

MS4 NPDES Term 2, Annual Report 1 July 1, 2003 – June 30, 2004

**National Pollutant Discharge
Elimination System Permit for
Storm Water Discharges
from the Santa Rosa Area**

NPDES Permit No. CA0025054

Submitted to:
**California Regional Water Quality Control Board
North Coast Region**

Submitted by:
**City of Santa Rosa,
County of Sonoma, and
Sonoma County Water Agency**

Submitted October 1, 2004

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Part I

Program Management

**Permit Term 2
Annual Report 1**

Program Management

1.0 BACKGROUND

On June 26, 2003, the North Coast Regional Water Quality Control Board (RWQCB) adopted Order No. R1-2003-0062, Waste Discharge Requirements for City of Santa Rosa, Water Agency and County of Sonoma Storm Water Discharges. This order is National Pollutant Discharge Elimination System (NPDES) Permit No. CA0025054; WDID # 1B96074SSON.

The NPDES permit requires that the copermitees submit by October 1 each year an Annual Report documenting the status of all the general programs and individual tasks contained in the Storm Water Management Plan (SWMP), including the Monitoring Plan. This Annual Report is a detailed report on the status of implementation of the SWMP and the monitoring plan and includes an evaluation of the control measures, management practices, and other actions and activities described in the SWMP. Unless otherwise noted, this annual report covers the period from July 1, 2003 through June 30, 2004.

The emphasis in the first permit term and in this second permit term was and will continue to be on utilizing existing staff and programs as much as possible, continuing the large number of existing activities that improve storm water quality, and implementing new programs as detailed in this SWMP. The most significant change in this SWMP is the area captured within the expanded permit boundary. The first term focused on the urban Santa Rosa area and the upstream areas contributory to Santa Rosa creeks. The new permit boundary captures an area approximately triple in size, and includes rural and urban areas: all lands within the Mark West Creek watershed (co-terminus with the Sonoma County Water Agency Flood Control Zone 1A) and the unincorporated urban areas surrounding Healdsburg, the unincorporated community of Graton and the unincorporated urbanized area surrounding Sebastopol. The original boundary contained approximately 19,400 acres of City jurisdiction area and 34,230 acres of County (unincorporated) area. The new boundary contains approximately 19,840 acres of City jurisdiction area, 132,740 acres of County (unincorporated) area and 2560 acres of Water Agency owned land.

The next most significant change to the SWMP is the addition of the Post Construction/Development: Standard Urban Storm Water Mitigation Plan (SUSMP). This plan targets the storm water pollution associated with increasing the impervious area that usually accompanies development. By considering water quality during the design phase of a project, source-control Best Management Practices (BMPs) and/or treatment-control BMPs can more efficiently be incorporated into projects.

More specifically, the SWMP describes how pollutants in storm water runoff will be controlled, and explains the BMPs that address the required program areas. Each BMP is listed as an activity. Each activity includes a measurable goal and an implementation schedule for time for completion. Some of the activities are “existing” and most will be continued or enhanced, and some are “new”. As in Permit Term 1, ongoing improvements are welcomed, and not considered changes that require NCRWQCB approval.

The Program Management BMPs, which are common to all the co-permittees, are found in Part 1 of the SWMP. Each co-permittee has developed a SWMP that applies to their area of

responsibility, and includes BMPs for the remaining eight elements. Part II explains the County's program elements, activities, measurable goals, and implementation schedules. Similarly, Part III explains the City's program elements, and Part IV explains the Water Agency's program elements. Part V, Monitoring Plan and Part VI, SUSMP, are joint program activities, and are shared by all co-permittees.

Legal authority and fiscal resources reporting are included in each copermitees section of the Annual Report.

The table included as Section 4 of this Chapter, "At-a-Glance Storm Water Management Plan", summarizes the implementation of the elements, activities, and goals of the SWMP during 2003/2004 for this Annual Report.

2. PERMITTEES

The following organization charts for the County of Sonoma, the City of Santa Rosa, and the Sonoma County Water Agency show the organization and responsibilities of the permittees, as well as contact person and phone number.

Figure I.A
COUNTY OF SONOMA
ORGANIZATIONAL CHART FOR STORM WATER MANAGEMENT PLANS

BOARD OF SUPERVISORS
Function: Approves the SWMP and provides funding

**PERMIT AND RESOURCE
MANAGEMENT DEPARTMENT**
Function: Coordinates SWMP and handles private development projects
Contact: Paula Stamp
Phone: (707) 565-1909

COUNTY ADMINISTRATOR'S OFFICE
Function: Provides fiscal guidance
Contact: Chris Arnold
Phone: (707) 565-3776

COUNTY COUNSEL
Function: Provides legal counsel
Contact: Jill Golis
Phone: (707) 565-2421

DEPARTMENT OF EMERGENCY SERVICES
Function: Ensures public safety
Contact: Andy Parsons
Phone: (707) 565-1152

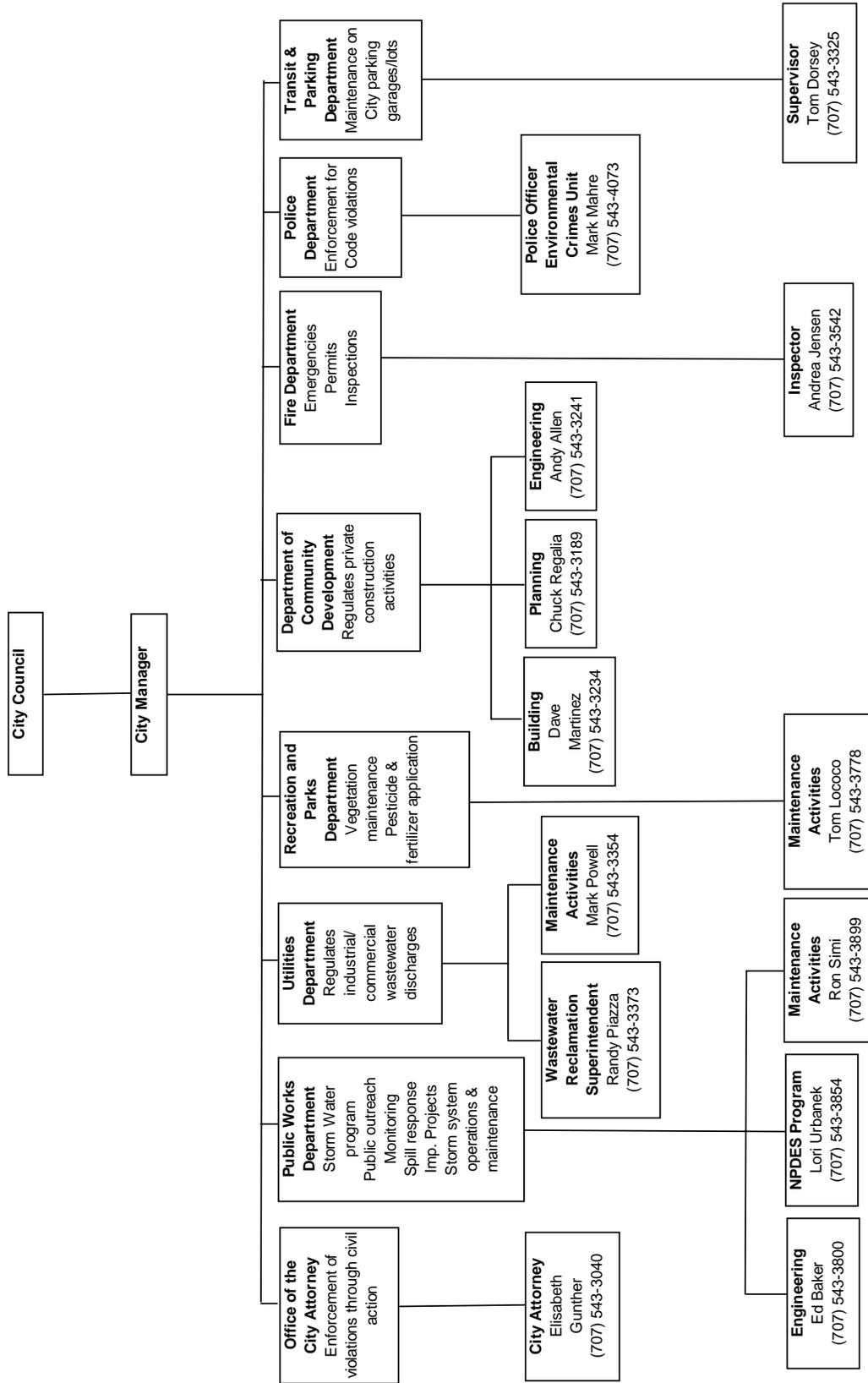
**DEPARMENT OF HEALTH SERVICES/
ENVIRONMENTAL HEALTH DIVISION**
Function: Protects public health and the environment
Contact: Jeff Lewin
Phone: (707) 565-6560

**GENERAL SERVICES/
ARCHITECT'S DIVISION**
Function: Handles public development projects
Contact: Charlie Cerniglia
Phone: (707) 565-3193

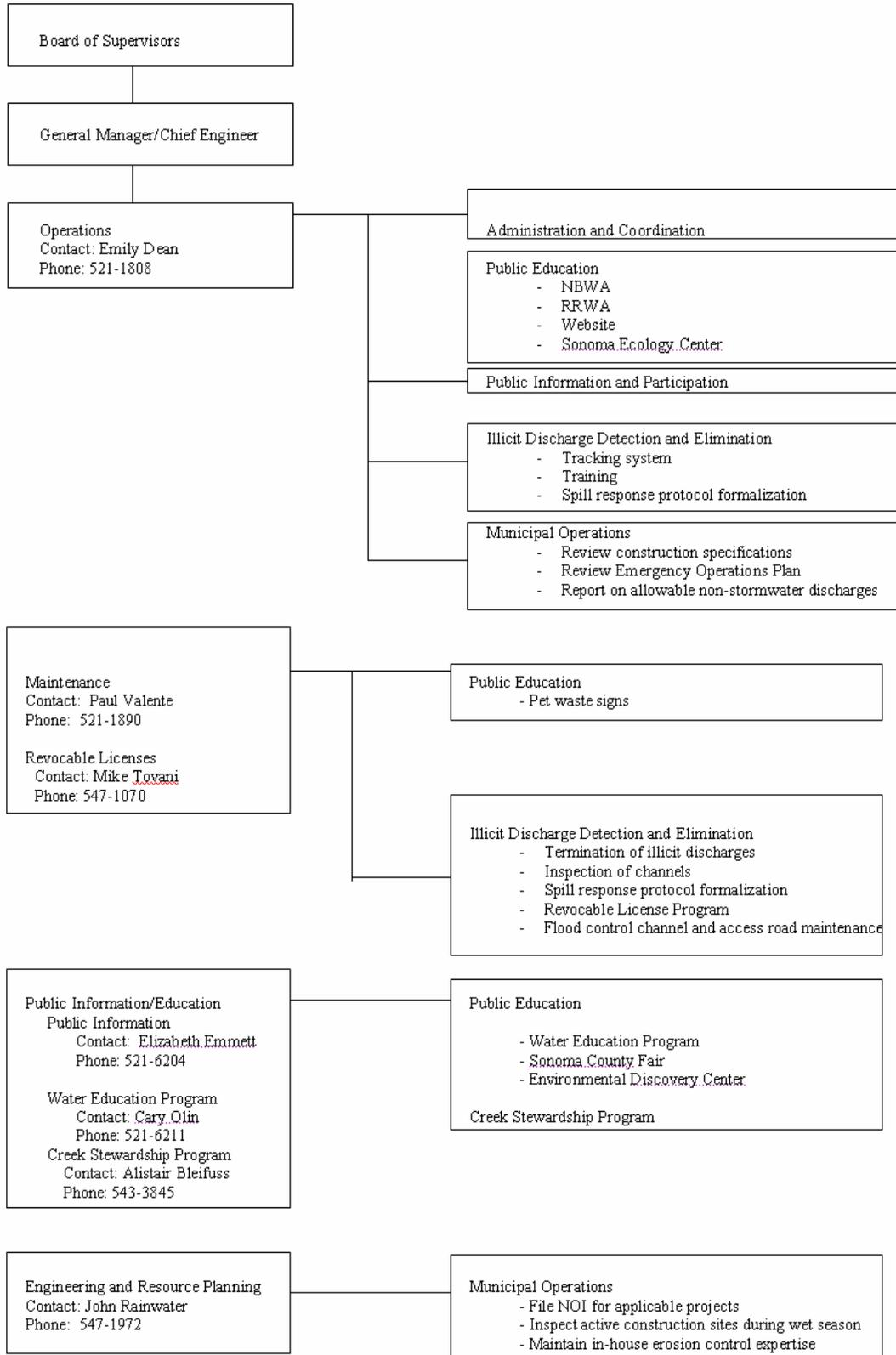
REGIONAL PARKS DEPARTMENT
Function: Maintains public lands
Contact: Allan Darrimon
Phone: (707) 565-2226

TRANSPORTAION AND PUBLIC WOKRS
Function: Maintains public improvements and roads
Contact: Steve Urbanek
Phone: (707) 565-3884

Figure I.B
City of Santa Rosa
NPDES Storm Water Management Plan Implementation Chart
 Prepared by City of Santa Rosa August 17, 2004



Sonoma County Water Agency
STORMWATER ORGANIZATIONAL CHART



3. PROGRAM MANAGEMENT BEST MANAGEMENT PRACTICES:

The Program Management goals are to: (1) facilitate communication and coordination between the co-permittees, NCRWQCB, and other appropriate entities; (2) ensure the SWMP elements are implemented on schedule; and (3) ensure that all requirements of the permit are met.

Existing Activities

Monthly coordination meetings are held and attended by City, Water Agency, and County staff. NCRWQCB staff and Caltrans representatives are also invited to attend. Monthly meetings are to share information on permit activities, to coordinate these activities where necessary, and to provide a forum for discussing relevant storm water management topics.

The Permit requires that the permittees submit Annual Reports documenting the status of the program. The Annual Reports include an evaluation of the activities described in the SWMP. It also includes a work plan that is used to set the goals for the following year. The first annual report for Term 2 (Year 1), will be submitted in October 2004, and include activities through June 30, 2004.

The co-permittees entered into a Cooperative Agreement in December, 2003. The City serves as Lead Agency. The County serves as lead agency for SUSMP. The City, County and Water Agency staff gave a presentation to the City Manager's meeting on June 1, 2001, regarding the existing Phase I storm water permit and the new Phase II regulations being enacted in March 2003.

New Activities

NCRWQCB staff has asked to be actively involved in development of the annual work plan. To accommodate this, the co-permittees will meet with RWB staff between January and April every year, to discuss the work plan. Final work plans will be included in the Annual Reports.

The Annual Reports will continue to be prepared and include a formal evaluation of the copermittees' storm water management programs, and will specifically address the Measurable Goals and Implementation Schedules laid out in the Storm Water Management Plan. In the second permit term this report will cover the period from July 1 to the following June 30, and be submitted to the NCRWQCB by October 1 each year.

The City will act as Lead Agency for the second permit term. The City may contract out some of the responsibilities, including:

- Coordinating meetings
- The effort to prepare and submit the Annual Report to NCRWQCB

To promote cooperation between Phase I copermittees and Phase II permittees, and take advantage of potential opportunities, the copermittees invite City and Town staff from the Phase II communities within the permit boundary to participate in the monthly coordination meetings.

Measurable Goals/Implementation Schedule

- a. Schedule and Conduct monthly Coordination Meetings/Ongoing
- b. Meet with NCRWQCB staff to discuss and develop preliminary annual work plans/First Quarter, Annually.
- c. Prepare Annual Report and Submit to RWB staff by October 1/Annually.
- d. As appropriate, enter into a Cooperative Agreement for second permit term/Within six months of permit adoption.
- e. Invite City and Town staff from Phase II communities within the permit boundary to the monthly coordination meetings.

Accomplishments

- Workplan meeting held April 8, 2004 to present Year 2004-2005 Workplan to Regional Board for discussion.
- Permittees entered into cooperative agreement, with City serving as lead agency and county taking lead for SUSMP implementation activities. Copy of this agreement sent to Regional Board in December, 2003.
- The City has contracted with a consultant to perform the lead agency work for fiscal year 2004-05. The work includes reviewing and compiling the annual report and conducting the monthly copermittee meeting. The contract is not to exceed the amount of \$36,524.
- Per the Cooperative Agreement, the County and Agency shall each pay one-third of the cost of lead agency work and 3.3% of the total consultant contract cost for contract management. For fiscal year 2004-05, the amounts paid by each the County and the Agency to the City for lead agency work shall not exceed \$13,390.
- Continue to invite Phase II permittees to monthly meeting. Meeting Minutes are presented in Appendix I.A.
- The copermittees have coordinated agency activities in a number of different ways. These include adopting SUSMP (see VI. of this report), meeting together on a monthly basis (Meeting Notes for this period are included as Appendix I.A to this report), and setting forth and completing the measurable goals described in this report.

4. AT A GLANCE

The table on the following pages presents a summary of the achievement of measurable goals during the Term 2 Year 1 permit period by the permittees.

Summary "At a Glance" Storm Water Management Plan Annual Report

Protecting and Enhancing Water Quality by Reducing Storm Water Pollutants to the Maximum Extent Practicable

City of Santa Rosa, County of Sonoma, and Sonoma County Water Agency

October 2004

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Program Management Goal: Facilitate communication and coordination between the copermittees, Regional Board and other appropriate entities. Ensure the SWMP elements are implemented on schedule and that all requirements of the Permit are met.			
Copermittees Monthly Coordination Meetings	Schedule and Conduct monthly meetings <i>Continue through Permit term</i> ONGOING, COMPLETED FOR REPORTING YEAR		
Annual Work Plan	Develop preliminary work plan for RWQCB staff <i>April Coordination Meeting, Annually</i> <i>Final work plan submitted with each Annual Report</i> ONGOING, COMPLETED FOR REPORTING YEAR		
Annual Report	Submit to RWQCB on time <i>October 1, Annually</i> ONGOING, COMPLETED FOR REPORTING YEAR		
Cooperative Agreement	Submit to RWQCB on time <i>within 6 months of Permit implementation</i> ONGOING, COMPLETED FOR REPORTING YEAR		
Coordination with Phase II Communities	Invite City and Town staff from Phase II communities within the permit boundary to monthly coordination meeting ONGOING, COMPLETED FOR REPORTING YEAR		

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Legal Authority Goal: Effectively prohibit non storm water discharges into the storm drain system and receiving waters.			
Review existing codes and propose amendments as required	Propose or demonstrate adequate enforcement authority <i>within 12 months of Permit implementation</i> COMPLETED	a. Provide a statement from County Counsel demonstrating adequate enforcement authority/In 1 st Annual Report COMPLETED b. Review codes for SUSMP construction enforcement, and any other authority/Within permit term c. Consult with Regional Board Counsel/12 months of permit implementation	Water Agency relies on enforcement authority of City and County, and has no plans to seek additional authority. The Water Agency will use its existing legal authority as appropriate. ONGOING

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Private Construction Element Goal: Reduce construction site related pollutant, especially sediment, to MEP			
Grading Permit Issuance	<p>Continue to implement current approval process. ONGOING</p> <p>Submit list of active grading permits to RWQCB <i>in each Annual Report</i>. COMPLETED</p>	<p>a. Continue to require Erosion Control Plans for grading-permit ONGOING</p> <p>b. Continue to use local ECP guidelines. ONGOING</p> <p>c. Report number of grading permits issued in Annual Report/Annually. ONGOING</p> <p>d. Meet with Grading Ordinance Work Group and make recommendations to Board of Supervisors related to new Grading Ordinance/2003 COMPLETED</p> <p>e. Review General Plan Resource Conservation Element to support policy changes/During Permit Term COMPLETED</p> <p>f. Establish inspection categories/during Permit term. COMPLETED</p> <p>g. Create standard Grading Notes for ECPs/2003 COMPLETED</p> <p>h. Create BMP handout for Type A building permits/Within 12 months of Permit implementation. COMPLETED</p> <p>i. Create procedures on pre-construction meeting/Within 36 months of permit implementation.</p> <p>j. Improve related project conditions/During Permit term.</p>	<p>Under California planning and zoning law, land use is regulated by the City and County, rather than the Water Agency. The Water Agency will continue to review construction plans referred to the Agency by the City and County to ensure adequate downstream channel capacity for site runoff so long as contracts with the Cities remain in effect. ONGOING</p>

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Vineyard Planting/Replanting Compliance	N/A	a. All optional: Continue to require Notifications be filed for Level I, II, and III vineyard sites. ONGOING b. Continue to require ECPs for Level II and III vineyard sites. ONGOING c. Continue to use local ECP guidelines. ONGOING d. Continue to post vineyard development information to the County website/Monthly. ONGOING	Under California planning and zoning law, land use is regulated by the City and County rather than the Water Agency. Thus, the Water Agency has no authority over vineyard planting or replanting. As such, this section is not applicable. N/A
Private Construction on Public Land	Continue to issue Encroachment Permits that require compliance with California Standard Specifications, Section 7-1.01G "Water Pollution" and the City Storm Water Ordinance ONGOING	a. Review/Revise Encroachment Permit Process/Once in Permit Term. b. Develop ECP Conditions for Encroachment Permits/Once in Permit Term. c. Ensure legal authority for enforcement/During permit term.	Incorporate appropriate BMP measures as part of the provisions contained in Revocable Licenses for private construction which occurs on Water Agency flood control channels. Request that cities and County refer project managers to Agency when project includes work on flood control channel. ONGOING

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
<p>Inspection of Construction and Vineyard Sites</p>	<p>Inspect sites with active grading permits every two weeks and after major storm events <i>Ongoing</i> ONGOING</p> <p>Submit list of site inspections performed for each grading permit to RWQCB <i>in each Annual Report.</i> COMPLETED</p>	<p>a. Analyze increased level of plan review and inspection needs, and prepare for BOS consideration. Prepare budget request as appropriate/Within 36 months. COMPLETED</p> <p>b. If (a) approved, hire inspectors/During Permit term.</p> <p>c. Hold pre-construction meetings on significant projects/Once per project. ONGOING</p> <p>d. Inspect activities at significant project sites prior to rainy season/Once per year. ONGOING</p> <p>e. Inspect "sensitive sites" prior to rainy season/Once per year. ONGOING</p> <p>f. Continue final grading inspections on all projects/Until construction is completed. Optional: ONGOING</p> <p>g. Inspect Level II & III vineyard sites prior to commencement of any work/Once per project. ONGOING</p> <p>h. Inspect Level II & III vineyard sites in autumn/Once per year ONGOING</p> <p>i. Inspect Level I vineyard sites as required/Until construction is completed. ONGOING</p> <p>j. Report number of vineyard inspections conducted, for Annual Report/Annually. ONGOING</p>	<p>Provide at least one inspection for construction projects on agency flood control channels which have been issued a revocable license to ensure compliance with license. ONGOING</p>

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Enforcement of Non-Compliant Sites	<p>Follow existing protocol and document verbal and written enforcement notices.</p> <p>ONGOING</p> <p>Submit list of sites requiring Third and Fourth Level enforcement actions to RWQCB <i>in each Annual Report</i></p> <p>COMPLETED</p>	<p>a. Continue enforcement protocol. ONGOING</p> <p>b. Consider increasing civil penalties/During Permit term. COMPLETED</p> <p>c. Report non-compliant sites in Annual Report/Annually ONGOING</p> <p>d. Create grading violation procedure/Within 24 months of Permit implementation.</p>	<p>Use the Water Agency's existing program and the enforcement authority of regulatory agencies to ensure projects comply with the conditions stated in the Water Agency-issued revocable licenses.</p> <p>ONGOING</p>
Reporting of Non-Compliant Sites	<p>Notify RWQCB verbally within 24 hours and in writing of Third and Fourth Level enforcement actions.</p> <p>ONGOING</p> <p>Submit list of sites requiring Third and Fourth Level enforcement actions to RWQCB <i>in each Annual Report</i></p> <p>COMPLETED</p>	<p>See "Enforcement of Non-Compliant Sites" above.</p>	<p>If Water agency becomes aware of non-filer status, agency will refer non-filers to the RWQCB within 48 hrs.</p> <p>ONGOING</p>
Training of Targeted Staff	<p>Provide Erosion Prevention and Sediment Control training for new staff, and continue attending and participating in the RWQCB's annual Erosion and Sediment Control Workshop.</p> <p>ONGOING</p> <p>Submit list of staff that attend and/or participate in training to RWQCB <i>in each Annual Report</i></p> <p>COMPLETED</p>	<p>a. Continue training staff/once per employee. ONGOING</p> <p>b. Continue "Code Corner" meetings. ONGOING</p> <p>c. Additional training for key staff/Once during Permit term. ONGOING</p> <p>d. Provide additional training for seniors and supervisors/Annually. ONGOING</p> <p>e. Invite RWB staff on ride-alongs/Annually. ONGOING</p>	<p>Provide a training session or training materials to the appropriate personnel on the components of the SWMP and new NPDES storm water permit within one year of permit implementation.</p> <p>COMPLETED</p>

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Industrial/Commercial Element Goal: Reduce the potential for pollutants to contact storm water to MEP			
Inventory of Facilities	Maintain data base of businesses within City that may be required to file NOI and comply with the terms of State General Industrial Permit. ONGOING <i>Submit in each Annual Report</i> COMPLETED	Maintain data base of food facilities and closed landfills (EH), and businesses regulated by DES/Annually ONGOING	The City and County, rather than the Water Agency, are authorized by California planning and zoning law to regulate land use. Thus, this section is not applicable to the Water Agency. N/A
Food Facility Inspections	Inspections are performed for wastewater discharge compliance. There are no measurable goals associated with this activity for the municipal NPDES permit.	Inspect twice during the 5-year permit term. ONGOING	N/A
Retail Gasoline Outlet and Automotive Service Facilities Inspections	RGO inspection checklist in the first Annual Report COMPLETED RGO outreach materials and distribution list in the second Annual Report Follow up inspection of RGO's and enforcement action summarized in the third, fourth or fifth Annual Report	a. Inspect RGOs annually and ASFs on routine basis. ONGOING b. Enhance inspections to include stormwater BMPs/RGOs-2003; ASFs-2004. ONGOING c. Increase inspection frequency/Once every 2.5 years. ONGOING	N/A
Industrial/Commercial Enforcement	1. Follow enforcement protocol for industrial/commercial facilities without industrial waste permits 2. Report on enforcement activities in each Annual Report view and submit findings to RWQCB COMPLETED	a. Use progressive enforcement. ONGOING b. Adopt CalEPA "CUPA" program enhancements, if available/2004. c. Report referrals to RWB/2003. ONGOING	N/A

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Interagency Coordination for Industrial/Commercial Facilities Program	Continue to participate in SEQAC meetings ONGOING	a. Participate in monthly permit Coordination meetings. ONGOING b. Notify RWB staff of violations/Within 60 days. ONGOING c. Participate in SEQAC discussions. ONGOING	N/A
Training of Targeted Staff	A description of the training provided and a list of participants will be included in each Annual Report. COMPLETED	a. Train Environmental Health inspectors/Annually. ONGOING b. Continue food team meetings and discussions. ONGOING c. Train Emergency Services inspectors on storm water BMP's/2003 and ongoing ONGOING	N/A
Municipal Operations Element Goal: Reduce or prevent pollution in storm water runoff from all municipal land use areas, facilities and activities			
Public Construction Activities Management			
Contract Documents	Review special provisions and submit any revisions to the RWQCB in the first annual report. COMPLETED	a. Continue to reference appropriate BMPs in construction documents. ONGOING b. Review and update construction standard documents to ensure they include the most recent BMP's/Once during Permit term. COMPLETED	Review Special Provisions and General Specifications for existing BMP'S to determine if they are adequate. Submit needed changes, if any, in Annual Report No. 2.

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Compliance with State General Construction Permit	<p>The City, or contracted consultant on behalf of the City, files a NOI for applicable projects and comply with terms of the State General Permit.</p> <p>Each Annual Report to the RWQCB includes a list of the projects that have complied with the terms of the State General Permit</p> <p>COMPLETED</p>	<p>a. Continue to submit NOIs for projects subject to the State General Construction requirement.</p> <p>ONGOING</p>	<p>File NOI for applicable projects, as required.</p> <p>ONGOING</p>
Inspection	<p>Perform each working day on active projects</p> <p>ONGOING</p>	<p>a. Continue to inspect public construction sites during construction activities.</p> <p>ONGOING</p>	<p>Continue to inspect active construction sites.</p> <p>ONGOING</p>
Enforcement	<p>Continue to implement progressive enforcement procedures.</p> <p>Continue through 2nd permit term</p>	<p>a. Continue to enforce construction documents regarding failure to carry out orders or contract provisions.</p> <p>ONGOING</p>	<p>Take action for non-compliance based on contract specifications.</p> <p>ONGOING</p>
Training of Targeted Staff	<p>Continue to discuss storm water quality requirements during pre-construction conference for public improvement projects.</p> <p><i>Provide Annually</i></p> <p>COMPLETED</p>	<p>a. Continue to provide training to all applicable employees.</p> <p>ONGOING</p> <p>b. Provide annual training to key personnel, to enhance BMP knowledge/Annually.</p> <p>ONGOING</p>	<p>Assess current education and training practices for construction practices.</p> <p><i>Permit Year 1</i></p> <p>COMPLETED</p> <p>Update, if necessary.</p> <p><i>18 months from permit implementation.</i></p>

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Landscape and Recreational Facilities Management			
Pesticide management	Continue to keep pesticide use below the levels used prior to the implementation of the Integrated Pest Management Program ONGOING	a. Continue to follow chemical use, storage, disposal and reduction practices. ONGOING b. Continue native vegetation and water conservation practices. ONGOING c. Develop database for staff training certification regarding these practices. ONGOING d. Develop written guidelines regarding these practices/During Permit term. COMPLETED	Continue with low-impact pesticide management. ONGOING
Fertilizer management	Develop a Fertilizer Management Plan and training program and provide in the first Annual Report COMPLETED	See "Pesticide Management".	Continue to utilize recycled water for irrigation which offsets the need for fertilizer at the Water Agency's West College facility. ONGOING
Native vegetation	None are proposed for this permit term.	See "Pesticide Management".	Continue to incorporate retention and planting of native vegetation in design projects on flood control facilities. (See also, Public Outreach)
Disposal of landscape waste	Continue to grind and reuse waste materials as compost and mulch ONGOING	a. Continue to follow practices as noted in Plan. ONGOING b. Develop guidance documents for practices/During Permit term. COMPLETED	Continue to use chipped brush and weeds as mulch around existing vegetation at Water Agency Channels. ONGOING

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Recreational water bodies	Continue to implement existing activities. ONGOING	a. Continue to follow practices as noted in Plan. ONGOING b. Develop guidance documents for practices/During Permit term.	County manages Spring Lake Park for agency. Continue to limit equipment and material storage in Water Agency's flood control channel right-of-way. ONGOING
Swimming pool discharge	Continue to implement existing activities ONGOING	See "Recreational Water Bodies"	N/A
Storm Drain System Operation and Management			
Source Identification- Drainage system mapping	Existing storm drain system complete. Continuously update ONGOING	a. Develop Regional Parks priority system for pipe inventory/Year 2. b. Inventory "high priority" Regional Parks pipe systems/Year 3. c. Inventory "low priority" Regional Parks pipe systems/Years 4 and 5. d. Inventory and map Public Works' Larkfield/Wikiup and Airport Business Park pipe systems/2005. e. Inventory and map other Public Works' systems in urban areas/2006.	Review existing mapping. <i>Permit Year 3</i> Modify maps, as needed, by the end of Permit Year 5. MODIFIED – CHANNELS MAPPED INTO GIS IN PERMIT YEAR 1.
Clean and inspect storm drain pipe and inlet structures	Continue to clean and inspect 130,000 feet of storm drain pipe and 1200 structures. <i>Annually</i> 221904 Lineal Ft storm drain pipe and 9775 structures cleaned and inspected. COMPLETED	a. Continue cleaning and inspection of problem inlets/Annually. ONGOING b. Develop program to pro-actively clean closed pipe systems/2005.	Pipes through City treated as open channel, see below. ONGOING
Flood control channel or road side ditch inspection and maintenance	Continue to inspect and remove debris for flood control purposes <i>Annually</i> ONGOING	a. Continue to inspect and remove debris for flood control purposes/Annually. ONGOING	Continue to provide trash cleanup in Water Agency channels, coordinate with local law enforcement when possible. <i>Annually, as needed</i> ONGOING

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Storm drain labeling	Label 80% of curb opening inlets within the City ROW <i>By the end of first year of permit term</i> Continue labeling program MODIFIED Records indicate only 60% completed.	a. Develop Parks Department program/Year 1. COMPLETED b. Develop Parks Department guidelines, procedures and database/Year 5. c. Label 10 Regional Parks inlets per year/Begin year 2. d. Label 100 Public Works inlets per year in Larkfield/Wikiup and Airport Business Park/Annually. MODIFIED e. Install labels on all new inlets in urban areas.	Label and maintain labels at storm drains within the West College Facility. <i>Six months of permit implementation.</i> COMPLETED
Streets and Roads Maintenance			
Street sweeping frequency	Priority A <i>three times per week.</i> Priority B <i>twice a week</i> Priority C <i>once a week</i> Priority D <i>monthly</i> ONGOING	Starting in Year 3 of Program: a. Industrial and Commercial Areas in the expanded permit boundary six (6) times a year/Annually. b. Urbanized residential areas in boundary-3x/year/Annually. c. Rural roads within boundary-2x/year/Annually. d. Various streets, intersections, and other including Regional Parks parking lots-upon request.	Water Agency does not maintain public roads. No sweeping planned. Maintain shale layer on Water Agency-owned roads. ONGOING Continue to require reshaling of road in revocable licenses, where appropriate. ONGOING Continue to limit vehicular access to Water Agency roads. ONGOING
Material management	Continue to properly recycle or dispose of materials. ONGOING	a. Continue good housekeeping practices. ONGOING	Continue to limit equipment and material storage in Water Agency's ROW. <i>Ongoing</i> ONGOING

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Training of targeted staff	Continue to provide training annually ONGOING	a. Continue to provide training to key Regional Parks and Public Works staff. ONGOING b. Continue bi-weekly road crew tailgate meetings. ONGOING c. Review current practices. d. Complete draft road maintenance standards manual, collaborating with other counties/2003. COMPLETED e. Analyze draft manual and present to Board of Supervisors for policy direction/2004.	Provide informal road maintenance BMP training. <i>As-needed</i> ONGOING
Parking Facilities Management			
Sweeping	Continue to sweep City Transit and Parking sites (5 garages and 9 lots) <i>weekly</i> , pressure wash such garages <i>annually</i> ONGOING	See "Streets and Road Maintenance, Street Sweeping Frequency" above	Sweep two employee and one visitor parking lot at West College facility. <i>Annually between August 15 and October 15</i> COMPLETED
Spill clean up	Respond immediately to priority reports/ within one business day for non urgent small spills ONGOING	a. Continue to clean up and dispose of spills as required. ONGOING	Respond in a timely manner. Use spill response protocol for hazardous or unmanageable spills. ONGOING

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Emergency Procedures			
Emergency Operations Plan	Continue to implement the Emergency Operations Plan. ONGOING	a. Continue to implement Emergency Operations Plan. ONGOING b. Update Area Plan/2003. MODIFIED c. Update Emergency Operations Plan/2005. d. Update Spill Plan/2003. COMPLETED e. Report Plan updates in Annual Report/Annually. ONGOING f. Continue interagency emergency coordination. ONGOING	Review existing Water Agency emergency operations plan for appropriate changes. <i>Permit Year 3</i>
Illicit Discharge Detection and Elimination Element Goal: Detect and minimize illegal non storm water discharges			
Spill Response	Continue existing illicit discharge detection and elimination activities. ONGOING	a. Continue existing illicit discharge detection and elimination activities. ONGOING b. Report activities in Annual Report/Annually. ONGOING	Implement current program. ONGOING
Private sanitary septic systems	Follow up on reported problems until resolved ONGOING	Follow up on reported problems until resolved ONGOING	Notify City, County or RWQCB if a problem with a private sanitary septic system is discovered and not immediately corrected by land owners. ONGOING

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Enforcement Procedures	Follow written enforcement procedures-update as needed ONGOING	a. Continue to pursue enforcement actions for violations. Report in Annual Report ONGOING b. Develop policies and procedures. Within the Permit term.	Water Agency works with responsible party, City, County, and other regulatory agencies to correct the problem. <i>Continue with existing program.</i> ONGOING
Record Keeping and Documentation	Continue to update database as complaint response and inspections are completed Document illicit discharge detection and elimination activities and summarize in each Annual Report. COMPLETED	a. Continue to practice recordkeeping by Public Works, Environmental Health, Emergency Services, PRMD. ONGOING b. Report number of illicit discharges in the annual report/Annually. ONGOING	Ensure phone number to report a spill is listed in phone book. <i>Permit Year 1</i> COMPLETED Develop tracking system. <i>Permit Year 2</i> List reported spills in annual report. ONGOING
Illicit Connections	Document field inspection results from storm drain cleaning crew ONGOING	a. Continue illicit connection investigation and enforcement protocol. ONGOING	Investigate the sources of illicit discharges within flood control channels. Notify and provide support to appropriate municipality for discharges originating outside of channels. ONGOING
Disposal of used oil and toxic materials	Integrated Waste Management	a. Continue to implement existing used oil and toxic materials programs. ONGOING b. Report amounts collected in the annual report/Annually. ONGOING	Rely on existing programs by others. Provide outreach material developed by others where appropriate. ONGOING

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Training of targeted staff	Training provided annually, documented, and summarized in each Annual Report. ONGOING	a. Continue to provide training to key staff. ONGOING	Review and update training for spill response personnel. <i>1 yr of permit implementation</i> MODIFIED Provide current contact info to receptionist. <i>6 mo of permit implementation</i> COMPLETED Provide annual review of contact info. COMPLETED
Public Education and Outreach Element Goal: Increase the community’s knowledge of MS4 and the impacts of urban storm water runoff, encourage behavioral changes thereby reducing pollutant release to the MS4			
General Public/Residents			
Storm drain inlet decal program	Continue to provide decal kits to volunteer groups ONGOING	See “Municipal Operations, Storm Drain System Operation and Management Section - Storm Drain Labeling”	Provide key Water Agency staff with contact numbers for storm drain labeling programs. <i>Permit Year 1</i> MODIFIED Evaluate efficacy of incorporating storm drain labeling program into creek stewardship program. <i>Permit Year 2</i> MODIFIED
Ecology/Environmental column in local newspaper	The co-permittees will make first contact with the Press Democrat within 18 months of permit implementation and with Sonoma West within 24 months of permit implementation. The status will be reported in the corresponding annual report.	The co-permittees will make first contact with the Press Democrat within 18 months of permit implementation and with Sonoma West within 24 months of permit implementation. The status will be reported in the corresponding annual report.	The co-permittees will make first contact with the Press Democrat within 18 months of permit implementation and with Sonoma West within 24 months of permit implementation. The status will be reported in the corresponding annual report.

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Web site	Update to include street sweeping schedule by address <i>Within first permit year</i> Located on GIS Map page at lmaps.ci.santa-rosa.ca.us/index2.cfm COMPLETED	See "Hazardous Waste Disposal".	Include info on creek stewardship program. <i>Permit Year 3.</i> ONGOING
Creek Stewardship	N/A	a. Conduct survey of horse facilities adjacent to major creeks within boundary/2005 b. Provide horse owners with prepared materials as part of (a) above/2005.	Work with groups to develop Creek stewardship program and signs. <i>Permit Year 1.</i> COMPLETED Conduct outreach. <i>Permit Year 2.</i> Incorporate one creek per year. <i>Permit Years 3-5.</i> Provide half of funding required for project coordinator. <i>2002-2003</i>
Pet waste signs	10 signs will be posted at major access points to the Santa Rosa Creek Trail, subject to approval by the Water Agency and City's Waterways Advisory Committee. <i>Within the first year of the permit term.</i> MODIFIED 25 "Clean Up After Your Pet" signs will be posted at access points each year of the permit term. 140 signs installed. COMPLETED	a. Continue to install pet waste signs at Regional Parks facilities/ Ongoing. ONGOING	10 signs will be posted at major access points to creeks, subject to approval by the Water Agency and City's Waterways Advisory Committee. <i>Within the first year of the permit term.</i> COMPLETED 10 signs yearly thereafter
Public Events	Continue to pursue opportunities to participate in general outreach events. Report in each Annual Report COMPLETED	See "Hazardous Waste Disposal".	Participate each year in Sonoma County Fair. Distribute outreach materials at fair. <i>Annually</i> ONGOING

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Hazardous Waste Disposal	County Waste Management Agency	All Optional: a. Publish and distribute Sonoma County Recycling Guide/Annually. ONGOING b. Operate Eco-Desk hotline. ONGOING c. Maintain Sonoma County Waste Management Agency website. ONGOING d. Encourage oil and filter recycling via annual campaign. ONGOING e. Continue campaign for curbside oil and filter recycling ONGOING f. Continue Household Toxics collection publicity. ONGOING g. Continue to provide "No Toxics" garbage can stickers. ONGOING h. Provide Integrated Pest Management workshop for county employees. ONGOING i. Provide booth at Sonoma County Fair and the Harvest Fair re: Household Hazardous Waste Management. ONGOING	County Waste Management Agency

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Illicit discharge	Material distribution numbers will be reported each year in Annual Report. COMPLETED	<p>a. Conduct public outreach alternative options for the disposal of swimming pool water containing chlorine and biocides/Within 36 months of permit implementation.</p> <p>b. Continue to distribute prepared materials during normal inspections (see Section 5 for more details of this activity). ONGOING</p>	Post stormwater pollution prevention message on the Water Agency's Highway 101 billboard for 3 months per year. MODIFIED
Private septic system	Material distribution and workshop attendance numbers will be included in the <i>first Annual Report</i> . COMPLETED	<p>a. Coordinate with the City on referrals/Within 1 business day. ONGOING</p> <p>b. Report activities in Annual Report. ONGOING</p> <p>c. Develop guidance documents/Withing 24 months of permit implementation.</p>	N/A
Industrial/Commercial	Continue to distribute prepared materials to the following industries: Automotive, Food facilities, Cleaning, Building and Construction ONGOING	<p>a. Prepared materials will be distributed to food facility operator in the expanded permit boundary ONGOING</p> <p>b. Emergency Services will discuss stormwater issues with RGO operators/2003. ONGOING</p> <p>c. F.I.A.F. presentation regarding changes to NPDES permit/Within 24 months of permit implementation.</p>	N/A

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Landscape and Agriculture Industries	Continue to sponsor the Master Gardeners. Renewed contract total funding for \$17,495 COMPLETED	a. Continue to give information to pesticide users with permits and annual registration. ONGOING b. Continue to offer junior college courses for state mandated continuing education for pesticide user licenses. MODIFIED	NONE.
Building and Construction	Refer to SUSMP for measurable goals.	a. Develop prepared materials/First half of Permit term. b. Distribute prepared materials/Second half of Permit term. c. and d. Additional goals related to SUSMP - see Section 10.	N/A
School Education			
Water Education Program	N/A	N/A	Although no measurable goal is included, as this program is independent of storm water funding, it is anticipated that the current program will continue. ONGOING
High School Aquatic Macroinvertebrate Bioassessment Program	Continue to solicit program participation from the 6 public high schools <i>Ongoing</i> COMPLETED	N/A	N/A

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Spring Lake Environmental Discovery Center	Continue to sponsor and participate in storm water related displays <i>Annually</i> COMPLETED	a. Continue to operate and manage EDC. ONGOING b. Continue to seek sponsorship of EDC. ONGOING c. Continue to contribute funding to EDC provide storm water, water conservation, and endangered species act displays. ONGOING	Provide financial support through fiscal year 2003/04 ONGOING
Effectiveness Evaluation			
Formal Evaluation	Evaluations will be included in each Annual Report. COMPLETED	a. Compare goals in SWMP to actual work; develop work plan with RWB staff/Annually. ONGOING b. Document (a) in Annual Report/Annually. ONGOING c. Increase coordination of activities agency-wide, by hiring Storm Water Coordinator/2002. COMPLETED	Continue to track program elements through direct and indirect indicators. <i>Annually</i> ONGOING <i>Summary Report Permit Year 5</i>
Public Education and Outreach	Resurvey community awareness (Data trends) <i>During 5th permit year</i>	a. Based on Special Study (below), consider outreach to improve stream quality. ONGOING	Voluntary include feedback mechanisms in water Education Program. ONGOING

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Monitoring Program	Evaluations will be included in each Annual Report.	a. See Special Study (below), related to sediment.	Review monitoring data for trends. <i>Permit Year 5</i>
Special Studies	A retrofit treatment special study will be conducted by the City not to exceed \$35,000. <i>Completed by the end of the second permit term.</i>	a. Continue to collect data at C3 station and evaluate for sediment levels. MODIFIED b. Begin data collection and establish background levels of bacteriological activity at C3 station/Annually via 3 grab samples. COMPLETED c. Report data in Annual Report. COMPLETED	None.
Fiscal Analysis			
Financial Analysis of Program Activities	Include in Annual Report COMPLETED	a. Report program expenditures and funding sources in Annual Report ONGOING b. Develop new reporting structure/Within 12 months of permit implementation. COMPLETED c. Seek new revenue sources/During permit term. ONGOING d. Include discussion of fiscal resources in work plan meetings/Annually ONGOING	Develop new reporting structure Permit Year 1. a. Include discussion of fiscal resources in work plan meetings/Annually ONGOING b. Report program expenditures and funding sources in Annual Report. ONGOING

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Monitoring Plan Goal: Assess the receiving water quality to direct resources toward local pollutants of concern			
Chemical Monitoring	N/A	a. Collect samples for first flush and 3 representative storms/Annually ONGOING b. Review "representative storm" criterion and propose changes in work plan/During permit term. c. Report chemical monitoring results from prior year in Annual Report. ONGOING d. Review all chemical monitoring results of first two permit terms/Last year of permit term.	Collect samples for first flush and three representative storms. <i>Annually</i> ONGOING Include results and proposed changes to program in annual reports. Analyze data for trends. <i>Permit Year 5.</i>
Bioassay	Bioassay samples will be collected for the first flush and one representative storm at eight sites within the permit boundary. Data will be reported in annual reports. COMPLETED	N/A	N/A
Aquatic Macroinvertebrate	Samples will be collected at six sites within the permit boundary and analyzed to level 3. Data will be reported in annual or approved supplement reports. COMPLETED Provided that local high schools continue to participate, results will be reported in annual or approved supplement reports. COMPLETED	N/A	N/A

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
SUSMP Goals: Minimize storm water pollution, limit storm water peak flows, and conserve natural areas to MEP from new and redevelopment			
Waiver	Waiver granted with RWQCB approval. Place fees in project fund		
Determine if legal authority exists	Report findings in first Annual Report COMPLETED		N/A
Establish legal authority if required	Propose/amend ordinance within 12 months of Program implementation COMPLETED		N/A
Review applicable codes	Report findings in Annual Report within 12 months of Program implementation COMPLETED		N/A
Review General Plan	Complete within 9 months of Program implementation and report findings in second Annual Report COMPLETED	Report findings in Annual Report COMPLETED	N/A
Revise environmental review process	Complete within 12 months of Program implementation and report findings in second Annual Report COMPLETED		N/A
Update special provision general specifications for City/County contracts	Complete revisions on schedule within 3 months of Permit adoption COMPLETED	Complete revisions within 12 months of Program implementation COMPLETED	N/A
Develop combined City/County site design guidelines	Complete on schedule within 20 months of Program implementation		
Develop guidance on long term funding, inspection, reporting procedures for BMP maintenance	Complete on schedule within 20 months of Program implementation		

<u>Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule: July 1 2003-June 30, 2004		
	City	County	Water Agency
Develop/Modify City design standards for conformance with SUSMP requirements	Complete on schedule within 27 months of Program implementation	N/A	N/A
Provide training to staff	Train targeted staff within 22 months of Program implementation		
Provide workshop to the development community	Prepare and conduct workshop within 24 months of Program implementation		
Implement SUSMP measures on City / County capital improvement projects	Design applicable projects with SUSMP measures <i>Upon Permit Adoption</i>	Design applicable projects with SUSMP measures within 12 months of Program implementation ONGOING	Design applicable Zone 1A flood control projects with SUSMP measures, January 2004. ONGOING
Encourage applicants to implement SUSMP measures on projects	Require storm drain labeling on all projects <i>Upon Permit Adoption</i>	Continue to discuss with development community as part of SUSMP public outreach ONGOING	N/A
Implement SUSMP measures on applicable projects within Urban Growth Boundary within Permit Boundary	Condition, plan check and inspect projects to meet SUSMP requirements <i>within 24 months of Program implementation</i>		

Part II

County of Sonoma

**Permit Term 2
Annual Report 1**

County of Sonoma Annual Report

The County of Sonoma has prepared the following report to document the implementation of the Storm Water Management Plan. See the At a Glance table in Part 1-4 for a quick reference including the status of all the measurable goals required for reporting period 2003-2004. The following text includes highlights of program accomplishments and, where appropriate, explanations of modification of measurable goals. Measurable goals are copied below for program elements where there were accomplishments during this reporting period. If there were no accomplishments and none were required, a statement "Not due this reporting period." is made under the heading for that measurable goal. If there were related accomplishments that were not required by the measurable goals, those appear under the heading "Additional Accomplishments."

1.0 LEGAL AUTHORITY

Goal: Effectively prohibit non-storm water discharges into the storm drain system and receiving waters.

Measurable Goals/Implementation Schedule

- a. & b. A statement will be included in the first Annual Report that the County's legal counsel has reviewed the County's legal authority to implement and enforce the permit requirements and certifies that applicable federal, state and local statutes and codes appear to provide adequate legal authority to implement and enforce the permit requirements.
- c. County's legal counsel will consult with Regional Water Board Counsel.

Accomplishments

➤ County Counsel

- a. **Storm water related ordinances and agreements and the reasons the ordinances are enforceable:**

Sonoma County Code Chapters 1, 7, 11, 23 and 25 contain ordinances that relate in whole or in part to storm water. These ordinances are adopted and enforceable pursuant to the legal authority of Article XI, Section 7 of the California Constitution (police power); the California Environmental Quality Act; California Planning and Zoning laws, including the Subdivision Map Act; the Federal Clean Water Act; California Water Code; Fish and Game Code; Health and Safety Code; and Penal Code.

Chapter 11 of the Sonoma County Code, Drainage and Storm Water Management (Chapter 11) contains the principal County ordinance regulating storm water. A copy of Chapter 11 is contained in the County's Storm Water Management Plan and is included in **Appendix II.A** for reference. Article III of Chapter 11, Stormwater Quality, was enacted specifically to control discharge to the County's storm water system and reduce pollutants in storm water discharges to the maximum extent practicable.

Chapter 7 of the Sonoma County Code, Building Regulations, (Chapter 7) contains the County's building regulations and incorporates by reference the 2001 California Building Code, including Appendix Chapter 33 regarding grading. A copy of Chapter 7 is included in **Appendix II.A**. The County is currently working on developing a comprehensive grading, erosion, sediment control, and drainage ordinance. A committee with resource agency representatives, including a representative of the Regional Board, is assisting the County with development of this ordinance.

Article 1, Chapter 23 of the Sonoma County Code, Rivers and Streams (Chapter 23) prohibits work or operations which pollute, contaminate or roil the waters of any rivers or streams in Sonoma County. A copy of Article 1, Chapter 23 is included in **Appendix II.A**. It was originally adopted by referendum in 1988.

Chapter 25 of the Sonoma County Code, Subdivisions (Chapter 25) contains the County's regulations for subdivision development. A copy of pertinent sections of Chapter 25 is included in **Appendix II.A**. See particularly Section 25-44 (a), (f), (i), (j), (l) and (m).

Section 1-7, Chapter 1 of the Sonoma County Code, General Provisions, (Chapter 1) contains Sonoma County's Code Enforcement regulations, although Chapter 11 and Chapter 7 also contain additional enforcement provisions. A copy of Section 1-7, Chapter 1 and Ordinance 5468 containing the most recent revisions to Section 1.7 are included in **Appendix II.A**.

The County has entered into an interagency agreement with the City of Santa Rosa, dated December 16, 2003 to control the contribution of pollutants from one portion of the shared MS4 to another portion.

b. Local administrative and legal procedures available to mandate compliance with storm water related ordinances:

Chapter 11 generally prohibits release of non-stormwater discharges to the County's stormwater system, mandates that any person engaging in activities which may result in such pollution undertake all practicable measures to reduce or eliminate the pollutants and contains administrative enforcement mechanisms. Other provisions of Chapter 11 require written permits, generally, for specified activities that could impede storm waters, deposit material in storm water channels, affect a storm water drainage system, impair the effectiveness of a drainage easement, place deleterious material in such a manner as to be carried away by storm water, and construct structures near such channels. Chapter 11 also requires that drainage facilities be designed in accordance with specified flood control design criteria.

Chapter 7 requires that building and grading permits implement applicable provisions of Chapter 11. Under Chapter 7, in areas where storm water discharges are subject to an NPDES permit, construction must comply with relevant NPDES permit requirements. Failure to comply with applicable NPDES requirements constitutes a violation of the County Code.

Article 1, Chapter 23 is implemented through a permit process in which terms and conditions to prevent work or operations that unreasonably decrease water clarity are incorporated into any approval of the work or operation.

Chapter 25 is implemented through the subdivision evaluation and approval process.

Section 1-7, Chapter 1 provides that any continuing violation of the County Code is a public nuisance, subject to penalties. Section 1-7, Chapter 1 establishes an administrative procedure for abatement of code violations, including specifically, violations of Chapters 11 and 7. In 2004, Sonoma County amended Section 1-7, Chapter 1 to increase penalties for code violations. Under the amendments, the County is authorized to impose the highest fines allowed by state law: up to \$100 per day for the first violation; up to \$200 per day for a second violation of the same ordinance within one year; and up to \$500 per day for each additional violation of the same ordinance within one year.^a

c. Departments that conduct storm water pollution prevention related activities and their roles and responsibilities, including an up-to-date organizational chart specifying these departments and key personnel responsible for issuance of enforcement actions.

Private activities are regulated by the County's Permit and Resource Management Department (PRMD) (generally private land use/construction activities), Department of Health Services/Environmental Health Division (restaurants and horse owners), and Department of Emergency Services (automotive service facilities, retail gasoline outlets, responding to emergencies). The County's own activities are carried out by its Department of Transportation and Public Works (construction and maintenance of roads, landfill, transfer stations), General Services, including Architect's Division (construction and maintenance of County facilities), and Regional Parks Department (construction and maintenance of Regional Parks). An organizational chart for each of those six departments that identifies key personnel is attached. See Figure II.A.

The County Administrator's Office and County Counsel's Office assist the six departments.

d. How these ordinances are implemented and how enforcement actions under these ordinances may be appealed:

Chapter 5 of the County's Storm Water Management Plan, revised February 2003, contains a complete description of the methods the County uses to initiate storm water management enforcement activities under applicable County ordinances.

Under Section 1-7, Chapter 1 of the County Code, the County enforcing officer in PRMD issues a Notice and Order of violation. The notice and applicable penalties may be appealed to an administrative hearing officer. The hearing officer's determination is final, subject only to judicial review.

Egregious violations may also be referred to the District Attorney for criminal prosecution. (See Footnote a.)

e. Authority of County to issue administrative orders and injunctions or go through the court system for enforcement actions:

Section 1-7, Chapter 1 of the County Code provides an administrative procedure for abatement of Code violations, including violations of Chapter 7 and 11. Pursuant to those procedures, County staff is authorized to issue an administrative order that the violation cease. An administrative hearing may be held in two circumstances. First, a property

^aCounty Code Section 1-7 and County Code Section 23-4 also authorizes criminal prosecution of violations, but only the Sonoma County District Attorney has discretion to decide whether or not criminal charges will be filed. The County does not have any legal authority to make this determination.

owner may appeal the administrative order to an administrative hearing officer. Second, County staff may set a matter for an administrative hearing if a property owner does not abate an illegal condition, even if the property owner did not appeal the notice of violation. In either situation, the administrative hearing officer will issue an administrative order. The administrative order is subject to court challenge. The County records a lien against any property that is the subject of an abatement action. If, notwithstanding the order and any lien, a property owner still fails to comply, the County may initiate litigation.

A certification has been provided by Prentice Fish of County Counsel, in a memo dated November 18, 2003 to Paula Stamp and Mary Jo Yung of Sonoma County Permit and Resource Management Department, regarding Legal Authority to Implement Standard Urban Storm Water Mitigation Plan (SUSMP). The memo confirms that legal authority exists to implement SUSMP, and describes the code sections where that authority is contained. Applicable federal, state and local statutes and codes appear to provide adequate legal authority to implement and enforce permit requirements. **See Appendix II.A.**

Figure II.A
County of Sonoma
Organizational Chart for Enforcement of Storm Water Regulations

COUNTY COUNSEL

Function: Responsible for civil enforcement actions

Contact: Jill Golis
Phone: (707) 565-2421

DISTRICT ATTORNEY

Function: Prosecutes criminal cases.

Contact: Jeff Holtzman
Phone: (707) 565-2311

DEPARTMENT OF EMERGENCY SERVICES

Function: Enforces storm water regulations related to automotive service facilities, hazardous materials and retail gasoline outlets.

Contact: Andy Parsons
Phone: (707) 565-1152

**DEPARTMENT OF HEALTH SERVICES/
ENVIRONMENTAL HEALTH DIVISION**

Function: Enforces storm water regulations related to animal management facilities, food facilities, sewage spills and swimming pools.

Contact: Jeff Lewin
Phone: (707) 565-6560

**PERMIT AND RESOURCE MANAGEMENT
DEPARTMENT**

Function: Enforces storm water regulations related to construction operations, septic systems and all other storm water pollution.

Contact: Ben Neuman
Phone: (707) 565-2123

ALL SONOMA COUNTY DEPARTMENTS

Function: Report storm water violations to appropriate department.

Contact information varies.

2.0 PRIVATE CONSTRUCTION

Goal Reduce construction site-related pollutants, especially sediment, to the Maximum Extent Practicable (MEP).

2.1 GRADING PERMIT ISSUANCE

Measurable Goals/Implementation Schedule

- a. Continue to require erosion control plans for grading permitted projects. Ongoing.
- b. Continue to use guidelines that are encouraged for local use by North Coast Regional Water Quality Control Board (NCRWQCB). Ongoing.
- c. Report the number of grading permits issued and the publication used to review and approve the erosion control plans, in Annual Report. Annually.
- d. Meet with the Grading Ordinance Work Group and formulate recommendations for the Board of Supervisors consideration related to adopting a comprehensive Grading Ordinance. Include NCRWQCB staff in this process. Include consideration of possible thresholds above which certain grading projects would be subject to discretionary approval and environmental review under CEQA. Consider adopting a ordinance-based requirement that formalizes the current practice of requiring an erosion and sediment control plan for all grading permitted activities; consider inclusion of language for time-of-year criteria for construction projects. Complete during Permit Term.
- e. If a comprehensive Grading Ordinance is adopted, review the Resource Conservation Element of the General Plan to ensure supporting policy changes reflect new ordinance. Complete during the Term 2.
- f. Not due this reporting period.
- g. Create a set of standard Grading Notes, to be included on all grading plans checked by PRMD staff. Complete within 12 months of Permit adoption.
- h. Provide handout of Erosion Control BMPs, to be stapled to all Type A Building Plans. Complete within 12 months of Permit adoption.
- i. Not due this reporting period.
- j. Not due this reporting period.

Accomplishments

➤ **Permit and Resource Management Department**

Measurable Goal (a) PRMD staff have continued to require erosion control plans for grading permitted projects. From July 1, 2003 through June 30, 2004, there were 74 Grading Permits issued within the permit boundary. All 74 Grading Permits had erosion control plans.

Measurable Goal (b) PRMD staff have continued to use guidelines that are encouraged for local use by the North Coast Regional Water Quality Control Board. The publications used to review and approve the erosion control plans are listed in Measurable Goal (c) below.

Measurable Goal (c) Grading Permits can remain active up to three years from the date of issuance, after which the permit expires, or until a final grading inspection is conducted to verify grading operations have been completed, after which the permit is finalized. See Table 2.1 for Grading Permit data within the permit boundary.

Table II.1
Grading Permit Data within the Permit Boundary

Grading Permit Information	FY03-04
New grading permits issued	74
New grading permits finalized	10
Total grading permits active	316
Total grading permits finalized	55
New grading permits issued compared to total grading permits active	23%
New grading permits finalized compared to new grading permits issued	14%
New grading permits finalized compared to total grading permits finalized	18%

PRMD staff uses the following publications to review and approve the erosion control plans:

Erosion and Sediment Control Field Manual by the San Francisco Bay Regional Water Quality Control Board

Manual of Standards for Erosion & Sediment Control Measures by the Association of Bay Area Governments

Construction Site Best Management Practices Manual by CalTrans

Stormwater Best Management Practice Handbook by the California Stormwater Quality Association

Measurable Goal (d) The Grading Ordinance Working Group (GOWG) met approximately 30 times over 2 years (FY02-03 and FY 03-04) and an engineering technical subcommittee met an additional 15 times over that same time period. The following agencies were invited to be resources to the GOWG: North Coast Regional Water Quality Control Board, National Marine Fisheries (NOAA Fisheries), and the California Department of Fish and Game. Utilizing a staff report developed in June 2002, the GOWG discussed how to revise existing grading, erosion and sediment control, and drainage regulations for agricultural and construction activities. The GOWG discussions focused on the following issues:

- improving organization and user friendliness of regulations
- development of thresholds for requiring a permit and either non-engineered or engineered plans for both agricultural and construction grading and agricultural planting and replanting
- whether there should be a level of grading permit subject to discretionary review and CEQA

- appropriate permitting and plan review process for agricultural grading and planting
- the application of agricultural planting thresholds and standards to crops other than vineyards
- how erosion and sediment control and drainage should be addressed when a grading permit is not required
- how erosion and sediment control and drainage regulations should be enforced
- the development of grading, erosion and sediment control, and drainage performance standards.

On March 23, 2004, the Sonoma County Board of Supervisors reviewed the recommendation of the GOWG (Staff Report) and provided policy direction for county staff to develop a comprehensive grading ordinance. County Staff is currently working on the draft ordinance. The draft ordinance is expected to be considered by the Board of Supervisors during the permit term. Refer to Section 1 for existing County ordinances related to grading, drainage and erosion and sediment controls. See **Appendix II.B** for the Staff Report.

Measurable Goal (e) A comprehensive Grading Ordinance has yet to be adopted per paragraph above. However, the Resource Conservation Element, Biotic Resources Element and Water Resources Element of the General Plan are currently being reviewed through the General Plan Update process. Grading and erosion control issues are being addressed in the Water Quality section of the Water Resources Element.

Measurable Goal (g) Standard Grading Notes as well as standard Erosion Prevention and Sediment Control Notes (Standard Notes) were created by PRMD staff and are required to be included on all grading plan sets checked by PRMD staff effective July 1, 2004. See Section 6.12 for public involvement in the creation of the Standard Notes. See **Attachments II.1 and II.2** for the Grading Notes and Erosion Prevention and Sediment Control Notes, respectively.

Measurable Goal (h) PRMD staff created a handout for the protection of stormwater quality for minor building permits which provides an overview of stormwater pollution sources and promotes effective BMPs for construction activities associated with minor building permits (no plan check required). The handout is stapled to all A-BLD permits issued by PRMD staff effective July 1, 2004. See Section 6.12 for public involvement in the creation of the handout. See **Attachment II.3** for the Protection of Stormwater Quality for Minor Building Permits handout.

➤ **Additional Accomplishments**

The Protection of Stormwater Quality for Minor Building Permits handout mentioned in Measurable Goal (h) is stapled to all building permits, not just A-BLD permits.

Exceeding Provision C.14.b of Order No. R1-2003-0062, NPDES No. CA0025054, California Regional Water Quality Control Board, North Coast Region, PRMD staff *require* submitting a copy of a Notice Of Intent (NOI) and receiving a Waste Discharge Identification Number (WDID) as a condition of approval for discretionary projects disturbing one or more acres of land. The following is the condition of approval:

"If the project area is one acre or more, then it is subject to the National Pollution Discharge Elimination System (NPDES) requirements, and coverage under the State General Construction Permit, as set by the Regional Water Quality Control

Board (RWQCB). A copy of the Notice Of Intent (NOI) filed with the RWQCB, as well as the Waste Discharge Identification Number (WDID) issued by that agency; must be submitted to the Drainage Review Section".

2.2 VINEYARD PLANTING/REPLANTING COMPLIANCE

Measurable Goals/Implementation Schedule (optional)

- a. Continue to require Notifications be filed for Level I, II, and III vineyard sites. Ongoing.
- b. Continue to require Erosion Control Plans for Level II and III vineyard sites. Ongoing.
- c. Continue to use Erosion Control Plan guidelines that are for local use. Ongoing.
- d. Continue to post to the County web-site, relevant information regarding vineyard development Notifications received. Update web-site monthly.

Accomplishments

➤ **Agricultural Commissioner**

Measurable Goal (a): The Agricultural Commissioner's Office continues to require notifications be filed for Level I, II, and III vineyard sites. From July 1, 2003 through June 30, 2004, the Agricultural Commissioner's Office received 17 notifications for Level I vineyard sites and 2 notifications for Level II/III vineyard sites for planting or replanting of vineyards within the permit boundary.

Measurable Goal (b) The Agricultural Commissioner's Office continues to require Erosion Control Plans for Level II and III vineyard sites. From July 1, 2003 through June 30, 2004, 2 Level II/III vineyard sites required Erosion Control Plans for planting or replanting of vineyards within the permit boundary.

Measurable Goal (c) The Agricultural Commissioner's Office continues to use the following Erosion Control Plan guidelines for local use:

Erosion and Sediment Control Field Manual by the San Francisco Bay Regional Water Quality Control Board

Vineyard Management Guidelines by the Southern Sonoma Resource Conservation District

Fish Friendly Farming by the Sotoyome Resource Conservation District

Measurable Goal (d) The Agricultural Commissioner's Office continues to post relevant information regarding vineyard development notifications received onto the County's website.

2.3 Private Construction on Public Land

Measurable Goals/Implementation Schedule

- a. Not due this reporting period.
- b. Not due this reporting period.
- c. Not due this reporting period.

Accomplishments

➤ **Permit and Resource Management Department**

The measurable goals in Section 2.3 are to be completed during the permit term and will be reported upon completion.

2.4 Inspection of Sites Requiring Erosion Control Plans

Measurable Goals/Implementation Schedule

- a. Complete analysis of how to provide increased level of plan review and inspection activities and provide to the Board of Supervisors for consideration. Prepare budget program improvement request to increase inspection and plan review staff, as appropriate, along with any recommendations related to Fee Schedule changes during budget cycle. Complete within 36 months of Permit adoption.
- b. If approved by the Board, complete the work to recruit, hire, and train staff. Complete during two years following completion of item (a).
- c. Continue to hold pre-construction meetings with grading personnel, on “significant projects”. Once per project (PRMD)
- d. Continue to conduct BMP Verification inspection, subsequent to the pre-construction meeting, at “significant projects”. Once per project (PRMD).
- e. Continue to inspect grading permit activities on “sensitive sites” prior to rainy season, for erosion control plan compliance. Once per year (PRMD).
- f. Continue to conduct Final Grading inspections, for all grading permits. Ongoing (PRMD).
- g. Inspect Level II & III vineyard sites prior to commencement of any work. Once per project (Agricultural Commissioner).
- h. Inspect Level II & III vineyard sites in autumn. Once per year (Agricultural Commissioner).
- i. Inspect Level I vineyard sites as required. Ongoing (Agricultural Commissioner).
- j. Report number of construction inspections conducted, for Annual Report (PRMD), and the number of vineyard inspections conducted, for Annual Report (Agricultural Commissioner).

Accomplishments**➤ Permit and Resource Management Department**

Measurable Goal (a) PRMD management completed a program improvement analysis of how provide an increased level of plan review and inspections activities. The analysis was presented to the Board of Supervisors as a request to secure additional resources and emphasized MS4 NPDES permit responsibilities, personnel requirements and fiscal necessities.

Measurable Goal (b) Upon receiving approval from the Board, work was completed to recruit, hire and train the following positions:

- NPDES Engineer
- NPDES Assistant Engineer
- NPDES Inspector
- Senior Office Assistant

The NPDES Engineer and Assistant Engineer assist in reviewing grading plans and erosion control plans. The NPDES Inspector reviews construction sites for compliance with erosion control plans and promotes effective construction site management. The Senior Office Assistant provides administrative support related these tasks.

Measurable Goal (c) PRMD staff continues to hold pre-construction meetings with grading personnel on “significant projects”. See Table II.2 for Erosion Control Inspections data within the permit boundary.

Measurable Goal (d) PRMD staff continues to conduct BMP verification inspections at “significant projects”, subsequent to the pre-construction meeting. See Table II.2 for Erosion Control Inspections data within the permit boundary.

Measurable Goal (e) PRMD staff continues to inspect grading permit activities on “sensitive sites” for erosion control plan compliance prior to rainy season. See Table II.2 for Erosion Control Inspections data within the permit boundary.

Measurable Goal (f) PRMD staff continues to conduct Final Grading inspections for all grading permits. See Table II.2 for Erosion Control Inspections data within the permit boundary.

Measurable Goal (j) The number of construction inspections conducted is reported within Table II.2.

➤ Agricultural Commissioner

Measurable Goal (g) Level II and III vineyard sites were inspected prior to the commencement of any work. One site consisted of 43 acres with the other site being 10 acres. See Table II.2 for Erosion Control Inspections data within the permit boundary.

Measurable Goal (h) Both Level II and III vineyard sites were inspected in autumn.

Measurable Goal (i) All Level I sites (15 total for a total of 223 acres) were inspected and required to have a cover crop to prevent erosion and sedimentation. Inspection of these sites

is not mandatory under the erosion and sediment control ordinance. See Table II.2 for Erosion Control Inspections data within the permit boundary.

Measurable Goal (j) The total number of vineyard site inspections conducted is reported within Table II.2. Erosion and Sediment Control site plans are reviewed in conjunction with a Certificate of Inspection to make sure the plans are complete and approved. No violations of the county ordinance were noted. See **Attachment II.4** for the Certificate of Inspection.

Table II.2
Erosion Control Inspections Data within the Permit Boundary

	FY03-04
“Significant projects”	25
Pre-construction meetings held with grading personnel on “significant projects”	15
BMP verification inspections conducted at “significant projects”, subsequent to the pre-construction meeting	15
“Sensitive sites” inspected for erosion control plan compliance prior to rainy season	4
Final Grading inspections conducted	55
A-BLD construction inspections conducted	4,032
B-BLD construction inspections conducted	13,282
Level II and III vineyard sites inspected prior to the commencement of any work	2
Level I vineyard sites inspected	15
Total number of vineyard site inspections	17

Additional Accomplishments

➤ **Permit and Resource Management Department**

PRMD staff developed an Erosion/Sediment Control Compliance Check Form to aid inspectors to assess compliance of construction sites. Inspectors also continue to use a Required Grading Inspections form for grading permitted activities. See **Attachments II.5** and **II.6** for the Erosion/Sediment Control Compliance Check Form and the Required Grading Inspections form.

2.5 Enforcement and Reporting of Non-Compliant Construction Sites

Measurable Goals/Implementation Schedule

- a. Continue enforcement protocol. Ongoing
- b. Propose to Board of Supervisors to amend the Sonoma County Code, for substantial increases in the civil penalties regarding NPDES violations, including construction site violations. As part of the proposed amendment, review the legal authority for right-of-entry for inspectors. Complete during Permit Term.
- c. Report information on the non-compliant sites to the RWB, in the Annual Report. Annually.
- d. Not due this reporting period.

Accomplishments**➤ Permit and Resource Management Department**

Measurable Goal (a) When inspectors determine a construction site is lacking necessary erosion prevention and/or sediment control measures, the responsible party on site is notified verbally and the owner is sent a Stormwater Non-Compliance Letter. This letter emphasizes the importance of BMPs to protect storm water quality and the owner is asked to comply within ten days, after which a re-inspection is conducted. If the construction site is still out of compliance, the owner is contacted again via a Stormwater Non-Compliance Letter – Final Notice. This final notice conveys similar information to the initial letter but with stronger language and reference to the RWQCB requirements. If the construction site is still out of compliance after another re-inspection is conducted, then the owner is referred to the RWQCB as a Referral of Non-Compliant Site. See **Attachments II.7, II.8, and II.9** for the Stormwater Non-Compliance Letter, Stormwater Non-Compliance Letter – Final Notice, and Referral of Non-Compliant Site Form.

Measurable Goal (b) The Board of Supervisors adopted Ordinance No. 5468 as an amendment to Section 1-7.1 of the Sonoma County Code in February of 2004. The amendment allows violations of drainage and storm water regulations to be subjected to civil penalties and also increased the monetary amount of such civil penalties. See **Attachment II.10** for a Summary of Ordinance No. 5468.

The legal authority for the inspector's right-of-entry was reviewed and is contained within the following codes:

- Section 7-13 of the Sonoma County Code
- Section 102 of the California Building Code
- Section 102.2.2 of the California Plumbing Code
- Section 65105 of the Government Code

Measurable Goal (c) Information regarding non-compliant sites is reported within Table 2.3.

Table II.3
Non-Compliant sites data within the permit boundary

Non-Compliant Sites Information	FY03-04
New grading violations	69
Resolved grading violations	37
Active grading violations	114
Non-Compliant sites	8
Repeat non-compliant sites	1
Referrals of non-compliant sites	0
Referrals of non-filers	0

Additional Accomplishments**➤ Permit and Resource Management Department**

Exceeding Provision C.14.c of Order No. R1-2003-0062, NPDES No. CA0025054, California Regional Water Quality Control Board, North Coast Region, PRMD staff investigate construction sites that are required to gain coverage under the General Construction Permit. If such construction sites cannot demonstrate having submitted an NOI or received a WDID then they are referred to the RWQCB within twenty days of discovery via a Referral of Non-Filer letter. See **Attachment II.11** for the Referral of Non-Filer.

2.6 Training of Targeted Staff**Measurable Goals/Implementation Schedule**

- a. Continue to provide training to staff, once per employee. Ongoing. (PRMD & Agricultural Commissioner)
- b. Continue to provide trainees time at staff meetings and Code Corners to encourage discussion of Erosion Control current practices. Ongoing.
- c. Provide formal training to all Engineering Division inspectors and Engineering Technicians in the Encroachment Section and Operating Division, once per employee. During the permit term (PRMD).
- d. Provide annual training to the Supervisors and Seniors in the Engineering Division, Operations Division, Building Division, and Code Enforcement Division. Annually (PRMD).
- e. Invite Regional Water Board staff to ride along with inspectors. Annually.

Accomplishments**➤ Permit and Resource Management Department**

Measurable Goal (a) Many staff members are involved in at least one aspect of the Grading Permit process, including technical, professional, supervisory, managerial, planning, and administrative staff. As such, extensive training has been provided to all members involved with the Grading Permit process. Many staff members attended different types of training sessions and participated more than once. See below for list of trainings conducted.

Measurable Goal (b) Staff members discuss topics learned from trainings, such as BMPs and water quality issues, during staff meetings and individually. Discussion of current erosion control practices continues to be encouraged.

Measurable Goal (c) Formal training has been provided to all Engineering Division inspectors and Engineering Technicians in the Encroachment Section and Operations Division. See below for list of trainings conducted.

Measurable Goal (d) Formal training has been provided to the Supervisors and Seniors in the Engineering Division, Operations Division, Building Division, and Code Enforcement Division. See below for list of trainings conducted.

From July 1, 2003 through June 30, 2004, County PRMD staff attended the following NPDES related training sessions:

1. 21 staff members attended a workshop held in Santa Rosa on October 9, 2003 entitled "Santa Rosa Area SUSMP Workshop".
2. 1 NPDES Section staff member attended in-house training on October 13, 14 & 15, 2003 regarding NPDES permits, regulations and storm water quality issues.
3. 2 staff members attended field training on October 23, 2003 regarding construction site BMP installations and inspections.
4. 1 NPDES Section staff member attended a workshop held in Roseville on October 27, 2003 entitled "Storm Water Pollution Prevention Plan".
5. 2 staff members attended field training on October 29, 2003 regarding construction site BMP installations and inspections.
6. 3 Engineering Division staff members attended a workshop held in Napa on October 30, 2003 entitled "Construction Site Planning and Management for Water Quality Protection".
7. 12 Building Inspection Section staff members attended in-house training on November 5, 2003 regarding NPDES permits, regulations and storm water quality issues.
8. 2 Building Inspection Section staff members attended field training on November 13, 2003 regarding construction site BMP installations and inspections.
9. 2 Building Inspection Section staff members attended field training on November 24, 2003 regarding construction site BMP installations and inspections.
10. 3 staff members attended field training on December 5, 2003 regarding site review and construction site BMP installations.
11. 3 staff members attended field training on December 17, 2003 regarding Well & Septic water quality issues.
12. 1 Drainage Review staff member attended a course held in Oakland on January 29 & 30, 2004 entitled "Design of Stormwater Management Systems".
13. 7 staff members attended field training on February 5, 2004 regarding construction site BMP installations and inspections.
14. 1 NPDES Section staff member attended a course held in Oakland on February 23 & 24, 2004 entitled "Design of Storm Sewers and Pavement Drainage".

15. 14 Project Review staff members received training on California tiger salamanders, SUSMP (including the requirements of the NPDES permits) and Coho salmon recovery plan on March 31, 2004.
16. 15 Well & Septic Section staff members attended in-house training on May 12, 2004 regarding NPDES permits, regulations and storm water quality issues.
17. 13 staff members attended in-house training on May 19, 2004 regarding NPDES permits, regulations and storm water quality issues.
18. 22 staff members attended in-house training on May 26, 2004 regarding NPDES permits, regulations and storm water quality issues.
19. 2 staff members attended field training on June 2, 2004 regarding construction site BMP installations and inspections.
20. 21 staff members attended field training on June 16, 2004 regarding construction site BMP installations and inspections.
21. 23 staff members attended field training on June 30, 2004 regarding construction site BMP installations and inspections.

Measurable Goal (e) Paul Keiran, from the NCRWQCB, was invited to attend the construction site BMP training conducted on June 30, 2004, at a demonstration site located at the intersection of Mark West Springs Road and Riebli Road in the Santa Rosa area. The training is listed above as item 21 and was considered a success. Mr. Keiran's attendance and insight were greatly appreciated.

3.0 INDUSTRIAL/COMMERCIAL SOURCES

Goal: Reduce the potential for pollutants to contact storm water to MEP

3.1 Inventory of Facilities

Measurable Goals/Implementation Schedule

- a. Maintain database of retail food facilities and closed landfills (EH) and businesses regulated by DES, within permit boundary/Update annually.

Accomplishments

➤ **Environmental Health**

EH created an inventory in the Division's Dataease database for retail food facilities in the City of Santa Rosa and the unincorporated areas of the permit boundary to track business compliance and program performance for the following types of food facilities that are to be inspected twice during the five-year permit:

- Prepare food or drinks
- Restaurants
- Markets
- Bars with food preparation
- Bakeries

As of June 30, 2004, the inventory included 470 retail food facilities within the City of Santa Rosa and 92 retail food facilities within the unincorporated area of the county. EH uses the Dataease database in which landfill and retail food facility data is maintained. Copies of paperwork are maintained in EH files in the office and site-specific inspection, permitting, complaints and other data are maintained in the EH Dataease management system. See **Appendix II.C** for a sample tracking form produced from the database showing examples of inspections.

➤ **Department of Emergency Services**

DES regulates approximately 1,330 businesses under its Certified Unified Program Agency (CUPA) program. The database, CUPA DMS, has been in use for several years, and is used to track storm water inspections. It is being modified to denote the sites covered by the expanded NPDES permit boundary.

These activities meet the requirements of Provision 15(a) of Order No. R1-2003-0062.

3.2 Retail Food Facility Inspections

Measurable Goals/Implementation Schedule

- a. EH staff will inspect all retail food facilities within new expanded NPDES permit boundary twice during the 5-year permit term. The first inspections will begin within 12 months of permit adoption, and there will be a minimum interval of one year between the first compliance inspection and the second compliance inspection.

Accomplishments

➤ Environmental Health

BMP observations are written on a “Food Facility Storm Water Inspection Report” and attached to the routine inspection report as an addendum. A copy of this report is provided to and discussed with the food facility owner/operator. A copy of this report is stored in the Environmental Health Division’s food facility files for a five-year period. **(See Appendix II.D)**

EH staff conducted 12 storm water pollution Best Management Practice (BMP) inspections (as described in 3.6 below) at food facilities in the limits of the Permit boundary. Ten of these food facility BMP inspections were conducted within the City of Santa Rosa limits and two were conducted within the unincorporated area. No food facilities required follow-up inspections for deficiencies that were determined to need immediate attention. There will be a minimum of one year before the next BMP inspection will be performed at these food facilities.

3.3 Retail Gasoline Outlet and Automotive Service Facilities Inspections

Measurable Goals/Implementation Schedule

- a. Continue to inspect RGOs on an annual basis and ASFs on a routine basis. Ensure that the sites are complying with regulations.
- b. Enhance inspections to include storm water BMPs/RGOs in 2003/ASF's in 2004.
- c. Increase inspection frequency for ASFs/once every 2.5 years.

Accomplishments

➤ Department of Emergency Services

Measurable Goals(a) and (b): DES inspectors included discussion of stormwater BMPs, including common items such as establishing wash racks with containment, covering oily parts to prevent runoff, etc. at their inspections of retail gasoline outlets (RGOs) during 2003-2004. During this period, DES conducted 73 RGO inspections and 32 ASF inspections in the Phase 1 Term 2 area.

Measurable Goal (c): ASF inspection frequencies have increased. No major non-compliance issues related to storm water regulations were noted. This will be an ongoing effort on the part of DES.

3.4 Industrial/Commercial Facilities Enforcement

Measurable Goals/Implementation Schedule

- a. Use progressive enforcement approach to issues for noncompliant facilities/Ongoing.
- b. Not due this reporting period.
- c. Referrals will also be made as necessary to the RWQCB. This is expected to begin during the 3rd quarter of 2003.

Accomplishments

➤ Department of Emergency Services

Measurable Goal (a): If serious storm water violations are observed, they would be enforced in accordance with procedures described in the Storm Water Management Plan, Section 3.4, using a progressive approach.

Measurable Goal (c): DES makes referrals to the RWQCB as necessary for matters related to SWPP. On 6/25/04, DES referred a complaint related to 6530 Old Redwood Highway to the RWQCB. The property is being flooded because of a broken water line on a neighboring property.

3.5 Interagency Coordination for Industrial/Commercial Facilities

Measurable Goals/Implementation Schedule

- a. EH inspectors will continue to participate in the monthly co-permittee coordination meetings.
- b. EH staff will notify the Regional Water Board within 60 days of retail food facilities that receive a third violation notice.
- c. DES staff attend SEQAC or other roundtable discussion/Begin 2003.

Accomplishments

➤ Environmental Health

Measurable Goal (a): EH staff attended monthly co-permittee coordination meetings as well as monthly coordination meetings among County Department staff.

EH staff met on several occasions with Permit and Resource Management Department and Department of Transportation and Public Works staff to discuss spill response regarding private on-site waste disposal (septic) system and other sewage spills. Written procedures are being prepared to outline roles of the various agencies involved in the cleanup of sewage spills. This effort is focused on coordination of spill response between County departments and outside agencies. Section 5.2 of this report describes Measurable Goals for investigation conducted by PRMD of illicit discharges from failed septic systems on private property.

Measurable Goal (b): EH staff notified the North Coast Regional Water Quality Control Board staff within the 60 day time period of one retail food facility within the City of Santa Rosa that had been issued a third violation notice for illicit discharge of pollutants to the storm drainage system. (450 Mendocino Avenue, Santa Rosa)

➤ **Department of Emergency Services**

Measurable Goal (c): DES staff attend Sonoma Environmental Quality Assurance Committee (SEQAC) meetings quarterly in which issues related to storm water are frequently discussed. This organization is comprised of many regulatory agencies involved with hazardous material control. The purpose of the meetings is to improve interagency coordination and cooperation and to provide educational opportunities for inspectors. Participation allows County departments to develop more coordinated outreach procedures, and the ability to respond quickly to environmental emergencies through effective coordination between all involved agencies. The most recent meeting was held on 7/28/04, at which the Bay Area Air Quality Management District representatives discussed dry cleaning establishment compliance issues. See **Appendix III.F** for this permit year's SEQAC agendas.

3.6 Training of Targeted Staff

Measurable Goals/Implementation Schedule

- a. Train EH inspectors at least annually on procedures, policies and BMPs for storm water pollution prevention and control. Distribute to EH inspectors appropriate educational and training materials on inspection procedures, record keeping and enforcement/referral procedures.
- b. EH staff will discuss storm water pollution issues at retail food facilities during bi-weekly Retail food Team staff meetings and discuss non-hazardous storm water pollutant discharges during quarterly Emergency Response Team staff meetings.
- c. It is expected that training for DES inspectors in storm water pollution prevention standards will be conducted by the 3rd quarter of 2003.

Accomplishments

➤ **Environmental Health**

Measurable Goals (a) and (b): EH staff discussed storm water pollution issues at several bi-weekly Food Program staff meetings. On June 24, 2004, EH staff was trained about storm water inspection procedures for food facilities that included:

- Storm water permit background information
- Enforcement procedures
- "Food Facility Storm Water Inspection Report" procedure
- Distribution procedures for the "Food Facilities Storm Water Pollution Quick Reference" Guide
- Time recording procedures

13 field staff and one manager attend bi-weekly Food Program staff meetings. See **Appendix II.E** for procedures and Food Facilities Storm Water Pollution Quick Reference Guide.

EH Program Managers made a presentation to the Department of Health Services Managers at the monthly meeting in March 2004 about the storm water program and EH roles.

➤ **Department of Emergency Services**

Measurable Goal (c): Five DES inspectors/manager reviewed written materials related to storm water BMPs. In addition, two DES personnel attended a training class on storm water pollution prevention and in conducting storm water inspections on 4/29/04 in Marin County. Training of inspectors will be an ongoing effort for DES.

4.0 MUNICIPAL OPERATIONS

The purpose of this section is to document the goals, existing activities, and proposed activities associated with Municipal Operations. For purposes of this document, Municipal Operations includes the following activities:

- 4.1 Public Construction Activities
- 4.2 Landscape and Recreational Facilities Management
- 4.3 Storm Drain System Operation and Maintenance
- 4.4 Streets and Road Maintenance
- 4.5 Parking Facilities Management
- 4.6 Emergency Procedures.

4.1 Public Construction Activities

Goal: The goal of the Public Construction Activities section is to incorporate Best Management Practices (BMPs) to reduce the discharge of pollutants in storm water runoff, especially sediment, from public construction sites.

4.1.1 Contract Documents

Measurable Goals/Implementation Schedule

- a. Continue to reference appropriate BMPs in construction documents for public construction projects/ongoing
- b. Review and update Construction Standard Documents to ensure they include the most recent BMPs/once during permit term.

Accomplishments

➤ General Services

Measurable Goals (a) and (b): General Services has two active projects within the permit boundary under construction in compliance with the State General Construction Permit.

- Juvenile Justice Center
- Valley of the Moon Childrens' Home

See **Appendix VI.B**, for an example of updated construction standards for contracts.

➤ Transportation and Public Works (TPW)

Measurable Goals (a) and (b): TPW continually reviews and updates project documents as they are developed during a project design phase. Special Provisions for each project consider individual site requirements and construction practices that may impact stormwater quality. See the Special Provision section from the Grange Road Bridge Replacement in **Appendix II.F** as an example of the contract documents related to stormwater.

4.1.2 Compliance with State General Construction Permit

Measurable Goals/Implementation Schedule

- a. Continue to submit NOIs for projects subject to the State General Construction Permit requirement throughout the permit term.

Accomplishments

➤ **General Services**

General Services has two active projects within the permit boundary under construction in compliance with the State General Construction Permit.

- Juvenile Justice Center and
- Valley of the Moon Childrens' Home.

Notices of Intent have been filed and Storm Water Pollution Prevention Plans have been prepared. (WDID#1 49S320170)

All BMPs have been implemented. Retention basins have been installed, and erosion control measures are in place. County staff are continuing to monitor the construction contractor's SWPPP. No illicit discharges have occurred at the site, and no enforcement actions are necessary. Expected completion of the projects is July 2005. Post construction measures will be reviewed in the next reporting year for applicability.

➤ **Regional Parks**

Regional Parks has one active project within the permit boundary under construction in compliance with the State General Construction Permit.

- Spring Lake Park Children's Memorial Grove

A Notice of Intent has been filed (WDID 149C324641) and a Storm Water Pollution Prevention Plan has been prepared. All BMPs have been implemented. No illicit discharges have occurred at the site, and no enforcement actions are necessary. Expected completion of the project is December 2005.

➤ **Transportation and Public Works**

DTPW had no projects that disturbed more than one acre during FY 2003/2004. Therefore no Notice of Intent was required for projects constructed during the reporting period.

4.1.3 Inspection

Measurable Goals/Implementation Schedule

Continue to inspect public construction sites during construction activities on an on-going basis.

Accomplishments**➤ General Services**

General Services has two active projects within the permit boundary under construction in compliance with the State General Construction Permit.

- Juvenile Justice Center and
- Valley of the Moon Childrens' Home.

Inspection of erosion and sediment controls was conducted daily at the site.

➤ Regional Parks

Regional Parks has one active project within the permit boundary under construction in compliance with the State General Construction Permit.

- Spring Lake Park Children's Memorial Grove

All BMPs have been implemented. No illicit discharges have occurred at the site, and no enforcement actions are necessary. Expected completion of the project is December 2005.

➤ Transportation and Public Works

Construction inspection staff typically review the following materials prior to commencement of construction activity related to this permit:

- Notice of Intent (NOI) (if applicable)
- Soils/Geotechnical report
- Materials reports for identification of hazardous materials
- Drainage reports
- Regulatory Agencies
- Specific BMPs detailed in the PS&Es

DTPW construction inspection staff also review the resident engineers daily logs to facilitate the permit requirements.

4.1.4 Enforcement**Measurable Goals/Implementation Schedule**

- a. Continue to enforce the construction documents including the provisions set forth regarding failure to carry out orders given or to perform the provisions of the contract.

Accomplishments**➤ General Services**

General Services has two active projects within the permit boundary under construction in compliance with the State General Construction Permit.

- Juvenile Justice Center and
- Valley of the Moon Childrens' Home.

If there was any interruption in erosion control measures, the construction contractor was verbally made aware and asked to correct it. All issues were promptly corrected. The contractor is responsible for any fines that may be levied against the project for permit violations.

➤ **Regional Parks**

Regional Parks has one active project within the permit boundary under construction in compliance with the State General Construction Permit.

- Spring Lake Park Children’s Memorial Grove

No illicit discharges have occurred at the site, and no enforcement actions are necessary. Expected completion of the project is December 2005.

➤ **Transportation and Public Works**

DTPW construction inspection staff continues to monitor and enforce standard specifications and special provisions in the contract documents.

4.1.5 Training of Targeted Staff

Measurable Goals/Implementation Schedule

- a. Continue to provide training to all applicable staff involved in Public Construction projects/ongoing.
- b. Provide annual training to key personnel to enhance construction BMP knowledge/annually.

Accomplishments

➤ **General Services**

Project managers attended a SUSMP workshop presented by City of Santa Rosa on October 9, 2003, and discuss the project at monthly staff meetings.

➤ **Regional Parks**

Four Regional Parks staff attended a SUSMP workshop presented by City of Santa Rosa on October 9, 2003. Construction projects are discussed at regular staff meetings.

➤ **Transportation and Public Works**

DTPW staff have attended trainings and seminars related to stormwater quality, erosion and sediment control measures and BMPs. Specifically two staff attended:

- October 9, 2003 SUSMP workshop presented by City of Santa Rosa, County of Sonoma and Sonoma County Water Agency.

4.2 Landscape and Recreational Facilities

Goal: Incorporate Best Management Practices (BMPs) to minimize the discharge of pollutants in storm water run-off from existing landscape and recreational facilities. This section focuses on chemical (pesticides, herbicides, and fertilizers) use, storage, disposal, and reduction as well as proper disposal of vegetation and other debris and minimizing pollutants from entering permittee-owned recreational water bodies.

4.2.1 Pesticide Management

4.2.2 Fertilizer Management

4.2.3 Native Vegetation

Measurable Goals/Implementation Schedule

- a. Continue to implement the chemical use, storage, disposal, and reduction practices outlined above/on-going.
- b. Continue to follow the current practices regarding retention and planting of native vegetation and water conservation/on-going.
- c. Not due this reporting period.
- d. Not due this reporting period.

Accomplishments

➤ Regional Parks

Pesticides, Herbicides And Fertilizer: The Sonoma County Regional Parks Department held two Pesticide Seminars within the permit year. At the seminar on October 28, 2003, 158 people attended, including 10 employees of the Regional Parks Department. At the seminar on April 27, 2004, 63 people attended, including 7 employees of the Regional Parks Department. This workshop presented management techniques for turf maintenance, Integrated Pest Management, biological control methods, effective use of herbicides, and laws and regulations.

Regional Parks has an active volunteer program that hosts projects to reduce non-native invasive species such as *Arundo donax* and *Cytisus scoparius*. Reduction of pesticides is ongoing at West County Trail. Further reductions are planned at other parks. Fertilizer use is being studied, and there may be reductions possible.

4.2.4 Landscape waste disposal

Measurable Goals/Implementation Schedule

- a. Continue to implement the current practices regarding proper disposal of landscape waste/on-going.
- b. Not due this reporting period.

Accomplishments

➤ Regional Parks

Measurable Goal (a): Landscape Waste Disposal Program Outline

The Regional Parks Department currently complies with known regulations regarding disposal of vegetation and debris. Generally, vegetation and debris are disposed of at the Sonoma County Landfill, utilising the County's waste recycling program to the greatest extent possible. Vegetation is disposed of at the mulching facility and recyclable materials are recycled. A majority of Regional Park Department facilities include separate containers to collect recyclable items from facility users.

Sonoma County Landfill:

Turf clippings
Weeds
Non-native vegetation

Mulching/Compost on-site (chipped debris):

Select facilities:

Crane Creek	Hood Mountain
Shiloh	Foothill
Spring Lake	County Complex
Public Health	Los Guillicos
Orenda Center	

No compost/mulching at sites near tributaries

Tree Debris:

Native tree debris at 4" or less is chipped and dispersed on site

Non-native tree debris at 4" or less is recycled at the Sonoma County Green Waste Recycling Center

All tree debris 4" and above turned into firewood to sell in Regional Parks Campgrounds

4.2.5 Recreational Water Bodies

4.2.6 Swimming Pool Discharge

Measurable Goals/Implementation Schedule

- a. Continue to implement the current practices regarding management and monitoring of recreational water bodies and swimming pools/on-going.
- b. Not due this reporting period.

Accomplishments

➤ Regional Parks

Regional Parks has filed a Notice of Intent to comply with the State General Permit #CAG990005 for Discharge of Aquatic Pesticides to manage recreational water bodies.

4.3 Storm Drain System Operation And Maintenance

Goal: The goal of the Storm Drain System Operation and Maintenance section is to remove the load of pollutants prior to their reaching waterways

4.3.1 Drainage System Mapping

Measurable Goals/Implementation Schedule

- a. Not due this reporting period.
- b. Not due this reporting period.
- c. Not due this reporting period.
- d. Complete inventory of closed conduit system in the Larkfield/Wikiup and Airport Business Park urban areas by June 2005 (TPW).
- e. Not due this reporting period.

Accomplishments

➤ Transportation and Public Works

DTPW staff kicked off this work, holding three meetings to develop the scope of work and standard operating procedures necessary to meet the requirements of the permit but also to integrate the mapping efforts into the department's GIS system. The benefit of this approach will be to utilize the GIS system to manage the storm drain system maintenance efforts and the illicit discharge management efforts.

4.3.2 Clean and inspect storm drainpipes and inlet structures

Measurable Goals/Implementation Schedule

- a. Continue annual inspection of problem inlets and clean as necessary.
- b. Not due this reporting period.

Accomplishments

➤ Transportation and Public Works

DTPW continued with the standard practice of annual inspections of inlets and culverts that have a history of problems. They were cleaned as necessary.

4.3.3 Open Channel or Roadside Ditch Inspection and Maintenance

Measurable Goals/Implementation Schedule

- a. Continue to inspect roadside ditches on an annual basis and remove trash and debris as necessary to prevent or minimize flooding and erosion.

Accomplishments

➤ Regional Parks

Cleaning and inspection of storm drain inlets and roadside ditches was conducted as needed at the onset of the rainy season.

➤ Transportation and Public Works

DTPW continued with the standard practice of inspections of roadside ditches and cross culverts. Debris and trash are removed as necessary.

4.3.4 Storm Drain Labeling

Measurable Goals/Implementation Schedule

- a. Develop an outline of the written storm drain labeling program in Year 1 of the permit (Parks).
- b. Not due this reporting period.
- c. Not due this reporting period.
- d. Label 100 existing storm drain inlets per year until all inlets are labeled in the Larkfield/Wikiup and Airport Business Park urban areas (TPW).
- e. Label new storm drain inlets in the Larkfield/Wikiup and Airport Business Park urban areas during installation (TPW).

Accomplishments

➤ Regional Parks

Measurable Goal (a): Storm drain label design is being developed in coordination with the Russian River Watershed Association, with the goal of having a regional message applicable to all MS4 permittees within the watershed.

➤ Transportation and Public Works

Measurable Goal (d): Sonoma County DTPW joined the efforts of the other co-permittees and the Russian River Watershed Association in a coordinated effort to enhance the general public's understanding of stormwater issues through a common regional message. Part of that regional approach is the use of a common storm drain label. This work delayed the labeling program that was to be accomplished during this reporting period. It appears that the positive impact to public awareness through the use of a common storm drain label will outweigh the slip in schedule of the labeling program. Measurable Goal (d) will be implemented beginning in 2004-2005.

Figure II.B is the new regional design for Sonoma County storm drain labels. It is on a 5-inch Duracast street marker from Das Manufacturing. Sonoma County Waste Management Agency is proposing to use "Used Oil Block Grant" funds to purchase 12,000 labels, and hire a contractor to install them on storm drain inlets throughout residential areas in the County. The label design was selected based on a cooperative approach by Waste Management Agency, Russian River Watershed Association, and their member agencies including Sonoma County, Sonoma County Water Agency, Cloverdale, Healdsburg, Rohnert Park, Petaluma, Sebastopol, City of Sonoma, Windsor, and Santa Rosa.

Figure II. B

Regional Design for Sonoma County Storm Drain Labels



4.4 Streets and Road Maintenance

Goal: Reduce the impact of street and road operations and maintenance on storm water quality. Streets and roads may collect litter and debris from nearby activities, as well as from vehicular traffic. They also require routine maintenance, which may generate waste materials.

4.4.1 Street sweeping frequency

Measurable Goals/Implementation Schedule

- a. Industrial/Commercial areas within boundary – sweep 6 times per year (TPW) starting in year 3 of the program.
- b. Not due this reporting period.
- c. Not due this reporting period.
- d. Various/Intersections/Other (TPW and Regional Parks)/sweep upon request.

Accomplishments

➤ **Transportation and Public Works**

Measurable Goal (a) TPW continues to sweep based on priority levels established in the permit and as operations and maintenance activities affect the sweeping program. A new street sweeper was purchased to replace a less reliable model. Also, the Airport Industrial/Commercial areas have received additional attention and were swept more frequently than 6 times per year. Measurable Goal 4.4.1(a) has been implemented early.

The TPW sweeping program for the entire county road system removed 204 cubic yards of material from the road surfaces which would have been washed into the storm drain system.

➤ **Regional Parks**

Measurable Goal (d): Regional Parks did not receive any requests for sweeping of roads and parking areas within its facilities during the permit term. A log book is kept to track the amount of oil or contaminants that are picked up within facilities maintained by Regional Parks.

4.4.2 Materials management

Measurable Goals/Implementation Schedule

- a. Continue to implement current good housekeeping practices regarding materials management.

TPW crews continue to work with the California Highway Patrol to coordinate the cleanup of fuel spills resulting from vehicular accidents.

TPW personnel collected and disposed of the equivalent of 40 55-gallon drums of hazardous waste in County right-of-way within the permit boundary as follows:

- 26 – normal maintenance
- 13 – illegal dumping
- 1 - spill

4.4.3 Training of targeted staff

Measurable Goals/Implementation Schedule

- a. Continue meetings to discuss streets and road maintenance activities throughout the permit period. (Parks)
- b. Continue biweekly road-crew tailgate meetings to discuss streets and road maintenance activities throughout the permit period. (TPW)
- c. Review current streets and road maintenance practices, including BMPs related to materials management, on an ongoing basis throughout the term of this permit.
- d. Complete draft routine road maintenance standards manual that addresses water quality and fish protection, while providing for public safety. This is a collaborative effort with other counties, and a draft is expected during 2003.
- e. Analyze draft manual for fiscal impacts and return to Board of Supervisors for policy direction. This step is anticipated in 2003 or 2004.

Accomplishments

➤ Regional Parks

Measurable Goal (a): Maintenance staff met weekly and discussed street and road maintenance activities.

➤ Transportation and Public Works

Measurable Goals (b) and (c):

TPW Maintenance staff received four hours of training on wetlands permitting requirements on February 11 and March 24, 2004. See **Appendix II.G** for agenda.

10 TPW design staff received training on NPDES permit requirements on April 29, 2004. See **Appendix II.H** for agenda.

PRMD Environmental Review staff who provide environmental support to TPW received training on NPDES permit requirements on May 12, 2004. See **Appendix II.I** for agenda.

➤ Transportation and Public Works

Measurable Goals (d) and (e): DTPW maintenance staff have begun to implement procedures in the *draft* FishNet 4C Regional Endangered Species and Watershed Protection Program, Operations and Maintenance Standards. The final draft of this document is currently being developed

4.5 Parking Facilities Management

Goal: Reduce the discharge of pollutants to storm drain systems due to street and road maintenance, with a focus of maintaining debris-free parking facilities and minimizing excessive oil buildup.

4.5.1 Sweeping

See Section 4.4.1: Street Sweeping Frequency

4.5.2 Spill Clean-up

Measurable Goals/Implementation Schedule

- a. Continue to clean up and dispose of spills in paved parking areas within Regional Parks Department jurisdiction in accordance with current practices.

Accomplishments

➤ Regional Parks

There were no spills during the reporting period in any facilities within Regional Parks jurisdiction.

4.6 Emergency Procedures

Goal: Emergency procedures recognize that public health and safety are the highest priority when conducting emergency response activities; however, such procedures should protect surface water quality by incorporating appropriate BMPs into emergency response activities.

4.6.1 Emergency Operations Plan

Measurable Goals/Implementation Schedule

- a. Follow Area, Emergency Operations and Spill Plans. The Area Plan is currently being used for emergency response procedures. The Emergency Operations Plan and Spill Plan are also currently being used for emergency planning and response.
- b. Review and update Area Plan in August 2003.
- c. Not due this reporting period.
- d. Review and update Spill Plan in August 2003
- e. Include information about Plan updates in Annual Reports
- f. Continue to work with other agencies and County departments in planning for and responding to emergencies involving releases or threatened releases of hazardous materials throughout the permit term.

Accomplishments**➤ Emergency Services**

In accordance with Provision 3 of Order No. R1-2003-0062, Sonoma County Division of Fire Services staff presented the topic of “reasonable measures to address minimizing the impacts of fire-fighting flows to the environment” to a meeting of Fire Chiefs of Sonoma County in the spring of 2003. Paul Keiran of North Coast Regional Water Quality Control Board gave a presentation to the group. BMPs are required to be implemented to reduce pollutants from non-emergency fire fighting flows (i.e., flows from controlled or practice blazes).

Revise & update Oil Spill Contingency Plan (goal (d))	Completed	Updates completed during the 3 rd Quarter 2003
Revise & update Area Plan goal (b)	Underway	County Counsel completed its review of the Area Plan in June 2004. The Area Plan has already been reviewed by other agencies. It is expected to go to the BOS in August 2004.

As described in the above table, Measurable Goal 4.6.1(b) has been modified. The Operational Area Hazardous Materials Incident Response Plan was adopted by the Board of Supervisors on August 17, 2004.

5.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

Goal The goal of the illicit discharge program is to detect and eliminate non-storm water discharges (except those that are exempt or conditionally exempt) from entering the storm drain system and to reduce pollutants from such discharge to the maximum extent practicable. Spills due to vehicular accidents and unintentional discharges are also included under this section.

5.1 Spill Response Investigation/Inspection and Follow-up Procedures, Including Public Reporting

Measurable Goals/Implementation Schedule

- a. County agencies will continue to investigate illicit discharges during inspections, complaint follow-ups and emergency response activities.
- b. Report the number of spills investigated in the annual report.

Accomplishments

➤ **Environmental Health**

EH received 14 calls from the public and other governmental agencies regarding spills or discharges of non-hazardous pollutants into the storm drainage system. 100% of the calls were responded by EH staff within one business day, usually the same day of the call.

Nine calls were in the unincorporated area of the county as follows:

- Grease discharges at food facilities – 3 calls, with 2 substantiated and corrected and 1 not substantiated
- Stagnant water in storm drainage systems – 2 calls substantiated and corrected
- Sewage discharges – 2 calls substantiated and referred to Permit and Resource Management Department
- Solid waste in creek – 1 call not substantiated
- Horse manure discharge to creek – 1 call not substantiated

Five calls were in the City of Santa Rosa as follows:

- Sewage spills – 3 calls, with 2 corrected by City staff and 1 corrected due to flushing by heavy rainfall
- Grease discharges at food facilities – 2 calls substantiated and referred to City staff for enforcement

See **Appendix II.J** for a log of spill response activities.

➤ **Emergency Services**

DES received and investigated five complaints within the Phase I permit boundary in 2003-2004.

5.2 Private Sanitary Septic Systems

Measurable Goals/Implementation Schedule

- a. PRMD's goal is within one business day to make referrals to the City of Santa Rosa agency for follow-up action when the sewage problem occurs on a property within the city limits from a failed septic system or from some other source, such as gray water or trailer.
- b. Continue to investigate illicit septic system discharges and report the number of spills in the annual report.
- c. Not due this reporting period

Accomplishments

➤ PRMD

PRMD received reports of 94 failed septic systems within the permit boundary in 2003-2004. These reports were not necessarily illicit discharges related to the storm drainage system because some failures did not result in liquid waste entering waterways/drainageways. 100% of the calls were responded to by PRMD staff in accordance with the procedures described in the Storm Water Management Plan. The ongoing active caseload of failed septic systems at the beginning of 2003-2004 was 24. 14 cases were closed during the year (either abated, repaired or otherwise corrected) and the remaining cases are currently being monitored (remain in the database for a period of several years, pending further problems). A site-specific report is available upon request.

5.3 Standardized Enforcement Procedures

Measurable Goals/Implementation Schedule

- a. County agencies will continue to pursue current enforcement actions to obtain compliance for illicit discharge detection and elimination. Report the number of enforcement actions in the annual report. Based on the sensitivity of the violation which includes the number of properties impacted and threat to public safety, this entire civil process may take anywhere between 15 days to over a year to gain compliance.
- b. County agencies will continue to implement existing enforcement procedures in the expanded NPDES permit boundary. County agencies will develop policies and procedures during the permit term.

Accomplishments

➤ Transportation and Public Works

An illicit sewage discharge in County road right-of-way was reported on East Robles Avenue. The spill was cleaned up by a vactor truck crew from the Santa Rosa Industrial Waste Division. There were no enforcement actions by TPW.

➤ **PRMD**

PRMD staff are overseeing the development of coordinated County enforcement response policies and procedures for discharges within the Phase I and Phase II permit boundaries. Meetings were held to discuss appropriate procedures on March 29 and May 20, 2004. Meetings included County staff, as well as staff from the Water Agency and Santa Rosa.

➤ **Environmental Health**

EH staff notified the North Coast Regional Water Quality Control Board staff within the 60 day time period of one retail food facility within the City of Santa Rosa that had been issued a third violation notice for illicit discharge of pollutants to the storm drainage system.

5.4 Record Keeping and Documentation

Measurable Goals/Implementation Schedule

- a. County agencies will continue to implement current record keeping activities that are used for input to the annual report.
- b. Report number of illicit discharge in the annual report/Annually.

Accomplishments

➤ **Environmental Health**

Records of illicit discharge investigation reports are maintained in the Division files for a period of five years.

Also see information about other department's record keeping activities in Sections 5.1 to 5.3 above.

5.5 Illicit Connection Investigation

Measurable Goals/Implementation Schedule

- a. County agencies will continue to investigate illicit connections and pursue enforcement action or refer to the appropriate agency for follow-up/ongoing.

Accomplishments

➤ **Environmental Health**

EH staff inspect storm drain systems at retail food facilities during routine inspections and during complaints. Staff reported finding no illicit storm drain connections during routine inspections and received no complaints of illicit storm drain connections.

5.6 Public Reporting

The activities and goals to accomplish this are included in Section 5.1 "Spill Response Investigation/Inspection and follow-up Procedures, including Public Reporting".

5.7 Disposal Of Used Oil And Toxic Materials

Measurable Goals/Implementation Schedule

- a. County agencies will continue to implement their programs for disposal of used oil and toxic materials/ongoing.
- b. DTPW will continue to submit the amounts collected in the annual report/Annually.

Accomplishments

➤ **Transportation and Public Works**

The Sonoma County Waste Management Agency, of which Sonoma County is a member, manages refuse disposal services for the cities and the County. The Sonoma County Department of Transportation and Public Works Integrated Waste Division owns and operates the public landfill and the refuse transfer stations throughout the County. Approximately 6,484 pounds of used oil was collected by the curbside oil and oil filter recycling program conducted as part of the refuse collection service for most of the incorporated cities and the unincorporated areas of the County in 2003-2004. Approximately 176,956 pounds of household toxics were collected from residents and small businesses at events conducted by the Sonoma County Waste Management Agency called "Household Toxics Roundups".

Also see 4.4.1 for a report on hazardous materials collected during road maintenance activities.

5.8 Training of Targeted Employees

Measurable Goals/Implementation Schedule

- a. Continue to train staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges and connections/ongoing.

Accomplishments

➤ **PRMD**

The PRMD Code Enforcement Manager attended the California Association of Code Enforcement Annual Seminar on September 24-27, 2003. Pertinent topics discussed included NPDES permit requirements, environmental crimes, and administrative citation programs. See **Appendix II.K** for conference agenda.

PRMD staff presented a workshop on arsenic in Sonoma County groundwater on September 17, 2003. See **Appendix II.L** for agenda.

➤ **Environmental Health**

Responses to illicit discharges are discussed at the quarterly Emergency Response Team staff meetings. Illicit discharge responses within the Phase I permit boundary are agendaized and discussed at the quarterly standby meetings. There were five illicit discharges discussed at the standby meetings for fiscal year 2003-2004, four involving sewage spills and one involving motor oil discharge.

6.0 PUBLIC EDUCATION AND OUTREACH

Goals

- a. Make the public aware of the significance of the non-point source/storm water pollution problem in the Laguna de Santa Rosa watershed.
- b. Explain what non-point source and storm water pollution are, and describe sources, pathways, and impacts.
- c. Make the public aware of the regulatory requirements faced by the co-permittees and the community, and the results of noncompliance.
- d. Develop a sense of community ownership of the storm water/non-point source pollution problem and promote cooperative source control as the community's response to the problem.
- e. Emphasize the importance of individual action and responsibility in controlling storm water/non-point source pollution.
- f. Coordinate with other agencies, which are involved in environmental education throughout the watershed to maximize the effectiveness of all of the programs.

6.1 Storm Drain Labeling

Note: The Storm Drain Labeling Program and performance standards are included in the Municipal Operations - Storm Drain System and Maintenance Section.

6.2 Ecology/Environmental Newspaper Column

Measurable Goals/Implementation Schedule

Not due this reporting period.

6.3 Website

See Section 6.7, "Hazardous Waste Disposal" for a description of activities and goals related to the Website activity.

6.4 Creek Stewardship

Measurable Goal/Implementation Schedule

Not due this reporting period.

6.5 Pet Waste Signs

Measurable Goals/Implementation Schedule

- a. Continue to provide pet waste signs at Regional Parks facilities.

Accomplishments

➤ Regional Parks

All facilities have pet waste signs posted as of April 2004. Four signs were posted in 2003-2004. One at Shiloh Regional Park in Windsor, two at Memorial Beach in Healdsburg, and one at Maddux Park in Santa Rosa.

6.6 Public Events

See Section 6.7, "Hazardous Waste Disposal" for a description of activities and goals related to public events.

6.7 Hazardous Waste Disposal

Accomplishments

See Table II.4 on next page for description of accomplishments.

➤ Transportation and Public Works

The Sonoma County Waste Management Agency (SCWMA) provides collection services for Sonoma County residents and businesses that qualify as Conditionally Exempt Small Quantity Generators under California H&SC Title 22. Since 1993, SCWMA has provided Household Toxics Roundups and Business collections, which were one-day collection events held in parking lots. In 1998, SCWMA operated a door-to-door collection program for both residents and businesses, which was discontinued. The door-to-door program will start again when the Household Toxic Waste Facility is opened. The Household Toxic Waste Facility is due to open in 2004. The Facility will be located at the Central Landfill and will provide weekly drop-off opportunities for both residents and businesses. Additionally, small community collections will be operated weekly in different locations throughout the County.

In addition to the above mentioned collection programs, the County operates five recycling centers for recyclable hazardous waste, such as auto batteries, oil and oil filters, at its solid waste disposal sites. All six disposal sites also have load-check programs to capture hazardous waste disposed of in the solid waste stream. The load check program includes an extensive screening and educational effort to inform landfill users of the proper disposal options available. Curbside oil and oil filter collection is offered with other curbside recycling in six jurisdictions (City of Healdsburg, City of Cotati, City of Sonoma, City of Santa Rosa, City of Rohnert Park and the unincorporated county). Lastly, there are 60 businesses and government-sponsored centers that accept oil from the public. Forty-seven of those oil recycling centers also accept oil filters and fourteen accept antifreeze. **Table II.5**, in Section 7.1 Effectiveness Evaluation below, summarizes the hazardous waste collected in fiscal year 2003-2004.

Table II.4
Household Hazardous Waste Programs Educational Efforts

Program Description	Reach	Budget
Sonoma County Recycling Guide		
The Sonoma County Recycling Guide is a 28-page booklet published in the SBC phonebook listing recycling and disposal options for both solid and household hazardous wastes. The Guide is updated annually. It includes schedules for hazardous waste collections, oil, filter and antifreeze recycling centers, battery recycling, paint recycling, fluorescent lamp bans and recycling, CRT bans and recycling and more.	210,000/yr Every Sonoma County residence and business.	\$53,000/yr Printing, postage and advertising budget. Staff time not included.
Eco-Desk Hotline		
The Eco-Desk Hotline is an information line operated by Sonoma County Waste Management Agency staff to answer questions on recycling and disposal of solid and hazardous wastes. The Eco-Desk (565-DESK) is staffed from noon - 3pm Monday - Friday. During off-hours, there is an extensive telephone tree system, which disseminates information. Callers may leave messages and receive a return call for information they cannot obtain from the telephone tree.	6,145 calls in 2003 and 4060 in 2004 (Jan-July) (this does not include those who obtained their information from the recorded messages)	\$4,000/yr in telephone and voice boxes. Staff time not included.
Sonoma County Waste Management Agency Website		
The Sonoma County Waste Management Agency maintains an extensive website at www.recyclenow.org . The website encompasses all of the information in the Recycling Guide (hazardous waste collections and centers) and more. There are 11 downloadable fact sheets on Integrated Pest Management.	Unknown	\$6,040 Consulting, domain name. Staff time not included.
Oil and Filter Recycling Campaign		
Since 1993, the Sonoma County Waste Management Agency has received annual grant monies to encourage and support oil and filter recycling. A large spectrum of campaigns have been conducted and continues to be conducted utilizing this funding. There is approximately \$150,000 available annually. Generally, 50% of those funds are used to conduct educational/publicity campaigns.	Varies by campaign	\$150,000/yr
Household Toxics Collections Publicity		
The Sonoma County Waste Management Agency publicizes its Household Toxics Roundups and other household hazardous waste collection programs. The methods include: press releases, printed schedules/brochures, banners, utility bill flyers, Recycling Guide, Eco-Desk Hotline, and the Sonoma County Waste Management Agency website. A big media effort will occur in 2005 to publicize the opening the Household Toxic Waste Facility.	Not quantifiable	\$7,000 - \$25,000/yr
Fair Booths		
Each year the Sonoma County Waste Management Agency has a booth at the Sonoma County Fair, the Harvest Fair and other public events as they arise. The booth is designed to be interactive and attention getting.	Over 320,000 attendees annually	\$11,234
Future Project		
NO Toxics Garbage Can Stickers		
In 2005, the Sonoma County Waste Management Agency will apply "NO Toxics" stickers to residential garbage cans throughout the County. The stickers inform residents that oil, oil filters and other hazardous waste can not go in the garbage, and provide the Eco-Desk Hotline phone number.	∇100,000 households	\$100,000

6.8 Illicit Discharge Educational Materials Disseminated at Spill Sites

Measurable Goals/Implementation Schedule

- a. Not due this reporting period.
- b. Continue to distribute educational materials during the course of normal inspection duties, as well as while investigating complaints and responding to releases of hazardous materials.

Accomplishments

➤ Environmental Health

EH continues to distribute “Food Facilities Storm Water Pollution Quick Reference” Guide during inspections and investigation of complaints, and responding to releases of hazardous materials. See Section 3.6 above for more information.

6.9 Private Septic Systems

Measurable Goals/Implementation Schedule

Not due this reporting period.

6.10 Industrial/Commercial Outreach as Part of Inspections

Measurable Goals/Implementation Schedule

- a. Continue to educate and assist food facility operators/owners to implement effective BMPs to control pollutants from reaching storm water drainage systems.
- b. Begin first inspections no later than 12 months after permit adoption and provide the food facility operator/owner with a copy of the “Storm Water Pollution Prevention Guidelines for Food Handling Facilities” during these inspections.
- c. Not due this reporting period.
- d. Distribute additional materials at the beginning of the 3rd quarter 2003, or as soon thereafter as possible depending upon availability.
- e. Discuss compliance issues with owner/operators and provide them with applicable materials to assist with answering their questions include storm water pollution BMPs. Continue to encourage ASF's to receive Sonoma Green certification/2003.

Accomplishments

➤ Environmental Health

Measurable Goals (a) and (b): EH staff distributed the “Food Facilities Storm Water Pollution Quick Reference” Guide to food facilities during the BMP inspections with the end goal being a reduction in Pollutants of Concern, namely oil and grease. 12 BMP inspections were conducted, as described in Section 3.2 above. 12 Guides were distributed during the inspections. EH staff met on several occasions with City of Santa Rosa Public Works and Utilities staff and the refuse collection company staff to coordinate and discuss options for reducing liquid leakage from dumpsters at food facilities within the City of Santa Rosa. An

article on liquid waste reduction practices was published in one of the refuse collection company's newsletter. See **Appendix II.M**.

➤ **Department of Emergency Services**

Measurable Goal (d) DES discusses stormwater compliance with operators during the normal course of inspections. Inspectors also have informational brochures related to specific industries that are handed out as appropriate. 73 retail gasoline outlet inspections were conducted, and 32 automotive service facility inspections, as described in Section 3.2, above.

Measurable Goal (e) Five businesses were certified "Sonoma Green Businesses" in 2003-2004. The program continues to expand, although it is still primarily focused on the auto repair industry/wineries/printers. A complete list of the Green businesses in Sonoma County and more information about the program can be found at http://www.sonoma-county.org/des/hm_green.htm See **Appendix II.N** for list of businesses.

6.11 Landscape and Agricultural Industries

Measurable Goals/Implementation Schedule

- a. Continue to provide pesticide users with oral and written information when they apply for permit or register annual registration/ongoing.
- b. Continue to instruct SRJC courses for State mandated continuing education for pesticide user licenses.

Accomplishments

➤ **Regional Parks**

The Sonoma County Regional Parks Department held two Pesticide Seminars within the permit year. At the seminar on October 28, 2003, 158 people attended, including 10 employees of the Regional Parks Department. At the seminar on April 27, 2004, 63 people attended, including 7 employees of the Regional Parks Department. This workshop presented management techniques for turf maintenance, Integrated Pest Management, biological control methods, effective use of herbicides, and laws and regulations.

➤ **Agricultural Commissioner**

The County Agricultural Commissioner's Department (AG COMM) receives monthly summary pesticide use reports from the City, County and Water Agency regarding the use of pesticides in Sonoma County. The reports document the name and manufacturer of products applied and their registration numbers, the total product used and the number of applications performed in a given month. Reports are forwarded electronically to the California Department of Pesticide Regulation. Golf courses and parks as well as agricultural and residential pesticide users report their pesticide use to the Agricultural Commissioner's office.

The AG COMM office continues its annual update to pesticide users who visit the office when applying for pesticide identification numbers, restricted material permits and when conducting annual registrations of maintenance gardeners and pest control businesses. Safe

use and storage of pesticides and hazardous storage and waste is discussed during these office visits. The AG COMM office also gives out the documents and brochures pertaining to pesticides and hazardous materials during these office visits.

The AG COMM staff conducted a two-hour pesticide laws and regulation, weed management, and endangered species update workshop in December 2003, which was attended by approximately 375 growers who needed continuing education hours in order to maintain their Private Applicator Certification. The ten-hour training sessions conducted in the Spring and Fall Semester at the Santa Rosa Junior College to provide continuing education for license and certificate holders were cancelled by the Junior College due to state budget cutbacks. These classes may be reinstated in the spring of 2005.

Education of the general public occurs when they contact the AG COMM office, and at the numerous seminars the AG COMM staff attends as speakers. Four recycling days in the spring and fall are held for plastic pesticide/chemical containers.

The AG COMM office continues to conduct inspections as scheduled, and the staff continues to respond to all complaints concerning pesticides.

➤ **Additional Accomplishments**

➤ **PRMD**

PRMD supports the Bay Area Regional Integrated Pest Management (IPM) group, through the Bay Area Storm Water Management Agencies Association (BASMAA). PRMD's involvement includes distributing fact sheets to five hardware stores in the unincorporated County, including Bassignani's Nursery within the permit boundary. The program encourages stores to carry less toxic products, conducts a special training of store employees so that they are able to answer questions from the public, holds public workshops in stores, and has a statewide website of IPM information, which includes information about participating stores in Sonoma County. More information about the program can be found at <http://www.ourwaterourworld.org>.

6.12 Building and Construction

Measurable Goals/Implementation Schedule

- a. Not due this reporting period.
- b. Not due this reporting period.
- c. Not due this reporting period.
- d. Not due this reporting period.

Accomplishments

None of the measurable goals in this section are required to be completed during this reporting period. However, the following public outreach activities were conducted.

➤ **PRMD**

PRMD participated in a series of educational presentations to the North Bay Association of Realtors (NorBAR). The series was designed for realtors who manage country property and

was offered in the fall of 2003 as well as in the spring of 2004. Members from the various divisions gave presentations about their respective areas of expertise including vineyard development, storm water quality issues, construction grading requirements, and septic issues. The audience learned about water quality issues such as environmental impacts of soil erosion and the difference between a sanitary sewer system and a storm drain system. A handout promoting a television program called “After the Storm” was distributed to the audience. “After the Storm” is an educational video, produced by the EPA and The Weather Channel, presenting the challenges facing the nation’s water quality. See **Appendix II.O** for the two Country Property Series agendas and the “After the Storm” handout.

PRMD publishes a quarterly newsletter presenting useful information and addressing current events related to the development community. *The PRMD Newsletter* is distributed to PRMD staff and made available to the public in the PRMD lobby. The following is an article that appeared in the winter 2003 issue:

THE RAINS HAVE COME

Construction operators are busy assuring clean stormwater runoff from their sites through effective erosion and sediment controls. The key to having effective erosion and sediment controls is proper installation and maintenance. Wouldn't you rather spend a little more time installing them once the right way during decent weather instead of constantly having to fix problems while it's raining or muddy?

Erosion controls such as slope stabilization with straw mulch should be applied at two tons per acre. Don't forget to crimp or tackify to keep it in place. Plastic sheeting and erosion control mats work well but they must be trenched in at the top of slope and be tight against the soil with proper overlapping. When using sediment controls like fiber rolls and silt fences, be sure to trench them in place and compact the excavated soil up slope of the device.

Contact your supplier or manufacturer for proper installation techniques. For more information on erosion and sediment controls visit the State Water Resource Control Board website at <http://www.swrcb.ca.gov/stormwtr/index.html>. And remember, it's important to have clean water leaving construction sites to help preserve our waterways.

➤ **Standard Notes**

Standard Grading Notes as well as standard Erosion Prevention and Sediment Control Notes (Standard Notes) were created by PRMD staff to provide minimum guidance for grading, erosion prevention and sediment control activities, and promote effective BMPs for grading construction operations. See Section 2.1 for a complete description of the Notes. The creation of the Standard Notes was an iterative process seeking input from a variety of sources within PRMD as well as throughout the development community. Contributors to the Standard Notes include Sonoma County Departments (Agricultural Commissioner, County Counsel, Transportation and Public Works, and Regional Parks), Regional Water Quality Control

Boards (North Coast and San Francisco Bay) and local engineering organizations (Consulting Engineers & Land Surveyors of California, American Society of Civil Engineers, and Engineering Contractors Association, Inc.). Once completed, the Standard Notes were mailed to 63 engineering firms as well as made available to the development community at PRMD.

➤ **Stormwater Quality Handout**

PRMD staff created a handout for the protection of stormwater quality for building permits which provides an overview of stormwater pollution sources and promotes effective BMPs for construction activities associated with building permits. The creation of the handout was an iterative process seeking input from a variety of sources within PRMD as well as throughout the development community. Contributors to the handout include the North Coast Regional Water Quality Control Board and local engineering organizations (Consulting Engineers & Land Surveyors of California, American Society of Civil Engineers, and Engineering Contractors Association, Inc.). The handout is stapled to all building permits and is available to the development community at PRMD. See Section 2.1 for further information regarding the handout.

6.13 Spring Lake Environmental Discovery Center

Measurable Goals/Implementation Schedule

- a. Continue to operate and manage Spring Lake Park Environmental Discovery Center /ongoing.
- b. Continue to seek sponsorship for operation of the Environmental Discovery Center.
- c. Continue to contribute funding to the Environmental Discovery Center to promote public education of storm water pollution prevention.

Accomplishments

➤ **Regional Parks**
Public Outreach

The Environmental Discovery Center (EDC) provides public outreach to school and community groups, bringing messages of environmental stewardship and responsible resource use to students, families, and individuals. One program the EDC offers is “Down the Drain” which relays messages about storm water pollution prevention to students and members of the public. The program ran from January 21-June 13, 2004.

Environmental Discovery Center Attendance at
Storm Drain Pollution Prevention Program “Down the Drain.”

Down the Drain ran from January 21 - June 13, 2004 (21 weeks)

Total visitors from the general public during the 21 weeks: **4,140**

Total school children that participated in Down the Drain instruction: **3,168**

Total schoolteachers and parents who participated in Down the Drain: **396**

For a grand total of **7,704** persons exposed to the Down the Drain message.

New Education partners include Medtronic Vascular and California Fish and Wildlife Commission. New Discovery Circle partners include North Bay Corporation and the Sonoma County District Attorney. Regional Parks contributes 2/3 of the education program funds used for the “Down the Drain program.

7.0 EFFECTIVENESS EVALUATION

Goal: Provide an assessment of the County's program implementation and permit compliance.

7.1 Formal Evaluation

The objective of the Storm Water Management Plan is to protect and enhance water quality by reducing storm water pollutants to the maximum extent practicable. Through implementation of the measurable goals in the plan, pollutant removal is achieved and the quality of urban storm water runoff is improved. The purpose of the effectiveness evaluation is to provide an assessment of program implementation and permit compliance. The assessment utilizes direct and indirect measurements to evaluate each of the program elements. The results are used to track progress and focus or redirect program resources to address pollutants of concern, via the workplan.

An example of a direct measurement is the amount of debris removed from the storm drain system as a result of municipal cleaning and maintenance activities. Removal and proper disposal of debris is a quantitative reduction in the pollutant load that would otherwise result in a discharge of pollutants to receiving waters.

Indirect measurements are used to evaluate program elements that cannot be numerically quantified, such as the educational impact the message "Drains to Creek-No Dumping" on a storm drain label may have in deterring an illicit discharge.

Since this is the first year of the permit term, comparisons of numeric achievements to establish trends from year to year are not possible. Data reported in this Annual Report will be compared to that of future years, and effectiveness evaluation including estimated pollutant load reductions will be accomplished in future years.

Measurable Goals/Implementation Schedule

- a. Compare Measurable Goals listed in the SWMP to actual work completed, and work with NCRWQCB staff and co-permittees on developing work plan elements/Annually.
- b. Document this information in the Annual Report/Annually.
- c. Increase level of coordination among County staff involved in completing SWMP activities, by hiring a Stormwater Coordinator/2002.

Accomplishments

➤ **Measurable Goals (a) and (b): Direct Measurement**

Part IV, Monitoring contains a complete discussion of monitoring program elements used to characterize reductions in pollutant loading to receiving waters from the overall program. An analysis of trends will be conducted in the final year of the permit term.

- **Amount of Hazardous Waste Collected**

Table II.5
Summary of Hazardous Waste Collection Programs
Fiscal Year 2003-2004*

Program	Fiscal Year	Participation by Residents	Participation by Businesses	Waste from Residents (lbs.)	Waste from Businesses (lbs.)	Reuse (lbs.)	Waste Total (lbs.)
Household Toxics Roundups	03-04	7,395	23	165,388	3,973	177	176,956
Load Check Program	03-04	-	-	-	-	-	
Recycling Only Recycling Centers	03-04	-	-	-	-	-	
Curbside Oil Recycling	03-04	6,484	-	-	-	-	6484
Vendor Recycling	03-04	-	-	-	-	-	
Total	03-04						183,440

*Not all program data for 2003-2004 are available

- **Acres of Open Space Acquired or Created**

The Sonoma County Agricultural Preservation and Open Space District acquired 528.9 acres of open space in fee in the last year. Title to open space lands acquired may be transferred to other entities, i.e., California State Parks, Sonoma County Regional Parks. In addition, 1,309 acres were protected by purchase of conservation easement.

- **Indirect Indicators**

Chapters 2. Private Construction, 3. Industrial/Commercial Sources, 4. Municipal Operations, 5. Illicit Discharge Detection and Elimination and 6. Public Education and Outreach above contain numeric data related to inspections, reporting from the public and educational and outreach activities. The following additional data is also relevant to effectiveness evaluation.

Number of Reports of Illegal Dumping from the Public

48 to PRMD Code Enforcement
 14 to Environmental Health

In addition to reports from the public, PRMD NPDES staff received

Five referrals from RWQCB staff and seven referrals from City of Santa Rosa stormwater staff related to sites within the permit boundary. Of these, seven were stormwater violations not related to building or zoning codes reported in Sections 2 and 5, above. Three sites achieved compliance after a verbal warning or first written notice, four files are still open pending further investigation. NPDES diversion spill response activities include educational outreach related to stormwater issues.

7.2 WORKPLAN:

Refer to the At a Glance table in Part I.4 for a full report on Measurable Goals completed, ongoing and modified. Based on the analysis of indicators, the overall program is determined to be effective. All Storm Water Management Plan activities will continue. The special study at C3 has been modified as described in 7.2 below. Implementation of measurable goals to begin in 2004-2005 is also described below. See **Attachment II.12** for a complete listing of measurable goals to be implemented in the next reporting period (2004-2005). The majority of the effort will be focused on developing the guidance documents for the SUSMP projects for which the City or County issue permits. This is a new program, which will involve setting up procedures to be followed for the long term, and it will involve a great deal of thought and expense. Emphasis will be placed on using proven methods to reduce stormwater volume and treat runoff where necessary. The County will provide leadership, administer the consultant contract for the guidance document development, and appoint a technical advisory committee to give input to the process.

Although no revisions to the County Code are required to implement the SUSMP, minor changes will be made to the list of conditionally exempt discharges in Section 11-29(b)(2) to include those in Order No. R1-2003-0062 Provision 3. Other code changes may be recommended during the public review process.

The County is also implementing a SWMP under the statewide general MS4 permit for the Petaluma and Sonoma unincorporated areas. This will result in additional actions to control stormwater pollution countywide where feasible. Efforts under that permit for 2004-2005 are expected to be focused on creating comprehensive written spill response and enforcement response plans.

7.3 MEASURABLE GOALS TO BE IMPLEMENTED BEGINNING 2004/2005

➤ **Public Education and Outreach**

6.2 Contact newspapers within 24 months of permit adoption and report on status in Annual Report. PRMD

6.4(a) Conduct survey of horse facilities adjacent to major creeks. Horse owners will be provided with a copy of the guidelines A Horse Owner's Guide to Water Quality.

6.10(b) Make a presentation to the Food Industry Advisory Forum (a committee of food industry owners and EH staff) about the storm water management plan and the changes for food facilities between Term 1 and Term 2 permits. EH

➤ **Illicit Discharge Detection and Elimination**

5.2 Develop policies and procedures for investigation and notification of appropriate agencies regarding illicit discharges from septic systems. PRMD

➤ **Private Construction**

2.5 (d) Create a policy and procedure for grading violations. PRMD

➤ **Industrial/Commercial Sources**

3.3(b) Enhance ASF inspections to include stormwater BMPs. DES

3.4(b) Actively pursue adopting Cal EPA's program enhancements for administrative enforcement. DES

➤ **Municipal Operations**

4.3.1(a) Develop priority system regarding inventory of closed conduit storm drains. Regional Parks.

4.3.4(c) Label 10 existing storm drain inlets per year until all inlets are labeled. This number will be re-examined after an inventory is completed. Regional Parks.

4.3.4(d) Label 100 existing storm drain inlets per year until all inlets are labeled in the Larkfield/Wikiup and Airport Business Park urban areas. TPW.

4.4.6(d) Analyze draft routine road maintenance standards manual and return to Board of Supervisors for policy direction. TPW

➤ **SUSMP**

Develop combined City/County SUSMP site design guidelines or requirements for developers (source controls).

Develop guidance on long term funding , inspection and reporting procedures for BMP maintenance.

Provide training to staff.

Provide workshop to the development community on planning procedures, policies, design guidelines and BMPs for stormwater pollution prevention.

Implement SUSMP measures on applicable projects within Urban Growth Boundary within Permit boundary.

Measurable Goal (c)

➤ **PRMD**

County department coordination meetings were held on July 10, August 14, October 16, November 20 and December 18, 2003 and on January 29, March 25, April 15, May 13 and June 10, 2004. Topics discussed included implementation of Storm Water Management Plans and County/Water Agency coordination issues. See **Appendix II.P** for agendas and minutes.

7.4 SPECIAL STUDIES

Measurable Goals/Implementation Schedule

- a. Continue to collect grab samples at C3 station and evaluate for sediment levels/annually via grab samples.
- b. Begin data collection and establish background levels of bacteriological activity at C3 station/annually via grab samples.
- c. Report data evaluation in Annual Report/ongoing.

Accomplishments**➤ Transportation and Public Works**

Measurable Goal 7.2 (a). has been revised as follows: The sediment portion of the study has been eliminated based on a recommendation from Regional Water Quality Control Board staff (letter to copermittees from John Short dated May 6, 2004, page 13 Special Studies) and a work plan for the bacteriological portion of the study was prepared. The work plan was presented to Regional Water Quality Control Board staff for their concurrence on 6/17/04. (See **Attachment 13** for Work Plan). An evaluation of Phase I of the study is included with this report. (See **Attachment 14** for Phase I Analysis)

➤ Environmental Health

EH staff assisted the Department of Transportation and Public Works in the development of a work plan for the Matanzas Creek Bacteriological Study.

8.0 FISCAL ANALYSIS

Goal Provide a financial accounting of the County's Storm Water Management Plan

Measurable Goals/Implementation Schedule

- a. Continue to report on expenditures and sources of funding for work related to the NPDES Phase I permit as part of each Annual Report/Annually.
- b. Develop new reporting structure for expenditures and sources of funding for work related to the NPDES Phase I permit/Within 12 months of permit adoption.
- c. Seek new revenue sources for storm water program, including fees related to those projects subject to SUSMP requirements/During permit term.
- d. Include discussion of fiscal resources in work plan meeting with RWQCB staff/Annually.

Accomplishments

- **Measurable Goals (a) and (b):**
- **A new reporting structure was implemented during 2003-2004. An outline of the reporting categories follows: (See Storm Water Management Plan Attachment 12 for more detailed description of activities to report in each category.)**

Program Management- County portion of lead agency costs, stormwater coordinator, management of budget and staff, Annual Report.

Private Construction- All activities by PRMD except department coordination, Illicit Discharge, Public Education & Outreach, SUSMP.

Industrial Commercial- Activities of Emergency Services and Environmental Health except spill response.

Municipal Operations- All activities of Transportation and Public Works except spill response, storm drain labeling, Waste Management Agency, SUSMP and monitoring activities, Regional Parks activities except storm drain labeling, pet waste signs and Environmental Discovery Center.

Illicit Discharge Detection and Elimination- response, follow-up and enforcement by Transportation and Public Works, Environmental Health, Emergency Services, PRMD

Public Education and Outreach- Transportation and Public Works storm drain labeling, PRMD construction outreach activities. Regional Parks storm drain labeling, pet waste signs and Environmental Discovery Center activities.

SUSMP- PRMD, Transportation and Public Works, Regional Parks: all measurable goals under this chapter of storm water management plan.

Monitoring- Transportation and Public Works monitoring program including annual chemical monitoring and special study.

Permit Costs- Fees only. (This fiscal year's permit fee of \$7,653.00 is included in various expenditures reported by PRMD below.)

➤ **Expenditures**

Table II.6 includes expenditures for each department with responsibilities under the MS4 permit, summarized by the categories above.

Table II.6
MS4 Expenditures for County Departments

	Department of Health Services/Environmental Health Division Department of Transportation and Public Works Permit and Resource Management Department General Services/Architect's Division Department of Emergency Services Agricultural Commissioner's Office Regional Parks Department CAO								TOTAL
Program Management/ Effectiveness Evaluation	\$11,827	\$21,666	\$76,824	\$0	\$0	\$3,565	\$2,200	\$13,071	\$129,153
Private Construction	\$0	\$0	\$40,650	\$0	\$0	\$0	\$0	\$0	\$40,650
Industrial/Commercial Sources	\$1,046	\$0	\$0	\$0	\$9,098	\$0	\$0	\$0	\$10,144
Municipal Operations	\$0	\$296,125	\$0	\$29,250	\$0	\$0	\$5,195	\$0	\$330,570
Illicit Discharge Detection and Elimination	\$4,393	\$0	\$8,674	\$0	\$6,065	\$0	\$0	\$0	\$19,132
Public Education and Outreach	\$527	\$0	\$28,632	\$0	\$0	\$0	\$1,640	\$0	\$30,272
SUSMP	\$0	\$0	\$26,876	\$0	\$0	\$0	\$0	\$0	\$26,876
Monitoring	\$0	\$13,000	\$0	\$0	\$0	\$0	\$0	\$0	\$13,000
TOTAL	\$17,266	\$330,791	\$181,656	\$29,250	\$15,163	\$3,565	\$9,035	\$0	\$600,324

➤ **Financial Plan**

The County is in the process of preparing budgets for the 2004/2005 fiscal year. The Board of Supervisors will finalize the budget in August 2004. The proposed budget includes funding sufficient to comply with the MS4 permit requirements, as shown below.

PRMD.....	\$504,230
Emergency Services.....	\$ 27,663
Environmental Health.....	\$ 18,598
Transportation and Public Works.....	\$360,500
Regional Parks.....	\$ 53,546
General Services.....	\$ 29,250
 TOTAL	 \$ 993,787

Also see Table II.4 in Section 6.7 for annual budget of Sonoma County Waste Management Agency for collection of household hazardous waste and education programs.

➤ **PRMD**

PRMD increased fees for a wide variety of permits that include ground disturbance, and has established a SUSMP program development fee. NPDES and SUSMP revenue for 2003-2004 was \$422,244. See **Appendix II.Q** for a portion of the Fee Schedule.

➤ **Environmental Health**

EH implemented a new revenue source for implementation of its storm water program activities, that includes a \$15 annual fee charged to retail food facilities in the City of Santa Rosa and in the unincorporated area of the county within the storm water permit boundary.

➤ **Measurable Goal (d)**

A workplan meeting with Regional Water Quality Control Board staff was held on April 8, 2004. Workplan topics included program funding.

GRADING NOTES

1. PERFORM GRADING IN ACCORDANCE WITH THE LATEST EDITION OF APPENDIX CHAPTER 33 OF THE CALIFORNIA BUILDING CODE, APPLICABLE SONOMA COUNTY REGULATIONS [AND TO THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEERING REPORT, PREPARED BY _____, DATED _____.]
2. EXISTING DRAINAGE COURSES RECEIVING WATERS FROM THIS SITE AND LOCATED THROUGHOUT THIS SITE SHALL REMAIN OPEN AND CLEAR OF DEBRIS TO PROPERLY CONVEY STORM WATER. IF EXISTING DRAINAGE COURSES RECEIVING WATERS FROM THIS SITE ARE LOCATED IN THE COUNTY RIGHT-OF-WAY AND NEED MAINTENANCE, CONTACT THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS AT (707) 565-2231 FOR FURTHER ASSISTANCE. IN ANY EVENT, THE OWNER AND/OR CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS.
3. RETAINING WALLS ARE NOT APPROVED UNDER THIS GRADING PERMIT. RETAINING WALLS REQUIRE A SEPARATE BUILDING PERMIT, UNLESS EXEMPTED.
4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER UPON DISCOVERING SIGNIFICANT DISCREPANCIES, ERRORS OR OMISSIONS IN THE PLANS. PRIOR TO PROCEEDING, THE OWNER SHALL HAVE THE PLANS REVISED TO CLARIFY IDENTIFIED DISCREPANCIES, ERRORS OR OMISSIONS. THE REVISED PLANS SHALL BE SUBJECT TO REVIEW BY THE CHIEF BUILDING OFFICIAL.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UNDERGROUND SERVICE ALERT (U.S.A.), TOLL FREE AT 1-800-642-2444, AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL UNCOVER RELEVANT UTILITIES TO VERIFY THEIR LOCATION AND ELEVATION. IF UNEXPECTED OR CONFLICTING UTILITIES ARE ENCOUNTERED DURING EXCAVATION, NOTIFY U.S.A, THE UTILITY OWNER AND/OR THE PROJECT ENGINEER IMMEDIATELY. UTILITIES INCLUDE BUT ARE NOT LIMITED TO WATER, SEWER, ELECTRICAL, GAS, TELEPHONE AND CABLE/TV.
6. IN THE EVENT CULTURAL RESOURCES (I.E., HISTORICAL, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCES, AND HUMAN REMAINS) ARE DISCOVERED DURING GRADING OR OTHER CONSTRUCTION ACTIVITIES, WORK SHALL BE HALTED WITHIN A 100 FOOT RADIUS OF THE FIND. THE NORTHWEST INFORMATION CENTER SHALL BE NOTIFIED AT (707) 664-0880. A QUALIFIED ARCHEOLOGIST SHALL BE CONSULTED FOR AN ON-SITE EVALUATION. ADDITIONAL

MITIGATION MAY BE REQUIRED BY THE COUNTY PER THE ARCHEOLOGIST'S RECOMMENDATIONS. IF HUMAN BURIALS OR HUMAN REMAINS ARE ENCOUNTERED, THE CONTRACTOR SHALL ALSO NOTIFY THE COUNTY CORONER AT (707) 565-5070.

7. SHOULD GRADING OPERATIONS ENCOUNTER HAZARDOUS MATERIALS, OR WHAT APPEAR TO BE HAZARDOUS MATERIALS, STOP WORK IN THE AFFECTED AREA IMMEDIATELY AND CONTACT 911 OR THE APPROPRIATE AGENCY FOR FURTHER INSTRUCTION.
8. THE GRADING PERMIT AND AN APPROVED COPY OF THE GRADING PLANS SHALL BE MAINTAINED ON THE PROJECT SITE THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.
9. DRAINAGE FACILITIES AND GRADING SHALL BE INSPECTED BEFORE RECEIVING FINAL APPROVAL. THE CONTRACTOR SHALL CONSULT THE PROJECT JOB CARD FOR COORDINATION OF INSPECTION REQUESTS.

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

1. PERFORM EROSION PREVENTION AND SEDIMENT CONTROL IN ACCORDANCE WITH THE LATEST EDITION OF APPENDIX CHAPTER 33 OF THE CALIFORNIA BUILDING CODE, APPLICABLE SONOMA COUNTY REGULATIONS, AND SECTION 20 OF THE CALTRANS STANDARD SPECIFICATIONS.
2. THE APPROVED PLANS SHALL CONFORM WITH THE EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES CONTAINED IN THE LATEST EDITIONS OF THE FOLLOWING PUBLICATIONS OR AN EQUIVALENT BEST MANAGEMENT PRACTICE:

EROSION AND SEDIMENT CONTROL FIELD MANUAL BY THE SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD.
MANUAL OF STANDARDS FOR EROSION & SEDIMENT CONTROL MEASURES BY THE ASSOCIATION OF BAY AREA GOVERNMENTS.
CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL BY CALTRANS.
STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK BY THE CALIFORNIA STORMWATER QUALITY ASSOCIATION.
3. IF DISCREPANCIES OCCUR BETWEEN THESE NOTES, MATERIAL REFERENCED HEREIN OR MANUFACTURER'S RECOMMENDATIONS, THEN THE MOST PROTECTIVE SHALL APPLY.
4. THE OWNER IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT NO. CAS000002 WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY DISTURBING LAND EQUAL TO OR GREATER THAN ONE ACRE. CONSTRUCTION ACTIVITIES INCLUDE BUT ARE NOT LIMITED TO CLEARING, GRADING, EXCAVATION, STOCKPILING, AND RECONSTRUCTION OF EXISTING FACILITIES INVOLVING REMOVAL AND REPLACEMENT.
5. PRESERVATION OF EXISTING VEGETATION SHALL OCCUR TO THE MAXIMUM EXTENT PRACTICABLE.
6. THE OWNER IS RESPONSIBLE FOR PREVENTING STORM WATER POLLUTION GENERATED FROM THE CONSTRUCTION SITE YEAR ROUND. THE OWNER MUST IMPLEMENT AN EFFECTIVE COMBINATION OF EROSION PREVENTION AND SEDIMENT CONTROL ON ALL DISTURBED AREAS DURING THE RAINY SEASON (OCTOBER 15 - APRIL 15).

7. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED BY THE OWNER BEFORE FORECASTED STORM EVENTS AND AFTER ACTUAL STORM EVENTS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. STORM EVENTS PRODUCE AT LEAST 1 INCH OF PRECIPITATION IN A 24 HOUR PERIOD. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT HAVE FAILED OR ARE NO LONGER EFFECTIVE SHALL BE PROMPTLY REPLACED. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED.
8. CHANGES TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN MAY BE MADE TO RESPOND TO FIELD CONDITIONS. CHANGES SHALL BE NOTED ON THE PLAN WHEN MADE.
9. DISCHARGES OF POTENTIAL POLLUTANTS FROM CONSTRUCTION SITES SHALL BE PREVENTED USING SOURCE CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SEDIMENT, TRASH, NUTRIENTS, PATHOGENS, PETROLEUM HYDROCARBONS, METALS, CONCRETE, CEMENT, ASPHALT, LIME, PAINT, STAINS, GLUES, WOOD PRODUCTS, PESTICIDES, HERBICIDES, CHEMICALS, HAZARDOUS WASTE, SANITARY WASTE, VEHICLE OR EQUIPMENT WASH WATER AND CHLORINATED WATER.
10. ENTRANCE(S) TO THE CONSTRUCTION SITE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF POTENTIAL POLLUTANTS OFFSITE. POTENTIAL POLLUTANTS DEPOSITED ON PAVED AREAS WITHIN THE COUNTY RIGHT-OF-WAY, SUCH AS ROADWAYS AND SIDEWALKS, SHALL BE PROPERLY DISPOSED OF AT THE END OF EACH WORKING DAY OR MORE FREQUENTLY AS NECESSARY.
11. EXPOSED SLOPES SHALL BE PROTECTED BY USING EROSION PREVENTION MEASURES TO THE MAXIMUM EXTENT PRACTICABLE, SUCH AS ESTABLISHING 70% VEGETATION COVERAGE, HYDROSEEDING, STRAW MULCH, GEOTEXTILES, PLASTIC COVERS, BLANKETS OR MATS.
12. WHENEVER IT IS NOT POSSIBLE TO UTILIZE EROSION PREVENTION MEASURES, EXPOSED SLOPES SHALL EMPLOY SEDIMENT CONTROL DEVICES, SUCH AS FIBER ROLLS AND SILT FENCES. FIBER ROLLS AND SILT FENCES SHALL BE TRENCHED AND KEYED INTO THE SOIL AND INSTALLED ON CONTOUR. SILT FENCES SHALL BE INSTALLED APPROXIMATELY 2 TO 5 FEET FROM TOE OF SLOPE.
13. HYDROSEEDING SHALL BE CONDUCTED IN A THREE STEP PROCESS. FIRST, EVENLY APPLY SEED MIX AND FERTILIZER TO THE EXPOSED SLOPE. SECOND, EVENLY APPLY MULCH OVER THE SEED AND FERTILIZER. THIRD, STABILIZE THE MULCH IN PLACE.

APPLICATIONS SHALL BE BROADCASTED MECHANICALLY OR MANUALLY AT THE RATES SPECIFIED BELOW. SEED MIX AND FERTILIZER SHALL BE WORKED INTO THE SOIL BY ROLLING OR TAMPING. IF STRAW IS USED AS MULCH, STRAW SHALL BE DERIVED FROM WHEAT, RICE OR BARLEY AND BE APPROXIMATELY 6 TO 8 INCHES IN LENGTH. STABILIZATION OF MULCH SHALL BE DONE HYDRAULICALLY BY APPLYING AN EMULSION OR MECHANICALLY BY CRIMPING OR PUNCHING THE MULCH INTO THE SOIL. EQUIVALENT METHODS AND MATERIALS MAY BE USED ONLY IF THEY ADEQUATELY PROMOTE VEGETATION GROWTH AND PROTECT EXPOSED SLOPES.

<u>MATERIALS</u>	<u>APPLICATION RATE</u> (POUNDS PER ACRE)
SEED MIX	
<i>Bromus mollis</i> (BLANDO BROME)	40
<i>Trifolium hirtum</i> (HYKON ROSE CLOVER)	20
FERTILIZER	
16-20-0 & 15% SULPHUR	500
MULCH	
STRAW	4000
HYDRAULIC STABILIZING*	
M-BINDER OR SENTINEL	75-100
EQUIVALENT MATERIAL	PER MANUFACTURER

*NON-ASPHALTIC, DERIVED FROM PLANTS

14. THE OWNER SHALL PROTECT STORM DRAIN INLETS FROM POTENTIAL POLLUTANTS UNTIL DRAINAGE CONVEYANCE SYSTEMS ARE FUNCTIONAL AND CONSTRUCTION HAS BEEN COMPLETED.
15. ENERGY DISSIPATERS SHALL BE INSTALLED AT STORM DRAIN OUTLETS WHICH MAY CONVEY STORM WATER FLOW LEADING TO SOIL EROSION.
16. SOIL AND MATERIAL STOCKPILES SHALL BE PROPERLY PROTECTED TO MINIMIZE SEDIMENT AND POLLUTANT TRANSPORT FROM THE CONSTRUCTION SITE.
17. SOLID WASTE, SUCH AS TRASH, DISCARDED BUILDING MATERIALS AND DEBRIS, SHALL BE PLACED IN DESIGNATED COLLECTION AREAS OR CONTAINERS. THE CONSTRUCTION SITE SHALL BE CLEARED OF SOLID WASTE DAILY, OR AS NECESSARY, AND REGULAR REMOVAL AND PROPER DISPOSAL SHALL BE ARRANGED.
18. A CONCRETE WASHOUT AREA, SUCH AS A TEMPORARY PIT, SHALL BE DESIGNATED TO CLEAN CONCRETE TRUCKS AND TOOLS. AT NO TIME

SHALL CONCRETE PRODUCTS AND WASTE BE ALLOWED TO ENTER COUNTY WATERWAYS SUCH AS CREEKS OR STORM DRAINS.

19. PROPER APPLICATION, CLEANING AND STORAGE OF POTENTIALLY HAZARDOUS MATERIALS, SUCH AS PAINTS AND CHEMICALS, SHALL BE CONDUCTED TO PREVENT THE DISCHARGE OF POLLUTANTS.
20. WHEN UTILIZED, TEMPORARY RESTROOMS AND SANITARY FACILITIES SHALL BE LOCATED AND MAINTAINED TO PREVENT THE DISCHARGE OF POLLUTANTS.
21. APPROPRIATE VEHICLE STORAGE, FUELING, MAINTENANCE AND CLEANING AREAS SHALL BE DESIGNATED AND MAINTAINED TO PREVENT DISCHARGE OF POLLUTANTS.

Protection of Stormwater Quality for Minor Building Permits

NPD-001

Purpose

Under the County's Stormwater Management Plan, you have an obligation to protect stormwater quality. The purpose of this handout is to inform owners and contractors of their responsibility to protect stormwater during construction activity allowed with a minor building permit. A minor building permit includes such things as: general home repair; roof replacements; certain electrical work; window and door replacement; and deck repair. Responsible and proper construction management at your job site is essential for the protection of stormwater quality in our neighborhoods and county.

Stormwater runoff is the water that collects on your property and runs off during rain storms. This stormwater runoff might enter a storm drain in an urban area but eventually the water will enter a creek or stream. At your job site you must protect and preserve the quality of stormwater runoff. This means clean rain water that enters your job site must remain clean. However, as rain strikes the earth it can become polluted and can transport this pollution to storm drains that lead to creeks. Common sources of pollution at minor building job sites are litter, debris, paint, saw dust, roofing materials, and sediments. You have an obligation to control stormwater at the source before it becomes polluted and treat the runoff on your property if it does become polluted.

You can protect stormwater quality by using some best management practices (BMPs) on your job site. Properly implemented BMPs reduce pollution. The following are some BMPs that will protect stormwater quality. Table 1 (back of page) gives more detail on construction BMPs commonly used with minor building permits.

The following are key BMPs for minor building permits.

- \$ Pick up litter and sweep site
- \$
- \$ Place waste and debris in trash cans
- \$
- \$ General site clean up
- \$
- \$ Reduce exposure of construction material and soil piles to rain
- \$
- \$ Minimize outdoor work during the wet season
- \$
- \$ Place pans under fuel and oil leaks
- \$
- \$ Minimize ground disturbance
- \$
- \$ Replant vegetation or reseed

You may call the Permit and Resource Management Department (PRMD) at 707-565-1900 and ask for the National Pollutant Discharge Elimination System (NPDES) Section for additional information about protecting stormwater. Additional measures to help reduce or prevent stormwater pollution are available by the State Water Resources Control Board at www.swrcb.ca.gov/stormwtr. Publications like the *Erosion and Sediment Control Field Manual* and the *Guidelines for Construction Projects* are available through the Association of Bay Area Governments by calling 510-622-2465 or visiting: <http://store.abag.ca.gov/construction.asp>

There is much that can be done to help reduce the amount of pollutants entering Sonoma County's waterways. By incorporating stormwater BMPs on your site you can have a project that preserves and protects stormwater water quality in our neighborhoods and in Sonoma County.

Table 1. BMPs¹ for Minor Building Permits

Pollutant	Origin	BMP ¹
Litter	Dropped or wind blown items	Clean up and sweep job sites.
Debris	Trash left on the ground, messy job sites	Pick up debris and place in covered cans.
Concrete	Pouring new or breaking up pavement or foundations	<ol style="list-style-type: none"> 1. Mix correct amounts of concrete so all is used and none left over. Never bury waste material. 2. Store bags of concrete under cover protected from rainfall, runoff, and wind; and away from storm drains. 3. Designate a concrete wash-out area for containment, drying and removal. 4. Transport small amounts of concrete to a landfill. 5. Transport large amounts of concrete to a crushing company to recycle.
Paint	Application and cleanup during new construction and remodeling	<ol style="list-style-type: none"> 1. Avoid spills by careful use and placement of paint cans such that tipping does not occur. 2. Keep all liquid paint away from streets and storm drains. All paints and solvents contain chemicals that are harmful to aquatic life found in our streams and creeks. 3. When thoroughly dry, dispose of used brushes, rags, drop clothes, and empty paint cans (lids off) into trash. 4. Use water-based paints when possible. 5. Do not use paint over 15 years old, as lead levels are likely elevated. 6. Reuse paint thinner. Dispose of residue as hazardous waste². 7. Paint chips and dust from non-hazardous dry stripping of paints may be disposed of as trash. Chips and dust from paints containing lead or tributyl tin are hazardous wastes² and must be disposed of properly. 8. If you do use high-pressure water, block nearby storm drains and allow cleaning water to flow into grass, soil, or gravel area. 9. Paint out brushes to the extent possible. Rinse water-based paints in the sink. Clean oil-based paints with thinner, reuse thinner, and dispose of residue as hazardous waste². 10. Reuse leftover paint for touch-ups.
Oil or fuel	Spills during refueling. Drips from hydraulic lines or oil from machinery.	<ol style="list-style-type: none"> 1. When refueling, place drip pans under leaks. 2. Have absorbent pads in the cabs of machinery ready to collect spills. 3. Repair equipment such that there are no leaks. Check frequently for leaks during work. 4. Refuel at one location away from streams or streets. Use drip pans when parked.
Sediment	Exposed soil, debris piles, excavations, or other disturbances of the earth.	<ol style="list-style-type: none"> 1. Store materials under a roof to reduce exposure to rainfall. Alternatively, use plastic sheeting to cover piles or excavations prior to rain and during the rainy season (October 15 through April 15). Keep all debris away from the street and storm drains. 2. Schedule excavation projects during the dry weather; generally April 16 through October 14. 3. Prevent erosion by planting fast-growing native grasses that shield and bind soil. 4. Recontour disturbed areas to return the ground to its previous shape. 5. Spray water as necessary to prevent dust from entering stream systems but not so much as to cause runoff.
Pathogens	Human or animal waste.	<ol style="list-style-type: none"> 1. Use appropriate waste disposal systems. Make sure portable toilets are in good working order. 2. Clean up dog or other animal waste.

¹ BMP is an abbreviation for best management practice and is defined as a program, technology, process, siting criteria, operational method or measure, or engineering system, which when implemented prevents, controls, removes, or reduces pollution.

² Hazardous waste can be dropped off at the County's free **household** "toxic roundups" held throughout the year hosted by the Eco-Desk Hotline in Santa Rosa at 527-3375 or www.recyclenow.org. Up to 27-gallons of business hazardous waste can be dropped off for a fee at the County's **business** "toxic roundups." Contractors with larger volumes of hazardous materials should use a commercial waste hauler. Further information about disposal of paint chips, thinner, liquid paint, or other household hazardous waste can be found by calling the Eco-Desk Hotline.

If there is an emergency spill of toxic or hazardous materials that threatens human health or could enter a waterway call 9-1-1. For other spills call County Department of Emergency Services at 565-1152. If there is a non-emergency spill of non-toxic or non-hazardous materials call the City of Santa Rosa Field Services at 543-3881 or the Sonoma County Operations at 565-7280.



Certificate of Inspection

Vineyard Erosion & Sediment Control Ordinance

Sonoma County Agricultural Commissioner's Office
Phone (707) 565-2371 Fax. (707) 565-3850

Project Address: _____

Owner: _____

Agent: _____

Temporary Plan: Yes No

Final Plan: Yes No

Engineer Post-Construction Plan Compliance Letter: Yes No

Project Completed by Deadline (Nov 1st—New Development, Nov 15th—Replants): Yes No

Erosion & Sediment Control				
<i>Requirements</i>		<i>Compliance</i>		
		Yes	No	N/A
1	Cover Crop			
2	Mulch			
3	Fiber Rolls			
4	Silt Fencing			
5	V-Ditches			
6	Jute Netting			
7	Swales			
8	Other:			
9	Other:			

Drainage				
<i>Requirements</i>		<i>Compliance</i>		
		Yes	No	N/A
10	Drain Pipes			
11	Inlets			
12	Outlets			
13	Sediment Basin			
14	Water Bars			
15	Check Dams			
16	Straw Bale Dikes			
17	Other:			
18	Other:			

Remarks: *(Include description of all non-compliances)*

PLAN CONFORMANCE: Yes No

If "no" is checked above, you are in violation of Sonoma County Code (Section 30-65 Article V, Chapter 30). Any person in violation of this section shall be guilty of a criminal misdemeanor, punishable by a fine not exceeding \$1000 or by imprisonment for a term not exceeding six months, or both. In addition, you may be subject to administrative civil penalties up to \$1000 per day for each day or portion thereof that the violation continues.

Received by (Owner/Agent): _____ Date: _____

Inspected by : _____ Date: _____



COUNTY OF SONOMA

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA 95403-2829
 (707) 565-1900 FAX (707) 565-1103

EROSION/SEDIMENT CONTROL COMPLIANCE QUICK CHECK FORM

Site Address: _____ Permit No: _____
 Cross Street: _____ APN: _____
 Owner: _____ Phone: (____) _____

Date: _____ Inspector: _____ Const. Inspection Area: _____

GENERAL INFORMATION

- | | Yes | No | Unknown |
|---|--------------------------|--------------------------|--------------------------|
| 1. Is the address posted? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Locked gate(s) or other impediments to site entry? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Does the construction project disturb one acre or more? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are waters of the State in close proximity to project? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Is SWPPP located in the construction office? | <input type="checkbox"/> | <input type="checkbox"/> | |
| 6. The work appears: <input type="checkbox"/> ongoing <input type="checkbox"/> not yet started <input type="checkbox"/> completed | | | |

Evaluate the following erosion/sediment control measures:

EROSION CONTROL (Wet Season)

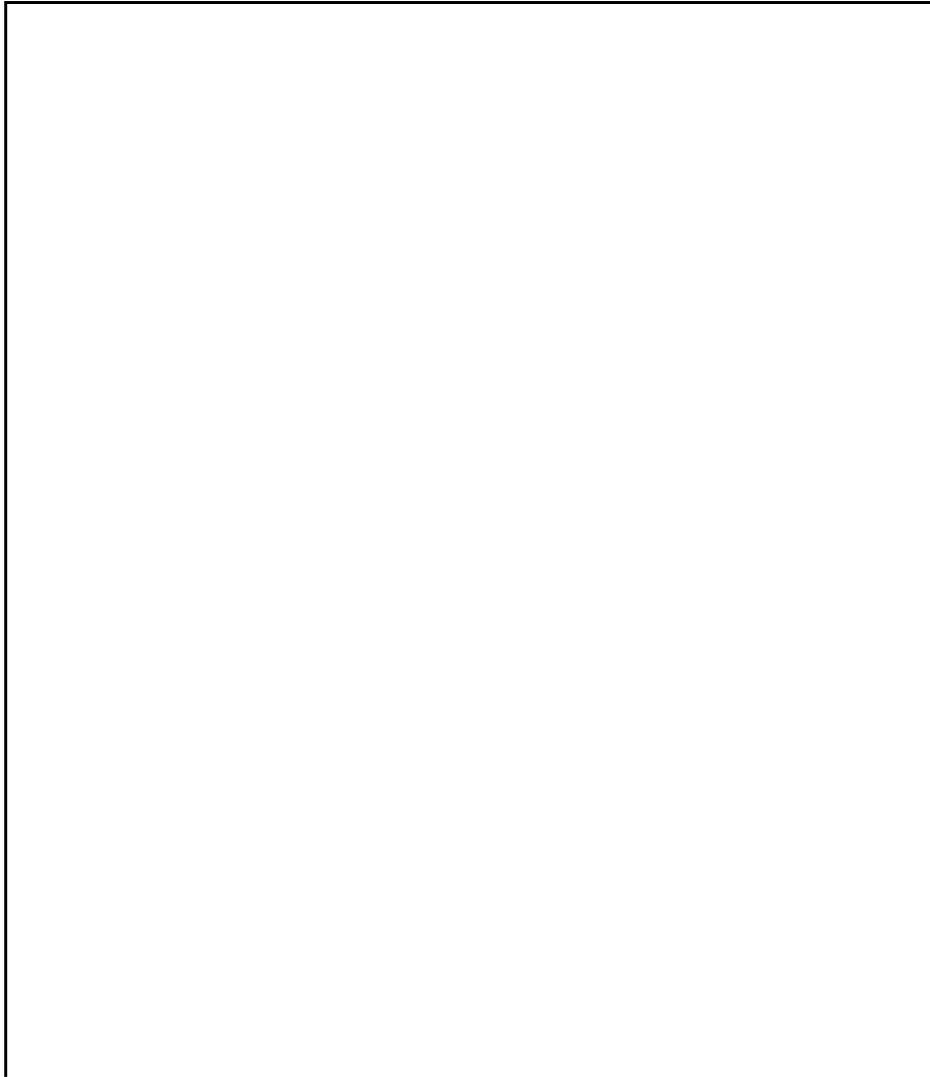
Control Measure	Adequate	Needs Attention	Not Required
7. Riprap at pipe or culvert outlets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Stock piles covered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Terraced or tracked slopes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Erosion control matting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Hydro seeding in place by Oct. 15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Straw mulch crimped into soil or tackified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Vegetation established in hydro seeded areas (70% covered by Nov. 1st)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SEDIMENT CONTROL (Year Round)

Control Measure	Adequate	Needs Attention	Not Required
14. Silt fences installed along contours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Fiber rolls (wattles)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Storm drain inlet protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Check dams or sediment ponds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Structural BMP's	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Stabilized construction access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Concrete washout areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Vehicle maintenance and refueling site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Does the site appear overall to have erosion/sediment control measures in place and be in substantial compliance with the NPDES or County of Sonoma storm water quality ordinance? Yes No

Sketch of site



Notes: _____

Required Grading Inspections

BPC-010

This is a list of required inspections to be performed by the grading inspector and, if engineered grading, by the engineer providing grading controls. If work requiring inspection is covered or concealed without first having been inspected, the grading inspector may require, by written notice, that such work be exposed for examination. All Code Sections listed below refer to California Building Code - Appendix Chapter 33.

Project Address: _____ City: _____

Grading Plan Check or Permit # _____ APN: _____

- The project plans have been checked and classified by the Plan Check Section as **engineered grading**. (CBC-3309.4)
- The project plans have been checked and classified by the Plan Check Section as **non-engineered** grading. (CBC-3309.8)

Note: Inspections, tests and reports are required when the corresponding box is checked.

Grading Inspector	Engineer
<input type="checkbox"/> Pre-construction meeting with contractor, grading inspector and others, as applicable.	<input type="checkbox"/> Pre-construction meeting with contractor, geotechnical engineer, grading inspector and others, as applicable. (This is recommended, but not required.)
<input type="checkbox"/> Other inspections, as agreed at pre-construction meeting.	<input type="checkbox"/> Other inspections, as agreed at pre-construction meeting.
<input type="checkbox"/> Preparation of ground for fill placement, organic layer removed, competent material exposed, surface scarified, etc. (3313.2)	<input type="checkbox"/> Preparation of ground for fill placement, organic layer removed, competent material exposed, surface scarified, etc. (3313.2)
<input type="checkbox"/> Surface benched where surface receiving fill is steeper than 5h:1v. (3313.2)	<input type="checkbox"/> Surface benched where surface receiving fill is steeper than 5h:1v. (The geotechnical engineer may require benching at flatter than 5h:1v.) (3313.2)
<input type="checkbox"/> Key or core. (3313.2)	<input type="checkbox"/> Key or core. (3313.2)
<input type="checkbox"/> Terraces, as required. (3315)	<input type="checkbox"/> Terraces, as required. (3315)
<input type="checkbox"/> Surface drainage facilities including interceptor drains, swales, ditches on terraces, concrete or shotcrete ditch lining, etc. (3315.2)	<input type="checkbox"/> Subsurface drainage facilities. (3313.2)
<input type="checkbox"/> Final rough grading of both cut and fill slopes, including terracing, rounding of top soil layer, setbacks from permit area boundaries, etc. (3312, 3313, 3314, 3315)	<input type="checkbox"/> Fill placement method, suitability of materials, lift thickness, moisture content and density monitored and reported to contractor, etc. (Design specifications).
<input type="checkbox"/> Erosion control measures, either temporary or permanent, including sediment fences, installation of fabrics, seeding slopes, etc. (3316)	<input type="checkbox"/> Density tests and moisture content with moisture/density curve at locations chosen by engineer providing grading controls, not by contractor. (3317, 3318)
<input type="checkbox"/> Final inspection for code compliance. If engineered grading, the final report is also reviewed by grading inspector before the grading permit is finalized.	<input type="checkbox"/> Erosion control measures, either temporary or permanent, including sediment fences, installation of fabrics, seeding slopes, etc. (3316)
	<input type="checkbox"/> "As Built" plans by civil engineer, if changes have been made during construction. Verification on line & grade by civil engineer may be requested by soils engineer or this department. (3318)
	<input type="checkbox"/> Final report by the soils engineer providing grading controls meeting the requirements of 3318.

Plan Checker: _____

Date: _____

*Engineer: _____

Date: _____

*Engineer's signature is required for "engineered" grading.



COUNTY OF SONOMA PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA 95403-2829
(707) 565-1900 FAX (707) 565-1103

STORMWATER NON-COMPLIANCE LETTER

[Date]
[Owner's Name]
[Owner's Address]
[Owner's City, State & Zip Code]

SUBJECT: [Permit Number] / APN: [xxx-xxx-xxx]
[Project Name/Owner's Name]
[Project Address/Location]

Dear Mr./Ms. [Owner's Last Name]:

We conducted a review of your construction site at the subject location on [Date of Inspection]. At the time of inspection, we found that the erosion and sediment control measures had not been installed or were not properly installed and maintained. This situation commonly results in polluted stormwater runoff which is a violation of federal, state and local regulations.

Please be aware that grading and soil disturbing operations should be scheduled in order to minimize the amount and duration of soil exposed to erosion by wind, rain or stormwater runoff. Installing and maintaining erosion and sediment control measures will protect the quality of our water. We also wish to note that all construction activities must abide by the Sonoma County Stormwater Quality Code and any National Pollutant Discharge Elimination System (NPDES) conditions, both of which require effective installation and maintenance of erosion and sediment control measures.

Your prompt attention to appropriately install and maintain the erosion and sediment control measures required on your site as indicated in your Erosion/Sediment Control Plan or Storm Water Pollution Prevention Plan (SWPPP) will help you gain regulatory compliance and improve the quality of water being discharged to our creeks and rivers. A re-inspection of your site will be conducted ten (10) days after receiving this letter.

If you have any questions as to the exact nature of the work needed to be done on your construction site, we suggest that you contact your contractor. Please feel free to call [Contact] at [Contact's Phone Number] if you have any questions regarding this matter. Thank you.

Sincerely,
[Inspector]

cc: [Contractor]
[Applicant]
[Civil Engineer]
NPDES Section



COUNTY OF SONOMA PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA 95403-2829
(707) 565-1900 FAX (707) 565-1103

STORMWATER NON-COMPLIANCE LETTER - FINAL NOTICE

[Date]

[Owner's Name]

[Owner's Address]

[Owner's City, State & Zip Code]

SUBJECT: [Permit Number] / APN: [xxx-xxx-xxx]

[Project Name/Owner's Name]

[Project Address/Location]

Dear Mr./Ms. [Owner's Last Name]:

A re-inspection was conducted at the above referenced project on [Date of Re-inspection] to verify compliance with the previously sent Stormwater Non-Compliance Letter, the National Pollutant Discharge Elimination System (NPDES) and the Sonoma County Stormwater Quality Code (SCSQC). At the time of re-inspection, the erosion and sediment control measures had not been installed or were not properly installed and maintained.

This letter serves as a final notice to comply with the appropriate installation and maintenance of the erosion and sediment control measures required on your construction site as indicated in your Erosion/Sediment Control Plan or Storm Water Pollution Prevention Plan (SWPPP) and in accordance with NPDES and SCSQC.

You have ten (10) days from receipt of this letter to comply with this request. After such time, a re-inspection will be conducted to verify compliance. Failure to properly install and maintain the appropriate erosion and sediment control measures may result in further enforcement actions including a stop work order, reimbursement for County expenses to make corrections and referral to the Regional Water Quality Control Board (RWQCB). The RWQCB enforcement actions may include substantial monetary penalties.

If you have any questions regarding this letter, please refer to the attached correction notice or contact [Contact] at [Contact's Phone Number].

Sincerely,
[Inspector]

cc: [Contractor]
[Applicant]
[Civil Engineer]
NPDES Section



COUNTY OF SONOMA
PERMIT AND RESOURCE MANAGEMENT
DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA 95403-2829
 (707) 565-1900 FAX (707) 565-1103

REFERRAL OF NON-COMPLIANT SITE

[Date]

John Short, Senior Water Resource Control Engineer
 Watershed Protection, Russian River Unit
 North Coast Regional Water Quality Control Board
 5550 Skylane Boulevard, Suite A
 Santa Rosa, CA 95403

SUBJECT: [Permit Number] / APN: [xxx-xxx-xxx]
 [Project Name/Owner's Name]
 [Project Address/Location]
 [Owner's Phone Number]
 Project Size: [Size of Project in Acres]

Dear Mr. Short,

A third inspection was conducted at the subject location on [Date of Third Inspection] to verify compliance with the previously sent Final Notice of Stormwater Non-Compliance, the National Pollutant Discharge Elimination System (NPDES) and the Sonoma County Stormwater Quality Code (SCSQC). At the time of re-inspection, erosion and sediment control measures were not installed or were not properly installed and maintained.

This project has been sent two separate notices (see enclosures) requesting compliance with the appropriate installation and maintenance of the erosion and sediment control measures required on the construction site as indicated in their Erosion/Sediment Control Plan or their Storm Water Pollution Prevention Plan and in accordance with NPDES and SCSQC. Compliance has not been achieved.

This letter serves as notification to the Regional Water Board by the County of Sonoma regarding persistent non-compliant construction sites in accordance with Provision C.14.d of the California Regional Water Quality Control Board, North Coast Region, Order No. R1-2003-0062, NPDES No. CA0025054.

For further information regarding this matter, please contact [Contact] at [Contact's Phone Number].

Sincerely,
 [Inspector]

enc: Stormwater Non-Compliance Letter
 Stormwater Non-Compliance Letter - Final Notice

cc: [Owner]
 [Contractor]
 [Applicant]
 [Civil Engineer]
 NPDES Section

**SUMMARY OF
ORDINANCE NO. 5468**

AN ORDINANCE OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SONOMA, STATE OF CALIFORNIA, AMENDING SECTION 1-7.1 OF THE SONOMA COUNTY CODE

On March 9, 2004, the Board of Supervisors of the County of Sonoma adopted Ordinance No. 5468, “An Ordinance of the Board of Supervisors of the County of Sonoma, State of California, Amending Section 1-7.1 of the Sonoma County Code.”

Ordinance No. 5468 amends Section 1-7.1 of the Sonoma County Code as follows:

1. It amends section 1-7.1 to include violations of sections 11-2, 11-29, 11-30, and 11-31, which address drainage and storm water regulations, as being subject to civil penalties.
2. It amends section 1-7.1 to change the amount of penalties that the County impose from \$25 to a range of \$25 to \$100 for violations arising from unlawful commercial, rental or similar uses or structures, provided that the enforcing officer’s department has adopted a written policy setting forth how civil penalties within the ranges are determined.
3. It amends section 1-7.1 to change the amount of penalties that the County impose from \$15 to a range of \$15 to \$100 for violations arising from an unlawful owner-occupied residential uses or structures, provided that the enforcing officer’s department has adopted a written policy setting forth how civil penalties within the ranges are determined.
4. It amends section 1-7.1 to change the amount of penalties that the County impose from \$5 to a range of \$5 to \$100 for violations arising from any other violation, including but not limited to an unlawful noncommercial junkyard, an unlawful noncommercial truck terminal, an unlawful nonoperative vehicle storage yard, unlawful accessory structure or an unlawful excess number of animals, provided that the enforcing officer’s department has adopted a written policy setting forth how civil penalties within the ranges are determined.

5. It amends section 1-7.1 to clarify that where an illegal use or structure in violation may be permitted with an appropriate permit, the County may impose penalties as a multiplier of any permit fee, required approval or any other required review.

6. It amends the penalties for multiple violations of the same ordinance within twelve months for all violations. The penalty for the second violation of the same ordinance within a twelve month period, is \$200 per day. After a second violation, the penalty for each additional violation of the same ordinance within a twelve month period is \$500 per day.

7. It amends section 1-7.1 to designate the Director of the Permit and Resources Management Department as the enforcing officer for violations of sections 11-2, 11-29, 11-30, and 11-31.

8. It amends section 1-7.1 by expanding the criteria that the enforcing officer may consider when imposing penalties. In addition to all existing criteria, the revisions authorize the enforcing officer to consider: whether or not the violation poses a threat to human health, safety, or to the environment; the seriousness or gravity of the violation; and the sophistication of the persons creating or causing the violation.

Copies of Ordinance No. 5468 are available for public inspection during regular business hours in the office of the Clerk of the Board of Supervisors, 575 Administration Drive, Room 100A, Santa Rosa, California.

SUPERVISORS:

BROWN_____ **SMITH**_____ **KELLEY**_____ **REILLY**_____ **KERNS**_____

AYES_____ **NOES**_____ **ABSENT**_____ **ABSTAIN**_____

EEVE T. LEWIS, County Clerk and
ex-officio Clerk of the Board of
Supervisors

By: _____
Deputy Clerk



**COUNTY OF SONOMA
PERMIT AND RESOURCE MANAGEMENT
DEPARTMENT**

2550 Ventura Avenue, Santa Rosa, CA 95403-2829
(707) 565-1900 FAX (707) 565-1103

REFERRAL OF NON-FILER

[Date]

John Short, Senior Water Resource Control Engineer
Watershed Protection, Russian River Unit
North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

SUBJECT: [Permit Number] / APN: [xxx-xxx-xxx]
[Project Name/Owner's Name]
[Project Address/Location]
[Owner's Phone Number]
Project Size: [Size of Project in Acres]

Dear Mr. Short,

During a visit to the construction site at the subject location on [Date of Inspection], the construction site operator was asked to produce evidence of filing a Notice of Intent (NOI) or receiving a Waste Discharge Identification (WDID) Number from the State Water Resources Control Board (SWRCB). The construction site operator was unable to demonstrate submitting an NOI or receiving a WDID.

After searching the SWRCB website's database for Active Construction Storm Water Permittees, PRMD staff were unable to affirm an NOI or WDID for the construction site in question. If any records of communication with the developer regarding filing requirements exist within PRMD, they have been enclosed.

This letter serves as notification to the Regional Water Board by the County of Sonoma regarding identified non-filers in accordance with Provision C.14.c of Order No. R1-2003-0062, NPDES No. CA0025054, California Regional Water Quality Control Board, North Coast Region.

For further information regarding this matter, please contact [Contact] at [Contact's Phone Number].

Sincerely,
[Inspector]

enc: [Enclosure]

cc: [Owner]
[Contractor]
[Applicant]
[Civil Engineer]
NPDES Section

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN						
DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
1 7/1/2005	Public Education and Outreach	Continue to provide pesticide users with oral and written information when they apply for a permit or register	II-68	Agricultural Commissioner	Ongoing	
2 7/1/2005	Public Education and Outreach	Continue to instruct SRJC courses for pesticide user licenses	II-68	Agricultural Commissioner	Ongoing	
3 7/1/2005	Legal Authority	Include a statement in the second annual report detailing Provision 13, a-e	Permit	County Counsel	Not Started	
4 7/1/2005	Industrial/ Commercial	Maintain database of regulated businesses within permit boundary Update annually	II-15	DES	Ongoing	
5 7/1/2005	Industrial/ Commercial	Continue to inspect RGO's on an annual basis and ASFs on a routine basis	II-15	DES	Ongoing	
6 7/1/2005	Industrial/ Commercial	Enhance ASF inspections to include storm water BMPs	II-17	DES		
7 7/1/2005	Industrial/ Commercial	Use progressive enforcement approach to issues for noncompliant facilities	II-19	DES	Ongoing	
8 Annually	Industrial/ Commercial	Refer noncompliant facilities to RWQCB	II-19	DES	Ongoing	
9 7/1/2005	Industrial/ Commercial	Actively pursue adopting Cal EPA's program enhancements for administrative enforcement	II-19	DES		

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN

DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
10 Annually	Illicit Discharge	Investigate complaints of illicit discharges/report in Annual Report	II-49	DES	Ongoing	
11 Ongoing	Illicit Discharge	Continue to pursue current enforcement actions/report in annual report	II-53	DES		
12 Ongoing	Illicit Discharge	Continue to implement current record keeping activities/report in Annual Report	II-54	DES	Ongoing	
13 Ongoing	Illicit Discharge	Continue to investigate illicit connections and pursue enforcement action or refer to the appropriate agency for follow up	II-56	DES	Ongoing	
14 Ongoing	Illicit Discharge	Continue to train staff who are responsible for illicit discharge and connection enforcement	II-59	DES	Ongoing	
15 7/1/2005	Public Education and Outreach	Discuss compliance with operators and provide Storm water informational materials	II-64	DES	Ongoing	
16 7/1/2005	Municipal Operations	Continue to reference BMPs in construction documents for public construction projects	II-27	DTPW	Ongoing	

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN						
DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
17 7/1/2005	Municipal Operations	Continue to submit NOIs for projects subject to the State General Construction Permit requirement throughout the permit term	II-27	DTPW	Ongoing	
18 7/1/2005	Municipal Operations	Continue to inspect public construction sites during construction activities on an ongoing basis	II-28	DTPW	Ongoing	
19 7/1/2005	Municipal Operations	Continue to enforce the construction documents including the provisions set forth regarding failure to carry out orders given or to perform the provisions of the contract	II-30	DTPW	Ongoing	
20 7/1/2005	Municipal Operations	Continue to provide training to all applicable staff involved in public construction projects	II-32	DTPW	Ongoing	
21 7/1/2005	Municipal Operations	Continue annual inspection of problem inlets for cross culverts and closed drainage systems and clean as necessary	II-38	DTPW	Ongoing	
22 7/1/2005	Municipal Operations	Continue to implement current good housekeeping practices regarding materials management	II-42	DTPW	Ongoing	

	DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
23	7/1/2005	Municipal Operations	Continue bi-weekly road crew tailgate meetings to discuss street and road maintenance activities throughout the permit period	II-43	DTPW	Ongoing	
24	7/1/2005	Municipal Operations	Continue to inspect and clean Park and Ride facilities regularly to ensure they are kept clear of debris and excessive oil buildup	II-44	DTPW	Ongoing	
25	Annually	Illicit Discharge	Investigate complaints of illicit discharges/report in Annual Report	II-49	DTPW	Ongoing	
26	7/1/2005	Illicit Discharge	Report suspected illicit septic discharges to PRMD whenever they are located in roadside drainage facilities	II-50	DTPW	Ongoing	
27	Ongoing	Illicit Discharge	Continue to pursue current enforcement actions/report in annual report	II-53	DTPW	Ongoing	
28	7/1/2005	Illicit Discharge	County agencies will continue to implement current illicit discharge record keeping activities that are used for input to the Annual Report	II-54	DTPW	Ongoing	
29	Annually	Illicit Discharge	Report number of illicit discharges in Annual Report	II-54	DTPW	Ongoing	

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN						
DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
30 7/1/2005	Illicit Discharge	In cases where a capital project is planned or underway, DTPW will conduct septic system evaluations to determine the cause of an illicit discharge and the appropriate way to address the situation	II-55	DTPW	Ongoing	
31 Ongoing	Illicit Discharge	Continue to implement current record keeping activities/report in Annual Report	II-54	DTPW	Ongoing	
32 7/1/2005	Illicit Discharge	Continue to investigate illicit connections and pursue enforcement action or refer to the appropriate agency for follow up	II-56	DTPW	Ongoing	
33 7/1/2005	Public Education and Outreach	Continue to implement programs for disposal of used oil and household toxics	II-57	DTPW	Ongoing (Optional)	
34 Annually	Public Education and Outreach	Report the amounts of used oil and household toxics collected in the Annual Report	II-57	DTPW	Ongoing (Optional)	
35 7/1/2005	Illicit Discharge	Continue to train staff who are responsible for identification, investigation, termination, clean-up and reporting of illicit discharges and connections	II-59	DTPW	Ongoing	

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN						
DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
36 Annually	Effectiveness Evaluation	Compare measurable goals listed in the SWMP to actual work completed, and work with NCRWQCB staff and copermittees on developing work plan elements	II-71	PRMD	Ongoing	
37 Annually	Effectiveness Evaluation	Document above information in the Annual Report	II-71	PRMD	Ongoing	
38 7/1/2005	Effectiveness Evaluation	Report data evaluation in Annual report	II-72	DTPW	Ongoing	
39 7/1/2005	Monitoring Plan	Collect chemical monitoring samples for the first flush and for three representative storms during the wet season each year of the permit	II-76	DTPW	Ongoing	
40 7/1/2005	Monitoring Plan	Review representative storm criterion and list of monitored constituents each year to determine if improvements are needed to meet the goal of the SWMP Include changes or proposed changes in Annual Report or Annual Work Plan as appropriate	II-76	DTPW	Ongoing	
41 Annually	Monitoring Plan	Report chemical monitoring results in Annual Report	II-76	DTPW	Ongoing	

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN						
DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
42 7/1/2005	SUSMP	Design applicable County capital improvement projects with SUSMP measures	23	DTPW	Ongoing	
43 7/1/2005	Effectiveness Evaluation	Continue to collect grab samples at C3 station and evaluate for sediment levels annually	II-72	DTPW	Underway	
44 7/1/2005	Effectiveness Evaluation	Begin data collection and establish background levels of bacteria at C3 station via grab samples	II-72	DTPW	Underway	
45 7/1/2005	Municipal Operations	Provide annual training to key personnel to enhance construction BMP knowledge	II-32	DTPW	Ongoing	
46 7/1/2005	Municipal Operations	Label 100 existing storm drain inlets per year until all inlets are labeled in Larkfield/Wikiup and Airport Business Park urban areas	II-39	DTPW	Not Started	
47 7/1/2005	Municipal Operations	Label new storm drain inlets in the Larkfield/Wikiup and Airport Business Park urban areas during installation	II-39	DTPW	Ongoing	
48 7/1/2005	Municipal Operations	Sweep various intersections upon request	II-41	DTPW	Ongoing	

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN						
DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
49 7/1/2005	Municipal Operations	Update public project construction documentation	II-27	DTPW	Ongoing	
50 12/31/2004	Municipal Operations	Analyze draft maintenance manual for fiscal impacts and return to Board of Supervisors for policy direction	II-43	DTPW	Not Started	
51 Ongoing	Municipal Operations	Review current streets and road maintenance practices, including BMPs related to materials management	II-43	DTPW	Ongoing	
52 7/1/2005	Industrial/Commercial	Maintain database of retail food facilities and closed landfills Update annually	II-15	EH	Ongoing	
53 7/1/2005	Industrial/Commercial	Use progressive enforcement approach to issues for noncompliant facilities	II-19	EH	Ongoing	
54 Annually	Industrial/Commercial	Notify NCRW/QCB within 60 days of retail food facilities third violation notice	II-21	EH	Ongoing	
55 7/1/2005	Industrial/Commercial	Train EH inspectors at least annually on procedures, policies and BMPs Distribute educational materials	II-21	EH	Ongoing	

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN

DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
56 7/1/2005	Industrial/Commercial	Discuss storm water issues at bi-weekly Food Team and quarterly Emergency Response meetings	II-21	EH	Ongoing	
57 Annually	Industrial/Commercial	Staff to participate in monthly permit coordination meetings	II-20	EH	Ongoing	
58 Annually	Illicit Discharge	Investigate complaints of illicit discharges at retail food facilities/report in Annual Report	II-49	EH	Ongoing	
59 Ongoing	Illicit Discharge	Continue to pursue current enforcement actions/report in annual report	II-53	EH	Ongoing	
60 Annually	Illicit Discharge	Train staff regarding spill response during quarterly meetings	II-59	EH	Ongoing	
61 7/1/2005	Public Education and Outreach	Distribute guidelines during routine inspections	II-67	EH	Ongoing	
62 7/1/2005	Industrial/Commercial	Create and maintain an inventory of retail food facilities in permit boundary	II-13	EH	Underway	

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN						
DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
63 7/1/2005	Industrial/Commercial	Inspect retail food facilities for BMP and illicit connections Provide Guidebook during inspections	II-16	EH		
64 7/1/2005	Public Education and Outreach	Make a presentation to the Food Industry Advisory Forum (a committee of food industry owners and EH staff) about the Storm Water Management Plan and the changes for food facilities between Term I and Term 2 permits	II-67	EH		
65 Annually	Industrial/Commercial	Train staff on procedures, policies and BMPs	II-21	EH	Ongoing	
66 Ongoing	Industrial/Commercial	Continue to implement current record keeping activities/report in Annual Report	II-54	EH	Ongoing	
67 Ongoing	Industrial/Commercial	Continue to investigate illicit connections and pursue enforcement action or refer to the appropriate agency for follow up	II-56	EH	Ongoing	
68 7/1/2005	Public Education and Outreach	Conduct survey of horse facilities adjacent to major creeks Horse owners will be provided a copy of the guidelines "Horse Owners Guide to Water Quality" D78	II-61	EH		
69 7/1/2005	Public Education and Outreach	Continue to distribute educational materials at spill sites	II-65	EH	Ongoing	

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN

DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
70 7/1/2005	Municipal Operations	Provide annual training to key personnel to enhance construction BMP knowledge	II-32	General Services		Overview and discussions at monthly staff meetings Project Managers have attended SUSMP
71 7/1/2005	Private Construction	Create standard grading notes for grading plans	II-3	PRMD	Not Started	
72 7/1/2005	Private Construction	Continue to hold pre-construction meetings with grading personnel, on "significant projects"	II-8	PRMD	Ongoing	
73 7/1/2005	Private Construction	Continue to conduct BMP verification inspection, subsequent to the pre-construction meeting, at "significant projects"	II-8	PRMD	Ongoing	
74 7/1/2005	Private Construction	Continue to inspect grading permit activities on "sensitive sites" prior to rainy season, for erosion control compliance	II-8	PRMD	Ongoing	
75 7/1/2005	Private Construction	Continue to conduct final grading inspections, for all grading permits	II-8	PRMD	Ongoing	
76 7/1/2005	Private Construction	Report number of construction inspections conducted, for annual report	II-8	PRMD	Ongoing	

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN						
DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
77 7/1/2005	Private Construction	Continue enforcement protocol	II-11	PRMD	Ongoing	
78 7/1/2005	Private Construction	Propose to Board of Supervisors to amend County Code to increase civil penalties Review right-of-entry for inspectors	II-11	PRMD	Ongoing	
79 7/1/2005	Private Construction	Report information on non-compliant sites to RWB in Annual Report	II-11	PRMD	Ongoing	
80 7/1/2005	Private Construction	Create a policy and procedure for grading violations	II-11	PRMD		
81 7/1/2005	Illicit Discharge	Continue to train staff who are responsible for investigation of illicit discharges and connections	II-59	PRMD	Ongoing	
82 7/1/2005	Public Education and Outreach	Contact newspapers within 24 months of permit adoption and report on status in Annual report	II-60	PRMD		
83 7/1/2005	Public Education and Outreach	Provide workshop to the development community on planning procedures, policies, design guidelines and BMPs for storm water pollution prevention	II-69	PRMD		

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN						
DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
92 6/26/2005	SUSMP	Implement SUSMP measures on applicable projects within Urban Growth Boundary within Permit boundary	23	PRMD	Ongoing	
93 2/26/2005	SUSMP	Develop guidance on long term funding, inspection and reporting procedure for BMP maintenance	23	PRMD	Ongoing	
94 7/1/2005	Private Construction	Continue to use guidelines that are encouraged for local use by NCRWQCB	II-3	PRMD	Ongoing	
95 Ongoing	Illicit Discharge	Refer sewage spills from septic systems in SR city limit to City within one business day	II-50	PRMD	Ongoing	
96 7/1/2005	Illicit Discharge	Continue to investigate illicit septic system discharges and report the number in the Annual Report	II-50	PRMD	Ongoing	
97 7/1/2005	Illicit Discharge	Develop policies and procedures for investigation and notification of appropriate agencies regarding illicit discharges from septic systems	II-50	PRMD		

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN							
DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS	
98	Ongoing	Illicit Discharge	Continue to pursue current enforcement actions/report in annual report	II-53	PRMD	Ongoing	
99	Ongoing	Illicit Discharge	Continue to implement current record keeping activities/report in Annual Report	II-54	PRMD	Ongoing	
100	Ongoing	Illicit Discharge	Continue to investigate illicit connections and pursue enforcement action or refer to the appropriate agency for follow up	II-56	PRMD	Ongoing	
101	7/1/2005	Fiscal Analysis	Continue to report on expenses and sources of funding	II-74	PRMD	Ongoing	
102	7/1/2005	Fiscal Analysis	Include discussion of fiscal resources in workplan meeting with RWB	II-74	PRMD	Ongoing	
103	7/1/2005	SUSMP	Design applicable County capital improvement projects with SUSMP measures	23	Regional Parks	Ongoing	

2004-2005 PHASE I TERM 2 COUNTY OF SONOMA ANNUAL WORKPLAN						
DUE DATE	AREA	GOAL	PAGE NO	LEAD DEPARTMENT	STATUS	COMMENTS
104 4/1/2004	Municipal Operations	Develop an outline of the storm drain labeling program in year one of the permit	II-39	Regional Parks	Not Started	Will hire planning technician by April 2004
105 7/1/2005	Municipal Operations	Develop priority system regarding inventory of closed conduit storm drains	II-37	Regional Parks		What does this mean?
106 7/1/2005	Municipal Operations	Update public project construction documentation	II-27	Regional Parks	Underway	
107 7/1/2005	Municipal Operations	Provide annual training to key personnel to enhance construction BMP knowledge	II-32	Regional Parks	Ongoing	
108 7/1/2005	Municipal Operations	Label 10 existing storm drain inlets per year until all inlets are labeled This number will be re-examined after an inventory is completed	II-39	Regional Parks		
109 7/1/2005	Public Education and Outreach	Continue to provide pet waste signs at Regional Parks facilities	II-62	Regional Parks	Ongoing	
110 Ongoing	Public Education and Outreach	Continue to operate and manage Spring Lake Park Environmental Discovery Center	II-70	Regional Parks	Ongoing	
111 Ongoing	Public Education and Outreach	Continue to contribute funding to the Environmental Discovery Center	II-70	Regional Parks	Ongoing	
112 Ongoing	Public Education and Outreach	Continue to seek sponsorship of Environmental Discovery Center	II-70	Regional Parks	Ongoing	Environmental fines from DA's office provides source of funding

NPDES Storm Water Permit Area
Phase 1 – Term 2

*Work Plan For
Matanzas Creek Bacteriological Study*

Prepared by:

*Sonoma County
Department of Transportation and Public Works*

November 2003

Matanzas Creek Bacteriological Study Work Plan

Study Objectives

The purpose of this study is to determine whether bacteriological contamination of storm water runoff from the Matanzas Creek watershed is from human or animal sources. Once the source(s) are determined, a course of action will be recommended and undertaken to address the contamination.

The initial sampling and testing portion of the Study (*Part I*) will take place during 2003/2004. Following the initial sampling and testing, an analysis of the results will take place and a public outreach program will be developed to reduce contamination (*Part II*).

Background

During the rainy seasons of years 2001/02 and 2002/03, relatively high numbers of fecal coliform bacteria and fecal streptococcus bacteria were found in the stormwater samples taken at Matanzas Creek at Station C3, and in grab samples taken in the upper reaches of the C3 watershed. The actual numbers reported were on the order of thousands to tens of thousands MPN per 100 milliliters of sample. The County Department of Health Services may post streams as unsafe for human contact when Fecal Coliform levels exceed 400 MPN per 100 ml and fecal streptococcus (enterococcus) levels exceed 61 MPN per 100 ml. These bacteria are common in the intestinal tract and feces of humans and warm-blooded animals, and are indicators of potential pathogenic bacterial contamination of watercourses.

Study Overview

To assess the possible sources of the bacterial contamination of the storm water runoff within the Matanzas Creek watershed and assess the effectiveness of the corrective measures, the following questions and steps will be addressed:

1. Is there variation in contaminant levels during the rainy season, or is there no change in contaminant concentration levels throughout the rainy season.
2. Is the source animal or human or a combination of both? Coliphage typing will be used to distinguish between human and non-human bacteria types. Animal specific DNA testing or “Ribotyping” is not within the scope of this study and will not be performed.

3. The outcome of the preceding steps will define the scope of Part II of the study. Part II will include some form of public outreach such as a mailout to property owners with information about Best Management Practices and opportunities for creek stewardship within this watershed.

This study will evaluate both the middle fork and the south fork of Matanzas Creek. Grab samples will be obtained at three different locations within the C3 watershed. These three locations are the same as the grab sample locations that were used during the last two winters where elevated bacteria levels were detected. The tributary areas are shown in Figure 1. This study will not address samples taken at the C3 monitoring station.

The data gathered during the course of this study will be specific to the Matanzas Creek watershed. However, it may be illustrative of other watersheds with similar characteristics.

Specific Study

The grab samples will be taken at the three locations, labeled on Figure 1. Two storm events will be sampled each rainy season. Rainy seasons typically begin in November and run through April of each year. The initial bacteriological sampling and testing in Part I, will take place in 2003/04. At the end of the Part 1 period, sampling will cease. Part II is the public outreach portion of the study and it is planned to begin in the summer of 2005.

Part I – Initial Sampling and Testing (2003/04)

“First Flush” Sampling and Testing

The first annual sampling event will occur when storms of sufficient intensity and duration at the beginning of the rainy season to develop enough runoff to provide meaningful samples. This is called the “First Flush”. Samples will be taken at sites M1, M2 and M3 as shown on Figure 1. These samples will be subjected to male-specific RNA coliphage test. The samples will be delivered to Biovir Labs in Benicia, which will perform the coliphage testing for this study. Samples will be frozen prior to delivery to Biovir.

“Mid-winter” Sampling and Testing

The second sampling event will occur during the middle of winter (i.e., the end of January) when the watershed is saturated and sources of bacteria needing saturated conditions to be mobilized in surface water will contribute to the bacterial load in the stream. The mid-winter sampling will use the same procedure described above for the “First Flush”. The results of this sampling will be compared with the first flush sampling and it is anticipated to be representative of ground surface bacterial sources. Over time

this comparison will answer the questions relative to the time-of-season variability of bacterial numbers which are a possible sources of contamination.

Part II - Public Outreach and Education

The results of the sampling and testing will be analyzed using coliphage testing. The initial analysis of the Part I coliphage testing will trigger the following.

1. If the test results indicate the bacterial source has a human component: This test result typically indicates either residences in the watershed with inadequate septic systems, or possible homeless encampments in the watershed. This finding will mean that information will be mailed to property owners targeting septic system management.
2. Test results indicate only an animal bacterial source: Should the test results indicate no detectable human bacterial contamination of stormwater runoff, the source of the contamination is animal. Animal contamination may originate from domestic or wild animals. An effort will be made to determine if domestic animals such as cows, sheep, chickens or pets found on rural farms or ranch lands are being cared for in ways that could create contamination. If this is the case information will be mailed to property owners targeting animal management.

Special Study Report

The results from each part will be submitted with Annual Report. This report will include a summary of test data results and a description of the outreach program. With the submittal of this report, this study will be concluded.

Report on

Evaluation of Winter 2003/2004 Matanzas Creek Monitoring Data

INTRODUCTION

During the rainy seasons of 2001/02 and 2002/03, relatively high numbers of fecal coliform bacteria and fecal streptococcus bacteria were found in the stormwater samples taken at Matanzas Creek, station C3, and in grab samples taken in the upper reaches of the Matanzas Creek watershed. As a result a special study was promulgated entitled “Work Plan for Matanzas Creek Bacteriological Study”, dated November 2003, and hereinafter referred to as the Work Plan. This report is the first relative to that Work Plan. The purpose of the study was “to determine whether bacteriological contamination of storm water runoff from the Matanzas Creek watershed is from human or animal sources”. The study was broken down into two phases. Phase 1 specified two sampling events to be sampled during the 2003/04 rainy season. Phase 2 pertains to a public outreach and education program targeting and addressing specifically the human or animal verified source.

The data presented herein is a summarization of the lab results of two storm events that were sampled in the 2003/2004 rainy season. The first sampling event occurred on December 10, 2003 and qualified as a “first flush”, and second event occurred on March 10, 2004. The second event which is referred to as “Mid-Winter” in the Work Plan was anticipated to occur at the “end of January”, however due to the actual rainfall pattern the sampling was done on March 10th instead. This delayed sampling represented “when the watershed is Saturated” as defined in the Work Plan.

The samples were analyzed for nutrients, solids and bacteriological at the Alpha Analytical Laboratory in Ukiah. Additionally, and as specified in the Work Plan, samples were taken for bacteriophage testing at the Bio-Vir Laboratories in Benicia. It was anticipated that the latter testing would distinguish between human and animal sources of high bacterial contamination.

SAMPLING PROTOCOL

Samples were obtained from three locations within the Matanzas Creek watershed. The sampling locations were chosen to represent accessible locations within the watershed, and the locations included both the south and middle reaches of the Matanzas Creek tributaries. One sample location was located at the overcrossing of Sonoma Mountain Road at Batesole Drive. Additional sample locations were located at the overcrossings of Hidden Acres Road and at the overcrossing of Sonoma Mountain Road approximately ½ mile east of the intersection with Roberts Road.

Stormwater samples were collected during representative storm events as defined in the General Permit. A qualifying storm is defined as 0.3 inches of precipitation in 3 hours preceded by 72 hours of dry weather. The first flush storm of December 10, 2003 produced the first significant runoff and stream flows in the rural watershed. Samples were collected as grab samples from the flowing stream in laboratory-supplied sterile containers. Upon collection, the samples were sealed, capped and labeled, and placed under refrigerated conditions pending transport to a certified laboratory under Chain-of-Custody procedures. The bacteriophage samples were frozen prior to shipping as a means of preserving the samples prior to analysis.

RESULTS AND DISCUSSION

Please refer to the summarization of the data in the spreadsheet entitled “Matanzas Creek Chemical Monitoring – Winter 2003/2004”. The data reporting is tabulated by Grab 1, Grab 2 and Grab 3 headings. Grab 1 is the grab sample at Matanzas Creek at Batesole Drive, the most downstream location. Grab 2 is the grab sample at Matanzas Creek at Hidden Acres Road. Grab 3 is the grab sample at Matanzas Creek at Roberts Road, the most upstream location. These grab sample locations are the same locations that were sampled during the rainy seasons of 2001/02 and 2002/03 as mentioned above. The constituent data includes the nutrients nitrogen and phosphorus, and solids concentrations. This data is ancillary to the bacteriological data and is provided to help clarify the results.

The first flush (12/10/03) data fecal coliform and fecal streptococcus numbers are, as much as 100 times higher than the previous winter’s data. The numbers range from 63,000 to 54,000,000 mpn/100ml. With reference to the BioVir Laboratories data on the bacteriophage testing, the bacteriophage numbers are given in terms of PFU or Plaque Forming Units per ml (milliliter). Bacteriophages are viruses that infect bacteria. BioVir personnel were consulted in order to help interpret and evaluate the data. The data reports results ranging from 1 to 12 PFU/ml. These results alone are not an outright indicator of whether the source is “animal or human”. An interpretation of the results derives from a comparison of the values of the PFU units to the PFU units for human sewage. Typically human sewage has PFU units of 100,000 per 100 ml or 1,000 per ml. In other words, human sewage concentrations are 100 to 1,000 times more concentrated than the sample results. BioVir personnel thought that this result, i.e. relatively low numbers of PFU, may point more towards animals as the source of the very high bacterial numbers; however there is no doubt a human component. See the watershed discussion below.

The mid-winter (3/10/04) data is more in line with previous years results. The data for the fecal coliform and fecal strep is about 1/100th less than the first flush data. The BioVir bacteriophage data for the samples taken on the same date ranges between 0.6 to 1.1 PFU/ml. These numbers are roughly 1/10th of the concentrations for the first flush. Again these bacteriophage numbers are not conclusive as to human or animal origin. See the watershed discussion below.

In order to get a more definitive answer to the human vs. animal question, personnel from BioVir suggested the option of additional laboratory work, i.e. RNA typing, at a laboratory at the University of North Carolina. This work has been described in an internet release of Stormwater magazine, entitled “Detecting Bacteria in Coastal Waters 2” by Mary Catherine Hager, and downloaded on Nov. 4, 2003. (See pages 8 thru 11, “F-Specific Coliphage Typing”). Apparently this testing would result in a differentiation between one of four groups: Group 1- coliphages found in both humans and animals, Group 2 -human specific coliphage group in North America, Group 3 – human specific coliphages common in other parts of the world, and Group 4 – the animal specific coliphage group.

We did attempt to do this additional step for the mid-winter samples but the BioVir lab found no RNA in any of the samples and therefore could not send cultures back to North Carolina. This testing is expensive and the result may very well be a Group 1 (animal and human) determination. For that reason it is not recommended.

Some discussion of the characteristics of the watershed should be made. Reference is made to the fold out color aerial photo (2003) of the watershed with the sub-watersheds and Creek delineated. In general, homeless encampments are considered to be a very unlikely situation in this watershed. This is due to the lack of large bridges for the homeless to camp under, and the fact that the owners of the private property would not tolerate the homeless camping on their property. Therefore, bacterial contamination from this potential source can be eliminated.

The tributary watershed to the Roberts Road (Grab 3) sample location is a very rural, headwaters watershed. Approx. 65% is grassland or pasture (less than 5% vineyards) and the remaining 35% is wooded. There are only a total of about 10 dwellings in the watershed of 940 acres. All of the dwellings except one are at least 500 ft. away from the Creek. Yet the fecal coliform numbers were almost 4 times the numbers for the Hidden Acres (Grab 2) site, which has considerably more development. Although the sampling is “just a snapshot in time” this would indicate that the high numbers are likely more animal sourced than human. The amount of livestock in the watershed is unknown . There are also four water impoundments in the Roberts Road watershed. Given the fact that Canada Geese like to stop-over at ponds during their migration it could be concluded that they are, at least in part, the cause. See Phase 2 discussion below.

The Work Plan asked the question “Is there variation in contaminant levels during the rainy season, or is there no change in contaminant concentration levels throughout the rainy season?”

Obviously there is a significant change in levels of fecal coliform and streptococcus and to a lesser extent, bacteriophage, during the course of the rainy season. The first flush does indeed carry significantly more fecal bacteria than the “mid-winter” season. This is probably due to the watershed early surface water runoff mobilizing feces on the ground surface and conveying it to the streams. This again points towards animal sources. Septic systems at this time of the season probably don’t contribute much of this loading, unless they are grossly failing and seeping out of the ground. Nitrate levels during the first flush

were detectable. As the Basin Plan does not contain numeric water quality objectives for nitrate, a direct comparison cannot be made. However, the concentrations detected are within the drinking water standard and lower than those which may adversely affect aquatic life. Nitrates were not detected in the mid-winter samples. The range of levels was 0.89 to 3.2 mg/l which are fairly high for a running stream. This is probably due to fertilizers that were applied in the growing season and then flushed out during the first rains. Suspended solids (TSS) were also found in fairly high levels during the first flush and tapered off considerably during the mid winter. The levels increased from the upper reaches to the lower, which would be expected.

The mid-winter results might be considered as a watershed saturated, steady state of ground water influenced runoff. The ground water influence probably contributes a very dilute portion of septic system leachate. The non-detect of nitrates in the samples of mid-winter would indicate that no gross pollution by septic systems occurred.

CONCLUSION

All of the data, although not conclusive, points more towards animals as the source of high fecal bacterial contamination. However, human sources can not be ruled out. The bacteriophage data alone, without the RNA-type testing, is only supportive of the more definitive evidence as listed below. The bacteriophage numbers as stated in PFU/ml are only useful when comparing the numbers to the typical numbers for human raw sewage. Of the suspected animal sources it is not known whether wild or domestic animals are the source. Wild animals are suspected. It is possible that the Phase 2 activity could determine this and then measures can be taken to reduce the fecal loading to the watercourses.

- The early rainy season storms carry a lot more fecal contamination than the mid-winter season. As discussed this would indicate animal sources.
- Given the presumption that there are no human encampments in the watershed there is no fecal bacteria contamination from this source.
- The headwaters watershed (tributary to Grab 3) produced more fecal contamination than the more developed downstream location (tributary to Grab 2), indicative of animal rather than human sources.
- The bacteriophage numbers were very low when compared to typical values for human raw sewage.

Part III

CITY OF SANTA ROSA

**PERMIT TERM 2
ANNUAL REPORT 1**

CITY OF SANTA ROSA ANNUAL REPORT

1.0 LEGAL AUTHORITY

Goal: Effectively prohibit non storm water discharges into the storm drain system and receiving waters.

The legal authority required to implement and enforce the municipal storm water management plan is provided in the Federal Clean Water Act, California Water Code, Fish and Game Code, Health and Safety Code and Penal Code. The California Environmental Quality Act and Subdivision Map Act provide municipalities legal authority to establish conditions on development projects. The City of Santa Rosa has adopted local ordinances to supplement Federal and State legal authority to fulfill the National Pollutant Discharge Elimination System for storm water discharge (NPDES) requirements and implement the Storm Water Management Plan (SWMP).

This section contains specific examples of the current existing legal authority to effectively implement the elements of the storm water management plan thereby reducing pollutants in storm water discharge to the maximum extent practicable (MEP) within its jurisdiction.

Local Legal Authority

Existing Activities:

The Santa Rosa City Code, Chapter 17-12, Storm Water, was amended under Ordinance Number 3272, adopted by the City Council on July 30, 1996. The provisions of this ordinance took effect on August 30, 1996. The Storm Water Ordinance is available on the City web page at the following address: <http://ci.santa-rosa.ca.us/default.aspx?PageId=349>.

State Legal Authority

Existing Activities

In addition to the local enforcement authority granted by the local ordinance, law enforcement apply sections from the California Fish and Game, Health and Safety, Water and Penal Code for environmental crimes.

New Activities:

The California Regional Water Quality Control Board, North Coast Region (RWQCB) adopted an Order No. R1-2003-0062 issuing the Waste Discharge Requirements and Municipal Separate Storm Sewer System Permit for Santa Rosa, Sonoma County Water Agency, and County of Sonoma. After issuance of the second Permit, City Attorney staff attorneys will consult with Regional Board staff attorney to the extent there is a need for further code revisions in connection with the second Permit.

Measurable Goals:

A statement will be included in the second Annual Report that the City's legal counsel has reviewed the City's legal authority to implement and enforce the Permit requirements and certifies that applicable Federal, State and local statutes and codes appear to provide adequate legal authority to implement and enforce the Permit requirements.

Accomplishments:

The City of Santa Rosa (City) certifies that it has adequate legal authority to implement and enforce each of the requirements contained in 40 C.F.R. 122.26(a)(2)(i) (A-F) and Permit No. CA0025052, as modified and effective on June 26, 2003. The City's legal authority is summarized in the Annual Report and described in detail in Part III, Section 1.0 (Legal Authority) of the City's Storm Water Management Plan.

(Signed / CAO)

City Attorney for the City of Santa Rosa

The paragraphs below identified as **13a. – 13e.** are intended to summarize the legal authority information that is contained in Section 1.0 of the Storm Water Management Plan and comply with the Waste Discharge Requirements Order No. R1-2003-0062, Provision 13.

13 a. City's storm water related ordinances and agreements and the reasons the ordinances are enforceable

1. The following ordinances contained in the Santa Rosa City Code ("SRCC") provide the City with the authority to 1) control the contribution of pollutants in discharges of runoff to its MS4, including discharges associated with industrial activities and industrial sites; 2) prohibit illicit connections an/or illicit discharges to the MS4; and 3) control the discharge of spills, dumping, or disposal of materials other than storm water to its MS4: Although sections of the City Code are cited below, the entire Code can be viewed on the internet at the: <http://municipalcodes.lexisnexis.com/codes/santarosa>.

SRCC Chapter 17-12 (Storm Water)

SRCC Chapter 18-04 (Building and Construction – General)

SRCC Chapter 19-64 (Subdivision – Grading and Erosion Control)

SRCC Chapter 15 (Sewers)

2. The following ordinances contain the enforcement mechanisms, including monetary fines, to require compliance with the City's storm water ordinances, permits, contracts and orders:
SRCC Chapter 17- 12, (Storm Water), Sections 180, 190, 260, 270, 280
SRCC Chapter 1-30 (Administrative Review)
3. The following ordinances provide the City with the authority to carry out all necessary inspections, surveillance and monitoring to ensure compliance with local ordinances and the Permit:
SRCC Chapter 17–12, (Storm Water), Section 180
SRCC Chapter 15, (Sewers)
4. The City has entered into an interagency agreement with the County of Sonoma, dated December 16, 2003, to control the contribution of pollutants from one portion of the shared MS4 to another portion.

13 b. Local administrative and legal procedures available to mandate compliance with storm water related ordinances:

The City has the authority to mandate compliance with storm water related ordinances and its Permit pursuant to the following ordinances:

SRCC Chapter 17-12, (Storm Water), Sections 180, 190, 260, 270, 280
SRCC Chapter 1-24 (Code Violations)
SRCC Chapter 1-30 (Administrative Review) Newly Adopted – November 18, 2003

13c. Roles and responsibilities of City Departments that conduct storm water pollution prevention related activities:

The roles and responsibilities of the City Departments that conduct storm water pollution prevention related activities are described below. An organizational chart for each department that identifies key personnel is also included at the end of this Section.

Department of Public Works: The Public Works Department manages the storm water program, conducts public education and storm water quality testing, provides illicit discharge and connection response and follow up enforcement. Public Works also maintains the storm drain maps, and provides for storm water system operations and maintenance.

Utilities Department: The Utilities Department regulates industrial/commercial operational activities to ensure that wastewater is properly pretreated and routed to the sanitary sewer system. The Utilities Department operates and maintains sanitary sewer system.

Community Development: The Community Development Department regulates private construction activities through plan review, building and grading permit issuance and construction inspection and enforcement.

Recreation and Parks Department: The Recreation and Parks Department is responsible for pesticide, fertilizer application and vegetation maintenance activities at parks and recreational facilities.

Transit and Parking Department: The Transit and Parking Department is responsible for cleaning and maintenance activities on the City owned parking garages and lots.

Police Department: The Police Department assists various City departments by providing enforcement for City Code violations as well as responding environmental crimes.

Fire Department: The Fire Department responds to emergencies, issues permits and conducts routine inspections.

City Attorney's Office: The City Attorney's Office handles enforcement of storm water related violations through civil actions, based on referrals from City departments.

13d. How these ordinances are implemented and how enforcement actions under these ordinances may be appealed:

The following is a description of the implementation and enforcement actions as applied by the various City departments. The levels of progressive enforcement action range from simple verbal warnings to civil action brought by the City.

Private Construction: The discharge of pollutants into the City storm drain system from construction activities is achieved through plan review and grading permit issuance, construction inspection, and enforcement of the City's Storm Water Ordinance at private development construction sites.

City Code Section 19-64.010 requires also that subdivisions be designed to provide for proper grading and erosion control. This section and Title 18, Building and Construction, section 18-04.030 also require compliance with the storm water provisions of Chapter 17.

Inspections of Private Construction Sites: The Community Development Department (CD) Engineering and Building Divisions are involved with inspection of private construction sites. CD-Engineering provides grading and storm water inspection. CD-Building provides structural inspection.

The CD-Engineering currently has two full time grading inspectors that are assigned to providing grading and storm water inspections for private development construction sites. These sites consist primarily of residential subdivisions and also include construction projects that have been approved by CD-Building following CD-Engineering staff approval.

CD-Engineering inspects construction contractors' proper storage, use, and disposal of construction materials, chemicals, and wastes, and prevention of illicit discharges to storm drains and water courses at construction sites with Grading Permits.

For development projects with planned construction activity during the wet season (October 15 - April 15), CD-Engineering inspects erosion and/or sediment control measures for implementation in accordance with local ordinances, approved storm water plans and project conditions of approval and for maintenance as needed during construction.

CD-Engineering inspects construction sites for adequacy of storm water quality control measures. The frequency of inspections for active sites varies; inspections are performed at least twice per month, or more frequently based on the size of the project, site conditions, precipitation, and the project's potential impact on storm water quality.

Prior to the beginning of the wet season each year, CD-Engineering notifies the owner/contractor to remind them of the need to have the appropriate erosion and/or sediment control measures in place prior to October 15th. CD-Engineering inspects all sites requiring erosion and/or sediment control plans, for plan conformance and adequate BMPs have been taken to minimize erosion and discharges of sediment from disturbed areas.

Enforcement of Private Construction Sites: Construction sites with inadequate erosion/sediment controls are given verbal or written notice of the inadequacies, according to the City's enforcement procedures, and followed up with action(s) commensurate with the risk of pollutants entering municipal storm drains or waterways.

Graduated levels of enforcement are as follows:

- First Level - (Non-compliance Notification) Verbal warning or written correction notice.
- Second Level - NPDES Inspection Citation written.
- Third Level - Notice of Violation written.
- Fourth Level - Criminal and/or Civil Action through the City Attorney's office.

Public Construction Activities Management: The City requires that all work performed on public improvement projects shall be performed in accordance with the City of Santa Rosa Special Provisions, Plans, City Design and Construction Standards, City Specifications and State of California Department of Transportation (Caltrans) Standard Plans and Standard Specifications. The documents contain the conditions and terms in which the contractor is legally bound to comply upon the contract award.

The City Special Provision Section 7, Legal Relations and Responsibility, 7-1.01G-Water Pollution requires that the contractor provide adequate measures to control and prevent the discharge of pollutants. This provision is included in all City public improvement projects. If an improvement project requires grading, other than trench work, the project improvement plans will include an erosion prevention and sediment control plan. Additionally, contractors are required, as part of the contract, to comply with Caltrans Standard Specification Section 20-3: Erosion Control. Section 20 provides specifications for the preparation of areas to receive erosion control materials such as application of straw, seed and fertilizer.

Public Construction Inspection: Construction inspection policy and procedures are defined in the Public Works Engineering Division Procedures Volume 1. The City construction inspectors are responsible to ensure that public improvements projects, whether constructed through City contracts or by private developers, are constructed in accordance with approved plans and specifications. The specifications and plans require the contractor to implement BMPs to protect water quality during construction activities. The inspection policy and procedures are utilized by the City as the quality control mechanism for aspects of construction including storm water BMP implementation.

Public Construction Enforcement: If a contractor, permittee, or other agency performing work under the supervision or control of the City Engineer, fails to comply or violates any contract provisions, ordinance or lawful instruction the following procedures shall be followed.

1. **Verbal Instruction** - documented in construction diary
2. **Job Memorandum** - written instruction confirming verbal instruction where circumstances are not severe enough to warrant a Notice of Violation or Non-Compliance

3. **Notice of Non-compliance** - issued for non compliance of plans, specifications and legal requirements. A stop work order may also be included as part of the Notice.

Industrial/Commercial: The discharge of pollutants into the City storm drain system from industrial and commercial activities is achieved through education, inspection and enforcement of the City's Sewer and Storm Water Ordinances.

The Industrial/Commercial element emphasizes operational activities to ensure that waste water is properly pretreated and routed to the sanitary sewer system. City of Santa Rosa's Pretreatment Program Enforcement Response Plan (PPERP) outlines the operational procedures intended to ensure that commercial and industrial dischargers to the sanitary sewer system are permitted and monitored. The Industrial Waste Section (IW) of the City Utilities Department is responsible for implementation the PPERP. (**Appendix III.A**)

County of Sonoma Department of Health Services, Environmental Health Division is responsible for all health code inspections related to food facilities within the City and County. See Part II, County of Sonoma Storm Water Management Plan for details.

The City of Santa Rosa Industrial Waste Section issues permits and provides inspections of food facilities that have an active wastewater permit to discharge industrial wastewater to the City of Santa Rosa's sewer collection system. Permit provisions specific to food facilities include permit compliance inspections that are performed by the Industrial Waste Section.

Inspection of food facilities for wastewater discharge permit compliance is performed with a range frequency that varies from twice a year to once every five years. The majority of facilities, approximately 95%, are inspected a minimum of once every two years. Reporting of inspections will be accomplished as required under the terms of the NPDES Permit No CA0022764 Waste Discharge Requirements for the City of Santa Rosa, Laguna Subregional Wastewater Treatment, Reuse, and Disposal Facilities.

Industrial Waste (IW) issues permits and provides inspections of nonresidential auto repair/body facilities with an active permit to discharge industrial wastewater to the City of Santa Rosa's sewer collection system. Inspections of automotive service facilities for wastewater discharge permit compliance are performed with a frequency that varies from twice a year to once every five years. The majority of facilities, approximately 67%, are inspected a minimum of once every two years. Reporting of inspections is accomplished as required under the terms of the NPDES Permit No CA0022764 Waste Discharge Requirements For the City of Santa Rosa, Laguna Subregional Wastewater Treatment, Reuse, and Disposal Facilities.

Industrial/Commercial Enforcement -Industrial Waste Permitted Facilities: The City of Santa Rosa Pretreatment Program Enforcement Response Plan details the range of responses to instances of noncompliance which take into account the circumstances related to noncompliance. That Response Plan also specifies the IW personnel responsible for the enforcement response. While enforcement response procedures are the responsibility of IW personnel, procedures may also be instituted by Public Works staff and the Police Department as provided by the appropriate legal authority granted to each.

The IW enforcement procedures for noncompliance are categorized and summarized below:

Noncompliance Categories:

1. Sampling, monitoring or reporting violations
2. Compliance schedules
3. Effluent limits
4. Non-compliance detected through inspections of field investigations

Progressive Enforcement:

- **Phone call**
- **Notice of Violation (NOV)** - An official communication from the City to a non-compliant user which informs a user that a pretreatment violation has occurred.
- **Administrative Order (AO)** - Enforcement document which directs industrial users to undertake or cease specified activities. There are four common types of Administrative Orders.
- **Cease and Desist Orders** - directs a non-compliant user to cease illegal or unauthorized discharges immediately or to terminate its discharge altogether.
- **Consent Order** - An agreement between the City and the industrial user normally containing three elements.
 - A. Compliance schedules
 - B. Stipulating fines or remedial actions
 - C. Signatures of City and Industrial representatives

Illicit Discharge Detection and Elimination: Preventing spills to the storm drain system including creeks and channels is an ongoing educational and proactive process that is an inherent part of the NPDES permit compliance.

During the first permit term, funding was approved for an Environmental Crimes Investigator. Funding for this position is provided annually by the storm water utility assessment, the Utilities Department. The Environmental Crimes Investigator assists Public Works, Utilities and Fire Departments with incidents of environmental crime. Monthly coordination meetings with the Environmental Crimes Investigator, Fire, Industrial Waste, PW Field Services and Storm Water Team are held to coordinate and share information about recent incidents.

The City Industrial Waste Division routinely responds to potential incidents of violation of the sewer use ordinance in addition to periodic routine inspections of permitted businesses. Reports and referrals that indicate potential illegal disposal to the storm drain system are forwarded to the City Public Works Department for locations within the City limits that do not have an active Industrial Waste Permit. The City Public Works Department will coordinate with the City Industrial Waste Division on follow up on such referrals to have illicit connections eliminated and to take appropriate steps to prevent future illegal discharges.

Spill Containment, Cleanup and Investigation: Under the storm water discharge permit, the City is responsible for cleaning up non-hazardous materials from their right-of-way within the permit boundary. The City Public Works Department has developed Spill Response Procedures to provide appropriate response for discharges to the storm drain system (**Appendix III.B**). Typical response to a report of potential or actual discharge is to immediately dispatch a City Field Services crew to the scene to stop any discharge from entering the storm drain system. For

serious incidents or if the substance spilled is a hazardous material, City Police and/or Fire Department respond. Public Works Field Services response staff are on call twenty four hours a day, seven days a week. During normal business hours, the City Storm Water Inspector is dispatched in a timely manner to the scene to assist with clean-up efforts, establish contact with the discharger, business and/or property owner, and provide follow-up enforcement and education. Unfortunately, it is not always possible to identify a discharger and pursue appropriate follow-up. In these cases, City crews perform any required cleanup using the appropriate equipment to remove any pollutants that have entered or threatened to enter the storm drain system and if appropriate, door tags will be placed on residences in the vicinity. If identified, the discharger may be assessed the cost of the clean-up and/or may be referred for prosecution.

Prioritization for Investigation of Illicit Discharges:

Investigations of illicit discharges and disposal are prioritized on the nature, location and quantity of the material spilled and the time of year. Highest priority is given to those incidents involving large quantities and occurring in the wet weather with the highest potential of discharge to a pipe system or creek.

Enforcement Procedures:

The City established Enforcement Procedures (refer to **Appendix III.B**) Spill Response Procedure) for general violations which formalize plan of action to be taken pursuant to Chapter 17-12, Storm Water, of the City Code or other State law violations. The Enforcement Procedures includes a list of possible violations and template warning letter, notice of violation, cease and desist orders and administrative show cause orders.

Show Cause Order - Direct industrial or commercial user to appear before the City Engineer, explain its non-compliance, and show cause why more severe enforcement against the user should not go forward.

Compliance Orders - Directs the industrial or commercial user to achieve or restore compliance by a date specified in the Order. Usually issued when non-compliance cannot be resolved without construction, repair or process changes.

Penalty - A monetary fine can be assessed for certain permit and/or discharge violations as specified in Part 4 of the Enforcement Response Plan. Penalties are assessed according to the criteria and formula detailed in Part 6 of the Enforcement Response Plan.

City Code Violation Appeal Process

The Santa Rosa City Code Chapter 1 (General Provisions) cited below, provides appeal process for any dispute of the interpretation or application of the City Code. Chapter 17 Storm Water contains provisions specifically for any discharger to appeal their determination in writing to the Public Works Director. If the discharger is dissatisfied with the Public Works Directors determination they may file an appeal with the City Council.

Chapter 1.20 APPEALS BEFORE CITY COUNCIL

Any person dissatisfied with any final decision of any City Commission, board or official may appeal such final decision to the Council. Only final decisions may be appealed to the Council. This section shall not apply to the issuance of a building or grading permit, including any construction, electrical, plumbing, mechanical or other permit issued by the Building Division of the Department of Community Development. (Ord. 3664 § 1, 2004: prior code § 2.400)

Building Permits can be appealed to the Board of Building Regulations, but only for code issues. See Section 18-04.060. Appeal issues are outlined in the California Building Code (CBC) Section 105.

Building Permits (grading permits are a specific type of Building Permit) can not be appealed because they are considered ministerial acts. However, if the grading or construction activity results in a violation of the Storm Water Ordinance the following sections may apply. Refer to the Storm Water Management Plan Section 1.0 or the City of Santa Rosa's web page: <http://ci.santa-rosa.ca.us/default.aspx?PageId=349> for the entire text.

Section 17.12.190 Violations constituting misdemeanors.

Section 17.12.200 Violation--Additional actions and remedies.

Section 17.12.210 Violation--Emergency abatement.

Section 17.12.270 Civil actions.

Section 17.12.280 Remedies not exclusive

Section 17.12.290 Dispute--Request for ruling- the discharger may request in writing a ruling by the Director of Public Works on the matter.

13e. Use of administrative orders and injunctions:

The City has the authority to issue administrative orders imposing penalties and providing for injunctive relief pursuant to Santa Rosa City Code Chapters 17-180 (Storm Water) and 1-30 (Administrative Review of Ordinance Violations). Refer to below articles and resolution for the City's authority to impose fines up \$500 per day per code violation.

Chapter 1.30 ADMINISTRATIVE REVIEW OF ORDINANCE VIOLATIONS**Section 1.30.009A Article 1 Purpose and Authority for an Administrative Review--Definitions****Section 1.30.010 General enforcement authority for an administrative review.**

This chapter is adopted pursuant to the municipal affairs provision contained in Section 51 of the Santa Rosa City Charter for the purpose of making any violation of the Santa Rosa City Code or of any ordinance enacted by the Santa Rosa City Council subject to administrative fines and penalties and to set forth the procedures authorized in Government Code Section 53069.4 for the imposition, enforcement, collection, and administrative review of such fines and penalties. (Ord. 3665 §§ 1 (part) and 3, 2004; Ord. 3641 § 1 (part), 2003).

Section 1.30.020 Violations of an ordinance subject to an administrative review.

This section declares that a violation of the Santa Rosa City Code or of any ordinance enacted by the Santa Rosa City Council is subject to an administrative fine or penalty. The procedures are activated by an administrative notice and order, which may be used at the sole discretion of the City of Santa Rosa. The remedies provided by this chapter shall be in addition to and cumulative of all other remedies, criminal or civil, which may be pursued by the City of Santa Rosa to address any violation of its ordinances. (Ord. 3665 § 1 (part),

2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.040 Administrative notice and order.

Whenever a Code Enforcement Officer determines that a violation of an ordinance has occurred, the Code Enforcement Officer may issue an administrative notice and order to the responsible party for the violation.

(B) Each administrative notice and order shall contain the following elements:

(1) The date of the violation or, if the date of the violation is unknown, then the date the violation is identified;

(2) The address or a definite description of the location where the violation occurred, such as a tax assessor parcel number (A.P.N.);

(3) The section of the code that the responsible party has violated and a description of how the responsible party has violated the section;

(4) A description of the action necessary to correct the violation and a reasonable time designated to correct the violation;

(5) The amount of the penalty for the code violation;

(6) An explanation of how the penalty shall be paid, the time period in which it shall be paid, and the consequences of failure to pay the penalty;

(7) An order prohibiting the continuation or repeated occurrence of the code violation described within administrative notice and order;

(8) A description of the administrative review procedures. The description shall including the time, date and place of the hearing, which shall be at least 10 days after the date of the administrative notice and order;

(9) The name, date, and signature of the Code Enforcement Officer. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.048A Article 2 Reserved.

Section 1.30.049A Article 3 Procedures for Administrative Review of Code Violations and Nuisances.

(A) Whenever a Code Enforcement Officer determines that a violation of an ordinance has occurred, the Code Enforcement Officer may issue an administrative notice and order to the responsible party for the violation.

(B) Each administrative notice and order shall contain the following elements:

(1) The date of the violation or, if the date of the violation is unknown, then the date the violation is identified;

(2) The address or a definite description of the location where the violation occurred, such as a tax assessor parcel number (A.P.N.);

(3) The section of the code that the responsible party has violated and a description of how the responsible party has violated the section;

(4) A description of the action necessary to correct the violation and a reasonable time designated to correct the violation;

(5) The amount of the penalty for the code violation;

(6) An explanation of how the penalty shall be paid, the time period in which it shall be paid, and the consequences of failure to pay the penalty;

(7) An order prohibiting the continuation or repeated occurrence of the code violation described within administrative notice and order;

(8) A description of the administrative review procedures. The description shall including the time, date and place of the hearing, which shall be at least 10 days after the date of the administrative notice and order;

(9) The name, date, and signature of the Code Enforcement Officer. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.050 Penalties and payments for violations.

(A) The penalty for code violations imposed by this chapter shall be set forth in a schedule of penalties established by resolution of the Santa Rosa City Council.

(B) The penalty shall be paid to the City of Santa Rosa within 30 days from the date of the administration enforcement order.

(C) Payment of a penalty under this chapter shall not excuse or discharge any continuance or repeated occurrence of the code violation that is the subject of the administrative notice and order.

(D) No building, zoning, fire, or other permit shall be issued to the responsible party until the administrative penalty and appropriate permit fees related to the violation have been paid. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.060 Procedures after the administrative notice and order is issued--Recordation of administrative notice and order. Enforcement Officer may file in the office of the County Recorder a certificate describing the property and certifying the following:

(A) That the building, structure, or property is in violation of the Santa Rosa City Code or of an uncodified ordinance adopted by the City Council; and

(B) That the owner has been so notified.

This certificate may be filed either prior to the administrative hearing designated in the administrative notice and order, or prior to any continuance thereof, or within a reasonable time following the filing of the administrative enforcement order.

Whenever the corrections ordered in the administrative notice and order shall thereafter have been completed or the building, structure, or property has been repaired, demolished, or removed so that it no longer exists as a violation thereof, the Code Enforcement Officer shall, at his sole discretion, either file, or cause to be filed, with the County Recorder, or, in lieu of such filing, provide to the property owner with notice, a new certificate certifying that the building, structure, or property has been brought into compliance with the administrative notice and order, or that all required corrections have been made so that the building, structure, or property conforms to the requirements contained in the administrative notice and order. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.069A Article 4 Administrative Hearing Procedures**Section 1.30.070 Declaration of purpose.**

The purpose of the hearing is to provide a review of the administrative notice and order by a Hearing Officer. The Hearing Officer shall only consider evidence that is relevant to the determination of facts contained in the administrative notice and order. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.080 Hearing Officer.

(A) The City Manager shall appoint one or more individuals as the Hearing Officer(s) for an administrative hearing held pursuant to this chapter.

(B) The employment, performance evaluation, compensation and benefits of the Hearing Officer shall not be directly or indirectly conditioned upon the amount of administrative notice and order penalties upheld by the Hearing Officer.

(C) The Hearing Officer shall not be a City employee or City official, whether elected or appointed. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.100 Hearing Officer' s decision.

(A) After considering all of the testimony and evidence submitted at the hearing, the Hearing Officer shall, within 45 days, file a written decision with the Code Enforcement Officer. The decision is to be entitled "Administrative Enforcement Order" and shall either uphold, modify, or cancel the administrative notice and order as to each named responsible party. The decision shall list the finding in support of the decision and the imposition of any

administrative fine or penalty.

(B) The Hearing Officer shall serve the administrative enforcement order on each party; when the administrative enforcement order is served on the Code Enforcement Officer, the order shall be final.

(C) When the administrative enforcement order cancels the administrative notice and order as to a responsible party, the case shall be terminated as to that party.

(D) When the administrative enforcement order upholds or modifies the administrative notice and order as to one or more responsible parties, the Hearing Officer shall impose and assess not only the prescribed fine and/or penalty but also impose and assess administrative costs against each responsible party. When the administrative enforcement order directs the abatement of a violation, including a nuisance, the violation may be corrected or abated as authorized within this chapter or as otherwise permitted by law.

(E) The administrative enforcement order shall include notice to the responsible party that the penalties and the administrative costs may become the subject of a special assessment against the property where the violations occurred if payment is not received within 30 days of the date of the final order. The administrative enforcement order shall also state the penalty for any late payment and that, if the violation continues, the responsible party may be subject to additional penalties authorized by law.

(F) Failure to Commence Work. Whenever the required repair or demolition is not commenced within 30 days after any final administrative enforcement order issued under this chapter becomes effective:

(1) The Chief Building Official/Code Enforcement Officer shall cause the building, structure, or other property described in such order to be vacated by posting at each entrance thereto a notice reading:

Section 1.30.120 Limited appeal--Right to judicial review.

Notwithstanding the provisions of Section 1094.5 or 1094.6 of the California Code of Civil Procedure, within 20 days after service of the final administrative order or decision of the local agency is made pursuant to an ordinance enacted in accordance with California Government Code section 53069.4 regarding the imposition, enforcement or collection of the administrative fines or penalties, any person contesting the final administrative order or decision made pursuant to this chapter may seek review by filing an appeal to be heard by the superior court. The right to appeal is limited to the terms and conditions set out in Section 53069.4. In the event that a copy of the notice of appeal is served in person or by first-class mail upon the City of Santa Rosa by the contestant-appellant pursuant the appeal to the superior court, the time for payment shall be suspended from the date of said service until the judgment of the court is final. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.130 Private right of action.

Any person, entity, association, or organization aggrieved by a willful violation of any provision of this chapter, where the owner(s) of a property has failed or refused to correct and/or abate a violation under this chapter for 40 days after the administrative enforcement order becomes final, shall have the right to file an action and/or proceeding for injunctive relief and damages against the owner(s) of such property. Any person, entity, association, or organization which prevails or is successful in any such action or proceeding shall be entitled, in addition to any other relief, to recover all reasonable costs, expenses and attorney' s fees incurred in such action or proceeding. Treble damages also shall be awarded for such willful failure to comply with this chapter. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.139A Article 5 Collection of Administrative Fines and Penalties.**Section 1.30.140 Administrative hearing fund--General.**

(A) The City Council shall establish a special revenue fund to be designated as the administrative hearing fund.

(1) Revenue to the fund shall include, but is not limited to, special assessments and personal obligations made pursuant to this chapter.

(2) Transfers or expenditures from the administrative hearing fund shall be budgeted for and approved by the City Council. Reimbursements shall be budgeted for said funds to reimburse or defray the costs and expenses that may be incurred by the City in doing or causing to be done the necessary work involving one or more violations identified in an administrative notice and order or in an enforcement order.

(B) When any work, including, but not limited to, repair, demolition, or abatement, is to be done pursuant to this chapter, the City Manager, under his or her signing authority, shall cause the work to be accomplished by city personnel or by private contract, pursuant to Santa Rosa City Code Section 3-08.110. Any amount in excess of the City Manager's signature authority shall be approved by the City Council. Plans, specifications, and other work requirements necessary to accomplish the objectives of this chapter therefore may be prepared by or at the direction of the City Manager, who may employ such labor or professional services on a contract basis as may be deemed reasonably necessary. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.150 Maintenance of fund.

The City Council may at any time transfer to the administrative hearing fund, out of any money in the general fund of the City, such sums as it may deem necessary in order to expedite an administrative notice and order or an enforcement order, and any sum so transferred shall be deemed a loan to the administrative hearing fund and shall be repaid out of the proceeds of the collections hereinafter provided for. All funds collected under the proceedings hereinafter provided for shall be paid to the City of Santa Rosa which shall credit the same to the administrative hearing fund. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.160 Recovery of administrative notice and order penalties and costs.

If the responsible party does not comply with either the administrative notice and order or administrative enforcement order, or both, and no appeal has been properly and timely filed, the Code Enforcement Officer shall file with the County Recorder a copy of the administrative enforcement order with which the responsible party has failed to comply. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.170 Procedure to confirm a special assessment lien.

(A) Whenever the amount of any administrative penalty, including administrative costs, imposed in the administrative enforcement order pursuant to this chapter has not been satisfied in full within 30 days and/or has not been successfully challenged by a timely judicial review pursuant to Government Code Section 53069.4, this penalty may constitute a special assessment lien against the real property on which the violation occurred.

(1) If the responsible party has not paid the administrative penalty, including administrative costs, in full within 30 days and the City wishes to confirm the charge as a special assessment against the property, the Code Enforcement Officer shall request the confirmation of the special assessment to be placed on the consent agenda of the City Council within 120 days of the administrative enforcement order.

(2) The Code Enforcement Officer shall provide written notice to the responsible party of the request to the City Council for the confirmation of the penalty as a special assessment against the property at least 10 days prior to the City Council action.

(3) The Code Enforcement Officer, in his or her sole discretion, may authorize that the administrative enforcement order imposing the penalty, including the administrative costs,

against the property involved, when the amount is in excess of \$2,500.00, may be divided into installments payable in not more than five equal annual installments. The resolution adopted pursuant to this article confirming the assessment against the property shall also state, when applicable, the number of installments and the rate of interest thereupon, the descriptions of the parcels identified in the confirmation shall be those used for the same parcels on the County Assessor's map books for the current year. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.180 Report to Assessor and Tax Collector--Addition of assessment to tax bill.

After confirmation of the report, certified copies of the assessment shall be given to the Tax Assessor and to the Tax Collector, who shall add the amount of the assessment to the next regular tax bill levied against the parcel. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.190 Filing copy of report with County Auditor.

If the County Assessor and the County Tax Collector assess property and collect taxes for the City, a certified copy of the assessment shall be filed with the County Auditor on or before August 10. The descriptions of the parcels reported shall be those used for the same parcels on the County Assessor's map books for the current year. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.200 Lien of assessment.

(A) Priority. Immediately upon its being placed on the assessment roll, the assessment shall be deemed to be complete, the several amounts assessed shall be payable, and the assessments shall be liens against the lots or parcels of land assessed respectively. The lien shall be subordinate to all existing special assessment liens previously imposed upon the same property and shall be paramount to all other liens except for state, county and municipal taxes, with which it shall have parity. The lien shall continue until the assessment and all interest due and payable thereon are paid.

(B) Interest. All such assessments remaining unpaid after 30 days from the date of recording on the assessment roll shall become delinquent and shall bear interest at the rate of seven percent per year from and after said date. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.210 Collections of assessment--Penalties for foreclosure.

(A) The amount of the assessment shall be collected at the same time and in the same manner as ordinary property taxes are collected, and shall be subject to the same penalties and procedure and sale in case of delinquency as provided for ordinary property taxes. All laws applicable to the levy, collection and enforcement of property taxes shall be applicable to such assessment.

(B) If the City Council has determined that the assessment shall be paid in installments, each installment and any interest thereon shall be collected in the same manner as ordinary property taxes in successive years. If any installment is delinquent, the amount thereof is subject to the same penalties and procedure for sale as provided for ordinary property taxes. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.220 Repayment of repair and demolition fund.

All money recovered by payment of the charge or assessment or from the sale of the property at foreclosure sale shall be paid to the Treasurer of this jurisdiction who shall credit the same to the repair and demolition fund. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

Section 1.30.230 Satisfaction of lien.

Once payment in full is received by the City for outstanding penalties and costs, the Director shall either record a notice of satisfaction or provide the property owner or financial institution with a notice of satisfaction so they may record this notice with the office of the County Recorder. Such notice of satisfaction shall cancel the City' s lien. (Ord. 3665 § 1 (part), 2004; Ord. 3641 § 1 (part), 2003)

The following Resolution was approved and adopted by the Santa Rosa City Council to establish an administrative penalty and fine schedule for violations of a City Ordinances.

RESOLUTION NO. 25816**RESOLUTION OF THE COUNCIL OF THE CITY OF SANTA ROSA APPROVING AND ADOPTING AN ADMINISTRATIVE PENALTY AND FINE SCHEDULE FOR VIOLATIONS OF A CITY ORDINANCE**

WHEREAS, State law provides that cities may establish penalties and fines applicable to an administrative hearing process with regard to a violation of a City ordinance; and

WHEREAS, the Council has received and considered any comments submitted during the public hearing;

NOW, THEREFORE, BE IT RESOLVED that the Council of the City of Santa Rosa establishes the Administrative Penalty and Fine Schedule set forth in Exhibit A attached hereto and incorporated herein; and

BE IT FURTHER RESOLVED that the Council determines that the adoption of the Administrative Penalty and Fine Schedule set forth in Exhibit A is exempt from the California Environmental Quality Act in accordance with Public Resources Code 21080(b)(8) and CEQA Guideline Sections 15061(b)(3) and 15308.

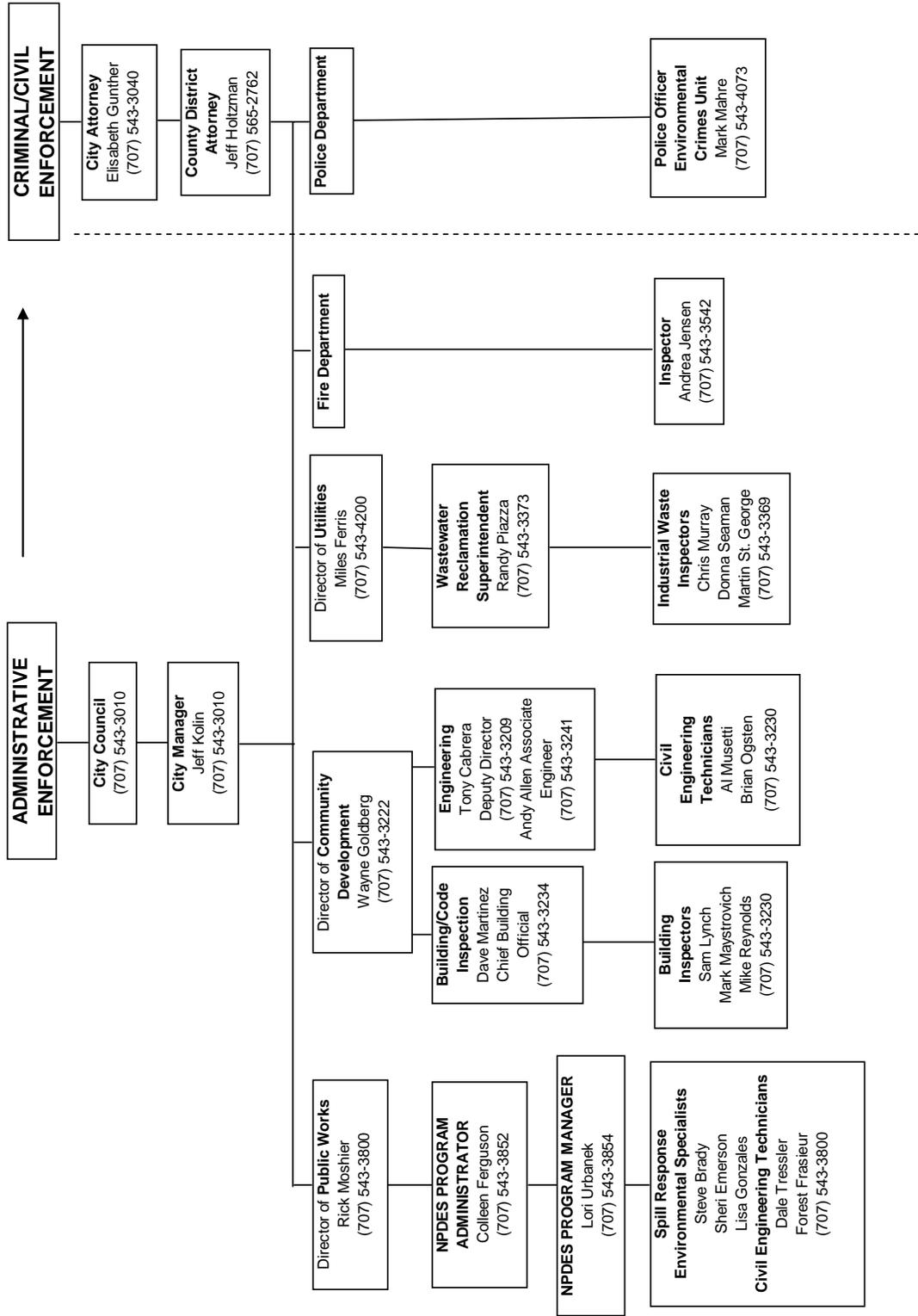
IN COUNCIL DULY PASSED this 18th day of November, 2003.

EXHIBIT A**Administrative Penalty and Fine Schedule**

In addition to paying the City's administrative costs as defined in the City Code, the penalties applicable to a violation of a City ordinance shall also include the following:

1. The penalty for an initial violation is five hundred dollars (\$500) for each day the violation continues.
2. The penalty for a subsequent violation within thirty-six (36) months of an initial violation is \$1,000 for each day the violation continues.
3. The penalty for a late payment is 7%, pro-rated daily, from payment date.
4. Notwithstanding any other means of collecting a penalty, at the discretion of the City Manager or designee, any penalty created pursuant to this resolution may be deemed either a special assessment lien against the property where the violation occurred or a personal obligation of the party responsible for the violation.

Figure III.A
City of Santa Rosa
Organization Chart for Enforcement of Storm Water Regulations
 Prepared by City of Santa Rosa August 17, 2004



2.0 PRIVATE CONSTRUCTION

Goal: Reduce or eliminate the potential for private construction generated pollutants to enter the City storm drain system to the MEP.

Storm water discharges from construction related-activities are considered to have the potential to be significant pollutant contributors to the municipal storm water system. The program goal to reduce or eliminate the discharge of pollutants into the City storm drain system from construction activities will be achieved through education, plan review and grading permit issuance, construction inspection, and enforcement of the City's Storm Water Ordinance at private development construction sites.

2.1 Grading Permit Issuance

Existing Activities:

The Community Development Engineering Division (CD-Engineering) and the Building Division (CD-Building) are involved with the issuance of Grading Permits for the City of Santa Rosa. Grading Permits are a specific type of Building Permit.

1. For residential and commercial subdivisions, public Improvement Plans are prepared by private engineers on behalf of the project developer, and are reviewed and approved by CD-Engineering. These plans include a Grading Plan and an Erosion Control Plan. Grading Permits are issued by CD-Engineering staff based upon these plans. These projects are inspected per Section 2.3 below.
2. For commercial, industrial and residential projects that are not associated with a residential or commercial subdivision, Building Permit plans are prepared by private engineers on behalf of the project developer. These plans include a Grading Plan and an Erosion Control Plan that are reviewed and approved by CD-Engineering. Grading Permits or Building Permits that include grading, are issued by CD-Building staff following review and approval by CD-Engineering staff based upon these plans. These projects are inspected per Section 2.3 below.
3. For commercial, industrial and residential projects that have little or no site grading (such as interior tenant improvements, structures with foundation excavation only, electrical permits, plumbing permits, roofing permits), plans do not include a Grading Plan or an Erosion Control Plan. Therefore Grading Permits (or Building Permits that include grading) are not issued on these projects. These projects are **not** inspected per Section 2.3 below.

Prior to issuance of a Grading Permit, a staff engineer from CD-Engineering reviews the project plans and requires documentation of the following items:

1. An Encroachment Permit has been issued by Public Works (see Section 2.2 below).
2. Where applicable, a revocable license has been issued by the Sonoma County Water Agency.

3. Where applicable, a Notice of Intent to comply with the State General Permit for storm water discharges from construction sites has been submitted to the State Water Resources Control Board.
4. Where applicable, a Fish and Game Permit.
5. Where applicable, an Army Corps of Engineers Permit.
6. Where applicable, a Cal Trans Encroachment Permit.
7. When issuing a grading permit between August 1 and April 30, a project timeline shall be submitted by the contractor to determine if sufficient progress can be made before the project needs to be winterized. In addition, the Erosion Control Plan is reviewed (and revised as needed) to reflect this winterization. Grading permits to be issued between August 1 and April 30 must be approved by the City Engineer.

New Activities:

None are proposed for this permit term.

Measurable Goals:

- Erosion Control Plans are reviewed, and updated as needed, prior to issuance of the Grading Permits
- Issue Grading Permits after required documentation is received.
- Submit a list of active grading permits to the Regional Water Board in each Annual Report.

Accomplishments:

- CD-Engineering and CD-Building continue to process Grading Permits as outlined under Existing Activities. Prior to issuing Grading Permits, Erosion Control Plans are reviewed (and updated as needed) and supporting permits are received. A list of Active Grading Permits is included in **Appendix III.C**.

2.2 Private Construction on Public Lands

Existing Activities:

The Public Works Department and CD-Engineering are involved with the issuance of Encroachment Permits for private construction on City right-of way.

1. For development projects that include major improvements within the public right-of-way, public Improvement Plans are prepared by private engineers on behalf of the project developer, and are reviewed and approved by CD-Engineering. These plans include a Grading Plan and an Erosion Control Plan. Encroachment Permits are issued by Public Works staff based upon these plans.
2. For development projects that include minor improvements within the public right-of-way (such as driveway curb cuts, utilities laterals, & replacing curb and gutter), plans are reviewed by Public Works and/or Utilities staff. Encroachment Permits are issued by Public Works staff based upon these plans.

3. Encroachment permits for work with the potential for pollutant discharges include the following language:

“CONTRACTOR SHALL CONTROL AND PREVENT DISCHARGE OF ALL POTENTIAL POLLUTANTS TO THE GUTTER, STORM DRAIN, OR DITCH. ATTENTION IS DIRECTED TO THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS, SECTION 7-1.01 G “WATER POLLUTION”, AND THE CITY CODE, CHAPTER 17-12, “STORM WATER”.

CD-Engineering provides storm water inspection for development projects. This inspection includes private construction in City right-of-way. Storm water inspection is outlined in Section 2.3 below. Public Works inspects construction of public drainage facilities by development projects, such as storm drain pipes, inlets, gutters, culverts and bridges.

New Activities:

None are proposed for this permit term.

Measurable Goals:

- Continue to issue Encroachment Permits that require compliance with California Standard Specifications, Section 7-1.01G “Water Pollution” and the City Storm Water Ordinance.

Accomplishments:

- City Public Works Department continues to issue Encroachment Permits as outlined under Existing Activities and CD-Engineering continues to provide storm water inspection for private construction in the City Right-of-Way on development projects where grading permits are issued.

2.3 Inspections of Construction Sites

Existing Activities:

CD-Engineering and CD-Building are involved with inspection of private construction sites. CD-Engineering provides grading and storm water inspection. CD-Building provides structural inspection.

1. The CD-Engineering currently has two full time grading inspectors that are assigned to providing grading and storm water inspections for private development construction sites. These sites consist primarily of residential subdivisions and also include construction projects that have been approved by CD-Building following CD-Engineering staff approval.
2. CD-Engineering inspects construction contractors’ proper storage, use, and disposal of construction materials, chemicals, and wastes, and prevention of illicit discharges to storm drains and water courses at construction sites with Grading Permits.
3. For development projects with planned construction activity during the wet season (October 15 - April 15), CD-Engineering inspects erosion and/or sediment control measures for implementation in accordance with local ordinances, approved storm water

plans and project conditions of approval and for maintenance as needed during construction.

4. CD-Engineering inspects construction sites for adequacy of storm water quality control measures. The frequency of inspections for active sites varies; inspections are performed at least twice per month, or more frequently based on the size of the project, site conditions, precipitation, and the project's potential impact on storm water quality.
5. Prior to the beginning of the wet season each year, CD-Engineering notifies the owner/contractor to remind them of the need to have the appropriate erosion and/or sediment control measures in place prior to October 15th. CD-Engineering inspects all sites requiring erosion and/or sediment control plans, for plan conformance and adequate BMPs have been taken to minimize erosion and discharges of sediment from disturbed areas.

New Activities:

None are proposed for this permit term.

Measurable Goals:

- Maintain and document daily diaries and inspection forms
- Inspect sites with active grading permits every two weeks and after major storm events
- Submit a list of site inspections performed for each grading permit to the Regional Water Board in each Annual Report.

Accomplishments:

- CD-Engineering continues to inspect construction sites as outlined under Existing Activities. Daily Diaries and Inspection Forms are maintained, and sites with active grading permits are inspected. The list of Active Grading Permits presented in **Appendix III.C** includes the number of site inspections for each project. Grading Permits issued after the winter season are shown with zero site inspections. Grading Permits with only a few site inspections are projects that were near completion and had limited opportunity for erosion.
 - Number of Active Grading Permits: 82
 - Number of Site Inspections: 1134

2.4 Enforcement of Construction Sites

Existing Activities:

Construction sites with inadequate erosion/sediment controls are given verbal or written notice of the inadequacies, according to the City's enforcement procedures, and followed up with action(s) commensurate with the risk of pollutants entering municipal storm drains or waterways. Written notices and follow up actions are tracked and summarized in the City's Annual Report to the RWQCB.

Graduated levels of enforcement are as follows:

- First Level - (Non-compliance Notification) Verbal warning or written correction notice.
- Second Level - NPDES Inspection Citation written.
- Third Level - Notice of Violation written.
- Fourth Level - Criminal and/or Civil Action through the City Attorney's office.

New Activities:

None are proposed for this permit term.

Measurable Goals:

- Document verbal and written enforcement notices
- Submit a list of sites requiring Third and Fourth level enforcement actions to the Regional Water Board in each Annual Report (see Section 2.5 below).

Accomplishments:

- CD-Engineering continues to document verbal and written enforcement notices as outlined under Existing Activities. There were no Third and Fourth Level Enforcement Actions during the period of this Annual Report.

2.5 Reporting of Non-Compliant Sites

Existing Activities:

Construction sites with inadequate erosion/sediment controls are given verbal or written notice of the inadequacies as outlined in Section 2.4 above. The RWQCB is typically not notified of First Level and Second Level enforcement actions. Third Level enforcement letters will be copied to the RWQCB. In addition, the RWQCB will be notified in writing of Fourth Level enforcement.

New Activities:

None are proposed for this permit term.

Measurable Goals:

- Notify Regional Board in writing of Third and Fourth Level enforcement actions
- Submit a list of sites requiring Third and Fourth level enforcement actions to the Regional Water Board in each Annual Report.

Accomplishments:

- CD-Engineering continues to document verbal and written enforcement notices as outlined under Existing Activities. There were no Third and Fourth Level Enforcement Actions during the period of this Annual Report.

2.6 Education of Targeted Staff

Existing Activities:

CD-Engineering provides training in Erosion Prevention and Sediment Control to new staff members. Training in the past has included courses offered by the Association of Bay Area Governments, as well as attending local seminars. In addition, CD-Engineering's construction inspection staff attends, and typically participates in, the annual Erosion & Sediment Control seminars presented by the RWQCB. Inspectors receive training on the latest construction-related storm water pollution prevention techniques and BMPs.

New Activities:

None are proposed for this permit term.

Measurable Goals:

- Document training obtained
- Submit a list of staff that attend and/or participated in training to the Regional Water Board in each Annual Report.

Accomplishments:

- CD-Engineering did not add any new staff members during the period of this Annual Report. The RWQCB did not conduct their annual Erosion & Sediment Control seminar. Thus, City of Santa Rosa were unable to attend or participate in this seminar.

3.0 INDUSTRIAL/COMMERCIAL SOURCES

Goal: Reduce or eliminate the potential for Industrial/Commercial generated pollutants to contact storm water runoff to MEP.

3.1 Introduction

Storm water discharges from industrial and commercial related activities are considered to have the potential to be significant pollutant contributors to the municipal storm water system. The program goal to reduce or eliminate the discharge of pollutants into the City storm drain system from industrial and commercial activities will be achieved through education, inspection and enforcement of the City's Sewer and Storm Water Ordinances.

The Industrial/Commercial element will continue to emphasize operational activities to ensure that wastewater is properly pretreated and routed to the sanitary sewer system. City of Santa Rosa's Pretreatment Program Enforcement Response Plan (PPERP) outlines the operational procedures intended to ensure that commercial and industrial dischargers to the sanitary sewer system are permitted and monitored. The Industrial Waste Section (IW) of the City Utilities Department is responsible for implementation the PPERP.

3.2 Inventory of Facilities

Existing Activities:

The development of the Industrial User Inventory (IUI) was designed to maintain and update a database of industrial and commercial facilities which are required to obtain a Wastewater Discharge Permit. The inventory is maintained for the entire sub-regional service area which includes the cities of Santa Rosa, Cotati, Rohnert Park and Sebastopol and South Park County Sanitation District. The IUI was initiated at the time of the Pretreatment Program approval in 1983. The IUI continues to be updated from the information supplied by the City of Santa Rosa and the sub-regional partners. The sources are listed below.

- Business tax certificate applications are forwarded to IW on a monthly basis.
- Building permit applications are forwarded to IW on a monthly basis.
- City of Santa Rosa Community Development Department (CD) forwards use permits to IW on a monthly basis.
- Utilities Engineering Staff represents IW in the Zoning Administration Review Committee (ZARC) which meets bi-weekly.
- Regular inspections for new business operations.

New Activities:

None are proposed for this permit term.

Measurable Goals:

- Continue to provide, as part of each Annual Report, the RWQCB an updated list of businesses with Standard Industrial Classification (SIC) codes that may be required to file an

Notice of Intent (NOI) and comply with the terms of the State General Industrial NPDES permit.

Accomplishments:

- Copies of the following lists are in **Appendix III.D:**
- Businesses in the City's 2004 database of business licenses with SIC codes that may be required to obtain a State General Industrial NPDES Permit;
 - Businesses in the City's Industrial Waste 2004 database of permitted industries with SIC codes that may be required to obtain a State General Industrial NPDES Permit;
 - Businesses listed on the SWRCB database with a filed Notice of Intent to obtain a State General Industrial NPDES Permit.

3.3 Food Facility Inspection

Existing Activities:

County of Sonoma Department of Health Services, Environmental Health Division is responsible for all health code inspections related to food facilities within the City and County. See Part II, County of Sonoma Storm Water Management Plan Annual Report Section for details.

The City of Santa Rosa Industrial Waste Section issues permits and provides inspections of food facilities that have an active wastewater permit to discharge industrial wastewater to the City of Santa Rosa's sewer collection system. Permit provisions specific to food facilities include the following:

- Permittee shall maintain a program of consistent grease trap, interceptor or sump cleaning and maintenance to prevent excessive buildup of grease, oil and oil/solids in the sewer lateral and/or from entering the sewer system. Permittee shall retain copies of the cleaning receipts if commercially cleaned, or maintain a cleaning log, if in-house maintenance is done. The in-house log shall include cleaning dates, employee's name, and owner/manager's verification.
- Grease trap treatment and/or additives shall be approved by the City of Santa Rosa.
- All discharges into grease traps shall comply with the City of Santa Rosa Interceptor Policy.
- The outside washing of floor mats, serving carts, or any other equipment is prohibited unless a City approved wash area has been established.
- Permittee shall implement and maintain a program of good housekeeping to prevent the accumulation of grease and debris on the premises, and reduce the discharge of pollutants to the storm collection system. All storm drain inlets on the premises shall be cleaned to remove trash, dirt and other pollutants. A cleaning log which documents this activity shall be maintained at this business establishment for three years.

Inspection of food facilities for wastewater discharge permit compliance is performed with a range frequency that varies from twice a year to once every five years. The majority of facilities, approximately 95%, are inspected a minimum of once every two years. Reporting of inspections will be accomplished as required under the terms of the NPDES Permit No CA0022764 Waste Discharge Requirements for the City of Santa Rosa, Laguna Subregional Wastewater Treatment, Reuse, and Disposal Facilities.

New Activities:

None are proposed for this permit term.

Measurable Goals:

No measurable goals are associated with this activity.

3.4 Retail Gasoline Outlet and Automotive Service Facility Inspection**Existing Activities:**

Industrial Waste (IW) issues permits and provides inspections of nonresidential auto repair/body facilities with an active permit to discharge industrial wastewater to the City of Santa Rosa's sewer collection system. Permit provisions specific to auto repair/body facilities are as follows:

- Material Safety Data Sheets (MSDS) for all chemical products used on the permitted site shall be subject to regular inspection by IW personnel.
- Wet/dry sanding shall be accomplished in an area that will prevent discharge to the storm drain and/or sanitary sewer systems. Sanding debris shall be categorized by the permittee to determine the proper disposal.
- Uncovered battery storage is strictly prohibited. Batteries and electrolyte stored outside shall be removed or double contained.
- Paint spray-gun cleaning shall be performed in a closed container that is self contained with no discharge to the sanitary sewer.
- Shop rags shall be laundered by a City approved laundry facility.
- Permittee shall not wash any vehicle or piece of equipment using any cleaning agents in areas where runoff is to surface waters or soils, storm drains, or other waterways. Any vehicle or equipment washing shall be performed within a City approved pretreatment system that is connected to the sanitary sewer.
- Discharge of used radiator fluid to the sanitary sewer or storm drain is prohibited. All spent anti-freeze and flush water shall be collected, properly stored and recycled.
- Permittee shall maintain a program of consistent sump/separator cleaning to prevent excessive buildup of grease, oil and/or solids from entering the sewer system. A cleaning log or receipt of the cleaning shall be maintained on the premises for three years.
- If auto related parts are stored outside, they must be kept covered or removed for the entire duration of the rainy season.

Inspections of automotive service facilities for wastewater discharge permit compliance are performed with a frequency that varies from twice a year to once every five years. The majority of facilities, approximately 67%, are inspected a minimum of once every two years. Reporting of inspections is accomplished as required under the terms of the NPDES Permit No CA0022764 Waste Discharge Requirements For the City of Santa Rosa, Laguna Subregional Wastewater Treatment, Reuse, and Disposal Facilities.

Measurable Goals:

No measurable goals are associated with this activity.

New Activities:

Within the first year of the permit term the Public Works Department will develop the retail gasoline outlet inspection storm water BMP checklist. The inspection checklist will be submitted as part of the first Annual Report for review by the RWQCB.

Measurable Goals:

RGO inspection checklist in the first Annual Report

Accomplishments:

- A draft flyer with a checklist of Best Management Practices BMP for Retail Gas Outlets has been developed by the City of Santa Rosa. The draft was based on the California Stormwater Quality Taskforce Best Management Practice Guide-Retail Gas Outlets (March 1997), the City's NPDES Permit, other municipality examples and the California Stormwater BMP Handbook. Staff from the City's Public Works, Utilities, and Fire Departments has reviewed it for initial comment. See **Appendix III.E** for a copy of the draft RGO checklist.

3.5 Industrial/Commercial Outreach**Existing Activities:**

During the first permit term, significant outreach was undertaken for food facilities, automotive service, cleaning, landscape, building and construction industries. Brochures and educational materials, including posters and videos, were created and distributed during inspections or by mail. The materials created will continue to be reprinted for distribution.

New Activities:

RGO outreach and measurable goals are described in the Section 3.4 Retail Gasoline Outlet and Automotive Service Facility Inspection.

Accomplishments::

- Outreach to the automotive, cleaning, food service, and landscape industries continued during Year 1 as requested by businesses, through Industrial Waste (Pretreatment) Inspections or during spill response situations. Educational materials were provided to interested parties upon request. The number of materials distributed can be found in Section 6.1.8 Public Outreach, Table III.4.

3.6 Industrial/Commercial Enforcement Protocols

Refer to Section 1.0 Legal Authority of this report for a description of the enforcement protocols. Note: Enforcement response for industrial waste permitted facilities is conducted by IW and is not covered in this annual report or storm water permit.

Industrial/Commercial Facilities Without Waste Permits

The enforcement actions initiated on industrial and commercial facilities without industrial waste permits are typically the result of an illicit discharge to the storm drain system. Refer to Section 5, Illicit Discharge Detection and Elimination for enforcement protocol.

New Activities:

None are proposed for this permit term.

Measurable Goals:

- Follow enforcement protocol for industrial/commercial facilities without industrial waste permits
- Report on enforcement activities in each Annual Report

Accomplishments:

- The Industrial Waste Section continues to issue permits and provide inspections of commercial industrial and food facilities that have an active wastewater permit to discharge industrial wastewater to the City of Santa Rosa's sewer collection system. Reporting of inspections is accomplished as required under the terms of the NPDES Permit No. CA0022764 Waste Discharge Requirements for the City of Santa Rosa, Laguna Sub regional Wastewater Treatment, Reuse and Disposal Facilities. The following is a summary of IW inspections and enforcement actions of facilities with active wastewater permits and is included for information purposes only:

Inspections:	616
Notice of Violations:	48
Cease and Desist:	3
Administrative Orders:	3
Warnings:	6
Notice of Termination:	1

- Enforcement activities on facilities without waste permits are included in Section 5 Illicit Discharge Detection and Elimination information (5.4 Record Keeping and Documentation).

3.7 Interagency Coordination for Industrial/Commercial Facilities**Existing Activities:**

The city staff from Industrial Waste, Public Works, Community Development Building and Engineering, Fire and Police Environmental Crimes meet monthly to coordinate among themselves, and share information at the Environmental Crimes Enforcement Meeting.

City staff also actively participate with the Sonoma Environmental Quality Assurance Committee (SEQAC). Regularly scheduled bimonthly SEQAC meetings cover County-wide environmental enforcement and education issues for air quality, sanitary sewer (industrial waste), hazardous materials, and storm water quality.

New Activities:

None are proposed for this permit term.

Measurable Goals:

Continue to participate in SEQAC meetings.

Accomplishments:

- See **Appendix III.F** for the agendas of this permit years SEQAC meetings.

3.8 Training of Targeted Staff**Existing Activities:**

Training of Industrial Waste Inspectors is provided by the Utilities Department under the wastewater discharge permit and is not covered by this SWMP and therefore not part of this report. On-the-job training is provided to the Public Works storm water response staff. In addition, staff are sent to appropriate training courses offered in nearby locations.

New Activities:

The City will provide annual training to Public Works' storm water response staff on topics relating to potential pollutant discharges from the industrial and commercial sources.

Measurable Goals:

A description of the training provided and a list of participants will be included in each Annual Report.

Accomplishments:

- See **Appendix III.G** for the May 25th agenda of the workshop for Auto Body shops co-sponsored by the Redwood Auto Body Association and SEQAC. All Industrial Waste inspectors presented at the workshop or attended.

4.0 MUNICIPAL OPERATIONS

Goal: Reduce or prevent pollution in storm water runoff from all municipal land use areas, facilities and activities.

4.1 Public Construction Activities Management

4.1.1 Contract Documents

Existing Activities:

The City requires that all work performed on public improvement projects shall be performed in accordance with the City of Santa Rosa Special Provisions, Plans, City Design and Construction Standards, City Specifications and State of California Department of Transportation (Caltrans) Standard Plans and Standard Specifications. The documents contain the conditions and terms in which the contractor is legally bound to comply upon the contract award.

The City Special Provision Section 7, Legal Relations and Responsibility, 7-1.01G-Water Pollution (shown below) requires that the contractor provide adequate measures to control and prevent the discharge of pollutants. This provision is included in all City public improvement projects. If an improvement project requires grading, other than trench work, the project improvement plans will include an erosion prevention and sediment control plan. Additionally, contractors are required, as part of the contract, to comply with Caltrans Standard Specification Section 20-3: Erosion Control. Section 20 provides specifications for the preparation of areas to receive erosion control materials such as application of straw, seed and fertilizer.

Section 7-1.01G Water Pollution

Attention is directed to Section 7-1.01G of the Standard Specifications. Contractor shall control and prevent discharge of all potential pollutants including, but not limited to, petroleum products, solid wastes and construction chemicals. The program to control water pollution required to be submitted under Section 7-1.01G of the Standard Specifications shall include a spill contingency plan that establishes clean-up procedures that will be followed in the event of a spill of potentially hazardous, toxic or polluting materials.

If a spill occurs on the construction site and the Contractor does not take immediate and adequate steps to contain and clean up the spill, especially if rain is threatening or if a discharge to a storm drain or creek could occur, the City may hire an independent contractor to clean up the spill. The cost of any such clean up will be deducted from the Contractor's next progress payment.

Measurable Goals:

Continue to include Special Provision Section 7-1.01G as part of construction contract documents on all public improvement projects. Review special provisions and submit any revisions to the RWQCB in the first annual report.

Accomplishments:

- Public Works storm water engineering staff has reviewed the special provisions and recommends no revisions at this time.

4.1.2 Compliance with Statewide General Construction Permit

Existing Activities:

All public improvement construction projects undertaken by the City and subject to the State General Construction Storm Water Permit will file a Notice of Intent (NOI) and comply with the terms of the General Permit to discharge storm water associated with construction activities.

Currently, a project is subject to the State General Construction Storm Water Permit if it disturbs one acre or more of soil, or if the project results in the disturbance of less than one acre but is part of a larger common plan of development or sale that exceeds one acre.

Measurable Goals:

- The City, or contracted consultant on behalf of the City, files a NOI for applicable projects and comply with terms of the State General Permit.
- Each Annual Report to the RWQCB includes a list of the projects that have complied with the terms of the State General Permit.

Accomplishments:

- All projects subject to the conditions of the State General Construction Storm Water Permit have filed the NOI and are in compliance with the terms of the General Permit to discharge storm water associated with construction activities. The current list of active projects with NOI's is listed in Table III.1 below.

Table III.1
City Construction Projects With NOI on File at RWQCB

WDID	Status	Operator/Owner	Site Name	Site Location	Acres	Start Date
1 49C326901	Active	City of Santa Rosa	Reservoir R 9B Replacement	3446 Summerfield Rd	2.00	12-Jul-04
1 49C313622	Active	Santa Rosa City	Santa Rosa City Geyser Proj	Linear Project	48.00	14-Aug-00
1 49C303507	Active	Santa Rosa City	4300 Llano Rd	4300 Llano Rd	52.00	15-Jul-94
1 49C313660	Active	Santa Rosa City	A Place To Play Phase I	2375 West Third St	82.00	11-Sep-00
1 49C309333	Active	Santa Rosa City Re Devt	170 Railroad St	170 Railroad St	8.00	01-Sep-98

4.1.3 Inspection

Existing Activities:

Purpose of Inspection:

Construction inspection policy and procedures are defined in the Public Works Engineering Division Procedures Volume 1. The City construction inspectors are responsible for ensuring that public improvement projects, whether constructed through City contracts or by private developers, are constructed in accordance with approved plans and specifications. As mentioned in section 4.1, the specifications and plans require the contractor to implement BMPs to protect water quality during construction activities. The inspection policy and procedures are utilized by the City as the quality control mechanism for aspects of construction including storm water BMP implementation.

Measurable Goals:

On active projects, inspections are performed and documented in a construction diary on a daily basis.

Accomplishments:

- Inspection procedures are ongoing as described above.

4.1.4 Enforcement

Refer to Section 1.0 Legal Authority of this report for a description of the enforcement protocols.

Measurable Goals:

Continue to implement progressive enforcement procedures. Report to the RWQCB in each Annual Report the number and details of any notice of Non-Compliance issued.

Accomplishments:

- No notices of Non-Compliance were issued during fiscal year 2003-04.

4.1.5 Training of Targeted Staff

Existing Activities:

All Public Works Engineering Division staff are responsible to have knowledge of and comply with Public Works procedures. As part of their duties, inspectors are specifically required to read and be familiar with the City of Santa Rosa Standard Specifications and Caltrans Standard Specifications, which define the requirements the contractor must adhere to during construction to protect water quality.

A pre-construction conference is conducted by the project engineer before the contractor commences construction. Storm water quality requirements are discussed with the contractor and inspector at this conference.

New Activities:

None are planned for this permit term.

Measurable Goals:

Continue to discuss storm water quality requirements during pre-construction conference for public improvement projects.

Accomplishments:

- A workshop for Capitol Improvement Project inspectors from the Public Works and Utilities Departments was held on March 3, 2004. The workshop included a presentation on Best Management Practices for erosion control and pollution prevention on construction sites. The workshop agenda, roster of attendees, and a quick-reference guide to “Contractor Activities and Pollution Prevention” is included as **Appendix III.H**.

4.2 Landscape and Recreational Facilities Management

Goal: Reduce or eliminate pollutants resulting from maintenance activities of landscaped areas and recreational facilities.

4.2.1 Introduction

Maintenance practices at parks and recreational facilities generally include fertilizer and pesticide application, vegetation maintenance and disposal, swimming pool maintenance and trash and debris management. The goal of the landscape and recreational facilities program is to make storm water quality a concern when conducting maintenance and operation activities.

The objectives of this program are to:

- Minimize the discharge of pesticides, herbicides and fertilizers to the storm drain system.
- Prevent the disposal of landscape waste into the storm drain system.
- Minimize trash, debris and other pollutants from entering City-owned recreational water bodies.
- Discharge municipal swimming pool water in a manner that will not contribute pollutants to receiving waters.

Facilities include:

- Parks: The City of Santa Rosa owns and operates 55 parks within the permit boundary. Picnic accommodations, open play areas and sports fields are part of the Parks system.
- Golf course: Bennett Valley Golf Course is owned by the City and operated under contract.
- Swimming pools: Finley Pool and Ridgway Pool
- Recreational water bodies: Lake Ralphine (Howarth Park), Nielsen Ranch, Fountaingrove Lake.
- Other landscaped areas: Maintenance is generally provided by City personnel though some areas are maintained under contract with a licensed landscape contractor. Additionally, an Adopt-a-Greenspace program for the maintenance of other areas by interested private parties is coordinated and supervised by the Recreation and Parks Department.

4.2.2 Pesticide Management

Existing Activities:

Pesticides are stored, handled and applied in accordance with existing state regulations, California Title 3, Division 6, Pesticides and Pest Control Operations. Detailed records of pesticide applications are kept and all pesticide use is reported to the Sonoma County Agricultural Commissioner on a monthly basis.

- Pesticides are stored in a secure location within the Municipal Services Center on asphalt surfacing. These pesticides are stored in a structure designed for hazardous materials storage which includes spill containment. The storage facility is checked periodically for spills and leaks. Access is limited to select personnel.
- Pest management activities are guided by an existing Integrated Pest Management Program and include non-chemical pest management approaches.
- Chemical applications are avoided during the wet season, to the extent feasible, to minimize the amount of pollutant runoff in storm water. Weather forecasts, soil moisture levels and specific site conditions are included in the decision making process regarding vegetation management activities. Chemicals are not applied during storm events.
- Non-chemical methods used for vegetation management include weed mowers and string weed-trimmers, weed burners, hoeing and hand pulling, and mulch materials.
- In addition to usage of non-chemical vegetation control methods, the City also utilizes reduced herbicide use rates, spot treatments and, where appropriate, specialized application equipment.
- The management of insect pests includes site inspection, monitoring for beneficial insects and allowing their populations to build sufficiently to solve the problem. Spray treatments typically involve insecticidal soap, horticultural oil and water washes.

New Activities:

As an ongoing activity, continue to seek new, less toxic materials and new methods and techniques for the purpose of reducing pesticide use.

Measurable Goals:

Continue to keep pesticide use below the levels used prior to the adoption of the Integrated Pest Management Program (1997). Report on Integrated Pest Management Program in each Annual Report.

Accomplishments:

- Continue to keep pesticides use levels below the levels used prior to the adoption of the Integrated Pest Management Program (1997). Total pesticide use in 2003 was 530.56 pounds compared to 560.34 pounds used the previous year.
- Beginning with the implementation of the IPM Program, reduction in pesticide use relative to pre-IPM Program years has been achieved. This was one of the goals of the program, not necessarily effecting reductions based on the previous years use. While the Regional Board's comments regarding pesticide reduction are understood, the amount of pesticide used in any given year is based on a number of factors, most notably weather and, in the case of pre-

emergent herbicides, a desire to avoid weed resistance encountered by continued use of the same product or one of similar chemistry.

First illustration: a pre-emergent herbicide with a 75% active ingredient and applied at the label rate of 1 pound per acre yields .75 pound of pesticide used. A different pre-emergent herbicide with a 50% active ingredient and applied at the label rate of 8 pounds per acre yields 4 pounds of pesticide used. The difference in the amount of pesticide used is a factor of 5.33 and demonstrates how product selection affects total pesticide use.

Second illustration: In the case of aphid control in certain problematic street tree species, a soil injected insecticide is used. A full label rate is used one year followed the next year by a half rate. The third year is again at the full rate. Given the full label rate, the amount (in pounds active ingredient) used on 68 mature trees is 3.05 pounds. Spraying those trees only once with insecticidal soap – typically they would need at least three treatments – would use (in pounds active ingredient) 81.6 pounds, again demonstrating how product selection affects total pesticide use. Further, this spraying would be done to trees that overhang streets and other paved surfaces, all of which drain to the storm drain system.

Concerns at least as important to pesticide use reduction are: what non-chemical (alternative) methods are being used, how are they integrated and how effective are they at a specific site, and, do they truly reduce the need for pesticides? And, when pesticides are used, what criteria are used in their selection and what is considered when they are applied? It needs to be fully understood that one of the City's primary concerns is minimizing off-site movement of pesticides, be it drift, run-off or erosion of pesticide treated soils.

It should be noted that the pesticide use reduction achieved in the 2003 calendar year compared to 2002 was due fully to budgetary constraints and personnel reassignments which have, operationally speaking, become staffing reductions. This, coupled with an increase in sites and an increase in graffiti and vandalism, has resulted in an inability to engage in "alternative" pest management methods to any significant degree and has prompted calls for more spraying to address weed issues in particular. The City still believes the most important concerns are those noted above. The ability to properly analyze them in the context of IPM and a desire for pesticide use reduction, however, is not possible at this time nor will it be while the City continues to face economic hardships.

New activities:

On-going and as part of the overall IPM Program, the City will continue to look for less toxic materials and new methods and techniques.

4.2.3 Fertilizer Management

Existing Activities:

Fertilizer use is generally limited to turf areas such as sports fields and those lawns deemed high visibility. Spring and fall applications are made utilizing slow-release nitrogen fertilizers formulated for turf use. Spot fertilization in landscaped areas may be made according to plant need. This approach has reduced fertilizer use from past years.

- Storage and inspection is in compliance with federal, state and county regulations.
- Materials are stored in enclosed sheds or buildings or under cover on an impervious surface.
- Storage areas are periodically checked for spills, leaks, or unsafe storage methods.
- Fertilizers are applied and handled in strict accordance with the label directions.
- Post fertilizer application irrigation scheduling is adjusted to minimize non-storm water runoff.

New Activities:

Development of a management plan and provide training to maintenance personnel.

Measurable Goals:

Include Fertilizer Management Plan and training program in the first Annual Report.

Accomplishments:

- The Recreation and Parks Department has developed the following Fertilizer Management Plan. It includes provisions as required by the NPDES Permit and has been reviewed by staff from the Recreation and Parks Department and Public Works.

Fertilization Management

Description

Nitrogen, phosphorus, potassium and other nutrients are necessary to maintain optimum health of most vegetation. This management document addresses proper use, application, storage and disposal of fertilizers, employee education, and record keeping.

Pollutants Controlled and Impacts

Nutrients applied at appropriate times and rates will minimize the potential for pollution of surface and ground waters. Nutrients are essential in order for vegetation to stay healthy. Healthy vegetation requires fewer inputs.

Pruned materials from woody landscape trees and shrubs are chipped and returned to landscape to control landscape waste disposal, weeds, and lower overall use of fertilizer. Top dressing is done on some sports fields such as Franklin Park to enhance soil conditions and create a better growing environment for turf.

City tries to use natural fertilizers or slow-release fertilizers, such as sulfur- or polymer-coated urea. These products release nutrients slowly over a longer period, allowing the grass to absorb nutrients more efficiently. Slow-soluble forms of N include natural and

synthetic organic fertilizers. Slow-release products are more expensive than water-soluble fertilizers, but fewer applications at higher rates are possible with less chance of burn. Fertilizers, if misapplied, can kill soil life and ruin soil structure in even the best soils.

Application

Equipment is calibrated as needed to ensure the desired application rate. The calibration procedures of the Manufacturers specifications are followed. All components of equipment are checked to ensure good working order. Applicators are trained to use the equipment.

Before mixing fertilizers, determine the size of the area for fertilizing. After determining the area needing treatment, mix the appropriate amount using label directions. Mix only the amount of fertilizer needed for your application.

Add the fertilizer into equipment over an impervious area such as cement, so that if the fertilizer is spilled it can be easily cleaned up. Never pour fertilizers into bins/spreaders/sprayers on the turf because large concentrations of fertilizer can kill the turf, and potentially impact surface and ground waters.

When to Apply:

A fertilization program for lawns should begin in fall (as opposed to spring) in order to promote deep, healthy root systems and hardy lawns.

Avoid to the extent feasible application of fertilizers immediately before, during, and after a rain event or when water is flowing off the application area.

Select the most appropriate fertilizer for the location and soil conditions. Follow fertilizer label directions using recommended rates. The appropriate fertilizer is selected based on the experience of Parks Department staff and consideration of the factors for each park. Factors considered include turf type, turf quality, turf use, soil conditions, previous applications, use of compost and grass clippings, and environmental conditions.

Whenever possible, compost should be used and applied with a top dressing application for even distribution.

After the Initial Fertilization

A light irrigation immediately after fertilization can be helpful in moving fertilizer down into the thatch and the surface layers of soil. Do not apply water in excess of what can be taken up by the soil. Post fertilizer application irrigation scheduling is adjusted to minimize non-storm water runoff

Lawns should be mowed to the proper height for the specific type of turf.

Storage and Disposal

Always follow the storage and disposal directions on the label. Fertilizers should be kept under cover in a cool dry place.

To avoid disposal issues, only the amount required for use should be purchased at one time.

Spills shall be swept up and applied to vegetation consistent with application instructions

Employee Education

The acting supervisor shall train employees applying fertilizers the proper application techniques in accordance with label directions. Fertilizer must be kept out of gutters and hard surfaces where there would be a chance of fertilizer entering the storm drain system. Fertilizer broadcast on to hard surfaces such as walkways shall be blown or swept back on to the turf to prevent accidental runoff. All drain inlets in turf areas must be covered prior to fertilization.

Record Keeping

It is advisable to keep records of the amount and type of fertilizer used. Location, weather conditions and name of applicator should also be included.

4.2.4 Planting and Retention of Native Vegetation

Existing Activities:

Planting of native vegetation at City landscaped areas will be implemented to the extent feasible when practical to reduce water, fertilizer and pesticide needs. The decision to plant native vegetation will be based upon the possible effects on drainage and erosion, hardiness, maintenance requirements, and possible conflicts between preserving vegetation and the resulting maintenance needs.

New Activities:

None are proposed for this permit term.

Measurable Goals:

None are proposed for this permit term.

4.2.5 Procedures to Reduce Water, Fertilizer and Pesticides Needs

Existing Activities:

- Compliance with City-wide water conservation program.
- From a facility design standpoint, the use of turf is generally limited to sports and open play fields, thereby reducing water demand for irrigation, fertilizer and pesticide use and, consequently, the potential for run-off.
- Automatic irrigation systems are programmed using CIMIS information. This programming includes use of repeat cycles further reducing run-off. Water is applied in a manner that encourages deep rooting of turf grasses.
- Irrigation systems in landscaped areas are designed to apply water where needed (at the plant) via a bubbler system rather than spray system.

New Activities:

For this permit term it is planned to retrofit irrigation heads on 25 acres of turf to provide more efficient irrigation delivery and therefore less water demand. As funds become available such retrofitting of additional turf areas will be scheduled.

Measurable Goals:

None are proposed for this permit term.

4.2.6 Landscape Waste

Landscape waste consists of clippings, cuttings and droppings of woody and leafy materials. The following procedures are implemented, where applicable, to assure that exposed materials and accumulated sediment, trimmings and litter are disposed of properly and not to the storm drain system.

Existing Activities:

- Employees and contractors who generate landscape waste dispose of it at an approved site, such as at the Laguna Treatment Plant Composting Facility or at the Sonoma County Central Landfill.
- Pruned materials from woody landscape trees and shrubs are chipped and returned to the landscape as mulch.
- Temporary stockpiled materials are placed away from water courses, and bermed or covered to prevent material from entering the storm drain or creeks.

New Activities:

Facility and landscape design considerations include selection of native plant materials, and use of plant materials that do not require frequent shearing.

Measurable Goals:

Continue to implement existing and new activities.

Accomplishments:

- Maintenance activities are ongoing as described above.

4.2.7 Recreational Water Bodies

Picnic areas, lakes and ponds receive a large number of visitors and may collect large amounts of litter, debris and other pollutants. To minimize the amount of potential pollutants that reach the water body, the following procedures are implemented, where applicable.

LAKE RALPHINE - a 22-acre lake within Howarth Park is fed by storm water run off surrounding hills, overflow from neighboring Spring Lake and can be supplemented by City wells. Due to the lake's setting, the introduction of pollutants found in typical urban settings is minimized. With the exception of a rescue boat, outboard motors are prohibited.

NIELSEN RANCH- a 2-acre pond within Nielsen Ranch Park is part of the storm drain system.

FOUNTAINGROVE LAKE - a 25-acre lake is located in the Fountaingrove area of the City. It is co-owned by the Fountaingrove Golf and Country Club and the City of Santa Rosa. This is an undeveloped park site and use is minimal. This lake is part of the storm drain system.

Existing Activities:

- Trash receptacles are provided and maintained to hold refuse generated by the public.
- Trash and debris from bins along water bodies are collected to minimize the amount of trash and debris that may contact the water.
- Debris and trash is collected from within water bodies, where feasible.
- Trash collection is increased during peak visitation summer months.

New Activities:

None are proposed at any of the sites for this permit term.

Measurable Goals:

Continued to implement existing activities.

Accomplishments:

- Maintenance activities are ongoing as described above.

4.2.8 Swimming Pool Discharge

RIDGWAY POOL and FINLEY AQUATIC CENTER

Existing Activities:

The pool drains at both locations are connected to the city sewer system. Drains in the pool deck are designed to capture storm water and incidental pool water and are connected to the storm drain system. The following procedures are implemented, where applicable, to manage discharges from City of Santa Rosa Finley and Ridgway Pools.

- Filter backwash water and chemically treated water is discharged to the sanitary sewer, unless it is not possible.
- If discharging to the storm drain system, water is dechlorinated to 0.1 ppm by letting the water sit several days without adding chlorine or by adding sodium bisulfite.
- All chemicals, such as acid wash residue, are neutralized before discharging to the storm drain system.
- All of the above requirements are incorporated into maintenance contracts.

New Activities:

None are proposed at either site for this permit term

Measurable Goals:

Continued to implement existing activities.

4.3 Storm Drain System Operation and Management

The storm drain system functions primarily to collect and convey surface runoff to receiving waters during storms to prevent flooding. It is a common activity to maintain the storm drain system so that it functions hydraulically as intended during storms. The goal of this program is to reduce the impact of storm drain operation and maintenance activities on storm water quality.

The City of Santa Rosa owns and maintains most of the underground public drainage system within the City limits. This system consists primarily of an underground pipe network that discharges to flood control channels owned and maintained by the Water Agency. There are some segments of open channels and two detention basins that are part of the City-maintained system. In addition to maintaining most of the open channels, the Water Agency maintains five detention basins within the permit boundary. The County of Sonoma maintains the remainder of the public drainage system within the permit boundary. Many of the open channels within the permit boundary are privately owned and maintained.

4.3.1 Source Identification-Drainage System Mapping

Existing Activities:

The most recently printed (5/2002) City of Santa Rosa Storm Drain Maps book was submitted to the RWQCB as part of Annual Report 6. The storm drain system is also available on the internet City of Santa Rosa web page ci.santa-rosa.ca.us/pworks/CityMap. It provides details on location, size and discharge point of the known storm drain facilities within the City jurisdiction. Also shown in the map book are the location and address of most parcels within the permit boundary. The grid on the first few pages of the map book is used to determine which page to turn to for more specific information on a particular area.

The Storm Drain Maps book was developed by entering information from 1960's era maps and the City's files of improvement plans into a computer mapping system. Field investigations were conducted to resolve conflicts in record information. The map book presents the best information the City has to date on the storm drain system. However, the City assumes no responsibility for the accuracy or completeness of the drainage information shown on the maps.

Although the existing storm drain system is map is complete, the map is continuously updated with new and modified systems, and/or conflicts as identified in the field. This work is ongoing and is planned to continue through the permit term.

New Activities:

None are planned for this permit term.

Measurable Goals:

Submit updated City of Santa Rosa Storm Drain Maps books at the written request of RWQCB, not to exceed one printing per year.

4.3.2 Clean and inspect storm drain pipe and inlet structures

Existing Activities:

The City continued implementation of a dedicated storm drain cleaning program consisting of a dedicated two-person full-time equivalent crew cleaning with a combination vacuum and water-jetting truck. The cleaning crew begins in the spring, weather permitting, by systematically working through the City's storm drain system. Areas that have been identified as problematic are given priority. During the fall and early winter crews concentrate efforts on removal of leaf and vegetative debris. As the drainage systems are cleaned, the data is input directly into a handheld computer in the field to track locations and quantities of materials. This data is downloaded to the City's computer network and maintained in a Microsoft Access database. Reports generated show the total number of structures and linear footage of pipes cleaned, the location and quantity of found pollutants, and the location of structural problems.

New Activities:

None are planned for this permit term.

Measurable Goals:

The amount of drainage system cleaning that can be completed each year varies depending on overall work load, staffing, and equipment reliability. The cleaning and maintenance of the drainage system is an ongoing operation and will continue throughout the permit term. The numeric goal for the first year of the second permit term is to clean and inspect:

- 130,000 linear feet of storm drain pipe
- 1,200 drainage inlet structures cleaned

Accomplishments:

- During the last year, Public Works crews accomplished the following tasks:
 - 221,904 linear feet of storm drain pipe cleaned
 - 9,775 drainage inlet structures cleaned
 - 15,142 curb miles of streets swept
 - 36 inlets repaired
 - 4,686 linear feet of ditches cleaned
 - 5,980 cubic yards of debris cleaned from storm drain pipes, inlet structures, and street sweeping activities

4.3.3 Flood control channel or road side ditch inspection and maintenance

Existing Activities:

City-maintained open channels are cleared of trash and debris annually for flood control purposes. All materials are disposed of properly.

New Activities:

None are planned for this permit term.

Measurable Goals:

Continued to inspect and remove debris from open channel for flood control purposes. This maintenance activity is planned to continue throughout permit term.

4.3.4 Storm drain labeling**Existing Activities:**

The current storm drain labeling program has been implemented as an educational volunteer participation as described in Section 6 Public Education and Outreach. The City is proposing to supplement the ongoing public volunteer storm drain labeling program with City crews as stated below under new activities.

New Activities:

City field service crews will be utilized to augment the existing volunteer program to label storm drain inlets within the public right of way (ROW). For safety reasons, volunteer groups' efforts focused on labeling structures that were located within residential areas that had low traffic volumes. City crew efforts will be directed toward replacement of worn or missing labels and labeling the curb opening inlets within the City ROW in high traffic areas.

The City does not have the legal authority to enter private property and label private storm drain structures.

Measurable Goals:

Continue the storm labeling program with a goal of labeling 80% of the curb opening inlets within the City ROW by the end of the first year of the second permit term.

Accomplishments

- During the 2003-04 fiscal year, City Field Services staff continued to install storm drain labels on catch basins located within the public right of way. Table III.2 shows the number labeled, not labeled, and the total number of catch basins. City records indicate that 60% of the City's catch basins have been labeled. However this information may not reflect the total number of labels that were applied. The current system requires field staff to identify the structure (catch basin) location on a hard copy of the City's storm drain map as the labels are applied. This information from the hard copy of the map is then manually entered into the City's map data base. This method of tracking the number and location of the storm drain labels is labor intensive and does not track the replacement of worn or missing labels. In an attempt to correct this situation in the future, the city is implementing a new database system that has the potential to utilize a GPS handheld device to collect information. Other issues that may have impacted the lack of completion of this goal include understaffing and expending efforts on areas already labeled. The corrective action currently implemented includes a plan that will clearly identify unlabeled catch basins on a map prior to the submitting a work request to Field Services.

Table III.2
Labeling of Santa Rosa Catch Basin

Labeled	4544
Not Labeled	3149
Total Catch Basins	7693

4.4 Street and Road Maintenance

Existing Activities:

Streets and roads may collect litter and debris from nearby activities, as well as from vehicular traffic. They also require routine maintenance which may generate waste materials. The goal of this program is to reduce the impact of street and road operations and maintenance on storm water quality.

4.4.1 Street Sweeping Frequency

Existing Activities:

PW Field Services performs street sweeping with a regenerative air sweeper. The street cleaning operations are prioritized by traffic volume and swept on the following frequency. A map showing the approximate areas of service is enclosed in **Appendix III.I**.

- Priority A: Streets located in the downtown area from Brookwood Avenue to Dutton Avenue are cleaned three times per week. This downtown area encompasses approximately 10 blocks.
- Priority B: College Avenue and Fourth Street between Stony Point Road and Farmers Lane as well as Santa Rosa Avenue from Sonoma Avenue to Bellevue Avenue are cleaned twice a week.
- Priority C: Streets are Guerneville Road between Fulton Road and Mendocino Avenue, Mendocino Avenue between and College Avenue, Foulton between Highway 12 and Guerneville Road, Cleveland Avenue between College Avenue and Bicentennial Way are cleaned once a week.
- Priority D: all other curbed streets are cleaned on a monthly basis.
- Streets are swept after special events, such as the weekly “Downtown Market” or annual “Rose Parade.”

New Activities:

The City receives calls from residents who want to know when their street will swept so that they can maximize the effectiveness of the street sweeping operation. This information is not currently available except by telephone during normal business hours. The street sweeping schedule will be made available to the public on the City web page.

Measurable Goals:

- Continue to sweep streets on the frequency as prioritized above.
- Post the street sweeping schedule on web page within the first year of the second permit term.

Accomplishments:

- During the first permit year the City accomplished the following:
 - 15,142 curb miles of streets swept.
 - Webpage completed and available for public viewing of the street sweeping schedule. (http://imaps.ci.santa-rosa.ca.us/index2.cfm?mapchoice=sr_streetsweep.mwf and **Appendix III.I**).

4.4.2 Material Management-Road Construction, Sweeping, Pipe/Ditch Cleaning**Existing Activities:**

Street and road maintenance operations may include saw-cutting, paving, the use of concrete materials and disposal of debris from cleaning operations. Best management practices to address each of these activities is described below:

Saw-cutting:

- Saw-cutting is performed only in dry weather to the extent feasible. Emergency sewer/water repairs must be performed during any weather condition.
- Saw-cutting slurry is either vacuumed or contained and disposed of at an appropriate location.
- Any spills from equipment or activities is disposed of properly.

Paving:

- Paving activities are performed only in dry weather to the extent feasible. Pothole patching may occur in the rainy season due to the potential safety hazard.
- Paving materials are prevented from entering the storm drain system during paving operations.
- Paving materials are stored away from drainage areas.
- Paving equipment is cleaned away from the site at an appropriate area.

Concrete:

- Concrete trucks are washed off site or in designated areas on site, such that there is no discharge of concrete wash water into the storm drain system.
- Wash water from exposed aggregate installation is contained for proper disposal.
- Concrete materials are stored under cover away from drainage areas.
- Only the required amount of concrete is mixed for any project.

Good Housekeeping:

The following good housekeeping practices are implemented to properly manage wastes that are generated during streets and roads maintenance activities:

- Debris is prevented from entering the storm drain system.
- Spills and leaks are cleaned up immediately using dry methods to the maximum extent feasible.
- Dry materials and residue from cleaning operations are swept up.
- Non-hazardous dry waste is collected into designated, leak-proof containers and disposed of properly.
- Trash, litter and debris from job sites are cleaned up and disposed of promptly.
- Work vehicles and equipment are inspected regularly for leaks.
- Stockpiled materials are placed away from catch basins, storm drain inlets, drainage paths and natural waterways.
- Stockpiled materials are bermed and tarped during rainy or windy weather.
- Stockpiles are inspected regularly and after significant rain events.
- Maintenance-related products are applied and stored in accordance with manufacturer's instructions and proper safety measures.
- Maintenance-related products are stored in labeled containers with covers or lids.

Maintenance Waste Disposal:

- Debris, silt and vegetation debris generated by street and road maintenance is disposed of at the Sonoma County Central Landfill.
- Asphalt from street or road repair is recycled to the maximum extent practicable.

New Activities:

None are planned for this permit term.

Measurable Goals:

Continued to implement existing activities and properly recycle or dispose of materials as described above.

Accomplishment:

- Santa Rosa's Utilities Department finalized the document "Standardized Beat Management Practices in Flushing Dead-end Blow-off Valves" and a map of the City's waterline system in relation to City creeks. This describes the procedures to reduce/eliminate sediment and chlorine pollution to creeks from flushing water lines. Document and map are included as **Appendix III.J.**

4.4.3 Training of Targeted Staff:

City Streets and Road Maintenance crews are trained on the job about using appropriate procedures to prevent their operations from impacting the City's storm drain system. An annual refresher is given to all Streets and Road maintenance crews on the subject of the storm water discharge permit and how to maintain compliance with that permit.

New Activities:

None are planned for this permit term.

Measurable Goals:

Continue to provide training to staff involved.

Accomplishments:

- On May 5, 2004, Public Works staff met with Field Services Street Maintenance crews during a regularly scheduled safety meeting to discuss the Industrial Storm Water Discharge permit for the Corporation Yard. The discussions covered the importance of not discharging to the storm drain, good housekeeping practices, the location of areas plumbed to the sewer for vehicle and equipment cleaning, proper storage and disposal of possible sources of pollutants and contacts for questions and reporting. The crews were also reminded that the City is under permit for its Municipal Storm Water discharge and when they are working in the streets the same rules apply. It was also stressed they were to report any activity they see that could be an illegal discharge to the storm drain system.
- This topic is an annual event and is part of the City's Storm Water Pollution Prevention Plan for the Corporation Yard. Other major users of the Corporation, Parks Department, Utilities Department, Garage and Transit Department, were offered to have Public Works staff cover the material during one of their safety meeting or cover the material themselves, using a fact sheet. All chose to cover it themselves with the fact sheet.

4.5 Parking Facilities Management**4.5.1. Sweeping/Spill Clean Up****Existing Activities:**

The goal of this component is to reduce the water quality impact of parking facilities with greater than 25 parking spaces owned by the City.

The following activities are performed by Public Works to remove debris from parking facilities:

- Sweeping is performed approximately weekly at the City's corporation yard at 55 Stony Circle and at City Hall and at the Senior Center on approximately a monthly basis.
- City Transit and Parking Department hires contractors to sweep and pressure wash City-owned public parking lots garages (5 garages and 9 lots). Pressure wash discharge water and debris is vacuumed and properly disposed in a manner such that it does not enter the storm drain system.
- Spill clean up response within City owned and operated parking lots and garages is immediate for priority calls and within one business day for non urgent small spills.

New Activities:

None are planned for this permit term.

Measurable Goals:

- Continued to sweep public parking lots and garages weekly and pressure wash annually. Maintain records in Transit and Parking Department.
- Response to spill clean ups within City owned and operated parking lots and garages is immediate for priority calls and within one business day for non-urgent small spills.

4.6 Emergency Procedures

The objectives of this program are to:

- Recognize that public health and safety are the highest priority when conducting emergency response activities.
- Protect surface water quality by incorporating appropriate BMPs into emergency response activities.

Existing Activities:

The City of Santa Rosa has an Emergency Operations Plan that guides staff in response to and recovery from natural disasters or other emergencies. Where feasible, fire-fighting water from City fire incidents is vacuumed up and disposed of into the sanitary sewer or as hazardous material. Any activities required for addressing emergency repairs of essential public services and infrastructure or for responding to natural disasters are implemented in accordance with federal, state and local regulations to the extent that such measures do not compromise public health and safety.

4.6.2 Hazardous Material Response Plan

The City's Hazardous Material Response Plan is an extension of the City's Emergency Plan and meets the requirements of Chapter 6.95, California Health and Safety Code and Title 19, Article 3, California Code of Regulations. The response plan contains information concerning specific hazardous chemicals at specific sites and emergency response procedures in the event of a release or threatened release of a hazardous material.

New Activities:

None are planned for this permit term.

Measurable Goals:

Continued to implement the Emergency Operations and Hazardous Materials Response Plans.

5.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

Goal: Detect and Minimize Illegal Non Storm Water Discharges

The goal of the illicit discharge program is to detect and eliminate non-storm water discharges (except those that are exempt or conditionally exempt) from entering the storm drain system and to reduce pollutants from such discharge to the maximum extent practicable.

5.1 Spill Response

Existing Activities:

Preventing spills to the storm drain system, including creeks and channels, is an ongoing educational and proactive process that is an inherent part of the NPDES permit compliance. Refer to Legal Authority Section 1.0 of this report for a description of the roles and responsibilities and enforcement procedures of pollution prevention activities.

Spill Prevention Coordination:

During the first permit term, funding was approved for an Environmental Crimes Investigator. Funding for this position is provided annually by the storm water utility assessment, the Utilities Department and the Police Department. The Environmental Crimes Investigator assists Public Works, Utilities and Fire Departments with incidents of environmental crime. Monthly coordination meetings with the Environmental Crimes Investigator, Fire, Industrial Waste, PW Field Services and Storm Water Team are held to coordinate and share information about recent incidents.

The City Industrial Waste Division routinely responds to potential incidents of violation of the sewer use ordinance in addition to periodic routine inspections of permitted businesses. Reports and referrals that indicate potential illegal disposal to the storm drain system are forwarded to the City Public Works Department for locations within the City limits that do not have an active Industrial Waste Permit. The City Public Works Department coordinates with the City Industrial Waste Division on follow up on such referrals to have illicit connections eliminated and to take appropriate steps to prevent future illegal discharges.

In addition to coordination among City departments, the City actively participates with the Sonoma Environmental Quality Assurance Committee (SEQAC). Regularly scheduled SEQAC meetings cover County-wide environmental enforcement and education issues for air, sanitary sewer (industrial waste), hazardous materials, and storm water quality.

Spill Containment, Cleanup and Investigation:

Non-Hazardous Materials:

Under the storm water discharge permit, the City is responsible for cleaning up non-hazardous materials from their right-of-way within the permit boundary. The City Public Works Department has developed Spill Response Procedures to provide appropriate response for discharges to the storm drain system; see **Appendix III-B**. Typical response to a report of potential or actual discharge is to immediately dispatch a City Field Services crew to the scene to stop any discharge from entering the storm drain system. For serious incidents or if the substance spilled is a hazardous material, City Police and/or Fire Department respond. Public

Works Field Services response staff are on call twenty-four hours a day, seven days a week. During normal business hours, the City Storm Water Inspector is dispatched in a timely manner to the scene to assist with clean-up efforts, establish contact with the discharger, business and/or property owner, and provide follow-up enforcement and education. Unfortunately, it is not always possible to identify a discharger and pursue appropriate follow-up. In these cases, City crews perform any required cleanup using the appropriate equipment to remove any pollutants that have entered or threatened to enter the storm drain system and if appropriate, door tags will be placed on residences in the vicinity. If identified, the discharger may be assessed the cost of the clean-up and/or may be referred for prosecution.

Prioritization for Investigation of Illicit Discharges:

Investigations of illicit discharges and disposal are prioritized on the nature, location and quantity of the material spilled and the time of year. Highest priority is given to those incidents involving large quantities and occurring in the wet weather with the highest potential of discharge to a pipe system or creek. Illicit discharge classifications are based on the field investigations and are defined as follows:

- Investigation yields no evidence of actual or potential illicit discharge is categorized as “No Discharge.”
- Evidence of an illicit discharge but discharge did not enter a gutter, street, drain inlet, pipe network or creek is categorized as a “Potential Discharge.”
- Evidence of an illicit discharge that has entered a gutter, street, drain inlet, pipe network or creek is categorized as an “Actual Discharge.”

New Activities:

None proposed in this permit term.

Measurable Goals:

- Continue existing illicit discharge detection and elimination activities.
- Maintain records of spill response actions in the Public Works Department and summarize in each Annual Report.

Accomplishments:

- PW has continued discharge detection and elimination activities with five Storm Water Inspectors who rotate spill response duty on a weekly basis. In addition to spill response, the Storm Water Inspectors performed follow-up education, issued violation letters, and provided assistance to businesses and the public on storm water management issues. The “Storm Water Incident Response” form continues to be revised and a copy of the revised form is included as **Appendix III.K**.
- 146 reports of illicit discharges were received during the first year of the second permit term, resulting in a total of 1,161 reports in the PW database since the City has been under permit.

5.2 Private Sanitary Septic Systems:

The City of Santa Rosa contracts with the County of Sonoma to be the lead agency with well and septic issues. The County Permit and Resource Management Well & Septic Section issues

permits for new septic systems and repair permits to fix failing septic systems if no sewer is available within 200 feet, and also issues new well permits.

Existing Activities:

When a complaint is received of a possible failing septic system within City Limits, the City Community Development Building & Code Compliance Division notifies the County Well & Septic Section of the address of the subject property, so that one of their Code Enforcement inspectors can be dispatched to the site. A City Building & Code Compliance inspector conducts an onsite review within a few hours, usually less than 24 hours from the time the complaint is received. If the inspector finds the complaint valid, a correction notice is issued, directing the property owner to contact County Well & Septic at PRMD for proper testing, evaluation and to obtain a repair permit, if possible.

Should the property owner be unable to obtain a septic repair permit and City sewer is available, the owner must pay hook-up fees to Santa Rosa's Utilities Department, obtain a Public Works encroachment permit, and obtain a plumbing permit from Building & Code Compliance. The owner must also obtain a septic abandonment permit from Sonoma County's Well & Septic Section and properly abandon the septic system. Inspections must be requested of all three: City Encroachment for the tie-in in the public right-of-way, County Well & Septic for the septic abandonment, and Building for inspection of the new sewer line.

If the inspector finds raw sewage above ground, the Building & Code compliance inspector will contact County Well & Septic Section directly and request that one of their inspectors come out to the property for immediate evaluation of the septic system. If the Building & Code compliance inspector finds raw sewage being pumped into a storm drain, drainage ditch or creek the City's Spill Response team is notified immediately. If the Building & Code compliance inspector can locate who is doing the pumping, that individual is ordered to stop immediately via a correction notice and stop work order.

New Activities:

None proposed in this permit term.

Measurable Goals:

- Follow up and resolve any reported illicit discharges from private sanitary septic systems
- Respond within one hour to a reported illicit septic discharge that flows beyond the property boundary
- Respond within one business day to a reported illicit septic discharge contained within property boundary and poses no immediate threat to public health or environment

Accomplishments:

- The City Utilities Department responded to 44 sewer spills in Permit Year 1, resulting in cleaning up of 56,033.5 gallons of raw sewage. Twenty-nine of the spills were discharged from private property. When sewage discharges from private property, the SRPD is called and the owner is billed for clean up costs. The average cleanup cost for Permit Year 1 was \$1269.14.

5.4 Record Keeping and Documentation:

Existing Activities:

The City continues to use and update its computerized databases to track activities related to the NPDES permit. Each department documents its own inspections and actions and maintains its own database irrespective of whether this inspection or activity was routine, follow-up or resulted from referral. Each department compiles summary reports of its activities. PW collects these summary reports for annual reporting purposes.

PW's complaint responses and inspections are entered into a database. In addition, the original report copy and supporting documentation (including photographs and follow up enforcement letters) are filed according to either: (1) business name or (2) address (for residential incident responses).

New Activities:

None are proposed for this permit term.

Measurable Goals:

- Continue to update database as complaint response and inspections are completed.
- Document illicit discharge detection and elimination activities and summarize in each Annual Report.

Accomplishments:

- PW responded to 146 reports of illicit discharges to the storm drain system during Permit Year 1, resulting in the following:
 - 22 identified as “no discharge”
 - 40 potential discharges
 - 75 actual discharges (including “discharge to creek”)
 - 14 discharges to creek
 - 43 total number of clean up operations performed
 - 91 follow-up actions undertaken

- Table III.3 categorizes PW's incident responses by discharge source. Similar to previous years, the majority of PW responses were related to discharges from residential, street spills, construction, and food facilities.

Table III.3
**City of Santa Rosa Public Works Department
 Incident Reports According to Source**

<i>Industry</i>	<i>Year 1</i>	
	<i>Incidents</i>	<i>%</i>
Residential	34	23
Street Spills	14	10
Construction	25	17
Food Facilities	8	5
Automotive	8	5
Schools and Public Agencies	7	5
Pollution reported in creek	3	2
Dumping/Abandoned	8	5
Multi-family Residential	5	3
Other	3	2
Retail	3	2
Cleaning	7	5
Traffic Accidents	0	0
Unknown	9	6
Manufacturing	2	1
Homeless	1	1
Business Centers	4	3
Recreational	0	0
Residential Care	0	0
Service Based Organization	2	1
Printing	0	0
Medical Facilities	3	2
TOTAL	146	100

Enforcement relating to spill response included the following:

- 33 Verbal Warnings
- 33 Written Warnings
- 1 Notice of Violation
- 0 Cease and Desist Orders
- 20 Referrals to other departments or agencies

5.5 Illicit Connection Investigation:

Existing Activities:

Illicit connections are defined as specific pathways for illicit discharges, even though a discharge may be infrequent or intermittent. The goal of the illicit connection elimination program is to eliminate these connections to the maximum extent practicable.

Possible illicit connections within the City are investigated in a number of ways. When odor complaints come in they are forwarded to the Utilities Department to investigate. Once an illicit connection is identified, City repair crews correct the situation or require the owner of the connection to correct the situation immediately.

To prevent the possibility of illicit connections, the City Industrial Waste Division reviews plans and inspects construction for commercial improvements.

If City PW street maintenance crews note any odors or substances in catch basins while doing routine catch basin maintenance they will contact the Utilities Department to investigate.

Storm drain inspection and illicit connection identification by field screening is conducted by the two-person field services crew dedicated to storm drains. When the field services crew has a reason to suspect an illicit connection or illegal discharge as a result of this field screening process, they will coordinate with the Public Works Engineering Division and/or the Utilities Department to test the flow and follow up as appropriate.

Prioritization:

All suspected illicit connections are investigated in a timely manner. However, if prioritization is necessary the following methods are implemented to prioritize potential problem areas to begin illicit connection investigation and elimination:

- Identify drainage areas of old commercial/industrial facilities and areas of heavy industry.
- Identify drainage systems older than 30 years.
- Identify areas with highest number of detected or reported incidents of illicit discharges.

Record Keeping and Documentation:

Illicit connections to the sanitary sewer system are documented in the same manner as sanitary sewer overflows by the Utilities Department.

Accomplishments:

- PW has a two-person full-time equivalent crew with a combination vacuum and water-jetting truck cleaning the storm drain system on a daily basis. All unusual or dry weather flows are investigated. In addition, PW coordinates with other programs; such as IW, SRFD, SRPD and Utilities on the inspection/investigation of illicit connections to the municipal storm drain system. During the first permit year the City cleaned 221,904 linear feet of storm drain pipe, cleaned 9,775 drainage inlet structures, repaired 36 inlet structures, replaced 3.56 miles of old sanitary sewer, conducted 616 inspections for industrial facilities, and Code Compliance responded to 847 incidents without finding a illicit connection to the storm drain system.

5.6 Illicit Connection Termination

Existing Activities:

If an illicit sanitary sewer connection to the storm drain system is discovered, the City's sewer use code, Chapter 15-16.020, lays out the measures to be taken to have the sanitary sewer connection be made properly. The person making that illicit connection would be subject to the same enforcement procedures authorized by the City's storm water ordinance described in Section 2, Illicit Discharge Elimination.

New Activities:

None proposed in this permit term.

Measurable Goals:

Any identified illicit connections to the storm drain system and steps taken to eliminate the connection are included in each Annual Report.

Accomplishments:

➤ No illicit connections to the storm drain system were found during this permit year.

5.7 Disposal of Used Oil and Toxic Materials:

Sonoma County Waste Management Agency provides used oil and toxic materials disposal services within the City limits. Existing activities, new activities and measurable goals are included in the Storm Water Management Plan-County of Sonoma.

5.8 Training of Targeted Staff**Existing Activities:**

During the first permit term, PW staff gave annual presentations to the PW Streets, Garage, and Electrical shops staff, Utilities Department water and sewer crews, and Recreation and Parks Department maintenance crews. The subject of the presentation was the City's storm water discharge permit and the role these employees play in observing, responding to, and reporting any incidents of pollutant discharges to the storm drain system.

New Activities:

These education programs will continue during the second permit term to provide annual training to targeted City employees.

Measurable Goals:

Training is provided annually, documented, and summarized in each Annual Report. See Section 4.4.3.

6.0 PUBLIC EDUCATION AND OUTREACH

Goal: Increase the community's knowledge of the municipal separate storm sewer system and the impacts of urban storm water runoff, encourage behavior changes thereby reducing pollutant release to the receiving waters

6.1 General Public/Residents

Public information and involvement is one of the most important elements of the storm water management program. Each member of the community can contribute to storm water quality improvement by modifying their activities to reduce the amount of pollution generated and by notifying the appropriate agencies of known or potential sources of storm water pollution.

During the first permit term, public outreach was conducted to the construction and building industries, engineering contractors, food service industry including restaurants, automotive repair and maintenance industry landscape industry and general public regarding pesticide, herbicide and fertilizer management, cleaning industry including mobile cleaners, apartments/multi-unit dwellings, and the general public on multiple storm water pollution prevention issues. For the second permit term, the public outreach program will continue to be a coordinated effort among the three copermittees, with each utilizing their existing community outreach and education programs for maximum effect. Due to the new requirements under the Standard Urban Storm Water Mitigation Plan (SUSMP), it is anticipated that the majority of the public outreach efforts in the second term will be for the development community. Local and City/County planners, developers, engineers, contractors and inspection staff will be trained on the implementation of the new SUSMP requirements.

The objectives of the public education and outreach element of this Storm Water Management Plan are to:

- Promote community ownership and protection of water resources
- Increase the community's understanding of storm water pollution prevention
- Promote a clear identification of problem behaviors and solutions
- Identify potential target audiences and past outreach efforts
- Educate target audiences about specific methods to prevent pollution

6.1.1 Storm Drain Inlet Decal Program

Existing Activities:

In 1993 the City of Santa Rosa began a volunteer catch basin stenciling program as an element of its Storm Water Management Program. Catch basins or curb inlets that collect storm water runoff from the street were labeled, "No Dumping, Drains to Creek." Volunteers have included organizations such as Boy Scouts and the Sierra Club, several churches and schools, as well as many families and individuals. Neighborhoods were informed with door hangers describing the storm water program, the difference between the sanitary sewer and storm drain system, and the importance of preventing illegal dumping.

Measurable Goals:

The City will continue to provide decal kits to volunteer groups, and will report the number of decals placed each year in each Annual Report. Since this portion of the Storm Drain Inlet Decal program is voluntary, a numeric goal is not appropriate. See Section 4.3.4 for a description of the portion of the inlet decal program to be completed by City staff.

Accomplishments:

- No volunteer groups have installed any storm drain labels this permit year. The focus will be on City Staff completing storm drain labeling for the City as reported in Section 4.3.4.

- Figure III.B is the new regional design for Sonoma County storm drain labels. It is on a 5-inch Duracast street marker from DAS Manufacturing. Sonoma County Waste Management Agency is proposing to use “Used Oil Block Grant” funds to purchase 12,000 labels, adhesive, and hire a contractor to install them on storm drain inlets throughout residential areas in the County. Recognizing the need and benefit in developing a regional storm water pollution prevention icon, the Sonoma County Waste Management Agency, Russian River Watershed Association, and their member agencies which includes Sonoma County, Sonoma County Water Agency, Cloverdale, Healdsburg, Rohnert Park, Petaluma, Sebastopol, Sonoma, Windsor, Cotati, Ukiah, Mendocino County Water Agency, Mendocino Inland WPC and Santa Rosa, considered a number of label designs. This design, shown above, modifies the current design used by the cities of Rohnert Park and Santa Rosa. It was chosen so that the storm drain message would be consistent and easily recognizable in Sonoma County. The basic design has been used by the City of Santa Rosa since 1994.

Figure III.B
Regional Design for Sonoma County Storm Drain Labels



6.1.2 Ecology Column in Local Newspaper

New Activities:

Local newspapers reach a large number of citizens and businesses within Sonoma County. A column focused on ecological topics is a simple way to present detailed information to these readers. The idea of an "Ecology Column" in a local newspaper will be presented to the Press Democrat and/or the Sonoma West newspapers by December, 2005. This column would include reporting on a variety of ecological topics, including storm water pollution prevention.

Measurable Goals:

Correspondence and meeting notes and results regarding the presentation of Ecology Column idea to local newspapers will be included in the first Annual Report. If the column is published, readership numbers would be included in subsequent Annual Reports.

Accomplishments:

- The idea of an Ecology Column will be explored with the Russian River Watershed Association. A number of jurisdictions over a significant portion of a newspapers coverage area would have greater influence on the newspapers Editorial Board. It would also help to make a storm water message that is consistent throughout the Region and more recognizable by the public. RRWA is just starting and developing a structure before working on specific messages.

6.1.3 Storm Water Management Program Web Site

Existing Activities:

The City created a website for the Storm Water Management Program, at the address: <http://www.ci.santa-rosa.ca.us/default.aspx?PageId=319> to better inform the public about storm water quality issues including the NPDES Discharge Permit and creek restoration. Updates and revisions to the pages are ongoing. Future updates will include a schedule for street sweeping by address.

Measurable Goals:

- Update to include street sweeping schedule by address.
- A counter will be installed on the main storm water page to track the number of visitors to the site. These numbers will be reported in each Annual Report.

Accomplishments:

- The City has continued to maintain and update the Storm Water Web site with more information on the City's Storm Water Management plan and pollution prevention practices. A detailed map of the street sweeping schedule has been added to the City's GIS Map Site at <http://imaps.ci.santa-rosa.ca.us/index2.cfm> so that the sweep day of the month for each parcel can be determined.

- A web service was engaged to provide statistics of use for the main storm water web page nearly two years ago. Data was provided for a period of time, but the service eventually proved difficult to use and contact and was discontinued. Over this permit year the City Manager's office selected Planetaria to redesign the variety of Department web pages with a common design and standardized features. Statistics of web page use is a part of the contract with Planetaria, but information is not available at this time.

6.1.4 Water Agency Adopt-a-Creek Program

The Water Agency is the lead for the Adopt-a-Creek program within the permit boundary. Details of the program are included in Water Agency portion of this Storm Water Management Program. The Water Agency and the City each fund half of a full-time Environmental Specialist position. Duties of this position include the coordination of the Adopt-a-Creek program. The Adopt-a-Creek Program and associated measurable goal are detailed in the Water Agency's section of the Annual Report.

6.1.5 Pet Waste Signs Along Water Agency Channels in Santa Rosa

New Activities:

Signs that remind pet owners to protect water quality by cleaning up after their pets will be designed by a graphic artist. The location, content, and appearance of signs along Santa Rosa Creek are subject to the Santa Rosa Creek Design Guidelines adopted by the Santa Rosa City Council and Sonoma County Board of Supervisors. The Waterways Advisory Committee oversees implementation of the guidelines and has recommended that signs along other waterways within the Urban Boundary be subject to the same guidelines. The majority of creekside trails within the permit boundary are on Water Agency property. Any sign posted on Water Agency property is subject to their approval.

After receiving the necessary approval, informational signs will be posted at major public access points to creekside trails. These signs will remind trail users to not pollute creeks and to help take care of creeks by doing such things as carrying out their trash, picking up after pets, keeping pets on leashes, and not building fires.

In addition, signs specifically targeting pet owners to "Clean Up After Your Pet" to reduce bacteria and nutrient pollution will be posted at creekside trail access points. The installation of the "Clean Up After Your Pet" signs will be posted at major creek access points as an interim measure on the major creek access points until the informational signs are installed.

Dispensers of pet waste collection bags will be installed at four points in the Brush Creek Restoration area. Dispensers will be refilled as necessary. Santa Rosa Recreation and Parks Department will supply containers to dispose of collected pet waste and regularly empty the containers.

Measurable Goals:

- By the end of the first year of the permit, 10 informational signs will be posted at major access points to the Santa Rosa Creek Trail, subject to approval by the Water Agency and City's Waterways Advisory Committee.

- 25 “Clean Up After Your Pet” signs will be posted at access points each year of the permit term.
- Each annual work plan, will identify the locations and numbers of additional signs to be posted along creekside trails.

Accomplishments

The ten informational signs have been designed as 30” x 24” signs that include information about storm water runoff, water quality, stream maintenance practices, fisheries, and other animals and plants. Only 1 sign was installed in Permit Year 1. In 2003, the Sonoma County Agricultural Preservation and Open Space District, Sonoma County Regional Parks, Sonoma County Water Agency, and the City formed a partnership for \$1.4 million of improvements along the Santa Rosa Creek Greenway (the 6 miles of Santa Rosa Creek between Santa Rosa Avenue and Willowside Road). These improvements will include interpretive, directional, and regulatory signs that will feature a distinct look. To maintain a uniform and distinct look for all Greenway signs, the 10 signs at major access points will be redesigned to meet the Greenway standards and installed in Permit Year 2.

Two-hundred pet waste signs have been purchased and approximately 140 of these have been installed in the last 2 years. Pet waste signs are installed at all major access points to the Santa Rosa Creek Trail.

Two pet waste collection bag dispensers have been installed in the Brush Creek Restoration area and appear to working well. Two more will be installed in the future.

6.1.6 Public Events

Existing Activities:

The City actively pursues opportunities to participate in general outreach events. Participation in previous events have included the Santa Rosa Rose Parade, Wednesday Night Market, Autumn Water Festival, City’s Citizen Academy and Earth Day events.

Measurable Goals:

The City will provide a summary of participation in general outreach events including materials distribution numbers to the Regional Board on an annual basis.

Accomplishments:

- The Storm Water Team is continuing to set up displays at events and hand out a variety of informational materials pertaining to storm water. The following is a list of outreach events showing the date, the event title, location and (audience, direct contact, event attendees). The number of materials distributed can be found at the end of this section.

Public Outreach Exhibits or Speaking Engagements:

- 3/04, PW gave “enviroscape” presentation and informational materials to classrooms at Elsie Allen, Maria Carrillo, Montgomery, Piner, and Santa Rosa High Schools (140 students).
- 4/22/04, PW staffed a display and gave out informational materials at the Aglient Earth Day Fair in Santa Rosa office (80, 200 employees).

- 5/1/04, PW staffed a display and gave out informational materials at the Water Fair hosted by Santa Rosa Utilities Department at the Finley Center (250, 400 general public).
- 5/4/03, informational materials given out at the City's Cinco de Mayo celebration (25 general public).
- 5/15/04, PW staffed a display and gave out informational materials at the Santa Rosa Rose Parade, Juilliard Park (200, 1000+ general public).
- 5/26/04, PW staffed a display and gave out informational materials at the Wednesday Farmers Market, downtown Santa Rosa (150, 1500+ general public).
- 6/30/04, PW staffed a display and gave out informational materials at the Wednesday Farmers Market, downtown Santa Rosa (90, 1000+ general public).

6.1.7 Hazardous Waste Disposal

The Sonoma County Waste Management Agency has public outreach programs to prevent improper disposal of used oil and toxic materials. This program and associated measurable goal are described within the County's Storm Water Management Plan.

6.1.8 Illicit Discharge Incidents

Existing Activities:

Pollution prevention outreach materials designed for private citizens during response to accidental or illicit discharges were developed during the first permit term. These outreach materials will continue to be distributed to citizens as part of spill response duties during the second permit term.

Measurable Goals:

Material distribution numbers will be reported each year in Annual Report.

Accomplishments:

- In Spring 2004 a new brochure on Swimming Pools and Water Quality was finalized and printed. It was also mailed to all identified pool owners within Santa Rosa's City Limits. A copy of this brochure is included here as **Appendix III.L**.
- Summer and Fall 2003 PW staff researched and put together a car wash kit for non-profit groups to borrow free to hold car wash fundraisers without polluting local creeks. The kit contains instructions, a thick plastic sheet to block catch basin grates, sump pump, orange cones for safety, electric extension cord, brush, dustpan, and sand bags. A catch basin can be blocked in a parking lot for car washing and the ponded soapy water pumped to a sanitary sewer cleanout or large landscape area.
- See Table III.4 below, for list and number of these brochures, inserts, and flyers given out to the public.

Table III.4
Educational Material Distributed

Outreach Item	Year 6 Quantity	Category/ Audience	Language
Apartment Manager Checklist	6	MultiFamily	English
Automotive Guide	3	Automotive	English
Automotive Guide	1	Automotive	Spanish
BMP 1 Storm Water	40	Construction	English
BMP 2 Hvy Equip/Earth Mov.	40	Construction	English
BMP 3 Road Work/Paving	40	Construction	English
BMP 4 Concrete/Mortar App.	40	Construction	English
BMP 5 Gen Construction/Supervision	40	Construction	English
BMP 6 Home Repair/Remodel	80+	Construction	English
BMP 7 Painting	40	Construction	English
Clean Carpet, Dirty Streams	12	Cleaning	English
Cleaning Industry General Guide	5	Cleaning	English
Cleaning Industry Q & A	5	Cleaning	English
Cleaning Industry Surface Cleaner	5	Cleaning	English
Cleaning Industry Carpet Cleaner	5	Cleaning	English
Cleaning Industry Water Regulations	5	Cleaning	English
Cleaning Industry Auto Detailer	5	Cleaning	English
Only Rain down the Storm Drain	5	Cleaning	Eng/Span
Cleaning Industry Poster	5	Cleaning	English
Food Facility Guide	3	Food	English
Food Facility Quick Ref. CHN		Food	Chinese
Food Facility Quick Ref. ENG		Food	English
Food Facility Quick Ref. SPN		Food	Spanish
IPM Mosquitos	1500	IPM	English
IPM Problem Pesticides	500	IPM	English
IPM Safe use and disposal of Pesticides	500	IPM	English
IPM Tips for a Beautiful Lawn	1000	IPM	English
IPM Growing a Healthy Garden	2400	IPM	English
IPM Tips for Wonderful Roses	2100	IPM	English
IPM Controlling Ants	2700	IPM	English
IPM Controlling Aphids	2200	IPM	English
IPM Keeping Cockroaches Out	500	IPM	English
IPM Keeping Fleas Off	1800	IPM	English
IPM Controlling Snails and Slugs	1000	IPM	English
IPM Living with Spiders	2000	IPM	English
IPM Controlling Yellowjackets	2000	IPM	English
IPM Problem Pesticides	30	IPM	Spanish
IPM Safe use and disposal of Pesticides	50	IPM	Spanish
IPM Tips for a Beautiful Lawn	100	IPM	Spanish
IPM Controlling Ants	100	IPM	Spanish
IPM Keeping Cockroaches Out	50	IPM	Spanish
IPM Keeping Fleas Off	30	IPM	Spanish
IPM Controlling Snails and Slugs	70	IPM	Spanish

Outreach Item	Year 6 Quantity	Category/ Audience	Language
IPM Living with Spiders	80	IPM	Spanish
IPM Controlling Yellowjackets	90	IPM	Spanish
Beware Grease Goblin	74	IW/General	1/2 Eng/ Spn
Swimming Pool Brochure	2300	General	English
Door Tag "No Dumping"	20+	General	English
Door Tag Storm Drain Violation	20+	General	English
Healthy Env. Begins @ Home	160	General	English
Recycle Autumn Leaves	40	General	English
Recycle Guide, 2003	30	General	English
SD are for SW Only brochure	150	General	English
SD are for SW Only brochure	30	General	Spanish
SD are for SW Only poster	10	General	English
SD are for SW Only poster	5	General	Spanish
Storm Water Citizen Resource Guide	80	General	English
Storm Water Ordinance	50	Regulation	English
Creek benefits Brochure	80	Creek/Gen	English
Creek Stewardship Program	80	Creek/Gen	English
Only Rain Down the Storm Drain magnet	200	Gen/Promo	English
"Our Water Our World" magnets	150	IPM/Promo	English
Frisbee w/ curb marker decal	270	Gen/Promo	English
Coffee Mug w/ logo	40	Gen/Promo	English
Pencil w/ logo	200	Gen/Promo	English

6.1.9 Private Septic Systems

New Activities:

Outreach materials focused on proper maintenance of private septic systems and signs of potential system failure will be developed and distributed to residents within the Santa Rosa Creek watershed. A workshop will be held to address citizen's concerns about their particular systems as well as the potential for and impacts of septic-related pollution in Santa Rosa Creek.

Measurable Goals:

Materials distribution and workshop attendance numbers will be included in the first Annual Report.

Accomplishments:

- In an effort to reduce the impacts of septic systems on waterways, a workshop on the operation and maintenance of septic systems was held for Santa Rosa residents on Saturday, October 5, 2002. Speakers from the Santa Rosa Public Works and Utilities Departments and from the Sonoma County Permit and Resource Management Department discussed routine maintenance, design, and landscaping suggestions for septic system owners whose properties are within 300 feet of a waterway in Santa Rosa. An invitational flyer was sent to

approximately 600 residents one month prior to the workshop. A total of 10 people attended the workshop and received handouts pertaining to septic system maintenance, guidelines for remodeling and additions, and sewer connection fees. Workshop participants were asked questions regarding leach field maintenance, frequency of tank pumping, and the validity of septic tank additives. Copies of the invitational flyer and the workshop handouts are included as **Appendix III.M**.

6.2 Industrial/Commercial Outreach

Existing Activities:

During the first permit term, significant outreach was undertaken for food facilities, the automotive, cleaning, landscape, building, and construction industries. Brochures and educational materials, including posters and videos, were created and distributed during inspections or by mail. The materials created will continue to be reprinted as needed and distributed upon request in the second permit term.

In addition, the City participated in the Sonoma Environmental Quality Assurance Committee (SEQAC) during the first permit term. This organization is comprised of many regulatory agencies involved with hazardous material control. Participation in this organization allows for more coordinated outreach and the ability to respond quickly to environmental emergencies through effective coordination between all involved agencies. The City will continue to participate in SEQAC as part of its ongoing outreach to industry.

6.2.1 Automotive Repair, Food Facility, and Cleaning Industries

Existing Activities:

During the first permit term, the permittees created and distributed outreach materials in English and Spanish for the automotive, food facility, landscape, and cleaning industries. The outreach materials were distributed by City and County inspectors upon request and while doing routine inspections or when responding to incidents. Educational materials were also distributed by staff at presentations, trade shows, and meetings. These educational materials will be continue to be printed, as needed, and distributed during the second permit term.

Measurable Goals:

- Distribute prepared educational materials on storm water pollution prevention during inspections. Ongoing through second permit term.
- Track and report in each Annual Report the type and number of educational brochures distributed. Material distribution numbers will be reported each year in the Annual Report.

Accomplishments:

- See Table III.4 for outreach materials distributed and **Appendix III.F** for the SEQAC meeting agendas for this permit year. The Spring 2004 issue of “Santa Rosa Recycling News” from Santa Rosa Recycling and Collection Inc. (SRRC) included an article geared to restaurants on storm water protection by proper handling of waste. Excess wet waste placed in trash containers at food facilities can spill onto city streets from collection trucks. SRRC,

with support from County and City agencies, developed a written procedure to work with these food facilities where excess wet waste becomes a problem. See **Appendix III-N** for copies of the article and the procedure.

6.2.2 Landscape Industry

Existing Activities:

During the first permit term, the City worked with University of California Cooperative Extension (UCCE) Master Gardeners for distribution of the Integrated Pest Management (IPM) Fact Sheets, conducting public IPM workshops, and the creation of a native plant garden display at the Sonoma County Fair. The goals of this project include raising public awareness that pesticides can affect water quality and providing information on less-toxic pest management and the proper use and disposal of pesticides. The City will also continue to provide IPM Fact Sheets to retail stores who are part of the “Our Water Our World” Program.

Measurable Goals:

Materials distribution numbers will be reported each year in the Annual Report.

Accomplishments:

- The City continued to fund work by University of California Cooperative Extension (UCCE) Master Gardeners for distribution of the Integrated Pest Management (IPM) Fact Sheets, conducting public IPM workshops, and the creation of a native plant garden display at the Sonoma County Fair. As a direct result from City funding the Master Gardeners had contact with over 9,000 people handing out over 19,000 IPM Fact sheets at a number of events including:
 - July 24-August 6, 2003 Sonoma County Fair Demo Garden (8600 contacts)
 - March 19-21, 2003 Home and Garden Show
 - May and June, 2004 Santa Rosa Wednesday Farmers Markets
 - Gardening with Good Bugs Workshop at SR Harvest for the Hungry Community Garden.
- The Master Gardeners also published two articles about integrated pest management in the Santa Rosa Press Democrat (PD). The PD currently has a readership of quarter million adults. The articles are enclosed in **Appendix III.O**.
 - August 7, 2004 “New Tools for Managing Garden Pests”
 - August 14, 2004 “Take Right Approach to Insect Pests”

The October 17, 2003 Manager’s Weekly Email report to City staff and the public included a segment on the UC Extensions Master Gardener Program of Sonoma County receiving the IPM Innovator Award from the Dept of Pesticide Regulation for the IPM outreach conducted for the City of Santa Rosa. See Table III.4 for number of outreach materials distributed and **Appendix III.P** for a copy of the City’s agreement with UCCE.

- The City of Santa Rosa has also supported the Bay Area Regional IPM group, part of the Bay Area Stormwater Management Agencies Association in spreading its point of purchase program, Our Water, Our World to more California counties. Through a grant, the program

is reaching up to 19 retail stores in Sonoma County, including 4 in the City of Santa Rosa. The program encourages the stores to carry less toxic products, have a rack of the IPM Fact Sheets, clearly mark less toxic products, conduct a special training of store employees so they are able to answer the public questions, hold public workshops in stores, and created a statewide web-page of IPM information. On February 13, 2004 a press release was sent to local newspapers regarding a public workshop on IPM at the local Yardbirds store.

6.2.3 Building and Construction Industries

Existing Activities:

During the first permit term, outreach materials for the building and construction industry were developed and distributed. Information was provided during site inspections as well as industry-sponsored workshops. The City will continue to print and distribute these outreach materials during the second permit term.

New Activities:

A large portion of the public outreach effort during the second permit term will focus on the development and distribution of materials related to the Standard Urban Storm Water Mitigation Plan (SUSMP).

Measurable Goals:

Materials distribution numbers will be reported in each Annual Report. Measurable goals related to the SUSMP outreach effort are detailed in Part VI of the Storm Water Management Program.

Accomplishments:

➤ See Table III.4 for outreach materials distributed.

6.3 School Education

6.3.2 High School Aquatic Macroinvertebrate Bioassessment Program

Existing Activities:

The City will continue to work with Santa Rosa area high school students through the Macroinvertebrate Bioassessment Program. This program includes classroom and field coursework during the spring. Students learn how to identify aquatic macroinvertebrates and about the ecology of a particular creek within Santa Rosa. The importance of storm water pollution prevention is also covered during lectures.

Measurable Goals:

The number of students reached through this program and total teaching hours of City staff will be reported in each Annual Report. However, it is ultimately the decision of the administration of each individual school to continue the Bioassessment Program each year, and as such a goal for the minimum number of students reached for each year will not be set.

Accomplishments:

- A total of 135 students from five high schools participated in the program in 2004. The five participating high schools were: Montgomery, Maria Carrillo, Elsie Allen, Piner, and Ridgway.
- A total of 54 hours were spent presenting the classroom and field coursework by City staff.

6.3.3 Spring Lake Environmental Discovery Center**Existing Activities:**

The new Environmental Discovery Center of Sonoma County (EDC) is a multi-sensory, interactive, hands-on place where people of all ages are exposed to information about what's being done to enhance the environment and highlight the natural resources of Sonoma County. The EDC will use Spring Lake and other regional parks as resources for interpretive displays, docent-lead programs, habitat restoration projects and field laboratories. The EDC will also provide environmental education at school sites throughout the County. The facility will host four or five rotating programs throughout the year, each featuring a different aspect of Sonoma County's unique natural resources and what local agencies, businesses, and citizens are doing to encourage environmental stewardship and the enjoyment of natural resources within our community.

Measurable Goals:

Attendance and materials distribution numbers will be reported in each Annual Report. However, as the City has no control over these numbers, no minimum goal will be set.

Accomplishments:

- The primary program related to storm water was held during the months of January to June and called "Down the Drain: A raindrop's journey from cloud to creek." The centerpiece display is a storm drain system that children can crawl through, entering at a "storm drain" and exiting to either a "creek" or "beach" area. Also included are large-size board games, a technology tent with computer stations (featuring the Watermaze game and other programs), a movie theater with short video films, and puzzles. An interactive watershed model (Enviroscape), provided by the City is also on display. Between January and June, 4,140 members of the general public visited the center, as well as 3,564 school children and teachers. A copy of the agreement between the City and Sonoma County Regional Parks Department and the poster advertising the stormwater display is in **Appendix III-Q**. Also included are student letters about the center.

7.0 EFFECTIVENESS EVALUATION

Goal: Provide the City and the RWQCB an assessment of the City's program implementation and permit compliance

7.1 Management Plan

Existing Activities

The objective of the City of Santa Rosa Storm Water Management Plan is to protect and enhance water quality by reducing storm water pollutants to the maximum extent practicable. It is expected that through systematic program implementation the City is making an appreciable impact on improving the quality of urban storm water runoff. The purpose of the effectiveness evaluation is intended to provide to the City and RWQCB an assessment of program implementation and permit compliance. The information is used to track progress and focus or redirect program resources through process improvement and achieve the maximum benefit in minimizing the impact of the pollutants of concern. The assessment utilizes direct and indirect measurements to evaluate each of the program elements.

An example of a direct measure is the amount of debris removed from the storm drain system as a result of municipal cleaning and maintenance activities. Removal and proper disposal of debris is a quantitative reduction in the pollutant load that would otherwise result in a discharge of pollutants to the receiving waters.

Indirect measurements are used to evaluate program elements that cannot be numerically quantified such as the educational impact the message "No Dumping-Drains to the Creek" on a storm drain inlet may have in deterring an illicit discharge.

New Activities:

The City has restructured the SWMP to include measurable goals for each program element. The effectiveness evaluation will be a "self assessment" of the program implementation status. The evaluation will consist of a review of the accepted annual work plan and a determination that it is proceeding accordingly. Any deviations from the stated work plan will also be identified in the Annual Report.

Measurable Goals:

Where a measurable goal for a plan component identifies a deliverable or a reporting task, the plan component will be evaluated to determine whether or not the goal was met. A checklist will be developed for an annual self-evaluation conducted by City staff to check on the progress of implementation of the Storm Water Management Plan. Evaluations will be included in each Annual Report.

An example of an evaluation of a measurable goal that identifies a deliverable would be the cleaning and inspection of 130,000 linear feet of storm drain. An evaluation would be conducted and the results reported. Conversely, the measurable goal defined under Emergency Procedures does not contain a deliverable or a reporting task. The stated goal is to follow the HAZMAT Reponse Plan. This would not be included as part of the effectiveness evaluation.

Accomplishments:

The achievement of the program's measurable goals are summarized in the "At – a – Glance" table and detailed information can be found under each program element section. The City of Santa Rosa has met or exceeded all its stated goals with the storm drain labeling as the only exception. The City is in the process of implementing corrective action and will achieve the 80% goal of labeling the catch basins contained within the City right-of-way during fiscal year 2004-05. More importantly, it should be noted that a new regional label has been designed and approved by the majority of all the communities within the Russian River Watershed. This will promote a consistent storm water pollution prevention message throughout the watershed.

- Program Highlights that directly improved water quality
 - 221,904 linear feet of storm drain pipe
 - Cleaned 9,775 drainage inlet structures
 - Replaced 3.56 miles of old sanitary sewer
 - 15,142 curb miles of street swept
 - 5,980 cubic yards of debris collected

- Program highlights that indirectly improved water quality
 - Conducted 616 inspections for industrial facilities
 - Conducted 1134 inspections on active grading permits
 - Responded to 847 code compliance incidents
 - Responded 146 reports of illicit discharges
 - Conducted a SUSMP workshop- 146 attendees
 - Installed 140 pet waste signs along creek access points
 - Over 25,000 pieces of outreach materials provided to the public and businesses
 -

- Program highlights of products developed that indirectly improve water quality
 - Street sweep map now on internet
 - Fertilizer Management Plan developed by Park and Recreation Department
 - Swimming pool BMP brochure finished and sent to 2000 residents
 - Quick Reference guide on "Contractor Activities and Pollution Prevention" BMPs prepared for inspectors
 - Utilities Department prepared the "Standardized Best Management Practices for Flushing Dead-end Blow-off Valves"
 - Worked with the Russian River Watershed Association and other jurisdiction to develop the standard storm drain decal for Sonoma County
 - Santa Rosa Recycling and Collection, Inc., with City and County support, developed the document "Best Management Practices and Response Procedures for Wet and Liquid Waste"
 - A carwash kit for nonprofits to hold non-polluting car wash fundraisers was developed.

Work Plan

During the permit renewal process the City developed a five year management plan designed to control urban storm water pollution to the “maximum extent practicable”. To a large extent the emphasis will continue to implement existing activities and staff. A significant change to permit requirements is due to the addition of the Santa Rosa Area Standard Urban Storm Water Mitigation Plan. The implementation of the SRA-SUSMP will be the primary new focus of this storm water program. The attached work plan summarizes the activities of the associated departments with the approved management plan, identifies the responsible lead departments and presents the implementation schedule. Based on the results from this annual evaluation, the City is in substantial conformance with the permit requirements. The attached work plan (see Attachment III.1) provides a summary of activities and measurable goals for year 2004-05 to achieve permit compliance. The City is not proposing any substantial program modifications at this time.

8.0 FISCAL ANALYSIS

Existing Activities:

During the first permit term, fiscal resources were reported in each Annual Report. The report included actual expenditures for the prior fiscal years and estimated expenditures for the upcoming fiscal year.

Capital expenditures were reported in the following categories:

- drainage maintenance and tracking equipment
- develop standards and procedures for inspections and permits
- public outreach
- water quality testing equipment and program.

Operation and maintenance costs were reported in the following categories:

- permit administration
- drainage maintenance
- response and enforcement
- inspections and permits
- public education
- water quality testing.

Operation and maintenance costs did not include costs for routine maintenance activities that were being performed prior to issuance of the NPDES permit.

Each Annual Report also included a description of the funding sources to meet the estimated expenditures for the upcoming fiscal year. The City established a storm water enterprise and utility for permit compliance activities within the City limits in 1996. The storm water enterprise and utility has been the funding source for the City's compliance with the storm water discharge permit. Each year the storm water permit portion of the storm water utility increases, based on the Consumer Price Index - San Francisco – Oakland, so that increased costs due to inflation will be funded.

Each Annual Report also included a description of shared funding among the permittees for lead agency coordination work.

Measurable Goals:

Continue to report on funding of lead agency work as part of each Annual Report.

Accomplishments:

- The City of Santa Rosa, County of Sonoma and the Sonoma County Water Agency executed a cooperative agreement on December 16, 2003, which specifically identifies the roles and responsibilities of each permittee for the activities identified in the permit. The cooperative agreement designates the City as lead agency and designates cost sharing for the lead agency work under the permit. Under the terms of the agreement the County and the Water Agency each pay the City one-third of the lead agency cost. City of Santa Rosa hired a consultant to

perform lead agency work. The work includes to conducting permittee coordination meetings and assisting in the preparation of the annual report. The cost share for each permittee was \$13,200 for a total cost of \$39,600.

New Activities:

The categories used for reporting fiscal resources during the first permit term are not consistent with the City's budget tracking system for the storm water utility. In addition, since large capital expenditures are not anticipated as part of the second permit term, capital expenditures no longer need to be reported separate from operation and maintenance costs.

Reporting categories that are consistent with the City's budget and the types of expenses included in each category are described below.

a) *storm water public education*

Initial outreach to the development industry, outreach to retail gasoline outlets, participation in the Environmental Discovery Center at Spring Lake Park, contract with Master Gardeners for Integrated Pest Management outreach, reprinting of previously developed outreach materials, and storm drain decal program.

b) *storm water quality testing*

Staff salaries and benefits, equipment purchases and printing curriculum for high school macroinvertebrate monitoring program, staff costs for water quality sampling, laboratory testing of water quality samples, and training on water quality testing.

c) *storm water maps, hydraulics and surveys*

Updating mapping of storm drain system, mapping and analysis software, and surveying of storm drain system.

d) *storm water system operations and maintenance*

Staff salaries and benefits, fuel, equipment purchase and maintenance associated with cleaning storm drain system using a combination vacuum/jet truck, software and equipment for tracking cleaning activities, and filters and absorbent materials used in spill cleanup.

e) *storm water discharge permit*

Incident response, follow-up education and enforcement actions, coordination among permittees, other related programs and RWQCB staff, grading inspector (salaries, benefits and equipment costs), administrative support staff, preparation of annual reports to RWQCB, staff training, and annual permit fee.

f) *storm water program administration*

Management of storm water program (budget and staff), dues to State Storm Water Quality Task Force and Water Environment Federation, participation in general storm water management meetings (State Storm Water Quality Task Force, Bay Area Stormwater Management Agencies Association, California Water Environment Association), portion of environmental crimes investigator, and general government overhead associated with the storm water utility.

Each year the permittees will meet with the RWQCB staff to discuss the work plan for the upcoming fiscal year. A discussion of the fiscal resources proposed to implement the work plan should be part of that meeting so that the costs can be considered as part of the budget process.

After the City Council adopts the budget for the upcoming year, storm water budget information is available to include in the next Annual Report. The City Council generally adopts the budget before July 1 of each year.

Measurable Goals:

- Each year, include discussion of fiscal resources in work plan meeting with RWQCB staff.
- In each Annual Report, report on fiscal resources in the following categories:
 - a. storm water public education
 - b. storm water quality testing
 - c. storm water maps, hydraulics and surveys
 - d. storm water system operations and maintenance
 - e. storm water discharge permit
 - f. storm water program administration.
- In each Annual Report after implementation of SUSMP requirements on private development projects, report on fiscal resources in the categories established for tracking SUSMP related expenses.
- Include in each Annual Report in the fiscal resources section for past fiscal years a breakdown within each of the above categories for salaries, benefits, professional and other outside services, and capital costs.
- Include in each Annual Report in the fiscal resources section for the upcoming fiscal year the total budgeted amount within each of the above categories.

Accomplishments:

Table III.5
Annual Report - Fiscal Analysis
Prepared by the City of Santa Rosa
August 17, 2004

Storm Water Program Element	Salaries		Benefits		Services & Supplies		Capital Costs		Total	
	Actual 2003-04	Budget 2004-05	Actual 2003-04	Budget 2004-05	Actual 2003-04	Budget 2004-05	Actual 2003-04	Budget 2004-05	Actual 2003-04	Budget 2004-05
Storm Water Public Education	20,837	19,796	5,273	7,324	46,448	99,146	0	0	\$72,558	\$126,266
Storm Water Quality Testing	33,060	25,500	6,268	9,434	8,132	16,656	0	0	\$47,460	\$51,590
Storm Water Maps, Hydraulics and Surveys	10,123	15,759	3,095	5,830	4,598	14,788	0	0	\$17,816	\$36,377
Storm Water Systems Operations & Maintenance	133,882	145,000	58,613	73,819	118,891	90,454	0	0	\$311,386	\$309,273
Storm Water Discharge Permit	142,407	147,000	47,011	54,387	88,429	81,683	0	0	\$277,847	\$283,070
Storm Water Program Administration	12,488	20,000	3,281	7,400	79,588	74,734	0	0	\$95,357	\$102,134
Total	\$352,797	\$373,055	\$123,541	\$158,194	\$346,086	\$377,461	\$0	\$0	\$822,424	\$908,710

Attachment III.1: "At a Glance" Storm Water Management Work Plan 2004-05
Protecting and Enhancing Water Quality by Reducing Storm Water Pollutants to the Maximum Extent Practicable
 City of Santa Rosa

Proposed Storm Water Management Plan	Measurable Goals and Implementation Schedule		
	Measurable Goals	Lead Department	Schedule
Program Management Goal: Facilitate communication and coordination between the copermittees, Regional Board and other appropriate entities. Ensure the SWMP elements are implemented on schedule and that all requirements of the Permit are met.			
Copermittees Monthly Coordination Meetings	Schedule and Conduct monthly meetings <i>Continue through Permit term</i>	Public Works	Ongoing
Annual Work Plan	Develop preliminary work plan for RWQCB staff <i>April Coordination Meeting, Annually</i> <i>Final work plan submitted with each Annual Report</i>	Public Works	Preliminary work plan due April 1, 2005
Annual Report	Submit to RWQCB on time	Public Works	October 1, 2005
Coordination with Phase II Communities	Invite City and Town staff from Phase II communities within the permit boundary to monthly coordination meeting	Public Works	Ongoing
Legal Authority Goal: Effectively prohibit non storm water discharges into the storm drain system and receiving waters.			
Review existing codes and propose amendments as required	Continue to assess the effectiveness of the storm water ordinance. Revise as required	Public Works City Attorney	Ongoing
Private Construction Element Goal: Reduce construction site related pollutant, especially sediment, to MEP			
Grading Permit Issuance	Continue to implement current approval process. Submit list of active grading permits to RWQCB <i>in each Annual Report.</i>	Community Development	Ongoing

Proposed Storm Water Management Plan	Measurable Goals and Implementation Schedule		
	Measurable Goals	Lead Department	Schedule
Private Construction on Public Land	Continue to issue Encroachment Permits that require compliance with California Standard Specifications, Section 7-1.01G "Water Pollution" and the City Storm Water Ordinance	Public Works	Ongoing
Inspection of Construction and Vineyard Sites	Inspect sites with active grading permits every two weeks and after major storm events Submit list of site inspections performed for each grading permit to RWQCB <i>in each Annual Report.</i>	Community Development	Ongoing
Enforcement of Non-Compliant Sites	Follow existing protocol and document verbal and written enforcement notices- Submit list of sites requiring Third and Fourth Level enforcement actions to RWQCB <i>in each Annual Report</i>	Community Development	Ongoing
Reporting of Non-Compliant Sites	Notify RWQCB verbally within 24 hours and in writing of Third and Fourth Level enforcement actions. Submit list of sites requiring Third and Fourth Level enforcement actions to RWQCB <i>in each Annual Report</i>	Community Development	Ongoing

Proposed Storm Water Management Plan	Measurable Goals and Implementation Schedule		
	Measurable Goals	Lead Department	Schedule
Training of Targeted Staff	<p>Provide Erosion Prevention and Sediment Control training for new staff, and continue attending and participating in the RWQCB's annual Erosion and Sediment Control Workshop</p> <p>Submit list of staff that attend and/or participate in training to RWQCB <i>in each Annual Report</i></p>	<p>Community Development for private development</p> <p>Public Works for public improvements</p>	Ongoing
Industrial/Commercial Element Goal: Reduce the potential for pollutants to contact storm water to MEP			
Inventory of Facilities	<p>Maintain data base of businesses within City that may be required to file NOI and comply with the terms of State General Industrial Permit.</p> <p><i>Submit in each Annual Report</i></p>	Public Works	Ongoing
Food Facility Inspections	<p>Inspections are performed for wastewater discharge compliance. There are no measurable goals associated with this activity for the municipal NPDES permit.</p>	Industrial Waste	Refer to Sonoma County's Storm Water Management Work Plan
Retail Gasoline Outlet and Automotive Service Facilities Inspections	<p>RGO outreach materials and distribution list in the 2004-05 Annual Report</p>	Public Works	Complete by June 30, 2005
Industrial/Commercial Enforcement	<ol style="list-style-type: none"> 1. Follow enforcement protocol for industrial/commercial facilities without industrial waste permits 2. Report on enforcement activities in each Annual Report view and submit findings to RWQCB 	Public Works	Ongoing

Proposed Storm Water Management Plan	Measurable Goals and Implementation Schedule		
	Measurable Goals	Lead Department	Schedule
Interagency Coordination for Industrial/Commercial Facilities Program	Continue to participate in SEQAC meetings	Industrial Waste Public Works	Ongoing
Training of Targeted Staff	A description of the training provided and a list of participants will be included in each Annual Report.	Public Works	Complete by June 30, 2005
Municipal Operations Element Goal: Reduce or prevent pollution in storm water runoff from all municipal land use areas, facilities and activities			
Public Construction Activities Management			
Compliance with State General Construction Permit	The City, or contracted consultant on behalf of the City, files a NOI for applicable projects and comply with terms of the State General Permit. Each Annual Report to the RWQCB includes a list of the projects that have complied with the terms of the State General Permit	Public Works Recreation and Parks Administrative Services Utilities	Ongoing
Inspection	Perform each working day on active projects	Public Works, Utilities, Administrative Services, and Recreation and Parks	Ongoing
Enforcement	Continue to implement progressive enforcement procedures. <i>Continue through 2nd permit term</i>	Public Works Recreation and Parks Administrative Services Utilities	Ongoing
Training of Targeted Staff	Continue to discuss storm water quality requirements during pre-construction conference for public improvement projects. <i>Provide Annually</i>	Public Works Utilities	Complete by June 30, 2005

Proposed Storm Water Management Plan	Measurable Goals and Implementation Schedule		
	Measurable Goals	Lead Department	Schedule
Landscape and Recreational Facilities Management			
Pesticide management	Continue to keep pesticide use below the levels used prior to the implementation of the Integrated Pest Management Program	Recreation and Parks	Ongoing
Fertilizer management	Implement the Fertilizer Management Plan and training program	Recreation and Parks	Ongoing
Disposal of landscape waste	Continue to grind and reuse waste materials as compost and mulch	Recreation and Parks	Ongoing
Recreational water bodies	Continue to implement existing activities.	Recreation and Parks	Ongoing
Swimming pool discharge	Continue to implement existing activities	Recreation and Parks	Ongoing
Storm Drain System Operation and Management			
Source Identification-Drainage system mapping	Existing storm drain system complete. Continuously update	Public Works	Ongoing
Clean and inspect storm drain pipe and inlet structures	Continue to clean and inspect 130,000 feet of storm drain pipe and 1200 structures <i>Annually</i>	Public Works	Complete by June 30, 2005
Flood control channel or road side ditch inspection and maintenance	Continue to inspect and remove debris for flood control purposes <i>Annually</i>	Public Works	Ongoing

Proposed Storm Water Management Plan	Measurable Goals and Implementation Schedule		
	Measurable Goals	Lead Department	Schedule
Storm drain labeling	Label of curb opening inlets within the City ROW and replace worn or missing labels as required. Develop a labeling program for heavy traffic private parking lots-report all labeling activities in 2004-05 Annual Report	Public Works	Ongoing Due by June 30, 2005
Streets and Roads Maintenance			
Street sweeping frequency	Priority A <i>three times per week</i> . Priority B <i>twice a week</i> Priority C <i>once a week</i> Priority D <i>monthly</i>	Public Works	Ongoing
Material management	Continue to properly recycle or dispose of materials.	Public Works	Ongoing
Training of targeted staff	Continue to provide training annually	Public Works	Ongoing
Parking Facilities Management			
Sweeping	Continue to sweep City Transit and Parking sites (5 garages and 9 lots) <i>weekly</i> , pressure wash such garages <i>annually</i>	Transit and Parking	Ongoing
Spill clean up	Respond immediately to priority reports/ within one business day for non urgent small spills	Transit and Parking	Ongoing

Proposed Storm Water Management Plan	Measurable Goals and Implementation Schedule		
	Measurable Goals	Lead Department	Schedule
Emergency Procedures			
Emergency Operations Plan	Continue to implement the Emergency Operations Plan.	Police and Fire Department	Ongoing
Illicit Discharge Detection and Elimination Element Goal: Detect and minimize illegal non storm water discharges			
Spill Response	Continue existing illicit discharge detection and elimination activities.	Public Works	Ongoing
Private sanitary septic systems	Follow up on reported problems until resolved	Public Works	Ongoing
Enforcement Procedures	Follow written enforcement procedures-update as needed	Public Works	Ongoing
Record Keeping and Documentation	Continue to update database as complaint response and inspections are completed Document illicit discharge detection and elimination activities and summarize in each Annual Report.	Public Works	Ongoing
Illicit Connections	Document field inspection results from storm drain cleaning crew	Public Works	Ongoing
Disposal of used oil and toxic materials	Integrated Waste Management	Refer to County SWMP	N/A

Proposed Storm Water Management Plan	Measurable Goals and Implementation Schedule		
	Measurable Goals	Lead Department	Schedule
Training of targeted staff	Training provided annually, documented, and summarized in each Annual Report.	Public Works	Ongoing
Public Education and Outreach Element Goal: Increase the community’s knowledge of MS4 and the impacts of urban storm water run off, encourage behavioral changes thereby reducing pollutant release to the MS4			
General Public/Residents			
Storm drain inlet decal program	Continue to provide decal kits to volunteer groups	Public Works	Ongoing
Ecology/Environmental column in local newspaper	The co-permittees will make first contact with the Press Democrat within 18 months of permit implementation and with Sonoma West within 24 months of permit implementation. The status will be reported in the corresponding annual report.	Public Works	Contact Press Democrat by December 30, 2004
Web site	Continue to update street sweeping schedule	Public Works	Ongoing
Pet waste signs	10 signs will be posted at major access points to the Santa Rosa Creek Trail, subject to approval by the Water Agency and City’s Waterways Advisory Committee. 140 “Clean Up After Your Pet” signs were installed in year 2003-04 at creek access points. The signs will continue to be maintained.	Public Works	Ongoing

Proposed Storm Water Management Plan	Measurable Goals and Implementation Schedule		
	Measurable Goals	Lead Department	Schedule
Public Events	Continue to pursue opportunities to participate in general outreach events. Report in each Annual Report	Public Works	Ongoing
Hazardous Waste Disposal	County Waste Management Agency		
Illicit discharge	Material distribution numbers will be reported each year in Annual Report.	Public Works	Ongoing
Industrial/Commercial	Continue to distribute prepared materials to the following industries: Automotive, Food facilities, Cleaning, Building and Construction	Public Works Industrial Waste	Ongoing
Landscape and Agriculture Industries	Continue to sponsor the Master Gardeners.	Public Works	Ongoing
Building and Construction	Refer to SUSMP for measurable goals.	Community Development	
School Education			
Water Education Program	N/A		
High School Aquatic Macroinvertebrate Bioassessment Program	Continue to solicit program participation from the 6 public high schools <i>Annually</i>	Public Works	Ongoing
Spring Lake Environmental Discovery Center	Continue to sponsor and participate in storm water related displays <i>Annually</i>	Public Works	Ongoing
Effectiveness Evaluation			
Formal Evaluation	Evaluations will be included in each Annual Report.	Public Works	October 1, 2005

Proposed Storm Water Management Plan	Measurable Goals and Implementation Schedule		
	Measurable Goals	Lead Department	Schedule
Monitoring Program	Evaluations will be included in each Annual Report.	Public Works	Ongoing
Special Studies	A retrofit treatment special study will be conducted by the City not to exceed \$35,000. <i>Completed by the end of the second permit term.</i>		Not planned for 2004-05
Fiscal Analysis			
Financial Analysis of Program Activities	Include in Annual Report	Public Works	October 1, 2005
Monitoring Plan Goal: Assess the receiving water quality to direct resources toward local pollutants of concern			
Chemical Monitoring	N/A		
Bioassay	Bioassay samples will be collected for the first flush and one representative storm at eight sites within the permit boundary. Data will be reported in annual reports.	Public Works	October 1, 2005

Proposed Storm Water Management Plan	Measurable Goals and Implementation Schedule		
	Measurable Goals	Lead Department	Schedule
Aquatic Macroinvertebrate	<p>Samples will be collected at six sites within the permit boundary and analyzed to level 3. Data will be reported in annual or approved supplement reports.</p> <p>Provided that local high schools continue to participate, results will be reported in annual or approved supplement reports.</p>	Public Works	October 1, 2005
SUSMP Goals: Minimize storm water pollution, limit storm water peak flows, and conserve natural areas to MEP from new and redevelopment			
Waiver	Waiver granted with RWQCB approval. Place fees in project fund	Community Development	In Progress; Complete by February 26, 2005
Review applicable codes	Report findings in Annual Report within 12 months of Program implementation	Community Development	In Progress; Complete by February 26, 2005
Revise environmental review process	Complete within 12 months of Program implementation and report findings in second Annual Report	Community Development	In Progress; Complete by February 26, 2005
Develop combined City/County site design guidelines	Complete on schedule within 20 months of Program implementation	Community Development	Complete by February 26, 2005
Develop guidance on long term funding, inspection, reporting procedures for BMP maintenance	Complete on schedule within 20 months of Program implementation	Community Development	Complete by February 26, 2005
Develop/Modify City design standards for conformance with SUSMP requirements	Complete on schedule within 27 months of Program implementation	Community Development	Complete by September 26, 2005

Proposed Storm Water Management Plan	Measurable Goals and Implementation Schedule		
	Measurable Goals	Lead Department	Schedule
Provide training to staff	Train targeted staff within 22 months of Program implementation	Community Development	Complete by April 26, 2005
Provide workshop to the development community	Prepare and conduct workshop within 24 months of Program implementation	Community Development	Complete by June 26, 2005
Implement SUSMP measures on City / County capital improvement projects	Design applicable projects with SUSMP measures <i>Upon Permit Adoption</i>	Public Works	Ongoing
Encourage applicants to implement SUSMP measures on projects	Require storm drain labeling on all projects <i>Upon Permit Adoption</i>	Community Development	Ongoing
Implement SUSMP measures on applicable projects within Urban Growth Boundary within Permit Boundary	Condition, plan check and inspect projects to meet SUSMP requirements <i>within 24 months of Program implementation</i>	Community Development	Complete by June 26, 2005

Part IV

Sonoma County Water Agency

**Permit Term 2
Annual Report 1**

Sonoma County Water Agency

1 LEGAL AUTHORITY

The goal of this element is to identify the Sonoma County Water Agency's (Water Agency) legal authority to effectively prohibit non-stormwater discharges into the Water Agency's flood control channels.

The following subsections itemize the Water Agency's legal authority to enforce each of the remaining nine programs of the Stormwater Management Plan (SWMP). Details of each program element can be found under each respective section.

The Sonoma County Flood Control and Water Conservation Act of 1949 established the Water Agency as a Flood Control and Water Conservation District. The Water Agency was originally authorized to provide water supply and flood control services (See West's Water Code Appendix Chapter 53, hereafter "The Agency Act").

In 1958, the Water Agency formed eight geographic flood control zones, each encompassing a major watershed. The core permit area encompasses the boundary of Zone 1A, which incorporates the Mark West Creek Watershed. The cities of Santa Rosa, Rohnert Park, Cotati and Sebastopol and the Town of Windsor all lie within Zone 1A. The urban boundary area surrounding the City of Healdsburg lies within the boundaries of Zones 4A and 6A. The urban boundary of Graton and a portion of the urban boundary of Sebastopol is located in Zone 5A. Flood control facilities within Zone 1A were constructed as the Central Sonoma Watershed Project by the Water Agency in cooperation with the U.S. Department of Agriculture, Soil Conservation Service with the purpose of protecting the Santa Rosa urban area from flooding. The construction of floodwater retarding structures and the straightening, shaping and stabilization of waterways began in 1958 and continued over the ensuing 25 years.

Since its formation in 1949, the Water Agency has added a number of different functions, each with its own independent authority, responsibilities and budgets. The Water Agency has constructed and operates and maintains a water transmission system, which provides water to eight cities and water districts, (the Cities of Santa Rosa, Rohnert Park, Sonoma, Cotati and Petaluma and the North Marin, Forestville and Valley of the Moon Water Districts, referred to as the "Water Contractors".) Transmission system costs are paid by the Water Contractors under the Eleventh Amended Agreement for Water Supply and the Water Contractors' funds may only be spent on purposes related to construction, operation and maintenance of the transmission system. Since 1995, the Water Agency has also been responsible for managing sanitation facilities in five Water Agency zones and, by contract, for five sanitation districts. Sanitation funds may not be spent on non-sanitation facility activities and sanitation facility customers may only be charged the costs of providing sanitation services. (See, inter alia, Article XIID, California Constitution (Proposition 218).)

The Water Agency is a co-permittee, since it owns portions of the municipal storm sewer system (MS4) in the permit boundary. The Water Agency's management plan incorporates appropriate activities and best management practices (BMPs) for activities related to its flood control and general fund activities. As previously stated, the Water Agency is not authorized to spend water

transmission or sanitation funds on stormwater management and thus such activities, although described generally in this document for information purposes, are not part of the Water Agency's SWMP.

1.1 Program Management

Existing Program:

The Water Agency has authority to enter into interagency agreements pursuant to California Government Code Section 6502 and Section 3 of the Agency Act.

New Activities:

No new activities related to legal authority for Program Management are proposed.

Measurable Goal:

Use the Water Agency's existing legal authority as it relates to this program element.

1.2 Private Construction

Existing Program:

The Water Agency controls the limited amount of private construction that occurs within Water Agency owned land or Water Agency rights-of-way through its Revocable License program. These licenses limit activities the licensee is permitted to undertake on Water Agency controlled land and list provisions with which the licensee must comply. If a licensee does not comply with the provisions in the Revocable License, the Water Agency may revoke the license. In addition, the Water Agency will not authorize the release of a deposit held by the City or County until the job on Water Agency property is completed to the Water Agency's satisfaction.

In instances where a project includes entry into a Water Agency owned channel, the licensee is also required to obtain permits from other permitting agencies which may include the County, the United States Army Corps of Engineers (ACOE), the California Department of Fish and Game (DFG) and the North Coast Regional Water Quality Control Board (Regional Board). Each of these agencies also has legal authority to take enforcement actions against a non-compliant licensee. In most cases, these agencies have statutory authority that provides significantly greater remedies and penalties than those available to the Water Agency.

If either of the above two means of enforcement do not resolve a problem satisfactorily, the Water Agency has the authority to enforce license terms through civil litigation. (Agency Act Section 3 b)

The Water Agency also performs drainage review of new development under contract with and on behalf of all Sonoma County cities except Healdsburg. Any enforcement authority associated with this drainage review is exercised solely by and at the discretion of the cities. The cities could, at their discretion, terminate the Water Agency's contract and perform the services themselves.

New Activities:

The Water Agency will continue with its existing program. No new activities are proposed.

Measurable Goals:

Use the Water Agency's existing legal authority as it relates to this program element.

1.3 Industrial/Commercial**Existing Program:**

The City and County, rather than the Water Agency, regulate land use under California planning and zoning law. Thus, the Water Agency does not regulate private industrial or commercial activities within the permit boundary. As such, this section does not apply.

New Activities:

None.

Measurable Goals:

None.

1.4 Municipal Operations**Existing Activities:**

The Water Agency is authorized by the Agency Act to enact policies and programs governing its operations including: construction, landscaping, storm drain operation and maintenance, flood control road maintenance, parking facilities maintenance, and emergency procedures. As mentioned above, the Water Agency operates five special districts, under contract, but each special district has its own legal authority. Legal authority within this section for municipal operations is provided for activities funded through the flood control zones and general fund, but not for sanitation and transmission system activities.

The Regional Board has issued the Water Agency Waste Discharge Requirements (WDR) No. 81-73 for flood control maintenance activities, such as sediment removal and herbicide applications. Since these activities are regulated by a separate permit issued by the Regional Board, these activities are not described in the SWMP.

New Activities:

The Water Agency's existing legal authority is adequate for its municipal operations. No additional activities are proposed.

Measurable Goals:

Use the Water Agency's existing legal authority as it relates to this program element.

1.5 Illicit Discharge Detection and Elimination**Existing Program:**

As part of the Water Agency's authority to operate and maintain its flood control channels, the Water Agency has the authority to inspect its flood control channels including those on lands it owns in fee and those on lands on which it owns flood control easements. Existing Federal, State, City, and County laws that prohibit dumping and polluting waterways apply within Water Agency owned channels. The Water Agency does not have police powers and relies on the

police powers of the City, County and other regulatory agencies. Although it has not happened to date, if these enforcement authorities did not resolve a problem to the Water Agency's satisfaction, the Water Agency could initiate civil litigation against a party responsible for polluting a Water Agency owned or controlled channel (Agency Act Section 3b).

New Activities:

No new activities are proposed.

Measurable Goals:

Use the Water Agency's existing legal authority as it relates to this program element. Continue to rely on the City's, County's and other regulatory agency's legal authority, as applicable.

1.6 Public Education and Outreach

Existing Program:

Much of the Water Agency's public education and outreach program is funded by the Water Agency's Water Contractors under the Eleventh Amended Agreement for Water Supply. The Water Agency has the legal authority to determine what types of outreach it will pursue but cannot use Water Contractor funds for purposes beyond the scope of the Agreement for Water Supply. Therefore, the public outreach materials must be related to the Eleventh Amended water supply purpose.

Water Contractor and public participation in the Water Agency's public outreach efforts is purely voluntary. The Water Agency can offer the materials or a program to its Water Contractors, or to the public but the Water Agency does not have the legal authority to *force* a Water Contractor to participate in the public outreach effort, and similarly, cannot mandate changes in people's behavior as a result of its public outreach efforts.

New Activities:

No new activities are proposed.

Measurable Goals:

Use the Water Agency's existing legal authority as it relates to this program element.

1.7 Effectiveness Evaluation

Existing Program:

As part of its authority to carry out flood control activities, the Water Agency has the authority to evaluate its programs and report on the evaluations in the Annual Report submitted to the Regional Board.

Each Annual Report is certified by the Water Agency's Board of Directors (Board). This certification states that the information therein was prepared under the direction of the Board; that qualified personnel properly gathered and evaluated the information; and that to the best of the Board's knowledge and belief, the information is true, accurate, and complete.

New Activities:

No new activities are proposed

Measurable Goals:

Use the Water Agency's existing legal authority as it relates to this program element.

1.8 Fiscal Analysis**Existing Program:**

The Water Agency's activities regulated by the NPDES stormwater permit are related to operation of its flood control facilities. The Agency's flood control activities are accounted in six separate special revenue flood control zone funds – Zones 1A, 2A, 3A, 5A, 7A, and 8A. Only the activities of Zone 1A (Laguna – Mark West Watershed) and 5A (Lower Russian River Watershed) are covered by this NPDES Stormwater permit.

The primary source of funding for Zones 1A and 5A are a share of the Proposition 13 – 1% property tax. Additionally, voters within Zone 1A approved a ballot measure in 1996 authorizing the levying of a benefit assessment tax on each parcel within the Zone for a period of 10 years. This funding source for Zone 1A will expire in 2006. If the Water Agency's Board of Directors decides to place a renewal of the benefit assessment tax on the ballot, under Proposition 218, it must be approved by two-thirds of the voters to become effective.

In addition to the funding from Zones 1A and 5A, the Water Agency may fund SWMP activities through its General Fund as well as the Russian River Projects Fund. Fees paid by the developers for conducting drainage review are to be spent exclusively for that activity according to the terms of the Water Agency's contracts with the cities for which the drainage reviews are performed.

Budgets for these various Flood control Zones are prepared each year by Water Agency staff and submitted to the Board for approval. The budget for Zone 1A is developed in consultation with the Zone 1A Advisory Committee, which is made up of representatives from each of the incorporated communities within the Zone 1A.

New Activities:

The Water Agency is not proposing any new legal authority as it relates to the Fiscal Analysis part of the SWMP.

Measurable Goals:

Use the Water Agency's existing legal authority as it relates to this program element.

1.9 Monitoring Plan**Existing Program:**

The Water Agency has the authority to monitor its own waterways and must comply with all State and Federal law. Some regulatory agencies, such as DFG and the National Marine Fisheries Service (NMFS), also must approve some monitoring activities.

New Activities:

The Water Agency's chemical monitoring proposed in this plan does not require additional legal authority. No new activities are proposed.

Measurable Goals:

Use the Water Agency's existing legal authority as it relates to this program element.

1.10 Standard Urban Stormwater Mitigation Plan**Existing Program:**

The Standard Urban Stormwater Mitigation Plan (SUSMP) is a new program developed by the co-permittees. The sole existing activity is the development of the SUSMP.

New Activities:

The SUSMP, contained in Section VI, is principally directed to private construction projects on private land; because the City and County, not the Water Agency, regulate land use under California planning and zoning law, many of the BMPs are not applicable to the Water Agency. The Water Agency's legal authority needed to enact SUSMP is sufficient to allow it to regulate and control the property which the Water Agency owns. Thus, no new legal authority is needed to incorporate SUSMP measures in projects on Water Agency property.

Although the Water Agency performs drainage review for the City and may perform SUSMP review for private construction projects on behalf of the City, the legal authority to enforce SUSMP measures (as well as drainage improvement measures) will remain with the City.

Measurable Goals:

Use the Water Agency's existing legal authority as it relates to this program element.

2 PRIVATE CONSTRUCTION

The goal of this program element is to reduce construction site related pollutants, especially sediment, to the maximum extent practicable (MEP).

2.1 Grading Permit Issuance

Existing Program:

Under California planning and zoning law, land use is regulated by the City and the County, rather than the Water Agency and therefore the Water Agency has limited or no involvement with permits issued for private construction on private land.

The cities within Sonoma County, excluding the City of Healdsburg, have contracts with the Water Agency to perform drainage review. This Water Agency contractual review is limited to a check of the impact of flood control channel capacity and to prevent scouring of the channels. A city or town determines which projects are referred to the Water Agency. The Water Agency then reviews these projects for conformance with the *Sonoma County Water Agency Flood Control Design Criteria (August 1983)* (Flood Control Design Criteria). Water Agency staff work with the project engineer to assure the project conforms to the Flood Control Design Criteria. After working with the project engineer and city, the Water Agency issues a final letter to the developer's engineer with a copy to the applicable city. The letter states whether the project conforms to the Flood Control Design Criteria, and whether the Water Agency has other concerns. The city then approves or disapproves of a project using its planning and zoning authority independent of Water Agency's review or determination. The County Permits and Resource Management Division (PRMD) performs all review for areas outside of city boundary.

New Activities:

The Water Agency will continue with its existing program so long as the contracts with the cities remain in effect.

Measurable Goals:

Review all projects referred to the Water Agency by the cities, and work with the cities and project engineers.

2.2 Vineyard Planting/Replanting Compliance

Existing Program:

Under California planning and zoning law, land use is regulated by the City and the County rather than the Water Agency. Thus, the Water Agency has no authority over vineyard planting or replanting. As such, this section is not applicable.

New Activities:

Not applicable.

Measurable Goals:

Not Applicable.

2.3 Private Construction on Public Land

Existing Program: The Water Agency requires that all private construction projects occurring within Water Agency flood control channels or on Water Agency owned roads obtain a Revocable License from the Water Agency. The Revocable License contains provisions to protect water quality. These provisions include:

- Requiring seeding of bank disturbing projects.
- Requiring erosion control mats for trenching work disturbing creek or channel banks if the work occurs after September 1st.
- Requiring that the work area be kept clear of trash and debris.
- Prohibiting the storage of material or equipment on Water Agency rights-of-way.
- Limiting work to the timeframe between April 15 and October 15, unless DFG approves work outside this time period.
- Prohibiting the placement of trench spoils on channel slopes.
- Requiring the applicant to re-shale the affected service roads.

The Water Agency also relies on the ACOE, DFG, the County and the Regional Board to issue permits with appropriate conditions for work within the channel.

Many of these projects are also tied to City or County projects, which may also have placed a number of conditions upon the construction project under their respective permitting process.

New Activities:

The Water Agency will continue with its existing Revocable License program. The Water Agency will send a letter to each of the cities in the permit boundary area and County PRMD reminding them of the Water Agency's Revocable License program, and providing appropriate contact information.

Measurable Goals:

Incorporate appropriate BMP measures as part of the provisions contained in Revocable Licenses. Send a letter to the cities and County PRMD requesting them to refer project managers to the Water Agency when a project includes work on Water Agency owned flood control facilities.

Accomplishments:

- In the 2003-2004 reporting year, the Water Agency issued fifteen new Revocable Licenses for projects near flood control channels within the permit boundary, while seven Revocable Licenses issued prior to June 2003 continued to be active.

2.4 Inspection of Construction and Vineyard Sites

Existing Program:

During key points in a project, Water Agency personnel inspect construction projects that have Water Agency revocable licenses. In many cases, the City or County oversees the actual construction of inlet structures.

The Water Agency inspects projects that go through drainage review if a Revocable License is required as part of the project. The inspection is limited to the work under the Revocable License.

New Activities:

The Water Agency will continue with its existing program.

Measurable Goals:

Perform at least one inspection on each construction project requiring a Revocable License.

Accomplishments:

- All active construction projects subject to a Revocable License were inspected at least once, in compliance with the SWMP. Follow-up inspections were performed, when appropriate. In total, thirteen inspections were performed on construction projects on flood control property within the permit boundary.

2.5 Enforcement of Construction Sites

Existing Program:

As previously stated in Section 1.2, the Water Agency does not exercise police power, and relies on the enforcement authority of others, including the City, County and other regulatory agencies. If Water Agency staff notice a problem on Water Agency property, Water Agency staff usually try to work with the responsible party first to correct the problem. If that is not successful, the Water Agency also can report violations to regulatory agencies and revoke the Revocable License.

If the work is part of a larger construction project permitted by the City or County, many times the contractor has a refundable deposit with the governing authority. If a licensee does not comply with the provisions in the Revocable License, the Water Agency can and does recommend that the City or County retain the deposit until the job is completed to the Water Agency's satisfaction.

In instances where the project includes work within the channel, the licensee is also required to obtain permits from other agencies which may include the County, ACOE, DFG and the Regional Board. Each of these agencies has requirements to protect water quality and also has enforcement authority. The Water Agency will notify these agencies and work with their staff if additional efforts are needed to protect water quality.

If a responsible party causes damage to Water Agency property, and the Water Agency is not able to resolve the problem using the enforcement mechanisms mentioned above, the Water Agency is authorized to initiate civil litigation against the responsible party (Agency Act Section 3b).

New Activities:

The Water Agency will continue with its existing program.

Measurable Goals:

Use the Water Agency's existing program and the enforcement authority of regulatory agencies to ensure projects comply with the conditions stated in the Water Agency issued Revocable License. No enforcement actions were taken during the 2003-2004 reporting period.

2.6 Reporting of Non-Compliant Sites**Existing Program:**

If the Water Agency is aware of an activity that requires a permit that has not been issued by the Water Agency or other agency, the Water Agency usually informs the party needing the permit and, in many cases, also informs the permitting agency.

New Activities:

The Water Agency will continue with its existing program. In cases regarding construction permits, if the Water Agency becomes aware of a situation where someone is operating without a required NPDES General Construction Stormwater Permit, the Water Agency will notify the Regional Board of the non-filer status.

Measurable Goals:

Notify the Regional Board within 48 hours of situations where the Water Agency is aware of a non-filer status. Water Agency was not aware of non-filers during the 2003-2004 reporting period.

2.7 Education of Targeted Staff**Existing Program:**

The Water Agency provides training to its inspectors on appropriate BMP measures.

New Activities:

The Water Agency is developing in-house expertise that can be used to train other Water Agency personnel on appropriate BMP implementation. The Water Agency will provide the appropriate personnel information on the applicable requirements of the SWMP and the newly adopted NPDES stormwater permit within one year of permit implementation.

Measurable Goals:

Provide a training session or training materials to the appropriate personnel on the components of the SWMP and new NPDES stormwater permit.

Accomplishments:

- The Water Agency staff who implement the Revocable License program attended a NPDES Permit/SWMP orientation meeting on February 5, 2004. As a result of this meeting, the standard conditions of the Revocable License will be reexamined in permit year 2004-2005.

3 INDUSTRIAL/COMMERCIAL

The City and County, rather than the Water Agency, are authorized by California planning and zoning law to regulate land use. Thus, this section is not applicable to the Water Agency.

4 MUNICIPAL OPERATIONS

The goal of this section is to reduce or prevent pollution in stormwater runoff from all municipal land use areas, facilities and activities.

In this element, municipal operations are divided into six major categories, each with its own BMPs.

4.1 Public Construction Activities Management

4.1.1 Contract Documents

Existing Program:

The Water Agency incorporates BMPs into its flood control design projects. Many times, these BMPs are also required by other regulatory agencies. When the Water Agency uses contracted services to perform the work, the contractor is required to obtain required permits, which include requirements for BMPs.

New Activities:

The Water Agency will review and modify, as needed, its Special Provisions and General Specifications to ensure that BMPs are incorporated into flood control projects.

Measurable Goals:

Review Special Provisions and General Specifications for existing BMPs to determine if they are adequate. If changes are needed, make modifications and report on these changes in Annual Report No.2.

4.1.2 Compliance with State General Construction Permit

Existing Program:

The Water Agency currently files a Notice of Intent (NOI) and complies with the NPDES General Construction Stormwater Permit when it undertakes a project that will disturb more than five acres of land.

New Activities:

The Water Agency will continue to comply with this program. When the land disturbance trigger is reduced to one acre in March 2003, the Water Agency will begin to submit NOIs for projects one acre or larger.

Measurable Goals:

File NOI for applicable flood control projects, as required. No Water Agency construction projects larger than one acre were undertaken during the 2003-2004 reporting period.

4.1.3 Inspection

Existing Program:

The Water Agency completes regular inspections of its construction projects to ensure that BMPs are employed to minimize mobilization of sediment.

New Activities:

The Water Agency will continue with its existing program. In addition, the Water Agency developing is in-house expertise on erosion control. This expert will be available to provide additional inspection of key construction sites.

Measurable Goals:

Each Water Agency construction site that is active during the wet season will be inspected by Water Agency personnel to ensure erosion control measures are in place. Sites that have a higher potential for sediment discharge will be inspected more frequently.

4.1.4 Enforcement

Existing Program:

The Water Agency requires its contractors to provide performance bonds ensuring proper performance of the contract, typically at 10% of the total contract price. This money is not released until work is completed to the Water Agency's satisfaction. Additionally, interim payments are normally made at various stages in the project. If stormwater BMPs are not properly employed, in some cases, this payment can be withheld until the work is completed for that stage of the project. In more extreme cases, the Water Agency can terminate the contractor for non-performance.

New Activities:

No new activities are proposed.

Measurable Goals:

Use the enforcement mechanisms available to the Water Agency for public construction projects. No enforcement actions were taken during the 2003-2004 reporting period.

4.1.5 Education of Targeted Staff

Existing Program:

Operations, Maintenance, and inspection staff have been trained on stormwater BMPs.

New Activities:

The Water Agency is encouraging personnel to become Certified Professionals in Erosion and Sediment Control (CPESC). Certification requires a four-year degree in a field related to erosion control, six years of experience working with erosion control issues, and the successful completion of a standardized test. The Water Agency has worked to have a staff member achieve CPESC status by November 30, 2002. The CPESC is available for consultation on the compilation of erosion control plans, design of construction BMPs, and inspection of construction projects.

Measurable Goals:

Within one year of permit implementation, Water Agency staff will assess current education and training practices for Water Agency sponsored construction practices. Staff will update the training program within 18 months of permit implementation. Maintain CPESC or CPESC-in-training on staff, beginning six months after permit implementation.

Accomplishments:

- The Water Agency continues to maintain a CPESC on staff. Training for Water Agency inspections staff during the 2003-2004 reporting period included attendance of a workshop in spring 2004 sponsored by the North Coast Regional Water Quality Control Board.

4.2 Landscape and Recreational Facilities

Please note, County Parks and Recreation Department manages the Water Agency's Spring Lake Park recreational facility. Please see Section II.4 of the County's SWMP for a description of Recreational Facilities Management, as it relates to Spring Lake Park.

4.2.1 Pesticide Management**Existing Program:**

A contractor performs landscaping activities at the Water Agency's West College facility. The herbicides Roundup® and Surflan® are applied, per manufacturer's specifications, as needed. These chemicals are not stored onsite.

If pesticide applications are required, the work is done under the direct supervision of a certified pesticide applicator. This work is done by contract, and is applied per manufacturer's specifications.

Herbicide application requirements on Water Agency flood control channels are already regulated by the Regional Board in Order No. 81-73, and are therefore not included in this program.

The Water Agency has minimized the use of herbicides for maintenance of the flood control channels in favor of using mechanical and manual methods of vegetation control. The only herbicide still used along the flood control channels is Rodeo®, and there are only two situations in which Rodeo® is applied. One use is to kill stumps of trees that have been removed. Rodeo® is applied with a brush to the stumps in a manner that minimizes the potential for fugitive chemicals. The second use of Rodeo® is as a post-emergent spray on the flood control channel access roads. A licensed contractor performs this spraying once annually in the late spring. A second spraying may occur, but is typically not necessary. The product is used per manufacturer's specifications. The intent of the spraying is to control the vegetation on and bordering the roads. No chemicals are applied in the flood control channels. However, because Rodeo® is approved for use as an aquatic pesticide, if some product were to enter the channel, there would be no effect on aquatic life.

New Activities:

The Water Agency will continue with its existing program. The Water Agency intends to move to a new building in the Airport Business Park within the next permit term. Low impact pesticide management will be evaluated for landscape management of the new facility.

Measurable Goals:

Continue with low-impact pesticide management.

4.2.2 Fertilizer Management**Existing Program:**

The Water Agency uses recycled water from the Santa Rosa Subregional Wastewater Reclamation Plant to irrigate the landscaping at its West College facility. The nutrients present in the recycled water have eliminated the need for fertilizer application. The Water Agency plugs storm drains and pumps back recycled water to turf when needed so that recycled water does not enter the storm drain or surface waters. This use of recycled water represents a reduced demand on the potable water supply.

New Activities:

The Water Agency has no plans to use fertilizers at its West College Facility. The Water Agency intends to move to a new building in the Airport Business Park within the next permit term. Low impact pesticide management will be evaluated for landscape management of the new facility.

Measurable Goals:

Offset the need for fertilizers by utilizing recycled water at the Water Agency's West College Facility.

4.2.3 Native Vegetation**Existing Program:**

Over 10,000 native trees have been planted on Water Agency owned flood control channels since 1991, through a partnership with Sonoma County ReLeaf and other environmental organizations.

The direct seeding program, which began in 1975, has continued along the Water Agency's channels. Approximately 1,000 seeds are planted through this program every year. Since the program's inception, the Water Agency has seen the survival rate increase from 30 percent to 65 percent due to new planting techniques and seedling preservation. Although the ReLeaf program is no longer active, the Water Agency actively continues to incorporate native vegetation into its flood control channel maintenance projects.

New Activities:

A key element of the Water Agency's watershed stewardship program (See Public Education and Outreach, Section IV-8) includes procedures to identify and eradicate non-native vegetation in Water Agency channels and replace them with native vegetation.

Because the landscaping at the Water Agency's West College facility was required by the City as part of the permitting process for the recycled water use, no changes to the landscaping are proposed at this facility. The Water Agency intends to move to a new building in the Airport Business Park within the next permit term, and will evaluate the use of native vegetation should landscaping work be needed.

Measurable Goals:

Incorporate retention and planting of native vegetation in design projects and maintenance activities on flood control facilities.

4.2.4 Proper Disposal of Landscape Waste

Existing Program:

Brush that has been cleared from flood control channels is chipped and placed as mulch around existing vegetation. Weeds that have been mowed are also used as mulch. The landscape contractor is responsible for properly disposing of landscape waste from the Water Agency's West College Facility.

New Activities:

No changes to the existing program or new activities are proposed.

Measurable Goals:

Continue to use landscape waste as mulch on flood control channels.

4.2.5 Minimize Pollutants from Entering Permittee-Owned Recreational Water Bodies

Existing Program:

The Water Agency does not store equipment or materials on its flood control channels, nor does it allow such practices for private construction projects. For other types of work, all materials used are stored in such a way to prevent the materials from entering waterways. This serves to limit the possibility of a spill to a flood control channel. See County Section II.4 for related information on Spring Lake Park.

New Activities:

The Water Agency will be installing pet waste signs at major access points to flood control channels as part of a public education effort. In addition, public participation through the Creek Stewardship Program will also be used to minimize pollutants from entering recreational water bodies. For more details on these items, see Section IV-6.1.

Measurable Goals:

Continue to limit equipment and material storage in Water Agency's right-of-way.

4.2.6 Manage Swimming Pool Discharge

Existing Program:

The Water Agency does not manage any swimming pools. The County's Regional Parks Department manages the lakes at Spring Lake Park. See the County's SWMP at Section II-4 for further information.

New Activities:

Not applicable.

Measurable Goals:

Not applicable.

4.3 Storm System Operation and Management

4.3.1 Source Identification – Drainage System Mapping

Existing Program:

As part of the Phase II application, flood control channels within the first permit boundary were mapped. In addition, the Water Agency maintains as-built plans of flood control capital projects.

New Activities:

The Water Agency will review its existing mapping to determine if it is up to date for the new expanded permit boundary. If not, the Water Agency will revise its maps.

Measurable Goals:

Review existing mapping by the end of permit year three. Modify maps, as needed by the end of permit year five.

Accomplishments:

- During the 2003-2004 reporting period, the flood control channels within the permit boundary were mapped with a GPS unit, and the data is currently being compiled into a geographic information system (GIS) for use in flood control channel maintenance.

4.3.2 Clean and inspect storm drain pipe and inlet structures

Existing Program:

The Water Agency has several closed pipes in its system, including several 14-foot tall box culverts that carry Santa Rosa Creek under the downtown area, and several 72" diameter or greater conduits that run under downtown Santa Rosa. The drop inlets to these pipes are inspected and maintained by the City. The Water Agency maintains this pipe as it would an open channel. See below for a description of the cleaning activities.

New Activities:

None are proposed.

Measurable Goals:

See section on flood control channel maintenance below.

4.3.3 Flood Control Channel or Road Side Ditch Inspection and Maintenance

Existing Program:

The Water Agency maintains a network of open flood control channels. These are divided into several categories: natural waterways, constructed channels, and closed conduits. The Water Agency's maintenance responsibilities vary, depending on the level of control the Water Agency has over the channel.

There are 150 miles of constructed channels within the county, most of which are within the permit boundary. This category includes waterways that have been significantly altered and improved to achieve ultimate hydraulic capacity. Most channels have adjacent service roads, which facilitate maintenance access. These channels are inspected annually to assess their condition and determine the required level of maintenance activity. Maintenance can include: clearing of large debris, such as shopping carts, construction materials, or vegetative debris; bank stabilization; silt removal, to maintain channel capacity; fencing repair; landscaping to reestablish native species; and weed control on access roads. In many cases, the Water Agency utilizes supervised adult crews (SAC) to complete cleanup work. For the last few years of the permit, Water Agency staff has been coordinating its efforts with the City of Santa Rosa Police Department to eliminate and discourage illegal activities within flood control channels, such as dumping, encampments, and fires. The Water Agency removes trash and underbrush and raises tree canopies to discourage further illegal activities.

Fewer maintenance activities are performed on the less than 50 miles of natural waterways for which the Water Agency holds easements within the permit boundary. Maintenance activities are limited to debris removal and weed control on access roads. Bank stabilization and silt removal activities are not performed.

The Water Agency has adopted BMPs for the maintenance of its flood control facilities. These BMPs provide an alternative range of techniques for accomplishing maintenance tasks, from very low-impact hand labor to the operation of heavy equipment within waterways under certain specified conditions. In 1991, the Water Agency's past practice of total vegetation clearing in flood control channels was abandoned. The Agency's more recent practice is to remove only that vegetation which impedes the flow of water significantly enough to cause a threat of flooding. The Water Agency has also performed some riparian enhancement activities in cooperation with the DFG on natural creeks and rivers. One of the goals of this program is to create a shade canopy over the channels, which reduces plant growth in the channel bottom. Since implementing practices which create shade canopy, there has been a significant reduction in bank failures and a reduced amount of siltation in many channels without any observed increase in frequency or severity of flooding.

The Water Agency does not perform work on channels it does not own or have legal maintenance responsibilities for.

The Water Agency sometimes uses volunteers to help with trash pick-up through its Creek Stewardship Program. This program is described in more detail in the Water Agency's Public Outreach Section, IV-6.1.d.

New Activities:

There are a number of additional channels that will be included in the expanded permit boundary. The Water Agency plans to continue focusing its efforts on the more problematic areas first. If illegal activities on Water Agency owned channels occur within the new expanded boundary, the Water Agency will try to work with the local law enforcement authorities to stop existing illegal activities and discourage further activities through some of the specific maintenance practices mentioned above.

The Water Agency's Creek Stewardship Program is being enhanced to increase public participation in creek cleanups, eradication of invasive plants, detection and reporting of illegal activities, as well as a number of additional efforts. See section IV-6.1.d for more details.

Measurable Goals:

Continue to provide trash cleanup in Water Agency channels and coordinate work with the local law enforcement to reduce illegal activity within Water Agency flood control channels when possible.

Accomplishments:

- The flood control channel maintenance program has undergone further refinement during the 2003-2004 reporting period. The program seeks to take a more holistic approach to management of the waterways to not only provide good flood protection, but also provide good riparian habitat and water quality. The goal is to encourage mature riparian canopy, with alders and other trees that grow tall and stretch their branches over the creek, cooling the water and shading out bushes, brush and less desirable species of trees that reduce the water-carrying capacity of the creek. To start toward this goal, the reaches of streams for which the Water Agency has maintenance responsibility were cataloged by a field team. Information regarding vegetation, crossings, confluences and other features has been recorded in a GIS format to maximize the utility of the information for future maintenance projects. The information collected during this winter was used to set the priority list for maintenance activities during the summer of 2004. The limited vegetation removal to be done during this season will be in compliance with Regional Board and Department of Fish and Game permits, and a biologist will be present onsite at all times. This is reported for informational purposes only, as this channel maintenance work is regulated by the Regional Board under a separate waste discharge requirements (Order No. 81-73).
- The Water Agency also continues to remove loose garbage from flood control channels, as stated in the SWMP. During the 2003-2004 reporting period, Water Agency and SAC crews removed 96 tons of garbage from flood control channels within the permit boundary, including an ice machine, three refrigerators, a microwave, many tires, and several shopping carts.
- The Water Agency provided funding for a fence to deter homeless encampments near the E Street fish ladder on Santa Rosa Creek.

4.3.4 Storm Drain Labeling

Existing Program:

The Water Agency maintains only a few inlet structures. These are in its parking lots at the West College facility and at small storm drain inlet structures, which transport runoff from the v-ditches along Water Agency flood control access roads to the channel. Some inlets on flood control channels may have stencils or labels.

New Activities:

The Water Agency will apply and maintain labels to its storm drain inlets in the parking areas at its West College Facility. The Water Agency will consider a program to apply labels at the storm drain inlet structures along Water Agency channels. The Water Agency plans to coordinate any labeling program with other labeling programs, such as the City of Santa Rosa's and the Sonoma County Waste Management Agency (see County SWMP, section II-6). Installation of the labels may be coordinated through the Creek Stewardship Program (See section IV-6).

Measurable Goals:

Apply stenciling in West College Avenue parking lots within six months of permit implementation. Check annually to ensure legibility. Storm drain labels will be installed at the new Water Agency building in the Airport Business Park within one year of occupancy.

Accomplishments:

- The storm drain labels at the West College facility are in good condition. A new improvement to the wash rack at the West College facility was implemented in response to a complaint that it was not functioning as designed. The wash rack was designed to drain wash water to the City of Santa Rosa sewer system while vehicles are being washed, but allow stormwater discharged to drain to the College Creek. Although the system was designed to automatically stop flow to the creek when a vehicle is at the rack, the valve stopping the flows was not working properly due to debris blockage in the operating mechanism. To ensure that vehicle wash water does not reach the creek, a manual valve was installed to stop flows to the creek.

4.4 Streets and Roads Maintenance

4.4.1 Street Sweeping Frequency

Existing Program:

The Water Agency maintains a network of access roads to its flood control facilities. Public access to these roads is restricted to pedestrian and bicycle use in some areas, and prohibited in other areas. The only vehicles allowed on these roads are emergency vehicles, Water Agency vehicles, or private vehicles working on a construction project with a Revocable License. Thus, the roads are exposed to a minimal amount of vehicular traffic. The majority of these are not paved, though most are graveled to minimize erosion. The Water Agency does not sweep its paved access roads, as these roads are operated and maintained by the City.

New Activities:

None.

Measurable Goals:

Maintain gravel layer on roads. Continue to require resurfacing of roads in Revocable Licenses. Continue to limit vehicular access to Water Agency roads, where appropriate.

4.4.2 Material Management**Existing Program:**

The Water Agency does not allow equipment or materials from private construction projects to be stored within the Water Agency's right of way. This limits the possibility that these materials may spill to a flood control channel.

Sediment removed to maintain flood carrying capacity of the channels is regulated under individual waste discharge requirements, and therefore is not included in this program. The handling of landscape materials is described in section 4.2.e above. Trash and excess vegetation removed from Water Agency channels is disposed of at a landfill.

New Activities:

The Water Agency will continue with its existing program. No new activities are proposed.

Measurable Goals:

Continue to limit equipment and material storage in Water Agency's right-of-way. Dispose of trash removed from Water Agency channels at a landfill.

Accomplishments:

- Water Agency crews removed 96 tons of loose garbage from channels within the permit boundary.

4.4.3 Standardized BMP Training**Existing Program:**

No formal BMP training exists for Water Agency road maintenance since such maintenance is minimal. Informal training is given on an as-needed basis.

New Activities:

No new activities are proposed.

Measurable Goals:

Provide informal road maintenance BMP training on an as-needed basis.

4.5 Parking Facilities Management

4.5.1 Sweeping

Existing Program:

The Water Agency West College Facility currently has one visitor and two employee parking lots encompassing approximately 120 spaces. The parking lots contain storm drain inlets that drain to College Creek located behind the 2150 West College Avenue facility in Santa Rosa. Employees are encouraged to keep the parking lot clean by disposing of refuse in the provided receptacles located off the administration building's employee parking lot and behind the operation and maintenance building.

New Activities:

Sweep Water Agency employee and visitor parking lots to remove accumulated sediment and other pollutants.

Measurable Goals: Continue to provide refuse receptacles. Sweep at least once between August 15 and October 15 each year.

Accomplishments:

- The West College Facility parking lots were swept on September 14, 2003.

4.5.2 Spill Clean-Up

Existing Program:

The Water Agency's Facility Maintenance section will respond to most small spills at the Water Agency's West College Avenue parking facilities. The Water Agency has absorbent pads to remove most petroleum-related spills.

For other types of spills, the Water Agency team of trained spill responders may perform the clean-up. If a spill is hazardous or unmanageable, the Water Agency will try to isolate the spill while employing its spill response procedures and notify the local authorities.

New Activities:

The Water Agency will continue with its existing program. No new activities are proposed.

Measurable Goals:

Respond to parking lot spills in a timely manner.

4.6 Emergency Procedures

Existing Activities:

The Water Agency adopted its most recently revised Emergency Operations Plan in September 1998. This plan helps to manage the Water Agency's critical functions during any emergency and protect the safety of staff and the public. It directs the Water Agency to plan, train, and coordinate with responders from other public and private entities and organizations charged with emergency duties. This plan has been adopted to give clear direction to Water Agency staff to

meet the requirements of Standardized Emergency Management System (SEMS) regulations. Any activities requiring emergency repairs of essential public services such as water pipelines and storage tanks, or for responding to natural disasters, are implemented in accordance with federal, state, and local regulations to the extent that such measures do not compromise public health and safety.

The Water Agency's Emergency Operations Plan contains a Hazardous Materials Incident Plan that directs Water Agency staff in the response to a hazardous material spill at any Water Agency facility. The Plan currently addresses chlorine, sulfur dioxide, radiation hazard, anhydrous ammonia, sodium hydroxide and sodium sulfite spills at Water Agency facilities. The Water Agency Hazmat Team typically responds to spills at Water Agency facilities unless the spill is too large to be contained, or the spill is of another type of hazard where the Water Agency does not have the expertise. In this case, City or County HAZMAT Teams are called to respond.

New Activities:

Review Emergency Operations Plan to ensure it is up to date, and propose and adopt changes, as needed.

Measurable Goal:

Review Emergency Operations Plan by the end of permit year three.

5 ILLICIT DISCHARGE DETECTION AND ELIMINATION

The goal of the illicit discharge element is to detect and eliminate non-stormwater discharges (except those that are exempt or conditionally exempt) from entering the storm drain system.

5.1 Spill Response Procedures

Existing Program:

Illicit discharges are normally discovered either by Water Agency personnel who inspect flood control channels during the course of a year, or by private citizens who have called into the Water Agency to report an illicit discharge.

During working hours, the public can call (707) 521-1845 to report a problem in a Water Agency flood control channel directly to the Flood Control Channel Maintenance Coordinator. Additionally, the public can call the Water Agency's Operations number that is staffed 24-hour per day, (707) 523-1070. The staff member answering this line will contact the appropriate response personnel.

If the spill is not located in a Water Agency channel, the Water Agency will refer that caller to the proper local authority for response.

For spills that occur in Water Agency flood control channels, depending on the magnitude and characteristics of the material released, the Water Agency responds in one of the following manners as outlined in the cooperative agreement:

- If the quantity of the spill is manageable and is non-hazardous, Water Agency crews will proceed with containment and cleanup. Procedures outlined in the Water Agency's Emergency Operations Plan will be followed.
- If the quantity of the spill is unmanageable and/or hazardous, the Water Agency will immediately notify the City or County Emergency Services' Hazardous Materials Team for response.
- If no other resources are available to respond to a spill, the Water Agency's Hazmat Team could be activated. The Water Agency's Hazardous Materials Team is trained primarily in response to chlorine and caustic soda releases at Water Agency facilities.

New Activities:

The Water Agency will continue with its existing program. The Water Agency anticipates similar language regarding spill response procedures will be incorporated in the next cooperative agreement.

Measurable Goals:

Continue to implement spill response procedure as outlined above.

5.2 Private Sanitary Septic Systems

Existing Program:

The Water Agency is not a land use agency and therefore has no jurisdiction over private septic systems. If the Water Agency notices an illegal discharge from a septic system to a flood control channel, the Water Agency normally tries to work with the property owner to correct the problem immediately. If that is unsuccessful, or the situation is serious, the Water Agency will notify the proper land use authority to correct the situation.

For septic system spills that have occurred in Water Agency channels, the Water Agency follows the above spill response protocol. In many cases, this includes notifying County Environmental Health of the spill.

The Water Agency does not get involved with spill clean up on private land, unless: (1) it is a threat to public health and safety or a serious threat to water quality, (2) the Water Agency has personnel and equipment at the site to clean up the spill, and (3) a cleanup crew is in route to clean up the spill. If the Water Agency does perform some work, it is normally limited to containing the spill to protect public health and safety and water quality.

New Activities:

The Water Agency plans to continue with its existing program. No new activities are proposed.

Measurable Goals:

Respond to septic discharges to Water Agency channels as noted in the Water Agency's emergency response procedures. Notify appropriate land use agency of septic problems discovered by the Water Agency and not immediately corrected by a property owner.

5.3 Enforcement Procedures

Existing Program:

If the Water Agency is able to identify a party responsible for an illicit discharge into a Water Agency channel, Water Agency staff will try to work with the responsible party to correct the problem. If that is unsuccessful, or the issue is serious, the Water Agency will notify the City, the County or other regulatory agencies. The Water Agency works with the City or County PRMD to terminate illicit connections into Water Agency channels. If others do not correct a problem, the Water Agency will plug illegally installed stormwater outlets into Water Agency channels. If other enforcement authorities do not resolve a problem to the Water Agency's satisfaction, the Water Agency may choose to take the responsible party to civil court.

New Activities:

The Water Agency plans to continue with its existing program. No new activities are proposed.

Measurable Goals:

Work with the responsible party to correct the situation, or notify the City, County or other regulatory agency with enforcement authority to take action.

5.4 Record Keeping and Documentation

Existing Program:

The Water Agency receives calls daily from the public at its number listed in the telephone book for “Channel Maintenance,” a small percentage of which are for spills or discharges. Most of the tracking of these calls is done informally.

New Activities:

A tracking system for public calls and their responses will be developed during the next permit term, which will require information be collected by the 24-hour operator who receives the call or the Water Agency staff person who answers the Channel Maintenance line. This information will include who called, and why, and any follow-up activities, including forwarding the call to another appropriate agency or dispatching a Water Agency crew to the site (or both), or other appropriate responses. All information will be forwarded to the staff person handling stormwater program coordination to be included in the stormwater annual report, as well as evaluated for any potential changes in response.

Measurable Goals:

Ensure that the phone numbers, which the public can call to report a spill, are listed in the telephone book by the end of permit year one. Develop tracking system by the end of the permit year two. List reported spills in each annual report.

Accomplishments:

The Water Agency stream maintenance and 24-hour phone numbers are listed in the phone book. Spills will be listed in the annual report upon completion of the spill tracking system.

5.5 Illicit Connection Investigation

Existing Program:

The Water Agency prioritizes its investigations of illicit discharges and disposal based on the nature, location, and quantity of the material spilled and the time of year. The highest priority is given to those incidents involving large quantities and occurring in the wet weather with the highest potential of discharge to a pipe system or creek. If the Water Agency notices a problem, the staff will begin looking upstream to locate the source of an illicit discharge. If the source is a storm drain, the Water Agency will notify the municipality of the problem, for further action on their part.

New Activities:

The Water Agency will continue with its existing program. No new activities are proposed.

Measurable Goals:

Investigate the sources of illicit discharges within the Water Agency’s flood control channels. Notify the appropriate municipality for discharges originating outside of Water Agency flood control channels.

5.6 Disposal of Used Oil and Toxic Materials

Existing Program:

The Water Agency does not have a specific disposal program for used oil and other toxic materials targeted for the general public. The City, County and other agencies provide these services. The Water Agency will use materials developed by others if it sees a need to educate someone regarding proper disposal practices.

New Activities:

The Water Agency will continue with its existing program. No new activities are proposed.

Measurable Goals:

Rely on existing programs provided by the City, County and other agencies. Provide developed outreach materials to individuals when education for proper disposal practices is appropriate.

5.7 Training of Targeted Staff

Existing Program:

Several staff members that may take part in spill response and illicit discharge response procedures receive training appropriate to the task assigned. The Water Agency's Hazmat team receives quarterly training on response to some spills. In addition, portions of the Water Agency's maintenance staff have received spill response training. Chemists and Environmental Compliance Inspectors receive training on sampling and source identification.

New Activities:

The Water Agency will assess its current training practices for those employees that have duties associated with spill response and illicit discharges, and update the training as necessary.

The Water Agency's receptionist will also be trained to direct phone calls to the proper staff so that the calls regarding illicit discharges are handled quickly.

Measurable Goals:

Review and update training for spill response and illicit discharge response personnel by the end of permit year one. Train receptionists on proper contact information within six months of permit implementation. Provide annual updates of the correct contact information.

Accomplishments:

- The Water Agency receptionist has been trained to direct spill calls to the stream maintenance phone number or to the 24-hour Operations Desk. There are no updates to the contact information at this time. The review and update of training for spill response personnel will be included in the next annual report.

6 PUBLIC EDUCATION AND OUTREACH

The goal of the public education and outreach element is to: (1) increase the community's knowledge of stormwater systems and the impacts of stormwater runoff, (2) to encourage behavioral changes thereby reducing pollutants released to the stormwater system, and (3) to encourage public participation in stormwater issues.

The public outreach program is a coordinated effort among the three permittees, with each utilizing their existing community outreach and education programs for maximum effect.

6.1 General Public/Residents

6.1.1 Storm Drain Labeling Volunteer Program

Existing Program:

During the first permit term, the Water Agency provided stencils to students, youth organizations, and special community groups who wanted to participate in storm drain stenciling. Since stenciling is not as durable as stickers and stencil opportunities in Water Agency channels were limited, during the last couple years of the first permit term, the Water Agency referred the general public to the City of Santa Rosa to participate in the City's storm drain labeling program.

New Activities:

Although the storm drain stencil is still available to students, community groups, and youth organizations that are interested in stenciling storm drains, other programs (one within City limits and another which is planned by the Sonoma County Waste Management Agency) using different media may be more effective. The Water Agency will refer students, community groups and youth organizations to other existing programs, or will continue to loan out its stencil for groups requesting them. The Water Agency will also evaluate the effectiveness of incorporating storm drain labeling in its Creek Stewardship Program described below.

Measurable Goals:

Key Water Agency staff, including staff at front counters and staff in the water education, Revocable License, stormwater, and fisheries sections will be provided contact numbers for existing storm drain labeling programs by the end of permit year one. If a labeling program is not available, the Water Agency will loan out its storm drain stencil. The Water Agency will evaluate the effectiveness of incorporating storm drain labeling in its Creek Stewardship Program by the end of permit year two. The findings of this evaluation will be presented in the subsequent annual report.

Accomplishments:

- The Sonoma County Waste Management Agency has secured a grant to develop and install storm drain labels within the service areas of its member municipalities. These include: Santa Rosa, rural Sonoma County, Healdsburg, Windsor, Sebastopol, Rohnert Park, and Cotati. The goal is to have a consistent label throughout the county, to promote a unified stormwater message. As this coincides with the Russian River Watershed Association (RRWA) goal of promoting a unified stormwater message throughout the Russian River

watershed, this project was brought to the attention of the RRWA. As a member of RRWA, the Water Agency participated in the customization of the storm drain decal design. The chosen design is shown in **Appendix IV.A**. The round design, which is currently used by Santa Rosa, was selected, and retains the egret and fish icons. Both of these icons remind viewers of the wildlife dependent on the creeks for habitat. The “Drains to Creek, No Dumping” message also appears in Spanish “Desague al Arroyo, No Contamine,” to get the message out to the Spanish speaking community. Alternate phrasing was adopted for communities adjacent to the Russian River, “Drains to River” and “Desague al Rio,” as these communities tend to identify more with the river than local creeks.

- SCWMA will label the majority of the public storm drains in the county within the next permit term. The measurable goals for the 2003-2004 reporting period have been postponed, pending the implementation of this extensive labeling program. New goals will be developed to make the storm drain label available for private entities to affix to storm drains on private property (e.g. commercial, industrial facilities, or multi-family residential).

6.1.2 Ecology/Environmental Column in Local Newspapers

Existing Program:

None.

New Activities:

The Water Agency, along with the City and County, will propose to the Santa Rosa Press Democrat and the Sonoma West Times to include a regular column covering ecology and environmental issues, including issues surrounding stormwater. Details of this BMP, such as who would write the articles, have not been determined.

Measurable Goals:

The co-permittees will make first contact with the Press Democrat within 18 months of permit implementation, and with Sonoma West Times by the end of permit year two.

6.1.2 Web Site

Existing Program:

The Water Agency’s website became public within the last couple of years. Currently, the Water Agency’s web site provides basic information about the Water Agency and water conservation tips.

New Activities:

The Water Agency is currently adding information about the Water Agency’s water education program. Teachers will be able to use the Internet site to sign up for workshops and request materials. Other parts of the website are still being developed. The web site will be used as one avenue for reaching people and groups interested in the Water Agency’s Creek Stewardship Program. Other outreach topics will be developed as the program is implemented.

Measurable Goals:

Add information regarding the Creek Stewardship Program to the Water Agency’s website by the end of permit year three.

Accomplishments:

- Content for a stormwater section on the Water Agency website began to be developed during 2003-2004. It is anticipated that this will be added to the website prior to Permit Year 3. A copy of the webpage will be included in future annual reports.

6.1.4 Creek Stewardship

Existing Program:

During the first permit term, the Water Agency sponsored several volunteer “clean-up” days in Water Agency owned channels. The Water Agency has coordinated creek cleanups in the past through the Environmental/Natural Resources Department and Revocable License Program, where the Water Agency has provided gloves, garbage bags and trash pickup. A “tree planting” program along flood control channels is in place through the Water Agency Service Center.

New Activities:

The Water Agency and the City are taking the lead on a new Creek Stewardship Program. The Water Agency has hired a part-time position through June 2007 to aid in developing and implementing this program. Funding for this program is still subject annually to approval by the Water Agency’s Board of Directors. This program is focused on the permit boundary established during the first permit term. The Water Agency, Santa Rosa Public Works and Police Departments, and Santa Rosa Recreation and Parks Department will coordinate with volunteer groups and individuals to do creek cleanups, maintenance of trails, and educational outreach. Volunteers will be asked to report illegal activities along the Water Agency’s flood control channels so that they can be handled promptly. In addition, volunteers will also be trained in identifying and in some cases removing invasive, non-native plant species.

The pilot program will begin on three creeks within the permit boundary: Santa Rosa Creek, Brush Creek and Piner Creek. The Creek Stewardship program will continue to provide gloves, garbage bags and trash removal, and implement recognition for the creek implementation through signs or other methods. Informational signs regarding watershed protection and creek cleanup activities will be placed at several locations in the three pilot creeks.

Measurable Goals:

To implement this program, the Water Agency will work with other City groups to develop the program and signs within permit year one. During the second and subsequent years, the Water Agency will coordinate four outreach/training sessions related to this program per year. Starting in permit year three, the Water Agency will try to obtain coverage under this program for one creek per year.

Accomplishments:

- This program has become more fully realized during the last year, and has exceeded the measurable goals set for it in the SWMP. The program encourages individuals, neighbors and businesses to become Creek Stewards and adopt a specific reach of creek. Creek

Stewards learn about their particular reach of creek and serve as additional “eyes, ears, and ideas” to identify potential problems and situations detrimental to creeks and water quality. Creek Stewards can either take action to remedy situations themselves or, in more complicated instances, report to the Program Coordinator who initiates an appropriate response. Creek Stewards’ familiarity with their adopted creek allows Agency and City staff to respond to reports of a known set of circumstances at an exact location.

- Nearly 150 Creek Stewards have adopted reaches on the following thirteen creeks within the permit boundary:

Arroyo Sierra Creek	Matanzas Creek	Santa Rosa Creek
Austin Creek	Paulin Creek	Spring Creek
Brush Creek	Piner Creek	Steele Creek
Colgan Creek	Poppy Creek	
Forestview Creek	Roseland Creek	

- Creek Stewards are provided with the *A Guide to Restoring Native Riparian Habitat in the Russian River Watershed*, the *Creek Steward Handbook* that includes information specific to their reach of creek, and periodic updates from the Program Coordinator.
- Creek Stewardship Program outreach activities consisted of creek walks, educational presentations, volunteer creek clean ups, volunteer creek restoration projects, and community creek events. Outreach activities were often in conjunction with schools, churches, non-profit organizations, and community groups involved with the protection and enhancement of creeks.
- During the 2003-2004 Permit Year, Creek Stewardship used 33 partnerships with community groups to sponsor or support:
 - 18 school groups with creek related educational and stewardship activities
 - 14 creek walks
 - 20 educational presentations on storm water runoff and creeks
 - 13 creek restoration and monitoring projects
 - 35 volunteer creek clean ups that collected 97 cubic yards of trash and debris

- The Creek Stewardship Program formed partnerships on creek activities with the 33 community-based organizations shown in Table IV.1 and with the 18 schools and educational programs shown in Table IV.2.

**Table IV.1
Creek Stewardship – Community Partnerships**

Arroyo Sierra Creek neighborhood	Rebuilding Together Santa Rosa
Blue Circle	Pastors' Prayer Fellowship
California Native Plant Society	Roseland Creek neighborhood
Canine Companions	Ross Recreational Equipment
Chinese Association Youth	Russian River First Flush
Church of Religious Science	Russian River Watershed Celebration
Coastal Commission Coast and Creek Cleanup	Sierra Club
Cub Scouts	Social Advocates for Youth
Day of Caring 2003	Sonoma County Regional Parks
Footloose Forays	Sonoma County Volunteer Center
Flat Rock Neighborhood	Sonoma State University Project Focus
Friends of Paulin Creek	Sotoyome Resource Conservation District
Graffiti Abatement Program	Spring Lake Village
Heffernon Insurance Co	USA 2000
LandPaths	Whole Foods Market Santa Rosa
Madrone Audubon Society	Willow Creek Treatment Center
	Sonoma County Agricultural Preservation and Open Space District

**Table IV.2
Creek Stewardship – School/Education Partnerships**

Brook Hill Elementary School	Olivet School
Elsie Allen High School Interact Club	Riebli School
Helen Lehman Elementary School	Santa Rosa Christian School
Kawana Elementary School	Steele Lane Elementary School
LandPaths, In Our Own Backyard Program	Watershed Educators
Madrone Elementary School	Willowside Middle School
Maria Carrillo High School	Windsor High School
Montgomery High School	VISTA Cool Schools
North Coast CREEC Network	Students and Teachers Restoring a Watershed (STRAW)

➤ The Program sponsored or supported the 14 creek walks shown in Table IV.3:

**Table IV.3
Creek Stewardship Creek Walks**

Date	Group/Walk	Location
7/17/2003	Sierra Club, City Creek Hike	Santa Rosa Creek Trail at Farmers Lane
7/19/2003	Explore a Riparian Ecosystem in the City	Santa Rosa Creek Trail at Yulupa Av
7/21/2003	Riebli School Summer Camp	Mark West Creek
8/11/2003	Sierra Club, Santa Rosa Underground Creek Walk	Santa Rosa and Matanzas Creeks confluence
9/16/2003	Russian River Celebration, Steelhead Trout in the City	Santa Rosa Creek Trail at Farmers Lane
9/18/2003	Russian River Celebration, Urban Creeks	Prince Memorial Greenway
9/24/2003	Helen Lehman School, Steele Creek History	Steele Creek watershed
12/9/2003	Footloose Forays, Piner Creek Walk	Paulin and Piner Creeks
1/24/2004	A Creek Runs Through Us	Prince Memorial Greenway
2/19/2004	LandPaths/Windsor High School	Hanson Ponds, Windsor
2/21/2004	Steelhead Trout Habitat walk	Santa Rosa Creek Trail at Yulupa Av
6/1/2004	LandPaths, Moonrise Over Santa Rosa's Watersheds	Taylor Mountain
6/12/2004	How Creeks are Different	Matanzas and Spring Creeks in Doyle Park
6/23/2004	Creek Walk from Downtown Market	Prince Memorial Greenway

➤ The 20 educational presentations to schools and groups are summarized in Table IV.4:

**Table IV.4
Creek Stewardship Educational Presentations**

Date	Group/Event	Location
8/20/2003	Environmental Fair	Memorial Hospital
8/26/2003	Sunrise Rotary	Flamingo Hotel
9/9/2003	Volunteer Fair	Sonoma State University
9/12/2003	Wellness Fair	Santa Rosa Junior College
9/30/2003	Merit Awards to Creek Stewards	City Council Chambers
10/8/2003	Montgomery High School Interact Club	Montgomery High School
10/13/2003	Cub Scouts meeting	Matanzas Elementary School
10/16/2003	Sunrise Kiwanis	Oakmont Community Center
10/21/2003	CA Native Plant Society	Burbank Garden Center
12/3/2003	Public Works Quarterly meeting	Municipal Service Center South
2/19/2004	Windsor HS Environmental Studies class	Windsor High School.
2/24/2004	Cub Scouts Blue and Gold Banquet	First Presbyterian Church
2/25/2004	Helen Lehman School 6 th grade	Helen Lehman School
3/12/2004	Willowside Middle School 6 th grade	Willowside Middle School
3/24/2004	Spring Creek Village creek walk	Spring Creek Village
4/19/2004	"The Outsiders" show for Earth Day	KRSH radio station
3/26/2004	VISTA Cool School, Kawana Elementary School 3 rd Grade	Kawanas Elementary School
4/20/2004	Santa Rosa Christian School 5 th grade	Santa Rosa Christian School
5/1/2004	Landpaths Community Creek Day	Doyle Park
6/19/2004	North Coast CREEC Network	Chops Teen Center

- Additionally, the Creek Stewardship program coordinated or supported 13 volunteer creek restoration or creek monitoring activities summarized in Table IV.5.

Table IV. 5
Creek Stewardship Restoration And Monitoring Activities

Date	Event/Group	Location
10/11/2003	Creek Care Day	Prince Memorial Greenway
11/6/2004	Russian River First Flush monitoring	Colgan, Piner, & Santa Rosa Creeks
12/30/2003	Canine Companions and Cub Scouts	Colgan Creek
3/9/2004	STRAW and LandPaths	Matanzas Creek at Doyle Park
3/13/2004	Brush Creek Restoration	Brush Creek Restoration Area
3/27/2004	Youth Community Service Day	Prince Memorial Greenway
4/3/2004	Creek Restoration w/ Native Riparian Plants	Prince Memorial Greenway
4/8/2004	Steele Lane Elementary School, Landpaths	Poppy Creek at Steele Lane School
4/24/2004	Rebuilding Together Santa Rosa	Prince Memorial Greenway
5/5/2004	Church of Religious Science	Un-named creek at 2075 Occidental Rd
5/17/2004	Snapshot Day monitoring	Citywide through Sotoyome RCD
5/26/2004	Arroyo Sierra Creek Neighbors	Arroyo Sierra Creek
Spring & Fall	Madrone Audubon Society	Brush and Colgan Creeks

- The Creek Stewardship Program helped to organize the 35 volunteer creek clean ups shown in Table IV.6 that collected 97 cubic yards of trash from creeks within the permit boundary. Not included is the amount of trash collected during creek trail clean ups by individuals who received clean up supplies from the Creek Stewardship Program.

Table IV.6
Creek Stewardship Volunteer Creek Clean Ups

Date	Event/Group	Location
8/18/2003	Social Advocates for Youth	Santa Rosa Creek Trail, Fulton to Pierson, N side
9/3/2003	Social Advocates for Youth	Santa Rosa Creek Trail, Fulton Rd to SR Ave
9/17/2003	Day of Caring 2003	Santa Rosa Creek Trail, Dutton Ave to Pierson
9/20/2003	Coast and Creek Cleanup	Creek in NW Community Park
9/20/2003	Willowside Middle School	Santa Rosa Creek at Willowside Rd
10/10/2003	Ross Recreational Equipment	Brush Cr, Highway 12 to Montecito Blvd
10/19/2003	Heffernon Insurance Company	Prince Memorial GreenwayMG
10/19/2003	Cub Scout Pack 127, Den 3	Spring Creek trail upstream of Yulupa
10/25/2003	Roseland Creek neighborhood	Roseland Creek, Burbank Av to Dutton Av
10/26/2003	Sierra Club	Santa Rosa Creek at box culvert
11/1/2003	Elsie Allen High School Interact Club	Colgan Creek in front of school
11/8/2003	Madrone Elementary School	Ducker, Austin and Brush Creeks
11/11/2003	Burbank Avenue neighborhood	Burbank Ave & Roseland Creek
1/25/2004	Backyard Wildlife Habitat group	Poppy Creek at Steele Park
3/6/2004	Cub Scouts	Roseland Cr upstream of Stony Point Rd
3/6/2004	Sonoma State University Project Focus	Prince Memorial Greenway & Pierson Bike Path
3/13/2004	Brush Creek Restoration at Flat Rocks	Brush Creek Restoration Area
3/20/2004	Rebecca Ashbach birthday party	Santa Rosa and Brush Creeks at Flat Rocks
3/26/2004	Cool Schools Kawana Elementary	Kawanas Creek in Colgan Park
3/27/2004	Youth Community Service Day	Prince Memorial Greenway
4/2/2004	Cool Schools Kawana Elementary	Kawanas Creek in Colgan Park
4/3/2004	Willowside Middle School	Santa Rosa Creek at Willowside Rd
4/3/2004	Prince Memorial Greenway Restoration	Prince Memorial Greenway
4/17/2004	Pastors Prayer Fellowship	26 miles of creek trails
4/21/2004	Santa Rosa Christian School	Roseland Creek upstream of Stony Point Rd
4/22/2004	Earth Day clean up at Carrillo Adobe	Santa Rosa Creek, Farmers Lane to Flat Rocks
4/24/2004	Rebuilding Together Santa Rosa	Prince Memorial Greenway
5/6/2004	Sonoma State University Project Focus	Prince Memorial Greenway
5/23/2004	Maria Carrillo High School	Austin Creek from Boas Dr to Calistoga Rd
5/30/2004	Willow Creek Treatment Center	Santa Rosa Creek at Willowside Rd.
6/4/2004	Ross Recreational Equipment	Brush Creek, Highway 12 to Montecito Blvd
6/5/2004	USA 2000	Roseland Creek near McMinn Ave
6/5/2004	Baptist Church	Paulin Creek near Coffey Lane
6/15/2004	Willow Creek Treatment Center	Irwin Creek near Riebli Road
6/17/2004	Willow Creek Treatment Center	Doran Beach

To coordinate response to reports from Creek stewards and the public, the program has developed relationships with Sonoma County Sheriff's Department, Sonoma County Regional Parks, Sonoma County Agricultural Preservation and Open Space District, Water Agency crews, and staff of the City's Public Works, Police, and Recreation and Parks Departments.

Reports that the Program Coordinator receives from the public or agencies on specific maintenance and clean up needs are typically investigated further and then directed to the responsible party, Creek Stewards, or the Water Agency's contracted Supervised Adult Crews (SAC), as deemed appropriate for resolution.

In response to Creek Stewardship reports, SAC crews cleaned up 380 cubic yards and 3,700 pounds of trash and debris that had been deposited in or near creeks or entered creeks through the storm drain system. Working with the City Police and the County Sheriff, the SAC crews cleaned up 403 homeless encampments near creeks.

- Quarterly meetings of the Creek Stewardship Program with governmental partners, representatives from community groups, Creek Stewards, and members of the public are held to share information and discuss ways to utilize and strengthen the Creek Stewardship Program. Quarterly meetings were held July 23 and October 22, 2003 and on January 28 and May 11, 2004.
- 20 additional signs reminding creek trail users to "Clean up after Your Pet" were installed along Agency creeks.

6.1.5 Pet Waste Signs

Existing Program:

The Water Agency began working with the City of Santa Rosa in 2001 to develop a sign that could be placed at access points to Water Agency owned flood control channels that would encourage the public to pick up after their pet.

New Activities:

The Water Agency will continue to work with the City and other interested municipalities to develop a sign that can be placed on any Water Agency owned channel. Once a sign is finalized, the Water Agency will begin installing the signs at popular entrances to Water Agency channels within the permit boundary, focusing first in the Santa Rosa area. The Pet Waste Sign BMP will be coordinated with the Creek Stewardship program and will be incorporated in public access areas of creek restoration projects. The Water Agency anticipates that during the second permit term, signs within City limits will be fairly elaborate, providing more stormwater information.

Measurable Goals:

Install 10 signs per year (in conjunction with the City) in major access locations along Water Agency channels.

Accomplishments:

- 20 additional signs reminding creek trail users to “Clean up after Your Pet” were installed along Agency creeks, in conjunction with the Creek Stewardship program.

6.1.6 Public Events

Existing Program:

During the first permit term, the Water Agency conducted public outreach at the Sonoma County Fair, the Sonoma-Marin Fair, the Marin County Fair, Wednesday Night Markets, and water and science fairs. During these outreach events, the Water Agency provided free literature and water conservation devices to those visiting the Water Agency’s booth. Free give-aways or drawing registrations were used to engage the public in discussions on water-related issues. The free literature has covered such topics as water conservation measures, landscaping tips, and lawn watering guides.

The Water Agency also owns a watershed model that had been displayed at the (now-nonexistent) Discovery Center of Sonoma County. This model is a “hands-on” exhibit that demonstrates the impacts of urban runoff and the harmful consequences of unmanaged runoff from agriculture, industry, residential consumers, and recreational areas such as parks and golf courses. The Water Agency now uses the model during its classroom visits and includes it in its lending library, whereby teachers and community groups can borrow the model for three-week periods. A groundwater model is also available.

New Activities:

The Water Agency will continue to participate in the Sonoma County Fair at a minimum, providing outreach materials to those visiting the Water Agency’s booth. The Water Agency may endorse, participate in or provide financial sponsorship of other events, assemblies and workshops, as it deems appropriate.

Measurable Goals:

Participate in the Sonoma County Fair in permit years one through five. Provide outreach materials to those visiting the booth.

Accomplishments:

- The Water Agency again staffed a booth at the Sonoma County Fair, promoting water conservation. Many of the water conservation methods encouraged also serve to improve stormwater quality. For example, the promotion of “water-wise gardening” helps to minimize over irrigation.

6.1.7 Hazardous Waste Disposal

Existing Program:

The Sonoma County Waste Management Agency develops and distributes hazardous waste disposal literature and conducts household hazardous waste clean-up events. The Water Agency has distributed some of these materials on a limited basis, as applicable situations arise.

New Activities:

The Water Agency will continue to distribute appropriate outreach materials on a case-specific basis.

Measurable Goals:

None.

6.1.8 Illicit Discharges

Existing Program:

If Water Agency staff encounters illegal dumping, discharges or other incidences that have adverse impact on water quality or the use of Water Agency channels, normally, Water Agency staff will speak with the responsible party and try to educate them of the adverse impacts of their actions. In some cases, pollution prevention materials are provided. If necessary, the Water Agency may follow up with a written letter to the responsible party or notify the City, County, Regional Board or other regulatory entity of the problem.

New Activities:

No new activities are proposed.

Measurable Goals:

Continue with the existing program of providing informal education to responsible parties.

Accomplishments:

- The Water Agency sponsored an anti-illicit discharge billboard on Highway 101 from January through March 2004. The ad, which is shown in **Appendix IV.B**, shows a picture of a litter-strewn storm drain and a picture of the Russian River, with the message, “Garbage here [the storm drain].. ends up here [the Russian River]. Keep litter out of storm drains and creeks!” The billboard on this highly traveled section of road is visible to over 100,000 cars per day.
- Billboards bearing a stormwater pollution prevention message will be run for a three-month period every year for the duration of the permit.

6.1.9 Private Septic System Outreach

Existing Program:

The Water Agency does not have authority over septic systems or other types of land use. The City and County conduct these programs.

New Activities:

If the Water Agency encounters a situation where education is needed in the industrial or commercial sector, it will refer this situation to either the City or County, as appropriate.

Measurable Goals:

None.

6.2 Industrial/Commercial Education

Existing Program:

The Water Agency does not have a stormwater outreach program for industrial and commercial uses. The City and County conduct these programs.

New Activities:

If the Water Agency encounters a situation where education is needed in the industrial or commercial sector, it will refer this situation to either the City or County, as appropriate.

Measurable Goals:

None.

6.3 Landscape Industry

Existing Program:

During the first permit term, the Water Agency participated in a Bay-wide integrated pest management (IPM) program developed by Contra Costa County. The program consisted of educating nurseries and home improvement stores about less toxic ways to control household pests. Personnel from the participating nurseries and home improvements were given training on IPM and flyers, displays, tee shirts and other outreach material were provided to these businesses for distribution to the public. A follow-up study was conducted to measure the overall effectiveness of the program. For greater detail, see Annual Report No. 3 of the first permit term (1999-2000). The Water Agency's participation included outreach to nurseries and home improvement stores in several locations within Sonoma County, including the greater Airport area. The City of Santa Rosa, who coordinated this effort with Contra Costa County, has turned this program over to the Master Gardeners.

New Activities:

Since this program is no longer active as a Bay-wide effort, the Water Agency's participation is minimal. The Water Agency has continued to purchase flyers developed as part of this program, and distributes them from time to time. No specific activities are proposed.

Measurable Goals:

None.

6.4 Building and Construction

Existing Program:

The Water Agency does not have a stormwater outreach program for the construction and development sector. The City and County conduct such programs.

New Activities:

If the Water Agency encounters a situation where education is needed in the construction and development sector, it will refer this situation to either the City or County, as appropriate.

Measurable Goals:

None.

6.5 School Education Program

6.5.1 Water Education Program:

Note: The Water Agency's Water Education Program, described below, is funded by the Water Agency's Water Contractors and other customers (including the Town of Windsor and Marin Municipal Water District). As noted in Section IV-1.6, the Water Agency is obligated by contract to keep Water Transmission System funds legally separate from other Water Agency funds and to spend those funds solely on transmission system activities. Accordingly, these funds are not legally available to fund the stormwater program or its requirements. The Water Agency's Water Education Program does, however, provide significant water conservation and pollution prevention outreach in Sonoma and North Marin Counties to schools that are serviced by the Water Agency's Water Contractors and other customers. Therefore, it is included for informational purposes.

Existing Program:

The Water Agency's Water Education Program provides a comprehensive learning experience to students and teachers in Sonoma and North Marin Counties for grades K-6. During the first permit term, the program evolved from focusing on water supply issues to encompassing watershed issues. Topics include the hydrological cycle, physical properties of water, water supply issues, pollution prevention methods, and treatment of wastewater. Teacher participation in this program is purely voluntary. However, the program is very popular.

In the past three years, program curriculum has been changed to meet science curriculum requirements for the State of California. Every year, the Water Agency sends out information packets to teachers in the approximately 125 kindergarten through 12th grade public and private schools in areas serviced by the Water Contractors and other customers. These packets provide sample materials and an order form for free educational materials. The packets also contain information on free workshops available to teachers and allow teachers to sign up for the in-class/field instruction available through the Water Agency. The Water Agency also has a lending library which includes books and other materials, the enviroscape model and a groundwater model, California Alive, which is a CD ROM on California's biodiversity, and a

computer game called Hydroexplore, which focuses on pollution prevention. These materials will be available for teachers to order or reserve on the Water Agency's web site.

The Water Agency's program includes classroom visits and field trips. The Water Agency's field classroom at Wohler is currently closed for the construction of Collector 6. Last year, on-site instruction was as follows:

1st Graders: Outdoor instruction at Spring Lake

3rd Graders: In-class instruction

5th Graders: In-class instruction and site visit to Mirabel for instruction on water treatment, water quality and habitat for the endangered salmonid species

6th Graders: In-class instruction and site visit to the Santa Rosa Subregional Wastewater Treatment Facilities and Kelly Farm.

This program is extremely popular and is generally limited to first come, first served.

Last year, prior to a 5th grade site visit, Water Education staff provided the teachers a pre-site test to better understand the knowledge of the children attending the program and tailor the program to maximize the effectiveness of the outreach efforts. At the end of the program, a verbal post assessment was taken of the student's knowledge. In addition, teachers were asked to complete an evaluation of the educational program. Some evaluations asked teachers if they thought the Water Education Program effected the behavior of the students.

As mentioned above, the Water Education program includes instructional workshops for teachers. In spring 2002, the Water Agency added a pollution prevention workshop for teachers. Teachers are also sent the Hydro-Herald newsletter produced by the Water Agency.

New Activities:

For school year 03-04, the Water Agency's classroom instruction program is as follows:

K to 2nd Grade: Teacher Training

3rd Grade: In class training

4th Grade: Curriculum is currently being developed but will focus on the watershed and our interdependence on it. Outdoor instruction will be at Spring Creek and follow the creek through Santa Rosa to Matanzas Creek.

5th Grade: In class training and site visit to Mirabel focusing on Water Quality. Students will receive basic training on water quality sampling and how to identify a healthy watershed including looking at benthic diversity.

6th Grade: In class instruction and site visit to the Santa Rosa Subregional Wastewater Treatment Facility and Kelly Farm. This will cover wastewater treatment and recycled water use.

The Water Agency's outreach is also expanding in its curriculum material available for teachers to teachers of 7 through 12 grade. These materials include curriculum on methyl t-butyl ether (MtBE): risks and issues, which is geared to 8th through 12th graders, and Project H2O, which

includes water chemistry experiments, which is geared to 7th through 12th graders. Direct teaching opportunities for 7th to 12th graders are available on a very limited basis.

The Water Education Program plans to request that teachers participating in the in class and field study for 4th and 5th graders have their class take a test before and after the in-class and outdoor visits to see if knowledge is being increased by the program. In addition, as part of the program evaluation, teachers will be asked to assess if they believe there has been any behavioral changes resulting from this outreach.

Measurable Goals:

Since this program is distinct from the stormwater program and flood control zones, and funds spent on it cannot be spent for other purposes, no measurable goals are included.

Accomplishments:

The programs are free to teachers in the 197 schools within our service area.

➤ **Water Education Program Packets**

Water Education Program Packets with order forms for teachers to request education materials or direct instruction are distributed to all public and private schools in the service area. A packet is sent to each teacher at the elementary level and to science teachers at the middle and high school levels. Workshops for teachers are listed in the program packet and additionally in a Professional Development Catalog published by the Sonoma County Office of Education. A copy of the 2003-2004 Water Education Program Brochure is included as **Appendix IV.C.**

➤ **Education Materials / Lending Library**

Curriculum materials are available for grades K – 12. The Program offers developmentally appropriate student workbooks for grades K – 6 and Project Water Science, a general science program developed by the Water Education Foundation for grades 7 – 12. Curriculum guides for teachers, maps, rain gauges, and a variety of student incentives (book covers, folders, stickers, pencils, erasers, rulers etc.) are also available. The Program received requests for free education materials from 88 different schools, and 365 classrooms (8597 students) during the 2003-2004 school year.

The Water Education Program lending library includes additional education materials available to teachers including computer software, interactive models (groundwater and enviroscape models) and videos that are loaned for a two-week period. The Program had 29 requests this year to borrow lending library materials. One of the most popular and frequently requested items was the Enviroscape Model. This is a tabletop watershed model that depicts a community and a local water supply source. This interactive model lets the students sprinkle Kool-aid for pesticides, make cocoa patties for cow manure then create a rainstorm over the community with a spray bottle and watch what happens to the local water supply. Discussion of point and non point source pollution is generated throughout the lessons. The models are especially popular with middle and high school science teachers.

➤ *Classroom and Field Study Instruction* All instructional visits have been carefully developed to support the California State Frameworks. Certain grade levels are offered a field study experience and other grade levels a classroom instructional program. Each grade level lesson has a subject specific focus that supports the newly revised California Science Standards for that grade level and includes developmentally appropriate hands-on activities. During the 2003 – 2004 school year, the Water Education Program offered a classroom instructional series for grade three and field study programs for grades four, five and six. During the 2003 – 2004 school year the total number of students receiving direct instruction was 2314. The Program had 39 classes from 19 different schools participating in our field study programs (1163 students) and an additional 60 classrooms from 22 schools participated in our classroom only instructional program (1151 students). Below is a detailed description of each grade level program:

Classroom Instructional Program – Grade 3

The classroom instructional program includes two, 60 minute lessons conducted by Water Agency staff in the school classroom. Through hands-on experiments and discussions, students explore how their attitudes and daily habits affect their water supply source. Topics covered include:

- Water and how it moves about the earth
- Water is essential to all living things
- Ways we manage our water
- Anything that goes down a storm drain enters the natural system without treatment

During the first visit, students conduct an experiment that demonstrates the surface tension of water and how it can support the weight of insects. They explore what elements can break that surface tension (soap), how surface tension allows certain communities of living things to survive and what happens when pollution enters the system. The second visit focuses on the concepts of adaptation and interdependence as students identify a variety of ways that animals and plants use water. Teachers are given extension activities after each lesson.

Field Study Programs – Grades 4, 5, 6

The Water Agency’s field study programs consist of a pre-site student assessment, a one-hour visit to the school classroom by Water Agency staff and a follow up full day field trip. Each student receives a journal which is used both during the classroom portion of the program and then again on their day in the field. Journals, the pre-assessment sheets, Lesson plans and the accompanying Journals are included in **Appendix IV.D**. The Program provides free buses for the field trip portion of the program.

Grade 4 – Watershed Awareness

Before the initial classroom visit, teachers are asked to give their students a short pre-assessment that indicates the baseline knowledge of the class before participating in our field study program. During the classroom visit the concept of watershed is defined and students learn that each watershed is part of a larger watershed. Class discussions reveal the downstream portion of a watershed may suffer from upstream influences and that all things in a watershed are ultimately connected. This is reinforced with a watershed web activity that illustrates the connections between water and other elements in nature, and that everything is affected when pollution enters the system. During the field trip portion students hike and explore the upper reaches of a local watershed. The class then follows the water as it moves downstream merging into larger and larger watersheds. There are points along the way where the water is diverted into a flood control reservoir, where it disappears and has been channeled underground and a section where there is an urban creek restoration project underway. These smaller watersheds eventually flow into the Russian River, which is the source of the students’ drinking water.

Grade 5 – Mirabel Pumping Facility

Before the initial classroom visit, teachers are asked to give their students a short pre-assessment that indicates the baseline knowledge of the class before participating in our field study program. The fifth grade field study program focuses on the Water Agency's water supply and transmission system, water quality testing and the natural history of salmon and steelhead in the Russian River watershed. During the classroom portion of the program, discussions center around watersheds and how everything that occurs in a watershed will ultimately affect the overall health of that watershed. Discussion topics also include Salmonids, the water quality parameters they need to survive, and that Coho, Chinook and steelhead are protected in the Russian River, the source of the student's drinking water. A water quality testing activity follows where students are given four prepared water samples and asked to conduct a series of tests (pH, temperature, turbidity and dissolved oxygen) to determine, which, if any, of the samples could support salmon. Each student is given a journal to record his or her test results.

On the field study day, a bus takes students out to the Russian River to experience first hand the source of their drinking water. Students conduct the same water quality tests they did in the classroom on a water sample taken directly from the Russian River and again use their journals to record and compare this data. On their field tour of the water transmission system they see Water Agency computers conducting these same tests on their drinking water. Water samples are collected from the river and students are given the opportunity to use microscopes to examine and identify aquatic invertebrates. Discussions follow on the implications of finding pollution sensitive organisms in the water samples, and how this is another method for testing the health of water. These journals also include information to be shared in the classroom and at home regarding water conservation, pollution prevention and personal responsibility for taking care of our water.

Grade 6 – Wastewater, Recycled Water & Wetlands

Before the initial classroom visit, teachers are asked to give their students a short pre-assessment that indicates the baseline knowledge of the class before participating in the field study program. Wetlands ecology, recycled water and sanitation are the themes woven throughout this component of the Water Education Program. During the classroom portion of the program students are introduced to the life giving functions of wetland habitats. Discussion is generated regarding where water goes after use and how it is treated and reused before getting recycled back into the environment. A clear distinction is made on the difference between storm drains and sanitary sewers. Students engage in building their own "mini-filters" and attempt to "clean" water that contains soap, oil, paint, glue, food scraps, toothpaste etc. Field journals are distributed with an assignment for the students to complete before their field study day. On the field trip day students have an opportunity to explore a unique wetland ecosystem that was created using recycled water. While at the wetland, students conduct tests on soils, investigate wetland plants and are given binoculars to observe the diverse wildlife living and foraging in this habitat.

Program Evaluation

All participating teachers are asked to complete an evaluation of the program. Teacher comments are carefully reviewed and often lead to further program development. The program has been continuously commended for:

- Age appropriate activities and concepts that related to their curriculum
- Hands on activities
- The opportunity for students to use science equipment no longer available in schools (microscopes, binoculars etc)
- The individual student field journals

Thousands of student letters received by the Water Agency also reflect the success of the Water Education Program. Program staff also has asked the teachers to give the same pre-assessment sheet to their students as a post assessment after the students have completed the program. This has provided some comparative data on what the students are learning and retaining. The results have been very encouraging.

➤ **Teacher Workshops and Trainings**

Water Education staff conducted several teacher workshops during the 2003 - 2004 school year. These workshops have been developed to provide teachers with standards aligned lessons and materials that support water science instruction, water conservation and pollution prevention. During the 2003 -2004 school year, 98 teachers participated in six different workshops:

- 56 teachers participated in three Project WET (Water Education for Teachers) Workshops
- 33 teachers attended two “make and take” Water Cycle Workshops
- 9 teachers attended a two-hour Pollution Prevention / Watershed Awareness Workshop

Water Education staff also presented a Water Cycle workshop at the California Science Teachers Annual Conference last October in Long Beach.

➤ **Water Awareness Contests**

This year we conducted two contests in celebration of Water Awareness Month:

- A Poster Contest for 3rd and 4th graders: This year’s theme was “Water-Save A Little, Help A Lot”. We administered this contest along with City of Santa Rosa Water Conservation staff. Winning entries will be featured in the SCWA 2005 Water Awareness Calendar
- A High School Video Contest: The theme was “Storm Water Pollution Prevention” and was sponsored by the Russian River Watershed Association. We received 30 videos from four high schools. The winning videos are to be used for education purposes. A copy of the flyer announcing the contest is included in **Appendix IV.E**, and a DVD of the three winning videos is included as **Appendix IV.F**.

6.5.2 High School Aquatic Macroinvertebrate Bioassessment Program

Existing Program:

The City administers this program. The Water Agency does not participate in this program.

New Activities:

None.

Measurable Goals:

None.

6.6 Spring Lake Environmental Discovery Center

Existing Program:

The Water Agency is one of the sponsors, along with Sonoma County Regional Parks Department, Sonoma County Regional Parks Foundation and the City of Santa Rosa, of the Environmental Discovery Center of Sonoma County (EDC). The EDC is a multisensory, interactive, hands-on place where people of all ages are exposed to information about what's being done to enhance the environment and highlight the natural resources of Sonoma County. Children of all ages will be challenged and amazed at what they learn while playing games and having fun at the EDC. Adults can meander through the demonstration gardens, check out the interactive exhibits in the EDC or just relax in the outdoor reading area.

The EDC officially opened on April 20, 2002, although the EDC hosted a number of classes prior to this date. The EDC occupies the former Spring Lake Visitor's Center, situated in the 320-acre Spring Lake Regional Park. The EDC will use Spring Lake and other regional parks as resources for interpretive displays, docent-lead programs, habitat restoration projects and field laboratories. The EDC will also provide environmental education at school sites throughout the County. The architecturally stunning facility will host four or five rotating programs throughout the year. Each program features a different aspect of Sonoma County's unique natural resources, and what local agencies, businesses and citizens are doing to encourage environmental stewardship and the enjoyment of natural resources within our community.

The first program at the EDC was "Down the Drain: A raindrop's journey from cloud to creek." The centerpiece display was a storm drain system made of storm drain pipe that the children could crawl through, entering at the storm drain and exiting to either a "creek" or "beach" area. Also included were large-size board games, a technology tent with computer stations (featuring the Waterwaze game and other programs), a video center with short films, and puzzles.

Water Agency staff sits on an advisory board to the EDC. The Water Agency acts as a resource to the EDC.

New Activities:

The Water Agency will continue with its existing activities, including providing financial support for the EDC up to and including Fiscal Year 2003-04, actively participate in the advisory board, and acting as a resource to EDC staff.

Measurable Goals:

Provide fiscal support up to and including fiscal year 2003-04.

Accomplishments:

The Water Agency continued to provide funding for the EDC in fiscal year 2003-2004. An advertisement for the “Down the Drain” exhibit, which was run from January 21 until June 13, is included as **Appendix IV.G.**

6.7 New BMP: Employee Newsletter

New Activities:

As part of the Phase II stormwater program, the Water Agency has begun to include a stormwater article in the Water Agency employee newsletter on a quarterly basis. These articles, which covered topics such as stormwater friendly car washing, lawn care and hazardous waste disposal are included as **Appendix IV.H.**

7 EFFECTIVENESS EVALUATION

The goal of this program element is to assess the Water Agency's SWMP to (1) quantify the efforts being taken to improve stormwater quality, (2) determine if the program is being implemented, as proposed, and (3) determine if these efforts are impacting stormwater quality.

Existing Program:

A number of existing programs are evaluated for their effectiveness using direct and indirect indicators. The results of the evaluation are included in the Annual Reports. Some of these program evaluations include:

Municipal Operations: The Water Agency tracks the status of programs included in its SWMP. This includes measures such as the amount of trash removed from Agency channels each year.

Public Outreach: The Agency tracks the effectiveness of its other outreach programs by the number of workshops held, the number of pamphlets distributed, and the number of other educational materials distributed.

Monitoring Program: The Water Agency annually reviews monitoring data for trends between upstream and downstream constituents. The concentrations of constituents measured are an indication of the pollutant loading in the receiving water.

Special Studies: In the first permit term, the Water Agency did not participate in special studies.

New Activities:

The Water Agency will continue to track and report on its program elements through direct and indirect indicators, as it does with its existing program. Most BMPs in the Water Agency's SWMP now include new measurable goals. A status of the Water Agency's efforts to meet these measurable goals will be included in the Annual Reports. Special efforts to measure the effectiveness are contained in the following programs:

Public Outreach: The Water Agency's Water Education Program has begun including some feedback mechanisms, including pre-site visit testing and program evaluations with questions regarding behavioral changes. Participation in these tests and evaluations are purely voluntary. This program is funded by the Water Contractors who are not a part of this permit. The Water Education program will begin asking teachers administer both pre- and post-visit tests for selected grades. In addition, as part of the program evaluation, teachers will be asked to assess if they believe there has been any behavioral changes resulting from this outreach.

In the last year of the second permit term, the Water Agency and the County will review the ten years of chemical monitoring data collected over the course of the first two permit terms from the two sampling locations on Santa Rosa Creek to determine trends. The Water Agency will use this review to recommend changes in focus or monitoring for the third permit term. This review will be included in the last annual report for the second permit term.

Special Studies:

For the next permit term, the Water Agency is not proposing any special studies.

Measurable Goals:

Provide a summary report in the annual report of permit year 5 assessing the effectiveness of the Agency's program elements.

Since the Water Education Program is distinct from the stormwater program and flood control zones, no measurable goals are included for this activity. The Water Agency will track and report on the status of indirect indicators in each annual report.

Perform a review of the chemical monitoring program and present the findings in the last annual report for the second permit term.

Accomplishments:

- Compliance with the measurable goals set out in the SWMP is summarized in the At-a-Glance table at the beginning of this Annual Report. The table shows that the Water Agency has met virtually all of the measurable goals for the first year of the permit term. A few measurable goals have been modified to reflect programmatic changes that have occurred within a set of BMPs. For example the storm drain labeling measurable goals will be postponed until the new county-wide storm drain label is available. Several new activities were undertaken that were not mentioned in the SWMP, for example the stormwater pollution prevention billboard and the employee newsletter articles.
- One set of direct indicators of the effectiveness of the stormwater program include the amount of debris removed from creek channels that would otherwise have contributed to pollution. For 2003-2004, the following were from the creeks within the permit boundary:
 - 96 tons of loose garbage, removed by Agency forces
 - an ice machine, three refrigerators, a microwave, many tires, and several shopping carts, removed by Agency forces
 - 97 cubic yards of debris, removed by Creek Stewardship volunteers
 - 403 homeless encampments, removed by SAC crews in response to Creek Stewards
- The Water Education Program has recently added in a measure of program effectiveness. As stated earlier, pre- and post-site visit evaluations were distributed to 1163 students from 39 different 4th through 6th grade classes from 19 different schools that participated in the Water Education Program field study programs. Results of these surveys indicate that students' knowledge of watersheds is increased through participation in the program. **Attachment IV.1** contains the pre-and post-site visit evaluations administered to the three grade levels and **Attachment IV.2** summary tables of the results. The evaluation questions focus on the difference between storm drains system and sewer system, and on the effects of illicit discharges. All classes that took both the pre- and post- site visit evaluations showed an improvement in the average number of questions answered correctly. The mean class score on the post-site visit quiz was on average 15% higher than the pre-site visit quiz. This demonstrates that the students are gaining an understanding of the concept of a watershed, the impact of illicit discharges on the Russian River watershed, and the difference between stormwater and wastewater.

- Stormwater sampling results shows that the monitored water quality parameters in the upstream and downstream samples are within the Basin Plan objectives.

Based on the above indicators, it appears that the Water Agency stormwater program is effective.

The workplan for Permit Year 2, Term 2 was developed and presented to the Regional Board at the April 8, 2004, copermittee meeting. A summary table of the workplan is included in **Attachment IV.3**.

8 FISCAL ANALYSIS

Existing Activities:

During the first permit term, fiscal resources were reported in each Annual Report. The information included actual expenditures for the prior fiscal years and estimated expenditures for the upcoming fiscal year.

Capital expenditures are reported in the following categories:

- Drainage maintenance and tracking equipment
- Development of standards and procedures for inspections and permits
- Public outreach
- Water quality testing equipment and program.

Operation and maintenance costs are reported in the following categories:

- Permit administration
- Drainage maintenance
- Response and enforcement
- Inspections and permits
- Public education
- Water quality testing.

Operation and maintenance costs do not include costs for routine maintenance activities that were being performed prior to issuance of the NPDES permit. The categories used during the first permit term were consistent for all permittees and were based on the Part II application; however, the categories did not adequately reflect Water Agency operational cost.

Each Annual Report also includes a description of the funding sources to meet the estimated expenditures for the upcoming fiscal year.

Each Annual Report also includes a description of shared funding among the permittees for lead agency coordination work.

New Activities:

The Water Agency will review the categories currently used for reporting fiscal resources during the first year of the permit term. It is anticipated that the Water Agency will revise the categories to capture both capital and operations and maintenance costs that are more in line with the Water Agency's SWMP and operations.

Each year the permittees will meet with the Regional Board staff to discuss the work plan for the upcoming fiscal year. A discussion of the fiscal resources proposed to implement the work plan should be part of that meeting so that the costs can be considered as part of the budget process. After the Water Agency's Board of Directors adopts the budget for the upcoming year, stormwater budget information is available to include in the next Annual Report. The Water Agency's Board of Directors generally adopts the Proposed Budget prior to July 1st, and the Final Budget during September of each year.

Measurable Goals:

Develop new reporting structure for expenditures and sources of funding for work related to the NPDES Phase I permit by the end of permit year one; include a discussion of fiscal resources in work plan meeting with Regional Board staff; and, continue to report on expenditures and sources of funding for work related to the NPDES Phase I permit as part of each Annual Report.

Accomplishments:

The tracking system has been revised in the last year to try to better capture the expenditures. As it was implemented during the middle of the fiscal year, although the total amount spent on the program will be accurate, the division between subtasks may be skewed. Table IV.7 below reflects operational and maintenance costs associated with the implementation of the stormwater program. Note that costs of activities funded through other sources, such as the Water Education Program and Zone 1A drainage maintenance activities, and that do not have measurable goals included in the SWMP, are not reflected in the table below.

Table IV.7
Operational and Maintenance Costs

ENGINEERING STUDIES AND ANNUAL REPORT	\$ 31,207
SAMPLING	\$ 19,989
LAB ANALYSIS	\$ 2,844
DRAINAGE MAINTENANCE ZONE 1A	\$ -
POLLUTION PREVENTION EDUCATION	\$ 20,180
APPLICATION COST/ANNUAL FEES	\$ 7,653
COORDINATION MEETINGS	\$ 705
TRAININGS AND CONFERENCES	\$ 942
RRWA ACTIVITIES	\$ -
ILLCIT DISCHARGE TRACKING	\$ -
CREEK STEWARDSHIP	\$ 56,728
TOTAL	\$ 140,248

There were no capital costs incurred during the 2003-2004 year.

ATTACHMENT IV.1:

SONOMA COUNTY WATER AGENCY WATER EDUCATION PROGRAM
Pre /Post Assessment – Grade 4
What do you know about Watersheds?

1. What is a watershed? Illustrate your answer.

Circle True or False for the following statements.

- | | | |
|------|-------|--|
| True | False | 1. All watersheds are the same size |
| True | False | 2. The rainbow colors we see on parking lots after a rain are caused by oil that has leaked from parked cars |
| True | False | 3. All parts of a watershed are connected |
| True | False | 4. A storm drain collects rainwater and puts it directly into our creeks and streams |
| True | False | 5. Leaves and grass should be swept into a storm drain inlet since they are natural and biodegradable |
| True | False | 6. We all live in a watershed |
| True | False | 7. Non-point source pollution includes materials and chemicals that are washed into the storm drain system from many sources |
| True | False | 8. Asphalt (blacktop) streets slow the flow of rain water into waterways |
| True | False | 9. All animals depend on plants for food, either directly or indirectly |
| True | False | 10. A watershed includes an entire land area, visible and invisible drained by a particular creek or river. |
| True | False | 11. Every living organism needs food, water, air and a place to live |

**SONOMA COUNTY WATER AGENCY WATER EDUCATION PROGRAM
Pre / Post Assessment - Grade 6**

What do you know about H₂O?

3. What is a wastewater treatment plant? What happens there?

Circle True or False for the following statements.

- | | | |
|------|-------|---|
| True | False | 21. The rainbow colors we see on parking lots after a rain are caused by motor oil that has leaked from parked cars |
| True | False | 22. A <i>wetland</i> is always wet |
| True | False | 23. A storm drain collects rainwater and puts it untreated into our waterways |
| True | False | 24. Almost no one lives in a watershed |
| True | False | 25. A leaf is biodegradable |
| True | False | 26. Wastewater is water that leaves homes, schools and businesses through indoor drains and toilets |
| True | False | 27. All living things need water in order to survive |
| True | False | 28. Non-point source pollution includes materials and chemicals that are washed into the storm drain system from many sources |
| True | False | 29. Asphalt (blacktop) streets slow the flow of rain water into waterways |
| True | False | 30. If something is poured down a storm drain it goes to the wastewater treatment plant to be cleaned |
| True | False | 31. Storm drains and sewers are the same thing |
| True | False | 32. Water is the only substance on earth that is naturally found in three forms – solid, liquid, & gas |

file: Pre-Post assessmentG6

ATTACHMENT IV.2: PRE AND POST ASSESSMENT

, GRADE 4

School	watershed	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	Total % Correct	Change
Olivet														
presite (26) J	31%	96%	46%	73%	73%	81%	38%	73%	73%	65%	77%	88%	68%	
post (28)	93%	100%	93%	86%	93%	75%	100%	75%	71%	75%	89%	100%	88%	20%
presite (23)C	0%	70%	44%	70%	61%	74%	56%	44%	39%	70%	48%	83%	55%	
post														
Fremont														
presite (25)	64%	100%	36%	56%	60%	56%	20%	76%	40%	64%	36%	100%	59%	
post (29)	69%	100%	83%	93%	93%	69%	90%	66%	41%	79%	69%	93%	79%	20%
JX Wilson														
presite (28)A	57%	93%	61%	61%	61%	71%	86%	46%	50%	71%	71%	89%	68%	
post	89%	100%	52%	96%	96%	93%	96%	85%	48%	78%	70%	93%	83%	15%
presite (30) P	3%	87%	53%	67%	67%	77%	10%	67%	30%	83%	50%	87%	57%	
post														
M. Hahn														
presite (28) G	7%	86%	68%	64%	79%	64%	18%	64%	32%	57%	64%	96%	58%	
post														
presite (26) B	0%	88%	58%	73%	65%	69%	27%	69%	46%	85%	58%	88%	60%	
post (27)	100%	100%	74%	96%	78%	89%	100%	81%	37%	95%	96%	100%	87%	27%
Meadow View														
presite (28) P	39%	96%	82%	50%	89%	57%	29%	68%	43%	64%	32%	96%	62%	
post (26)	69%	81%	65%	88%	96%	88%	88%	23%	42%	77%	73%	96%	74%	12%
presite (23) S	13%	87%	44%	70%	78%	70%	0%	74%	39%	65%	48%	78%	56%	
post (25)	80%	100%	96%	88%	92%	80%	88%	68%	72%	80%	92%	96%	80%	24%
Doyle Park														
presite														
post (B)	87%	100%	87%	87%	67%	87%	93%	73%	53%	87%	73%	93%	82%	
presite														
post (S)	65%	100%	40%	96%	85%	80%	80%	5-	35%	60%	50%	90%	69%	
														20%

GRADE 5

Post													
Bernard Eldridge													
Pre (29) B	52%	41%	69%	62%	52%	34%	59%	66%	76%	45%	72%	59%	+12
Post	77%	80%	60%	77%	46%	90%	73%	83%	90%	57%	50%	71%	
Pre (31) A	32%	52%	84%	48%	55%	26%	81%	65%	55%	58%	61%	56%	
Post													
Valley Vista													
Pre (29) L	17%	62%	48%	66%	48%	13%	76%	69%	72%	55%	65%	54%	
Post													
Pre													
Post (15) J	73%	100%	93%	60%	40%	93%	73%	73%	100%	53%	66%	75%	
San Ramon													
Pre (28) K	79%	75%	36%	54%	57%	18%	68%	79%	50%	64%	50%	57%	
Post	93%	89%	100%	75%	64%	71%	86%	64%	96%	54%	71%	78%	+21
Pre- P													
Post	93%	93%	87%	43%	40%	80%	53%	70%	83%	70%	70%	71%	
Prestwood													
Pre(H)	96%	19%	46%	50%	57%	57%	62%	65%	58%	62%	42%	56%	
Post													
Pre (G)	100%	19%	65%	62%	42%	70%	62%	42%	73%	46%	88%	61%	
Post													
John Reed													
Pre (K)	100%	61%	74%	48%	48%	56%	52%	39%	61%	39%	40%	56%	
Post													
Pre (G)	71%	42%	58%	33%	58%	88%	79%	46%	92%	79%	58%	64%	
Post													
Roseland													
Pre													
Post	64%	72%	72%	64%	40%	58%	40%	52%	80%	36%	64%	58%	
Corona Creek													
Pre													
Post													
Pre													
Post													

GRADE 6

School	WWTP	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	Total % Correct	Change
Hidden Valley															
Kiraly															
presite (26)	50%	62%	62%	46%	30%	69%	81%	100%	58%	46%	35%	81%	69%	61%	
post (27)	89%	93%	96%	67%	30%	85%	100%	100%	59%	59%	67%	85%	93%	78%	17%
Gaylord															
post (27)	96%	81%	85%	55%	41%	59%	100%	100%	81%	78%	37%	89%	70%	75%	
Parker															
presite (24)	71%	67%	71%	42%	38%	79%	88%	92%	58%	54%	33%	71%	54%	63%	
post (24)	88%	88%	96%	58%	62%	79%	100%	96%	54%	71%	54%	75%	88%	78%	15%
Wright															
Tom															
presite(24)	38%	33%	33%	50%	38%	50%	92%	92%	50%	63%	38%	79%	83%	57%	
post (26)	54%	35%	88%	81%	46%	73%	92%	92%	50%	27%	54%	70%	70%	60%	3%
Nordhagen															
presite (21)	81%	62%	52%	57%	38%	62%	86%	95%	33%	33%	24%	62%	71%	58%	
post(25)	68%	80%	80%	52%	36%	64%	88%	92%	40	64%	36%	76%	84%	66%	8%
Doyle Park															
presite (54)	22%	70%	52%	65%	35%	57%	83%	93%	44%	43%	28%	63%	72%	54%	
post (21)	57%	62%	19%	57%	48%	62%	95%	100%	57%	48%	10%	62%	86%	59%	5%
Meadow															
Ellis															
presite(29)	41%	48%	62%	66%	41%	72%	62%	96%	24%	34%	17%	79%	72%	55%	
post (22)	86%	77%	73%	64%	68%	64%	95%	95%	73%	46%	27%	77%	86%	72%	17%
Steeves															
presite (20)	35%	50%	75%	55%	60%	65%	80%	85%	55%	50%	25%	55%	70%	58%	
post (25)	100%	76%	92%	48%	92%	84%	100%	96%	64%	44%	48%	72%	96%	78%	20%
Kenwood															
Springer															
presite(18)	78%	56%	39%	39%	44%	56%	83%	100%	61%	67%	17%	67%	72%	60%	
post															

Attachment IV.3 “At a Glance” Storm Water Work Plan 2004-05

Protecting and Enhancing Water Quality by Reducing Storm Water Pollutants to the Maximum Extent Practicable
 Sonoma County Water Agency

<u>Proposed Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule Program Implementation began on July 1, 2003		
	Water Agency Tasks	Lead Department	Status
Program Management Goal: Facilitate communication and coordination between the copermittees, Regional Board and other appropriate entities. Ensure the SWMP elements are implemented on schedule and that all requirements of the Permit are met.			
Copermittees Monthly Coordination Meetings	Participate in monthly meetings Continue through Permit term	Operations	Ongoing
Annual Work Plan	Develop preliminary work plan for RWQCB staff April Coordination Meeting, Annually Final work plan submitted with each Annual Report	Operations	Complete
Annual Report	Submit to RWQCB on time October 1, Annually	Operations	Complete
Coordination with Phase II Communities	Invite City and Town staff from Phase II communities within the permit boundary to monthly coordination meeting	Operations	Ongoing
Legal Authority Goal: Effectively prohibit non storm water discharges into the storm drain system and receiving waters.			
Review existing codes and propose amendments as required	Water Agency relies on enforcement authority of City and County, and has no plans to seek additional authority. The Water Agency will use its existing legal authority as appropriate.	Operations	Ongoing

<u>Proposed Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule Program Implementation began on July 1, 2003		
	Water Agency Tasks	Lead Department	Status
Private Construction Element Goal: Reduce construction site related pollutant, especially sediment, to MEP			
Private Construction on Public Land	Incorporate appropriate BMP measures as part of the provisions contained in Revocable Licenses for private construction which occurs on Water Agency flood control channels. Request that cities and County refer project managers to Agency when project includes work on flood control channel.	Maintenance	Ongoing
Inspection of Construction and Vineyard Sites	Provide at least one inspection for construction projects on Agency flood control channels which have been issued a revocable license to ensure compliance with license.	Maintenance	Ongoing
Enforcement of Non-Compliant Sites	Use the Water Agency's existing program and the enforcement authority of regulatory agencies to ensure projects comply with the conditions stated in the Water Agency-issued revocable licenses.	Maintenance	Ongoing
Reporting of Non-Compliant Sites	If Water agency becomes aware of non-filer status, Agency will refer non-filers to the RWQCB within 48 hrs.	Operations	Ongoing
Industrial/Commercial Element Goal: Reduce the potential for pollutants to contact storm water to MEP			
No measurable goals planned			

<u>Proposed Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule Program Implementation began on July 1, 2003		
	Water Agency Tasks	Lead Department	Status
Municipal Operations Element Goal: Reduce or prevent pollution in storm water runoff from all municipal land use areas, facilities and activities			
Public Construction Activities Management			
Contract Documents	Review Special Provisions and General Specifications for existing BMP'S to determine if they are adequate. Submit needed changes, if any, in Annual Report 2.	Operations, Engineering	Will be undertaken in Permit Year 2
Compliance with State General Construction Permit	File NOI for applicable projects, as required	Engineering	Ongoing
Inspection	Continue to inspect active construction sites.	Engineering	Ongoing
Enforcement	Take action for non-compliance based on contract specifications.	Engineering	Ongoing
Training of Targeted Staff	Assess current education and training practices for construction practices. <i>Permit Year 1</i> Update, if necessary. <i>18 months from permit implementation.</i>	Operations/Engineering	Ongoing
Landscape and Recreational Facilities Management			
Pesticide management	Continue with low-impact pesticide management.	Maintenance	Ongoing
Fertilizer management	Continue to utilize recycled water for irrigation which offsets the need for fertilizer at the Water Agency's West College facility.	Maintenance	Ongoing

<u>Proposed Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule Program Implementation began on July 1, 2003		
	Water Agency Tasks	Lead Department	Status
Native vegetation	Continue to incorporate retention and planting of native vegetation in design projects on flood control facilities. (See also, Public Outreach)	Maintenance	Ongoing
Disposal of landscape waste	Continue to use chipped brush and weeds as mulch around existing vegetation at Water Agency Channels.	Maintenance	Ongoing
Recreational water bodies	County manages Spring Lake Park for agency. Continue to limit equipment and material storage in flood control channel right-of-way.	Maintenance	Ongoing
Storm Drain System Operation and Management			
Clean and inspect storm drain pipe and inlet structures	Pipes through City treated as open channel, see below.	Maintenance	Ongoing
Flood control channel or road side ditch inspection and maintenance	Continue to provide trash cleanup in Water Agency channels, coordinate with local law enforcement when possible. <i>Annually, as needed</i>	Maintenance	Ongoing
Streets and Roads Maintenance			
Street sweeping frequency	Water Agency does not maintain public roads. No sweeping planned. Maintain shale layer on Water Agency-owned roads. Continue to require reshaling of road in revocable licenses, where appropriate. Continue to limit vehicular access to Water Agency roads.	Maintenance	Ongoing

<u>Proposed Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule Program Implementation began on July 1, 2003		
	Water Agency Tasks	Lead Department	Status
Material management	Continue to limit equipment and material storage in Water Agency's ROW.	Maintenance	Ongoing
Training of targeted staff	Provide informal road maintenance BMP training, as-needed.	Maintenance	Ongoing
Parking Facilities Management			
Sweeping	Sweep two employee and one visitor parking lot at West College facility. <i>Annually between August 15 and October 15</i>	Maintenance	Ongoing
Spill clean up	Respond in a timely manner. Use spill response protocol for hazardous or unmanageable spills.	Maintenance	Ongoing
Illicit Discharge Detection and Elimination Element Goal: Detect and minimize illegal non storm water discharges			
Spill Response	Implement current program.	Operations and Maintenance	Ongoing
Private sanitary septic systems	Notify City, County or RWQCB if a problem with a private sanitary septic system is discovered and not immediately corrected by land owners. <i>Ongoing</i>	Operations	Ongoing
Enforcement Procedures	Water Agency works with responsible party, City, County, and other regulatory agencies to correct the problem. <i>Continue with existing program.</i>	Operations and Maintenance	Ongoing

<u>Proposed Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule Program Implementation began on July 1, 2003		
	Water Agency Tasks	Lead Department	Status
Record Keeping and Documentation	Develop tracking system. <i>Permit Year 2</i> List reported spills in annual report. <i>Ongoing</i>	Operations	To be undertaken in Permit Year 2
Illicit Connections	Investigate the sources of illicit discharges within flood control channels. Notify and provide support to appropriate municipality for discharges originating outside of channels. <i>Ongoing</i>	Operations and Maintenance	Ongoing
Disposal of used oil and toxic materials	Rely on existing programs by others. Provide outreach material developed by others where appropriate.	Operations	Ongoing
Training of targeted staff	Provide annual review of contact info.	Operations and Maintenance	Ongoing
Public Education and Outreach Element Goal: Increase the community’s knowledge of MS4 and the impacts of urban storm water run off, encourage behavioral changes thereby reducing pollutant release to the MS4			
General Public/Residents			
Storm drain inlet decal program	Evaluate efficacy of incorporating storm drain labeling program into creek stewardship program. <i>Permit Year 2</i>	Operations	Will be done in Permit Year 2
Website	Include information regarding the Creek Stewardship program by the end of Permit Year 3.	Operation/Public Information	Stormwater program information, including information on the Creek Stewardship Program will be posted on the Water Agency’s website in Permit Year 2

<u>Proposed Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule Program Implementation began on July 1, 2003		
	Water Agency Tasks	Lead Department	Status
Creek Stewardship	Conduct outreach. <i>Permit Year 2.</i>	Operations and Maintenance	Outreach material is currently available on the web, and as part of the Santa Rosa Adventure Guide. Outreach brochures will be developed in Permit Year 2.
Billboard	None	Public Information	A billboard containing a stormwater pollution prevention message was posted along Highway 101 for 3 months (Jan. through Mar. 2004). This will be repeated in upcoming years.
Pet waste signs	10 signs will be posted at major access points to creeks, subject to approval by the Water Agency and City's Waterways Advisory Committee. <i>Within the second year of the permit term.</i>	Operations and Maintenance	Signage has been developed and posted.
Public Events	Participate each year in Sonoma County Fair. Distribute outreach materials at fair. Ongoing, <i>annually</i>	Public Information	Participated in 2003 Fair, and planning to participate in 2004.
Illicit discharge	Continue existing program of providing informal education to parties responsible for illicit discharges	Operations and Maintenance	Ongoing

<u>Proposed Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule Program Implementation began on July 1, 2003		
	Water Agency Tasks	Lead Department	Status
School Education			
Water Education Program	Although no measurable goal is included, as this program is independent of storm water funding, it is anticipated that the current program will continue.	Public Information	The Water Education Program will be conducted in 2004-05.
Spring Lake Environmental Discovery Center	Provide financial support through fiscal year 2003/04	Public Information	Continue to provide fiscal support
Effectiveness Evaluation			
Formal Evaluation	Continue to track program elements through direct and indirect indicators. <i>Annually</i>	Operations	Ongoing
Public Education and Outreach	Voluntary include feedback mechanisms in water Education Program.	Public Information	Feedback mechanisms have been developed and will be included in the program for 2004-05
Monitoring Program	Review monitoring data for trends. <i>Permit Year 5</i>	Operations	Data may be evaluated sooner for possible modifications to the monitoring program.
Fiscal Analysis			
Financial Analysis of Program Activities	Develop new reporting structure Permit Year 1. a. Include discussion of fiscal resources in work plan meetings/Annually b. Report program expenditures and funding sources in Annual Report.	Operations	A new reporting structure is being developed for Annual Report 1.

<u>Proposed Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule Program Implementation began on July 1, 2003		
	Water Agency Tasks	Lead Department	Status
Monitoring Plan Goal: Assess the receiving water quality to direct resources toward local pollutants of concern			
Chemical Monitoring	Collect samples for first flush and three representative storms. <i>Annually</i> Include results and proposed changes to program in annual reports. Analyze data for trends. <i>Permit Year 5.</i>	Operations	Ongoing
SUSMP Goals: Minimize storm water pollution, limit storm water peak flows, and conserve natural areas to MEP from new and redevelopment			
Waiver	Waiver granted with RWQCB approval. Place fees in project fund		
Provide training to staff	Train targeted staff within 22 months of Program implementation	To be spearheaded by County	In process of hiring a consultant for SUSMP work, which will include training.
Provide workshop to the development community	Prepare and conduct workshop within 24 months of Program implementation	To be spearheaded by County	In process of hiring a consultant for SUSMP work, which will include workshops.
Implement SUSMP measures on City / County capital improvement projects	Design applicable Zone 1A flood control projects with SUSMP measures, January 2004.	Engineering	No applicable projects are scheduled for design.
Implement SUSMP measures on applicable projects within Urban Growth Boundary within Permit Boundary	Condition, plan check and inspect projects to meet SUSMP requirements <i>within 24 months of Program implementation</i>		

Part V

**Monitoring Results
Storm Water Management Plan**

**Permit Term 2
Annual Report 1**

Monitoring Results

In compliance with the NPDES permit, discharge characterization activities were continued during this past year to help identify storm water pollutants within the permit boundary. This section of the Annual Report combines information gathered from all three copermittees. The characterization process takes place in three parts: Chemical Monitoring, Bioassay testing, and Benthic Community Assessment.

1. CHEMICAL RESULTS

The County and the Water Agency regularly collect composite and grab samples necessary for chemical analysis of storm water runoff. This section includes:

1. An overview of the chemical monitoring stations, sampling equipment and procedures;
2. A summary of the sampling events; and,
3. Results from the three events sampled.

Laboratory analysis reports for the chemical monitoring sampling are included as **Appendix V.A.**

Chemical Monitoring Stations

Site "C1" is located along Santa Rosa Creek approximately fifty-feet upstream of the confluence with Piner Creek. This site provides downstream monitoring of most of the permit area. The site can be reached by using one of two flood control access roads off Fulton Road in Santa Rosa.

The Water Agency is responsible for chemical monitoring at this site. Site C1 is equipped with a portable 900 Max Sigma sampler with a rain and depth gauge. The sampler is housed in a steel cabinet within a fenced area at the top of the bank of Santa Rosa Creek. The sampler is programmed to automatically collect samples after a set rainfall accumulation occurs within a specific timeframe. The sampler will also collect samples if the water level in the creek rises above a set point. The sampler is programmed to automatically call the cell phone of the appropriate Water Agency personnel when it begins to take a sample. The Water Agency personnel then travels to the site to ensure that the sampler began sampling, and also takes grab samples at this time.

Site "C2" is located on Santa Rosa Creek at Melita Road upstream of the urban area. The County is responsible for chemical monitoring at Site C2. Site C2 is equipped with a portable automatic composite sampler (Sigma 900 Max) that is housed in a secure steel cabinet near the creek, and a tipping bucket rain gauge (Sigma model #2149) that is mounted on a 20-foot high pole. The rain gauge is located about sixty feet away from the sampler, away from the trees along the creek. Solar cells, used to charge the backup batteries, are also mounted on the pole. The sampling unit is equipped with an internal modem.

2003/2004 Qualifying Rainfall Events

The Monitoring Program associated with the Permit requires that samples be taken from a first flush storm event, and three representative storm events. A rain gauge located on the roof of the Water Agency's administration building on College Avenue is now used to determine if an event is a qualifying sampling event. The first flush event qualified as a representative storm during 2003/2004. Two additional representative storms were sampled, fulfilling the permit requirements.

The representative storm is defined as a storm that produces at least 0.3 inches of precipitation within a 3-hour period. Additionally, the storm must be preceded by 72 hours of dry weather (less than 0.1 inch of precipitation), and one month must separate each monitoring event.

The two automatic composite samplers are programmed to begin sampling storm water runoff once a set criterion is met. Criteria can include depth of precipitation, storm duration, and rise in creek depth. The samplers can be set to take samples when a volume of water has passed, or at specific time intervals. The programmed criteria are set to meet the target storm event. Because the samplers are several miles apart and rainfall and runoff varies between the sites, samplers must be monitored during a storm event for proper operation.

To prepare for a sampling event, weather forecasts are monitored in order to target a representative storm, as outlined in the Monitoring Plan. Sampling is coordinated between the County and the Water Agency. Each permittee checks its sampler to verify proper operation, and to collect field data and grab samples. Once samples are taken, the County and Water Agency verify with each other that samples have been successfully collected and that the storm meets the representative storm criteria before sending samples to the lab for analysis.

The sampled events in Permit Year 1, Term 2 and the sampler settings are described below. The first flush storm event began on November 8, 2003. This also qualified as the first representative storm. The second representative storm was on December 19, 2003, and the third was March 25, 2004.

First Flush Storm Event

For the first flush storm event the samplers at Stations C1 and C2 were programmed to begin sampling when 0.3 inches of rainfall had accumulated in a time period of 3 hours. The first flush criteria were met on the morning hours of November 8, 2003 and the samplers began the sampling sequence. Samples were obtained in a time-proportional sampling method, and were taken within minutes of the creek reaching its crest, approximately 20 inches above its base flow stage. Sampling was completed at approximately 10 a.m. on the morning of November 8, when the first flush composite and grab samples were obtained. The samples were collected in laboratory supplied sterile containers that were labeled, capped, and placed under refrigerated conditions pending transport to a state certified analytical laboratory for chemical analysis.

First Representative Storm Event

Due to the accumulated rainfall that was measured during the November 8, 2003 rain event, the event qualified as both the first flush storm event as well as the first representative storm event for both sampling locations.

Second Representative Storm Event

The second representative storm event of the 2003/2004 season started at just after noon on December 19, 2003. A total of 0.57 inches of rain was measured during the storm event.

The samples at stations C1 and C2 were programmed to begin sampling after 0.3 inches of rain had accumulated within a 3-hour period of time. Sampling started at approximately 4 p.m. and was completed at approximately 7 p.m. Samples were collected as the creek was cresting, approximately 30 inches above its base flow. Both composite and grab samples were obtained from the sites in laboratory supplied sterile containers that were labeled, capped, and placed under refrigerated conditions pending transport to a State certified analytical laboratory for chemical analysis. The samples were analyzed for the chemical constituents as listed in the Monitoring & Reporting Program.

Third Representative Storm Event

The third representative storm event of the 2003/2004 season occurred on March 25, 2004. The samplers were programmed to begin sampling after 0.3 inches of rain had accumulated within a 3-hour period of time. Samples were collected at approximately 5 p.m. Both composite and grab samples were obtained from each site in laboratory supplied sterile containers that were labeled, capped, and placed under refrigerated conditions pending transport to a state certified analytical laboratory for chemical analysis.

Results

Table V.1, below, shows the results of the three events sampled during the 2003/2004 wet season. **Appendix V-A** contains lab reports of all events and locations. Tables in **Appendix V-B** show summaries of the first seven years of monitoring data. Due to changes in methods and variances in matrix interferences, detection limits are given only for the last two years' analysis.

Table V.1:
Summary of Chemical Monitoring Results at Sites C1 and C2 during 2003-2004

SAMPLE DATE	Event	Temp	pH	TSS	TDS	Phosphorus		Total Nitrogen	Nitrate as N	TKN	Ammonia	Nitrite as N	Fecal Coli	Fecal Strep
						mg/L	mg/L							
Method →		°C	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mpn/100ml
C1														
11/8/2003	1	15.4	7.09	54	170	< 1.0	< 1.0	1.2	0.33	0.74	0.3	< 0.2	280000	220000
12/19/2003	2	10.5	8.05	11	180	< 1.0	< 1.0		0.68	0.46	< 0.2		340000	140000
3/25/2004	3	15.0	7.58	94	200	< 1.0	< 1.0	0.36	0.36	2.3	0.4	< 0.2	60000	60000
C2														
11/8/03	1	14.2	7.57	8	210	< 1	< 1	< 0.5	< 0.2	0.21	< 0.2	< 0.2	70000	30000
12/19/03	2	9.9	8.23	11	170	< 1	< 1	1.1	0.33	0.77	< 0.2	< 0.2	2400000	1800000
3/25/04	3			5	210	< 1	< 1	0.78	< 0.2	0.77	< 0.2	< 0.2	400000	14000

The pH of all samples was within the Basin Plan objective of 6.5-8.5 for the Russian River and the Laguna de Santa Rosa. The total dissolved solids (TDS) concentrations of all samples were near 90% upper limit of 200 mg/l in the Basin Plan. No total or dissolved phosphorus was

detected in the stormwater samples. Some forms of nitrogen were detected, however, there are no numeric Basin Plan objectives for nutrients with which to compare the data. To put the data in some perspective, the domestic water supply criterion for nitrate nitrogen is 10 mg/l, and aquatic species easily tolerate level much higher than this (EPA Quality Criteria for Water, 1986, EPA440/5-86-001). The highest nitrate nitrogen concentration observed in the 2003-2004 sampling was 0.7 mg/l at the downstream sampling station – substantially below drinking water standards. *This comparison should not in any way be interpreted to imply that drinking water standards should be applied to stormwater discharges.* No nitrite nitrogen was detected in any of the samples. Fecal Coliform organisms ranged from most probable numbers (MPN) of 60,000 MPN/100 ml to 2,400,000 MPN/100 ml. Fecal Streptococcus ranged from 14,000 MPN/100 ml to 1,800,000 MPN/100 ml.

2. BIOASSAY RESULTS

Bioassay tests are conducted to determine whether storm water runoff is impacting the water quality in creeks that support fish populations.

Bioassay tests measure the total toxicity of the samples by exposing twenty rainbow trout fry (15 to 30 days old) to 100% sample water for 96 hours under controlled conditions. The results are expressed as the percent that survive.

Two bioassay samples were collected for each sampling site during the 2003-2004 rainy season, except Peterson Creek where a sample was not collected on the representative storm. The samples were collected during the first storm of the season on November 8, 2003 and the second sampling event was conducted during a representative storm event on March 25, 2004. A representative storm sample was not collected for Peterson Creek. Since the storm event occurred in the late afternoon, there was not sufficient daylight to safely collect the sample and deliver the remaining samples to the lab in time for analysis.

Each set of samples typically consists of nine water samples collected from eight sites. Two samples were collected from one site, the latter being a duplicate for quality assurance. Six of the sampling locations are the same sites used for the Benthic Community Survey component of the monitoring plan. Two sites, Santa Rosa Creek at Melita Road and Piner Creek, correspond to the chemical monitoring sites (C1 and C2). Each sample consisted of five gallons of creek water and was either dipped or bucketed from the creeks into a plastic five-gallon container. The samples were transported to the laboratory located in the Laguna Treatment Plant at 4300 Llano Road for testing. Twenty acclimated rainbow trout were placed in five gallons of undiluted sample water for each 96-hour survival test following the EPA/600/4-90/027F protocol.

This season's bioassay results reflect high water quality at all sites except Colgan Creek and the first flush for Santa Rosa Creek at Piner Creek (see Table V.2). All other sites had survival rates of 90% or higher for the first flush and representative storms. Average survival rates from the previous 6 years of sampling are also listed in Table V.2 for comparison. Previous data from each sampling event of the first permit term can be found in Annual Report 6.

Table V.2
BIOASSAY RESULTS 2003-2004

Sampling Location	First Flush		Representative Storm	
	November 8, 2003 (Duplicate)	Previous 6 Year Average	March 25, 2004 (Duplicate)	Previous 6 Year Average
Peterson Creek @ Fulton Road	95%	95%	N/A	100%
Matanzas Creek @ Hoen Frontage Rd	90%	99%	100%	100%
Paulin Creek @ Mendocino Avenue	100%	100%	100% (100%)	100%
Brush Creek @ Hwy 12	95%	98%	100%	99%
Colgan Creek @ Bellevue Ave	70% (55%)	86%	75%	89%
Piner Creek @ Marlow Road	90%	96%	95%	98%
Santa Rosa Creek @ Melita Road	100%	99%	100%	99%
Santa Rosa Creek @ Piner Creek	75%	N/A*	90%	N/A*

*New location added this permit year no data from previous years.

Comparison with recent bioassay results indicates improved water quality at all sites except Colgan Creek. Over the course of the sampling program, results for Matanzas, Peterson, and Piner Creeks have shown lower survival rates during the first flush on three sampling events. This year's results for Matanzas, Peterson, and Piner Creeks indicate no toxicity to fish. Colgan Creek had lower survival rates for the first flush in three out of the last four years and during the representative storm sampling for the last two years.

Due to lower survival rates over the last several years on Colgan Creek, the City conducted a constituent analysis during the first flush (Table V.3). The constituents analyzed included the same ones analyzed by the County of Sonoma and the Sonoma County Water Agency as part of the first permit term.

See **Appendix V.C** for results of 11/9/2003 Bioassay Survey.

Table V.3

**Summary of Chemical Monitoring Results for Colgan Creek
at Bellevue Avenue During the First Flush 2003.**

CONSTITUENT	Colgan Creek at Bellevue Avenue <i>mg/L</i>	Detection Limits <i>mg/L</i>
Arsenic [total]	ND	0.0020
Chromium [total]	ND	0.010
Copper [total]	ND	0.020
Lead [total]	ND	0.0050
Mercury [total]	ND	0.0010
Nickel [total]	0.010	0.010
Silver [total]	ND	0.010
Zinc [total]	0.065	0.020
BOD [5 day]	6.4	5.0
Nitrate	3.5	1.0
Total Kjeldahl Nitrogen	1.4	1.0
COD	32	10
Total Phosphorus as P	0.32	0.10
Oil and Grease	ND	5.0
Total Dissolved Solids	81	10
Total Suspended Solids	22	1.0
Fecal Coliform	260000	2 MPN/100 ml
Fecal Streptococcus	280000	2 MPN/100 ml
Acetone	ND	5.0 µg/L
Methyl ethyl ketone	ND	1.0 µg/L
Methylene Chloride	ND	0.50 µg/L
Phenol	ND	0.50 µg/L

Most of the constituents were not detected and others were within ranges comparable to the storm water samples taken by the County and Water Agency at Santa Rosa Creek. The City may conduct additional analysis in the future to identify what is causing low bioassay survival rates on Colgan Creek.

3. STUDENT BENTHIC COMMUNITY SURVEY

In 2004, five high schools in the Santa Rosa City School District participated in the “City of Santa Rosa Aquatic Macroinvertebrate Bioassessment Project” (due to unforeseen circumstances, Santa Rosa High School was unable to participate this year). The focus and primary goal of this program is to provide education to high school students and teachers about how human actions affect storm water pollution. The curriculum is focused on watershed dynamics, riparian and aquatic habitat, and aquatic macroinvertebrates (spineless aquatic insects). Secondly, the program is designed to teach students how to use a water quality monitoring technique to evaluate the biological and physical conditions of Santa Rosa’s creeks. Students utilize the California Department of Fish Game (CDFG) Protocol, “California Stream Bioassessment Procedures (Habitat Assessment and Biological Sampling for Citizen Monitors)” (CSBP) under the direction of the staff Program Adviser. The CSBP is a method of taking macroinvertebrates out of a creek (organisms such as mayflies, stoneflies and caddisflies) and determining water quality based on their diversity and abundance. The 2004 Aquatic Macroinvertebrate Bioassessment Report is attached as **Appendix V.D**.

Ridgway High School is a continuation school that since 2000 has received a simplified version of the program and has used an alternative field protocol to process and identify the samples. This occurs mainly because there is a high turnover rate of students, making it difficult to teach the CSBP protocol to the same group of students thoroughly.

The following is a list of high schools, teachers, and number of students, sample dates and sample locations, for the 2004 data collection:

1. **Elsie Allen High School:**
Number of Students: 28
Sample Date: March 23, 2004
Sample Location: Colgan Creek at Bellevue Avenue
2. **Piner High School:**
Number of Students: 50
Sample Date: April 26, 2004
Sample Location: Petersen Creek west of Fulton Road
3. **Montgomery High School:**
Number of Students: 22
Sample Date: March 11, 2004
Sample Location: Matanzas Creek at Hoen Frontage Road
4. **Maria Carrillo High School:**
Number of Students: 26
Sample Date: March 29, 2004
Sample Location: Brush Creek south of Highway 12
5. **Ridgway High School:**
Number of Students: 9

Sample Date: June 3, 2004

Sample Location: Paulin Creek west of Mendocino Avenue

The previous staff Project Adviser compiled a comprehensive “2000 Aquatic Macroinvertebrate Bioassessment Project” manual. In an effort to reduce the amount of reading material assigned to the students, only certain portions of this manual were distributed to students in 2004. See **Appendix V.D.**

Data Analysis

Data collected from this project will be analyzed using classifications outlined in the above CDFG protocol. The 1998 data served as baseline data for 1999, 2000, 2001, 2002, 2003, and 2004 comparisons. The data has also been analyzed for variations between sites within the watershed.

4. PROFESSIONAL BENTHIC COMMUNITY SURVEY

Every year, samples are collected for the “Professional Benthic Community Survey” using the California Department of Fish and Game protocol, “California Stream Bioassessment Procedures (Habitat Assessment and Biological Sampling for Citizen Monitors).” Creek reaches have been identified as appropriate sampling areas in Matanzas, Brush, Piner, Paulin, Peterson, and Colgan Creeks, and riffles have been chosen from those reaches when the flows diminish. A Chain of custody form is completed for each sample. Every two years the samples are sent to an appropriate testing laboratory for sample processing, macroinvertebrate identification, and data analysis. Samples were collected in 2004 but they were not sent to a laboratory for analysis.

Part VI

**Standard Urban Storm Water Mitigation Plan
(SUSMP)**

**Permit Term 2
Annual Report 1**

Standard Urban Stormwater Mitigation Plan (SUSMP)

Goal Minimize storm water pollution, limit storm water peak flows, and conserve natural areas to MEP from new and redevelopment

Measurable Goals

The following measurable goals were implemented during the 2003-2004 fiscal year. Implementation times are shown as months after permit adoption, June 26, 2003.

Table VI.1
Implemented Measurable Goals

LEGAL AUTHORITY	CITY	COUNTY
Determine if legal authority exists to implement SUSMP	3 months	3 months
If legal authority does not exist- establish legal authority.	12 months	12 months
Review General Plan for conformance to water quality and watershed protection principles and policies.	9 months	15 months
Review applicable codes for conformance with SUSMP requirements.	12 months	12 months
Revise the environmental review process as needed to evaluate water quality impacts of storm water runoff from new development and redevelopment projects	12 months	12 months
GUIDANCE DOCUMENTATION		
Update special provisions general specifications for City/County contracts.	3 months	12 months
PROJECT APPROVAL PROCESS		
Implement SUSMP measures on City/County capital improvement projects, which have not yet begun the environmental review process.	Upon permit adoption.	12 Months
Encourage applicants to implement SUSMP measures on projects.	Upon permit adoption.	Upon permit adoption.

COUNTY

All of the measurable goals were achieved within the specified time frame. See **Section III.1** and **Appendix II.A** to Legal Authority sections above from City and County certifying that legal authority exists to implement SUSMP.

See **Appendix VI.A** describing the adequacy of the County environmental review process to evaluate water quality impacts.

See sample specifications for construction contract for Valley of the Moon Childrens' Home administered by Sonoma County Architect, for a typical example of updated contract special provisions related to water quality. See **Appendix VI.B.**

The County has implemented storm water detention basins at Valley of the Moon Childrens' Home and Juvenile Justice Center projects with the encouragement of the North Coast Regional Water Quality Control Board.

CITY

The City has determine that the legal authority exists to implement SUSMP and has reviewed the General Plan and has found it to be in conformance with the water quality and watershed protection principles and policies in SUSMP. The City has recently adopted a new Zoning Code (August 3, 2004). This document will be reviewed for conformance with SUSMP requirements. The findings of that review will be included in the next Annual Report. During this same time period, the City will revise the environmental review process as needed to evaluate water quality impacts of storm water runoff from new development and redevelopment projects. (See **Appendix VI.C.**)

CITY & COUNTY

City and County consider and implement post-construction storm water treatment BMPs for projects managed by their departments whenever possible.

City and County have encouraged applicants to implement SUSMP measures on projects, and have permitted several projects, which incorporate detention basins, proprietary vault stormwater treatment devices, inlet filters and grassy swales.

SUSMP Workshop

On October 9, 2003 the City of Santa Rosa, County of Sonoma and the Sonoma County Water Agency sponsored a day-long workshop on the principles of SUSMP. See Appendix VI.C for workshop information. The workshop was attended by 146 people, including staff of the copermittees, Regional Water Quality Control Boards, and various other cities and counties. There were also many engineers, landscape architects and developers who attended. The workshop served to kick off the SUSMP guidance document development process, which will continue through 2004, with a draft expected in February 2005. (See **Appendix VI.D.**)

The majority of the effort in 2004-2005 will be focused on the process of developing the guidance documents for the SUSMP projects for which the City or County to issue permits. This is a new program, which includes setting up procedures to be followed for the long term, and it will involve a great deal of thought and expense. Emphasis will be placed on using proven methods to reduce stormwater volume and treat runoff where necessary. The County will provide leadership, administer the consultant contract for the guidance document process, and appoint a technical advisory committee to give input to the process.

SUSMP Implementation

The City will require SUSMP implementation on applicable projects within the city limits. The implementation schedule for private projects outside the Santa Rosa city limits requires SUSMP measures to be implemented on applicable projects “within Urban Growth Boundary within Permit Boundary”. This appears to be a typographical error. Urban Growth Boundary is a term used by incorporated cities to refer to the limits of their planned growth. The corresponding term for unincorporated Sonoma County is “Urban Service Area”. While the County endeavors to make the Urban Service Area boundaries contiguous with the Urban Growth boundaries whenever possible, in cases where these boundaries differ, the County will implement SUSMP measures on applicable projects within the Urban Service Area (outside incorporated cities, and in unincorporated communities) within the Permit Boundary.