Protection Workshop. Bill McBride received training from Napa County Flood Control Agency.

LOCAL PROGRAM: NAPA COUNTY

Performance: The two engineering staff in the DPW responsible for reviewing stormwater plans attended the SFEP/RWQCB construction site runoff control for Phase I and II in the Fall of 2004.

Effectiveness: Unknown

The effectiveness of the plan review process may be evaluated in the future by evaluating the BMP implementation of projects with approved plans and projects approved with standard conditions of approval. This is difficult to track at this point because projects with standard approval are not part of the inspection program. The analysis will require some refinement of the way complaints are tracked with the illicit discharge database and data queried in the construction inspection database.

ELEMENT V – POST-CONSTRUCTION RUNOFF MANAGEMENT

1. LEGAL AUTHORITY

TASK 1B. EVALUATE AND REVISE ORDINANCE

LOCAL PROGRAM: NAPA, YOUNTVILLE, ST. HELENA, CALISTOGA, AND NAPA COUNTY

Performance: Ordinance evaluated and not revised.

The DPW reviewed the stormwater ordinance that was adopted in FY03/04 and determined that the ordinance has adequate authority for the Director to establish BMP requirements through a public process and to ensure that structural treatment control BMPs are operated and maintained for the life of the project.

Effectiveness: Not applicable.

2. DESIGN STANDARDS

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

LOCAL PROGRAM: CITY OF NAPA

Performance: Interim policy procedure for post-construction best management practices stormwater pollution prevention for residential and commercial (Appendix K)_were adopted by the City Council on July 26, 2004.

The City of Napa's interim post construction standards do not address the protection of channels. Other City standards require applicants to obtain permits from the Board, California Fish and Game, and the Corps of Engineers for work in waters of the United States. City staff is reviewing the draft post-construction management requirements developed by Napa County staff so that there are consistent county-wide standards for post-construction stormwater pollution prevention.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: A Post-Construction Runoff Management policy was adopted by the City Council on June 28, 2005. The policy describes the Site Design, Source Control, and/or Treatment Control BMPs that are required for various project categories.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

Effectiveness: Unknown

The effectiveness of the Post-Construction Runoff Management policy may be measured in the future by evaluating the number and type of post-construction BMPs required for new development and redevelopment projects.

LOCAL PROGRAM: NAPA COUNTY

Performance: Napa County developed a 2nd draft of Post-Construction Runoff Management requirements, but did not adopt them in FY04/05. 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.

Effectiveness: Not applicable.

3. PLAN REVIEW

TASK 3A. DEVELOP PLAN REVIEW PROCESS

LOCAL PROGRAM: CITY OF NAPA

Performance: Plan review process developed.

An interim policy procedure for post-construction best management practices storm water pollution prevention for residential and commercial was adopted by the City Council on July 26, 2004. The policies describe the process for incorporating post-construction BMPs into the project design and the City's process for reviewing and approving BMPs.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: A Post-Construction Runoff Management policy was adopted by the City Council on June 28, 2005. The policy describes the process for incorporating post-construction BMPs into the project design and the City's process for reviewing and approving runoff management plans.

Effectiveness: NA

LOCAL PROGRAM: NAPA COUNTY

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

A first draft of Post-Construction Runoff Management requirements was circulated for review and comment among DPW, CDPD, DEM, and legal staff in September of 2004. Several meetings were held to discuss the plan review process, BMP requirements, and project applicability. A second draft of this policy was prepared re-circulated for review in February 2005 and a 3rd draft was prepared in May 2005. Further revisions are still planned for this policy. A future draft will be circulated for public review and comment and a final draft will be introduced for adoption by the BOS in FY05/06.

Effectiveness: Not applicable.

4. LONG-TERM MAINTENANCE

TASK 4A. DEVELOP O&M STANDARDS FOR BMPs

COUNTY-WIDE PROGRAM

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

Performance: Operation and maintenance standards for post-construction BMPs were established.

The factsheets in Section 4 of the California Stormwater BMP Municipal handbook were established as appropriate operation and maintenance standards for treatment control BMPs.

Effectiveness: Unknown.

TASK 4B. IDENTIFY ALL STRUCTURAL CONTROLS OPERATED BY THE MUNICIPALITY.

ALL LOCAL PROGRAMS

Performance: Each local program identified all structural treatment control BMPs that it is responsible for operating and maintaining.

None of the local programs are responsible for operating or maintaining treatment control BMPs with the exception of detention basins. In the few cases where development projects have been approved with structural treatment control BMPs, the owner is responsible for the long-term operation and maintenance of the BMP.

Effectiveness: Unknown.

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 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

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

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 held.

The RWQCB held a workshop for the Phase II program staff the discussed the use of site design, source control, and treatment control BMPs to reduce pollutants in stormwater runoff and to moderate runoff rates and downstream erosion. The CWPC gave a power point presentation on the draft post-construction runoff management requirements that were developed for the County-wide Program. The presentation discussed the applicability of the requirements to development projects and the procedures for identifying pollutants of concern and integrating BMPs into the project design. The workshop was attended by engineering and planning staff from the City of Napa, St. Helena, and Napa County.

Effectiveness: Unknown.

ELEMENT VI – MUNICIPAL OPERATIONS

1. Street Sweeping

TASK 1A. STREET SWEEP ACCORDING TO TABLE 8.

LOCAL PROGRAM: NAPA, YOUNTVILLE, ST. HELENA, CALISTOGA, NAPA COUNTY

Performance: Each of the local programs implemented the street sweeping schedule according to Table 8.

Effectiveness: Unknown.

The City of St. Helena is the only program that collects data on the number of miles and quantity of material removed from impervious surfaces. The City of St. Helena is also currently researching the purchase of a larger water tank to improve street sweeping operations.

TASK 1C. RECORD KEEPING

COUNTY-WIDE PROGRAM

Performance: Forms for tracking miles swept and quantity of material collected developed.

Several methods of collecting data on the miles swept and the amount of material collected from streets were evaluated and a form was developed. The form may be modified depending on the Local Program's ability to track either the volume or weight of the material. For example, Napa County contracts out all the street sweeping and the contractor provides a manifest to the DPW each month that lists the miles swept and the weight of the material collected. The weight of the material is recorded at the transfer station where the sweeper is weighed before and after the material is dumped.

Effectiveness: Not applicable.

TASK 1D. RECORD KEEPING

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

COUNTY-WIDE PROGRAM

Performance: Forms for tracking sweeper maintenance were developed.

Effectiveness: Not applicable.

TASK 1G. STAFF AND CONTRACTOR TRAINING

LOCAL PROGRAM: NAPA, YOUNTVILLE, ST. HELENA, CALISTOGA, NAPA COUNTY

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.

TASK 1H. PARKED AND ABANDONED VEHICLES

LOCAL PROGRAM: CITY OF NAPA

Performance: Assessment of areas with high numbers of parked and abandoned vehicles completed.

An assessment of areas with multiple family housing, apartments, found that parked cars often interfere with street sweeping.

Effectiveness: Unknown

The effectiveness of the assessment at reducing pollutants in stormwater runoff will depend on the success of the outreach program to encourage residents to avoid street parking during the days that street sweeping is scheduled.

LOCAL PROGRAM: NAPA COUNTY

Performance: Assessment of areas with high numbers of parked and abandoned vehicles completed.

An assessment of the areas that are swept found no areas with significant numbers of parked or abandoned vehicles. The industrial park at the airport does not allow parking on the main arterial streets and there is almost no parking on the side streets because there is ample space to park for their employees and customers in the parking lots. The streets within the Silverado Country Club have some cars parked on the residential streets, but the main arterials are largely absent of cars.

Effectiveness: Unknown

The effectiveness of the assessment at reducing pollutants in stormwater runoff will depend on the success of the outreach program to encourage residents to avoid street parking during the days that street sweeping is scheduled.

TASK 1M. LEAVES DURING LEAF SEASON

LOCAL PROGRAM: CITY OF NAPA

Performance: Assessment of areas with high volume of leaves completed.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Assessment of areas with high volume of leaves completed.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

The Industrial Park at the Napa County Airport has a very low volume of leaves to collect from public streets because the developments in the area are relatively new and the street trees are relatively small. There is a very high volume of leaves on the streets at the Silverado Country Club to collect in the fall due to the size and density of street trees in the area.

TASK 1N. LEAVES DURING LEAF SEASON

LOCAL PROGRAM: CITY OF NAPA

Performance: Two methods of collecting leaves from public streets were evaluated and implemented.

Based upon existing experience removing leaves from public streets, two methods of collecting leaves were evaluated and implemented in the Fall of 2004. Leaves in areas with low volumes of leaves are simply collected with the street sweeper. High volumes of leaves (are collected by scheduling a front loader and street sweeper operating in tandem. The front loader collects leaves and loads them into a truck ahead of the street sweeper to maximize pollutant removal. The methods for collecting leaves have been used for several years and seem to be effective based upon the observations of staff.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Two methods of collecting leaves from public streets were evaluated and implemented.

Based upon existing experience removing leaves from public streets, two methods of collecting leaves were evaluated and implemented in the Fall of 2004. Leaves in areas with low volumes of leaves (Industrial Park) are simply collected with the street sweeper. High volumes of leaves (Silverado Country Club) are collected by scheduling a front loader and street sweeper operating in tandem. The front loader collects leaves and loads them into a truck ahead of the street sweeper to maximize pollutant removal. The methods for collecting leaves have been used for several years and seem to be effective based upon the observations of staff.

Effectiveness: Unknown.

The effectiveness of the leaf removal program will be evaluated in the future by developing and piloting a form for tracking the amount of leaves removed and visual observations after the streets are swept.

TASK 1R. TREES INTERFERING WITH STREET SWEEPING

LOCAL PROGRAM: CITY OF NAPA

Performance: Assessment of areas with trees interfering with street sweeping completed.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Assessment of areas with trees interfering with street sweeping completed.

Effectiveness: Unknown.

TASK 1S. TREES INTERFERING WITH STREET SWEEPING

LOCAL PROGRAMS: CITY OF NAPA AND NAPA COUNTY

Performance: Three methods of reducing interference of trees with street sweeping activities were investigated and prioritized for implementation.

The first method of reducing the interference of trees with street sweeping operations is to provide work order forms to staff and contractors that perform street sweeping. Staff and contractors will fill out a work request when they find trees along streets that interfere with sweeping operations and provide the form to the Street/Road Superintendent. The second method will utilize the observations of road and street crews during routine maintenance of streets and storm drains. Road and street crews will be instructed to routinely remove tree limbs and other vegetation that will interfere with street sweeping operations. The third method will rely on complaints from the public regarding broken tree limbs and other vegetation obstructing traffic.

Effectiveness: Unknown

The effectiveness of the first and third methods will be the easiest to track by saving records of work order requests from street sweeping staff/contractors and the public. The second method may be more difficult to track because street crews often take care of problems as they are identified during routine street maintenance work.

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: Annual training completed on May 25, 2005

Maintenance staff from the PW Department attended a stormwater training session on May 25, 2005. At the training, staff watched the Excal video and completed the stormwater survey.

Effectiveness: Unknown.

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. Staff then discussed each question on the pre-test and the correct answers and other stormwater questions were discussed that arose.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Annual training completed on May 24, 2005.

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

Municipal staff from the Roads Division in the DPW attended a stormwater training session on May 24, 2005. Staff completed a pre-test identical to the post-test that was given in June 2004, watched a 20-minute video called “Municipal Stormwater Pollution Prevention” produced by Excal Visual, and took a post-test prepared by the maker of the video.

The pre-test was used to measure staff’s long-term knowledge of stormwater issues. No refresher was given prior to this test and the last training was held 11 months prior. The average score on the pre-test was 15.2 out of a possible score of 20. The average scores for each of the 6 questions ranged from a low of 1.9 out of 3 points possible for #4 and 8.6 out of 10 points possible for #2. The low scores for question #4 were because many staff did not know that concrete saw cut slurry can have a high pH. The most worrisome result of the pre-test was the fact that 35% of respondents believed that “materials and substances entering the storm drain system are treated/removed before discharging to receiving waters”.

Unfortunately, it’s not possible to determine if the training improved staff’s knowledge about the lack of treatment because the post-test did not have a similar question. On the bright side, staff scored very high on the list of pollutants that may degrade water quality (Question #2). 21 out of 23 staff members identified sediment as a pollutant. The most common pollutants in question #2 that were not identified by staff as causing water quality problems were nutrients and leaf litter.

The post-test was conducted after the Excal training video was presented. The average score on the post-test was 80% correct and the low and high scores were 47% and 100% respectively. The questions most commonly answered incorrectly were questions #14, #4, and #7.

Future trainings will focus on the topics where staff’s understanding of stormwater pollution issues and use of BMPs need improvement.

Effectiveness: Unknown

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.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: All storm drains were inspected prior to the winter months and cleaned as needed throughout the year.

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

3. Stormwater Pump Stations

TASK 3B. TRAINING

LOCAL PROGRAM: CITY OF NAPA

Performance: The City of Napa trained all appropriate staff on the inspection and cleaning schedule and practices described in the Stormwater Pump Station Maintenance Standards.

Effectiveness: Unknown.

TASK 3C. VISUAL INSPECTIONS

LOCAL PROGRAM: CITY OF NAPA

Performance: The City of Napa has one stormwater pump station at Lake Park. This pump station is inspected in accordance with the Stormwater Pump Station Maintenance Standards.

Effectiveness: Unknown.

TASK 3D. MAXIMIZE POLLUTANT REMOVAL PRIOR TO DISCHARGE

LOCAL PROGRAM: CITY OF NAPA

Performance: The City of Napa has one stormwater pump station at Lake Park. This pump station is cleaned in accordance with the Stormwater Pump Station Maintenance Standards.

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 regularly.

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: Unknown

LOCAL PROGRAM: CITY OF ST. HELENA

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

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

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 three days per week is optimum.

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 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.

TASK 4B. ASSESSMENT

LOCAL PROGRAM: CITY OF NAPA

Performance: Assessment completed; recommendation implemented.

The city continuously monitors the capacity of trash receptacles and adjusts the number of receptacles or the frequency of service to ensure that receptacles are not overfilled.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Assessment completed; recommendation implemented.

The City continuously assesses the need to provide additional receptacles and modify routine service schedules. In response to recommendations from municipal staff, the City Council updated the waste disposal ordinance in the Fall of 2004 to reduce and/or eliminate residential trash from being put into municipal containers. The dumping of private trash into public trash receptacles often leads to overfilling and spillage. The City will continue on-going evaluations of litter disposal to ensure that sufficient trash receptacles are provided and serviced to minimize litter in public areas.

Effectiveness: Unknown

LOCAL PROGRAM: NAPA COUNTY

Performance: Assessment completed and recommendations implemented.

DPW staff continuously assesses the need to provide additional receptacles and modify routine service schedules. Based upon the number of beverage containers collected at the Yountville Ecological Preserve, the DEM and PW added recycling containers to the disposal area near the parking lot.

Effectiveness: Unknown

TASK 4C. EDUCATION

LOCAL PROGRAM: CITY OF NAPA

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

Performance: 30% of litter receptacles maintained by the City are labeled with anti-littering messages.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: All of the litter receptacles maintained by Napa County are labeled with anti-littering messages.

Effectiveness: Unknown.

This measurable is difficult to assess for effectiveness, but a qualitative assessment may be made by evaluating the amount of trash collected at the Yountville Eco Preserve during Coast and Creek Cleanup Day.

5. Corporation Yard

TASK 5A. PREPARE SWPPP

LOCAL PROGRAM: CITY OF NAPA

Performance: A map showing all buildings, drainage inlets and direction of drainage was developed. A storm drain was designed for Jackson Street which will serve the corporation yard and provide a connection point for a future bio-swale. An enclosed dumping location was created to reduce silt tracking from dumping at the corporation yard.

Effectiveness: Unknown.

LOCAL PROGRAM: TOWN OF YOUNTVILLE

Performance: A map of the City's corporation yards was prepared showing the locations of the buildings, storage and maintenance areas, storm drain inlets, and the direction of drainage.

Effectiveness: Unknown.

The effectiveness of the maps at reducing non-stormwater discharges will be evaluated when the assessments are completed in FY05/06.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: A map of the City's corporation yards was prepared showing the locations of the buildings, storage and maintenance areas, storm drain inlets, and the direction of drainage.

Effectiveness: Unknown.

The effectiveness of the maps at reducing non-stormwater discharges will be evaluated when the assessments are completed in FY05/06.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: Public Works developed a map of the Public Works yard which shows buildings, material storage locations and existing drainage patterns.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Maps of the County's corporation yards in Yountville and the City of Napa were prepared showing the locations of the buildings, storage and maintenance areas, storm drain inlets, and the direction of drainage.

Effectiveness: Unknown.

The effectiveness of the maps at reducing non-stormwater discharges will be evaluated when the assessments are completed in FY05/06.

6. Road Maintenance

TASK 6A. EDUCATION AND OUTREACH

COUNTY-WIDE PROGRAM

Performance: A road design and maintenance workshop held on July 8, 2004 and was attended by 6 road division crew leaders and 2 DPW engineering staff from Napa County, 2 employees from Napa County Fire, one employee from the SFRWQCB, 8 engineering consultants, and 2 private property owners.

The instructor for the road design and maintenance workshop was Bill Weaver from Pacific Watersheds Associates. The workshop was a full day class that covered basic concepts of designing and maintaining roads to reduce sediment delivery to streams. The workshop included presentations in the morning and a tour of public roads in the Dry Creek watershed in the afternoon. The workshop covered many of the basic concepts of culvert sizing and alignment, stream crossings, and improved road drainage. Each participant at the workshop received a copy of "Handbook for Forest and Ranch Roads – A Guide for Planning, Designing, constructing, Reconstructing, Maintaining and Closing Wildland Roads" (Mendocino County RCD, June 1994) and a CD with software that can be used to size culverts.

Effectiveness: Unknown.

TASK 6C. TRAINING

COUNTY-WIDE PROGRAM

Performance: All relevant staff trained.

In addition to the road design and maintenance workshop (Task 6A) attended by Napa County staff, each of the Local Programs trained appropriate staff with the materials provided in the Excal Visual Municipal Stormwater Pollution Prevention Program. See Task 2B above for more information on the training.

Effectiveness: Unknown.

Task 7. Creek and Ditch Maintenance

TASK 7C. TRAINING

COUNTY-WIDE PROGRAM

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: One park was assessed for pollution prevention measures.

Veteran's Park is located on Main Street at the intersection of Third Street. This parks eastern boundary is the Napa River.

- Pesticides (Roundup) are used four times a year to control weeds. Approximately 3 gallons of diluted pesticide is applied each time. Integrated pest management practices are used to reduce the use of pesticides.
- Turf is fertilized with approximately 100 pounds of 30-3-9 fertilizer.
- Cut grass is grass- cycled and remains on site.
- Trash is collected from this park three times a week.
- The flood control project will modify this park and provide bank protection to prevent stream bank erosion.

Effectiveness: Unknown.

LOCAL PROGRAM: TOWN OF YOUNTVILLE

Performance: Assessment completed for Van de Leur Park.

This is the Town's newest park and includes grass lines swales and a cobbled drainage ditch for filtration of on site runoff of storm water. No herbicides or pesticide are applied in this park. All park surfaces are either covered or landscape reducing erosion potential. The park is very flat.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF ST. HELENA

Performance: Assessment completed for Meily Park.

Meily Park is located on the north side of Pope Street adjacent to Sulphur Creek in St. Helena. The 4 acre park contains a soccer field and children's playground area. There is a parking lot and asphalt pathways throughout the park. All drainage is directed towards the turf area which utilizes and underground chamber system to capture, collect, and irrigate the turf. Overflow from the chambers is then directed into a 500'vegetated swale that filters runoff prior to entering Sulphur Creek.

Effectiveness: Unknown.

LOCAL PROGRAM: CITY OF CALISTOGA

Performance: Assessment completed for Heather Oaks Park.

The City of Calistoga maintains eight parks within the City limits. An assessment of Heather Oaks Park was completed in FY 04/05 and BMPs were identified to minimize pollutants in stormwater. Many of these BMPs are appropriate for all parks, but some were specific to the site conditions and activities associated with Heather Oaks Park.

Effectiveness: Unknown.

LOCAL PROGRAM: NAPA COUNTY

Performance: Not applicable.

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 8B. DEVELOP MAINTENANCE STANDARDS

COUNTY-WIDE PROGRAM

Performance: Operation and maintenance standards for park and recreation facilities were developed.

Several BMP resources were investigated and the BMP factsheets for Building and Grounds Maintenance (SC-41), Safer Alternative Products (SC-61), Fountains and Pools Maintenance (SC-72), and Landscape Maintenance (SC-73) form the California Stormwater BMP Municipal Handbooks.

Effectiveness: Unknown.

TASK 8C. TRAINING

COUNTY-WIDE PROGRAM

Performance: All relevant staff trained.

Each of the Local Programs trained appropriate staff with the materials provided in the Excal Visual Municipal Stormwater Pollution Prevention Program. See Task 2B above for more information on the training. Staff were also trained on the BMPs described in the maintenance standards adopted in Task 8B.

Effectiveness: Unknown.

GOALS AND MODIFICATIONS FOR FY05/06

I. PUBLIC EDUCATION AND OUTREACH

GOALS FOR THE 3RD YEAR

See Table 13.

MODIFICATIONS TO MEASURABLE GOALS

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

ADDITIONS TO MEASURABLE GOALS

TASK 1D. CONDUCT SURVEY

COUNTY-WIDE PROGRAM

Performance Measure: Collect 300 responses to survey.

Conduct a survey of the public's awareness of stormwater issues by mailing the survey with garbage bill inserts or a phone survey.

TASK 5G. MAIL BROCHURE TO CREEK-SIDE RESIDENCES AND BUSINESSES

COUNTY-WIDE PROGRAM

Performance Measure: Mail brochure on creek care BMPs to at least 80% of residences and businesses adjacent to streams.

II. PUBLIC INVOLVEMENT AND PARTICIPATION

GOALS FOR THE 3RD YEAR

See Table 13.

MODIFICATIONS TO MEASURABLE GOALS

Task 2D. Storm Drain Stenciling Program

LOCAL PROGRAMS: NAPA, YOUNTVILLE, CALISTOGA, NAPA COUNTY.

Old Performance Measure: Conduct one storm drain stenciling event per year.

New Performance Measure: None. See “Additions to Measurable Goals”.

The storm drain stenciling program is modified to eliminate the storm drain stenciling program from the Local Program measurable goals. Based upon experience gained during the first two years of the SWMP, it was found that it's easier for the County-wide Program to implement the storm drain stenciling program due to its active involvement with schools and community volunteers. The performance measure also needed to be modified to account for Local Programs the have marked all their storm drains. See “Additions to Measurable Goals” for new performance measure.

ADDITIONS TO MEASURABLE GOALS

Task 2D. Storm Drain Stenciling Program

COUNTY-WIDE PROGRAM

Performance Measure: Mark at least 250 storm drains per year.

Effectiveness Measure: Number of reports of illegal dumping and illicit discharges into storm drains.

III. ILLICIT DISCHARGE DETECTION AND ELIMINATION

GOALS FOR THE 3RD YEAR

See Table 13.

MODIFICATIONS TO MEASURABLE GOALS

TASK 4E RESTAURANT INSPECTIONS

COUNTY-WIDE PROGRAM

Old Performance Measure: Inspect at least 25% of restaurants annually.

New Performance Measure: None. See “Additions to Measurable Goals”.

In the first year of the SWMP, the County-wide Program contracted with the Napa County DEM to include a stormwater education component to their existing restaurant inspection program. The cost of expanding this contract to include inspections would be cost prohibitive to the County-wide Program. This task is modified to change the responsibility of restaurant

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

inspections from the County-wide Program to the Local Programs. See “Additions to Measurable Goals” for new performance measure.

TASK 4G CUPA INSPECTIONS

COUNTY-WIDE PROGRAM

Old Performance Measure: Inspect at least 300 business plan facilities per year.

New Performance Measure: None. See “Additions to Measurable Goals”.

In the first year of the SWMP, the County-wide Program contracted with the Napa County DEM to include a stormwater education component to their existing business plan facility (CUPA) inspection program. The cost of expanding this contract to include inspections would be cost prohibitive to the County-wide Program. This task is modified to change the responsibility of CUPA inspections from the County-wide Program to the Local Programs. See “Additions to Measurable Goals” for new performance measure.

ADDITIONS TO MEASURABLE GOALS

Task 4E Restaurant Inspections

LOCAL PROGRAMS: NAPA, CALISTOGA, NAPA COUNTY.

Performance Measure: Inspect at least 90% of restaurants annually.

Effectiveness Measure: Number of illicit discharges abated; % of restaurants in compliance.

LOCAL PROGRAMS: YOUNTVILLE, ST. HELENA.

Performance Measure: Inspect at least 50% of restaurants annually.

Effectiveness Measure: Number of illicit discharges abated; % of restaurants in compliance.

Task 4G CUPA Inspections

LOCAL PROGRAMS: NAPA, CALISTOGA, NAPA COUNTY.

Performance Measure: Inspect at least 25% of business plan facilities annually.

Effectiveness Measure: Number of illicit discharges abated; % of restaurants in compliance.

LOCAL PROGRAMS: YOUNTVILLE, ST. HELENA.

Performance Measure: Inspect at least 15% of business plan facilities annually.

Effectiveness Measure: Number of illicit discharges abated; % of restaurants in compliance.

IV. CONSTRUCTION SITE RUNOFF CONTROL

GOALS FOR THE 3RD YEAR

See Table 14.

MODIFICATIONS TO MEASURABLE GOALS

TASK 3E. CONSTRUCTION SITE INSPECTIONS

LOCAL PROGRAMS: YOUNTVILLE, ST. HELENA, CALISTOGA.

Old Performance Measure: Conduct 5 sites within 48hrs of a storm event (>0.25 inches/24hrs) has been modified.

New Performance Measure: 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.

It was found that the old performance resulted in too many site visits to the same projects. The inspections were very effective in the early part of the rainy season, but were unnecessary after the site was effectively protected from non-stormwater discharges. The majority of the problems were corrected in the beginning of the year and the many subsequent inspections for every small storm event was not worth the allocation in staff time which is very limited in a small municipality.

The new performance measure is adequate to ensure that all construction sites do not generate illicit discharges. Although there will be some storms that will not initiate an inspection from the municipality, there will be follow-ups to all reported violations during inspections and there is also the hotline that will receive complaints of discharges from construction sites.

TASK 4E. CONSTRUCTION SITE RUNOFF CONTROL WORKSHOP

ALL LOCAL PROGRAMS

Old Performance Measure: At least one planner/inspector and one public works employee shall attend.

New Performance Measure: At least one planner or inspector and one public works employee shall attend every other year.

ADDITIONS TO MEASURABLE GOALS

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

IV. POST-CONSTRUCTION RUNOFF MANAGEMENT

GOALS FOR THE 3RD YEAR

See Table 15.

MODIFICATIONS TO MEASURABLE GOALS

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

ADDITIONS TO MEASURABLE GOALS

TASK 2B – 2V. ADOPT DESIGN STANDARDS

LOCAL PROGRAMS: YOUNTVILLE, CALISTOGA, NAPA COUNTY

Performance Measure: Adopt standards.

TASK 3A. ADOPT PLAN REVIEW PROCESS

LOCAL PROGRAMS: YOUNTVILLE, CALISTOGA, NAPA COUNTY

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

IV. MUNICIPAL OPERATIONS

GOALS FOR THE 3RD YEAR

See Table 16.

MODIFICATIONS TO MEASURABLE GOALS

No modifications are proposed for the Municipal Operations Measurable Goals.

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)

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

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.
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

NAPA COUNTY SWMP – ANNUAL REPORT FY 04/05

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. **JPA** – Joint Powers Authority
14. **MEP** – Maximum Extent Practicable
15. **MS4** - Small Municipal Separate Storm Sewer System
16. **NA** – Not Applicable
17. **NCFCWCD** – Napa County Flood Control and Water Conservation District
18. **NCSWMP** – Napa County Stormwater Management Program
19. **NSSSA** – Napa-Solano-Sonoma Stormwater Agencies
20. **NOI** – Notice of Intent
21. **NPDES** – National Pollutant Discharge Elimination System
22. **OWOW** – Our Water, Our World
23. **RCD** – Napa County Resource Conservation District
24. **RDRT** – Rutherford Dust Restoration Team
25. **RWQCB** – San Francisco Bay Regional Water Quality Control Board
26. **SFEP** – San Francisco Estuary Project
27. **SWMP** – Stormwater Management Program
28. **SWPPP** – Stormwater Pollution Prevention Plan
29. **SWRCB** – State Water Resources Control Board
30. **TMDL** – Total Maximum Daily Load
31. **WICC** – Watershed Information Center and Conservancy

Overview of Measurable Goals for FY 04/05

Table 1: Public Education and Outreach Element (County-wide Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Status	Evaluation
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 4th year.	County-wide Program NCFCWCD	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.	County-wide Program NCFCWCD	I	A
3. Stormwater Website					
3A Develop Website	Develop website with info on the SWMP, illicit discharge hotline, upcoming workshops/events, FAQ, and BMPs for businesses and residences. Website will be a stand-alone site. City and County websites will link to the NCSWMP website.	PM Evaluate annually and continued development/ updates	County-wide Program NCFCWCD	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.	County-wide Program DEM	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

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

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

Overview of Measurable Goals for FY 04/05

Table 1: Public Education and Outreach Element (County-wide Programs)

Activity/Best Management Practices		Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Status	Evaluation
5. Outreach to general public						
5D	Upvalley hazardous waste collection	Continue to hold hazardous waste collection days for the upvalley community.	PM 2-4 events per year	County-wide Program DEM	I	A
5G		Mail to property owners adjacent to streams.	PM Mailed to > 80% of property owners adjacent to streams.	County-wide Program NCFCWCD	M	X
5I		Place ad in Yellow pages and purchase "used Oil Recycling in Napa County" radio advertisement	PM Advertisement placed	County-wide Program City of Napa DEM	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.	County-wide Program NCFCWCD	I	A
6. Outreach to schools						
6C	Conduct presentations	Conduct presentations.	PM Present to 5 classrooms by 2nd year, 10 classrooms every year thereafter.	County-wide Program RCD	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

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

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

Overview of Measurable Goals for FY 04/05

Table 2: Public Education and Outreach Element (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
				Status	Eevaluation	Status	Eevaluation	Status	Eevaluation	Status	Eevaluation	Status	Eevaluation
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.	All Local Programs/ County-wide Program NCFCWCD	I	A	I	A	I	A	NI	X	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.	Local Program City of Napa	I	A	X	X	X	X	X	X	X	X
5C Napa-Vallejo Household Haz Waster 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	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

Overview of Measurable Goals for FY 04/05

Table 3: Public Involvement and Participation Element (County-wide Programs)

Activity/BMP's	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementer	Status	Evaluation
3. Water Quality Monitoring					
3A Evaluation and assessment	Evaluate existing monitoring program. Determine other sites and chemical tests for monitoring.	PM Sites and parameters for monitoring determined.	County-wide Program RCD	I	A
3B Data Management	Evaluate existing database and improve as appropriate.	PM Database improved as appropriate.		I	A
3C Recruit volunteers	Solicit volunteers for monitoring program. Advertise in newsletters, websites, and newspaper.	PM Volunteers recruited. EM # of volunteers participating and # of sites monitored.		I	A
3D Develop training program	Develop training program for volunteers.	PM Training program developed.		I	A
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					
4A 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.	County-wide Program RCD, NCFCWCD, DEM	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

Overview of Measurable Goals for FY 04/05

Table 4: Public Involvement and Participation (Local Programs)

Activity/BMP's	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementer	Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
				Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
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.	Local Programs City of Napa Yountville Calistoga Napa County	I/M	A	I/M	A	X	X	NI/M	X	NI/M	X
5. Stewardships													
5B Rutherford Dust Restoration Team	Provide staff to support restoration efforts along the Napa River in Rutherford.	PM Conceptual restoration plan developed.	Local Program Napa County	NA	NA	NA	NA	NA	NA	NA	NA	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

Overview of Measurable Goals for FY 04/05

Table 5: Illicit Discharge Detection and Elimination Element (County-wide Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Status	Evaluation
2. Spill Response					
2C Spill response plan	Develop procedures for responding to and cleaning up hazardous and nonhazardous spills/dumping during normal working and non-working hours.	PM Spill response plan developed.	County-wide Program NCFCWCD	I	A
2D Staff training	Develop training program for receiving calls, identifying illicit discharges, spill clean-up, and educating the public on the use of BMP's	PM Training program developed.		I	A
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.		I	A
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.	County-wide Program NCFCWCD	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

Overview of Measurable Goals for FY 04/05

Table 5: Illicit Discharge Detection and Elimination Element (County-wide Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Status	Evaluation
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	County-wide Program DEM	I	A
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
4E Inspections	Conduct restaurant inspections	PM Inspect at least 25% of restaurants annually. EM % of restaurants in compliance.		I/M	NA
4F Hazardous waste disposal	Distribute outreach materials to businesses on stormwater pollution prevention practices to businesses.	PM Distribute to 300 business plan facilities per year.		I/M	NA
4G Inspections	Implement inspection program for businesses that handle hazardous materials and waste.	PM Inspection program implemented; inspect 300 facilities per year. EM % of businesses in compliance.		I/M	NA
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.		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

Overview of Measurable Goals for FY 04/05

Table 6: Illicit Discharge Detection and Elimination

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
				Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
2. Spill Response													
2F Stormwater Hotline	Establish a phone number to receive information about non-storm water discharges from the public. Identify staff to receive calls from the public and initiate spill response plan.	PM Phone number established and staff identified. EM # of violations reported from the public.	All Local Programs	I	A	I	A	I	A	I	A	I	A
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	A	I	A	I	A	I	A
3. SD System Mapping													
3A Develop maps of outfalls.	Collect all existing information on outfalls and map it.	PM Information compiled.	All Local Programs	I	A	I	A	I	A	I	A	I	A
3E Develop map of the municipal storm drain system.	Collect all existing information on storm drains and Waters of the State and map it.	PM Information compiled.		I	A	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

Overview of Measurable Goals for FY 04/05

Table 7: Construction Site Runoff Control Element (County-wide Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Status	Evaluation
3. Inspection Program					
3C Revision of training materials.	Revise training materials based on comments from pilot program.	PM Final version of training materials developed.	County-wide Program NCFCWCD	I	A
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
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.	County-wide Program NCFCWCD	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	County-wide Program NCFCWCD	I	NA

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

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

Overview of Measurable Goals for FY 04/05

Table 8: Construction Site Runoff Control (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
				Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
2. Plan review process													
2A Develop review process	Review and revise plan review process. Develop plan check list and instructions. Include relevant State and Federal permits in checklist.	PM Plan review process developed; plan check list and instructions developed.	All Local Programs	I	A	I	A	I	A	I	A	I	A
2B Draft training materials	Develop training program for plan review staff.	PM Training program developed.	All Local Programs	I	A	I	A	I	A	I	A	I	A
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	I	A	I	A	I	A	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	I	A	I	A
3. Inspection Program													
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	All Local Programs	I	U	I	NA	I/M	NA	I/M	NA	I/M	NA

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

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

Overview of Measurable Goals for FY 04/05

Table 8: Construction Site Runoff Control (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
				Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
3F Construction compliance hotline	Establish a phone number for the public to report nonstormwater runoff from construction sites.	PM Hotline established EM # of noncompliant sites reported	All Local Programs	I	A	I	A	I	A	I	A	I	A
4. Outreach													
4C Permit process	Develop a brochure explaining the revised permit process. Attach to all permit applications.	PM Brochure developed	All Local Programs	I	A	M	X	I	A	I	A	I	A
4E Construction site erosion control workshop	Attend workshop.	PM At least one planner/inspector and one public works employee shall attend.	All Local Programs	I/M	NA	M	X	I/M	A	I/M	NA	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

Overview of Measurable Goals for FY 04/05

Table 9: Post-Construction Runoff Management Element (County-wide Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Status	Evaluation
4. Long-term Maintenance					
4A Develop O&M standards for BMP's.	Develop maintenance standards for Post-Construction BMP's.	PM O&M standards developed.	County-wide Program NCFCWCD	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.	County-wide Program NCFCWCD	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

Overview of Measurable Goals FY 04/05

Table 10: Post-Construction Runoff Management (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
				Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
1. Legal Authority													
1B Evaluate and revise ordinance	Evaluate effectiveness of ordinance and revise as appropriate.	PM Ordinance evaluated and revised.	All Local Programs	I	A	I	A	I	A	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 Outlets, Restaurants, Home Subdivisions with 10 or more housing units, Parking Lots 5,000 sq ft or more or with 25 or more parking spaces													
2B Peak SW runoff discharge rates	Adopt standard in attachment 4 of the State General Permit	PM Design standard adopted	All Local Programs	I	A	M	X	I	A	M	X	M	X
2C Conserve natural areas				I	A	M	X	I	A	M	X	M	X
2D Minimize SW pollutants of concern				I	A	M	X	I	A	M	X	M	X
2E Protect slopes and channels				NI	X	M	X	I	A	M	X	M	X
2F Provide SD system stenciling and signage				I	A	M	X	I	A	M	X	M	X
2G Properly design outdoor material storage areas				I	A	M	X	I	A	M	X	M	X
2H Properly design trash storage areas				I	A	M	X	I	A	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

Overview of Measurable Goals FY 04/05

Table 10: Post-Construction Runoff Management (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
				Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
2I Provide proof of ongoing BMP maintenance	Adopt standard in attachment 4 of the State General Permit	PM Design standard adopted	All Local Programs	I	A	M	X	I	A	M	X	M	X
2J Design standards for structural of treatment control BMP's				I	A	M	X	I	A	M	X	M	X
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	All Local Programs	I	A	M	X	I	A	M	X	M	X
2L Properly design repair/maintenance bays				I	A	M	X	I	A	M	X	M	X
2M Properly design vehicle/equipment wash areas				I	A	M	X	I	A	M	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	All Local Programs	I	A	M	X	I	A	M	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	All Local Programs	I	A	M	X	I	A	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

Overview of Measurable Goals FY 04/05

Table 10: Post-Construction Runoff Management (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
				Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
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	All Local Programs	I	A	M	X	I	A	M	X	M	X
2Q Properly design repair/maintenance bays				I	A	M	X	I	A	M	X	M	X
2R Properly design vehicle/equipment wash areas				I	A	M	X	I	A	M	X	M	X
2S Properly design loading/unloading dock areas.				I	A	M	X	I	A	M	X	M	X
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	All Local Programs	I	A	M	X	I	A	M	X	M	X
2U Properly design to limit oil contamination and perform maintenance				I	A	M	X	I	A	M	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.		I	A	M	X	I	A	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

Overview of Measurable Goals FY 04/05

Table 10: Post-Construction Runoff Management (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
				Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
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.	All Local Programs	I	A	M	X	I	A	M	X	M	X
4. Long-term Maintenance													
4B Identify all structural controls operated by the Municipality.	Locate, map, photograph and describe the site conditions of the structural controls. Group the different structural controls with their respective BMPs in a final report.	PM Completed report.	All Local Programs	I	A	I	A	I	A	I	A	I	A
4G Implement policy	Implement policy to ensure long-term maintenance of BMP's	PM Policy implemented.	All Local Programs	I	A	M	X	I	A	M	X	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

Overview of Measurable Goals for FY 04/05

Table 11: Municipal Operations Element (County-wide Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Status	Evaluation
1. Street Sweeping					
1C Record Keeping	Develop and use forms to report the miles swept, area covered, volume or weight of material collected, and problems associated with sweeping (e.g. parked cars, leaves, trees, etc)	PM Forms developed.	County-wide Program NCFCWCD	I	A
1D	Develop and use forms to track maintenance of street sweeping equipment (e.g. equipment adjustments, parts replacements, etc)			I	A
6. Road Maintenance					
6A Education and Outreach	Conduct public workshop on designing and maintaining roads to reduce pollution.	PM Public workshop held. Attended by at least one planner and one PW supervisor from Napa County.	County-wide Program NCFCWCD	I	A
6C Training	Train employees on O&M standards for roads. Survey used to evaluate staff understanding of BMP's.	PM All relevant staff trained annually.		County-wide Program Napa County PW	I
7. Creek and Ditch maintenance					
7C Training	Train all relevant staff and contractors on maintenance standards.	PM All relevant staff trained annually.	County-wide Program NCFCWCD	I	A
8. Parks and Recreation Facilities					
8B Develop maintenance standards	Develop O&M standards for park and recreation facility maintenance	PM O&M standards developed	County-wide Program NCFCWCD	I	A
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

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

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

Overview of Measurable Goals FY 04/05

Table 12: Municipal Operations (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
				Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
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.	All Local Programs	I	A	I	A	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.	All Local Programs	I	A	I	A	I	A	I	A	I	A
1H Parked and abandoned vehicles	Assess which areas have high numbers of parked cars reducing street sweeping effectiveness.	PM Assessment completed.	Local Programs City of Napa County of Napa	I	A	X	X	X	X	X	X	I	A
1M Leaves during Leaf Season	Assess which areas have high volume of leaves during Leaf Season	PM Completed assessment.		I	A	X	X	X	X	X	X	I	A
1N	Investigate and evaluate at least two appropriate leaf handling methods. Prioritize methods for pilot programs.	PM Evaluation and prioritization of leaf handling methods.		I	A	X	X	X	X	X	X	I	A
1R Trees near streets	Assess the miles of streets that have trees interfering with street cleaning.	PM Assessment completed.		I	A	X	X	X	X	X	X	I	A
1S	Investigate and evaluate at least two appropriate methods to reduce tree interference with street cleaning. Prioritize methods for pilot programs.	PM Methods evaluated and prioritized.		I	A	X	X	X	X	X	X	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

Overview of Measurable Goals FY 04/05

Table 12: Municipal Operations (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
				Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
2. Storm Drain Maintenance													
2B Training	Train municipals staff on use of BMP's.	PM All relevant staff trained annually	All Local Programs	I	A	I	A	I	A	I	A	I	A
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	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	Local Programs City of Napa	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.		I	A	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
4. Litter Control													
4A Services	Provide litter receptacles in litter source areas and empty regularly to prevent spills.	PM Receptacles provided and maintained.	All Local Programs	I	A	I	A	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.	Local Programs City of Napa Napa County	I	A	X	X	X	X	X	X	I	A
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	I

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

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

Overview of Measurable Goals FY 04/05

Table 12: Municipal Operations (Local Programs)

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Implementers	Napa (City)		Yountville		St. Helena		Calistoga		Napa County	
				Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation	Status	Evaluation
5. Corporation Yards													
5A Prepare SWPPP	Develop a map that shows all facilities, potential sources of pollution, and direction of drainage	PM Map and inventory developed	All Local Programs	I	A	I	A	I	A	I	A	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	All Local Programs	I	A	I	A	I	A	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

Goals and Modifications for FY 05/06

Table 13: Public Education and Outreach Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
1. Characterize general public.					
1D Conduct survey	<i>Evaluate and improve survey as needed. Evaluate options for conducting survey and implement.</i>	PM Get at least 300 responses to the survey. Repeat survey in 4th year.			County-wide Program NCFCWCD
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.	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.	PM Evaluate annually and continued development/ updates			County-wide Program NCFCWCD
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.	Only rain down the stormdrain; reduce use of water, nutrients, and pesticides; hazardous waste disposal and used oil recycling.	General Public	County-wide Program NCFCWCD
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.)			
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.			

Goals and Modifications for FY 05/06

Table 13: Public Education and Outreach Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
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.	Hazardous waste and used oil recycling; "only rain down the drain".	Residences and businesses.	County-wide Program DEM City of Napa
5C Napa-Vallejo Household Haz Waster 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.	Pesticides, cleaners, batteries, solvents, paints, thinners, old gasoline, adhesives, syringes.	Residences and businesses.	
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
5G <i>Creek Dumping Brochure</i>	<i>Mail to property owners adjacent to streams.</i>	PM <i>Mailed to > 80% of property owners adjacent to streams.</i>		<i>Private residences</i>	County-wide Program NCFWCD
5I	Place ad in Yellow pages and purchase "used Oil Recycling in Napa County" radio advertisement	PM Advertisement placed			County-wide Program City of Napa DEM
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	
5K Prioritize future outreach	Prioritize outreach to address other sources of SW pollution based upon results of illicit discharge data.	PM Outreach priorities established.	Depends on the priority pollutants and most common sources.	Public	County-wide Program NCFWCD
5L Develop materials	Develop priority outreach materials	PM One new message/outreach piece per year.			
5M Distribute materials	Method of distribution will depend on the target audience of the outreach materials.	PM Materials distributed			

Goals and Modifications for FY 05/06

Table 13: Public Education and Outreach Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
6. Outreach to schools					
6C Conduct presentations	Conduct presentations.	PM Present to 5 classrooms by 2nd year, 10 classrooms every year thereafter.		Grades 3-5	County-wide Program RCD
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.			

Goals and Modifications for FY 05/06

Table 14: Public Involvement and Participation Element

Activity/BMP's	Implementation Plan	Quantifiable Target/Evaluation Tool	Message(s)/Pollutants Addressed	Targeted Audience(s)	Implementers
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.	No dumping - SD drains to creek, river, bay.	Citizen volunteers.	County-wide Program RCD NCFCWCD
3. Water Quality Monitoring					
3E Train volunteers	Implement training program to ensure data quality.	PM Volunteers trained	proper use of sampling equipment and using water quality kits.	Citizen volunteers.	County-wide Program RCD
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

Goals and Modifications for FY 05/06

Table 15: Illicit Discharge Detection and Elimination Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/ Evaluation Tool	Message(s)/ Pollutants Addressed	Targeted Audience(s)	Implementers
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.	Nonstormwater discharges not regulated under existing ordinance.	Activities within the jurisdiction that result in regulated nonstormwater discharges.	All Local Programs
1D ERP Training	Train appropriate staff on the policies and procedures of the ERP.	PM All relevant staff trained annually.	Nonstormwater discharges must be prevented to protect water quality.	Code enforcement staff.	
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.		NA	
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.	Only rain down the Storm drain. Oil, grease, sediment, paint, detergents.	Municipal staff	All Local Programs
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.			

Goals and Modifications for FY 05/06

Table 15: Illicit Discharge Detection and Elimination Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/ Evaluation Tool	Message(s)/ Pollutants Addressed	Targeted Audience(s)	Implementers
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.	Sediment, grease, oil, sediment, landscape waste, etc.	Inspectors and maintenance staff	County-wide Program NCFCWCD
3. SD System Mapping					
3B Identify data gaps.	Identify data gaps.	PM Data gaps identified.	final map will assist in locating outfalls.	NA	All Local Programs
3F Identify data gaps.	Identify data gaps.	PM Data gaps identified.	Final storm drain map will help accurately trace illicit discharges.		
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	Legal requirements; proper management and disposal of litter, grease, oils, detergents.	Food service Facilities	All Local Programs
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	

Goals and Modifications for FY 05/06

Table 15: Illicit Discharge Detection and Elimination Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/ Evaluation Tool	Message(s)/ Pollutants Addressed	Targeted Audience(s)	Implementers
4E <i>Inspections</i>	<i>Conduct restaurant inspections</i>	PM <i>Inspect at least 25% of restaurants annually.</i> EM <i>% of restaurants in compliance.</i>	<i>Meet local and state requirements for SW discharges.</i>	<i>Food service facilities</i>	All Local Programs
4G <i>Inspections</i>	<i>Implement inspection program for businesses that handle hazardous materials and waste.</i>	PM <i>Inspection program implemented; inspect 300 facilities per year.</i> EM <i>% of businesses in compliance.</i>	<i>Legal requirements; Proper use of BMP's to reduce SW pollution.</i>	<i>Commercial facilities</i>	
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 DEM

Goals and Modifications for FY 05/06

Table 16: Construction Site Runoff Control Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/ Evaluation Tool	Message(s)/Pollutants Addressed	Targeted Audience(s)	Implementers
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 measure 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 <i>Inspect all projects > 1 acre, but no more than 5, within 48 hours of a major (>0.25 inches) storm event from May 1st through Dec 31st. Inspect all projects > 1 acre, but no more than 5, within 48 hours of a major (>0.25 inches) storm event from Jan 1st through Apr 30. EM % of sites inspected during wet season; % of sites in compliance</i>			Local Programs Yountville St. Helena Calistoga

Goals and Modifications for FY 05/06

Table 16: Construction Site Runoff Control Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/ Evaluation Tool	Message(s)/Pollutants Addressed	Targeted Audience(s)	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

Goals and Modifications for FY 05/06

Table 17: Post-Construction Runoff Management Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
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 > 1 acre.	All Local Programs
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.			
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.	Overview of Post-construction requirements (existing state and upcoming local) and use of appropriate BMP's.	Planners	County-wide Program NCFCWCD
Design Standards Attachment 4* - All categories: Single-Family Hillside Residences, 100,000 sq. ft. Commercial Developments, Automotive Repair Shops, Retail Gasoline Outlets, Restaurants, Home Subdivisions with 10 or more housing units, Parking Lots 5,000 sq ft or more or with 25 or more parking spaces					
2B <i>Peak SW runoff discharge rates</i>	<i>Adopt standard in attachment 4 of the State General Permit</i>	PM <i>Design standard adopted</i>	<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
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>		
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>		

Goals and Modifications for FY 05/06

Table 17: Post-Construction Runoff Management Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
<p>2F <i>Provide SD system stenciling and signage</i></p> <p>2G <i>Properly design outdoor material storage areas</i></p> <p>2H <i>Properly design trash storage areas</i></p> <p>2I <i>Provide proof of ongoing BMP maintenance</i></p>	<p><i>Adopt standard in attachment 4 of the State General Permit</i></p>	<p><i>PM Design standard adopted</i></p>	<p><i>Mark SD inlets with a sign or stencil that includes a brief statement that prohibits dumping into the SD system.</i></p> <p><i>Ensure outdoor storage areas do not contaminate SW runoff.</i></p> <p><i>Ensure trash storage areas do not contaminate SW runoff.</i></p> <p><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></p>	<p><i>New development and redevelopment</i></p>	<p>Local Programs <i>Yountville Calistoga Napa County</i></p>
<p>2J <i>Design standards for structural of treatment control BMP's</i></p>			<p><i>Require PD treatment control incorporate either a volumetric or flow-based treatment control standard to mitigate SW runoff.</i></p>		

Goals and Modifications for FY 05/06

Table 17: Post-Construction Runoff Management Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
<i>Design Standards Attachment 4* - 100,000 sq. ft commercial</i>					
2K <i>Properly design loading/unloading dock areas.</i>	<i>Adopt standard in attachment 4 of the State General Permit</i>	<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 <i>Properly design repair/maintenance bays</i>			<i>Design to eliminate run-on and runoff of SW, prohibit direct connections to the SD system.</i>		
2M <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>		
<i>Design Standards Attachment 4* - Restaurants</i>					
2N <i>Properly design equipment/accessory wash areas</i>	<i>Adopt standard in attachment 4 of the State General Permit</i>	<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
<i>Design Standards Attachment 4* - Retail gasoline outlets</i>					
2O <i>Properly design fueling area</i>	<i>Adopt standard in attachment 4 of the State General Permit</i>	<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
<i>Design Standards Attachment 4* - Automotive repair shops</i>					
2P <i>Properly design fueling area</i>	<i>Adopt standard in attachment 4 of the State General Permit</i>	<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

Goals and Modifications for FY 05/06

Table 17: Post-Construction Runoff Management Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
2Q <i>Properly design repair/maintenance bays</i>	<i>Adopt standard in attachment 4 of the State General Permit</i>	<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 system.</i>	<i>Automotive repair shops.</i>	Local Programs <i>Yountville Calistoga Napa County</i>
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 system.</i>		
Design Standards Attachment 4* - Parking Lots					
2T <i>Properly designing parking areas</i>	<i>Adopt standard in attachment 4 of the State General Permit</i>	PM <i>Design standard adopted</i>	<i>Reduce impervious surfaces of parking areas; infiltrate or treat runoff.</i>	<i>Parking lots</i>	Local Programs <i>Yountville Calistoga Napa County</i>
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 systems.</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>	<i>New development and redevelopment.</i>	
2W <i>Adopt design standards</i>	<i>Adopt design standards identified in task 2X.</i>	PM <i>Design standards adopted</i>			

Goals and Modifications for FY 05/06

Table 17: Post-Construction Runoff Management Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
3. Plan Review Process					
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>	PM <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>	Local Programs <i>Yountville Calistoga Napa County</i>
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>			

Goals and Modifications for FY 05/06

Table 17: Post-Construction Runoff Management Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
4. Long-term Maintenance					
4B Identify all structural controls operated by the Municipality.	Locate, map, photograph and describe the site conditions of the structural controls. Group the different structural controls with their respective BMPs in a final report.	PM Completed report.		Maintenance staff	Local Programs Yountville Calistoga Napa County
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.			
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.			
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.	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 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.	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

Goals and Modifications for FY 05/06

Table 18: Municipal Operations Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
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.	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.			
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.	Contract Sweepers: Comply with terms of contract in order to assure maximum removal of pollutants from streets. Municipal staff: Comply with implementation plans.	Street sweepers	
1I	Develop two different outreach programs to reduce parked cars that interfere with sweeping.	PM 2 pilot programs implemented			Local Programs City of Napa Napa County
1J	Identify areas to pilot outreach program.	PM Areas identified			
1K	Implement pilot programs in areas with high numbers of parked cars.	PM Pilot programs implemented.			
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.			

Goals and Modifications for FY 05/06

Table 18: Municipal Operations Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
1O	Implement pilot programs to reduce volume of leaves on streets.	PM Measures implemented	Excessive Leaves Reduce sweeping effectiveness.	Streets sweeping departments and residences.	Local Programs City of Napa Napa County
1P	Evaluate success of pilot programs	PM Evaluation completed EM Increase sweepable areas by 10%.			
1Q	Implement most effective program to reduce leaves on streets.	PM Program implemented EM Increase total sweepable areas by 25% over 2 years.			
1T	Pilot measures to reduce tree interference with street cleaning.	PM Methods implemented	Trees interfering with sweeping operations.	Streets sweeping departments	
1U	Evaluate success of pilot programs	PM Evaluation completed. EM Increase sweepable areas by 25%.			
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.			
2. Storm Drain Maintenance					
2B Training	Train municipals staff on use of BMP's.	PM All relevant staff trained annually	Leaves, trash, sediment, oil	Municipal staff.	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.			
2D	Assess the need for more frequent cleaning of stormdrains.	PM Assessment completed. EM Recommendations made.			

Goals and Modifications for FY 05/06

Table 18: Municipal Operations Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
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	Sediment and oil	Pump station maintenance crew.	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.			
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
4B Assessment	<i>Document areas targeted for litter removal and assess the need for additional/better trash receptacles or more frequent collection.</i>	PM Assessment completed EM Recommendations made.			Local Programs City of Napa
4C Education	<i>Label litter receptacles with anti-littering message</i>	PM 25% of receptacles by 2nd year; 50% by 4th year.			
5. Corporation Yards					
5B SWPPP	Develop a plan for SW management. Includes necessary capital improvements, O&M	PM SWPPP developed with timeline for implementation.	Sediment, oil, paints, chemicals, litter.	Municipal staff.	All Local Programs
5C SWPPP	Implement items from SWPPP.	PM Items implemented over three to five year period. EM Number and types of BMP's implemented			

Goals and Modifications for FY 05/06

Table 18: Municipal Operations Element

Activity/Best Management Practices	Implementation Plan	Quantifiable Target/Evaluation Tool	Message/Pollutants Addressed	Targeted Audience(s)	Implementers
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.	Sediment , asphalt	Municipal staff.	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.	Sediemnt, gas, oil, leaves.	Municipal staff.	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					
9A Prioritize	Prioritize all other municipal activities that could affect SW.	PM Municipal activities prioritized.	Pesticides, nutrients, sediment, organic matter, fuels, oils, trash, paint	Public facilities and employees	All Local Programs
9B Assessment	Assess facility conditions and operating procedures.	PM Assessment completed.			
9C Develop maintenance standards	Compile BMP factsheets	PM Two municipal activities targeted per year.			
9D Training	<i>Train appropriate personnel on use of BMP's for targeted activities.</i>	PM <i>All relevant staff trained annually for targeted activities.</i>			