

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

Storm Water Management Plan

NPDES Permit No. CA0025054

PERMIT TERM 3

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
December 2007**

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CERTIFICATIONS

CERTIFICATION CITY OF SANTA ROSA


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

CITY OF SANTA ROSA



Mayor

ATTEST:



Deputy City Clerk

As authorized by City Council Resolution No. 26986 and required by 122.22 Code of Federal Regulations.

THE WITHIN INSTRUMENT IS A CORRECT COPY
OF THE ORIGINAL ON FILE IN THIS OFFICE.

ATTEST: **DEC - 6 2007**

PRMD

#38
Resolution No. 07-1002
County Administration Building
Santa Rosa, CA

ROBERT DEIS, Clerk of the Board of Supervisors
of the State of California, in & for the County of
Sonoma

BY



DEPUTY

Date: December 4, 2007

CONCURRENT RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SONOMA AND THE BOARD OF DIRECTORS OF SONOMA COUNTY WATER AGENCY AUTHORIZING AND DIRECTING STAFF TO SUBMIT TO THE NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD THE APPLICATION PACKAGE FOR YEAR 2008-2013 FOR NPDES DISCHARGE PERMIT NO. CA0025054 FOR STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEMS.

WHEREAS, on June 26, 2003, the North Coast Regional Water Quality Control Board (Regional Water Board) adopted Order No. R1-2003-0062, Waste Discharge Requirements for the City of Santa Rosa, the County of Sonoma, and the Sonoma County Water Agency, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0025054; and

WHEREAS, the NPDES Permit No. CA0025054 has a five year term and expires on June 26, 2008; and

WHEREAS, the NPDES Permit No. CA0025054 requires an application be submitted to the NCRWQCB at least 180 days prior to permit expiration; and

WHEREAS, that application primarily consists of a Storm Water Management Plan specifying tasks to be undertaken to prevent and/or minimize the discharge of pollutants into the municipal separate storm sewer system (MS4) for the Santa Rosa area; and

WHEREAS, the City of Santa Rosa, the County of Sonoma and the Sonoma County Water Agency have developed a revised Storm Water Management Plan addressing all required issues.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Supervisors of the County of Sonoma and the Board of Directors of the Sonoma County Water Agency hereby finds, determines, and declares as follows:

1. The above recitals are true and correct.
2. Staff is authorized and directed The Chair directs staff to submit the Storm Water Management Plan to the NCRWQCB as the application package to renew NPDES Permit No. CA0025054 for Storm Water Discharges from Municipal Separate Storm Sewer Systems.



BE IT FURTHER RESOLVED that the Clerk of the Board is designated as the custodian of the documents and other materials that constitute the record of the proceedings upon which the Boards decision herein is based. These documents may be found at the office of the Clerk of the Board, 575 Administration Drive, Room 100A, Santa Rosa, California 95403.

COUNTY OF SONOMA
BOARD OF SUPERVISORS:

Kerns: Smith: __ __ Kelley: _____ Reilly: _____ Brown:

Ayes: 5 Noes: Absent: Abstain: _

SO ORDERED.

SONOMA COUNTY WATER AGENCY
BOARD OF DIRECTORS:

Kerns: Smith: __ __ Kelley: _____ Reilly: _____ Brown:

Ayes: S Noes: Absent: Abstain: _ _ _ _ _

SO ORDERED.

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Part I

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

NPDES Permit No. CA0025054

Program Management

Sonoma County Water Agency
City of Santa Rosa
County of Sonoma

November 2007

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Attachment I.A

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EXECUTIVE SUMMARY

General Information:

Storm Water Management Plans (SWMP) have been revised with consideration to current SWMP program effectiveness, input received from internal staff and community representatives and to the requirements of the Santa Rosa Area National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Storm Water permit. The City of Santa Rosa (City), the County of Sonoma (County), and the Sonoma County Water Agency (Water Agency) share this permit collectively and are referred to as Co-permittees by the North Coast Regional Water Quality Control Board (Regional Water Board). This will be the third 5-year permit to be issued to the Co-permittees in conjunction with the NPDES storm water program.

The process of SWMP assessment and input gathering for the permit renewal started midway through Year 4 of Term 2 and involved the Regional Water Board, City/County staff and management and the City's Waterways Advisory Committee. A Citizens Advisory Group was formed to provide insight into the community's perspectives and understanding about implementation and effectiveness of current SWMP programs and activities. Input gathered was summarized, collated and analyzed for consideration in the proposed SWMP revisions. This summary is included in Attachment I-A.

Each SWMP describes activities that will be undertaken by the three Co-permittees respectively to reduce the load of pollutants entering the publicly owned or maintained storm water system from the permit area.

Part I Program Management:

Each Co-permittee has jurisdiction over and maintenance responsibility for their respective storm drain systems or watercourses within the permit boundary, which is shown on the map included at the end of this summary (Attachment I.B). A Cooperative Agreement, executed for Terms 1 and 2, exists between the Co-permittees that outlines the responsibility of each. When the third permit is issued, a new agreement will be renegotiated with one of the Co-permittees acting as lead agency for coordinating meetings and assembling annual reports and another co-permittee acting as lead agency for SUSMP program coordination.

Funding for the activities outlined in the SWMP's are derived from City's storm water enterprise fund and utility charges, the County General Fund, City and County permit fees for projects directly related to storm water, the Water Agency General Fund, and Water Agency Zone 1A funds for channel maintenance activities.

Parts II - IV Individual SWMP's for the County, City, and Water Agency:

The individual SWMP's are contained in Parts II, III, and IV. Each part includes eight sections which describe the following program components specific to each co-permittee: Legal

Authority, Private Construction, Industrial/Commercial Sources, Municipal Operations, Illicit Discharge Detection and Elimination, Public Education and Outreach, Effectiveness Evaluation and Fiscal Analysis. Coordination of SWMP program elements associated with Monitoring and Post Construction/Development also called the Standard Urban Storm Water Mitigation Plan (SUSMP) are shared by the Co-permittees and are described in detail in Parts V and VI, respectively.

Part II Sonoma County:

The County is making many changes to its program during this permit term to address several concerns raised during discussions with Regional Water Board staff. These include addressing incidental runoff, adding a special study to evaluate Best Management Practices (BMP) effectiveness and obtain water quality data from storm drain discharges directly from outfall versus in-stream monitoring, and consolidating the grading program within the Engineering Division. The County will continue its efforts in many program areas to protect water quality. These include, but are not limited to, review and update, if necessary, its legal authority to reduce and/or eliminate non-storm water discharges, require erosion and sediment control plans on all grading permits (within and outside the NPDES permit boundary), conduct inspections on grading permit activities, conduct progressive enforcement actions when needed, continue to inspect and educate commercial and industrial sources of pollution, continue street sweeping program, and continue to operate the Environmental Discovery Center, at Spring Lake Park, by the County Regional Parks Department.

Part III City of Santa Rosa:

The City will supplement its program during Term 3 to address several concerns raised during the Term 2 program review which included input from staff, the City Waterways Advisory Committee, a Citizens Advisory Group and discussions with Regional Water Board staff. The City will review its storm water ordinance to ensure consistency with the renewed permit language and requirement. City grading ordinances require grading permits, and allow for inspection of private construction sites. Outreach materials are distributed to these and other potentially polluting businesses, describing BMPs for operation. City construction sites are inspected daily by personnel to ensure that contract specifications, including erosion control measures, are met. Formal BMP standards for erosion and sediment controls will be established. Pesticides, herbicides, and fertilizers will continue to be managed according to the Integrated Pest Management (IPM) program and the city-wide Water Conservation Program. A detailed pesticide and fertilizer use plan will be developed for the Bennett Valley Golf Course. Procedures to minimize incidental runoff from are being implemented for a number of sources including irrigation, summer discharges from nuisance flows, waterline and fire hydrant flushing and reservoir draining. The storm drain system is mapped on the City GIS system, and will continue to be updated periodically. Mapping of storm drain outfalls in City parks will be completed. The storm drain labeling program will be continued. Cleaning of catch basins will be prioritized and tracking of storm drain cleaning activities will be tied to GIS maps. The tiered street sweeping program will be continued to remove pollutants from the streets and gutters on a

consistent basis. Adoption of a Road Maintenance Standards Manual will be evaluated. City transit and parking facilities will continue to be swept annually. The spill response program to investigate and eliminate illicit discharges to the City's storm drains will be continued which includes funding of an Environmental Crimes Officer from the Police Department and maintenance of the CartêGraph® illicit discharge database. The database provides for special illicit discharge summary reports that show the location and respective watersheds of actual spills. The City sponsors many public outreach and education programs, including the Integrated Pest Management program which encourages environmentally sensitive gardening measures, and the high school aquatic macroinvertebrate bioassessment program. Public education and outreach activities/programs will also feature the City's Storm Water and Creeks website, sponsorship of the Creek Stewardship Program, encouragement of pet owners to clean up their animals' waste along creeks through the installation of pet waste signs and provision of trash receptacles along creeks in Santa Rosa and support of RRWA's monthly environmental column in local newspapers. In Term 3, additional activities will focus outreach to contractors, painters and landscapers and a new program will enhance storm water pollution awareness among City staff. Corporate outreach will be pursued. An outreach partnership with the Santa Rosa Junior College will be further refined and developed. Finally, another Community Survey is planned toward the end of Term 3 to aid in determining residential outreach program objectives for Term 4.

Part IV Sonoma County Water Agency:

The Water Agency is a Co-permittee because it owns and maintains some of the flood control channels within the permit boundary. The Water Agency's role in this permit is unique in that it is not a land use authority, and does not have the authority to enact grading ordinances, regulate industrial or commercial facilities, or impose controls on new development. The Water Agency will continue to issue revocable licenses to regulate private construction projects that take place on Water Agency land. Water Agency personnel will conduct inspections on such projects to ensure compliance with the provisions of the revocable license. The Water Agency will incorporate BMPs into projects that the Water Agency undertakes on its own flood control channels, comply with the State General Construction Permit, and perform regular inspections of active projects. Measures to minimize the use of pesticides, herbicides, and fertilizers will continue to be implemented. Problem areas of flood control channels will be cleaned of debris prior to the wet season. Additionally, the employee parking areas at the Water Agency's West College and Aviation facilities will be swept prior to the wet season. Illicit discharges reported to the Water Agency or detected by Water Agency personnel will be investigated and eliminated if within Water Agency jurisdiction or reported to the proper entity for follow-up if outside Water Agency jurisdiction. The Water Agency will continue to rely on the City and County for enforcement. There are several public outreach programs that the Water Agency sponsors and coordinates. These include the Creek Stewardship Program and the Environmental Discovery Center. The Water Agency performs downstream chemical monitoring of Santa Rosa Creek to help assess the health of the stream. SUSMP elements will be incorporated into Water Agency projects in the flood control channels.

Part V Monitoring Plan:

The Monitoring Plan goals are to characterize storm water discharges and assess the overall stream health, assist in gathering data for development of Total Maximum Daily Loads, evaluate long-term trends in receiving water quality, evaluate BMP effectiveness, and identify sources of pollutants to direct resources towards local pollutants of concern. These goals are achieved through implementation of a combination of chemical and biological monitoring of Santa Rosa creeks. The County and Water Agency perform chemical monitoring at locations upstream and downstream of the urban center of Santa Rosa for a first flush and one representative storm. Additionally, two dry weather samples will be collected during the period of May through September.

At the start of the Santa Rosa Area NPDES Storm Water Permit program samples were analyzed for water quality parameters, metals, pesticides, volatile organic compounds, semivolatile organic compounds, and pathogens. During the course of the past two storm water permit terms, constituents have been eliminated as the monitoring results demonstrated that they were not present, or not present in significant concentrations, in the creeks. The City conducted an external review of its monitoring program in 2005 and added chemical monitoring of two outfalls in the Colgan and Piner Creek watersheds. In Term 3, chemical outfall sampling will be continued at these two locations during the first flush and a representative storm event. Samples are analyzed for pollutants of concern (sediment, nutrients, and pathogens) to characterize outfalls that drain residential (Piner Creek) and residential, commercial, and industrial areas (Colgan Creek). For Term 3, the City is adding two additional dry-weather outfall sampling events to characterize flows during the low flow season. Additionally, the City is proposing to add constituents needed for development of TMDLs for nutrients and pathogens.

The City performs the biological component of the Monitoring Plan, which has three parts – three species chronic bioassay sampling on three creeks, professional bioassessment of macroinvertebrate populations at five locations throughout the watershed, and a macroinvertebrate bioassessment program which seeks to involve high school students from the area. These biological components are described in their entirety in Part V-Monitoring Plan. In Term 3, several additional items will be included in the Monitoring Plan including infrared aerial imagery to assist in determining locations of septic discharges and leaking sanitary sewer lines, temperature monitoring to record summer temperatures in several creeks, flow monitoring to detect excessive summertime flows or abnormal discharges and three special studies.

The first special study will entail a water quality based study to determine BMP effectiveness and will be conducted by the County and the Water Agency. The second special study will entail an aerial deposition study to help quantify the amount of nitrogen deposition within the Santa Rosa urban area and will be conducted by the City. The third special study will include City farm storm water monitoring at the Laguna Subregional Water Reclamation System's Kelly Farm for nutrient runoff. Additional details for the three studies are included in Part V

Part VI Post Construction/Development: Standard Urban Storm Water Mitigation Plan (SUSMP)

The Co-permittees will continue to implement the Post Construction/Development Standard Urban Storm Water Mitigation Plan (SUSMP), which seeks to control post-development storm water runoff through source control and treatment control Best Management Practices (BMPs). SUSMP measures are required on new projects that create an acre or more of impervious surface, or are proposed in an environmentally sensitive area. Despite the progress made in the SUSMP program, additional aspects of the program will be further developed in Term 3. These aspects include developing details for the SUSMP treatment offset program, developing guidance on how to address channel forming discharges or preventing hydrograph modification, promoting Low Impact Development (LID) design which will involve conducting LID training for both Co-permittee staff and the local design community, developing SUSMP treatment BMP sizing safety factors, reviewing and augmenting SUSMP project tracking, reviewing existing ordinances for SUSMP program constraints, developing outreach strategy for property owners and home owners regarding SUSMP BMPs on their property as well as evaluating long term maintenance, funding and long term inspections for SUSMP projects. Finally, the SUSMP guidelines will be supplemented with further guidance on appropriate BMPs based on targeted pollutants of concern.

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Part I

Program Management

Goal: Facilitate communication and coordination between the Co-permittees, Regional Water Board and other appropriate entities. Ensure the SWMP elements are implemented on schedule and that all requirements of the Permit are met.

General Information:

The proposed Storm Water Management Plan (SWMP) will be implemented in order to meet the requirements of the California State Water Resources Control Board (SWRCB) and the North Coast Regional Water Quality Control Board (Regional Water Board) as these requirements relate to a municipal storm sewer system (MS4) Phase I National Pollutant Discharge Elimination System (NPDES) permit.

The SWMP is built upon the foundation established by an existing NPDES permitted program: On March 27, 1997, the Regional Water Board adopted Order No. 97-3, Waste Discharge Requirements for City of Santa Rosa (City), Sonoma County Water Agency (Water Agency), and County of Sonoma (County), collectively referred to as Co-permittees, for Storm Water Discharges from the Santa Rosa area, and issued NPDES Permit No. CA0025054 (Permit). The Co-permittees were issued a second permit on June 26, 2003. The SWMPs included in this permit renewal application were prepared to support Term 3 of this Phase I NPDES storm water permit.

The SWMP was developed so that the public may review and comment on the proposed program prior to permit issuance. Permit issuance is anticipated to occur in June 2008. All review comments will be considered for inclusion in the final SWMP that will be published within the time frame required by the Regional Water Board.

Term 3 will continue to emphasize utilizing existing staff and programs as much as possible, continuing the large number of existing activities that effectively improve storm water quality, and implementing new programs as detailed in the Co-permittee SWMPs. The existing boundary contains approximately 19,840 acres of City jurisdiction area, 132,740 acres of County (unincorporated) area and four (4) square miles of Water Agency owned land. See Attachment I.B at the end of this section. The existing boundary includes rural and urban areas: all lands within the Mark West Creek/Laguna de Santa Rosa watershed (co-terminus with the Sonoma County Water Agency Flood Control Zone 1A) and the urban boundary areas of Healdsburg, the community of Graton and Sebastopol.

Term 3 will include the continuation of the Post Development/Standard Urban Storm Water Mitigation Plan (SUSMP) which focuses on channel forming discharge or preventing

Part I Program Management

hydrograph modification. This plan targets the problems associated with increasing the impervious area that usually accompanies development. By considering water quality during the design phase of a project, source-control BMPs and/or treatment-control BMPs can more efficiently be incorporated into projects.

Structure:

This SWMP includes Best Management Practices (BMPs) within eleven program elements:

1. Program Management (Part I)
2. Legal Authority
3. Private Construction Sites
4. Industrial/Commercial Sources
5. Municipal Operations
6. Illicit Discharge Detection and Elimination
7. Public Education and Outreach
8. Effectiveness Evaluation
9. Fiscal Analysis
10. Monitoring Plan (Part V)
11. Post Construction/Development: Standard Urban Storm Water Mitigation Plan (SUSMP) (Part VI)

More specifically, the SWMPs describe how pollutants in storm water runoff will be controlled, and explains the BMPs that address the required program elements. Each SWMP element includes BMPs, Measurable Goals and an implementation schedule for time for completion. Most of the existing activities will be continued or enhanced. Some activities are new and are expected to enhance the Co-permittees efforts toward storm water pollution reduction. As in Term 2, ongoing improvements are welcomed, and not considered changes that require Regional Water Board approval

The Program Management BMPs, common to all three Co-permittees, are found in the next section of Part 1. Each Co-permittee has developed a SMWP that applies to their areas of responsibility, and includes BMPs for the remaining eight elements. Part II explains the County program elements, activities, measurable goals, and implementation schedules. Similarly, Part III explains the City program elements, and Part IV explains the Water Agency program elements. Part V-Monitoring Plan and Part VI-SUSMP are joint program activities, and are shared by all three Co-permittees. Following the Program Management BMPs in Part 1 are the descriptions of the legal authority and fiscal resources needed to implement this program.

The table included at the end of this section, “At-a-Glance Storm Water Management Plan” provides a concise conceptual summary of the elements, activities, goals, and timelines of the SWMP.

Program Management Best Management Practices:

The Program Management goals are to: (1) facilitate communication and coordination between the Co-permittees, Regional Water Board, and other appropriate entities; (2) ensure the SWMP

Part I Program Management

elements are implemented on schedule; and (3) ensure that all requirements of the Permit are met.

Monthly coordination meetings are held and attended by City, Water Agency, and County staff. Regional Water Board staff, Caltrans, and Phase II representatives are also invited to attend to share information and to promote a consistent regional message for storm water pollution prevention. In Term 3, Santa Rosa Junior College representatives will also be invited. Monthly meetings provide a forum to share information on permit activities, coordinate activities where necessary, and discuss relevant storm water management topics.

The Permit requires that the Co-permittees submit an Annual Reports to document the status of all the general programs and individual tasks contained in the SWMPs, including the Monitoring Plan, by October 1 each year. The Annual Report provides a detailed report on the status of the program elements and Monitoring Plan implementation and includes an evaluation of the control measures, best management practices and other actions and activities described in the SWMPs. It also includes a work plan that is used to set the goals for the following year. In Term 3 this report will cover the period from July 1 to the following June 30, and be submitted to the Regional Water Board by October 1 each year for the first three and fifth years. The report for the fourth year in Term 3, will cover the period from July 1 to the following June 30 and will be submitted in March of Year 5 in order to avoid staffing concerns/resource limitations with preparing the Term 4 reapplication and the Year 4 Annual Report at the same time.

The Co-permittees entered into a Cooperative Agreement for Terms 1 and 2. The City serves as Lead Agency and the County as the Lead Agency for the SUSMP program. The Co-permittees anticipate entering into a Cooperative Agreement for Term 3 within six months of permit adoption. One of the Co-permittees will act as Lead Agency and may contract out some of the responsibilities, including:

- Facilitation of monthly meetings and preparation of meeting agendas and notes
- Coordination to prepare and submit the Annual Report to Regional Water Board

Regional Water Board staff will continue to be actively involved in development of annual work plans. As coordinated in Term 2, the Co-permittees will meet with Regional Water Board staff between January and April every year to discuss the work plan. Final work plans will be included in each Annual Reports.

Measurable Goals/Implementation Schedule

- a. Schedule and Conduct monthly Coordination Meetings/Ongoing
- b. Meet with Regional Water Board staff to discuss and develop preliminary annual work plans/First Quarter, Annually.
- c. Prepare Annual Report, Years 1-3 and 5 and Submit to Regional Water Board staff by October 1/Annually
- d. Prepare Annual Report (Year 4) and Submit to Regional Water Board staff by March 31
- e. As appropriate, enter into a Cooperative Agreement for Term 3/Within six months of permit adoption.

- f. Invite representatives from Phase II communities within the permit boundary, Caltrans and the Santa Rosa Junior College to the monthly coordination meetings.

Legal Authority:

Legal authority is needed for the three public agencies to manage the program jointly, as Co-permittees. This is currently set up through a Cooperative Agreement.

The City has authority to enter into interagency agreements pursuant to California Constitution Article XI, Sections 5 and 7. The County and the Water Agency have authority to enter into interagency agreements pursuant to California Government Code Section 6502.

The Co-permittees entered into Cooperative Agreements for Term 1 in 1997 and for Term 2 in 2003. The Co-permittees expect to enter into a Cooperative Agreement for Term 3 following adoption of the third permit. The renewed Cooperative Agreement would lay out the inter-jurisdictional responsibilities to control the contribution of pollution from incorporated areas to unincorporated areas and vice versa and is anticipated to be finalized within six months of permit adoption.

Other Co-permittee specific legal authority is detailed in their respective SWMPs.

Fiscal Resources:

The County of Sonoma funding for Term 1 has been from the County General Fund. Funding for Term 2 has been from the County General Fund and permit fees for development, such as grading permits or building permits. It is anticipated that funding for Term 3 will continue to be from the County General Fund and permit fees. These fees will be reviewed and may need to be revised to cover the costs for the additional expenses related to potential program expansion. As permit fees are dependent upon the quantity of development permits, alternative fees are being investigated.

The City of Santa Rosa established a Storm Water Enterprise and Utility Fund for permit compliance activities within the City limits in 1996. This is 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 charge is increased based on the Consumer Price Index- San Francisco-Oakland so that increased costs due to inflation will be funded. The City also collects permit fees for projects directly related to storm water.

The Sonoma County Water Agency funds the Storm Water Program (all activities related to storm water monitoring and laboratory analysis, pollution prevention education, annual fees, reporting, and permit administration costs through the Water Agency General Fund and Zone 1A funds.

The programs set forth in this document assume that available discretionary funds for each permittee will remain level in the future. "Discretionary funds" means funds not already committed by law to a particular program, and thus available to the Co-permittees for needed public programs such as child abuse protection services, spousal abuse protection and recovery

services, vital public safety programs, alcohol and drug dependency recovery programs, homeless and mental health programs, Russian River environmental enhancement programs, and the like.

In the unfortunate event that the Co-permittees available discretionary funds for fiscal years beginning in FY 2008/2009 are reduced on account of events beyond the control of the Co-permittees (for example, the State Legislature and State Governor decide to balance the state budget for any given fiscal year by taking away revenues now received by the Co-permittees, or reducing the state funding currently provided to the Co-permittees), then it is impracticable, on account of reduced funding, for the Co-permittees to fund the programs set forth in this document at the same level. In this event, the Co-permittees will seek to make a reduction in the funding of the storm water management program, in proportion to the unexpected reduction of the Co-permittees' discretionary funding. The Co-permittees and the Regional Water Board recognize that the SWMP may need to be modified, revised, or amended to respond to changed conditions. Such conditions could include more effective approaches to pollutant control or changes in discretionary funding levels. Co-permittees will work with the Regional Water Board staff to reevaluate and modify program elements. Such modifications could include, but are not limited to, extending implementation dates or substituting, reducing, or eliminating performance goals. Modifications will be made with the intent of preserving programs which have demonstrated a beneficial effect on water quality.

Proposed modifications to the SWMP will be included in the annual work plan which is submitted to the Regional Water Board in the Annual Report, or by separate petition by the Co-permittees. As time is of the essence, Regional Water Board staff recognizes its duty to respond and will work with the Co-permittees to bring the proposed SWMP revisions before the Regional Water Board for consideration as soon as feasible. If the permit is reopened to modify the SWMP by request of the Co-permittees, modifications will be limited to the areas of the Permit proposed for said modification.

Program Implementation:

The program measurable goals and implementation dates included in the SWMP assume that the permit will be adopted prior to July 1, 2008, and that the programs will begin starting on July 1, 2008. Programs included in the Term 2 NPDES permit will remain in effect until June 30, 2008, then continue only as described in this SWMP. The July 1 implementation date is important due to its impact on SWMP program scheduling and implementation and because it coincides with the fiscal year and the hydrologic cycle.

At A Glance

The At-A-Glance Table on the following pages present a summary of the Measurable Goals and Implementation Schedule for Term 3. This summary provides a general description of the storm water pollution prevention programs, best management practices and other actions/activities proposed in the Storm Water Management Plans.

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“At a Glance” Storm Water Management Plan – Term 3

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

June 2008

<u>Proposed Storm Water Management Plan</u>	Measurable Goals and Implementation Schedule Assuming Permit Adoption by July 2008 and Program Implementation on July 1, 2008		
	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.			
Co-permittee Monthly Coordination Meetings	Schedule and conduct monthly coordination meetings <i>Continue through Permit term</i>		
Annual Work Plan	a. Develop preliminary work plan, review with Regional Water Board staff <i>at April Coordination Meeting, Annually</i> b. <i>Final Work Plan submitted with each Annual Report</i>		
Annual Report	Submit to Regional Water Board on time <i>October 1, Annually for Years 1, 2, 3 and 5</i> <i>March 31 (of Year 5) for Year 4</i>		
Cooperative Agreement	Enter into Cooperative Agreement with Copermittees for Term 3 <i>anticipated within 6 months of Program implementation</i>		
Coordination with Phase II Communities, Caltrans, and the Santa Rosa Junior College	Invite representatives from Phase II communities within the permit boundary, Caltrans, and the Santa Rosa Junior College to monthly coordination meetings <i>Continue through Term 3</i>		

<p>Legal Authority Goal: Effectively prohibit non storm water discharges into the storm drain system and receiving waters.</p>			
<p>Review existing codes and propose amendments as required</p>	<p>Review existing Storm Water Ordinance for any needed revisions/updates <i>within 12 months of Permit implementation</i></p>	<p>a. Provide a statement from County Counsel demonstrating adequate enforcement authority/In Year one.</p> <p>b. Consult with Regional Board Counsel/12 months of permit implementation</p>	<p>Water Agency relies on enforcement authority of City and County, and has no plans to seek additional authority.</p> <p>The Water Agency will use its existing legal authority as appropriate.</p>
<p>Private Construction Element Goal: Reduce or eliminate the potential for private construction site generated pollutants to enter the City storm drain system, especially sediment, to the Maximum Extent Practicable.</p>			
<p>Grading Permit Issuance</p>	<p>Continue to implement current approval process.</p> <p>Submit list of active grading permits to RWQCB <i>in each Annual Report.</i></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.</p> <p>d. Review General Plan Resource Conservation Element to support policy changes/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.</p>
<p>Vineyard Planting/Replanting Compliance</p>	<p>N/A</p>	<p>a. All optional: Continue to require Notifications be filed for Level I, II, and III vineyard sites/Ongoing.</p> <p>b. Continue to require ECPs for Level II and III vineyard sites/Ongoing.</p>	<p>N/A</p>

		<p>c. Continue to use local ECP guidelines/Ongoing.</p> <p>d. Continue to post vineyard development information to the County website/Monthly.</p>	
<p>Private Construction Element Goal: Reduce or eliminate the potential for private construction site generated pollutants to enter the City storm drain system, especially sediment, to the Maximum Extent Practicable.</p>			
Private Construction on Public Land	<p>Continue to issue Encroachment Permits that require compliance with California Standard Specifications, Section 7-1.01G "Water Pollution" and the City Storm Water Ordinance</p> <p>Send pre-rainy season letter to applicable parties regarding key points and responsibilities. <i>Annually</i></p>	See Section 2.3 of SWMP.	<p>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.</p>
Inspection of Construction and Vineyard Sites	<p>Inspect sites with active grading permits every two weeks and after major storm events <i>Ongoing</i></p> <p>Submit list of site inspections performed for each grading permit and for each building permit that includes grading to Regional Water Board <i>in each Annual Report.</i></p>	<p>a. Hold pre-construction meetings on grading projects/Once per project.</p> <p>b. Conduct BMP inspections on grading projects of one acre or more prior to October 15 /Once per project per year.</p> <p>c. Conduct BMP verification inspections on grading projects (within permit boundary) during the winter season /Once per project per year.</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.</p>

		<p>d. Continue final grading inspections on all grading projects/ Ongoing</p> <p>e. Inspect Level II & III vineyard sites prior to commencement of any work/Once per project.</p> <p>f. Inspect Level II & III vineyard sites in autumn/Once per year</p> <p>g. Inspect Level I vineyard sites as required/Until construction is completed.</p> <p>h. Report number of vineyard inspections conducted, for Annual Report/Annually.</p> <p>i. Re-draft the PRMD policy entitled, "Pre-construction Meeting Requirements for PRMD Storm Water Inspectors" to include the use of and guidance on using telephone pre-construction discussions./June 2009.</p> <p>j. Draft, approve and implement a policy and procedure regarding photographic documentation /June 2009.</p>	
<p>Private Construction Element Goal: Reduce or eliminate the potential for private construction site generated pollutants to enter the City storm drain system, especially sediment, to the Maximum Extent Practicable.</p>			
<p>Enforcement of Non-Compliant Sites</p>	<p>Follow existing protocol and document verbal and written enforcement notices-</p>	<p>a. Continue enforcement protocol/Ongoing as needed</p>	<p>Use the Water Agency's existing program and the enforcement authority of regulatory agencies to</p>

	<p><i>Ongoing</i></p> <p>Submit list of sites requiring Third and Fourth Level enforcement actions to Regional Water Board <i>in each Annual Report</i></p>	<p>b. PRMD Engineering will notify the RWB on the third enforcement action or upon issuance of a Notice of Violation./Ongoing as needed</p> <p>c. Report the number of non-compliant sites, enforcement actions, and length of time to gain compliance in the Annual Report/ Annually</p>	<p>ensure projects comply with the conditions stated in the Water Agency-issued revocable licenses.</p>
<p>Reporting of Non-Compliant Sites</p>	<p>Notify Regional Water Board verbally within 24 hours and in writing of Third and Fourth Level enforcement actions.</p> <p>Submit list of sites requiring Third and Fourth Level enforcement actions to Regional Water Board <i>in each Annual Report</i></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>Formal BMP Standards</p>	<p>Establish formal BMP standards for erosion and sediment control. <i>By end of Year 2.</i></p>		
<p>Training of Targeted Staff</p>	<p>Submit list of staff that attend and/or participate in erosion and sediment control training to Regional Water Board <i>in each Annual Report</i></p>	<p>a. Continue to invite RWB staff to ride along with inspectors/Annually</p> <p>b. Continue “Code Corner” meetings/Ongoing.</p> <p>c. Provide formal training to Engineering inspectors and technicians/Once per employee./Annually</p> <p>d. Create a training database to</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>

		track and ensure key personnel identified above meet the training goals/June 2009.	
Industrial/Commercial Element Goal: Reduce the potential for pollutants to contact storm water to MEP			
Inventory of Facilities	Maintain database of businesses within City that may be required to file NOI and comply with the terms of State General Industrial Permit. <i>Submit in each Annual Report</i>	Maintain data base of food facilities and closed landfills (EH), and businesses regulated by DES/Annually	N/A
Food Facility Inspections	Inspections are performed for wastewater discharge compliance. There are no measurable goals associated with this activity for the municipal storm water permit.	Inspect twice during the 5-year permit term/Ongoing.	N/A
Retail Gasoline Outlet and Auto Repair/Auto Body Service Facilities Inspections	RGOs will be inspected annually through the Fire Department annual hazardous materials inspections. Outreach materials will be distributed during annual inspections. No measurable goals associated with the Auto Repair/Auto Body Service Facilities Inspections.	a. Inspect RGOs annually and ASFs on routine basis/Ongoing. b. Enhance inspections to include stormwater BMPs at RGOs and ASF's/ Ongoing. c. Increase inspection frequency/Once every 2.5 years.	N/A
Industrial/Commercial Outreach	Current outreach materials for contractors, landscapers & painters will be evaluated & updated in Year 2.		

	<p>Meeting with industry/trade representatives to identify an effective outreach strategy for contractors, landscapers & painters in Year 3.</p> <p>Outreach plan will be implemented in Year 4.</p>		
Industrial/Commercial Enforcement	<p>1. Follow enforcement protocol for industrial/commercial facilities without industrial waste permits, for Waste Water Ordinance and for Recycled Water User's Guide.</p> <p>2. Report on enforcement activities in each Annual Report view and submit findings to Regional Water Board.</p>	<p>a. Use progressive enforcement/Ongoing.</p> <p>b. Adopt CalEPA expanded Administrative Enforcement Order process/Ongoing</p> <p>c. Report referrals to RWB/Ongoing</p>	N/A
Interagency Coordination for Industrial/Commercial Facilities Program	<p>Continue to conduct monthly Environmental Crimes meetings with pertinent City staff.</p> <p>Continue to participate in SEQAC meetings during which compliance staff participate in roundtable discussions.</p>	<p>a. Participate in monthly permit Coordination meetings/Ongoing.</p> <p>b. Notify RWB staff of violations/Within 60 days.</p> <p>c. Participate in SEQAC discussions.</p>	N/A
Training of Targeted Staff	<p>A description of the training provided and a list of participants will be included in each Annual Report.</p>	<p>a. Train Environmental Health inspectors/Annually.</p> <p>b. Continue food team meetings and discussions/Ongoing.</p>	N/A

		c. Train Emergency Services inspectors on storm water BMPs/ Ongoing.	
Municipal Operations Element Goal: Reduce or prevent pollution in storm water runoff from all municipal land uses areas, facilities, and activities			
Public Construction Activities Management: Incorporate effective Best Management Practices to reduce the discharge of pollutants in storm water run-off, especially sediment, from public construction sites.			
Contract Documents	<p>Continue to include Special Provisions as part of City construction contract documents for all public improvement projects.</p> <p>Revise Special Provisions Section 7-1.01 to reflect formal BMP standards for erosion and sediment control measures. <i>By end of Year 3.</i></p>	<p>a. Continue to reference appropriate BMPs in construction documents/Ongoing.</p> <p>b. Review and update construction standard documents to ensure they include the most recent BMPs/Once during Permit term.</p> <p>c. Continue to integrate appropriate Low Impact Development technologies into project planning and design phases (Regional Parks)/Ongoing.</p> <p>d. Continue post construction monitoring to ensure the proper installation, maintenance, and/or removal of BMPs (Regional Parks).</p>	Review Special Provisions and General Specifications for existing BMPs to determine if they are adequate. Submit needed changes, if any, in Annual Report No. 2.
Compliance with State General Construction Permit	The City will file and NOI for applicable projects and maintain compliance with applicable terms of the State General Construction Permit.	Continue to submit NOIs for projects subject to the State General Construction requirement/Ongoing.	File NOI for applicable projects, as required

	Each Annual Report to the Regional Water Board includes a list of City projects that have complied with the terms of the State General Permit		
Inspection	Continue to inspect public construction sites during construction activities and document in a construction diary. <i>Ongoing</i>	a. Continue to inspect public construction sites during construction activities/Ongoing. b. Continue post construction monitoring to ensure the proper installation, maintenance, and/or removal of BMPs (Regional Parks)/Ongoing.	Continue to inspect active construction sites.
Enforcement	Continue to implement progressive enforcement procedures. <i>Continue through Term 3</i>	Continue to enforce construction documents regarding failure to carry out orders or contract provisions/Ongoing.	Take action for non-compliance based on contract specifications.
Training of Targeted Staff	Continue to discuss storm water quality requirements during pre-construction conferences for public improvement projects. <i>Ongoing</i>	a. Continue to provide training to all applicable employees/Ongoing. b. Provide annual training to key personnel, to enhance BMP knowledge/Annually.	Assess current education and training practices for construction practices. <i>Permit Year 1</i> Update, if necessary. <i>18 months from permit implementation.</i>
Training of City Staff for General Storm Water Awareness	Create a general storm water awareness and pollution prevention educational outreach brochure for all new City employees. <i>By end of Year 1.</i> Perform voluntary survey of existing City employees to determine level of storm		

	<p>water awareness among staff <i>by end of Year 2.</i></p> <p>Develop and implement outreach to existing City staff <i>by end of Year 3.</i></p> <p>Resurvey existing City employees to determine effectiveness of outreach <i>by end of Year 4.</i></p> <p>Document results of training Measurable Goals in each Annual Report.</p>		
<p>Municipal Services Center (Corporation Yard)</p>	<p>Continue compliance with General Storm Water Permit for Discharges Associated with Industrial Activities and the Municipal Services Center's SWPPP. <i>Continue through Term 3.</i></p>		
<p>Landscape and Recreational Facilities Management: Incorporate effective Best Management Practices to reduce or eliminate pollutants resulting from maintenance activities of landscaped areas and recreational facilities.</p>			
<p>Pesticide management</p>	<p>Keep pesticide use below the levels used prior to the implementation of the Integrated Pest Management Program. <i>Continue through Term 3.</i></p> <p>Seek less toxic materials and new methods/techniques to reduce pesticide use. <i>Continue through Term 3.</i></p>	<p>a. Continue to follow chemical use, storage, disposal and reduction practices/Ongoing.</p> <p>b. Continue native vegetation and water conservation practices/Ongoing.</p> <p>c. Continue to maintain and updatedatabase for staff training certification regarding these practices/Annually.</p>	<p>Utilize low-impact pesticide management.</p>

	Develop detailed pesticide and fertilizer plan for Bennett Valley Golf Course. <i>By end of Year 3.</i>	d. Maintain and update written guidelines regarding these practices/During Permit term.	
Fertilizer management	Continue to implement standard procedures of Fertilizer Management Plan and provide training in proper fertilizer application and storage to appropriate staff as needed. <i>Continue through Term 3</i> Develop detailed pesticide and fertilizer plan for Bennett Valley Golf Course. <i>By end of Year 3.</i>	See "Pesticide Management".	Utilize recycled water for irrigation which offsets the need for fertilizer at the Water Agency's West College facility.
Planting and Retention of Native Vegetation	Support recommendations contained in Citywide Creek Master Plan to promote use of native vegetation along local creeks & riparian areas. <i>Continue through Term 3.</i>	See "Pesticide Management".	Incorporate retention and planting of native vegetation in design projects on flood control facilities. (See also, Public Outreach)
Procedures to Reduce Water, Fertilizer and Pesticides Needs	Implement current procedures to reduce water, fertilizer and pesticide needs within City park grounds and landscaped areas. <i>Continue through Term 3.</i>		
Disposal of landscape waste	Continue to grind and reuse waste materials as compost and mulch <i>Continue through Term 3.</i>	a. Continue to follow practices as noted in Plan/Ongoing. b. Continue to maintain and update guidance documents for practices/During Permit term.	Use chipped brush and weeds as mulch around existing vegetation at Water Agency Channels.

<p>Recreational water bodies</p>	<p>Implement existing activities. <i>Continue through Term 3.</i></p>	<p>a. Continue to follow practices as noted in Plan/Ongoing. b. Maintain and update written guidelines and practices for management of water bodies/During Permit term.</p>	<p>County manages Spring Lake Park for agency. Continue to limit equipment and material storage in Water Agency's flood control channel right-of-way.</p>
<p>Swimming pool discharge</p>	<p>Continue to implement existing activities</p>	<p>See "Recreational Water Bodies"</p>	<p>N/A</p>
<p>Procedures to Minimize Incidental Runoff</p>	<p>Continue to implement existing activities and implement new activities with 2007 water rate structure. Inspect new landscapes in accordance with WELF and SRFLP. Provide Recycled Water User's Guide to all new sites using Recycled Water. <i>Ongoing</i></p> <p>Develop tracking system for reported locations of incidental runoff. <i>By end of Year 1.</i></p> <p>Draft and submit to Regional Water Board dechloration procedures and measures to manage/reduce flow volume and volume/velocity impacts on downstream waterways in <i>Year 1. Finalize in Year 2.</i></p> <p>Address summer discharges from specific types of nuisance flows in resident outreach strategy. <i>Complete outreach to residents by end of Year 5.</i></p>		

<p>Park Construction and/or Rehabilitation Projects</p>	<p>Comply with General Construction Permit. <i>Continue through Term 3.</i></p>		
<p>Storm Drain System Operation and Management</p>			
<p>Storm Drainage System Mapping</p>	<p>Update storm drain mapping on City GIS site. <i>Continue through Term 3.</i> Complete mapping of storm drain systems in City parks and the Bennett Valley Golf Course. <i>By end of Year 3.</i></p>	<p>a. Develop GIS database for inventory of storm drain systems (Parks)/During Permit term. b . Inventory and map other Public Works’ systems in urban areas.</p>	<p>Review existing mapping. <i>Permit Year 3</i> Modify maps, as needed, by the end of Permit Year 5.</p>
<p>Clean and inspect storm drain pipe and inlet structures</p>	<p>Continue to clean and inspect 130,000 feet of storm drain pipe and 1200 structures <i>Annually</i></p> <p>Monitor summertime flows in storm drain sections being cleaned to assist in identifying summertime flows or non-storm discharges. <i>Continue through Term 3.</i></p> <p>Begin to input storm drain cleaning data into electronic database in <i>Year 1.</i> Graphically display storm drain cleaning history <i>by end of Year 5.</i></p> <p>Prioritize catch basin cleaning. <i>By end of Year 1.</i></p> <p>Analyze catch basin cleaning and re-evaluate</p>	<p>a. Continue cleaning and inspection of problem inlets/Annually. b. Develop and maintain a database for problem inlets and storm drain systems by year three of the permit term. (Parks) c. Develop a priority system to address problematic drain inlets for remediation by year four of the permit term. (Parks)</p>	<p>Pipes through City treated as open channel, see below.</p>

	<p>catch basin priorities as needed. <i>By end of Year 3.</i></p> <p>Implemented prioritized catch basin inspection and cleaning schedule. <i>By end of Year 4.</i></p>		
Flood control channel or road side ditch inspection and maintenance	<p>Continue to inspect and remove debris for flood control purposes <i>Annually</i></p>	<p>a. Continue to inspect and remove debris for flood control purposes/Annually.</p>	<p>Continue to provide trash cleanup in Water Agency channels, coordinate with local law enforcement when possible. <i>Annually, as needed</i></p>
Storm drain labeling	<p>Continue storm drain labeling program to replace damaged, worn or missing decals as needed.</p> <p><i>Ongoing</i></p> <p>Identify inlets not yet labeled and develop and implement a plan to label, as possible. <i>By the end of Term 3.</i></p>	<p>b. Maintain and update written guidelines and procedures (Parks)/During Permit term.</p> <p>c. Inspect storm drain inlets to ensure labels are installed (Parks)/Annually.</p> <p>e. Install labels on all new inlets in urban areas/Ongoing.</p>	<p>Label and maintain labels at storm drains within the West College Facility.</p> <p><i>Six months of permit implementation.</i></p>
Trash Management	<p>Require management of trash and litter generated from public events for which City issues a Special Event Permit.</p> <p><i>Continue through Term 3.</i></p>		
Streets and Roads Maintenance			
Street sweeping frequency	<p>Continue to sweep streets as prioritized below:</p> <p>Priority A <i>three times per week.</i></p> <p>Priority B <i>twice a week</i></p>	<p>a. Industrial and Commercial Areas in the permit boundary six (6) times a year/Annually.</p> <p>b. Urbanized residential areas in boundary-3x/year/Start date</p>	<p>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</p>

	Priority C <i>once a week</i> Priority D <i>monthly</i> <i>Ongoing</i>	2010. c. Various streets, intersections, and other including Regional Parks parking lots-upon request/Ongoing.	appropriate. Continue to limit vehicular access to Water Agency roads.
Material management – Road Construction, Sweeping, Pipe/Ditch Cleaning	Continue to properly recycle or dispose of materials. <i>Ongoing</i>	a. Continue good housekeeping practices/Ongoing.	Continue to limit equipment and material storage in Water Agency’s ROW. <i>Ongoing</i>
Training of targeted staff	Continue to provide training to staff as needed. <i>Annually</i>	a. Continue meetings to discuss streets and road maintenance activities throughout the permit period./Ongoing (Parks) b. Provide training to applicable staff on water quality and fish protection outlined in the Road Maintenance Standards Manual./Ongoing (Parks). c. Routinely meet to discuss streets and road maintenance activities throughout the permit term./Ongoing d. Review current streets and road maintenance practices, including BMPs related to materials management, on an ongoing basis throughout the permit term./Ongoing	Provide informal road maintenance BMP training. <i>As-needed</i>
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>	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>

<p>Spill clean up</p>	<p>Respond <i>immediately</i> to priority reports/ <i>within one business day</i> for non urgent small spills</p>	<p>a. Continue to clean up and dispose of spills as required/Ongoing.</p>	<p>Respond in a timely manner. Use spill response protocol for hazardous or unmanageable spills.</p>
<p>Emergency Procedures</p>			
<p>Emergency Procedures and Hazardous Material Response Plan</p>	<p>Continue to implement the Emergency Operations and Hazardous Materials Response Plan. <i>Ongoing</i></p>	<p>a. Continue to implement Emergency Operations Plan/Ongoing b. Review and update Area Plan in August 2010/One Time c. Review and update Emergency Operations Plan as necessary./Ongoing d. Review and update Spill Plan as necessary./Ongoing e. Report Plan updates in Annual Report/Annually. f. Continue interagency emergency coordination/Ongoing.</p>	<p>Review existing Water Agency emergency operations plan for appropriate changes. <i>Permit Year 3</i></p>
<p>Public Events on City Property</p>	<p>Require management of trash and litter generated from public events for which City issues a Special Event Permit. <i>Continue through Term 3.</i></p> <p>Develop educational materials for food vendors and attach to all City park reservation permits. <i>Complete by end of Year 1. Continue through Term 3.</i></p>		

Illicit Discharge Detection and Elimination Element Goal: Detect and minimize illegal non storm water discharges			
<p>Spill Response</p>	<p>Continue existing illicit discharge detection and elimination activities. <i>Ongoing</i></p> <p>Maintain records of spill response actions and summarize in each Annual Report. <i>Ongoing</i></p>	<p>a. Continue existing illicit discharge detection and elimination activities/Ongoing.</p> <p>b. Report activities in Annual Report/Annually.</p>	<p>Implement current program.</p>
<p>Private sanitary septic systems</p>	<p>Follow up on reported problems until resolved <i>Ongoing</i></p> <p>Conduct infrared imagery flight over Santa Rosa Creek and all tributaries upstream of downtown Santa Rosa in Year 1. Investigate and analyze “hotspots” in Year 2. Outreach/ enforcement in Year 3. Progress reports will be provided in applicable Annual Reports.</p>	<p>a. Follow up on reported problems until resolved/Ongoing</p> <p>b. Continue to investigate illicit septic system discharges and report the number of spills in the annual report./Annually</p>	<p>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></p>
<p>Enforcement Procedures</p>	<p>Follow written enforcement procedures as needed. <i>Ongoing</i></p>	<p>a. County agencies will continue to pursue current enforcement actions to obtain compliance for illicit discharge detection and elimination.</p> <p>b. Report the number of storm water pollution enforcement actions in the annual report./Annually</p> <p>c. County agencies will continue to implement existing</p>	<p>Water Agency works with responsible party, City, County, and other regulatory agencies to correct the problem. <i>Continue with existing program.</i></p>

		<p>enforcement procedures in the NPDES permit boundary.</p> <p>d. County agencies will develop/revise policies and procedures, as necessary, during the permit term./Ongoing</p> <p>e. County agencies will notify the Regional Water Board in writing on the third enforcement action or Notice of Violation./Ongoing</p>	
<p>Record Keeping and Documentation</p>	<p>Continue to update database as complaint response and inspections are completed. <i>Ongoing</i></p> <p>Document illicit discharge detection and elimination activities and summarize in each Annual Report. <i>Annually</i></p> <p>Provide special illicit discharge summary reports with GIS tracking. <i>Annually</i></p>	<p>a. Continue to practice recordkeeping by Public Works, Environmental Health, Emergency Services, PRMD/Ongoing.</p> <p>b. Report number of illicit discharges in the annual report/Annually.</p>	<p>Develop tracking system for illegal discharges.</p> <p>List reported spills in annual report.</p>
<p>Illicit Connection Investigation & Termination</p>	<p>Document field inspection results from storm drain cleaning crew <i>Ongoing</i></p> <p>Describe any identified illicit connections to the storm drain system and steps taken to eliminate. <i>Annually</i></p>	<p>a. Continue illicit connection investigation and enforcement protocol/Ongoing.</p>	<p>Investigate the sources of illicit discharges within flood control channels. Notify and provide support to appropriate municipality for discharges originating outside of channels.</p>

<p>Disposal of used oil and toxic materials</p>	<p>Integrated Waste Management</p>	<p>a. Continue to implement existing used oil and toxic materials programs/Ongoing.</p> <p>b. Report amounts collected by Public Works programs in the annual report/Annually.</p>	<p>Rely on existing programs by others. Provide outreach material developed by others where appropriate.</p>
<p>Training of targeted staff</p>	<p>Training provided annually, documented, and summarized in each Annual Report.</p> <p><i>Ongoing</i></p>	<p>a. Continue to provide training to key staff/Ongoing.</p>	<p>Review and update training for spill response personnel.</p> <p><i>1 yr of permit implementation</i></p> <p>Provide annual review of contact information.</p>
<p>Inspection of Incidental Runoff</p>	<p>See Municipal Operations section for details.</p> <p>Develop tracking system for reported locations of incidental runoff.</p> <p><i>By end of Year 1.</i></p> <p>Address summer discharges from specific types of nuisance flows in resident outreach strategy. <i>Complete outreach to residents by end of Year 5.</i></p>	<p>a. During May through October, conduct monthly incidental runoff inspections of urban clusters. July 2008/Ongoing</p> <p>b. Meet with water utilities to discuss regulation of incidental runoff. July 2009/</p> <p>c. Develop handout on incidental runoff for the public. June 2009/</p> <p>d. Review legal authority on incidental runoff. June 2009</p> <p>e. Propose and draft legal authority to regulate discharges from irrigation runoff. June 2010.</p> <p>f. Draft and adopt policy for enforcement of incidental runoff. June 2010.</p> <p>g. Report the number of inspections and enforcement actions./Annually</p>	

Public Education and Outreach Element Goal: Increase the community’s knowledge of the storm drain system and the impacts of urban storm water run off, encourage behavioral changes thereby reducing pollutant release to the receiving waters to the Maximum Extent Practicable.

General Public/Residents

Residential Outreach	Evaluate results of Term 2 Community Survey and develop strategy for implementation <i>in Year 1</i> . Outreach to residents to be completed by <i>end of Year 5</i> . Perform Term 3 Community Survey to assist in developing Term 4 outreach strategy. <i>Complete in Year 4. Provide copy in Year 5 Annual Report.</i>		
Storm drain inlet decal program	Continue to provide decal kits to volunteer groups <i>Ongoing</i>	See “Municipal Operations, Storm Drain System Operation and Management Section - Storm Drain Labeling”.	Evaluate efficacy of incorporating storm drain labeling program into creek stewardship program. <i>Permit Year 1</i>
Environmental column in local newspapers	Reference RRWA Environmental Columns <i>in each Annual Report</i> . Issue a minimum of two media releases regarding storm water program items of interest or about storm water pollution prevention. Provide copies of media releases & describe follow-up media coverage <i>in each Annual Report</i> .	Continue working with the local newspapers to publish environmentally based articles and report on status in Annual Report/Annually.	Continue working with the local newspapers to publish environmentally based articles and report on status in Annual Report/Annually
Website	Continue to keep Storm Water and Creeks Website current. Track number of	Continue to fund and update the Sonoma County website and “sonomacountystormwater.org”	Include info on creek stewardship program.

	visitors to each storm water page and report numbers of significance in <i>each Annual Report</i> .	URL./During permit term.	<i>Permit Year 3.</i>
Creek Stewardship Program	<p>Each year a minimum of 3 creek walks, 3 creek presentations and six volunteer creek clean-ups will be coordinated. <i>Annually</i></p> <p>Promote Creek Stewardship activities in City Adventure Guide. Include copies of promotions in <i>each Annual Report</i>.</p> <p>Send email reminder to Creek Stewards each spring about reporting outfalls with summer flows. Copy of email to be included in <i>Annual Report</i>.</p>	<p>a. Conduct survey of horse facilities adjacent to major creeks within boundary/2011</p> <p>b. Provide horse facility owners with prepared materials as part of (a) above/2011.</p>	<p>Work with groups to develop Creek stewardship program and signs.</p> <p>Provide half of funding required for project coordinator.</p>
Pet waste signs	<p>Quantify & describe informational, pet waste and creek crossings signs installed or replaced in <i>each Annual Report</i>.</p> <p>Provide list of locations with pet waste signs, pet waste dispensers and trash receptacles in <i>each Annual Report</i>.</p> <p>Install 10 new trash receptacles and 5 pet waste bag dispensers <i>by end of permit term</i>.</p>	<p>a. Continue to install pet waste signs at Regional Parks facilities and maintain inventory/Ongoing.</p>	<p>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></p> <p>Post signs yearly thereafter as needed</p>

<p>Public Events</p>	<p>Participate in a minimum of 6 public events each year. Summarize in <i>each Annual Report</i>.</p>	<p>See “Hazardous Waste Disposal” below.</p>	<p>Participate each year in Sonoma County Fair. Distribute outreach materials at fair. Ongoing, <i>annually</i></p>
<p>Hazardous Waste Disposal</p>	<p>Continue to pass out recycle guide at PW-Storm Water outreach events. <i>Ongoing</i></p> <p>Continue to provide recycling guide or information on the Household Toxics Facility to responsible parties of illicit discharges. <i>Ongoing</i></p> <p>Continue to work directly or indirectly (such as through the RRWA) with SCWMA on toxics collection and recycling programs. <i>Ongoing</i></p> <p>Provide tally of number of Recycling Guides distributed in <i>each Annual Report</i>.</p>	<p>All Optional:</p> <ul style="list-style-type: none"> a. Publish and distribute Sonoma County Recycling Guide/Annually. 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. 	<p>County Waste Management Agency</p>

<p>Illicit discharge</p>	<p>Material distribution numbers will be reported <i>each year in Annual Report.</i></p> <p>Evaluate past year tallies of spill sources and spill locations from illicit discharge database to determine immediate needs for increased outreach. <i>Annually</i></p> <p>Include special illicit discharge summary reports which use GIS tracking in <i>each Annual Report.</i></p>	<p>a. Conduct public outreach on alternative options for the disposal of swimming pool water containing chlorine and biocides./Within 36 months of permit adoption.</p> <p>b. Continue to distribute materials during normal inspections and while investigating complaints /Ongoing.</p>	<p>N/A</p>
<p>Private septic systems</p>	<p>Conduct infrared imagery flight over Santa Rosa Creek and all tributaries upstream of downtown Santa Rosa <i>in Year 1.</i> Investigate and analyze “hotspots” <i>in Year 2.</i> Outreach/ enforcement <i>in Year 3.</i> Progress reports will be provided in applicable Annual Reports.</p>	<p>a. Continue to distribute BMP information to non-standard septic system owners, annually, and to all others upon request/2008.</p> <p>b. review and revise, if necessary, the storm water quality BMP brochure/June 2009.</p>	<p>N/A</p>
<p>Industrial/Commercial</p>	<p>Current outreach materials for contractors, landscapers & painters will be evaluated & updated in Year 1.</p> <p>Meeting with industry/trade representatives to identify an effective outreach strategy for contractors, landscapers & painters in Year 3.</p>	<p>a. Continue to educate and assist food facility operators/owners to implement effective BMPs.</p> <p>b. Continue to distribute “Food Facilities Storm Water Pollution Quick Reference” pamphlets during routine inspections/Annually</p> <p>c. Make a presentation to the Food Industry Advisory Forum about the storm water</p>	<p>N/A</p>

	<p>Outreach to contractors, painters & landscapers implemented in Year 4.</p>	<p>management plan and changes for food facilities/Within 24 months of permit adoption.</p> <p>a. Distribute additional materials./Ongoing</p> <p>b. Discuss compliance issues with owner/operators and provide materials to assist with questions. Include storm water pollution prevention BMPs/Ongoing</p> <p>c. Continue to encourage ASFs to receive Green Business certification/Ongoing</p>	
<p>Automotive Repair, Food Facility and Cleaning Industries & Retail Gasoline Outlets</p>	<p>Track and report number of educational materials distributed during inspections in <i>each Annual Report</i>.</p>		
<p>Gardening/Nurseries</p>	<p>Promote “Our Water, Our World” program through hiring a consultant to contact and work directly with local hardware/nursery businesses. Perform pollution prevention inspections to minimize nutrient pollutant loading in site run-off. Continue QWEL training.<i>Annually</i></p>	<p>a. Continue to give information to pesticide users with permits and annual registration/Ongoing.</p> <p>b. Continue to offer junior college courses for state mandated continuing education for pesticide user licenses.</p>	<p>N/A</p>
<p>Landscape Irrigation and Maintenance</p>	<p>Continue to host workshops and distribute prepared outreach materials; provide irrigation audits on request with initiation of 2007 water rates. Inspect new irrigation</p>		

	<p>sites in accordance with WELP and SFRLP. Provide new customer packets to all new water customers.</p>		
<p>Building and Construction Industries including Landscaping Companies</p>	<p>Provide a copy of CD's pre-rainy season letter sent by Community Development Department to applicable parties regarding key points of interest based on past season observations and current concerns. <i>Annual Report</i></p> <p>Current outreach materials for contractors, landscapers & painters will be evaluated & updated in <i>Year 2</i>.</p> <p>Meeting with industry/trade representatives to identify an effective outreach strategy for contractors, landscapers & painters in <i>Year 3</i>.</p> <p>Outreach to contractors, painters & landscapers implemented in <i>Year 4</i>.</p> <p>LID training for staff as well as the local design community will be planned and conducted in <i>Year 1</i>.</p> <p>Develop an outreach strategy to educate property owners and home owners regarding SUSMP BMPs their property based on input from the development community and area realtors before end of <i>Year 3</i>, implemented in <i>Year 4</i>.</p>	<p>a. Develop combined City/County SUSMP site design guidelines or requirements for developers/Within 5 years of permit adoption.</p> <p>b. Provide workshop to the development community on planning procedures, policies, design guidelines and BMP for the remaining SUSMP aspects/Within 5 years of permit adoption.</p>	<p>N/A</p>

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.
High School Aquatic Macroinvertebrate Bioassessment Program	<p>Continue to solicit program participation from the six public high schools in the City. Report on number of students and total teaching hours in each Annual Report. <i>Ongoing</i></p> <p>Measure the change in high school student awareness/understanding of basic storm water pollution prevention concepts. Report in Annual Report.</p>	N/A	N/A
Spring Lake Environmental Discovery Center	<p>Continue to sponsor and participate in storm water related displays. Report on attendance in each Annual Report. <i>Annually</i></p>	<p>a. Continue to operate and manage EDC/Ongoing.</p> <p>b. Continue to seek sponsorship of EDC/Ongoing.</p> <p>c. Continue to contribute funding to EDC to promote public education on pollution prevention/Ongoing.</p>	Provide financial support through fiscal year 2007/08
Santa Rosa Junior College	<p>Refine outreach partnership with SRJC. Contact/offer outreach materials <i>in Year 1</i>.</p> <p>Aim to develop a minimum of two collaborative outreach</p>		

	<p>projects in Term 3. <i>Continue through Term 3.</i></p> <p>Invite SRJC representatives to monthly coordination meetings. <i>Through Term 3</i></p>		
<p>Corporate Outreach</p>	<p>Identify a minimum of three corporate business and development outreach strategies in Term 3. Report on status in Annual Reports. <i>Through Term 3.</i></p>		
<p>City Staff Awareness and Education</p>	<p>Create a general storm water awareness and pollution prevention educational outreach brochure for all new City employees. By end of Year 1.</p> <p>Perform voluntary survey of existing City employees to determine level of storm water awareness among staff by end of Year 2.</p> <p>Develop and implement outreach to existing City staff by end of Year 3.</p> <p>Resurvey existing City employees to determine effectiveness of outreach by end of Year 4.</p> <p>Provide two briefings about</p>		

	Storm Water Program activities in City Manager's weekly email. Provide copies in Annual Reports.		
Effectiveness Evaluation			
Formal Evaluation	Evaluations will be included in each Annual Report.	<p>a. Compare goals in SWMP to actual work; meet with Regional Water Board staff and Co-permittees on developing work plan elements/Annually.</p> <p>b. Document (a) in Annual Report/Annually.</p> <p>c. Continue to utilize the Stormwater Coordinator position to maintain or increase the level of coordination among County staff involved in completing SWMP activities/Ongoing.</p>	Continue to track program elements through direct and indirect indicators. <i>Annually</i> <i>Summary Report Permit Year 5</i>
Public Education and Outreach	Resurvey community awareness. <i>During Year 4.</i>	a. Based on Special Study (below), consider outreach to improve stream quality.	Voluntary include feedback mechanisms in water Education Program.
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	Refer to Monitoring Report for Special Study description.	<p>a. Identify and evaluate 10-12 sub-watershed areas for initial evaluation/Year 1.</p> <p>b. Conduct ambient water quality monitoring (analytical and inspection)/Years 2-3.</p> <p>c. Evaluate data and determine BMP(s) to be studied. Install or implement BMP(s)/Year 3.</p>	None.

		<p>d. Continue water quality monitoring (analytical and inspection)/Years 4-5.</p> <p>e. Report findings and make recommendations/Year 5</p>	
Fiscal Analysis			
Financial Analysis of Program Activities	Continue to report on permit-related expenses and funding of lead agency work for each fiscal year in each <i>Annual Report</i> .	<p>a. Report program expenditures and funding sources in Annual Report</p> <p>b. Include discussion of fiscal resources in work plan meeting with Regional Water Board staff/Annually.</p> <p>c. Re-evaluate permit fee structure to ensure adequate funding for PRMD. Within 12 months of permit adoption</p> <p>d. Review the categories currently used for reporting fiscal resources/Within first 24 months of permit adoption.</p> <p>e. Seek new revenue sources for storm water program/During permit term.</p>	<p>Develop new reporting structure Permit Year 1.</p> <p>a. Include discussion of fiscal resources in work plan meetings/Annually</p> <p>b. Report program expenditures and funding sources in Annual Report.</p>
Monitoring Plan Goal: Assess the receiving water quality to direct resources toward local pollutants of concern (Refer to Part V for details)			
Chemical Monitoring of Outfalls	Continue outfall sampling at two outfalls during first flush and one representative storm events as well as two	See Part V, Monitoring of the Co-Permittee SWMP.	Collect samples for first flush and one representative storm, and collect two summer samples between the period May-September.

	dry weather sampling events. Report results in each Annual Report.		<p><i>Annually</i></p> <p>Include results and proposed changes to program in annual reports.</p> <p>Analyze data for trends. <i>Permit Year 5.</i></p>
Bioassays – Three Species Chronic Tests	See Part V, Monitoring of the Co-Permittee SWMP.	N/A	N/A
Aquatic Benthic Macroinvertebrate Sampling	See Part V, Monitoring of the Co-Permittee SWMP.	N/A	N/A
SUSMP Goals: Minimize storm water pollution, limit storm water peak flows, and conserve natural areas to MEP from new and redevelopment (Refer to Part VI for details)			
Develop details for the SUSMP treatment offset program	<p>Develop details for the SUSMP treatment offset program. Treatment offset sites will be considered in the following order: same stream reach, same sub-watershed, same watershed, adjoining watershed, or nearby watershed. Regional mitigation banking will be considered as part of treatment offset program. Complete first draft for RB review by end of Year 2.</p> <p>Finish policy by end of Year 3.</p>		
Channel-forming discharge (hydrograph modification).	<p>Develop details for addressing channel-forming discharge. Evaluate recommendations and requirements pertaining to hydrograph modification included in the Regional Water Board’s Stream and Wetlands Protection Policy and the San Francisco Bay Municipal Regional Urban Runoff NPDES Permit once finalized. This evaluation will be distilled into an outline on the approach that applicants should take when addressing channel-forming discharge. Complete first draft one-year after these documents are adopted.</p> <p>Finish policy within two-years after both of these documents are adopted.</p>		N/A

<p>Low impact development</p>	<p>Encourage low-impact development (LID) designs for all SUSMP projects. In addition, for all proposed development projects each Co-Permittee shall, during the planning process and prior to project approval and issuance of local permits, evaluate each project for the inclusion of LID BMPs, where applicable, which may minimize soil compaction, minimize disturbances to natural waterways, maximize infiltration and retention, provide detention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to the minimum widths necessary.</p> <p>Continuous.</p> <p>LID training for Co-Permittees' staff as well as the local design community will be planned and conducted before the end of Year 1.</p>	<p>N/A</p>
<p>Retail Gasoline Outlets</p>	<p>Apply post-construction conditions that address water quality on proposed new and redeveloped retail gasoline outlets (RGO). (Redeveloped RGOs would include existing RGOs that propose underground storage tank modifications that involve pipe replacement and under dispenser containment replacement.) Example conditions are: 1) fuel dispensing areas shall be paved with Portland cement concrete (or, equivalent smooth impervious surface), with a 2% to 4% slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of storm water to the extent practicable, 2) the fuel dispensing area shall be covered with a roof canopy, and the roof canopy's minimum dimensions shall be equal to or greater than the area within the grade break or the fuel dispensing area, as defined above. The cover shall drain directly into the storm drain system and not drain onto the fuel dispensing area. The storm drain located under the roof canopy shall include an oil separator, or equivalent, to collect minor fuel and oil spills. An ongoing maintenance plan for the oil separator shall be submitted for review and approval by the Storm Water Section of PRMD prior to issuance of County grading and building permits or by the City's Fire Dept. prior to issuance of any City permits for new/redevelopment RGOs, and 3) the applicant shall prepare</p>	<p>N/A</p>

	<p>and implement a Storm Water Spill Prevention Control and Countermeasure (SW SPCC) Plan to be integrated into the grading and drainage plan. The SW SPCC Plan shall be designed to address minor fuel and oil spills.</p> <p>Existing City codes shall be reviewed and modified to include specific conditions and site requirements before the end of Year 2.</p> <p>Continuous implementation for County permits.</p>	
<p>Auto Repair/Auto Body Service Facilities</p>	<p>Apply post-construction conditions that address water quality on proposed new and redeveloped auto repair/auto body service facilities. Prohibit discharges of wash water from entering storm drain systems resulting from hosing or cleaning vehicles.</p> <p>Continuous (Rough draft only – City needs to evaluate with Utilities-Environmental Compliance section.)</p>	<p>N/A</p>
<p>Implementation of safety factors to ensure that treatment BMPs accommodate the minimum design storm (Provision 29 from the current MS4 permit).</p>	<p>The sizing of filtering treatment devices shall recognize potential clogging and loss of capacity during operations and shall be sized to provide full treatment of the design storm. The City and County will prepare safety factors for treatment BMPs during the next permit phase as we gain experience with the maintenance of BMPs and as we evaluate the final requirements of the San Francisco Bay Municipal Regional Urban Runoff NPDES Permit.</p> <p>Safety factors will be proposed by the end of Year 3.</p>	<p>N/A</p>
<p>Tracking SUSMP projects</p>	<p>The Co-Permittees use tracking databases to record SUSMP information for projects. PRMD added a SUSMP screen for projects within PermitsPlus: this screen has fields to record: disturbed area, impervious surface, number and types of source control BMPs, number and types of treatment control BMPs, total BMPs installed, waiver field, and mitigation APN. The Measurable Goal would be for both the County and the City to review and refine the tracking of SUSMP projects using their respective databases.</p> <p>Completion of the review and augmented tracking of SUSMP</p>	<p>N/A</p>

	projects is targeted to be completed by the end of Year 2.	
Ordinance constraints	The Co-Permittees shall review respective ordinances for conflicting requirements that would prevent or restrict the installation of post-construction BMPs. Complete review by the end of Year 4.	N/A
Conserve natural areas	This is already one of the three goals of the SUSMP program. However, the Co-Permittees will expand on this goal during the next permit term to complement LID concepts. This guidance will be included to supplement the SUSMP Guidelines. Complete guidance on conserving natural areas by end of Year 5.	N/A
Educating property owners and home owners regarding SUSMP BMPs on their property	The intent of educating property and home owners on SUSMP BMPs is to educate them on the proper functioning of the SUSMP BMP(s) on their property and to provide guidance on how to maintain the SUSMP BMP(s). One idea is to develop a generic template brochure onto which developers could then add their customized information via electronic cutting and pasting. An outreach strategy will be developed based on input from the development community and area realtors before the end of Year 3 and implemented in Year 4.	N/A
Long term maintenance program	The intent of further developing a long term maintenance program for SUSMP facilities is to have fees cover administrative/inspection and maintenance costs, as applicable, for public agencies. Complete analysis of SUSMP maintenance programs by end of Year 5.	N/A
Review and revise, if necessary, legal authority	Report findings in first Annual Report Amend ordinance, if needed, within 12 months of Permit adoption	N/A

Provide training to staff	Train targeted staff (planners, storm water inspectors, engineers, engineering technicians) within 24 months of Permit Implementation		
Implement SUSMP measures on City / County capital improvement projects	Design applicable projects with SUSMP measures <i>Upon Permit implementation</i>		Design applicable Zone 1A flood control projects with SUSMP measures.
Encourage applicants to implement SUSMP measures on projects	Require storm drain labeling on all projects <i>Upon Permit implementation</i>	Condition applicable project with SUSMP requirements. Upon Permit implementation	N/A
Supplement SUSMP Guidelines with additional BMP guidance/criteria based on site specific pollutants.	Reconvene SUSMP Technical Advisory Committee to supplement SUSMP Guidelines. <i>Complete in Year 3.</i>		
Storm Drain Decals	Draft requirements to decal all proposed storm drain inlet basins in <i>Year 1</i> . Present for adoption in <i>Year 2</i> .		

**TERM 2 STORM WATER MANAGEMENT PROGRAM
REVIEW/INPUT SUMMARY**

Attachment I.A

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Term 2 Storm Water Management Program Review/Input Summary

Attachment I.A

The process of SWMP assessment and input gathering for the Term 3 storm water permit renewal started midway through Year 4 of Term 2 and involved the Regional Water Board, City/County/Water Agency staff and management and the City Waterways Advisory Committee. A Citizens Advisory Group was formed to provide insight into the community's perspectives and understanding about implementation and effectiveness of current SWMP programs and activities. Input gathered was summarized, collated and analyzed for consideration in the proposed SWMP revisions.

Three questions were posed to those providing input. A summary of responses to each question are included below and were collated into specific categories. In addition, where applicable, responses which may include relevant sections of the proposed Storm Water Management Plan that address input/concerns are noted in *italics*.

What has made the most significant impact on storm water quality/creek health in Santa Rosa during the last 10 years?

Storm Water Management Program:

- New Development Requirements/development groups more educated & aware
 - Less absorption of runoff due to building
 - Smart growth concepts
 - Green building standards

In Term 3, Low Impact Development (LID) will be promoted through LID training for staff and local designers; targeted for Year 1. (Part VI – SUSMP)

- Improved management practices – PW staff & CIP projects
 - In Term 3, the City will establish formal BMP standards for erosion and sediment control measures to be implemented for both private and public construction projects. (Part III – Section 2.6)*

- Irrigation Management - water conservation/reduction in irrigation runoff
 - Eel River diversion

The City Water Waste Ordinance prohibits water waste and both the Water Efficient Landscape Policy and the Single Family Residential Landscape Policy promote maximum water use efficiency and minimize waste.

- Storm Drain Cleaning/maintenance
 - Part III, Section 4.4 describes the City storm drain system operation & maintenance efforts.*
- Applying SD decals
 - Heightened public awareness/“No Dumping – Drains to Creek”
 - Storm drain decals will continue to be applied. Part VI-SUSMP describes the Term 3 goal that, decals will be required for all storm drains proposed as part of a City discretionary permit application.*

- Pro-active vs. reactive to keep SW pollutants out of system
 - The Co-permittees have developed pro-active activities and programs as part of their SWMPs.*
- SW management regulations and enforcement – *Section 1 of Parts II, III and IV pertains to each Co-permittee's legal authority.*

- Storm water utility fee – *The City Storm Water Enterprise and Utility Fund was established in 1996. This has been the City’s funding source for storm water permit compliance activities.*
- Adoption of SUSMP – *The SUSMP program was adopted in 2005. In Term 3, the SUSMP program will be further developed. See Part VI-SUSMP for proposed Measurable Goals.*
- Coordinated City Dept. efforts – *Communications among City Departments is necessitated through its coordinated compliance efforts to meet storm water permit requirements. This will continue through Term 3.*

Outreach/Education: *Part III, Section 6 has a full description of outreach activities/programs proposed for Term 3. The goal of the Public Education and Outreach program is to increase the community’s knowledge of the municipal storm drain system and the impacts of urban storm water runoff and to encourage behavior changes to reduce storm water pollution.*

- General Public re: Home Improvements – *Once completed the Term 2 Community Survey will assist City staff in determining a residential outreach strategy for Term 3.*
- Contractors – *In Term 3, industrial/commercial outreach will focus on contractors, painters and landscapers combined. (Part III, Section 6.2)*
- City employees – *General storm water awareness among City employees will be enhanced in Term 3 through a specific outreach strategy for City staff. Part III, Sections 4.1.6 and 6.5.*
- Friendly approach
- Support of Environmental Discovery Center – *Will be continued. Part III, Section 6.3.3.*
- “Marketing” of creeks in schools (e.g., having kids participate in creek clean-ups with Alistair). Elementary school education about creeks/protection (Water Agency –elementary schools, City – high schools). Training for teachers. *Will be continued in Term 3.*

Creeks:

- Creek Restoration – *Citywide Creek Master Plan is referenced in Part III, Section 4.3.3.*
- Creek Stewardship Program – *Term 3’s Creek Stewardship Program will continue to be jointly funded by the City and the Water Agency. For details, refer to Part III, Section 6.1.4 and Part IV, Section 6.*
 - Organized volunteer clean-ups – *In Term 3, the City has a goal of coordinating a minimum of six volunteer clean-ups each year.*
 - “Marketing” of creeks in schools (e.g., having kids participate in creek clean-ups.) Elementary school education about creeks/protection. Training for teachers.
- Erosion and Sediment Control – *In Term 3, the City will establish formal BMP standards for erosion and sediment control measures to be implemented for both private and public construction projects. (Part III – Section 2.6)*
 - SW inspections – outreach, educate, public relations/enforcement occurring before incidents become a big issue. *Will continue in Term 3.*
 - Use of BMPs on construction sites (still need to educate about how to use, problems remain with Qs being blocked from drains during rains) *In Term 3, the City will establish formal BMP standards for erosion and sediment control measures to be implemented for both private and public construction projects. (Part III – Section 2.6)*
 - Grading ordinances
 - County’s grading and culvert routines
- Seeing fish in the creek
- Projects like Prince Memorial Greenway and the Santa Rosa Creek trail that bring people closer to the environment.
- Increase in creek setback requirements – *Currently the City has a minimum 50’ creek setback*

requirement in its Zoning Code.

- Adoption of Citywide Creek Master Plan – *Adopted by the City in March, 2007.*
- Development standards for projects along creeks – *See SUSMP Guidelines.*
- Change in mindset of engineers, Water Agency re: use of creeks. *In Term 3, the SUSMP program will provide Low Impact Development training to both staff and the local design community.*
- Existence of Waterways Advisory Committee (reasonable recommendations)
- Promoting community responsibility for keeping creeks clean – *Co-permittees encourage community responsibility through the Creek Stewardship program and a variety of outreach efforts.*
- Planting of trees along creeks (i.e., creek restoration)
- City General Plan Creek Policies – 2002
 - Policies apply to everything (development; transportation; open space; resource protection and enhancement; rehab. of existing flood control channels; protection of creek environments)
- Fees at County dump; closure of some transfer stations resulted in “midnight dumping” along creeks
- Removal of concrete channeling – *The City has an active interest in implementing creek restoration projects. These projects generally include the removal of concrete channeling.*
- Lack of maintenance of creeks
 - Overabundance of non-native species

Spill Response Program: *Each Co-permittee has developed an Illicit Discharge Detection and Elimination Program. These efforts will continue through Term 3.*

- Enforcement – *The City’s Environmental Crimes Officer is contacted to assist with enforcement efforts as needed.*
- Environmental Compliance Division work, issues along Auto Row
- Collaboration on Colgan Creek issues, County fairgrounds runoff issues
- Environmental Crimes coordination and enforcement
- Tracking data – helps to prioritize direction/work load – *Term 3 goals target continued progress toward tracking data and utilizing GIS maps to assist in determining any patterns of concern.*
- Increase of pollutants from urban runoff
- “Game Boy” generation – children being raised out of harm’s way and out of nature.
 - Future leaders aren’t learning about insects; water; life – disconnected from creeks

Council Support & Community Support:

- Changing times and public awareness
- Cracking down on transients – *Homeless encampments will continue to be tracked in Term 3. Tracking will be enhanced through the use of GIS maps.*
- Response to citizen complaints
- Funding – unseen

What changes do you anticipate in your area of expertise during the next 6 years that could have an impact on storm water quality/creek health?

City Policies, Programs, Projects:

- Urban Reuse Program and BMPs - Water Conservation Program/Single Family Residential Landscape policy - *These programs will be continued in the City in Term 3.*
- Green Exchange - Water Conservation Program
- Water Efficient Landscape Policy - Water Conservation Program – *Will continue in Term 3.*
- Implementation of City Wide Creek Master Plan – *The City will continue to seek grant funding to implement creek restoration projects in Term 3 and beyond.*
- GIS and Data Tracking – *Additional GIS tracking for spills and homeless encampments will be developed in Term 3.*
- Increase in creek restoration efforts - *The City will continue to seek grant funding to implement creek restoration projects in Term 3 and beyond.*
- Change from reactive to proactive (keep spills from happening) – *The Co-permittees' Public Education and Outreach programs aim to encourage behavior changes to reduce the release of storm water pollutants to receiving waters.*
- Park design – reduction in the amount of turf, more efficient irrigation, increasing creek/storm drain awareness & education in parks. – *In Term 3, a detailed pesticide and fertilizer use plan will be developed for the Bennett Valley Golf Course. In addition, mapping of all storm drain outfalls in City parks will be completed in Term 3.*
- Homeless camps and bacteria issues – *Encampment locations in the City will be tracked on GIS maps during Term 3.*
- Keeping areas safe to encourage public access to creeks
- More legitimate use of creeks & pathways, increase in City service required
- Climate change
- More development pressure and in sensitive areas – *The SUSMP program aims to address development impacts on waterways within the permit boundary.*
- Shift toward fees, assessments to finance & maintain SW Quality
- Change in 100-year peak Qs per Corps study – *This study has not yet been completed.*
- Building should be vertical to stop sprawl.
- Smart growth/ Use of green building materials
- SMART train
- Buffers along creeks/need wider creek setbacks based on wildlife needs – *In the City, creek setbacks were recently increased to a minimum of 50'.*
- Improvements in wastewater treatment

Storm Water Management Program Implementation:

- SUSMP – CIP and Private Development/Need to know how to maintain SUSMP facilities - *In Term 3, the SUSMP program will focus on methods to educate property owners and home owners regarding SUSMP BMP facilities on their property. An outreach strategy will be developed based on input from the development community and area realtors.*
- Size of projects being regulated
- Database management – w/ other City Departments, possibly County
- Having enough staff to implement the IPM program. – *Budgetary concerns remain a factor in staffing the City's Recreation and Parks Department.*
- Maintenance of SUSMP facilities – *A Measurable Goal for Term 3's SUSMP program is to develop a long term maintenance strategy for all SUSMP facilities. This would involve a systematic method for the City and the County to initiate and track inspection and maintenance activities, as applicable. (Section VI-SUSMP)*

- Additional coordination among Storm Water, Fire, and Environmental Compliance staff - *Communications among City Departments is necessitated through its coordinated compliance efforts to meet storm water permit requirements. Staff from the Public Works, Fire, Utilities, Community Development Departments and the Environmental Crimes Officer meet monthly to discuss recent spill responses and other issues of interest. This will continue through Term 3.*
- Urban pollutants into storm drain systems (lack of treatment devices)
- SUSMP – Positive on new development to improve water quality and retain water on site – *Part VI-SUSMP.*
- Need more volunteer monitoring with hi tech devices to continuously monitor water quality. – *Creek Steward volunteers are encouraged to continue reporting unusual flows in waterways. Due to current staffing and funding limitations, continuous water quality monitoring is not feasible at this time.*

Change in Regulations:

- New regulations – stricter & tighter, possibly both seasons – between 4/15 – 10/15 and rainy season. *This may be considered by the Regional Water Board.*
- Increase in restrictions from permit may increase personnel needs – *Additional activities and increased tracking efforts proposed in the SWMPs will significantly increase staff time and effort spent to support permit compliance.*
- Establishment of TMDLs - *In Term 3, the Monitoring Plan aims to collect data to support TMDL studies that are being performed by the Regional Water Board. (Part V-Monitoring)*
- Stricter rules, numerical limits – *The Co-permittees prefer an iterative approach toward reaching storm water quality goals. At this point, numeric limits are not considered feasible.*
- Illegal dumping. – *City code prohibits dumping in or upon waterways and other public places. Large yellow “No Dumping” signs that reference City code are posted at known problematic locations.*
- SD inlet filters
- Climate Change/Global Warming...species and habitat could change. Will need to manage a “new” system.
 - Reduction in greenhouse gas emissions should improve water quality
- Existence of “effluent” (wastewater coliform) in creeks
- More regulation of toxics will cause more impacts. The costs to test and remove materials like lead and mercury will increase putting more pressure on creeks.
- Concern for all fish and wildlife is predicted so required protection will be for more than Endangered Species Act protected species.
- Increase energy costs will lead to less use and improvement in water quality, but will cause economic impacts.
- Storm water involved in HazMat materials permits and management plans (HMMPs)
- Future listing of species by FWS, NOAA
- Specific BMPs may be required, enforced. Specifics written into permits.
 - BMPs more field-tested, may improve or change. Technology is improving – *In Term 3, the City will establish formal BMP standards for erosion and sediment control measures to be implemented for both private and public construction projects. (Part III – Section 2.6) In addition, SUSMP Guidelines will be supplemented with further guidance on appropriate BMPs based on targeted pollutants of concern. (Part VI-SUSMP)*

Expanded Outreach: *Each Co-permittee will continue its outreach and education efforts during Term 3 to increase the community’s knowledge of the municipal storm drain system and the impacts of urban*

storm water runoff and to encourage behavior changes to reduce the release of storm water pollutants to receiving waters. (Part III, Section 6)

- Hone marketing toward specific behaviors/target audiences (sustained effort to change specific behavior) - *Once completed the Term 2 Community Survey will assist City staff in determining a residential outreach strategy for Term 3.*
- More outreach to the Hispanic community. *One of the objectives of the City's Public Education and Outreach program is to increase public understanding about storm water pollution prevention, including translation into Spanish or other languages deem necessary to reach the City's ethnic communities. (Part III – Section 6)*
- More community awareness, staff training as this happens, and more spill calls come in
- We will eventually get to where Storm Drains are not thought of as Sanitary Sewers ...citizens will know the difference. – *This is the goal of the Co-permittees!*
- Iterative efforts to determine what works – *An iterative approach is preferred by the Co-permittees.*
- Increasing importance of creeks (they have become the public's primary contact with open space) – *In Term 3, the City will continue to seek grant funding for creek restoration projects.*
- Education at early grades levels
- Trash and debris impact creeks, especially from public dumping and county road crews. –*In Term 3, the City will install ten new trash receptacles and five pet waste bag dispensers along creeks. (Part III, Section 6.1.5)*
- NIMBY – need to change attitudes to support more infill.

Considering your Department's successes & concerns associated with the storm water permit goals, what should be kept? What should be changed?

Storm Water Management Program:

- Delete Environmental Column from Press Democrat – *This specific goal has been modified to state that the monthly RRWA Environmental Column will continue to be supported by the Co-permittees in Term 3.*
- Allow recycled water to runoff from irrigation
- Reduce the size of the Annual Report – *The Co-permittees make every effort to write Annual Reports that are concise and complete.*
- Creek stewardship program/inspiration email communications – *Will continue in Term 3.*
- Bldg/construction inspection program - *Both the City and the County have Private Construction Inspection programs in their SWMPs which will be continued in Term 3.*
- Environmental Crimes - *This highly successful program will be continued in Term 3.*
- Sharing of databases – Public Works-Storm water & Field Services, Fire, Police, Utilities – *Efforts to share pertinent data between Departments will continue through Term 3.*
- Keep Cartegraph databases system – Keep Ken. *The Cartegraph database will continue to be maintained and supported but may change upon implementation of a City-wide database strategy.*
- May not be able to take anything out, likely just more added in. *In Term 3, the Co-permittee SWMPs have generally been supplemented and improved in focus toward effectiveness rather than narrowed.*
- Keep SW Team staff
- Keep SWMP as is – *The Co-permittee SWMPs have been revised to supplement and improve current efforts toward storm water pollution prevention.*
- Acknowledge “Green Building” program in SW permit

- Shift from concept to action/actual decisions
- Erosion Ctrl Device Mgmt to avoid detrimental impacts during storms
- Evaluate frequency/funding source for street sweeping (now about \$200k from creek restoration funds – require from garbage franchise)
- Establish milestones for municipal operations - “x%” removal, Total “x”
- Set milestones for effectiveness measurement – *Numerous milestone Measurable Goals have been established for Term 3 and will be evaluated throughout the permit term in each Annual Report as applicable.*
- Funding Source
 - i) Identify a funding source to implement and maintain storm water programs – *In 1996, the City established a Storm Water Enterprise and Utility Fund to fund storm water permit compliance activities.*

Additional Regulations:

- Better working relationship with RWQCB staff (more common sense on their part)
- Shopping cart ordinance – businesses would be required to have management plan – *Although shopping carts are a nuisance when dumped into waterways, they don’t pose a significant threat to water quality and, as such, a shopping cart ordinance will not be pursued through the storm water permit.*
- More interaction with Waste Management programs /improve disposal options – make it easier, more frequent collections – *Disposal options have improved over the years. In addition, these options are described in full detail in the Sonoma County phone books.*
- Keep and increase efforts to address homeless camps along creeks - *Homeless encampments will be tracking with GIS maps in Term 3.*
- Threat of fines – *Graduated level of enforcement actions *-include the threat of significant fines upon noncompliance.*
- Better permit wording – articulate clearly/Change wording of “effectively prohibit” non-storm water discharge to something more reasonable – Education Not Enforcement
- Remove “Sewer” as this infers sewage or wastewater – substitute storm drain (Change MSSSS (MS4) to MSSDS)
- One set of rules for all regulatory groups (WQ vs. DFG vs. NOAA vs. USFWS vs. ACE vs. PRMD etc.) to streamline the permit process
- Better protection from frivolous lawsuits for permit holders (County, City, SCWA) from environmental groups, legal firms, CBD
- Provide incentives – tax relief for landowners that set aside buffer strips along creek
- Communication, Cooperation & Coordination between agencies – *A goal for all!*
- Better, clearer definitions
- Coordinated rules from regulatory groups – 1 set of rules!
- Identify Regional Approach –*Part VI-SUSMP includes a goal to develop a treatment offset (waiver) policy.*
 - i) Offsetting (similar to Air pollutant offsetting program)
 - ii) Flexibility in meeting requirements
- Maximum Extent Practicable (MEP)
 - Need a clear definition of MEP (Financial/Practical)
 - MUCH wider stream corridors:
 - i) Assist in filtering storm water
 - ii) Beneficial to stream habitat
 - iii) More attractive streams

- At what population will City of Santa Rosa be required to treat all storm drain water?

Monitoring: *Part V-Monitoring describes the Co-permittees proposed goals for Term 3.*

- Reduce frequency of Bioassessment – data not telling us much – *Bioassessment sampling assesses overall stream health and is sensitive to water quality and stream habitat conditions over time and is therefore considered a useful tool for the Co-permittees. Professional Bioassessment monitoring will be accomplished using the Full SWAMP Bioassessment Procedures twice during Term 3. Five sampling reaches will be randomly selected among five City creeks.*
- Additional chemical sampling (prep for TMDLs) – *If Regional Board funding can be obtained for laboratory analysis, the City has proposed to perform monthly chemical grab sampling for 1 to 2 years at two locations on Santa Rosa Creek.*
- How to measure health, use of indicator species versus numerical limits (which are difficult to meet and onerous)
- Moving target – *A constant challenge for all storm water pollution prevention programs.*
- Concern about bacteria warning signs in PMG – *Required due to public health concerns.*
- Advertise & develop a Creek Hotline – *Information about City creek is available on-line.*
- Monitoring Program – reasonable, better, stricter – *This is the intent of the Term 3 program.*
- Strengthen monitoring – establish continuous monitoring in streams – 365 days/year @ 15 minute intervals – check for turbidity, ions, etc. at various stations – *Due to current funding and staffing limitations, this is not feasible.*
- Technical focus – i.e., monitoring program

Outreach: *Each Co-permittee will continue its outreach and education efforts during Term 3 to increase the community's knowledge of the municipal storm drain system and the impacts of urban storm water runoff and to encourage behavior changes to reduce the release of storm water pollutants to receiving waters. (See Part III, Section 6)*

- All city staff has knowledge of storm water regulations and practice proper BMPs (don't embarrass the City) - *General storm water awareness among City employees will be enhanced in Term 3 through a specific outreach strategy for City staff. Part III, Sections 4.1.6 and 6.5.*
- Get all school students involved with keeping their campus litter free (and adjoining creeks if there is one) - *Litter prevention will be included in the City's Term 3 outreach strategy.*
- More outreach to community (e.g., candy wrappers thrown on street may go into creek) - *Litter prevention will be included in the City's Term 3 outreach strategy.*
- Encourage use of greener products
- Revamp public education brochures – wording & look- *The City's new Marketing and Outreach Coordinator will assist in revamping the City's outreach materials in Term 3.*
- Reward those who protect water quality – *A rewards program will be considered in the future.*
- General notice to City staff about spills (provide names/phone #s) - *General storm water awareness among City employees will be enhanced in Term 3 through a specific outreach strategy for City staff. Part III, Sections 4.1.6 and 6.5.*
- Improve webpage (children's section) – *The entire City's website is currently being improved. The Storm Water and Creeks website will continued to be reviewed for improvement and to keep it up to date.*
- Better outreach to landscapers – protect stockpiled materials) *In Term 3, the City will establish formal BMP standards for erosion and sediment control measures to be implemented for both private and public construction projects. (Part III – Section 2.6)*
- Keep educating City employees – Educate new hires, possibly through a web based training

program - *General storm water awareness among City employees will be enhanced in Term 3 through a specific outreach strategy for City staff. Part III, Sections 4.1.6 and 6.5.*

- Look at organizing a regional SW outreach program with other cities and agencies – TV, radio, print, etc. – *This type of regional outreach effort is generally discussed and promoted at the monthly Russian River Water Association meetings.*
- Annual storm water training – for locals – *Will continue to be promoted in Term 3.*
- Specific outreach to residents adjoining creeks – provide kit or folder (creek care guide), include resources – how to report spills, wildlife protection – *A creek care guide is currently being developed by another local agency.*
- Continue to distill message to be clear & concise for target audiences
- Involve kids in public outreach through Community Service programs (required volunteer hours) – boy scouts, girl scouts – have a contest to win prizes (issue “citations” for environmentally “unfriendly” actions/items)
- School newsletters
- Citywide sign program
- Citywide logo for creeks – place on all creeks/include names of roads & creeks
- Awards program to acknowledge high level of environmentally-friendly intention - *A rewards program will be considered in the future.*
- Promote message “only storm water into storm drains” via public education & outreach! – *Currently being implemented.*
- Use longer lasting, self adhesive storm drain labels – *The initial decals used were problematic. Current decals are proving to be longer lasting.*
- Set up displays at malls – *The City actively pursues opportunities to participate in general outreach events to reach a broad spectrum of community members including local festivals, wellness fairs, workshops, community events and farmers markets.*
- Inform public about meetings: radio PSAs, web, radio, bi-lingual
- Have applicant, RB and municipality coordinate & communicate more – include all concerned parties – *Currently the Co-permittees meet with the Regional Board on a monthly basis at the permit coordination meetings.*
- Public Education; Provide more public education on the following topics: (*Part III, Section 6*)
 - i) Storm Drain Awareness
 - (a) Clearly define the difference between sanitary sewer and a storm drain
 - ii) Residential (educate public on)
 - (a) Washing cars in the driveway
 - (b) Pesticides runoff from yards
 - (c) Organic materials
 1. Sweeping leaves into gutter
 2. Throwing yard debris into rivers/creeks corridors
 - iii) Community Participation
 - (a) Create a program similar to the Creek Stewardship Program – *The Creek Stewardship program continues to be highly successful and a similar program is not currently considered necessary.*

SUSMP: (Part VI-SUSMP)

- Homeless encampments create huge problems – debris, etc. – *Homeless encampments in the City will be tracked on GIS maps in Term 3.*
- BMPs use of several techniques, a treatment ‘train’ instead of a single silver bullet - *In Term 3, the City will establish formal BMP standards for erosion and sediment control measures to be*

implemented for both private and public construction projects. (See Part III – Section 2.6) In addition, SUSMP Guidelines will be supplemented with further guidance on appropriate BMPs based on targeted pollutants of concern. (See Part VI-SUSMP)

- New technology not always well understood how effective it is – *Time and experience with a variety of BMPs will lead to an improved understanding.*
- Maintenance issues about SUSMP measures and expense – *These issues are considered during the SUSMP BMP selection process.*
- SUSMP – how are natural areas defined?
 - Define better, relate to general plans
 - Better define in Measurable Goals
- Prevent runoff – keep onsite, use permeable surfaces, retention ponds, swales, etc. – *In Term 3, Low Impact Development will be promoted.*
- Regional Approach – SUSMP
- Detention & Storm Water Basins as an Asset
 - i) Pros: Make basins more: 1) attractive; 2) multi-use; and 3) beneficial use
 - ii) Cons: 1) decreased housing density, 2) Costly, and 3) maintenance?
- Permeable Credits
 - (1) Similar to item 5a above. Provide mechanism for offsetting
- Permeable Surfaces
 - (1) Increase the number of permeable surfaces (relates to Items 5 and 8 above).
- Master Plan Detention Basin (where feasible)
 - (1) As part of the County planning process, identify multiple developments which can use one detention basin. The detention basins should be: 1) multi-use, and 2) beneficial to the community.
- Single Family Residential Discharging into Creek
 - (1) PRMD allows for SFR to daylight storm drains into creeks, i.e. allow home owners to discharge runoff into creek/stream rather than drain into a storm drain.
- Cleaning Detention Ponds
 - (1) How do you currently clean detention ponds (Many are unsightly in the summer time)?
 - (2) Who cleans them?
 - (3) Who funds the clean-up of detention ponds?
- Water Quality Sampling
 - (1) Train public to collect water quality samples. This program would be similar to the Creek Stewardship Program (also see Item 1c above).
- Change public perception – detention basins are assets
- County Level Planning – Regional Multi-Use Facilities

CAG Overall Themes:

- Support for Water Quality Protection:
 - More requirements, stricter vs. more flexibility – *The Co-permittees prefer an iterative approach toward storm water pollution prevention and improvement of water quality.*
- Provide incentives for creek buffers – *City requirements include a minimum 50' creek setback.*
- Regional Approach may be more effective – *This should be determined case by case.*
- Maximize use of Volunteers – *Currently being pursued.*
- Consider how to administer programs with limited or no resources – *Currently being evaluated.*
- Global Approach toward reaching goals
- Trash is a Major problem, possibly due to disposal fees (e.g., tires)







PERMIT BOUNDARY MAP

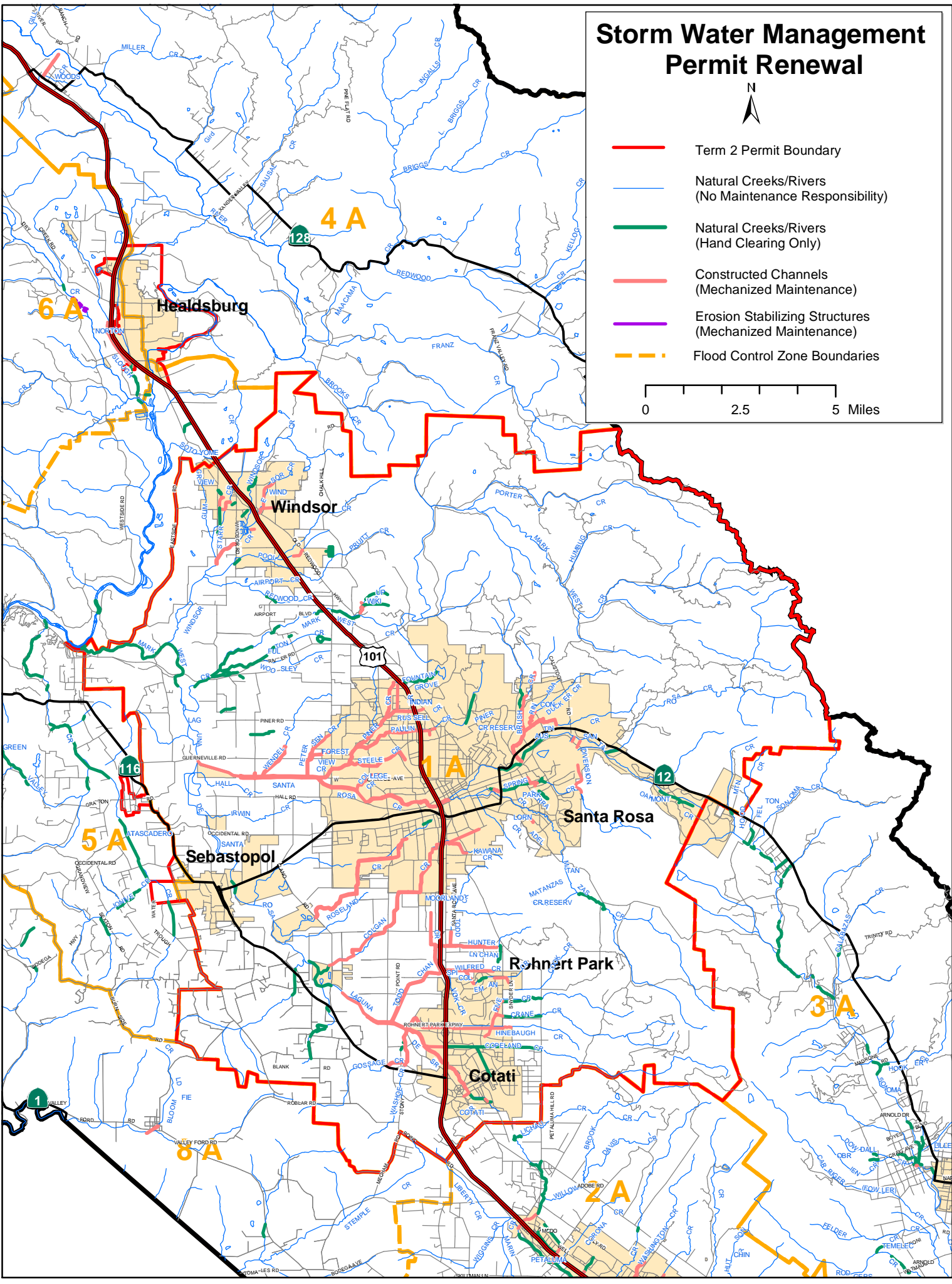
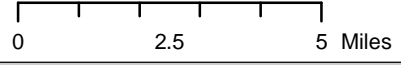
Attachment I.B

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Storm Water Management Permit Renewal



-  Term 2 Permit Boundary
-  Natural Creeks/Rivers (No Maintenance Responsibility)
-  Natural Creeks/Rivers (Hand Clearing Only)
-  Constructed Channels (Mechanized Maintenance)
-  Erosion Stabilizing Structures (Mechanized Maintenance)
-  Flood Control Zone Boundaries



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Part II

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

NPDES Permit No. CA0025054

Storm Water Management Plan County of Sonoma

Sonoma County Water Agency
City of Santa Rosa
County of Sonoma

November 2007

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1. LEGAL AUTHORITY

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

Existing Activities

The County's 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, Penal Code and the Sonoma County Code. The California Environmental Quality Act and Subdivision Map Act provide municipalities' legal authority to establish conditions on development projects. Sonoma County 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). These local ordinances are codified in the Sonoma County Code, and many of the provisions of the ordinances relating to storm water are codified in Chapter 11 (Drainage and Storm Water Management) of the Sonoma County Code. A copy of Chapter 11 is included at the end of this section labeled Exhibit #1.

The County's existing legal authority has effectively implemented the elements of the existing storm water management plan thereby reducing pollutants in storm water discharge to the maximum extent practicable (MEP) within its jurisdiction.

The County's legal authority was revised in 2005 to address a noted deficiency. The previous legal authority cited only the Santa Rosa MS4 permit boundary as the applicable boundary. The revised legal authority broadened the language to include any permit boundary contained in a MS4 NPDES permit adopted or issued by the San Francisco Bay Regional Water Quality Control Board, North Coast Regional Water Quality Control Board or State Water Resources Control Board.

New Activities

The existing legal authority identified above provides a solid base for permit implementation and enforcement. However, with new SUSMP requirements being implemented within the permit boundary, the County anticipates performing a review of its codes to ensure adequate authority exists for this.

The County is current working on a county wide grading ordinance. It is anticipated that some elements of Chapter 11 will be moved into the grading ordinance should the grading ordinance be adopted.

In addition, after the issuance of the third permit, the County's legal

counsel will consult the Regional Water Quality Control Board's legal counsel to the extent there are other specific identified needs for any further county code revisions in connection with the second permit.

Measurable Goals/Implementation Schedule

- a. Include a statement 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.
- b. County's legal counsel will consult Regional Water Board counsel.

2. PRIVATE CONSTRUCTION

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

2.1 GRADING PERMIT ISSUANCE

Existing Activities

All policies and procedures that were implemented to control erosion from construction sites as part of Term 1 and Term 2 of this permit shall be continued during Term 3. The activities listed below explain how the activities will be implemented over the permit area.

If a project needs a grading permit then Permit and Resource Management Department (PRMD) staff requires grading plans to be submitted for review and approval prior to construction. If a grading permit is required, the erosion and sediment control provisions of Chapter 7 and Chapter 11, Article 3 of the Sonoma County Code (SCC) are triggered.

What development/construction projects need a grading permit?

Development/construction projects in County jurisdiction are subject to the CBC Chapter Appendix 33 as it relates to excavations and grading, SSC Chapter 7 and Chapter 11, Article 3 as they relate to erosion and sediment control provisions, and SCC Chapter 11, Article 1 for drainage requirements. With respect to grading, the CBC and SCC provisions require a grading permit for any project that involves placing more than 50 cubic yards of earth material, importing fill greater than one foot in depth, importing fill greater than six inches in the Flood Prone Urban Area, importing any fill in the Laguna de Santa Rosa (and is subject to a zero net fill criteria), creating cut slopes greater than 5 feet (with exceptions for certain specified types of excavations). The CBC specifies certain thresholds for requiring engineered grading plans (e.g., volume of earth material exceeds 5000 cubic yards). Not all grading plans are engineered grading plans pursuant to the CBC. If an engineered grading plan is required, the applicant's engineer must submit a report certifying that the project, including any erosion and sediment control facilities, has been constructed as designed, prior to final inspection by PRMD.

SSC Chapter 11, Article 3, Section 11-32(h) requires compliance with BMPs. When reviewing and issuing grading permits, PRMD staff use as guidelines the erosion and sediment control BMPs that are described in the publication, Erosion and Sediment Control Field Manual (Third Edition), by San Francisco Bay Regional Water Quality Control Board, and encouraged for local use by the North Coast Regional Water Quality Control Board. In implementing SSC Chapter 11, Article 3, an erosion and sediment control plan is required on all grading plans reviewed and issued by PRMD staff.

In addition, the County created a set of standard Grading Notes and Erosion and Sediment Control Notes which are required to be included on all grading plans reviewed and issued by PRMD staff.

The USEPA Audit/Program Evaluation (approximately dated 2003) expressed a concern for the control of sediment on major projects that build single-family lots and complete their rough grading work and then sell the lots. The concern was that these lots receive Final Grading Approval, but continue to be bare of improvements until such time as they are purchased. Further, that sediment could potentially run off these lots when erosion controls are not maintained. This concern is approximately five years old and today's practice is to not grant Final Grading Approval until such time as the erosion control plan is 100% implemented. Plan reviewers are ensuring that grading plans protect all exposed or disturbed areas with an effective combination of erosion prevention and sediment control measures. Inspectors are ensuring these measures are installed as designed and depicted on the approved grading permit prior to granting the Final Grading Approval.

New Activities

Starting in April 2007, the grading program was re-assigned from the Building Division to the Engineering Division at PRMD. Prior to this re-assignment, flooding, local drainage and storm water pollution review played a supporting role in plan review and inspection. Currently, the Engineering Division is the lead plan reviewer and is responsible for all aspects of grading: building code issues (compaction, setbacks, slopes, etc.), flooding concerns (fill in flood plains, potential for increasing the base flood elevation, etc.), localized drainage concerns (hydrology, hydraulics, culvert sizing, erosion potential, etc.) and storm water pollution concerns. Consolidating the grading program in one division will increase efficiencies in plan review and make for a more holistic review. Further, the engineering plan review staff conduct this holistic review on all grading permits, not just grading permits in the MS4 permit boundary.

Measurable Goals/Implementation Schedule

- a. Continue to require erosion control plans on issued grading permits. Ongoing.
- b. Continue to use erosion control guidelines that are encouraged for local use by NCRWQCB. Ongoing.
- c. Report the number of grading permits issued and the publication used to review and approve the erosion control plans in each Annual Report. Annually.
- d. 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 Term 3.

2.2 **VINEYARD PLANTING/REPLANTING COMPLIANCE**

Existing Activities

Agricultural Land Use activities are not subject to this permit. However, agricultural activities are described here because they help meet the goal of reducing sediment in storm water runoff. The goals listed are optional.

Agricultural Commissioner's Office staff review vineyard planting and replanting plans, per the requirements of Article V of Chapter 30 of the Sonoma County Code. Article V of Chapter 30 of the Sonoma County Code requires notification to the county agricultural commissioner prior to planting or replanting a vineyard to request review of that planting or replanting. Based on the average percent slope of the site, new vineyard developments on slopes of 10% or greater with highly erodible soils or 15% or greater on less erodible soils, or vineyard replants of 15% or greater on highly erodible soils or 30% or greater on less erodible soils (level II and III) requires a certified erosion and sediment control plan developed by a registered civil engineer. Slopes greater than 50% are prohibited from being developed for new vineyard planting. Sites of 10% or less on highly erodible soils or 15% or less on less erodible soils (level I) require a twenty-five (25) foot riparian setback, a fifty (50) foot riparian setback is required on all other sites (level II and III). Initial vineyard planting work shall be carried between April 1, and November 15 with winterization of the site by November 1 for all new vineyard plantings, and between April 1 and November 15 for vineyard replants.

All vineyard development work shall be carried out according to the notification and approved certified Erosion Control Plan. All disturbed areas on the vineyard site shall be protected during the rainy season. When reviewing these vineyard planting/replanting erosion control plans, Agricultural Commissioner staff uses the Erosion and Sediment Control Field Manual, by San Francisco Bay Regional Water Quality Control Board, the Vineyard Management Guidelines by Southern Sonoma Resource Conservation District, and Fish Friendly Farming by Sotoyome Resource Conservation District as guidelines.

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.

2.3 PRIVATE CONSTRUCTION ON PUBLIC LAND

Existing Activities

Any construction work performed in the public right-of-way that is not a public project, is required to be covered by an Encroachment Permit, issued by PRMD. The vast majority of Encroachment Permits are driveway portions that connect the County road with the private property, sewer laterals that connect the house to the main, small structures (mailboxes, switching boxes for cable or telephone service, etc.) and an occasional fence. These projects are relatively small in nature typically not exceeding ¼ acre in land disturbance.

Presently the Encroachment Permit includes language that requires that the work will be done in accordance with all County of Sonoma rules and regulations. Encroachment Section staff have been trained relative to erosion and sediment control concerns and BMPs to address these concerns. The Encroachment Permit issuance process has been revised so that all permitted projects that have the potential for sedimentation in storm water runoff contain appropriate erosion and sediment control BMPs. Encroachment staff continue to review, issue, inspect and final all Encroachment Permits issued.

2.4 INSPECTION OF SITES REQUIRING EROSION CONTROL PLANS

Permits and Resource Management Department (PRMD)

Existing Activities

Up until April 2007, the Building Division was the lead plan reviewer for grading projects and focused on classic issues such as soil compaction, slope stability, and property line setbacks. Prior to April 2007, the Engineering Division was reviewing grading permits for local drainage, flood plain management and storm water concerns, but was not the lead.

The Engineering Division at PRMD hired one full time Engineering Technician in early 2004 and a second Engineering Technician in 2005 as full time storm water inspectors. At the same time, the Building Division was responsible for inspecting grading projects. The Building Division was responsible for grading inspections while Engineering was responsible for storm water runoff issues. The Building Division grading inspector and the two storm water inspectors conducted overlapping inspections on the same projects.

Due to the overlapping responsibilities in plan review and inspections, the grading program (plan review and inspection) was shifted to the Engineering Division in April 2007.

The inspection goal is currently one pre-construction meeting per project and one site inspection per year per project. The primary focus of these inspections was storm water pollution concerns. Additional inspections were being conducted for classic grading issues (compaction, setbacks, benching, keyways, etc.).

Storm water complaints and referrals are directed to the Storm Water Section for investigation, inspection and referrals to other sections and/or agencies if necessary. Complaint or referral inspections are driven by the number and type of complaints or referrals received. Typically complaints are from the public or outside agency where as referrals are internal (county) communications. Complaints or referrals within the permit boundary are investigated and/or inspected by Storm Water Section staff. Those outside the permit boundary may or may not be investigated or inspected by Storm Water Section staff depending on the nature of the case, but are generally referred to an outside agency (California Fish and Game, Regional Water Board, US Army Corps of Engineers, etc.) as well as county entities such as Code Enforcement (PRMD), Environmental Health, Department of Transportation and Public Work or the Sonoma County Water Agency. Non-storm water related grading complaints (grading without a permit) are typically handled by Code Enforcement.

New Activities

With the shift of the grading program to the Engineering Division, all grading inspections (except for American Disability Act requirements) are being conducted by the Engineering Inspection Section. PRMD staff (Storm Water Section inspectors and engineering plan reviewers) have trained our engineering inspectors in storm water pollution concerns and BMP installation and maintenance. We have consolidated the two Storm Water inspectors into the Engineering Inspection Section.

Our previous application and SWMP used the term “significant projects” which were projects in the Flood Prone Urban Area; in a Flood Hazard Zone; to legalize a grading violation; that are engineered grading (5000 or more cubic yards); or designated by staff. Our previous application also used the term “sensitive projects.” After using these definitions for several years it is apparent these definitions are out of date and are too narrow in some respects. For example, grading violations typically are for starting work early or without a permit or exceeding the scope of a grading permit. These types of grading violations may or may not include a storm water concern. Since the drafting of the current SWMP, PRMD has created a storm water violation activity type that is used to track storm water violations specifically. Using grading permits that legalize a grading violation is not an appropriate criterion.

Another example is the California Building Code definition of engineered grading is grading in excess of 5000 cubic yards of cut and fills volumes.

Some staff thought that if an engineer stamped a set of grading plans then the project was engineered grading and therefore a “significant project.” This has led to extra time teasing out the data.

For this application we are eliminating the terms “significant projects” and “sensitive sites.” We consider all grading projects to be a concern. Smaller grading projects may be of less concern than larger ones, but they are all of concern as any grading project has the potential to discharge soil and other construction related pollutants. The size of the project will dictate the use of telephone pre-construction discussions, the number of inspections and the use of photographic documentation for example (see discussion below on these topics). Factors to be considered in using the various tools, including frequency of inspection, are square footage of land disturbance, square footage of new impervious surfaces, proximately to water bodies, proposals for new storm drain outfalls and seasonal timing of construction (summer, winter, etc.).

PRMD is proposing the following inspection frequency for grading projects with an acre or more of land disturbance and those under an acre of land disturbance. Each grading project will receive a pre-construction meeting or discussion, one or two BMP verification inspections and at least one final inspection. In many cases, partial finals are granted and several visits are needed prior to the project being “finalized.” It is anticipated that additional inspections may be necessary, but that Table 2 represents the minimum necessary for the NPDES program.

Table 2 – Inspection/Activity Frequency

Inspection/Activity	One Acre or More	Under One Acre
Pre-Construct Mtg	Once per project	Once per project ¹
BMP Verification	Prior to October 15	--
BMP Verification	Once during Winter	Once during Winter
Final	Upon Notification	Upon Notification ¹
1: Projects under an acre may be allowed to use telephone pre-construction discussions and/or photographic documentation based on the relative policy and procedures to be developed this permit term.		

In response to the grading program re-assignment, the Engineering Division created a division wide tracking system for all engineering related inspections. Inspections vary from trenches (water and sewer mains and storm drains) to compaction testing for grading to storm water BMPs and span sewer, encroachment, grading and drainage permits. Basically a client calls for a specified inspection(s) on a permit using an automated phone in system (Selectron). The Selectron system prints out a pre-printed form for staff. After the inspection, staff bubbles in the

appropriate inspection status (approved, partial, etc.). The form is then scanned in and the inspection data is uploaded to our department database. Management then has the ability to review the inspection data and create reports.

Staff have also created an Engineering Job card. The job card is part of the package that is given to the permit holder. The job card alerts permit holders to the inspections required by the Engineering Division. The Engineering Job card rounds out the plan review/inspection process. Engineering now has a complete process for receiving and reviewing grading projects, requiring specific inspections, an automated phone-in inspection request system, an automated inspection data entry system and outreach material to communicate the required inspections.

One of the required inspections will be a pre-construction meeting or holding a pre-construction discussion. In the past, the Storm Water section relied on the job card and required inspections generated by the Building Division. With the grading program being re-assigned to the Engineering Division, the expectation is there will be an increase in the percentage of pre-construction meetings or discussions relative to newly issued grading permits.

The Engineering Division is also requiring a start work notice as additional “inspection.” We have created an inspection type on the job card, outreach material and Selectron form. The applicant will be required to phone in this “inspection” prior to the start of work. The issue is that once a grading permit is issued it is assumed to be “active”, but in reality may not have started construction. These projects artificially inflate the number of active projects that are required to be inspected and thereby decreases the percentage of sites inspected versus number of active grading projects. By using a start work notice as the criteria for “active” permits, the accuracy of “active” projects and the percentage of “active” projects inspected will increase.

On a related topic, the Engineering Division is actively cleaning up data relative to older “active” permits. Many permits exceed the three year permit life and remain in issued status. We are conducting outreach and giving permit holders an opportunity to “final” their permit if desired. If the project was not started, as happens in a percentage of the cases, or if we don’t get a response in a reasonable time frame, the permits will be expired. This effort will improve our data integrity and assist in program effectiveness evaluation.

The Engineering Division is trying two new tactics that should provide reasonable efficiency: telephone pre-construction meeting and photograph documentation. We recognize the need to convey construction related concerns prior to the start of construction. These concerns include storm water pollution concerns as well as project

planning, project timing and inspection scheduling. Some of the projects, however, may not need an on-site pre-construction meeting and these concerns can be expressed via the telephone. Telephone pre-construction discussions can be an effective method to convey our concerns and be a more efficient use of time and resources. Towards this end we have initiated this effort on a limited basis and propose to conduct telephone pre-construction discussions on roughly 25% of the grading projects. We also propose to re-draft our policy entitled, "Pre-construction Meeting Requirements for PRMD Storm Water Inspectors" to reflect this direction and to provide guidance on which projects to hold telephone pre-construction discussions. The "Pre-construction Meeting Requirements for PRMD Storm Water Inspectors" was initially approved in September 2006.

A second area of potential efficiency is photograph documentation. There are numerous projects, including complaints, referrals and minor projects where resolution might be achieved or a final might be issued based upon adequate photographic documentation. The concept has not yet been initiated, but has the potential of saving time and resources, provided the photographic documentation is sufficient. We propose to develop a policy and procedure in this permit term. We also propose to initiate photographic documentation on a limited basis in this permit term.

Agricultural Commissioner Office

Existing Activities

Agricultural Land Use activities are not subject to this permit. However, agricultural activities are described here because they help meet the goal of reducing sediment in storm water runoff. The goals listed are optional.

The Agricultural Commissioner Office staff may conduct field inspections of any vineyard site for an authorized vineyard planting or replanting at any time deemed necessary or appropriate. They shall conduct field inspections of all vineyard sites for level II and III authorized vineyard plantings, and level II authorized replantings to (i) view the vineyard site prior to authorizing the vineyard planting or replanting to proceed, and (ii) verify compliance with the requirements of the erosion and sediment control ordinance and the certified erosion and sediment control plan after the completion of all vineyard planting work prior to November 1 for new plantings, or November 15 for replantings.

Measurable Goals/Implementation Schedule

- a. Continue to hold pre-construction meetings/discussions with grading personnel, on grading projects./Once per project (PRMD)
- b. Continue to conduct BMP Verification inspections on grading projects with an acre or more of land disturbance prior to October 15./Once per project per year (PRMD).
- c. Continue to conduct BMP Verification inspections on grading projects

- d. during the winter season./Once per project per year (PRMD).
- d. Continue to conduct Final Grading inspections for all grading projects./Ongoing (PRMD).
- e. Inspect Level II & III vineyard sites prior to commencement of any work/Once per project (Agricultural Commissioner).
- f. Inspect Level II & III vineyard sites in autumn/Once per year (Agricultural Commissioner).
- g. Inspect Level I vineyard sites as required/Ongoing (Agricultural Commissioner).
- h. Report number of construction inspections conducted, for Annual Report (PRMD), and the number of vineyard inspections conducted, for Annual Report (Agricultural Commissioner).
- i. Re-draft the PRMD policy entitled, “[Pre-construction Meeting Requirements for PRMD Storm Water Inspectors](#)” to include the use of and guidance on using telephone pre-construction discussions./June 2009.
- j. Draft, approve and implement a policy and procedure regarding photographic documentation./June 2009.

2.5 ENFORCEMENT AND REPORTING OF NON-COMPLIANT CONSTRUCTION SITES

Permits and Resource Management Department (PRMD)

Existing Activities

PRMD enforcement of non-compliant construction sites is separated into two groups. The first group is projects started, underway or completed without grading permits and the second group is permitted projects that have deviated from the approved plans. The first group of violations is administered through the Code Enforcement Division, whereas the second group is administered through the Engineering Division. The Engineering Division also administers any of the first group that involves a storm water or NPDES issue.

In the second permit term PRMD staff in the Engineering Division developed and management approved a policy and procedure entitled, “Construction Site Storm Water Violation and Compliance.” This policy and procedure was submitted with the 2006-2007 Annual Report. The policy and procedure is a progressive enforcement policy that uses verbal warnings, correction notices, notice of violations and administrative hearings, generally in that order, as enforcement tools to gain compliance with SCC Chapter 11, Article 3.

New Activities

The Engineering Division will continue to utilize the “Construction Site Storm Water Violation and Compliance” policy and procedure when necessary.

The Engineering Division will notify the Regional Water Board, in writing, on the third attempt at seeking compliance or upon issuance of a Notice of Violation. For example, if Engineering Division staff have tried a verbal warning and a correction notice, the Regional Water Board will be notified, most likely as a copy, on the notice of violation. The intent is to communicate with the Regional Water Board that there is a serious enforcement case underway, but the communication is not intended to be a referral. The County will continue with our progressive enforcement policy and procedure.

Agricultural Commissioner Office

Existing Activities

Agricultural Land Use activities are not subject to this permit. However, agricultural activities are described here because they help meet the goal of reducing sediment in storm water runoff. The goals listed are optional. When any work being done contrary to the provisions of the vineyard erosion and sediment control ordinance, the agricultural commissioner may order the work stopped by notice in writing, or issue a citation to appear in court with a fine not exceeding one thousand dollars (\$1,000.00) and/or imprisonment for a term not exceeding six (6) months, or level a civil penalty of up to one thousand dollars (\$1,000.00) per day for each day or portion the violation continues, or in the event that the activity in violation may be permitted with appropriate approvals under the vineyard erosion and sediment control ordinance, a penalty processing fee of not less than three (3) times and not more than ten (10) times the amount of the standard processing fee for such approval. This processing fee is reviewed and updated annually via ordinance.

Measurable Goals/Implementation Schedule

- a. Continue enforcement protocol./Ongoing as needed.
- b. PRMD Engineering will notify the RWB on the third enforcement action or upon issuance of a Notice of Violation./Ongoing as needed.
- c. Report the number of non-compliant sites, the number of enforcement actions per each non-compliant site and the length of time to gain compliance to the RWB in the Annual Report/Annually.

2.6 TRAINING OF TARGETED STAFF

Permit and Resource Management Department (PRMD)

Existing Activities

Many staff members are involved in one aspect or another of the Grading Permit process, including technical, professional, supervisory, managerial, planning, and administrative staff. The majority of staff have attended at least one Erosion Control/NPDES formal training sessions conducted/sponsored by State or Regional Water Quality Control Boards. These training sessions are usually six to eight hours long. Many staff

members have attended more than once, and more than one type of workshop.

Training of key personnel should be ongoing as BMPs change over time, new innovations or approaches are being created, and/or new regulations are adopted. The key personnel at PRMD include the Building, Code Enforcement, Engineering, Planning, and Well and Septic Divisions. Staff and management from these divisions should attend at least one workshop, seminar, training session or other similar function that is at least four hours in length each year per person. In addition, time will be set aside at various staff meetings to discuss erosion prevention, sediment control and post-construction BMPs.

Previously, NCRWQCB staff has expressed a concern for the content of the grading inspections. To ensure their concerns are addressed, inspectors have offered ride-alongs to RWB staff who have accepted over time. PRMD will continue with this practice as it fosters communication between the agencies.

New Activities

PRMD will ensure the key personnel identified above receive the minimum training.

PRMD will create a training database to track and ensure the key personnel identified above meet the training goals.

Measurable Goals/Implementation Schedule

- a. Continue to invite Regional Water Board staff to ride along with inspectors/annually.
- b. Continue to provide time at staff meetings/Code Corners, to encourage discussion of Erosion Control current practices/ongoing.
- c. Staff and management from the Building, Code Enforcement, Engineering, Planning and Well and Septic divisions shall attend at least one workshop, seminar, training session or other similar function that is at least four hours in length each year per person./Annually (PRMD)
- d. PRMD will create a training database to track and ensure the key personnel identified above meet the training goals./June 2009 (PRMD).

3. **INDUSTRIAL/COMMERCIAL SOURCES**

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

3.1 **INVENTORY OF FACILITIES**

Environmental Health

Existing Activities

The Division of Environmental Health (EH) maintains a database with an inventory of all retail food facilities within Sonoma County. Category 03 and 04 retail food facilities within the NPDES permit boundary that have been inspected are tracked by the Division's Envision database system in which each retail food facility is assigned a facility identification number. EH inspectors complete a Daily Activity Log whereby a program element code and an activity code are entered into the database for the type of inspection, e.g., routine, follow-up or complaint, and whether the retail food facility is within the city limits or within the unincorporated area of the NPDES permit boundary. Changes in information for a retail food facility are updated by the EH inspector submitting a "Request For Action" form to an Office Assistant to enter into the Envision database.

EH maintains an inventory of closed landfills and transfer stations that are located within the NPDES permit boundary. These solid waste facilities are inspected by EH staff in accordance with State Minimum Standards established by the California Integrated Waste Management Board. Maintenance of drainage systems are reviewed during site inspections by EH staff to ensure integrity of roads and structures, and to prevent safety hazards and exposure of waste. The inventory of solid waste sites and copies of inspection reports are submitted to the California Integrated Waste Management Board.

Records of solid waste inspections are maintained in the EH files and copies of inspections are submitted to the California Integrated Waste Management Board on a quarterly basis for closed landfills and on a monthly basis for the transfer station.

New Activities - Retail Food Facilities

EH staff will continue to update the inventory in the Envision database of category 03 and 04 retail food facilities in the NPDES permit boundary requiring inspection for verification of storm water BMPs.

This inventory and database will be updated by EH staff at the time they become aware of new information by submitting a "Request For Action" form to an Office Assistant to enter into the Envision database.

EH will continue to maintain an inventory of closed landfills, transfer stations and composting/biosolid facilities that are located within the NPDES permit boundary. These solid waste facilities are inspected by EH staff in accordance with State Minimum Standards established by the California Integrated Waste Management Board. Maintenance of drainage systems are reviewed during site inspections by EH staff to ensure integrity of roads and structures and to prevent safety hazards and exposure of waste. The inventory of solid waste sites and copies of inspection reports are submitted to the California Integrated Waste Management Board.

Emergency Services

Existing Activities

An inventory of facilities that handle hazardous materials, generate hazardous wastes, maintain underground or aboveground fuel storage tanks, treat hazardous wastes, or handle acutely hazardous materials is currently maintained by the Department of Emergency Services (DES). This is done through its Hazardous Materials Division, which serves as the Certified Unified Program Agency (CUPA) for much of Sonoma County (with the exception of sites within the city limits of Santa Rosa, Petaluma, Healdsburg or Sebastopol).

DES uses an Access database (CUPA DMS) to track the sites that it regulates. For a given site, the database includes information regarding its address, business owner/operator, applicable CUPA programs, type and amount of hazardous materials handled and hazardous waste generated, SIC codes, etc.

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.

3.2 RETAIL FOOD FACILITY INSPECTIONS

Environmental Health

Existing Activities

Year One of NPDES Permit

During the first year of the NPDES permit, EH and the City of Santa Rosa Public Works Department entered into a one year Memorandum of Understanding (MOU) to establish criteria for selecting the types of retail food facilities to be inspected, the exact nature of inspections to be performed, the method of documentation and the form of reporting.

The criteria for selecting facilities include:

- Potential for discharging pollutants into municipal storm water system.
- Use of a grease interceptor.
- Location of trash dumpsters outside building.
- Cleaning of equipment outside.
- Washing of parking lots.
- Extent of food preparation.
- History of Health Code violations.
- Inspector's prior experience and knowledge of the facility's operation.

EH and City of Santa Rosa Public Works staff developed a Food Facility Storm Water Inspection Report form and an educational guideline "Storm Water Pollution Prevention Guidelines for Food Handling Facilities." During routine retail food facility inspections, EH inspectors recorded their observations on a Food Facility Storm Water Inspection Report and discussed findings with the facility operator/owner. EH inspectors provided a copy of the Report and a copy of the "Storm Water Pollution Prevention Guidelines for Food Handling Facilities" to the operator/owner.

Years 2-5 of NPDES Permit

After termination of the MOU, EH inspectors continued to inspect retail food facilities for verification of storm water BMPs in the City and unincorporated areas of the permit boundary; however, EH inspectors discontinued completing Storm Water Inspection Reports. Instead they noted comments on the EH Division's Food Facility Inspection Report.

EH inspectors continued to investigate and provide appropriate enforcement of all complaints and unsatisfactory deficiencies related to storm water pollution at retail food facilities within the City limits if the nature of the complaint was related to activities covered under the California Uniform Retail Retail food Facilities Law (CURFFL). To the extent not covered by CURFFL, EH refers complaints, unsatisfactory deficiencies and reports of discharges at retail food facilities within the City to the Santa Rosa Public Works Department for corrective action. Complaints and unsatisfactory deficiencies at retail food facilities in the unincorporated area are referred to the County Department of Transportation and Public Works for corrective action.

Documents related to storm water inspection reports, complaints and enforcement actions are maintained in the retail food facility files at the EH office. These documents are maintained for five years after which time they are destroyed.

New Activities

EH inspectors will inspect category 03 and 04 retail food facilities to confirm that storm water BMPs are being effectively implemented in compliance with City and County ordinances and California Retail Food Code. EH inspectors will note deficiencies on a “Food Facility Storm Water Inspection Report” form and provide a copy of the “Food Facilities Storm Water Pollution Quick Reference” pamphlet to the operator/owner.

Documents related to storm water inspection reports, complaints and enforcement actions will be maintained in the retail food facility files at the EH office. These documents are maintained for five years after which time they are destroyed.

Measurable Goals/Implementation Schedule

- a. EH staff will inspect all category 03 and 04 retail food facilities within the 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.

3.3 RETAIL GASOLINE OUTLET AND AUTOMOTIVE SERVICE FACILITIES INSPECTIONS

Emergency Services

Existing Activities

DES currently inspects retail gasoline outlet (RGO) and automotive service facilities. RGO’s are inspected annually to comply with Title 23 requirements. Automotive service facilities (ASF’s) are inspected every 3 years to comply with Health and Safety Code Chapter 6.95 requirements.

RGO’s are inspected for compliance with underground fuel storage tank and hazardous materials regulations and may be inspected for hazardous waste activities, depending on the nature of their business. ASF’s are always inspected for compliance with hazardous waste generator regulations and may be inspected for hazardous materials and underground fuel storage tank activities depending on the nature of their business. In some cases, aboveground fuel storage tank or hazardous waste treatment regulations may apply as well.

New Activities

Continue to inspect RGO’s on an annual basis. Ensure that the sites are complying with underground fuel storage regulations, as well as those that pertain to hazardous materials and if applicable, generators of hazardous waste. Continue to inspect ASF’s on a routine basis. Ensure that the sites are complying with hazardous waste generator regulations, and, when applicable, Hazardous Materials Business Plan and underground storage tank requirements.

CUPA DMS will be used to track both facilities requiring storm water inspections and the inspections themselves. Inspectors can add notes under ‘Inspections & Violations’ that relate to stormwater issues.

Measurable Goals/Implementation Schedule

- a. Continue to inspect RGO’s on an annual basis and ASF's on a routine basis. Ensure that the sites are complying with regulations and BMPs.
- b. Increase inspection frequency for ASF's to/once every 2.5 years.

3.4 INDUSTRIAL/COMMERCIAL FACILITIES ENFORCEMENT

Environmental Health

Non-Compliant Retail Food Facilities

Existing Activities

EH inspectors implement a progressive enforcement procedure for storm water violations related to activities covered under CURFFL that provides for:

- Verbal and written warnings. Retail food facility operators/owners are advised to correct minor deficiencies noted on the Food Facility Inspection Report. To the extent not covered by CURFFL, retail food facility operators/owners in the City of Santa Rosa observed with unsatisfactory deficiencies are referred to the City of Santa Rosa Public Works Department for corrective action and operators/owners in the unincorporated area are referred to the County Department of Transportation and Public Works.
- Violation Reinspection Fees. To the extent the storm water violations are covered by CURFFL, a violation reinspection fee is charged to the operator/owner for failure to correct storm water deficiencies. Up to two violation reinspection fees will be charged before the matter is taken up at an administrative hearing.
- Office Hearing. Failure to correct unsatisfactory deficiencies or discharges of pollutants to the storm drainage system subject to CURFFL results in the operator/owner appearing at an office hearing to discuss remedial and preventative actions.
- Show Cause Hearing. Failure to correct deficiencies discussed at the office hearing result in the operator/owner appearing at a Show Cause hearing for intent to revoke the retail food facility permit. At this meeting the operator/owner can either provide documentation of compliance or appeal to the hearing officer not to revoke the Food Facility Permit.

New Activities

EH inspectors will apply progressive enforcement procedures at non-compliant retail food facilities in the permit boundary similar to the existing practices in the Term 1 and Term 2 NPDES permits.

Emergency Services**Non-Compliant Industrial/Commercial Facilities**Existing Activities

DES currently uses a progressive enforcement approach to violators. An initial inspection report is provided to the owner/operator. If compliance is not reached within the specified time, a re-inspection is conducted. Again, if compliance is not reached, a Notice of Deficiency may be issued. This continues through a Notice of Violation and, finally, a Notice to Comply. If none of these measures are successful in obtaining compliance, a referral is made to the District Attorney's office or the case is handled through an administrative hearing.

New Activities

DES is expected to use its progressive enforcement policy, with referrals to the District Attorney's office or administrative hearings where appropriate, for storm water violations.

Measurable Goals/Implementation Schedule

- a. Use progressive enforcement approach to issues for noncompliant facilities./Ongoing.
- b. Use administrative enforcement orders when appropriate as an enforcement tool./Ongoing.
- c. Make referrals as appropriate to the Regional Water Board./Ongoing.

3.5 INTERAGENCY COORDINATION FOR INDUSTRIAL/COMMERCIAL FACILITIES**Environmental Health**Existing Activities

EH staff has routinely participated in the monthly interagency coordination meetings, and annual manager meetings during the first and second terms of the NPDES Permit.

EH staff participated:

- with the City of Santa Rosa in the development of the "Food Facility Storm Water Pollution Prevention Guidelines"
- with the City of Santa Rosa subcommittee to develop trash enclosure guidelines for retail food facilities

New Activities

EH will continue to participate in the monthly interagency coordination meetings.

Emergency Services

Existing Activities

DES staff currently attends meetings related to storm water issues. DES is an active member of the Sonoma Environmental Quality Assurance Committee (SEQAC) in which issues related to storm water are frequently discussed.

DES participates in the Green Business program, which recognizes businesses that are in compliance with environmental regulations, including storm water provisions. This program, coordinated by the County's Economic Development Department, requires a high degree of communication and cooperation among various regulatory agencies.

New Activities

Roundtable discussions in which compliance staff relate their experiences conducting storm water pollution prevention inspections are held quarterly through SEQAC. DES is currently an active member of SEQAC.

DES also participates in the Sonoma County Environmental Task Force. This group is coordinated by the Region 1 RWQCB and is primarily focused on stormwater issues. It meets approximately four times per year.

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 will attend SEQAC and environmental task force meetings as well as be an active participant in the Green Business program.

3.6 TRAINING OF TARGETED STAFF

Environmental Health

Existing Activities

EH staff participated in the initial one-day educational seminar in 1997 presented by staff with the San Mateo Storm Water Pollution Prevention Program. EH staff discusses storm water issues related to retail food facilities during routine staff meetings. On several occasions guest speakers from the City of Santa Rosa Public Works Department have made presentations to EH staff about storm water pollution prevention practices.

New Activities

EH inspectors will obtain ongoing training to support inspection activities.

Emergency ServicesExisting Activities

DES inspectors currently attend frequent training on compliance issues.

New Activities

Continue to train DES inspectors in compliance issues and the latest regulatory standards. Pursue training for DES inspectors in SWPP standards and BMP's.

Measurable Goals/Implementation Schedule

- a. Train EH inspectors at least annually on procedures, policies and BMP's 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./Annually
- b. EH staff will discuss storm water pollution issues regarding retail food facilities during monthly Retail Food Team staff meetings and discuss non-hazardous storm water pollutant discharges during quarterly Emergency Response Standby Team staff meetings./Ongoing
- c. DES inspectors will continue to be trained in storm water pollution prevention standards./Annually.

4. 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 Management
- 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

General Services Department/Architect's Division

Existing Activities

The Architecture Division manages public construction projects for the general government facilities of the County of Sonoma. Projects range in size from a few hundred dollars to several million dollars. Most projects are interior remodeling and deferred maintenance of existing buildings and structures. There are a few projects that result in new buildings, which are considered major projects.

Small construction projects (less than \$25,000) are completed with in-house Facility Operations Division construction crews. All other projects are completed by licensed contractors selected through competitive public bidding.

All construction projects managed by the Architecture Division are designed by licensed architects and engineers (A/E) who prepare complete construction documents (plans and specifications) which are submitted for building permits (including grading permits) from the County Permits and Resource Management Department (PRMD).

Where applicable, projects comply with California Environmental Quality Act (CEQA) or National Environmental Policy Act (NEPA) with environmental review, initial studies and other required documentation provided by PRMD through an agreement with the Architecture Division. Any and all requirements, including storm water management during

construction, that come from code or environmental review are incorporated into the construction documents and become part of the agreement with the construction contractor. Each project has a Project Manager assigned to it to oversee the project and assure the construction documents are being followed. The Project Manager is responsible to confirm that any mitigation monitoring program established through the permitting process has been completed. At the end of the project, the Project Manager certifies that the mitigation measures have been implemented.

Construction contract documents for major projects include provisions for BMPs in several areas related to storm water and pollution control. (Sheriff Building documents are used as an example. These documents are based on standard documents for major projects. Standard documents for smaller projects are being updated and made consistent with the major project standards). The following specification sections include applicable provisions:

- Supplemental General Conditions Section 00800 covers provisions for Dust Control and Disposal of Surplus Soils, Sediment Control, Groundwater, and Flammable Liquid Storage.
- Supplemental General Conditions – Hazardous Materials Section 00805 covers procedures for location, removal, remediation, disposal and abatement of hazardous materials.
- Regulatory Requirements Section 01410 covers the regulatory requirements and agencies that apply to the project
- Regulatory Requirements for Hazardous Materials Section 01411 covers the regulatory requirements and agencies relative to hazardous materials that apply to the project
- Testing and Inspection Section 01450 covers the requirements and procedures for testing and inspecting the work.
- Construction Facilities and Temporary Controls Section 01500 covers controls for dust, pollution, water, erosion and storage
- Individual technical specifications prepared by the A/E include provisions for the storage, application and clean up of specific materials.

Standard contract documents for all projects have been updated and provisions for storm water management during construction will be reviewed and will include appropriate BMPs. This will include review of the documents for activities related to inspection of construction sites to confirm that storm water requirements are being met.

Regional Parks Department

Existing Activities

Public construction activities undertaken by the Regional Parks Department includes a variety of facilities, including vehicle parking areas and access roads, restrooms, trail systems, athletic fields, and miscellaneous appurtenant structures and facilities include storm drain improvements. The majority of public construction projects undertaken by the Regional Parks Department result in less than one acre of grading

Public construction projects are designed by in-house staff. Some public construction projects require specific engineering design, which is completed under contract under the supervision of in-house staff. Public construction projects are constructed by licensed contractors selected through competitive public bidding. Construction documents, including plans project specifications, are prepared by in-house staff. In-house staff also supervises construction activities and assures the provisions included in the construction documents are being followed.

All public construction projects are subject to the California Environmental Quality Act (CEQA) and some are subject to the National Environmental Policy Act (NEPA). In-house staff conducts environmental review, CEQA and NEPA document preparation, and Mitigation Monitoring Plan preparation. Requirements, including storm water management and pollution prevention, that come from code or environmental review are incorporated into the Mitigation Monitoring Plan and the construction documents, becoming part of the agreement with the construction contractor.

The Regional Parks Department currently includes appropriate BMPs that reduce the discharge of pollutants from public construction sites in the design process and construction documents. Some BMPs are developed in consultation with various agencies such as Caltrans, Regional Water Quality Control Board, California Department of Fish and Game, National Fish and Wildlife Service, National Marine Fisheries Service, and the Sonoma County Permit and Resource Management Department. The following published BMP sources are reviewed for incorporation into the Mitigation Monitoring Plan and construction documents, as necessary:

- Erosion and Sediment Control Field Manual,
- Manual of Standards for Erosion and Sediment Control Measures,
- General Industry Safety Orders,
- Caltrans Standard Specifications,
- Handbook for Forest and Ranch Roads.
- FishNet 4C County Roads maintenance Program

If required by contract, the contractor will submit a Storm Water Pollution Prevention Plan (SWPPP) before start of work that details temporary BMP's to be used. The contract may also include permanent erosion

control/storm water measures.

New Activities

Regional Parks will integrate appropriate Low Impact Development technologies into project planning and design phases to ensure storm water is retained and infiltrated on-site where practical. Regional Parks will monitor post construction activities to ensure BMP’s are serviced or removed as outlined in the construction documents.

Department of Transportation and Public Works (TPW)

Existing Activities

TPW manages public construction projects related to the following

Divisions:

- Airport
- Refuse/Solid Waste
- Roads - Capital Improvements
- Roads - Maintenance
- Transit

Projects range in size from a few hundred dollars to multi-million dollars.

Projects types vary greatly (please see below for illustrations of construction types that take place under each division of the Department:

Division	Construction type
Airport	Hangers, runway work, various building, support roadways
Refuse / Solid Waste	Landfills, Transfer stations, support building and facilities
Roads – Capital Projects	Improvements associated with 1,400+ miles of roads including pavement culverts, bridges, retaining walls, slide repairs, etc. Generally these are major projects performed by contractors under DTPW design and supervision
Roads – Maintenance	Maintenance of 1,400+ miles of roads including pavement, culverts, bridges, retaining walls, slide repairs, etc. Generally, these are smaller projects performed by Department Crews.
Transit	Park and Ride lots, Maintenance Yards, support building and facilities. Generally these projects performed by contractors under DTPW design and supervision

Small construction projects (less than \$25,000) are completed with in-house crews or by minor contracts. All other projects are completed by licensed contractors selected through competitive public bidding.

All construction projects managed by TPW are designed by licensed

engineers who prepare complete construction documents (plans and specifications).

All Department projects are required to comply with California Environmental Quality Act (CEQA) or National Environmental Policy Act (NEPA) with environmental review, initial studies and other required documentation provided by Permits and Resource Management Department (PRMD). Often the environmental documents also subject to approval by various state and federal agencies. Any and all requirements, including storm water management during construction, that emerge from codes and the environmental review process are incorporated into the construction documents and become part of the agreement with the construction contractor.

Each project has a Project Manager assigned to it to oversee the project and assure the construction documents are being followed. The Project Manager is responsible to confirm that any mitigation-monitoring program established through the permitting process has been completed. At the end of the project, the Project Manager certifies that the mitigation measures have been implemented.

Construction contract documents for major projects include BMPs related to storm water and pollution control developed in consultation with various agencies including, Caltrans, Regional Water Quality Control Board, State Fish and Game, Federal Fish and Wildlife, National Marine Fisheries Service, etc. These documents employ well-accepted BMP's.

Currently, TPW uses the Caltrans Standard Specifications, including:

- Section 20 on Erosion Control and Highway Planting.
- Section 7.101G on Water Pollution
- Section 7.101H on Use of Pesticides

Additional project specific BMP's are developed through the project environmental document and by consultation with permitting agencies. Performance standards and implementation schedule are included in each project's specifications and permits.

New Activities

Standard contract documents for all projects are constantly being updated. Provisions for storm water management during construction is continually being reviewed and modified to include appropriate, emerging BMPs. This update includes review of the documents for activities related to inspection of construction sites to confirm that storm water requirements are being met.

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.
- c. Continue to integrate appropriate Low Impact Development technologies into project planning and design phases (Regional Parks).
- d. Continue post construction monitoring to ensure the proper installation, maintenance, and/or removal of BMP's (Regional Parks).

4.1.2 Compliance with State General Construction Permit

General Services Department/Architect's Division

Regional Parks Department

Department of Transportation and Public Works

Existing Activities

The County currently complies with the National Pollutant Discharge Elimination System (NPDES) Permit General Permit for Storm Water Discharges Associated with Construction Activity (General Permit), currently defined as 1-acre or more disturbance. For applicable public construction projects, the County submits a Notice of Intent (NOI), fee, explanation of the applicable project, and Storm Water Pollution Prevention Plan (SWPPP). The County will continue to submit NOIs for projects that disturb one acre or more and are subject to the State General Construction Permit requirement.

Measurable Goals/Implementation Schedule

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

4.1.3 Inspection

General Services Department/Architect's Division

Existing Activities

The Project Manager for each project is responsible to observe the work to confirm that it is being completed in compliance with the contract documents. On larger projects, the Project Manager is stationed at the site and observes the construction on a daily basis. For smaller projects, the Project Manager observes the work on a regular basis, at intervals appropriate to the size and complexity of the project. Also, the Architect or Engineer of record provides site observation. For larger projects, an Inspector of Record is hired to provide on going inspections. Testing agencies are hired for special tests and inspections required in the specifications. PRMD provides inspections at the intervals established in

the permit. Testing and Inspection Section 01450 in the contract documents describes the requirements and procedures.

Regional Parks Department

Existing Activities

The Regional Parks Department currently inspects public construction sites during construction to ensure adherence to construction documents. The timing and frequency of construction site inspection is determined by the particular project, the project location, the time of year that construction is occurring, and the specific BMPs required for implementation during the construction process.

New Activities

Continue post construction monitoring to ensure the proper installation, maintenance, and/or removal of BMP's.

Department of Transportation and Public Works (TPW)

Existing Activities

All TPW projects are assigned a Resident Engineer or Inspector. The Resident Engineer enforces the storm water BMP's as specified in the contract document (including compliance with plans, specifications, special provisions and various permits).

If required by contract, the contractor will submit a Storm Water Pollution Prevention Plan (SWPPP) before start of work that details temporary BMP's to be used. The contract may also include permanent erosion control/storm water measures.

During construction of the project, the Resident Engineer or Inspector will visit the site on a daily basis. The resident engineer inspects the work to insure the contractor is complying with the contract, including installing of erosion control/BMP features per details, specifications or manufacturers recommendations. The Resident Engineer also tracks the contractor's progress in implementing BMP's to ensure their placement within the time requirements of the contract. During non-working periods, the Resident Engineer or Inspector will monitor the project during rainstorm events to insure the BMP's are in place and functioning.

Measurable Goals/Implementation Schedule

- a. Continue to inspect public construction sites during construction activities on an on-going basis. (TPW/RP/GS)
- b. Continue post construction monitoring to ensure the proper installation, maintenance, and/or removal of BMP's. (Parks)

4.1.4 Enforcement

General Services Department/Architect's Division

Existing Activities

The Construction Contractor submits pay requests monthly to the County for payment. The Architect/Engineer of record certifies that the pay request is valid. The Project Manager confirms and approves the pay request. If the contractor has not performed some portion of the work, including any required storm water management, the pay request will be modified to be consistent with actual work completed, and moneys will be withheld for work not performed. A 10% retention is held until the project is complete. The construction agreement provides that the County may suspend work if the Contractor fails to comply with the contract documents, which includes any requirements for storm water management.

Regional Parks Department

Existing Activities

The Regional Parks Department, through the General Conditions set forth in the Contract Specifications, has the ability to temporarily suspend work or terminate a contract for failure on the part of the contractor to carry out orders given or to perform any provisions of the contract. Other remedial actions would include having a different contractor or County forces complete the work and charge the original contractor accordingly. The Regional Parks Department inspection practice provides authority to address non-performance of project specifications, including BMPs included to reduce the discharge of pollutants from public construction sites.

Department of Transportation and Public Works (TPW)

Existing Activities

Once construction has begun, Transportation and Public Works

- Requires that the contractor have materials on hand to implement in their SWPPP in the event of an unexpected storm.
- If there is a prediction of rain, the contractor is reminded of the SWPPP or elements of their plan that need to be acted, depending on the progress of the work and vulnerability of the site.
- If the contractor has not completed the erosion control/SWPPP work and a storm occurs, the Resident Engineer or Inspector will order the contractor to undertake emergency measures to prevent runoff damage.
- Certain projects are only allowed to work during specific times of the year to prevent damage to the Eco-system. An example would be bridgework in streams. For these projects, Department

Inspection forces warn the contractor of impending deadlines to cease work and winterize the project.

- If the contractor does not respond by the required date, the Resident Engineer or Inspector will withhold progress payments until the contract is in compliance.
- If the contractor is not able or unwilling to perform, TPW has the option of ordering the contractor to stop work or to undertake emergency erosion control/SWPPP work with County forces and then back-charging the contractor.

Performance Standards/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.

4.1.5 Training of Targeted Staff

General Services Department/Architect's Division

Existing Activities

Project Managers receive ongoing in-service training regarding project management procedures and enforcement of contract documents.

New Activities

Project management staff will receive in-service training on the new BMPs and standard contract documents, including their responsibility to observe the work to confirm that the requirements are being met.

Regional Parks Department

Existing Activities

Regional Parks Department planners and project managers receive training in the areas of erosion control management, riparian habitat restoration, erosion control and bank stabilization for instream construction projects; fish passage design and engineering; Stormwater Pollution Prevention Plan (SWPPP) preparation and enforcement; BMP planning, implementation and inspection; and enforcement of construction documents. In addition, all Regional Parks planning and field staff receive annual NPDES training directed toward enhancing construction BMP knowledge.

Department of Transportation and Public Works (TPW)

Existing Activities

Depending on the needs of the project, TPW employs either in-house permanent full-time inspectors or expert consultant construction management services, both of which are experienced with current BMP's.

PRMD usually hosts an annual workshop targeted at construction personnel. TPW utilizes these for keeping current with new BMPs and their applications. The Department's goal is for construction personnel to attend a workshop every year, or at least every other year. Staff also attends similar seminars offered through private industry and other agencies. New or inexperienced construction inspection staff is required to attend at least one workshop. In addition, an experienced person is assigned to aid new staff with BMP implementation and monitoring.

Each season, TPW staff review the various elements of SWPPPs used on past projects to evaluate their effectiveness. TPW also reviews erosion control measures visible on projects constructed by other agencies in the area to observe and learn about new or alternative techniques.

TPW also relies on published reference manuals for detailed information. These include:

1. "Erosion and Sediment Control Field Manual" by California Regional Water Quality Control Board San Francisco Bay Region
2. "Erosion and Sediment Control" by ABAG (Association of Bay Area Governments)
3. Storm Water Quality Handbooks Series prepared for and distributed by Caltrans
4. "Project Planning and Design Guide"
5. "Storm Water Pollution Prevention (SWPPP) and Water Pollution Control Program (WPC) Preparation Guide"
6. "Construction Site Best Management Practices (BMP's) Guide"
7. "Construction Contractor's Guide and Specifications"

New Activities

TPW will continue enhance its in-service training for staff members involved in BMP implementation. The in-service training may include topics such as incorporating applicable BMPs in the design process and project specifications, inspecting construction sites for BMP implementation, frequency and timing of BMP inspections, enforcement of BMPs, and remedial actions.

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.

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.

Regional Parks Department

The Regional Parks Department manages 44 parks totaling approximately 7,299 acres. The facilities include neighborhood Parks, regional recreation areas, Open Space parks, and trails. Many of the Regional Parks Department facilities include infrastructure elements such as parking areas, minor road systems, and storm drainage systems. Regional Parks also maintains the grounds for County facilities including the Administration Center, Health Center, Veterans Halls, Libraries, and Detention Centers.

4.2.1 Pesticide Management

4.2.2 Fertilizer Management

4.2.3 Native Vegetation

Existing Activities

The Regional Parks Department currently adheres to all federal, state, and local regulations that govern fertilizer, pest control, and fire management in all applicable facilities. Weekly and monthly staff meetings are conducted, one purpose of which is to reinforce the proper use of pesticides, herbicides, and fertilizers. The Department follows chemical application procedures, such as:

- Chemical applicators comply with standardized protocol for routine and non-routine application of pesticides, herbicides (including pre-emergents), and fertilizers.
- Chemical applicators comply with the State Water Resources Control Board guidelines and monitoring requirements for application of aquatic pesticides to surface waters (WQ Order No. 2001-12 DWQ).
 - Chemical applicators do not apply pesticides and fertilizers immediately before, during, or after a rain event or when water is flowing off the application area.
 - Chemical applicators do not use or store banned or unregistered pesticides.
 - Chemical applicators are certified by the California Department of Food and Agriculture or are under the direct supervision of a certified pesticide applicator.
 - Monthly reports are submitted to the Sonoma County Agricultural Commissioner.

The Regional Parks Department currently utilizes five permanent chemical storage areas and utilizes temporary chemical storage areas as needed for specific activities. The permanent and temporary chemical storage areas comply with federal, state, and local regulations. Current practices include:

- Banned or unregulated chemicals are not stored.
- Chemicals are stored indoors, or are stored outdoors under cover on a paved surface.
- Required signage is installed and maintained.
- Secondary containment is used where appropriate.
- Chemical storage areas are inspected regularly, including annual inspection in compliance with the City of Santa Rosa Fire Department.

The Department complies with federal, state, and local regulations regarding the disposal of pesticides, herbicides, and fertilizers. Chemical disposal is handled through Safety-Kleen, Co., or current vendor.

Additionally, the Regional Parks Department is currently implementing a program to reduce the use of pesticides, herbicides, and fertilizers. Reduced chemical use also reduces the chemical storage and disposal needs, which also reduces chemical handling and the potential for spills. Elements of the chemical reduction program include:

- Reduce the toxicity level of pesticides, herbicides, and fertilizers.
- Reduce the actual number of pesticides, herbicides, and fertilizers used.
- Implement IPM practices over chemical solutions.

To date, the chemical reduction program has yielded positive results. The overall toxicity of chemicals used for the Department's landscape and recreational facilities is limited to the "caution" level.

Furthermore, pesticide use in West County Parks has been discontinued completely and the use of pesticides at Helen Putnam and Tolay Lake Parks has been suspended in compliance with a Federal court order and EPA injunction which restricts pesticide use in California Red-legged Frog habitat.

The Regional Parks Department also requires all vendors and contractors to adhere to federal, state, and local regulations that govern pesticide, herbicide, and fertilizer use, storage, and disposal by including appropriate provisions in project specifications and agreements. The activities of vendors and contractors are inspected to ensure that the provisions are being adhered to. The timing and frequency of inspection is determined by the particular activity, the activity location, the time of year that the activity is occurring, and the specific provisions that require implementation. The Regional Parks Department inspection practice provides authority to address non-performance by documentation, sending notice to the contractor, and withholding payment for non-performance.

Maintenance staff participates in the Integrated Pest Management Program

(IPMP) and receives annual training and certification. Regional Parks Department maintenance staff has been participating in IPMP training and has been implementing IPMP practices as appropriate. These practices include utilizing mulch in landscaping and on recreational facility grounds to reduce the need for herbicide and fertilizer use. The use of mulch, as part of the IPMP implementation, results in the causal effect of water conservation in landscaping and recreational facility grounds because less water is used to irrigate mulched plantings.

Regional Parks currently practices retention and planting of native vegetation and water conservation. Projects are designed to minimize potential environmental impacts from construction, including the impacts associated with loss of native vegetation. Mitigation Monitoring Plans, which are prepared for some CEQA documents, include requirements for replacing trees, shrubs, and native habitats adversely affected by a project. These re-vegetation plantings are generally completed using native vegetation.

The department also utilizes volunteer assistance to reduce the populations of non-native plant species such as French Broom, Fennel, Blackberry, and Pampas grass at facilities within and beyond the permit boundaries.

Regional Parks is currently implementing its Water Conservation Project at the County Administration Center, which has improved water conservation, community education, and aesthetics. This project is being cosponsored with the Sonoma County Water Agency and City of Santa Rosa and is phased over a three-year period. The project replaces the existing turf and shrubs with walking paths and drought-resistant perennials and trees. Broadcast irrigation is also being replaced with drip irrigation throughout the Center. The new landscaping showcases examples of aesthetically pleasing water conservation techniques, BMP's, and Low Impact Development methods.

Measurable Goals/Implementation Schedule

- a. Continue to implement the chemical use, storage, disposal, and reduction practices outlined above/on-going. Ongoing
- b. Continue to follow the current practices regarding retention and planting of native vegetation and water conservation/on-going.
- c. Continue to maintain and update databases for staff training and certification associated with pesticide and fertilizer management/during the term of the permit.
- d. Continue to maintain and update written guidelines and practices for pesticide and fertilizer management/during the term of the permit.

4.2.4 Landscape waste disposal

Existing Activities

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, utilizing the County's waste recycling program to the greatest extent possible. Vegetation is disposed of at the mulching facility and recyclable materials are recycled. Special care is taken to ensure Sudden Oak Death material is disposed of properly in the county landfill. Tree debris larger than 4" in diameter is processed for utilization as firewood in Regional Parks campgrounds. On-site chipping of landscape debris was also conducted at park facilities, for utilization of the material as organic mulch. A majority of Regional Park Department facilities include separate containers to collect recyclable items from facility users. Written guidelines have been developed to address landscape waste disposal.

Measurable Goals/Implementation Schedule

- a. Continue to implement the current practices regarding proper disposal of landscape waste/on-going. Ongoing
- b. Continue to maintain and update guidance documents for proper practices and disposal of landscape waste guidance documents/during the term of the permit.

4.2.5 Recreational Water BodiesExisting Activities

The Regional Parks Department currently manages six recreational water bodies. These include non-swimming/boating water bodies that are maintained for natural habitat value and the swimming/boating water bodies at Spring Lake Regional Park and Healdsburg Veteran's Memorial Beach. The Regional Parks Department monitors applicable water bodies in conformance with federal, state, and local regulations. Written guidelines have been developed to address management of recreational water bodies. The non-swimming/boating water bodies are monitored for toxic infiltration and pesticide residuals. The swimming/boating water bodies at Spring Lake Regional Park and Healdsburg Veteran's Memorial Beach are monitored for coliform and fecal coliform, pesticide infiltration, and chlorine levels. Monitoring reports are maintained and submitted to the Sonoma County Health Department.

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. Maintain and update written guidelines and practices for management and monitoring of recreational water bodies/during term of the permit.

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

Regional Parks Department

Existing Activities

Regional Parks completed an inventory of its storm drain systems within the permit boundary. The facilities surveyed include County-owned parks as well as County-owned and affiliate-owned grounds under Regional Parks maintenance jurisdiction. The GPS coordinates of drain inlets, culverts, and outfalls were compiled into a database with information about the size, type, and design of the storm drain system.

New Activities

Regional Parks will begin developing a GIS database for its storm drain systems by utilizing the GPS coordinates and associated data gathered in the preceding permit term. Maps will be produced to illustrate the storm drain system features at Park and grounds maintenance facilities within the permit boundary. An associated data dictionary will accompany the maps to give further information about the storm drain system.

Department of Transportation and Public Works (TPW)

Existing Activities

Urban – Closed Drainage Systems: TPW currently has a comprehensive mapped inventory of its closed storm drain/inlet system. These systems are located primarily in subdivision streets that have been developed piecemeal over the years and throughout the county.

Rural – Open Drainage systems: Rural storm drainage systems typically consist of a combination of natural drainage ways and roadside ditches that employ short sections of culverts as necessary to drain storm water from one side of the road to the other. No inventory of these culverts exists.

New Activities

TPW will continue its program to inventory all drop inlets associated with closed drainage systems in its jurisdiction. This program will include development of written guidelines and procedures related to making and maintaining the inventory.

TPW proposes an annual inspection of 20% of its closed drainage systems, in addition to annual inspection of problem inlets. These systems will be cleaned as necessary.

Measurable Goals/Implementation Schedule

- a. Develop a GIS database for inventory of storm drain systems./During permit term. (Parks)
- b. Continue inventory of closed conduit system in the Larkfield/Wikiup and Airport Business Park urban areas and other urbanized areas within the boundary./During permit term.

4.3.2 Clean and inspect storm drainpipes and inlet structures

Regional Parks Department

Existing Activities

The Regional Parks Department inspects storm drainpipes and inlet structures on a yearly basis prior to the onset of the wet-weather season. Subsequent monitoring and clearing of debris from storm drainpipes and inlet structures is performed as needed during the rainy season. Temporary sediment control devices are installed as necessary at select locations, to prevent debris from entering storm drains. The debris is disposed of in compliance with federal, state, and local regulations. Stormwater Inspection Reports are completed by Park Maintenance and Operations staff to document problem drain inlets.

New Activities

Regional Parks will begin tracking problem drain inlets and other storm drain systems by compiling Stormwater Incident Reports and maintaining a database of reoccurring issues. A priority system will then be developed to begin addressing problematic storm drain systems for remediation.

Department of Transportation and Public Works (TPW)

Existing Activities

Urban – Closed Drainage Systems: Current maintenance of urban - closed drainage systems is minimal. These systems typically are not prone to blockage and flooding. TPW performs annual inspections of inlets and culverts that have historically been a problem, and inspect and clean as necessary.

Rural – Open Drainage systems: Inspection of open drainage courses and cross-culverts is currently limited to cleaning and servicing to minimize damage from flooding and erosion. Cross-culvert bottom conditions are consistent with the natural drainage courses preceding the culvert. Cleaning is restricted to re-moving debris associated with flood control.

Measurable Goals/Implementation Schedule

- a. Continue annual inspection of problem inlets and closed drainage systems and clean as necessary. (TPW)
- b. Develop and maintain a database for problem inlets and storm drain systems by year three of the permit term. (Parks)
- c. Develop a priority system to address problematic drain inlets for remediation by year four of the permit term. (Parks)

4.3.3 Open channel or roadside ditch inspection and maintenance**Regional Parks Department**Existing Activities

The Regional Parks Department inspects open channels and roadside ditches within its facilities on a yearly basis prior to the onset of the wet-weather season. Debris is removed from open channels and roadside ditches as necessary in order to prevent or minimize flooding and erosion. Trash and woody debris is also removed adjacent to creek areas in parks located within the permit area. This debris is disposed of in compliance with federal, state, and local regulations.

Department of Transportation and Public Works (TPW)Existing Activities

Open channels under the jurisdiction of TPW are typically located within the road right of way and are almost exclusively roadside ditches and short sections of culverts. Typically, TPW does not maintain natural or manmade drainage ways outside of the road right of way. TPW does inspect roadside ditches and associated short culverts on an annual basis to maximize drainage capacity and minimize erosion. Trash and debris are removed to the extent that they may block ditches or cross-culverts and cause flooding.

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.

4.3.4 Storm Drain Labeling**Regional Parks Department**

Existing Activities

Regional Parks applies labels to a minimum of 10 existing storm drain inlets per year and will continue this task until all storm drain inlets within the permit boundary are labeled.

New Activities

Regional Parks will maintain and update its written guidelines, procedures, and database for the storm drain labeling program. This includes the inspection and inventory of storm drain inlets on an annual basis to ensure labels are installed.

Department of Transportation and Public Works (TPW)Existing Activities

The County has labeled hundreds of storm drain inlets.

New Activities

The County will survey its facilities and identify storm drain inlets and will continue a storm drain inlet-labeling program. The storm drain inlet-labeling program may include the following elements:

- Identify stenciling or labeling to be used.
- Continue applying stencils or labels.
- Implement actual stenciling or labeling of storm drain inlets.
- Inspect the legibility of storm drain inlet stencils or labels.
- Reapply storm drain inlet stencils or labels as needed.
- Develop a record keeping database for the storm drain inlet-labeling program.
- Note: Certain inlets that drain to a nearby ditch are not proposed for labeling

Measurable Goals/Implementation Schedule

- a. Maintain and update written guidelines, procedures, and database for the storm drain labeling program/During permit term. (Parks)
- b. Inspect all storm drain inlets on an annual basis to ensure labels are installed/Annually. (Parks)
- c. Label new storm drain inlets in the Larkfield/Wikiup and Airport Business Park urban areas and replace damaged or missing labels found during storm drain inspections/Ongoing

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

Regional Parks Department

Existing Activities

The Regional Parks Department currently maintains the minor paved road systems and parking areas within its facilities. The Regional Parks Department also maintains paved road systems that are adjacent to County of Sonoma buildings and the County of Sonoma parking areas. The paved road systems within Regional Parks Department jurisdiction are considered “Priority D” and debris is removed as necessary. Debris is manually removed from paved road systems and parking areas after storm events. Debris is disposed of in compliance with federal, state, and local regulations.

Transportation and Public Works Department

Existing Activities

TPW currently sweeps significant portions of the 1,400+ miles of county roads – both rural and urban. There are five transit facility parking lots in the Term 2 boundary, including four Park and Ride lots and the main bus parking yard in South Santa Rosa. The main bus parking yard is swept several times a year, and the other lots are attended regularly by a landscape maintenance contractor including sweeping if needed. These sweepers operate full time throughout the year. The ability to meet a fixed schedule can be affected by:

- The need to divert staff to respond to other needs (complaints from the public for specific sweeping needs,
- Emergency or unforeseen problems,
- The need to support maintenance projects such as chip sealing and ditch cleaning follow-up)
- Equipment down time necessary for maintenance and repairs.

All debris generated from street sweeping goes to the County’s Central Landfill facility. Most often, the debris is transported directly in the sweeper units themselves, but occasionally it will be stockpiled and transported in dump trucks if the quantity of debris warrants.

Measurable Goals/Implementation Schedule

- a. Industrial/Commercial Areas within boundary - sweep 6 times per year./Annually. (TPW)
- b. Urbanized Residential Areas within boundary - sweep 3 times per year (TPW)/starting in year 3 of the program.
- c. Various/Intersections/Other (Parks)/sweep upon request.

4.4.2 Materials management

Transportation and Public Works

Existing Activities

Street and road maintenance operations may include saw-cutting, paving and the use of concrete materials in addition to natural material, trash and debris removal discussed above. Best management practices to address how to manage the materials resulting from each of these special activities is described below:

Saw-cutting: Saw-cutting activities are performed only in dry weather, to the extent feasible. However, 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 activity is disposed of properly.

Paving: Paving activities are performed only in dry weather, to the extent feasible. However, pothole patching may occur in the rainy season when there is a potential safety hazard. Paving materials are prevented from entering the storm drain system during paving operations and 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, so 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.

The following good housekeeping practices are implemented by TPW to properly manage wastes generated during street and road maintenance activities:

- a. Debris is prevented from entering the storm drain system.
- b. Spills and leaks are cleaned up immediately using dry methods to the maximum extent feasible.
- c. Dry materials and residue from cleaning operations are swept up.
- d. Non-hazardous dry waste is collected into designated, leak-proof containers and disposed of properly.
- e. Trash, litter and debris from job sites are cleaned up and disposed of promptly.
- f. Work vehicles and equipment are inspected regularly for leaks.
- g. Stockpiled materials are placed away from catch basins, storm drain inlets, drainage paths and natural waterways.
- h. Stockpiled materials are bermed and tarped during rainy or windy weather.
- i. Stockpiles are inspected regularly and after significant rain events.

- j. Maintenance-related products are applied and stored in accordance with manufacturer's instructions and proper safety measures.
- k. Maintenance-related products are stored in labeled containers with covers.
- l. Potential polluted debris, silt and vegetation debris generated by street and road maintenance is typically disposed of at the Sonoma County Central Landfill.
- m. Asphalt from street or road repair is recycled to the maximum extent practicable.
- n. Natural sediments and clean materials are disposed of in various ways including: placement at County operated landfills, placement at the Korbel fill site, or placement on private land, all in accordance with County grading permit requirements.

Measurable Goals/Implementation Schedule

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

4.4.3 Training of targeted staff

Regional Parks Department

Existing Activities

Regional Parks Maintenance and Operations staff representatives hold weekly Ranger/Maintenance coordination meetings (R3M3 meetings) to discuss street and road maintenance issues and activities. Regional Parks staff researches and reviews current published road maintenance BMPs, incorporates the most current BMPs in the written guidelines and procedures, and develops and implements training. Regional Parks field staff utilize the Sediment Control and Erosion Prevention Field Manual produced by the department as a quick reference guide on proper selection and installation of BMP's. Stormwater management staff also attend annual Fish Net 4C meetings for road maintenance activities.

Department of Transportation and Public Works (TPW)

Existing Activities

TPW currently conducts biweekly road-crew tailgate meetings. One purpose of these meetings is to communicate and reinforce NPDES storm water BMP's. The Department will review the BMP sources utilized in the streets and road maintenance and incorporate the most current BMPs in road maintenance activities outlined in the FishNet 4C Guidelines.

Measurable Goals/Implementation Schedule

- a. Continue meetings to discuss streets and road maintenance activities throughout the permit period. (Parks)

- b. Provide training to applicable staff on water quality and fish protection outlined in the Road Maintenance Standards Manual (Parks).
- c. Routinely meet to discuss streets and road maintenance activities throughout the permit period. (TPW)
- d. Review current streets and road maintenance practices, including BMP's related to materials management, on an ongoing basis throughout the term of this permit. (TPW)

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

Transportation and Public Works

Existing Activities

Spills of contaminants or hazardous materials are transported by TPW maintenance staff to the hazmat storage area at the Santa Rosa Yard following clean-up of the site which is under the direction of Environmental Health. The Parks and Ride lots at Healdsburg and Windsor also have surveillance cameras that are monitored by the TPW bus dispatcher.

Regional Parks Department

Existing Activities

The Regional Parks Department currently cleans up spills and disposes of cleaned up material in accordance with current local, state, and federal regulations. The Regional Parks Department contacts emergency services and/or local fire departments for spills that may be hazardous materials. Non-toxic materials are disposed of at county disposal sites. The Regional Parks Department responds to spill clean-up needs immediately upon notification of the spill.

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.

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**

Existing Activities

The Department of Emergency Services (DES) has responsibility for the County's Emergency Operations Plan. The Emergency Operations Plan is found in the Sonoma County Operational Area Hazardous Materials Incident Response Plan (commonly known as the "Area Plan"). The Area Plan was last updated in August 2007 and provides the following:

- Describes pre-emergency preparations, concept of operations, organizations and supporting systems required to implement the plan
- Provides for a coordinated and integrated response to hazardous materials accidents, releases or threatened releases.
- Defines roles and responsibilities and authority of participating agencies
- Establishes lines of authority, communication, and coordination when the plan is implemented
- Confines or restricts the effects of an immediate hazardous materials incident by restricting its expansion and/or the precipitation of secondary incidents
- Provides for accurate and timely information and issuance of emergency instructions concerning the release or threatened release of a hazardous material to the news media and the general public
- Establishes responsibility and provisions for training of emergency response personnel
- Provides for evacuation planning
- Provides a listing and description of available emergency response supplies and equipment
- Provides for incident evaluations and follow-ups

The Area Plan provides guidance to emergency responders in proper procedures to follow to minimize contamination of storm water systems.

The Sonoma County/Operational Area Emergency Operations Plan addresses the planned response to extraordinary emergency situations associated with large-scale disasters affecting the Sonoma Operational Area. It accomplishes the following:

- Establishes emergency management organization necessary for response to any significant emergency or disaster affecting Sonoma Operational Area
- Establishes the overall operational concepts associated with the management of emergencies

The Sonoma County Oil Spill Contingency Plan describes policies and procedures to be utilized in the event of an oil spill in a navigable waterway.

Copies of the Area Plan, Emergency Operations Plan and Oil Spill Plan are maintained in DES offices. Emergency responders for DES also keep copies of the Area Plan and Emergency Operations Plan in their response vehicles.

DES routinely works with other agencies in planning for and responding to hazardous materials incidents. Examples of the agencies that DES works with include the Sonoma County Sheriff and Department and Transportation and Public Works, United States Coast Guard, California Highway Patrol, California Department of Toxic Substances Control, Santa Rosa Fire Department, etc.

New Activities

The Area Plan is due to be updated in August 2010. Prior to that time, it will be reviewed for improvements related to storm water pollution concerns.

The Emergency Operations Plan was last updated in November 2006. It will also be reviewed for improvements related to storm water pollution concerns.

The Oil Spill Plan was last updated in 2003 and is reviewed as necessary (there is no mandated timetable for updates). Any necessary revisions and substantial changes will be forwarded to the Administrator of the Office of Oil Spill Prevention and Response (OSPR).

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 2010.
- c. Review and update Emergency Operations Plan as necessary.
- d. Review and update Spill Plan as necessary.
- 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.

5. 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

Transportation and Public Works (TPW)

Existing Activities

Minor illicit discharges, such as a traffic accident where pollutants can be contained on the road that do not create a water pollution hazard, are cleaned up and no further action is taken. Illicit discharges that create a water pollution hazard or plume are reported to the County Emergency Services, County Environmental Health, the Regional Water Quality Control Board and other impacted agencies. TPW maintenance staff contact the Sheriff's Office to bring contracted DES Hazardous Materials Response Team to a discharge when illicit discharges are considered major and/or of unknown substances.

TPW Road Maintenance Division responds to spills within the County maintained road right-of-way for traffic control and transportation of packaged spill materials to the Santa Rosa hazmat storage area. These spills include motor oils and fuels which the road crew will mop up, and place in 55-gallon drums for ultimate disposal by a licensed hazardous waste carrier.

If the spill is determined or suspected of being hazardous or toxic, and the County road crew does not have the training and equipment to do the clean-up, the Sheriff's Department is notified (if not already) and the DES Hazardous Materials Response Team is called in to handle the actual clean-up. The County road crew assists on an as needed basis.

TPW spill response is in effect throughout the County. No new procedures proposed due to the change in the NPDES storm water boundary.

Department of Emergency Services (DES)

Existing Activities

DES staff discovers illicit discharges through inspections, complaint follow-ups, and emergency response activities. Depending on the severity of the violation and the type of discharge, the discovery may result in any

of the following: immediate referral to the District Attorney's office for enforcement action; referral to another agency (e.g., RWQCB) for further investigation and/or enforcement; on-site documentation through the inspection report (including photos, if necessary) with a firm timeline for correction.

DES receives calls from the public, as well as referrals from other agencies, related to releases or threatened releases of hazardous materials. DES routinely investigates these reports and maintains written records of its actions. If the complaint is the result of a referral from another agency, DES informs them of the results of the investigation through a written report. If the complaint involves a CUPA-regulated facility, CUPA DMS and the site file are updated to reflect the results of the investigation.

DES will continue to investigate complaints and maintain records in the permit boundary. DES will continue to notify other agencies and update the CUPA DMS as necessary.

Continue to investigate illicit discharges during inspections, complaint follow-ups and emergency response activities in the permit boundary.

Environmental Health Division (EH)

Existing Activities

EH receives calls from the public regarding spills or discharges of both hazardous and non-hazardous materials into the storm drainage system. Spill reports within the city limits are referred to the appropriate city agency. Hazardous material spills in the unincorporated area are referred to DES. Sewage spills from septic systems are referred to PRMD. Sewage spills from the city public treated operations are referred to the City Utilities Department. Reported spills at food facilities, swimming pools and animal management facilities are recorded for response by an EH inspector.

EH inspectors will record public calls and respond to spills and complaints per current practices in the permit boundary.

EH responds within one business day of a report of a suspected spill or discharge of non-hazardous materials, such as grease at food facilities, filter backwash at swimming pools and waste at animal management facilities.

EH has a 24/7 standby emergency response system in place for response to reports of spills or discharges of non-hazardous materials into storm drainage systems within EH's jurisdiction. Complaints of sewage flowing off property from septic systems during weekends, holidays, or non-business weekday hours will be responded to by EH staff who will post health warning signs at the site as well as immediately contacting PRMD

management to advise of the discharge. See Section 5.2 for follow-up activities.

New Activities

EH will expand its current spill response investigation and follow-up procedures in the permit boundary. EH will continue to obtain information about illicit connections and spills from other agencies that involve food facilities, swimming pools and animal management facilities in the permit boundary.

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.

5.2 **PRIVATE SANITARY SEPTIC SYSTEMS**

Permit and Resource Management Department (PRMD)

Existing Activities

Complaints are received by PRMD Code Enforcement and are evaluated. If the complaint alleges that sewage is flowing off the property or into a stream, the complaint is investigated within one working day. If the sewage is confined to the property where the septic system is located and does not pose an immediate health hazard, then an investigation will be conducted within one week.

During the investigation, PRMD Code Enforcement verifies the validity of the complaint. If a sewage discharge has occurred, the source of the discharge is determined. Typical examples are a failed septic system, illegal use of the property such as a trailer, or an illegal gray water discharge. If the discharge is within the City of Santa Rosa limits, the complaint will then be referred back to the appropriate agency for follow up legal action. If the discharge is in the unincorporated area, PRMD Code Enforcement maintains jurisdiction for follow-up corrective action.

If septic system permits are required to correct a failing septic system within either the City of Santa Rosa or unincorporated area, then the permits are processed by PRMD Well and Septic. This generally is initiated by the property owner after notification from Code Enforcement.

If permits are required for corrections to plumbing or connection to sewer lines, then they are processed through the local jurisdiction. PRMD Well and Septic will issue a permit for any septic tank abandonment associated with these permits within either the City of Santa Rosa or unincorporated area.

PRMD Code Enforcement staff will continue to investigate complaints of septic system discharges in the permit boundary similar to existing procedures. Code Enforcement developed policies and procedures for investigation and notification of appropriate agencies during the second permit term.

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.

5.3 STANDARDIZED ENFORCEMENT PROCEDURES

DTPW Enforcement Procedures

Existing Activities

DTPW manages the cleanup of incidental illicit discharge on County roads and DTPW facilities as necessary to mitigate water pollution. Illicit discharges outside of DTPW jurisdiction or expertise are referred back to the respective County Department in charge of that type of illicit discharge.

DTPW will report suspected illicit septic discharges to PRMD whenever they are located in roadside drainage facilities.

PRMD Enforcement Procedures

Existing Activities

When PRMD receives an illicit septic system discharge complaint, Code Enforcement clerical staff routes the complaint to the Code Enforcement Supervisor, or designee, for assignment to staff and investigation. The timing of the investigation is based on the existing response protocol.

When Code Enforcement staff determines that an illicit discharge for a septic system has occurred, he or she has the option of pursuing the violation via criminal or civil litigation. Based on the egregiousness of the violation, a person may be cited criminally via the assistance of a Deputy Sheriff under Section 7-21 Sonoma County Code. Criminal citations are prosecuted at the discretion of the Sonoma County District Attorney's Office. However, violations are typically pursued via civil action per the following:

- Notice of Violation. A notice of violation is sent to the property owner that identifies the property, the nature of the violation and

the property owner's ability to appeal the violation to a hearing officer. Sonoma County Code allows a property owner 30 days to remove the violation without the imposition of civil penalties.

- Notice and Order. If the property owner fails to abate the violation, a Notice and Order which is a final notice is sent to the property owner certified mail return receipt requested and a second copy of the notice is posted on the property. The Notice and Order gives the property owner a time certain to remove, correct or legalize the violation. If the property owner fails to comply with the Notice and Order, a notice of abatement proceeding is recorded against the title of the property in the recorder office which notifies any potential buyers, lenders or agents that the County has an unresolved abatement proceeding on the subject property.
- Public Hearing. Following the recordation, a public hearing is scheduled and the property owner is notified to appear at a scheduled, publicly noticed abatement hearing. Both the County and the property owner have the opportunity to present their respective cases for the determination of a violation and corrective measures. The hearing officer notifies all parties of the determination per Section 1-7.3 Sonoma County Code. If a violation is upheld, all costs and civil penalties are imposed and the property owner is given a deadline for compliance.
- Civil Lawsuit. If the property owner fails to comply with the hearing officer's deadline, staff directs County Counsel to file a lawsuit in Sonoma County Superior Court. On occasion, a judge will issue a contempt order against the property owner with the sentence reserved pending correcting the violation. After the property is in compliance, if the property owner does not voluntarily pay all costs and penalties, a partial abatement lien is recorded on the property. Failure to pay will ultimately result in all costs and penalties collected by the County Collection Department.

One exception to the civil procedure is contained within Section 1-7.3 (m) Sonoma County Code which allows staff to sidestep the noticing and public hearing process and present a case directly to the Board of Supervisors for a determination that the violation poses a significant health or safety hazard to the public. By resolution, the Board of Supervisors may direct County Counsel to file a lawsuit or temporary restraining order as required.

PRMD Code Enforcement will continue to implement existing enforcement procedures of septic system discharges in the permit boundary.

Complaints regarding other types of illicit discharges (soils, paints, fuel or oils discharges, vehicle washing, etc.) are routed to the Engineering Division, Storm Water Section. These instances are handled in accordance with the recently approved “Construction Site Storm Water Violation and Compliance.” As discussed above in Section 2.5, this policy is progressive in nature and escalates from verbal warnings to administrative hearings. Staff is not limited to always start with a verbal warning. Staff has the discretion to skip steps in the progressive hierarchy depending on the circumstance.

New Activities

The Engineering Division will continue to utilize the “Construction Site Storm Water Violation and Compliance” policy and procedure regarding non-domestic waste illicit discharges.

The Engineering Division will notify the Regional Water Board, in writing, on the third attempt at seeking compliance or upon issuance of a Notice of Violation regarding non-domestic waste illicit discharges. See Section 2.5 for further discussion.

DES Enforcement Procedures

Existing Activities

Illicit discharges may result in immediate referral to the District Attorney for enforcement action. An alternative may be to refer them to the appropriate agency for further investigation and/or enforcement. For minor violations, inspectors may also choose to establish firm deadlines for compliance as specified in the field report. If compliance is not attained, the case may then be referred to the District Attorney or handled through an Administrative Enforcement Order.

New Activities

Continue to pursue enforcement action through the District Attorney’s office when appropriate. Alternatives include referral to the appropriate agency, compliance timelines specified in the field inspection report, or administrative hearings.

EH Enforcement Procedures

Existing Activities

EH implements a progressive enforcement procedure for illicit discharge storm water violations at food facilities related to activities covered under the California Uniform Retail Food Facility Law that provides for:

- Notice of Violation. Food facility operators/owners are issued a notice of violation on the Food Facility Inspection Report for illicit discharge connections and directed to repair the connection. The City of Santa Rosa Public Works Department is notified about

those facilities in the city and the County Department of Transportation and Public Works is notified about those facilities in the unincorporated area.

- Violation Reinspection Fees. A violation re-inspection fee is charged to the operator/owner for failure to correct illicit discharge connections. Up to two violations re-inspection fees will be charged before the matter is taken up at an administrative hearing.
- Office Hearing. Failure to correct illicit discharge connections to the storm drainage system results in the operator/owner appearing at an office hearing to discuss remedial and preventative actions.
- Show Cause Hearing. Failure to correct the illicit discharge connection discussed at the office hearing result in the operator/owner appearing at a Show Cause hearing for intent to revoke the food facility permit. At this meeting the operator/owner can either provide documentation of compliance or appeal to the hearing officer not to revoke the Food Facility Permit.

New Activities

EH inspectors will continue to implement the current progressive enforcement procedure for illicit discharge storm water violations in the permit boundary.

Measurable Goals/Implementation Schedule

- a. County agencies will continue to pursue current enforcement actions to obtain compliance for illicit discharge detection and elimination.
- b. Report the number of storm water pollution enforcement actions in the annual report./Annually
- c. County agencies will continue to implement existing enforcement procedures in the NPDES permit boundary.
- d. County agencies will develop/revise policies and procedures, as necessary, during the permit term./Ongoing
- e. County agencies will notify the Regional Water Board, in writing, on the third enforcement action or upon issuance of a Notice of Violation for each enforcement case./Ongoing

5.4 RECORD KEEPING AND DOCUMENTATION

DTPW Record Keeping

Existing Activities

DTPW records on actions taken related to illicit discharge on County roads and DTPW facilities vary depending on the severity of the discharge. Minor discharges are limited to notes in the Maintenance Foreman's Diary while more significant discharges, such as an underground fuel tank, may have substantial records kept on the clean up

of the discharge and cost recovery attempt.

DTPW records on illicit septic discharge are typically limited to reporting the incident to the appropriate agency. In areas where DTPW is planning a capital project that may affect septic systems a survey of all the septic systems in the project area is conducted to evaluate their condition and to determine the correct way to address the project's impact on the system.

PRMD Record Keeping

Existing Activities

PRMD maintains a database backed up by written files related to violation investigations and notifications. The Code Enforcement Supervisor is provided with quarterly reports on active violations and case closures.

New Activities

PRMD Code Enforcement will continue to maintain its database and written filing system for septic system discharges in the permit boundary.

PRMD Engineering Division, Storm Water Section will continue to maintain its database and written filing system for septic system discharges in the permit boundary.

DES Record Keeping

Existing Activities

DES maintains its database, CUPA DMS, with records related to the facilities staff inspects. DES also maintains site files in its office sorted by street address. These contain copies of inspection reports, permits, correspondence, etc.

New Activities

DES will continue to maintain its CUPA DMS database and site files in the permit boundary.

EH Record Keeping

Existing Activities

EH uses and updates its computerized databases to track activities related to the NPDES permit. EH 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. EH compiles summary reports of its activities for annual reporting purposes.

New Activities

EH staff will maintain its current record keeping procedures, but include the new facilities in the permit.

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.

5.5 ILLICIT CONNECTION INVESTIGATION**DTPW Illicit Connection Investigation**Existing Activities

If DTPW staff discovers an illicit discharge during the course of normal operations, the discharge is reported to the appropriate agency. Records on illicit discharge vary depending on the severity of the discharge. Minor discharges are limited to notes in the Maintenance Foreman's Diary while more significant discharges may have substantial records kept on the clean up of the discharge and cost recovery attempt.

New Activities

DTPW will refer septic illicit discharges to PRMD.

In cases where a DTPW capital project is being planned or underway, DTPW will conduct septic system evaluations to determine the cause of an illicit discharge in a project area and the appropriate way to address the situation.

PRMD Illicit Connection InvestigationExisting Activities

PRMD has not received complaints from other agencies regarding illicit connections of septic systems to storm drainage systems.

New Activities

PRMD Code Enforcement will respond with an investigation should DTPW discover an illicit septic system connection in the NPDES permit boundary.

DES Illicit Connection InvestigationExisting Activities

If DES inspectors discover illicit connections, the same procedures as in (1) and (3) above are generally followed. However, in the majority of cases, a referral to the appropriate agency will be made, since these often do not involve CUPA issues.

New Activities

DES will continue to pursue enforcement action through the District Attorney, handle administratively or through the inspection process, or refer to the appropriate agency.

EH Illicit Connection Investigation

Existing Activities

EH staff inspect storm drain systems for illicit connections during routine food facility inspections and when discovered, the operator/owner is directed to correct the deficiency. A referral to the appropriate city or county Public Works Department is also made.

New Activities

EH inspectors will inspect food facilities in the permit boundary for illicit connections.

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.

5.6 PUBLIC REPORTING

Various County departments ensure that the public is provided a means of reporting illicit discharges and illicit connections. The activities and goals to accomplish this is 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

DTPW/Integrated Waste Division

Existing Activities

As a point of information, there are a number of programs in Sonoma County that manage hazardous waste generated by residents and businesses that generate small quantities of hazardous waste. Most of the hazardous waste programs are operated by the Sonoma County Waste Management Agency (SCWMA). The SCWMA is not a co-permittee to the NPDES permit and therefore the programs of the SCWMA are not subject to the NPDES permit; however, the programs are listed in this permit document as they contribute to pollution prevention of storm water.

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, SWMA has provided Household Toxics Roundups and Business collections, which were one-day collection events held in parking lots. In 1998 the SCWMA added a door-to-door collection program for both residents and businesses. In 2005 the

SCWMA opened a Household Toxic Waste Facility at the Central Landfill, which provides weekly drop-off opportunities for both residents and businesses. Additionally, small community collections will be operated weekly in different locations throughout the County and door-to-door collections will be available for a fee.

In addition to the above mentioned collection programs, the County operates load checking programs that remove hazardous waste from solid waste at each disposal site. The load check program includes an educational effort to inform landfill users of the proper disposal options available. Recycling centers at all six disposal sites within the County that accept automotive batteries, oil, oil filters, and three centers accept latex paint. Curbside oil and oil filter collection is offered with other curbside recycling in four jurisdictions (City of Sonoma, City of Santa Rosa, City of Rohnert Park and the unincorporated county). Lastly, there are many businesses and city corporation yards that accept oil from the public. Most of those oil recycling centers also accept oil filters and some accept antifreeze.

DES

Existing Activities

DES refers both business and the public to the Sonoma County Waste Management program for assistance with disposal of used oil and other toxic materials. DES inspectors may also respond to complaints related to the improper disposal of used oil and other toxics. Although these may result in enforcement action, they most often are handled through discussions with homeowners and public education. DES may also respond to emergency releases of these wastes (e.g., roadside abandonment) in which case DES will identify the materials and arrange for pickup and proper disposal.

New Activities

DES will continue to make referrals to the SCWMA and recommend use of household hazardous waste and small quantity generator programs. DES will continue to respond to complaints and enforce/educate as necessary. DES will continue to respond to releases or threatened releases and assist with cleanup.

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.

5.8 TRAINING OF TARGETED EMPLOYEES

PRMDExisting Activities

PRMD Code Enforcement staff participate in weekly meetings to discuss current procedures, active cases and classes available.

DESExisting Activities

DES staff participate in training regarding proper handling of toxics and used oil. Continue to have DES staff conduct training for other agencies (e.g., volunteer fire companies) regarding the proper handling of incidents involving used oil and toxics, etc. Emphasize use of dry cleanup methods and avoidance of washing any used oil or toxics into storm drain system.

There may be additional training available for DES staff regarding illicit discharges and connections to the storm drain system. DES expects that it will participate in such training and use the information to be more effective in its work related to the storm water management program.

EHExisting Activities

EH Emergency Response Standby Team members meet quarterly to discuss and review spill responses for the previous quarter and to discuss new issues. EH Food Team inspectors discuss storm water management pollution prevention at regularly scheduled monthly staff meetings.

EH staff will continue illicit connection training in conjunction with its quarterly Emergency Response Standby Team staff meetings and with its monthly Retail Food Team staff meetings.

Measurable Goals/Implementation Schedule

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

5.9. INSPECTION OF INCIDENTAL RUNOFF**Permits and Resource Management Department (PRMD)**Existing Activities

In the 2003 NPDES MS4 permit, non-storm water discharges from landscaping overspray is permitted under C. PROVISIONS, 2.b Conditionally Exempted Discharges provided the discharges are potable water and are not identified by the permittee or Executive Officer as causing or contributing to a violation of any water quality standard. C.2.b

goes on to require the implementation of reasonable BMPs for elimination or reduction of pollutants from these discharges.

During the second permit term concerns were raised regarding incidental runoff from reclaimed effluent irrigation as well as potable water irrigation. The Regional Water Board has required the permittees to implement BMPs to reduce or eliminate pollutants from these non-storm water discharges.

As this is an emerging issue, the County does not currently have any activities associated with controlling incidental runoff into County owned storm drain systems.

The County is at a significant disadvantage relative to our co-permittee, the City of Santa Rosa, in that the County does not own or operate any drinking water utilities. As such the County's legal authority does not include the ability to terminate service. SCC Chapter 11, Article 3, section 11-32 does prohibit the discharge of pollutants, however, section 11-29(b)(2) appears to exempt landscape irrigation and lawn watering.

The County does not implement a treated effluent reclamation program similar to the City of Santa Rosa. There are no County owned or operated domestic waste treatment plants within the permit boundary that provide treated effluent for reclamation in urban or domestic settings.

New Activities

The first step to effectively regulate the discharge of pollutants from landscape and lawn irrigation runoff is to review, edit and adopt any necessary changes to the County's legal authority. Staff will also investigate water waste ordinances and the need for such regulations.

As the County does not have direct authority over the various water utilities, cooperation with these utilities may be vital in addressing this issue. PRMD staff will communicate with the water utilities within the permit boundary in an attempt to meet and discuss the issues surrounding incidental runoff.

The County further proposes to conduct dry season inspections of the urban clusters within the permit boundary on a monthly basis. The intent of the inspections is to identify irrigation overspray (water waste) and irrigation runoff (potential pollutant discharges).

The County will need a progressive enforcement policy and procedure should incidental runoff be detected. The first level of enforcement would be public outreach with flyers or door hangers explaining the situation that was detected. Perhaps two notices of this nature would be appropriate. A third offense could be a notice of violation with publication in a daily newspaper and a fourth offense could lead to a hearing. This enforcement

approach is conceptual at this point in time, not based on any legal authority and is subject to change.

Measurable Goals/Implementation Schedule

- a. During the months of May through October of each year, conduct monthly, incidental runoff inspections of the urban clusters within the permit boundary. July 2008.
- b. Attempt to meet with the various water utilities within the permit boundary to discuss the regulation of incidental runoff. July 2009.
- c. Develop brochure or door hanger regarding incidental runoff as public outreach and enforcement tool. June 2009.
- d. Review current legal authority relative to incidental runoff, landscape overspray, lawn overspray, irrigation runoff, and water waste. June 2009.
- e. Propose and draft legal authority to effectively regulate the potential discharge of pollutants from irrigation overspray and irrigation runoff. June 2010.
- f. Draft and adopt a policy and procedure for the enforcement of incidental runoff. June 2010.
- g. Annually report the number of inspections conducted, number and type of enforcement actions. Annually.

6. 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 non-point source and storm water pollution as well as their 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 LABELLING

Department of Transportation and Public Works Regional Parks Department

Note:

The Storm Drain Labeling Program and performance standards are included in the Municipal Operations - Storm Drain System and Maintenance Section (section 4.3.4). Both Departments propose to continue to label storm drains in order to inform the public and departmental staff to make them aware of the significance of individual actions in controlling storm water/non-point pollution sources.

6.2 ECOLOGY/ENVIRONMENTAL NEWSPAPER COLUMN

Existing Activities

The co-permittees, with the assistance of the Russian River Watershed Association, has published numerous articles in many of the local and daily newspapers. The co-permittees will continue to work with RRWA to continue publishing environmentally based articles.

The co-permittees has, on numerous occasions, discussed publishing an environmentally based article in the Press Democrat. The Press Democrat has consistently refused to publish an article written by an author not employed by the Press Democrat.

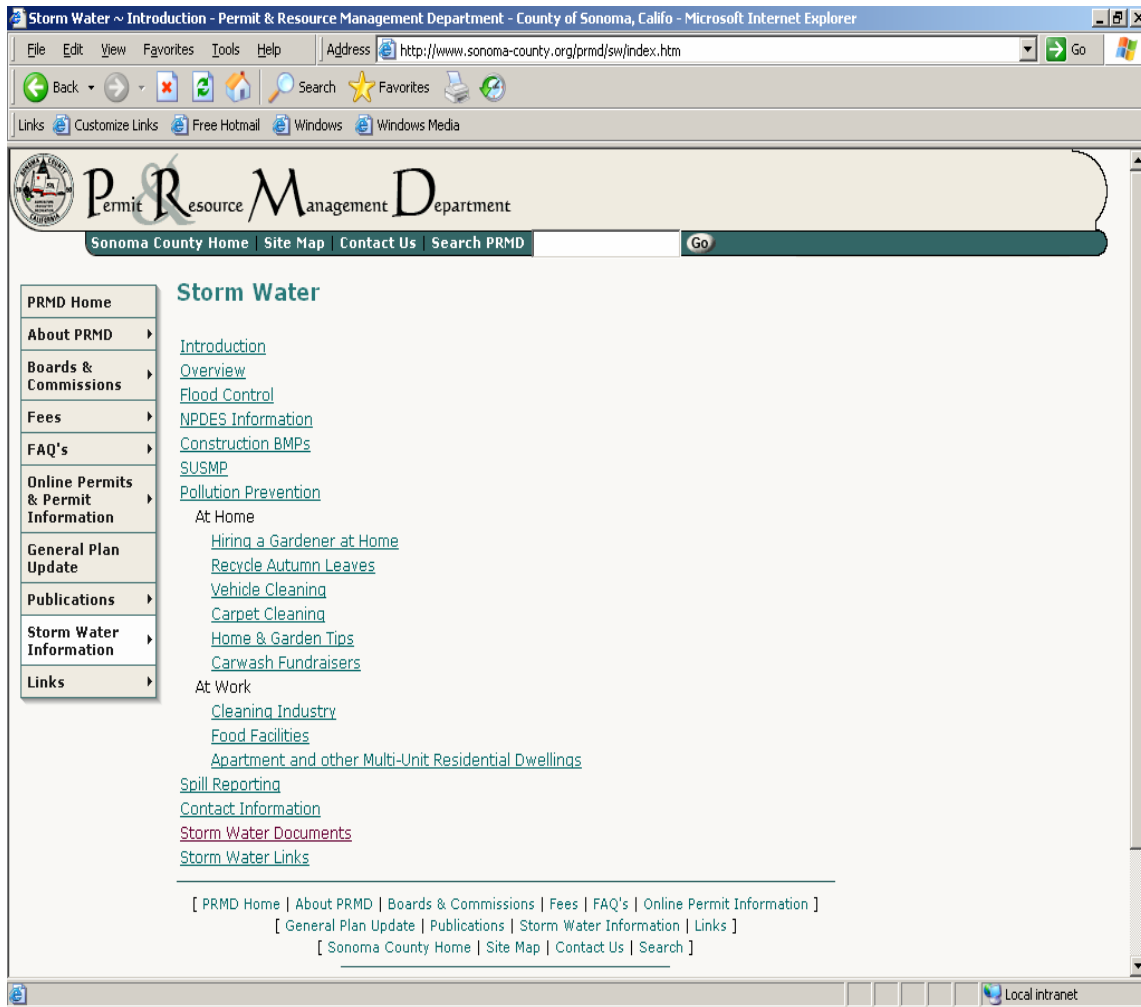
Measurable Goals/Implementation Schedule

- a. The co-permittees will continue working with the local newspapers to publish environmentally based articles and report on status in Annual Report/Ongoing -- 2008.

6.3 WEBSITE

Existing Activities

PRMD has created a Sonoma County website located at <http://www.sonoma-county.org/prmd/sw/index.htm> and the following image is a screen shot of the website.



The website includes information on such topics as construction BMPs, post-construction or SUSMP guidelines, pollution prevention at home and at work, flood control and a good background on the NPDES storm water program.

PRMD has also created a URL entitled, "Sonomacountystormwater.org." This URL is pointed to the above website.

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

Measurable Goals/Implementation Schedule

- a. The County will continue to fund and update the Sonoma County website as well as the "sonomacountystormwater.org" URL.

6.4 CREEK STEWARDSHIP

Environmental Health

Existing Activities

The Environmental Health Department conducted a field survey of horse facilities near Santa Rosa Creek as part of the public outreach for the fecal bacteria source identification project. A pamphlet entitled, "Horse Owners Guide to Water Quality Protection" authored by the Council of Bay Area Resource Conservation Districts was mailed to 21 properties with horses located adjacent to Santa Rosa Creek. The Department contributed \$500 to the Sonoma County Horse Council for a survey of the number of horses in Sonoma County that are located at facilities near waterways so that these facilities can be monitored for proper manure management practices.

New Activities

The Environmental Health Department will conduct the same activities in other areas within the permit boundary.

Measurable Goal/Implementation Schedule

- a. Conduct survey of horse facilities adjacent to major creeks in the permit boundary no later than July 1, 2011. Horse facility owners will be provided with a copy of the pamphlet entitled, "Horse Owners Guide to Water Quality Protection" authored by the Council of Bay Area Resource Conservation Districts.

6.5 PET WASTE SIGNS

Regional Parks

Existing Activities

The Regional Park Department currently posts pet waste signs at its facilities. An example of these signs is provided below.



Pet Waste Sign on Joe Rodota Trail

Measurable Goals/Implementation Schedule

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

6.6 PUBLIC EVENTS

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

6.7 HAZARDOUS WASTE DISPOSAL

Existing Activities

The SCWMA is not a co-permittee to the NPDES permit and therefore is not subject to the permit. However, SCWMA efforts are described as because they contribute to pollution prevention of storm water in Sonoma County. As this is informational, no goals or performance standards are included.

The Sonoma County Waste Management Agency's (SCWMA) efforts to educate the public on household hazardous wastes and their proper disposal are extensive. The following table describes current and ongoing efforts.

Household Hazardous Waste Programs Educational Efforts		
Program Description	Reach	Budget
Sonoma County Recycling Guide		
The Sonoma County Recycling Guide is a newsprint 24-page booklet listing recycling and disposal options for both solid and household hazardous wastes. The Guide is updated and printed 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.	\$62,000/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 phone tree system, which disseminates information. Callers may leave messages and receive a return call for information they can not obtain from the phone tree.	2,615 calls in 2005 (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.	In 2005, the website had 2,402,851 hits and there were 121,226 users.	6,040 Consulting, Hosting and domain name registration. 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 continue 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 2003 to publicize the opening the Household Toxic Waste Facility.	Not quantifiable	\$7,000 - \$25,000/yr
NO Toxics Garbage Can Stickers		
In 1997 the Sonoma County Waste Management Agency applied •NO Toxics• stickers to residential garbage cans throughout the County. The stickers informed residents that oil, oil filters and other hazardous waste can not go in the garbage, and provided the Eco-Desk Hotline. The Sonoma County Waste Management Agency will be reapplying the stickers during 2003 - 2004.	100,000 households	\$100,000

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. In 2002, the booth is highlighting household hazardous waste management.	Over 320,000 attendees annually	\$10,000

6.8 ILLICIT DISCHARGE - EDUCATIONAL MATERIAL DISSEMINATED AT SPILL SITES

Department of Emergency Services (DES)

Existing Activities

The Department of Emergency Services staff currently distributes educational materials regarding compliance issues to business owners/operators during the course of their routine inspections. Similar materials are at times handed out at emergency response sites or during complaint investigations to responsible parties. These include pamphlets and fact sheets, often related to hazardous waste and its proper handling. Many times the information provided by DES concerns alternative disposal methods, such as the HHW & SQG hazardous waste collection events.

Division of Environmental Health (EH)

Existing Activities

EH informed the public about the adverse impact that chlorine and biocides in swimming pool water discharges have on creeks and fish habitats, and educated the public on other disposal options for the discharge of swimming pool water containing chlorine and biocides via a pamphlet mailed to local pool service companies entitled, “Guidelines for Proper Disposal of Swimming Pool, Spa & Filter Backwash Water”.

New Activities

EH will continue to inform the public about the adverse impact that chlorine and biocides in swimming pool water discharges have on creeks and fish habitats, and will continue to educate the public on other disposal options for the discharge of swimming pool water containing chlorine and biocides.

Measurable Goals/Implementation Schedule

- a. Within 36 months of permit adoption, EH will conduct public outreach to educate the public on alternative options for the disposal of swimming pool water containing chlorine and biocides."
- 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.

6.9 PRIVATE SEPTIC SYSTEMS

PRMD

Existing Activities

There are more than 40,000 Standard Septic Systems in Sonoma County. PRMD maintains records of all permitted systems. These records include what type of system is installed, where on the property it is installed, the soil type, and some other information pertinent to the property. These records are available to all property owners upon request. This is important public education in the sense that many property owners need this information in order to ensure satisfactory septic system operations. In addition to answering questions on these system operations, PRMD Well & Septic Section staff make presentations on these Standard Septic Systems to realtors and home owner associations, upon request.

There are more than 2,000 Non-Standard Septic Systems in Sonoma County. PRMD mails out annual notices to all property owners of these systems, to perform their twice/year self-monitoring inspections. One of these mailings includes a flyer, inviting owners to attend the Annual 8-hour class on Operations and Maintenance of Non-Standard Septic Systems. This class is usually held in February. In addition, PRMD Well & Septic Section staff conduct routine inspections of these Non-Standard Systems, every one-to-three years depending on system type. Prepared materials are distributed at each inspection, and on change of ownership.

There are many Commercial/Industrial Systems in Sonoma County. The County has applied for and has received a tentative approval of an EPA grant, for \$75,000. This grant is to a) create a database of these systems; b) create guidelines of BMPs for distribution to the owners of these systems; and c) to conduct inspections of these systems and distribute these prepared materials.

As part of the ongoing outreach, PRMD developed and annually distributes storm water quality BMP information to non-standard septic system owners.

Measurable Goals/Implementation Schedule

- a. PRMD staff will continue to distribute storm water quality BMP information to non-standard septic system owners, annually, and to all others upon request/2008.
- b. PRMD staff will review and revise, if necessary, the storm water quality BMP brochure/June 2009.

6.10 INDUSTRIAL/COMMERCIAL OUTREACH AS PART OF INSPECTIONS

Food Facility Outreach

Existing Activities - Environmental Health Department

During routine inspections of food facilities requiring verification of BMPs in the existing NPDES permit boundary, Environmental Health inspectors will provide food facility operators/owners with a copy of the “Food Facilities Storm Water Pollution Quick Reference” pamphlet. This will allow inspectors to verify that storm water BMPs are being effectively implemented and ensure the food facility operator/owner:

- Has received educational materials on storm water pollution prevention practices;
- Does not pour oil, grease or grease residue onto a parking lot, street or adjacent drain inlet;
- Keeps the trash bin area clean and trash bin lids closed, and does not fill trash bins with washwater or any other liquid;
- Does not allow illicit discharges, such as discharge of washwater from floor mats, floors, porches, parking lots, alleys, sidewalks, and streets in the immediate vicinity of the establishment, filters, or garbage/trash containers;
- Removes food waste, rubbish, or other materials from parking lots in a sanitary manner that does not create a nuisance or discharge to the storm drain.

EH inspected food facilities and distributed prepared materials on storm water BMP's twice during term 2 of the permit within the permit boundary.

New Activities

EH will inspect food facilities and distribute prepared materials on storm water BMP's twice during term 2 of the permit within the NPDES permit boundary.

EH will conduct a survey of horse facilities adjacent to major creeks within the NPDES permit boundary.
(see section 6.4 above)

The Department of Emergency Services will distribute additional materials regarding SWPPs and BMPs, as they become available.

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. Continue to distribute “Food Facilities Storm Water Pollution Quick Reference” pamphlets to food facility operators/owners during routine inspections.

- c. Make a presentation to the Food Industry Advisory Forum about the storm water management plan and changes for food facilities between Term 2 and Term 3 permits within 24 months of permit adoption.

Industrial/Commercial Facility Outreach

Existing Activities

During the course of routine inspections, DES staff distributes compliance materials and discusses compliance issues with business owner/operators.

Where applicable (e.g., ASF's), inspectors also discuss the Sonoma Green program, which provides recognition to those businesses in compliance with environmental regulations.

New Activities

DES staff will distribute educational materials on storm water pollution prevention and BMPs during the course of routine inspections.

Measurable Goals/Implementation Schedule

- d. Distribute additional materials./Ongoing
- e. Discuss compliance issues with owner/operators and provide them with applicable materials to assist with answering their questions include storm water pollution BMP's./Ongoing
- f. Continue to encourage ASF's to receive Sonoma Green certification/2008.

6.11 LANDSCAPE AND AGRICULTURAL INDUSTRIES

Existing Activities

The County Agricultural Commissioner's Department 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 application performed in a given month. Repots 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 Commissioners office.

The Agricultural Commissioners 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 Agricultural Commissioners

office also gives out the documents and brochures pertaining to pesticide and hazardous material during these office visits.

The Agricultural Commissioners staff conducts a two hour pesticide laws and regulations and vertebrate pest control workshop in December, which is attended by approximately 250 growers who needed continuing education hours in order to maintain their Private Application Certification. Additionally, ten hour training sessions are conducted in the Spring and Fall Semester at the Santa Rosa Junior College to provide continuing education for license and certificate holders.

Education of the general public occurs when they contact the Agricultural Commissioners office and at the numerous seminars the Agricultural Commissioners staff attends as speakers. Four recycling days in the Spring and Fall are held for plastic pesticide/chemical containers.

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

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.

6.12 BUILDING AND CONSTRUCTION

Existing Activities

Private construction sites that are required to obtain grading permits are also required to implement erosion and sediment controls. Towards this end, PRMD staff have developed standardized grading notes and erosion and sediment control notes. Prior to requiring these “notes” on the plans, outreach and input was provided/requested from various designers, engineers, contractors and associations.

In addition, ten brochures, similar to those created by the City of Santa Rosa, were developed for County use. These brochures discuss BMPs for various activities and potential pollutants. These brochures as well as the Erosion and Sediment Control Field Manual were used as outreach material by PRMD inspectors. The inspectors continue to use the brochures as outreach.

PRMD currently has on permanent display BMP outreach materials including the ten BMP brochures, a brochure entitled, “After the Storm, A Citizens Guide to Understanding Stormwater,” a brochure entitled, “Fat

Free Sewers – How to Prevent Fats, Oils, and Greases from Damaging Your Home and Environment” in our lobby. Other outreach material is located here as well. Also a photo-board of appropriate BMP practices and a display board of various BMP materials are on display at the PRMD Storm Water Cubical.

The County Public Works Department provides public outreach to the contractors who worked on public projects. Language in their contracts included erosion control measures. This outreach had an impact on private construction sites where these contractors worked.

The County Regional Parks Department completed phase one of the Water Conservation Project replaced the existing turf and shrubs at the County Administration Center with walking paths and drought-resistant perennials and trees. The Water Conservation Project is also a demonstration garden that exemplifies aesthetically pleasing water conservation techniques to enhance understanding and awareness of storm water issues to the public and County staff.

New Activities

The remaining aspects of SUSMP will developed during this permit term. The SUSMP requirements will affect the planning, design, review, technical analysis, inspection and on-going maintenance of many projects. The education of the public and the County staff is essential for implementing this new element of the Storm Water Management Program. To be effective, guidance documents must be developed, for consistent and effective SUSMP application.

Measurable Goals/Implementation Schedule

- a. Develop combined City/County SUSMP site design guidelines or requirements for developers (source controls)/within 5 years of permit adoption.
- b. Provide workshop to the development community on planning procedures, policies, design guidelines and BMP for the remaining SUSMP aspects/within 5 years of permit adoption.

6.13 SPRING LAKE ENVIRONMENTAL DISCOVERY CENTER

Regional Parks Department

Existing Activities

Open since April 20, 2002 the Environmental Discovery Center (EDC) is operated and managed by the Regional Parks Department at Spring Lake Regional Park. Funding is through the Sonoma County Regional Parks Foundation (Foundation). The EDC offers a hands-on, interactive

environment where people of all ages can learn the value of environmental stewardship, habitat restoration, parks, open space, conservation, and responsible use of Sonoma County's natural resources. The vision of the EDC is to be a hub of educational and recreational activity, hosting volunteer and staff-led hikes, park ranger presentations, and campfire talks in the adjacent amphitheater. The EDC provides outreach to school and community groups, bringing messages of environmental stewardship and responsible resource use to students, families, and individuals. The Foundation works under the guidance of local schools and universities serving as advisory partners in the outreach programs.

The EDC features a variety of exhibits, educational computer games, nature videos in the theater, and outdoor activities. The most popular exhibit is a real 30-foot storm drain that children crawl through. The drain is one part of the "Down the Drain" program designed to educate children and adults about the environmental hazards of storm drain run-off. In addition to the regular storm water school program, Regional Parks added the Rockin' -n- Recycling and Weather or Not programs.

The EDC delivers sponsor messages in a format that allows visitors to gain understanding of environmental issues that affect Sonoma County. Visiting classrooms can cover curriculum that is required by the State of California. EDC sponsors include:

- City of Santa Rosa, Public Works Department
- Sonoma County Water Agency
- County of Sonoma Department of Health Services - Environmental Health Division
- County of Sonoma Transportation and Public Works Department - Integrated Waste Division
- County of Sonoma Regional Parks Department
- Sonoma County Agricultural Preservation and Open Space District
- Agilent Technologies
- North Bay Corporation
- Sonoma County Fish and Wildlife Commission

Measurable Goals/Implementation Schedule

- a. Continue to operate and manage Spring Lake Park Environmental Discovery Center (EDC)/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.

7. EFFECTIVENESS EVALUATION

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

7.1 FORMAL EVALUATION

Existing Activities

Representatives from County staff attend monthly coordinating meetings with co-permittees and NCRWQCB staff. The purpose of the meetings is to exchange information on program activities, and to enhance the overall effectiveness of the SWMP. Information or decisions from these meetings often needs to be communicated with coworkers, for follow-up action. This keeps the program activities moving in the right direction.

In addition to on-going activity coordination among co-permittees and RWB staff, an annual report is submitted to the RWB. The Annual report includes a review of the work that was planned to be completed that year, and lays out a work plan for the next year. Writing the Annual Report is an important and time-consuming task.

New Activities

The County has created a new position, ESA/Stormwater Coordinator, to improve the effectiveness of their SWMP. This full-time equivalent employee will work in County PRMD department, and be responsible for coordinating with other county department staff on their ongoing SWMP work. The activities listed in the SWMP will be reported to the Stormwater Coordinator. This information will be included in the Annual Reports. In addition, ongoing coordination of these activities, especially the new activities, will ensure redundancies of effort are reduced or eliminated. This coordinator will provide the link between intra-departmental coordination activities and inter-agency coordination activities. Additional work may include utilizing existing computer databases to collect analysis and report various activities and evaluate their effectiveness. This coordinator will represent the County at the monthly coordination meetings with co-permittees and NCRWQCB staff.

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. Continue to utilize the Stormwater Coordinator position to maintain or increase the level of coordination among County staff involved in completing SWMP activities/Ongoing.

7.2 SPECIAL STUDIES

New Activities

The County is proposing to develop and implement a water quality based study to 1) provide storm drain outfall monitoring data and 2) evaluate the effectiveness of specific BMPs through a controlled study.

At least two sub-watershed land areas, within the permit boundary, with similar features (size, rainfall regime, runoff coefficients, and land uses) will be identified and evaluated for inclusion in this study. Storm water discharges from each sub-watershed's storm drain system will be collected and analyzed in response to rain events. Non-storm water discharges will also be collected and analyzed should they occur. The data will be reviewed to determine an appropriate BMP(s) to study. A BMP or suite of BMPs will be tailored with the goal being to reduce or eliminate one or more constituents of concern(s) identified in the analytical results. The selected BMP(s) will be installed or implemented. Storm drain discharge monitoring will continue and results will be analyzed to determine BMP effectiveness. For further discussion please see Part V - Monitoring.

Measurable Goals/Implementation Schedule

- a. Identify and evaluate ten to twelve sub-watershed areas for initial evaluation/Year 1.
- b. Conduct ambient water quality monitoring (analytical and inspection)/Years 2-3.
- c. Evaluate data and determine BMP(s) to be studied. Install or implement BMP(s)/Year 3.
- d. Continue water quality monitoring (analytical and inspection)/Years 4-5.
- e. Report findings and make recommendations/Year 5

8. Fiscal Analysis

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

Existing Activities

During the first and second permit term, fiscal resources were reported in each Annual Report. The report includes 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
- develop 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.

Each Annual Report also includes a description of the funding sources to meet the estimated expenditures for the upcoming fiscal year. Currently, the County's source of financing is the General Fund and permit fees (collected at PRMD). The County has reviewed (during the second permit term) and will continue to review the categories currently used for reporting fiscal resources (within 24 months of permit adoption).

Each Annual Report also includes a description of shared funding among the permittees for lead agency coordination work.

New Activities

The County will also investigate new sources of revenue for the storm water program. Current costs are financed by the County's General Fund and permit fees (PRMD). The funding may be insufficient to meet all program goals contained in the SWMP. For example, permit boundary expansion will increase the workload and financial resources associated with implementing the SWMP county wide. depending on the permit boundary, grading permit activities related to Private Construction Sites may result in increases in plan check and inspection services.

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 Board of Supervisors adopts the budget for the upcoming year, storm water budget information is available to include in the next Annual Report. The Board of Supervisors generally adopts the Proposed Budget prior to July 1st, and the Final Budget during September of each year.

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 Include discussion of fiscal resources in work plan meeting with RWQCB staff/Annually.
- c Re-evaluate permit fee structure to ensure adequate funding for PRMD. Within 12 months of permit adoption (PRMD).
- d Review the categories currently used for reporting fiscal resources/Within first 24 months of permit adoption.
- e Seek new revenue sources for storm water program/During permit term.

9. MONITORING PLAN

Goal The goal of the monitoring program is to characterize stormwater discharges. Other possible beneficial uses of the monitoring data include: (1) assessing the chemical, physical, and biological impacts to receiving waters resulting from urban runoff; (2) assessing the overall health and evaluating long-term trends in receiving water quality; (3) measuring and improving the effectiveness of the BMPs; and (4) identifying sources of pollutants.

New Activities

See Part V, Monitoring of the Co-Permittee SWMP.

10. POST--CONSTRUCTION DEVELOPMENT: STANDARD URBAN STORM WATER MANAGEMENT PLAN

Goal Minimize storm water pollution, limit storm water peak flows and conserve natural areas to MEP from new and redevelopment

New Activities

See Part VI, Post Construction Development: SUSMP.

Upon review of Sonoma County Code, Chapter 11, Article 3, the County's legal authority to require SUSMP mitigations in areas that do not drain to County owned or maintained municipal separate storm sewer systems is uncertain. The County will review the legal authority and revise the SUSMP criteria accordingly.

Measurable Goal

- a. County Counsel and PRMD staff will review the County's legal authority and, if appropriate, revise the criteria for projects that are potentially subject to the SUSMP Guideline.

Part III

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

NPDES Permit No. CA0025054

Storm Water Management Plan City of Santa Rosa

Sonoma County Water Agency
City of Santa Rosa
County of Sonoma

November 2007

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Part III
CITY OF SANTA ROSA
STORM WATER MANAGEMENT PLAN

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 City of Santa Rosa Storm Water Management Plan (SWMP) is provided in the Federal Clean Water Act, California Water Code, California Fish and Game Code, California Health and Safety Code and California Penal Code. The California Environmental Quality Act and Subdivision Map Act provide municipalities the 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 to implement the SWMP.

This section contains specific examples of the current existing legal authority to effectively implement the elements of the SWMP thereby reducing pollutants in storm water discharge to the maximum extent practicable within the City jurisdiction.

Local Legal Authority

1.1 Storm Water Ordinance

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. Santa Rosa's Storm Water Ordinance is currently available on the City web page at the following address: <http://www.ci.santa-rosa.ca.us/default.aspx?PageId=349>.

Chapter 17-12 (Storm Water) contains two distinct sections, Article I, Drainage, and Article II, Storm Water Quality. Article II Storm Water Quality is the primary source of the City's existing enforceable legal authority to fulfill NPDES requirements to control pollutants in storm water discharges. Specific excerpts from Chapter 17-12 Storm Water, Chapter 18-04 (Building and Construction-General provisions) and Chapter 19-64 (Subdivisions-Grading and Erosion Control) are listed below as they pertain to distinct elements of the management plan.

As set forth above and in connection with the application for the first NPDES Storm Water Discharge Permit, the City adopted an ordinance revising the Santa Rosa City Code to successfully provide for enforcement of all permit requirements. These revisions provided a solid base for permit enforcement. In addition, after the issuance of the second permit, the City's legal counsel consulted the Regional Water Board legal counsel and determined no further code revisions were needed in connection with Term 2.

Existing Santa Rosa City Code sections regarding storm water quality requirements and enforcement are set forth below:

Section 17.12.170 Reduction of pollutants in storm water.

(A) **Activities Resulting in Discharge of Pollutants.** Any person engaging in activities which may result in pollutants entering the City's storm water system shall undertake all practicable measures to reduce and/or eliminate such pollutants. All activities that do actually, or may potentially, result in the deposit of pollutants in or on the City storm water system, in any tributary of this system, and all land which drains to either this system or any of its tributaries shall be construed as activities which may result in pollutants entering the City storm water system. Examples of such activities include, but are not limited to, ownership and use of premises which may be a source of pollutants such as parking lots, gasoline stations, industrial facilities, business enterprises and dwelling units.

(B) **Pollutants and Littering.** In addition to the prohibitions of Section 9-12.050, no person shall throw, deposit, leave, keep or permit to be thrown, deposited, placed, left or maintained, any refuse, household hazardous wastes or other hazardous wastes, garbage, debris, or other wastes, or other discarded or abandoned objects or articles in or upon any storm water system or upon any public or private plot of land in the City so that the same might become a pollutant, except in lawfully established waste disposal facilities.

(C) **Sidewalks.** The occupant or tenant, or in the absence of occupant or tenant, the owner or proprietor of any real property in the City in front of which there is a paved sidewalk shall maintain that portion of the sidewalk in front of the property free of dirt or litter to the maximum extent practicable. Sweepings from the sidewalk shall not be swept or otherwise made or allowed to go into the gutter or roadway or any element of any drainage system, but shall be disposed of in receptacles maintained as required for the disposal of solid waste.

(D) **Construction Activities.** Any construction contractor performing work in the City shall implement appropriate best management practices to prevent the discharge of construction wastes or debris or contaminants from construction materials, tools, and equipment from entering the storm water system.

(E) **Bodies of Water.** No person shall throw or deposit litter in any fountain, pool, lake, stream, river or any other body of water in a park or elsewhere within the City.

(F) **Standard for Parking Lots, Paved Areas, and Related Storm Water Systems.** Persons owning, operating, or maintaining a paved parking lot, the paved areas of a gas station, a paved private street, road, or driveway and related storm water systems shall clean those structures as frequently and thoroughly as practicable in a manner that does not result in discharge of pollutants to the storm water system.

(G) **Notification of Intent and Compliance with General Permits.** Each industrial discharger, discharger associated with construction activity or other discharger described in any general storm water permit addressing such discharges as may be adopted by the United States Environmental Protection Agency, the State Water Resources Control Board, or the California Regional Water Quality Control Board, North Coast Region, shall provide the notice of intent, comply with, and undertake all other activities required by any general storm water permit applicable to such dischargers, and shall provide a copy of the notice of intent and of each annual report pursuant to any general storm water permit to the Director of Public Works, and shall pay any associated monitoring and enforcement fees to the City that may be set by the City Council. Each discharger identified in an individual NPDES permit relating to storm water discharges shall comply with and undertake all activities required by such permit.

(H) **Compliance with Best Management Practices.** Where best management practice guidelines or requirements have been adopted or published by the Environmental Protection Agency, any State of California agency, any San Francisco Bay Area agency, or the City, for any activity, operation or facility which may cause or contribute to prohibited discharges, every person undertaking such activity or operation or owning or operating such commercial facility shall comply with such guideline or requirement.

(I) **Storm Water Pollution Prevention Plan.** The Director of Public Works may require any business in the City that is engaged in activities which may result in prohibited discharges to develop and implement a storm water pollution prevention plan, which must include an employee training program. Business activities which may require a storm water pollution prevention plan include, but are not limited to, maintenance, storage, manufacturing, assembly, equipment operations, vehicle loading or fueling, or clean-up procedures which are carried out partially or wholly out of doors.

(J) **Coordination with Hazardous Materials Release Response Plans and Inventory.** Any business subject to the Hazardous Materials Release Response and Inventory Plan, Division 20, Chapter 6.95 of the California Health and Safety Code (commencing with Section 25500), shall include in that plan provision(s) for compliance with this article, including the prohibitions on non-storm water discharges and the requirement to reduce the release of pollutants to the maximum extent practicable. (Ord. 3272 § 1)

1.2 Private Construction

Santa Rosa City Code Section 19-64.010 requires that subdivisions be designed to provide for proper grading and erosion control. This Section and Section 18-04.030 both require compliance with the storm water provisions of Chapter 17-12 and are set forth below:

Section 18-04.30 Persons to whom permits may be issued.

Permits for building, construction, alteration, repair, electrical work, plumbing work, mechanical work and all other work shall be issued only on the application of the holder of a contracting license issued by the state, licensing such person to engage in the type of work anticipated by the application for such permit, except that owners' permits may be issued as provided by law. Building permits are subject to all provisions of Chapter 17-12, which shall be administered by the Director of Building and Code Compliance.

Section 19.64.010 Requirements.

(A) All subdivisions shall be designed and improved to provide for proper grading and erosion control, including the prevention of sedimentation or damage of off-site property. All subdivisions shall follow Chapters 18 and 33 and Appendix Chapter 33 of the Uniform Building Code, the grading objectives indicated in the subdivision design guide, the following design objectives, and any future grading ordinances or policies adopted by the City:

- (1) Grading shall maintain or create a natural appearance to the extent it is reasonable and feasible to accomplish.
- (2) The finished lot grading shall provide a building site and yard area compatible with the surrounding pattern of development.
- (3) Erosion control measures shall be provided in accordance with the provisions of the Uniform Building Code to prevent sedimentation or damage to on-site and off-site property.

(B) The following principles for controlling erosion and sediment shall also be incorporated into subdivision design and improvements unless it is determined by the Building Official that these principles are not applicable to the particular project in question:

- (1) Minimize soil exposure during the rainy season by proper timing of grading and construction;
- (2) Retain natural vegetation whenever feasible;

- (3) Vegetate and mulch denuded areas to protect them from winter rains;
- (4) Divert runoff away from steep denuded slopes or other critical areas with barriers or ditches;
- (5) Minimize length and steepness of slopes by benching, terracing or constructing diversion structures;
- (6) Prepare drainage ways to handle concentrated or increased runoff from disturbed areas by using riprap or other lining materials;
- (7) Trap sediment laden runoff in basins to allow soil particles to settle out before flows are released to receiving waters;
- (8) Inspect sites frequently to ensure control measures are working properly and correct problems as needed.

1.3 Industrial/Commercial Sources

The primary function of City Code Chapter 15-Sewers is to maintain the necessary sanitary sewer infrastructure in order to provide for the full growth and development of the City and the surrounding urban area. City Code Chapter 15-16.010 prohibits the discharge of any sewage, industrial waste or other polluted water into any storm drain or natural outlet. Section 15.04.030 defines

"Industrial waste" means the waterborne waste and wastewater from any production, manufacturing, or processing operation of whatever nature including institutional and commercial operations where water is used for the removal of significant quantities of waste other than from human habitation of premises connected to the public sewers. Contents of chemical toilets, septic tanks, waste holding tanks and waste sumps shall be classified as industrial waste.

Section 15.12.020 Connection permit.

(A) No connection to a public sewer shall be made until a connection permit has been issued therefore by the Engineer.

City Code section 17-12.010 (Storm Water) requires a written permit authorizing any such activity that may deposit any material in any channel, pipe or drainage system.

1.4 Municipal Operations

The City is required by law, as are all private citizens, to comply with the applicable Federal, State and local ordinances. Municipal operations are conducted in accordance with all applicable regulations with public safety as top priority.

1.5 Illicit Discharge Detection and Elimination

In addition to the City Storm Water Ordinance that explicitly prohibits non-storm water discharges the City also has legal authority under City Code Section 7-28.010, cited below, to require pet owners to possess a device to remove dog waste left by a dog. "Be a Responsible Pet Owner" signs citing the City Code section are posted in City parks and recreational facilities and along some creeks.

Section 7-28.010 Animal Nuisances Prohibited

No owner or person otherwise having an animal in his care, charge, control, custody or possession, except a disabled person using an assistance dog, shall permit or allow any animal to do any of the following:

(A) Defecate on any public street or other public property without immediately cleaning or removing the excrement to a proper receptacle.

(B) Defecate on any private property other than of its owner without the consent of the owner, lessee or other person in control of the private property.

Any person owning or otherwise having an animal in his care, charge, control, custody or possession on any public street or other public property shall carry a tool or device to be used for cleaning or removing animal excrement. This tool or device shall be presented to the Poundmaster or his Deputies upon demand. (Ord. 2943 § 16, 1992)

City Code Section 9-12.050, cited below, prohibits littering or dumping in or upon waterways and other public places. Large yellow “No Dumping” signs that reference the ordinance are posted at known problematic locations.

Section 9-12.050 Littering, burning and burying prohibited.

(A) Except as provided in this chapter, it is unlawful for any person to litter, dump, throw, or otherwise deposit or accumulate, or cause to be deposited or accumulated, any solid waste, recyclable materials, yard trimmings, household hazardous wastes or other hazardous wastes, garbage, debris, or other wastes in or upon any vacant lot, or in any backyard, or in or upon any highway, street, alley, gutter, sidewalk, park, waterway, or other public place within the City.

1.6 Public Education and Outreach

The City does not have legal authority or jurisdiction to compel public education and outreach within the Santa Rosa City Public Schools.

1.7 Monitoring

The Storm Water Ordinance Section 17-12.180, Enforcement, establishes the legal authority to conduct inspections, establish monitoring procedures, require training of employees and require submittals of Remedial Action Plans necessary to ensure that permit and ordinance conditions are being complied with, including prohibitions of illicit discharges. Refer to Section 1.9 Enforcement below for code citations.

1.8 Standard Urban Storm Water Mitigation Plan (SUSMP)

In connection with the application for the first NPDES Storm Water Discharge Permit, the City adopted an ordinance revising the Santa Rosa City Code to successfully provide for enforcement of the Storm Water Permit requirements. These revisions provided a solid base for permit enforcement.

In addition, after issuance of the second permit, the City legal counsel consulted with Regional Water Board legal counsel to determine whether further code revisions were needed in connection with the second permit incorporating the SUSMP. The City determined that legal authority does

exist to implement SUSMP. In addition, the General Plan was reviewed and found to be in conformance with the water quality and watershed protection principles and policies stipulated by SUSMP.

1.9 Water Waste Ordinance and Related Statutes

The Santa Rosa City Code has several provisions addressing water waste, including prohibiting water waste, requiring repair or replacement of faulty equipment, and establishing the authority to terminate water service if water waste is occurring.

Chapter 14-21, Water Waste Regulations, adopted in 1999, and updated in 2007 to incorporate recycled water, prohibits water use that results in runoff, and prohibits breaks or leaks in the water delivery system. These City code provisions authorize the Director of Utilities to terminate water service for unresolved violations of the Water Waste Regulations.

Existing Santa Rosa City Code sections regarding Water Waste Regulations are set forth below:

Chapter 14-21 WATER WASTE REGULATIONS

[14-21.010 Purpose.](#) The purpose of this chapter is to promote the efficient use of potable or recycled water by prohibiting water uses which constitute water waste. The sections of this chapter encourage reasonable use of the potable or recycled water supply by eliminating all intentional or unintentional water waste when a reasonable solution is available and discouraging use of equipment which is wasteful. (Ord. 3426 § 2 (part), 1999)

[14-21.020 Water waste—Definition.](#)

Water waste means:

- (A) Potable or recycled water use in outdoor areas resulting in runoff; or
- (B) Breaks or leaks in the potable or recycled water delivery system. (Ord.

3426 § 2 (part), 1999)

[14-21.030 Prohibition of](#) potable or recycled [water waste.](#) A customer shall not allow potable or recycled water waste. (Ord. 3426 § 2 (part), 1999)

[14-21.050 Notice and disconnection.](#) The Director of Utilities may issue a written warning to anyone who violates the provisions of this chapter. If a customer does not correct the violation within 15 days of notification, or such other time as specified by the Director, the City may disconnect potable or recycled water service. (Ord. 3426 § 2 (part), 1999)

Chapter 14-04 of the City Code includes the following sections which establish City authority to 1) require any customer to adjust, repair or replace any water equipment; and 2) terminate water service for waste or public health or safety reasons

14-04.065 Installation, ownership and maintenance of potable or recycled water service receiving equipment.

Consumers shall furnish, construct, install, own, operate, maintain and repair that portion of the potable or recycled water system on the consumer's premises which begin at the coupling on the consumer's side of the water meter. The City, as determined by the City Engineer, may require the consumer at his/her own expense to adjust, replace, repair, maintain or discontinue the use of any potable or recycled water receiving or regulating equipment on the consumer's side of the meter. (Ord.

2757 § 2, 1989 in part)

14-04.210 Disconnection—When.

Potable or recycled water service may be disconnected for the following reasons:

(B) If the owner, occupant or consumer fails to comply with any of the regulations set out in this chapter, or any other rules and regulations of the Board of Public Utilities; or

(C) For public health and/or safety reasons; or

(E) If the utility customer who has received notice of violation of the water waste provisions of Chapter 14-21 fails to correct the conditions which caused the violation within 15 days, or other reasonable time as determined by the Director of Utilities.

(Ord. 3426 § 1, 1999, (part) prior code § 25.15); or

(F) For breach of the Recycled Water Use Permit as defined in Chapter 14-25.

1.10 Water Efficient Landscape Policy

Since 1993 Santa Rosa has required new landscape projects other than single-family residential yards, to comply with landscape planting and irrigation criteria that is designed to maximize water use efficiency and minimize waste. Sites are inspected after installation. The following provisions from this Policy are relevant to minimizing incidents of irrigation overspray and runoff from irrigation sites:

- No turf or high-water-use plants shall be allowed on slopes exceeding 10%, or 25% where other project water saving techniques can compensate for the increased runoff, and where need for such slopes is demonstrated.
- No turf shall be allowed in areas eight feet wide or less.
- All planted landscaped areas shall be irrigated with automatic controllers with repeat start-time potential.
- Separate irrigation circuits shall be provided for different plant types, irrigation methods, solar exposures, microclimates (e.g. understory, courtyard), slopes and soil types.
- Pressure regulation shall be installed so that all components of the irrigation system operate at the manufacturer's recommended pressure.
- Point application methods (drip, bubbler) shall be used where overhead irrigation would result in overspray, runoff, or non-uniform application.
- Irrigation delivery systems shall be designed in such a manner that water does not run off or overspray onto adjacent pavement, sidewalks, structures or other non-landscaped areas.
- Rain shut-off devices shall be installed on each irrigation controller.
- Check valves shall be installed where elevation differential may cause low head drainage.
- Sprinkler heads shall have matched precipitation rates on each irrigation circuit.

1.11 Single Family Residential Landscape Policy

Since March 2007, Santa Rosa has required new single-family residential landscapes to comply with landscape planting and irrigation criteria that is designed to maximize water use efficiency and minimize waste. Sites are inspected after installation. The following provisions from the Single

Family Residential Landscape Policy are relevant to minimizing incidents of irrigation overspray and runoff from irrigation sites:

- All planted landscaped areas shall be irrigated with automatic controllers with multiple programs and repeat start-time potential.
- Separate irrigation valves shall be used for different plant types, irrigation methods, solar exposures, microclimates, slopes (e.g., low precipitation rate heads), and soil types.
- Irrigation system design shall maximize distribution uniformity.
- Pressure regulation shall be installed so that all components of the irrigation system operate at the manufacturer recommended optimal pressure.
- Point application methods (e.g., drip, bubbler, etc.) shall be used in areas less than 5 feet wide.
- Rain shut-off devices shall be installed on each irrigation controller.
- Check valves shall be installed as needed to prevent low head drainage.

1.12 Waste Discharge Requirement and Master Reclamation Permit (NPDES Permit number CA0022764)

Attachment G to the City of Santa Rosa Master Reclamation Permit, Water Reclamation Requirements and Provisions, includes these specific provisions to assure that incidents of irrigation overspray and accidental release of recycled water are minimized:

- B.1 The use of recycled water shall not result in unreasonable waste of water.
- B.3 The Discharger shall be responsible to ensure that all users of recycled water comply with the terms and conditions of this Permit and with any rules, ordinances or regulations adopted by the Discharger.
- B.4 Recycled water shall not be applied to irrigation areas during periods when uncontrolled runoff may occur.
- B.5 Recycled water shall be applied in such manner so as not to exceed vegetative demand or field capacity.
- B.6 Recycled water shall not be allowed to escape the recycled use area(s) in the form of surface runoff.

The City of Santa Rosa is required under this Permit to have a User Agreement/ Permit with all end users of recycled water. The User Agreement/Permit binds the signatory user to all rules and regulations included in Attachment G, and the State of California Code of Regulations Title 22.

1.13 Recycled Water Ordinance/California Code of Regulations Title 22

The City of Santa Rosa is the owner and operator of the recycled water system serving the City Urban Growth Boundary with recycled water, and as such is governed by the California Code of Regulations Title 22 which sets forth criteria for the use of recycled water in California. In 2007, Santa Rosa adopted a Recycled Water Ordinance which modified City Code “Title 14 – Water” to extend many potable water provisions to recycled water, and to codify the rules, regulations and authorities of the Recycled Water System by introducing “Chapter 14-25 Recycled Water Regulations”.

All recycled water users must have a Recycled Water User Permit with the City for the use of recycled water which includes requirements to abide by all rules and regulations of the City Code and Santa Rosa's Recycled Water User's Guide which sets forth the specific rules and regulations for the end user. Pursuant to these rules and regulations, each user site is inspected annually, new sites are inspected on installation, and regular contact with the City is required.

Sections from the Recycled Water Ordinance regarding use of recycled water are set forth below:

14-25.050 Recycled Water User's Guide

The City will at all times have a Recycled Water User's Guide which will be prepared, maintained and updated by the Director of Utilities, or his or her designee. The purpose of the Recycled Water User's Guide is to detail the requirements of the following rules and regulations as they apply to the City recycled water system: this chapter; the California Code of Regulations Title 22; other state and local rules and regulations related to the use of recycled water as they may be adopted or changed from time to time.

14-25.060 Recycled Water Use Permit

The City will issue to each recycled water customer a Recycled Water Use Permit for each site, which grants permission to use recycled water and requires the customer to use recycled water in accordance with the rules, regulations and standards of the Recycled Water User's Guide and all applicable state and local rules and regulations.

14-25.070 Designation of Site Supervisor

Each customer will be required to designate a Site Supervisor for each site covered by a Recycled Water Use Permit. The Site Supervisor must serve as a liaison with the City, and must have the authority to carry out the requirements of the Recycled Water User's Guide and Recycled Water Use Permit, including the operations and maintenance of the on-site recycled water system and prevention of potential hazards.

14-25.080 Operation and maintenance of customer equipment

Each customer will be required to operate and maintain the on-site recycled water system in accordance with the Recycled Water User's Guide and Recycled Water Use Permit.

Notwithstanding compliance with this section, the City reserves the right to take any action necessary with respect to the operation of the customer's recycled water system to safeguard public health.

14-16.100 Entry upon customer's premises.

As a condition of recycled water service for new customers and as a condition of continued recycled water service for existing customers, the customer will permit the City to enter upon the customer's property during the City's normal working hours, or in case of emergency at any time, to inspect the customer's on-site recycled water system for compliance with the provisions of this chapter.

14-25.110 Enforcement of recycled water use rules and regulations

The Director of Utilities may immediately terminate recycled water service to any customer who violates the provisions of this chapter.

In the alternative, the Director of Utilities may issue a written warning to anyone who violates the provisions of this chapter. If a customer does not correct the violation within 15 days of notification, or such other time as specified, the Director of Utilities may terminate recycled water service without further notice. (Ord 3845§ 8, 2007 in part)

1.14 Enforcement

City Code Chapter 1-24 Citation Procedure provides the procedural sequence if a person is arrested for violation of the Santa Rosa City Code or other City ordinance. The Santa Rosa Police Department provides enforcement for City Code violations as well as for environmental crimes. In the event a citation is issued, the case is referred to the City Attorney for disposition. Violation of the Santa Rosa City Code can be prosecuted as infractions or misdemeanors per the discretion of the City Attorney. The sections are listed below.

1-24.010	Notice to appear-Generally
1-24.030	Notice to Appear-Time of Appearance
1-24.040	Notice to Appear-Place Specified
1-24.050	Notice to Appear- Promise to Appear
1-24.060	Fixing Bail-Deposit-Forfeit
1-24.070	Failure to Appear-Warrant issuance
1-24.080	Failure to Appear-Misdemeanor
1-24.090	Failure to Appear-Warrant procedure

The legal authority to conduct inspections, establish monitoring requirement, require training of employees, and require submittals of Remedial Action Plans necessary to ensure permit and ordinance compliance, is located in the Storm Water Ordinance Section 17-12.180, Enforcement. Section 17-12.190 specifies that violations constitute misdemeanors, Section 17-12.200 defines additional actions and remedies for violations and Section 17-12.270 specifies that violations may be enforced through civil action brought by the City.

Section 17.12.180 Enforcement.

(A) **Inspections.** Routine or area inspections by the City shall be based upon such reasonable selection process as may be deemed necessary to carry out the objectives of this article, including, but not limited to, random sampling and/or sampling in areas where there is evidence of storm water contamination, discharge of non-storm water to the storm water system, or similar activities. Such inspections may also be done in conjunction with routine inspections conducted by other public agencies such as the industrial waste section of the City's Utilities Department, the City's Fire Department or the County's Department of Health Services.

(B) **Authority to Sample and Establish Sampling Devices.** With the consent of the owner or the occupant of property or pursuant to a search or inspection warrant, any authorized City employee may take such samples and meter such discharges as the Director of Public Works deems necessary to determine whether a non-storm water discharge has taken place or is taking place and to determine the magnitude of such discharges. Such City employee may establish on any property such devices as are necessary to conduct sampling or metering operations. During all inspections as provided herein, the Director of Public Works may take any samples deemed necessary to aid in the pursuit of the inquiry or in the recordation of the activities on-site.

(C) **Training of Employees--Notification of Spills.** The owners of a commercial facility or the persons responsible for emergency response for a commercial facility have the responsibility to train facility personnel and maintain notification procedures to assure:

(1) Immediate notification is provided to the City Department of Public Works of any suspected, confirmed or unconfirmed release of material, pollutants or waste creating a risk of discharge into the City storm water system;

(2) Immediate notification is given to the "911" emergency response system if said discharge poses an immediate threat to the public health or safety and/or the environment;

(3) Written notification is provided to the Director of Public Works within five working days.

(a) Training of personnel shall assure that all BMPs are being fully and correctly implemented and that all releases of any non-storm water discharge or of any pollutant that threatens to enter the City's storm water system are immediately recognized and that appropriate response is taken in the event of such release.

(b) As soon as any person in charge of a commercial facility or who is responsible for emergency response for a commercial facility has knowledge of, or reasonably could be expected to have knowledge of, any suspected, confirmed or unconfirmed release of a non-storm water discharge entering, or of any pollutant that is threatening to enter, the City storm water system from such facility, such person shall take all necessary steps to ensure the early discovery and containment and clean-up such release and shall immediately notify the City Department of Public Works. In addition, written notification shall be given to the Director of Public Works within five working days. This written notification shall contain as a minimum a narrative describing the circumstances resulting in the release, or threatened release, the effort taken to clean-up the release and the measures being taken to prevent reoccurrence. This notification requirement is in addition to, and not in lieu of, other required notifications.

(D) Requirement to Test or Monitor. Any authorized City employee may require that any person engaged in any activity or owning or operating any commercial facility which may cause or contribute to illicit discharges, undertake such monitoring activities and/or analysis and furnish such reports as the authorized employee may specify. The burden, including costs, of these activities, analysis and reports shall bear a reasonable relationship to the need for the monitoring and/or analysis and reports and the benefits to be obtained. The recipient of such a requirement shall undertake and provide the monitoring, analysis and reports required.

(E) Order to Cease and Desist. When the Director of Public Works finds that the discharge from a commercial facility is taking place, or is threatening to take place, in violation of the prohibitions of this article or any other discharge control requirements, the Director of Public Works may issue a written order to cease and desist and may direct the discharger to:

(1) Comply forthwith with the order and to cease those operations which result or threaten to result in discharges which violate any prohibition or limit of this article until such time as the Director states in writing that he or she is satisfied that BMPs which will remove the threat are in place;

(2) Comply with the order in accordance with a time schedule set by the Director; or

(3) In the event of a threatened violation take appropriate remedial or preventive action.

(F) Require that the Discharger Submit a Schedule of Remedial or Preventive Action. When the Director of Public Works finds that the discharge from a commercial facility is taking place, or is threatening to take place, in violation of the prohibitions of this article or any other discharge control requirements, the Director of Public Works may issue an order to cease and desist and may direct the discharger to submit for her or his approval a detailed time schedule of specific actions the discharger shall take to correct or prevent the violation of such prohibitions and requirements.

(G) Pre-discharge Facility. When source reduction BMPs are in the opinion of the Director of Public Works inadequate to prevent actual or potential prohibited discharges from a commercial facility to the City's storm water system, the Director of Public Works may require that the owner of the commercial facility shall provide, at the owner's expense,

such pre-discharge facilities as may be necessary to reduce the pollutant load at a point prior to discharge from said facility or to any element of the City's storm water system. The Director of Public Works may further require that the owner of the commercial facility, at the owner's expense, provide a monitoring access hole so that the pollutant loading may be periodically measured. Examples of pre-discharge facilities are oil/grease interceptors and sand/silt interceptors.

Plans, specifications, and other pertinent factors related to the aforementioned pre-discharge facilities shall be submitted to the City for approval by the Director of Public Works. Construction of the proposed facilities shall not commence until the Director's approval is obtained in writing and use of the facilities shall not commence until the completed facilities are approved in writing by the Director. Such facilities, once approved, shall be continuously maintained in satisfactory operating condition to the satisfaction of the Director of Public Works. (Ord. 3272 § 1 (part), 1996).

Section 17.12.190 Violations constituting misdemeanors.

The violation of any provision of this article, or the failure to comply with any of the mandatory requirements of this article shall constitute a misdemeanor. (Ord. 3272 § 1)

Section 17.12.200 Violation--Additional actions and remedies.

(A) Any non-storm water discharger found to be in significant noncompliance as defined in Section 17-12.110 in any calendar year may have its name published in the largest daily newspaper published in the Santa Rosa area.

(B) Any person who violates any order issued by the Director of Public Works for violation of the provisions of this article regulating or prohibiting discharge of non-storm water and which causes, or threatens to cause, non-storm waters to enter the City's storm water system may be liable civilly in a sum not to exceed the amount that the City may be fined by the State Water Resources Control Board or the amount of any civil liability imposed on the City for noncompliance with the municipal storm water discharge permit for the Santa Rosa area. (Ord. 3272 § 1 (part), 1996).

Section 17.12.210 Violation--Emergency abatement.

If the Director of Public Works determines that a violation of this article has created an emergency condition which seriously endangers the public health or safety, the Director of Public Works may abate the condition. The cost of said abatement shall be charged to the discharger and the City may at its option recover the same in a civil action. Such charge shall be in addition to any penalty for a violation of the article under Sections 1712.190 or 17-12.200(B) of this article. (Ord. 3272 § 1 (part)),

Section 17.12.220 Fine for falsification of data.

Any person who submits a report required by this article, which she or he knows, or should have reason to know, contains falsified data shall be subject to a fine not to exceed the amount that the City may be fined by the State Water Resources Control Board or the amount of any civil liability imposed on the City for noncompliance with the municipal storm water discharge permit for the Santa Rosa area. (Ord. 3272 § 1 (part)),

Section 17.12.230 Continuing violation.

Every day or any portion thereof any violation of this article continues shall constitute a separate offense. (Ord. 3272 § 1 1996 (part)),

Section 17.12.240 Concealment.

Concealing, aiding, or abetting a violation of any provision of this article shall constitute a violation of such provision. (Ord. 3272 § 1 (part)),

Section 17.12.250 Acts potentially resulting in violation of Federal Clean Water Act and/or Porter-Cologne Act.

Any person who violates any provision of this article or who violates any cease and desist order or prohibition may also be in violation of the Federal Clean Water Act and/or the Porter-Cologne Act and may be subject to the sanction of those acts including civil and criminal penalties. Any enforcement actions authorized under this article may also include notice to the violator of such potential liability. (Ord. 3272 § 1 (part)),

Section 17.12.260 Violations deemed a public nuisance.

In addition to the penalties provided herein, the City Council finds and determines that any condition caused or permitted to exist in violation of any of the provisions of this article is a threat to the public health, safety and welfare, is declared to be a nuisance and may be abated as such. (Ord. 3272 § 1 (part)),

Section 17.12.270 Civil actions.

In addition to any other remedies provided in this article, any violation of this article may be enforced by civil action brought by the City. In any such action, the City may seek, as appropriate, any or all of the following:

- (A) A temporary restraining order, preliminary and permanent injunction;
- (B) Reimbursement for the costs of any investigation, inspection, or monitoring survey which led to the establishment of the violation, and for the reasonable costs of preparing and bringing administrative action under this article;
- (C) Costs incurred in removing, correcting, or terminating the adverse effect resulting from the violation;
- (D) Compensatory damages for loss or destruction of water quality, wildlife, fish and aquatic life.

Costs and damages recovered under this section shall be paid to the City and shall be used exclusively for costs associated with monitoring and establishing storm water discharge pollution control system(s) and implementing or enforcing the provisions of this article. (Ord. 3272 § 1 (part)),

Section 17.12.280 Remedies not exclusive.

The remedies identified in this article are in addition to and do not supersede or limit any and all other remedies, civil or criminal. The remedies provided in this article shall be cumulative and not exclusive. (Ord. 3272 § 1 (part)),

Section 17.12.290 Dispute--Request for ruling.

If any discharger disputes an interpretation or application of this article, the discharger may request in writing a ruling by the Director of Public Works on the matter. The Director will set forth his or her determination(s) in writing. (Ord. 3272 § 1 (part)),

Section 17.12.300 Appeals.

If the discharger is dissatisfied with the determinations made by the Director of Public Works under Section 17-12.290, the discharger may, within 30 days after receipt of

the ruling by the Director of Public Works, appeal the ruling to the City Council by filing a written notice of appeal with the City Clerk. The notice shall state each basis and the grounds for the appeal. The Council shall make a final determination of the issue(s) so submitted. (Ord. 3272 § 1 (part)),

State Legal Authority

In addition to the local enforcement authority granted by local ordinances, law enforcement applies the follow sections for environmental crimes. Citations issued under the following existing state codes are referred to the County District Attorney for prosecution. Sections from the California Fish and Game, Health and Safety, Water and Penal Code are summarized below:

FISH AND GAME CODE

Section 5650(a) Except as provided in subdivision (b), it is unlawful to deposit in, permit to pass into, or place where it can pass into the waters of this state any of the following:

- (1) Any petroleum, acid, coal, or oil tar, lampblack, aniline, asphalt, bitumen, or residuary product of petroleum. Or carbonaceous material or substance.
- (2) Any refuse, liquid, or solid, from any refinery, gas house, tannery, distillery, chemical works, mill, or factory of any kind.
- (3) Any sawdust, shavings, slabs, or edgings.
- (4) Any factory refuse, lime, or slag.
- (5) Any cocculus indicus.
- (6) Any substance or material deleterious to fish, plant life, or bird life

Section 5652 It is unlawful to deposit, permit to pass into, or place where it can pass into the waters of the state, or to abandon, dispose of, or throw away, within 150 feet of the high water mark of the waters of the state, any cans, bottles, garbage, motor vehicle or parts thereof, rubbish, or the viscera or carcass of any dead mammal, or the carcass of any dead bird.

HEALTH AND SAFETY CODE

Section 25190 Except as otherwise provided in Sections 25189.5, 25189.6, 25189.7, and 25191, any person who violates any provision of this chapter, or any permit, rule, regulation, standard, or requirement issued or adopted pursuant to this chapter, is, upon conviction, guilty of a misdemeanor and shall be punished by a fine of not more than one thousand dollars (\$1,000) or by imprisonment for up to six months in the county jail or by both that fine and imprisonment.

Section 25507(b) The handler or any employee, authorized representative, agent, or designee of a handler shall, upon discovery, immediately report any release or threatened release of a hazardous material to the administering agency, and to the office, in accordance with the regulations adopted pursuant to Section 25503. Each handler and any employee, authorized representative, agent, or designee of a handler shall provide all state, city, or county fire or public health or safety personnel and emergency rescue personnel with access to the handler's facilities.

Section 25215.2(b) No person shall dispose, or attempt to dispose, of a lead acid battery at a solid waste facility or on or in any land, surface waters, watercourses or marine waters.

Section 25217.1 No person shall dispose, or attempt to dispose of, liquid latex paint in the land, or into the waters of the state.

Section 117555 A person who places, deposits, or dumps, or who causes to be placed, deposited, or dumped, or who causes or allows to overflow, sewage, sludge, cesspool or septic tank effluent, accumulation of human excreta, or solid waste, in or upon a street, alley, public highway, or road in common use or upon a public park or other public property other than property designated or

set aside for that purpose by the governing board or body having charge of the property, or upon private property without the owner's consent, is guilty of a misdemeanor.

PENAL CODE

Section 374.2(a) It is unlawful for any person to maliciously discharge, dump, release, place, drop, pour, or otherwise deposit, or to maliciously cause to be discharged, dumped, released, placed, dropped, poured, or otherwise deposited, any substance capable of causing substantial damage or harm to the operation of a public sewer sanitary facility, or to deposit in commercial quantities any other substance, into a manhole, cleanout, or other sanitary sewer facility, not intended for use as a point of deposit for sewage, which is connected to a public sanitary sewer system, without possessing a written authorization therefore granted by the public entity which is charged with the administration of the use of the affected public sanitary sewer system or the affected portion of the public sanitary sewer system.

As used in this section, "maliciously" means an intent to do a wrongful act. **Section 374.8(b)** b) Any person who knowingly causes any hazardous substance to be deposited into or upon any road, street, highway, alley, or railroad right-of-way, or upon the land of another, without the permission of the owner, or into the waters of this state is punishable by imprisonment in the county jail for not more than one year or by imprisonment in the state prison for a term of 16 months, two years, or three years, or by a fine of not less than fifty dollars (\$50) nor more than ten thousand dollars (\$10,000), or by both the fine and imprisonment, unless the deposit occurred as a result of an emergency that the person promptly reported to the appropriate regulatory authority.

WATER CODE

Section 13376 Any person discharging pollutants or proposing to discharge pollutants to the navigable waters of the United States within the jurisdiction of this state or any person discharging dredged or fill material or proposing to discharge dredged or fill material into the navigable waters of the United States within the jurisdiction of this state shall file a report of the discharge in compliance with the procedures set forth in Section 13260, except that no report need be filed under this section for discharges that are not subject to the permit application requirements of the Federal Water Pollution Control Act, as amended. Any person proposing to discharge pollutants or dredged or fill material or proposing to operate a publicly owned treatment works or other treatment works treating domestic sewage shall file a report at least 180 days in advance of the date on which it is desired to commence the discharge of pollutants or dredged or fill material or the operation of the treatment works. Any person who owns or operates a publicly owned treatment works or other treatment works treating domestic sewage, which treatment works commenced operation before January 1, 1988, and does not discharge to navigable waters of the United States, shall file a report within 45 days of a written request by a regional board or the state board, or within 45 days after the state has an approved permit program for the use and disposal of sewage sludge, whichever occurs earlier. The discharge of pollutants or dredged or fill material or the operation of a publicly owned treatment works or other treatment works treating domestic sewage by any person except as authorized by waste discharge requirements or dredged or fill material permits is prohibited, except that no waste discharge requirements or permit is required under this chapter if no state or federal permit is required under the Federal Water Pollution Control Act, as amended.

The existing legal authority identified above provides a solid base for permit implementation and enforcement. However, with new permit requirements anticipated in Term 3, the City will perform a

review of its codes to ensure consistency and existence of adequate authority for implementation and enforcement.

Measurable Goals:

- During Year 1 of Term 3, the City will evaluate Chapter 17-12, the Storm Water Ordinance, for any updates needed to provide for language consistency with the third permit and present any needed changes for approval and adoption.

2.0 PRIVATE CONSTRUCTION

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

Storm water discharges from construction related-activities 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 for grading permit issuance, construction inspection, and enforcement of the City Storm Water Ordinance at private development construction sites.

2.1 Grading Permit Issuance

Grading Permits are a specific type of Building Permit. The Community Development Engineering and the Building Divisions are involved with the issuance of Grading Permits for the City of Santa Rosa.

- a. 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 the Community Development Department, Engineering Division. These plans include a Grading Plan and an Erosion Control Plan. Grading Permits are issued by Community Development Department Engineering Division staff based upon these plans. These projects are inspected per Section 2.3 below.
- b. 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 the Community Development Department, Engineering Division. Grading Permits or Building Permits that include grading, are issued by Community Development Department, Building Division staff following review and approval by Community Development Department, -Engineering Division staff based upon these plans. These projects are inspected per Section 2.3 below.
- c. Plans 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) appropriately 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. Consequently, these projects are not inspected per Section 2.3 below.

Prior to issuance of a Grading Permit, a staff engineer from the Community Development Department, Engineering Division will review the project plans and require issuance and documentation of the following items, as applicable:

1. Encroachment Permit by the Public Works Department, Encroachment Section (see Section 2.2 below)
2. Revocable license by the Sonoma County Water Agency
3. Notice of Intent to comply with the State General Permit for Storm Water Discharges from Construction Sites as submitted to the State Water Resources Control Board,
4. California Fish and Game permit
5. U.S. Army Corps of Engineers permit,
6. Caltrans Encroachment permit,

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. If grading operations have not commenced prior to the onset of the wet season beginning October 15th, the developer shall implement as a first order of work the Erosion and Sediment Control BMPs as shown in the projects onsite erosion and sediment control document. If applicable, the project 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.

Measurable Goals:

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

2.2 Private Construction on Public Lands

The Public Works Department and Community Development Department, Engineering Division are involved with the issuance of Encroachment Permits for private construction within 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 Community Development Department, Engineering Division. These plans include a Grading Plan and an Erosion Control Plan. Public Works Department staff issue Encroachment Permits 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, or replacing curb and gutter), plans are reviewed by Public Works Department and/or Utilities Department staff. Public Works Department staff issue Encroachment Permits 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 of Santa Rosa Code, Chapter 17-12, ‘Storm Water.’

Community Development Department, Engineering Division provides storm water inspection for development projects. This inspection includes private construction in the City right-of-way. Storm

water inspections are outlined in Section 2.3 below. The Public Works Department inspects the construction of public drainage facilities within the City right-of-way for development projects; such as storm drain pipes, inlets, gutters, culverts and bridges.

Measurable Goals:

- Continue to issue Encroachment Permits that require compliance with the State of California Standard Specifications, Section 7-1.01G “Water Pollution” and Santa Rosa’s Storm Water Ordinance, Chapter 17-12.

2.3 Inspections of Construction Sites

The Community Development Department Engineering and Building Divisions are both involved with inspection of private construction sites. The Engineering Division provides grading and storm water inspection while the Building Division provides structural inspection and storm water inspections for single-family residential homes.

Community Development, Engineering Division currently has two full time grading inspectors that are assigned to provide grading and storm water inspections for private development construction sites regardless of size. These sites consist primarily of residential subdivisions but also include construction projects that have been approved by the Community Development, Building Division following Engineering Division staff approval. The Community Development, Engineering Division inspects proper storage, use, and disposal of construction materials, chemicals, and wastes, and prevention of illicit discharges to storm drains and water courses by construction contractors at construction sites with Grading Permits.

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

Currently, the Community Development Department sends a letter of notice to contractors involved with private construction with active grading operations prior to the onset of the rainy season. This letter has provided educational outreach in reminding them of their storm water pollution prevention responsibilities and that all measures must be in place prior to October 15th. In the third permit term, a copy of this letter will be used to highlight key points of interest and responsibility based on past season observations and concerns. Community Development Department, Engineering Division continually inspects all sites requiring erosion and/or sediment control plans, for plan conformance and to see that effective BMPs have been implemented to minimize erosion and discharges of sediment from disturbed areas. Community Development inspectors site visit each project by September 15 when a letter of notice to responsible party is sent out, explaining the program, collecting pertinent job site contact information and discussing personally with the responsible party the project’s erosion and sediment control options. During the dry season the inspectors inform the responsible party that summer time activities are regulated under the program and implementation of

proper season specific erosion and sediment control measures are expected. Inspectors also guide homeowners, citizens and contractors with proper installation and maintenance of BMPs.

Measurable Goals:

- Maintain and document daily diaries and inspection forms
- Inspect sites with active grading permits every two weeks and after major storm events
- In each Annual Report, submit a list of all grading site inspections – those performed for each grading permit and those for building permits that include grading to the Regional Water Board.
- In the third permit term, a copy of the Community Development Department’s pre-rainy season letter sent to applicable parties regarding key points of interest and responsibility based on past season observations and concerns will be included in each Annual Report.

2.4 Enforcement of Construction Sites

Construction sites with inadequate erosion/sediment controls are given verbal or written notice of the inadequacies, according to the City enforcement procedures. Follow-up action(s) are also taken 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 Annual Report to the Regional Water Board.

Graduated levels of enforcement are as follows:

First Level-(Noncompliance 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.

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).

2.5 Reporting of Non-Compliant Sites

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

Measurable Goals:

- Notify Regional Water Board by phone or electronically within 24 hours of any Third Level and Fourth Level enforcement actions.
- Provide a list of sites requiring Third and/or Fourth level enforcement actions in each Annual Report.

2.6 Establish Formal BMP Standards

To ensure consistency of erosion and sediment controls among plan reviewers, construction site owners and City inspection staff, in Term 3 the City will establish a set of standards for adequate

design, installation and maintenance of erosion and sediment control BMPs. These standards would be utilized in both private and public construction projects to improve management of construction site erosion and sediment control objectives.

Measurable Goals:

By the end of Year 2, the City will establish a set of formal BMP standards for adequate design, installation and maintenance of erosion and sediment control BMPs to be utilized in both private and public construction projects.

2.7 Training of Targeted Staff

The Community Development, Engineering Division provides training in erosion prevention and sediment control to new staff members. Training in the past has included courses offered by the Russian River Watershed Association and the Association of Bay Area Governments, as well as attending pertinent local seminars. In addition, as work schedules allow, the Community Development, Engineering Division construction inspection staff attends, and typically participate in erosion and sediment control seminars presented by the Regional Water Board. Training will focus on the latest construction-related storm water pollution prevention techniques and effective BMPs as these change over time.

In order to foster communication and share perspectives on most effective BMPs with the Regional Water Board staff, the Community Development Department, Engineering Division inspectors will invite Regional Water Board staff to ride-along during grading inspections.

Measurable Goals:

- Document training obtained.
- Include a list of staff that attend and/or participated in erosion & sediment control training in each Annual Report.
- Invite Regional Water Board staff to ride along with Community Development Engineering Division site inspectors. Annually.

3.0 INDUSTRIAL/COMMERCIAL SOURCES

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

Storm water discharges from industrial and commercial related activities 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 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. The 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 Environmental Compliance Section of the Utilities Department is responsible for implementation the PPERP. (Appendix III-A)

3.1 Inventory of Facilities

The development of the Industrial User Inventory (IUI) was designed to maintain and update a database of industrial and commercial facilities that require a Wastewater Discharge Permit. The inventory is maintained for the entire sub-regional service area that 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 information supplied by the City of Santa Rosa and its sub-regional partners. The sources are listed below:

- Business tax certificate applications are forwarded to the Utilities Department, Environmental Compliance Section on a monthly basis.
- Building permit applications are forwarded to Environmental Compliance on a monthly basis.
- The Community Development Department forwards use permits to the Utilities Department, Environmental Compliance Section on a monthly basis.
- The Utilities Department, Environmental Compliance Section staff participates in the Zoning Administration Review Committee (ZARC) that meets bi-monthly.
- Regular inspections for new business operations.

A list of businesses that may need to file a Notice of Intent (NOI) to comply with the State General Industrial NPDES Permit can be compiled from the Utilities Department Industrial Waste Discharge Permit data base and the City Business Tax Certificate data base. A list of industrial dischargers under permit is available at the State Water Board website <http://www.swrcb.ca.gov/stormwtr/industrial.html>

Measurable Goals:

- As part of each Annual Report, continue to provide to the Regional Water Board an updated list of businesses with Standard Industrial Classification (SIC) codes that may be required to file a Notice of Intent (NOI) and to comply with the terms of the State General Industrial Permit.

3.2 Food Facility Inspections

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 SWMP for details.)

The Utilities Department, Environmental Compliance Section issues permits and provides inspections of food facilities that have an active wastewater permit to discharge industrial wastewater to the City sanitary sewer collection system. Non-Residential Food Service Discharge Permit provisions specific to food facilities include the items listed below.

- *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 sanitary 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 that documents this activity shall be maintained at this business establishment for three years.*
- *Grease trap or interceptor cleaning shall include the removal of all contents, including floating materials, wastewater, sludges and solids. It shall be the responsibility of the permittee to ensure that the interceptor is properly cleaned and that all fittings and fixtures inside the interceptor are in proper working function.*

In addition, Items 12 and 13 of the Non-Residential Food Service Discharge Permit Standard Conditions specifically pertain to the protection of storm water:

Item 12. DISCHARGES TO STORM WATER SYSTEM: Non-storm water discharges to the City's storm water system are prohibited.

Item 13. DUMPSTER/GREASE CONTAINER MAINTENANCE: Permittee shall maintain a program of consistent dumpster and grease container area maintenance to prevent grease and other debris from entering the storm water system. Cleaning of the area shall be performed in a manner that does not result in the discharge of pollutants to the storm water system.

Permit compliance inspections are performed by the Utilities Department, Environmental Compliance 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 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.

3.3 Auto Repair/Auto Body Service Facility and Retail Gasoline Outlet Inspections

Auto Repair/Auto Body Service Facilities:

The Utilities Department, Environmental Compliance Section issues permits and provides inspections of nonresidential auto repair/auto body service facilities with an active permit to discharge industrial wastewater to the City of Santa Rosa sanitary sewer collection system. The Utilities Department, Environmental Compliance Section has recently streamlined the Automotive Repair Facility component of this section. The auto-body repair shop program has not changed. The vehicle repair facilities have been categorized into Basic Automotive facilities and Extended Automotive Repair.

The Basic Automotive (BA) facilities have discontinued permits. The facilities are tracked in the section data base as a BA permit number and address. These no longer permitted facilities include Smog only businesses and shops that only have used filters, oil and antifreeze as a concern. These facilities have no discharges or sumps, no parts stored outside

that are storm water concerns and no parts washer booths where metals and organics can accumulate. Acting as the CUPA, the Fire Department will continue to inspect these facilities and review the Hazardous Waste Manifests to insure the correct handling of the identified waste streams. Permit applications are given to all vehicle repair facilities and an inspection is performed by Utilities Department Environmental Compliance Section personnel. After the inspection basic or extended service status is determined.

The Extended Automotive Repair Facilities are vehicle service businesses that will continue to be permitted and inspected. These include facilities with sumps or oil/water separators, parts cleaning booths, outside parts storage and car wash facilities. Any large vehicle dealerships will continue to be permitted.

Non-Residential Auto Repair/Body Discharge Permit provisions specific to auto repair/auto body service 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 Environmental Compliance 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 electrolytes 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 would be 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 sanitary 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.*

In addition, Items 12 and 13 of the Non-Residential Auto Repair/Body Discharge Permit Standard Conditions specifically pertain to the protection of storm water:

Item 12. DISCHARGES TO STORM WATER SYSTEM: Non-storm water discharges to the City's storm water system are prohibited.

Item 13. DUMPSTER/GREASE CONTAINER MAINTENANCE: Permittee shall maintain a program of consistent dumpster and grease container area maintenance to prevent grease and other debris from entering the storm water system. Cleaning of the area shall be performed in a manner that does not result in the discharge of pollutants to the storm water system

The frequency of auto repair/auto body service facility inspections for wastewater discharge permit compliance varies from once every year to once every three years. If a facility is a Basic Auto Facility but has a large parts washer inside the facility, it is inspected every three years instead of every two. About 60% of auto service facilities are considered non-critical and will be inspected every three years. The remainder of auto service facilities, considered critical because of their higher potential for storm drain contamination will be inspected 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, Subregional Water Reclamation Facility.

Measurable Goals:

No measurable goals are associated with this activity.

Retail Gasoline Outlets:

In the City of Santa Rosa, operators of facilities with regulated underground storage tanks (UST) holding hazardous material must apply for and obtain a Hazardous Material Storage/Underground Storage Tank Permit from the City of Santa Rosa Fire Department as required by State Law. As gasoline is considered a hazardous material, each Retail Gasoline Outlets (RGO) in the City is required to obtain a hazardous materials storage permit from the Fire Department Hazardous Materials Division.

All RGOs within the City limits are annually inspected by the Fire Department. During these inspections, hazardous materials storage areas, spill containment areas and the availability of spill clean-up materials are reviewed and evaluated. The Checklist Summary for Violations of Hazardous Materials Waste used by the Fire Department. for these inspections is included in Appendix III-B. This checklist includes a number of violation codes related to storm water pollution prevention including but not limited to the following:

- HW33 – Adequate spill control/mitigation materials available
- HW34 – Has protection for storm drains, sumps and sewer outlets for unplanned release.
- HW39 – Containers are not leaking
- HW46 – Minimal spills in storage area. Spills promptly removed.
- HW49 – Storage is unlikely to cause unintended discharge to storm drain, sump or sewer.
- HW80 – Employees trained on emergency response procedures, equipment use, chemical handling and safety.

In the Term 2, Public Works Department, Storm Water Section staff performed RGO inspections during the Year 2 and Year 4. However, it has since been determined that the Fire Department annual RGO inspections explicitly include a review of measures undertaken and maintained toward storm water pollution prevention. As a result, in order to conserve City staff resources and avoid duplication of efforts, RGO inspections described in the SWMP will be performed by the Fire Department and any significant items of concern will be noted in each Annual Report.

Outreach materials previously developed by the Public Works Department will be provided to the Fire Department for distribution during RGO inspections. These outreach materials focus on proper house keeping practices and effective storm water BMPs.

Measurable Goals:

- RGO inspections will be performed annually by the Fire Department. Any items of significance as well as the number of RGOs inspected will be noted in the Annual Report. Public Works Department outreach materials for RGOs will be provided to the Fire Department for distribution during their annual RGO inspections.

3.4 Industrial/Commercial Outreach

During the Term 1, significant outreach was undertaken for food facilities, automotive service, cleaning, landscape, and 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. See Section 6.2 for additional outreach information.

The Public Works Department, Storm Water Section reviewed the storm water discharge/illicit discharge (spill) inspection data collected during the Term 2 to determine which industries/businesses had the greatest history of storm water pollutant discharge issues. The combined grouping of contractors, landscapers and painters had highest number of spills for this period in the industrial/commercial category. (Overall, when considering all sources of illicit discharges, single family residential homes had the highest number of spills.) As a result, in Term 3, current outreach materials for contractors, landscapers and painters will be evaluated and updated as needed and an educational/outreach strategy determined and implemented.

Measurable Goals:

- In Year 2 of Term 3, current outreach materials for contractors, landscapers and painters will be evaluated and updated as needed. These materials will be translated into Spanish as deemed appropriate to promote awareness and understanding of native Spanish speaking contractors and employees. In Year 3, the City will coordinate with appropriate industry/trade group representatives to identify an effective educational/outreach strategy. Outreach efforts will then be implemented in Year 4.

3.5 Industrial/Commercial Enforcement Protocols**Industrial Waste Permitted Facilities**

Santa Rosa's PPERP (Appendix III-A) details the range of responses to instances of noncompliance that take into account the circumstances related to noncompliance. The PPERP also specifies that Utilities Department, Environmental Compliance Section personnel are responsible for enforcement. While enforcement response procedures are the responsibility of the Utilities Department, Environmental Compliance Section 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 Utilities Department, Environmental Compliance Section enforcement procedures for noncompliance are categorized and summarized below.

Noncompliance Categories:

- Sampling, monitoring or reporting violations
- Compliance schedules
- Effluent limits
- Noncompliance detected through inspections or field investigations

Progressive Enforcement:

- **Phone call**
- **Notice of Violation (NOV)** - An official communication from the City to a non-compliant user that informs a user that a pretreatment violation has occurred.
- **Administrative Order (AO)** - Enforcement document that 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.
 - Compliance schedules
 - Stipulating fines or remedial actions
 - Signatures of City and industrial representatives.
- **Show Cause Order** - Direct industrial or commercial user to appear before the City Engineer, explain its noncompliance, 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 noncompliance can not 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 PPERP. Penalties are assessed according to the criteria and formula detailed in Part 6 of the PPERP.

Enforcement response for industrial waste permitted facilities is conducted by the Utilities Department, Environmental Compliance Section and is not covered by this SWMP.

Industrial/Commercial Facilities Without Industrial 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. Section 5, Illicit Discharge Detection and Elimination details the enforcement protocol for these types of facilities in sub-section 5.3.

Measurable Goals:

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

3.6 Interagency Coordination for Industrial/Commercial Facilities

Staff from the Utilities Department, Public Works Department, Community Development Department, Fire Department, and the Police Department Environmental Crimes Officer meet monthly to discuss and share information about recent illicit discharges at the Environmental Crimes Enforcement Meeting. City staff also actively participates in 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.

Measurable Goals:

- Continue to conduct monthly Environmental Crimes meetings with pertinent City staff.
- Continue to participate in SEQAC meetings.

3.7 Training of Targeted Staff

Training of Utilities Department, Environmental Compliance Section inspectors is provided by the Utilities Department under the wastewater discharge permit and is not part of this SWMP. On-the-job training is provided to the Public Works Department, Storm Water Section spill response staff. Staff is sent to appropriate training courses offered in nearby locations. The City provides training to spill response staff on topics relating to potential storm water pollutant discharges from the industrial and commercial sources as needed.

Measurable Goals:

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

4.0 MUNICIPAL OPERATIONS

Goal: Reduce or prevent pollution in storm water runoff from all municipal land use areas, facilities and activities associated with Municipal Operations. The Municipal Operations Section describes the following activities:

- 4.1 Public Construction Activities Management***
- 4.2 Municipal Services Center (Corporation Yard)***
- 4.3 Landscape and Recreational Facilities Management***
- 4.4 Storm Drain System Operations and Management***
- 4.5 Streets and Road Maintenance***
- 4.6 Parking Facilities Maintenance***
- 4.7 Emergency Procedures***

4.1 Public Construction Activities Management

Goal: Incorporate effective best management practices to reduce the discharge of pollutants in storm water runoff, especially sediment, from public construction sites.

4.1.1 Contract Documents

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 Special Provisions contain the conditions and terms with which the contractor is legally bound to comply upon the contract award.

Santa Rosa's 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, as

part of the contract, contractors are required to comply with Caltrans Standard Specification Section 20-3: Erosion Control. This section provides specifications for the preparation of areas that will receive erosion control materials such as the 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 shall have the right, in its sole and absolute discretion, to cause clean-up the spill by City staff or independent contractor. The cost of any such clean-up, in addition to recovery of any penalty or fine imposed upon City, plus an administrative charge of fifteen percent (15%) of the costs incurred by the City, shall be immediately due and payable by contractor and may be deducted from any amounts owing Contractor hereunder. In the event that there are insufficient amounts owing Contractor hereunder to cover the foregoing costs and charges, the city shall have the right to pursue any other remedy to recover same, including but not limited to, proceeding against any surety or bond in favor of the City. The City rights under this Section 7-1.01G are intended to be in addition to and not in lieu of any charges imposed by the City against Contractor under Section 7-1.07 below for violations of the Santa Rosa City Code.

The following materials are available for Contractor's reference at the City of Santa Rosa Department of Public Works front counter, 69 Stony Circle, Santa Rosa:

- a.) State of California Best Management Practice Handbook - Construction Activity;
- b.) Erosion and Sediment Control Field Manual;
- c.) Guidebook: Information on Erosion and Sediment Controls for Construction Projects;
- d.) Caltrans Storm Water Pollution Prevention Handbook;
- e.) Association of Bay Area Governments Manual of Standards for Erosion and Sediment Control Measures;
- f.) City of Santa Rosa Storm Water Best Management Practices Brochures (set of 7).
Five of the seven specifically apply:
 - 2 - Heavy Equipment and Earth-Moving Activities
 - 3 - Roadwork and Paving
 - 4 - Fresh Concrete and Mortar Application
 - 5 - General Construction and Site Supervision
 - 7 - Painting

Attention is directed to City Code Chapter 17-12, Storm Water.

As described in Section 2.6, in Term 3 the City will establish a set of standards for adequate design, installation and maintenance of erosion and sediment control BMPs to ensure consistency of erosion and sediment controls among plan reviewers, construction site owners and City inspection staff. These standards would be utilized in both private and public construction projects to improve management of construction site erosion and sediment control objectives. Once established, Santa

Rosa Special Provision Section 7-1.01 will be revised to reference and require compliance to these standards.

Measurable Goals:

- Continue to include Special Provision Section 7-1.01G as part of construction contract documents for all public improvement projects.
- By the end of Year 2, the City will establish a set of formal BMP standards for adequate design, installation and maintenance of erosion and sediment control BMPs to be utilized in both private and public construction projects. (Section 2.6)
- Once formal BMP standards are established, Santa Rosa Special Provision Section 7-1.01 will be revised to reference and require compliance to these standards. By the end of Year 3.

4.1.2 Compliance with State General Permit for Discharges of Storm Water Associated with Construction Activity

The City complies with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (General Construction Permit). Currently, a project is subject to the General Construction 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 in total disturbs one or more acres. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation but does not include regular maintenance activities performed to restore the original line, grade or capacity of the facility.

For applicable public improvement projects undertaken by the City, the City will submit a Notice of Intent (NOI), fee, explanation of the applicable project and a Storm Water Pollution Prevention Plan. The City will continue to submit NOIs for projects that disturb one acre or more and will conform to the General Construction Permit requirements.

Measurable Goals:

- The City will file an NOI for applicable public improvement projects and maintain compliance with all applicable terms of the General Construction Permit including the development and implementation of a Storm Water Pollution Prevention Plan.
- A list of the City projects in compliance with the terms of the General Construction Permit will be included in each Annual Report.

4.1.3 Inspection

Purpose of Inspection:

Construction inspection policy and procedures are defined in the Public Works Engineering Division Procedures Volume 1. City construction inspectors are responsible to ensure that public improvement projects, whether constructed through City contracts or by private developers, are constructed in accordance with approved plans and specifications. As described in Section 4.1, project plans and specifications require contractors to implement and maintain effective BMPs to protect water quality during construction activities. Both inspection policy and procedures utilized by City staff provide a quality control mechanism for aspects of construction including effective storm water pollution prevention BMP implementation and maintenance.

Measurable Goals:

- On active projects, daily inspections are documented in a construction diary.

4.1.4 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 progressive enforcement procedures shall be followed.

- **Verbal Instruction** - documented in construction diary
- **Job Memorandum** - written instruction confirming verbal instruction where circumstances are not severe enough to warrant a Notice of Violation or Noncompliance
- **Notice of Noncompliance** - issued for non compliance of plans, specifications and legal requirements. A stop work order may also be included as part of the Notice.

Measurable Goals:

- Continue to implement progressive enforcement procedures. Include the number and details of any Notices of Noncompliance issued in each Annual Report.

4.1.5 Training of Targeted Staff Involved in Public Construction Activities

As part of their duties, City inspectors are specifically required to read and be familiar with the City of Santa Rosa Standard Specifications and the Caltrans Standard Specifications which define requirements that the contractor must follow during construction to protect water quality. Specifically, prior to starting any work on a project, contractors are required to provide a water pollution control program which describes how water pollution will be effectively controlled during project construction.

A pre-construction conference is conducted by the project engineer before the contractor commences construction. Water pollution control measures to protect storm water quality are discussed at this conference.

Measurable Goals:

Continue to discuss storm water quality requirements with contractor representatives and the project inspector during pre-construction conference for public improvement projects.

4.1.6 Training of City Staff for General Storm Water Awareness

In Term 3, general storm water awareness and educational outreach materials will be created for all new employees. These materials would focus on enhancing staff awareness of storm water pollution concerns and appropriate measures for pollution prevention. In addition, the materials will describe the City Storm Water Permit, the illicit discharge detection and elimination procedures as well as the Environmental Crimes Program.

In addition, a voluntary survey will be performed to determine the level of storm water awareness among current City staff. The results of this survey will determine training needs for existing City staff and an appropriate plan will be developed and implemented to improve the awareness of all City employees.

Measurable Goals:

- In Year 1 of Term 3, a general storm water awareness and educational outreach brochure will be created for all new employees. These materials will focus on promoting awareness of storm water pollution concerns and appropriate measures for pollution prevention, describing the City Storm Water Permit, spill response program/illicit discharge detection and elimination procedures and the Environmental Crimes Program.
- In addition, a voluntary survey will be performed in Year 2 to determine the level of storm water awareness among current City staff. The results of this survey will determine training needs for existing City staff and, in Year 3, an appropriate plan will be developed and implemented to enhance staff awareness of storm water pollution prevention including the City spill response program among all City employees. In Year 4, another a voluntary survey will be performed to determine any change in the level of storm water awareness among City staff. Results will be documented in the respective Annual Reports.

4.2 Municipal Services Center (Corporation Yard)

Goal: Operate the Municipal Services Center consistent the General Storm Water Permit for Discharges Associated with Industrial Activities and the associated storm water pollution prevention plan.

The City operates a Municipal Services Center where vehicles and equipment are maintained, fueled and cleaned, and materials are stored. The site is required to have coverage under the General Storm Water Permit for Discharges Associated with Industrial Activities due to the following four activities: bus service and repair; bus washing; tack and diesel oil storage; and temporary storage of hazardous materials. The Municipal Services Center's Storm Water Pollution Prevention Plan (available upon request) includes non-structural and structural BMPs for the following potential pollution sources: hazardous materials temporary storage area; waste tack oil and diesel storage area, bus wash area; sweeper wash down area; fuel bay; pressure wash area; garage; and bus parking area. All vehicle and equipment wash areas are plumbed to the sanitary sewer. The site is inspected monthly, storm water samples are collected and analyzed each winter, and a comprehensive site compliance evaluation is conducted annually. An annual report is submitted to the Regional Water Board by July 1 of each year.

Measurable Goal:

- Continue to comply with General Storm Water Permit for Discharges Associated with Industrial Activities and the Municipal Services Center's Storm Water Pollution Prevention Plan, including submittal of an annual report to the Regional Water Board by July 1 of each year.

4.3 Landscape and Recreational Facilities Management

Goal: Incorporate effective best management practices to reduce or eliminate pollutants resulting from maintenance activities of landscaped areas and recreational facilities.

Maintenance Practices:

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. These maintenance practices aim to protect storm water quality during maintenance and operation activities.

Objectives of the City Landscape and Recreational Facilities Maintenance Practices include:

- 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.
- Manage the use of fertilizers and pesticides at the Bennett Valley Golf Course.

Facilities include:

- *Parks*: The City of Santa Rosa operates and maintains 57 parks totaling 514 acres 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 Aquatic Center and Ridgway Swim Center
- *Recreational water bodies*: Lake Ralphine (Howarth Park), Nielsen Ranch and 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.

Measurable Goals:

- Continue to implement appropriate maintenance practices and provide staff training to reduce or eliminate pollutants from landscaped areas and recreational facilities Term 3.

4.3.1 Pesticide Management

Pesticides are stored, handled and applied in accordance with 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. The following practices are part of the City's Pesticide Management Plan:

- Pesticides are stored on an asphalt surface in a secure location within the Municipal Services Center. 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 nonchemical pest management approaches.
- To the extent feasible, chemical applications are avoided during the wet season in order to minimize the amount of pollutant runoff in storm water. Weather forecasts, soil moisture levels and specific site conditions are considered when making decisions about vegetation management activities. Chemicals are not applied during storm events.
- Nonchemical 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 nonchemical vegetation control methods, the City has also reduced herbicide use rates, utilized spot treatments and, where used 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.
The following BMPs are implemented to reduce the amount of pesticides that reach the storm drain system.

1. Use pesticides with low mobility and persistence when feasible.
2. Use pesticide formulations that reduce spray drift when feasible.
3. Use spray adjuvants to minimize spray drift when necessary.
4. Apply pesticide spray as close to the target as possible.
5. Keep pesticide equipment in good repair and inspect it regularly.
6. Calibrate pesticide application equipment regularly to ensure that the proper amount of pesticide is applied.
7. Utilize pesticide application techniques and equipment that target individual pests or improve uniformity of application.
8. Use spray nozzles designed to reduce spray drift.
9. Adjust spray equipment to give the range in droplet size for optimum coverage of the target.
10. When planning a pesticide application, the following is considered;
 - a) Target pest
 - b) All control options.
 - c) The pesticide.
 - d) Site inventory: proximity of people and pets, location of sensitive areas, water bodies, drain inlets, slopes, and drainage swales.
 - e) Weather forecasts
 - f) Soil moisture conditions.
11. Do not apply pesticides during weather conditions that may cause significant drift of small droplets away from the spray target.
12. Avoid pesticide applications prior to intense rainfall events.
13. Leave appropriate buffer zones around bodies of water and drain inlets.
14. Do not mix or apply pesticides near storm drains or bodies of water. Water sources shall be protected during mixing and application.
15. All spills are to be promptly and properly cleaned.

Measurable Goals:

- Continue to keep pesticide use below the levels used prior to the adoption of the Integrated Pest Management Program (1997). Report on any significant activities associated with the Integrated Pest Management Program in each Annual Report.
- As an ongoing activity, continue to seek less toxic materials and new methods and techniques to reduce pesticide use.
- A detailed fertilizer and pesticide use plan for the Bennett Valley Golf Course will be developed by the end of Year 3. A copy will be provided in the Annual Report for Year 3.

4.3.2 Fertilizer Management

The Recreation and Parks Department developed a Fertilizer Management Plan during Year 1 of Term 2. This plan addresses proper use, application, storage and disposal of fertilizers, employee education and record keeping. It generally limits fertilizer use to turf areas such as sports fields and 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 intentional approach has reduced fertilizer use from past years. The Fertilizer Management Plan is included below:

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 nitrogen 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.

Currently the Recreation and Parks Department utilizes compost from the City's Compost Facility in its turf fertilization program for athletic fields. The compost is applied through a calibrated top dressing machine by staff trained in its use. The material is applied in a ¼ to ½ inch layer as needed to maintain turf health. Application can occur any time of year except when wet turf conditions prevent access onto the turf. Applications are not made during storm events. Drain inlets are covered to prevent the material from entering the storm drain system.

Application

Equipment is calibrated as needed to ensure the desired application rate. The calibration procedures of the manufacturer 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 the fall season (rather than spring) in order to promote deep, healthy root systems and hardy lawns.

Avoid 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.

In addition, the following practices are standard procedures:

- 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.

Measurable Goals:

- Implementation of the City Fertilizer Management Plan will continue throughout Term 3. Standard procedures will continue to be followed. Training in proper fertilizer application and storage will be provided to appropriate staff members as needed and will be reported in each Annual Report.
- A detailed fertilizer and pesticide use plan for the Bennett Valley Golf Course will be developed by the end of Year 3. A copy will be provided in the Annual Report for Year 3.

4.3.3 Planting and Retention of Native Vegetation

Planting of native vegetation at City landscaped areas will be implemented to the extent feasible and 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.

Additionally, the Santa Rosa Citywide Creek Master Plan (CCMP) (available online at <http://www.ci.santa-rosa.ca.us/pworks/other/SW/fullPLANdoc.pdf>) adopted in March, 2007 promotes the preservation, enhancement and restoration of local creeks and riparian corridors as habitat for fish, birds, mammals and other wildlife. The CCMP presents recommendations and includes policies for habitat enhancement including the removal of non-native invasive species and replanting with native riparian vegetation. Native species effectively stabilize banks, filter pollutants from runoff before it enters the channel and shade the channel, providing cooler water for native fish. Two specific policies contained in the CCMP include:

Policy HA-2-1: Remove non-native invasive species from riparian corridors and adjacent areas.

Policy HA-2-2: Revegetate riparian corridors with native species to enhance aquatic and terrestrial habitat. Select native, locally available and genetically appropriate riparian plant materials for enhancement projects.

Measurable Goals:

- Continue to support recommendations contained in the Citywide Creek Master Plan that promote planting and revegetation of native vegetation along local creeks and riparian areas.

4.3.4 Procedures to Reduce Water, Fertilizer and Pesticides Needs

The City has implemented the following procedures to reduce the amount of water, fertilizer and pesticides needed to maintain its park grounds and landscaped areas:

- 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 runoff.
- 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.
- Late in Term 2, the City Fertilizer Management Plan was changed to include the use of compost in place of chemical fertilizers whenever possible. The compost is applied using a metered application of ¼ to ½ inch applied with a top dressing machine. This application controls the distribution of compost to the exact area with no drift of the material. Drain inlets in the turf area are covered to prevent compost from entering the storm drain system. This method of fertilization can be used at any time of the year except during the winter when the turf may be too wet. Use of compost prevents compaction of the soil and helps to retain moisture, thus reducing the amount of irrigation water needed. This change will continue into Term 3.

Measurable Goals:

- Continue to implement current procedures to reduce water, fertilizer and pesticides needs within the City park grounds and landscaped areas.

4.3.5 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 discharged to the storm drain system.

- Employees and contractors who generate landscape waste dispose of it at an approved site, such as the Santa Rosa Laguna Treatment Plant Composting Facility or at the Sonoma County Central Landfill.
- Pruned materials from woody 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.

During the Term 3, facility and landscape design considerations will continue to include selection of native plant materials, and use of plant materials that do not require frequent shearing.

Measurable Goals:

Continue to implement current procedures regarding proper disposal of landscape waste throughout the Permit term.

4.3.6 Recreational Water Bodies

Picnic areas, lakes and ponds receive a large number of visitors each year and may collect large amounts of litter, debris and other pollutants. City recreational water bodies include:

Lake Ralphine - a 22-acre lake within Howarth Park is fed by storm water run off from 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 in the Fountaingrove area of the City. It is co-owned by the Fountaingrove Golf and Country Club and the City of Santa Rosa. In 2007, the Nagasawa Community Park was opened. However, the use of the lake has not changed and is primarily used for fishing. This lake is part of the storm drain system.

To minimize the amount of pollutants that reach these recreational water bodies, the following procedures are implemented, where applicable:

- Trash receptacles are provided and maintained to hold refuse generated by the public.
- Trash and debris from receptacles along water bodies are collected to minimize the amount of trash and debris that may contact the water. Trash receptacles are monitored on a regular basis for litter removal.
- Debris and trash is collected from within water bodies, where feasible.
- Trash collection is increased during peak visitation summer months.

Measurable Goals:

Continue to implement existing procedures regarding storm water pollution prevention management including trash collection and removal at City recreational water bodies.

4.3.7 Swimming Pool Discharge

Pool drains at both Ridgway Swim Center and the Finley Aquatic Center are connected to the sanitary 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 these pools:

- If possible, filter backwash water and chemically treated water is discharged to the sanitary sewer.
- 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 bi-sulfite. Dechlorinated swimming pool discharges shall contain no biocides.
- All chemicals, such as acid wash residue, are neutralized before discharging to the storm drain system.
- All of the above requirements are incorporated into pool maintenance contracts.

Measurable Goals:

- Continue to implement existing procedures.

4.3.8 Procedures to Minimize Incidental Runoff

The following standard procedures are followed by City staff to minimize incidental runoff from a number of possible sources including:

Irrigation:

- Compliance with Citywide water conservation program, Water Waste Ordinance, Recycled Water Ordinance, Water Efficient Landscape Policy, and Recycled Water User's Guide.
- Automatic irrigation systems are programmed using California Irrigation Management Information System (CIMIS) information. This programming includes use of repeat cycles further reducing runoff. 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 bubbler systems rather than spray systems.
- Citizens and City staff report irrigation breaks or malfunctions to the Recreation and Parks Department office. Professional Irrigation Crew staff responds immediately and either turns off the irrigation system or repair the problem on site.

Summer discharges from nuisance flows:

- During storm drain cleaning operations, the Public Works Department Field Services Division cleaning crew will monitor summertime flows in the storm drain sections being maintained to assist in identifying excessive summertime flows or non-storm water discharges. Findings will be reported to the Public Works Department Storm Water Section for investigation and follow-up. The Public Works Department, Storm Water Section will track reported locations to determine whether any trends exist.
- Creek Steward volunteers will be asked to report locations of outfalls that they observe with summer flow to the Creek Stewardship Coordinator.
- The Utilities Department, Environmental Compliance Section inspectors will be asked to report locations with summer flows to Public Works Department, Storm Water Section.
- Public Works Department, Storm Water Section will include in its Term 3 residential outreach campaign (described in Section 6.1), educational information about summer discharges from specific types of nuisance flows (including but not limited to swimming pool discharges and residential car washing) to educate the community about environmental concerns resulting from summer discharges, to encourage reduction of summer discharges and to encourage reporting of problem locations for follow-up.

Waterline flushing and fire hydrant flushing:

- Restricting water line flushing operations to the rainy season was considered by the Utilities Department, but some operations need to be conducted throughout the year to protect public health and safety. Fire flow flushing is conducted to verify fire protection capacity when development and project applications are evaluated. This flushing needs to be conducted in a timely manner so that project processing can proceed with appropriate fire protection requirements. Water quality flushing of dead end mains needs to be conducted on a regular schedule throughout the year to ensure the quality of water in the drinking water system. Waterlines also need to be flushed after repairs, new construction, tie-ins, or pipe replacements for water quality and health reasons. Since most projects are constructed during the summer months, this type of water line flushing can not be restricted to the rainy season.

- Current City standards that apply to water line flushing for new construction into storm drains or other inland waterways include:
 - Water to be disposed of must contain no chlorine residual
 - pH must be between 6.5 and 7.5
 - The Regional Water Board must be notified in advance of the discharge.
- If discharges do not meet the preceding standards, the following is required:
 - Contractor must obtain permission from the Utilities Department, Environmental Compliance Section prior to the discharge being disposed of in the sanitary sewer system. (Payment of any fees required will be the responsibility of the contractor.)
 - pH must be between 6.0 and 9.5

Reservoir Draining:

Before any water tank reservoirs are taken out of service and drained, special precautions need to be taken as detailed below:

- A water discharge plan needs to be in place prior to any discharge.
- Notification of the following:
 - Fire protection agencies
 - Utilities Department, Environmental Compliance Section for discharge permit issues.
 - Public Works Department, Storm Water Section spill response staff for any storm water discharge response issues.
 - Utilities Department, Water Quality Division for possible low-pressure complaints and for sampling.
 - North Coast Regional Water Quality Control Board

If a specific area is determined to need advance warning, residences should be door tagged 48 hours prior to flushing.

Securing Reservoir:

A plan of action, duties, responsible persons, time lines, materials, equipment and contingency plans must all be made well in advance of the isolation and be discussed with all parties involved.

- Make prior arrangements with Regional Water Board staff to discuss discharge plan.
- Notify proper managers/co-workers
- Allow demand to draw down reservoir to minimize water loss
- Use pumper, if possible, to pump remainder of water into system.

Draining Plan:

Prior to each discharge, downstream impacts must be evaluated and efforts made to minimize any possible impacts to the maximum extent possible. Plan must describe:

- Reason for discharge
- Location of reservoir site
- Site map
- Water quality data.
- Anticipated discharge (flow and quantity) as well as duration.
- Notify residents that are in the proximity of water ways that may see a flow increase.
- Address any public concerns that may arise
- Inspect and clear all storm drains, drainage channels for possible blockages.

- Inspect for possible erosion and sediment issues. Specify appropriate BMPs to protect channel as appropriate.
- Inspect possible sources of contamination in storm drains, drainage channels, i.e., oil cans, hazardous waste, garbage, etc.
- Notify Public Works, Storm Water Section so they may be able to make any further recommendations.

Water Quality:

Once the drainage path is clear and protected, tank discharge water must be dechlorinated before the draining process can begin:

- Chlorine residual in the system is less than 2.0 mg/L, typically averaging between 0.2 mg/L and 0.8 mg/L. Check for residual levels to determine dechlorination process.
- Follow manufacturer instructions for de-chlorinating reagent dosing rates.
 - Granular reagents are more effective when made into a solution by mixing with water before applying.
 - Ascorbic acid, a natural material, (Vitamin C) is relatively safe and preferred over other reagents.
- After distributing the reagent through roof hatch and vents, monitor chlorine residual levels. A pocket colorimeter (Hach Company) may be used to measure residual chlorine concentration in the water. Chlorine residual must be non-detectable to proceed with discharge.
- In conjunction with adding the reagent to the interior of the reservoir, as additional precaution a perforated container of ascorbic acid tablets will be placed at the first point possible after the water has left the reservoir.
 - Ponding can be used to aid in detention time, as well as distributing de-chlorinating reagent by hand.

Once there is a non-detectable residual:

- Slowly begin to drain reservoir at a rate that will not be an impact to surrounding environment.
- Inspect effluent flow and adjust accordingly so as not to raise turbidity levels within channel flow. Flushing at high velocities can cause soil erosion, vegetation damages and drainage problems, if necessary use hay bales or other manufactured devices to aid with flow. Appropriate BMPs are required to avoid any type of detrimental impact to channels.
- Monitor outfall
- Continue water quality testing throughout the process.
- Keep the Public Works Department, Storm Water Section and the Regional Water Board informed of progress and advise them of completion of work.

Measurable Goals:

- Continue to implement existing procedures and activities.
- In Year 1, develop tracking system for reported locations of incidental runoff.
- In Year 1, dechlorination procedures and measures to manage/reduce flow volume and volume and velocity impacts on downstream waterways will be drafted and submitted for Regional Water Board review. Final procedures and protective measures will be established before the end of Year 2.

- In Year 1 of Term 3, the results of the data collected in the Year 5 of the Term 2 Community Survey will be evaluated and a residential outreach strategy developed including an appropriate schedule for implementation. As described in Section 6.1, this strategy will specifically address summer discharges from specific types of nuisance flows (including but not limited to swimming pool discharges and residential car washing) to educate the community about environmental concerns resulting from summer discharges, to encourage reduction of summer discharges and to encourage reporting of problem locations for follow-up. Outreach to residents will be completed by the end of Year 5 in Term 3.

4.3.9 Park Construction and/or Rehabilitation Projects

As described in Section 4.1.2, the Recreation and Parks Department complies with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity. For applicable public improvement projects undertaken by the Recreation and Parks Department, the department will submit a Notice of Intent (NOI), fee, explanation of the applicable project and a Storm Water Pollution Prevention Plan. The Parks Project Superintendent is responsible for oversight.

Measurable Goals (same as Section 4.1.2):

- The City will file an NOI for applicable public improvement projects and maintain compliance with all applicable terms of the General Construction Permit including the development and implementation of a Storm Water Pollution Prevention Plan.
- A list of the City projects in compliance with the terms of the General Construction Permit will be included in each Annual Report.

4.4 Storm Drain System Operation and Management

Goal: *Remove potential storm water pollutants prior to their entrance into waterways.*

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 as hydraulically designed during storm events. 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 storm drain network that discharges to flood control channels owned and maintained by the Sonoma County 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.

4.4.1 Storm Drainage System Mapping

City storm drainage system mapping allows City staff and other interested parties to identify storm water outfalls and the layout of the storm water collection system. The system has been useful in illicit discharge source investigations.

The most current mapping of the City storm drain system is available on the City GIS Internet site at <http://imaps.ci.santa-rosa.ca.us/index.cfm>. Details include location, size and discharge point of known storm drain facilities within the City jurisdiction. Also shown are the location and address of most parcels within the City. The extent of storm drain system mapping within City parks will be evaluated and completed in Term 3. (Most newer parks have been mapped but older parks have not.) This will include mapping of the drainage system at the Bennett Valley Golf Course.

The GIS map is updated periodically with new a modified systems and to resolve conflicts identified in the field. This work will continue through Term 3.

Measurable Goals:

- Continue to periodically update storm drain mapping on City GIS site.
- Complete mapping of storm drain systems in City parks and the Bennett Valley Golf Course by the end of Term 3.

4.4.2 Clean and inspect storm drain pipe and inlet structures

During Term 1, the City began full implementation of a storm drain inlet and pipe cleaning program by accomplishing the following:

1. Hired and trained a two-person full-time equivalent vacuum and water-jetting cleaning crew,
2. Purchased, outfitted and began using a combination vacuum and waterjetting truck,
3. Developed a data tracking system where both the length and location of storm drain cleaned

The cleaning crew begins in the spring, weather permitting and systematically works through the City storm drain system. Areas that have been identified as problematic are prioritized. 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 collected and maintained in a database. Reports generated show the total number of structures and linear footage of pipes cleaned, the location and quantity of pollutants removed, and the location of structural problems. In addition, during their cleaning operations, the cleaning crew monitors summertime flows in the storm drain sections being maintained to assist in identifying excessive summertime flows or non-storm water discharges. Late in Term 2, a new laptop computer was purchased to allow the Public Works Department, Field Services Division, storm drain cleaning crew to input their cleaning data into an electronic database while in the field. This data will include unique identification numbers for structures and pipes, allowing the City to link the data to the GIS maps and storm drain drawings. Eventually, staff will be able to query the data and graphically display the cleaning history.

By analyzing data collected during cleaning operations and capturing institutional knowledge of locations that have typically required more frequent cleaning the City will prioritize public catch basin inlets for inspection and cleaning.

Measurable Goals:

- The amount of drainage system cleaning that can be completed each year varies depending on overall work load, staffing, and equipment reliability. Cleaning and maintenance of the drainage system is ongoing and will continue throughout the Permit term. Similar to Term 2, the numeric goal for the each year of Term 3 is to clean and inspect:
 - 130,000 linear feet of storm drain pipe

- 1,200 drainage inlet structures
- During Term 3, the Public Works Department, Field Services Division cleaning crew will continue to monitor summertime flows in the storm drain sections being maintained to assist in identifying excessive summertime flows or non-storm water discharges. Any unusual findings will be reported to the Public Works Department Storm Water Section staff for further investigation. Any findings of significance will be reported in each Annual Report.
- In Year 1 of Term 3, Public Works Department, Field Services Division will begin to input their cleaning data into an electronic data base while in the field. This data will include unique identification numbers for structures and pipes, allowing the City to link the data to the GIS maps and storm drain drawings. By the end of the Term 3, City staff will be able to query the data and graphically display the storm drain cleaning history.
- In Year 1 of Term 3, Public Works Department, Field Services Division will designate public catch basins within the City limits as one of the following, based on staff experience maintaining the drainage system:
 - Priority A:* Catch basins that are consistently generating the highest volumes of trash and/or debris
 - Priority B:* Catch basins that consistently generate moderate volumes of trash and/or debris
 - Priority C:* Catch basins that generate low volumes of trash and/or debris.
- In Year 3 of Term 3, Public Works Department, Engineering Division will analyze data collected during cleaning operations and the catch basin priorities designated by the Field Services Division and, in coordination with the Field Services Division, develop a prioritized catch basin inspection and cleaning schedule. The schedule will be described in the subsequent Annual Report.
- In Year 4 of Term 3, the prioritized catch basin inspection and cleaning schedule will be implemented by the Public Works Department, Field Services Division.

4.4.3 Flood control channel or road side ditch inspection and maintenance

City-maintained open channels are cleared of trash and debris annually for flood control purposes. All materials are disposed of properly.

Measurable Goals:

Continue to perform annual inspections of trash and debris removal from open channels for flood control purposes. This maintenance activity is planned to continue throughout the Permit term.

4.4.4 Storm drain labeling

Storm drain labeling started in Term 1 as an educational volunteer participation program as part of the SWMP's Public Education and Outreach element (Section 6). For safety reasons, when volunteer groups request participation, their efforts are focused on placing decals on structures located within residential areas with low traffic volumes. In Term 2, the City supplemented the ongoing public volunteer storm drain labeling program with Public Works Department, Field Services Division crews and later did the majority of installing the storm drain decals on storm drain inlets in the right-of-way. Currently, the City does not have the legal authority to enter private property to place decals on private storm drain structures.

Presently, the City employs two methods to label storm drain catch basins. Current City standards require catch basins built with new subdivisions and capital Improvement projects to be labeled with

the standard decals per City Standard 409 before final approval and the Public Works Department, Field Services Division storm drain cleaning crew checks for a decal while cleaning. If the cleaning crew finds a decal is needed they either apply one or note in their cleaning log that one is needed before moving to the next structure. From the cleaning log a list of structures needing decals is generated.

The City storm drain map uses a different symbol for catch basins with a decal and for those without. Because City construction standards require decals prior to acceptance, catch basins in new subdivisions and those installed under the City Capital Improvement Program are mapped with the symbol for a decal. The cleaning log will be used to verify if an existing catch basin symbol is correct. If not, the symbol is changed accordingly.

As of September 2007, the storm drain maps show that approximately 80% of the public catch basins are labeled. It is estimated the percentage of catch basins with decals will grow slowly over the next 5 years because the decals are not permanent and the number of new decals applied may be offset by those that are lost or damaged. For Term 3, it is the City's goal to increase the number of public catch basins labeled by recording which inlets have not been labeled and which can not be labeled due to field conditions, and developing and implementing a plan to label the remaining inlets that can be labeled.

Measurable Goals:

- Continue the storm labeling program throughout the Permit term to replace damaged, worn or missing decals as needed.
- For Term 3, identify which inlets can but have not yet been labeled and develop and implement a plan to label these inlets.

4.4.5 Trash Management

The City waste hauling franchisee, Santa Rosa Recycling & Collection, offers weekly garbage service to customers. Included in the fee for garbage service is a weekly curbside recycling program and weekly green waste service. Customers are provided with rolling carts that are easy to maneuver around the yard and to the curb. The hinged lid keeps out rain and animals. Green waste collected in the Sonoma County curbside programs is taken to the Sonoma County Central Landfill where it is processed into compost and mulches. Weekly collection of green waste encourages property owners to place their leaves and other yard waste in the rolling cart for collection instead of allowing green waste to enter the drainage system.

For any event in the public right-of-way where it is foreseeable that substantial quantities of trash and litter may be generated, the City Special Event Permit requires the Permittee provide portable toilets and refuse and recycle cans. Permittees are referred to the waste hauling franchisee for such services. For particularly large public events, such as the Downtown Market, the City sweeps the streets early the following morning to pick up any remaining litter.

The Public Works Department responds to calls regarding trash dumped on City streets or along City maintained waterways. Trash is picked up and placed in a waste receptacle for disposal. Dead animals are also removed from the public right-of-way when reported. Domestic animals are removed by Sonoma County Animal Care & Control; wild animals are removed by the City.

Measurable Goal:

- Continue requiring the proper management of trash and litter generated from public events for which the City issues a Special Event Permit.

4.5 Street and Road Maintenance

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. In addressing maintenance concerns, procedures are implemented to prevent or minimize the delivery of sediment and chemicals to streams. The goal of this program is to reduce the impact of street and road operations and maintenance on storm water quality.

4.5.1 Street Sweeping Frequency

Public Works Department, Field Services Division crews perform street sweeping with a regenerative air sweeper. The performance of street cleaning operations is based on the following frequency as prioritized by traffic volume. A map showing the approximate areas of service can be viewed on the City GIS site at <http://imaps.ci.santa-rosa.ca.us/index.cfm>. (The Street Sweeping Days schedule viewing option is available on the Public Works pull down menu.)

- *Priority A:* Streets located in the Downtown area from Brookwood Avenue to Dutton Avenue are swept 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 swept twice a week.
- *Priority C:* Guerneville Road between Fulton Road and Mendocino Avenue, Mendocino Avenue, Fulton between Highway 12 and Guerneville Road, Cleveland Avenue between College Avenue and Bicentennial Way are swept once a week.
- *Priority D:* All other curbed streets are swept on a monthly basis.

In addition, City streets are swept after special events, such as the summertime weekly Downtown Markets or the annual Rose Parade.

Measurable Goals:

- Continue to sweep streets on the frequency as prioritized above.

4.5.2 Material Management-Road Construction, Sweeping, Pipe/Ditch Cleaning and Disposal

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 are described below:

Saw-cutting:

- Saw-cutting is performed only in dry weather to the extent feasible. However, emergency sewer/water repairs must be performed during any weather condition.
- Saw-cutting slurry is either vacuumed or contained and disposed of properly.
- Any spills from equipment or activities are disposed of properly.

Paving:

- Paving activities are performed only in dry weather to the extent feasible. However, 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 offsite or in designated areas on site to prevent 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 properly.
- 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.

Measurable Goals:

- Continue to implement existing activities and properly recycle or dispose of materials.

4.5.3 Training of Targeted Staff

The Public Works Department Streets and Road Maintenance Section crews receive on the job training for appropriate procedures to prevent their operations from impacting the City storm drain system. An annual refresher is given to all Streets and Road Section maintenance crews about the storm water discharge permit and how to conduct their activities to reduce or prevent pollution into the storm drain system to maintain compliance with the Permit.

The Public Works Department will evaluate adoption of a Road Maintenance Standards Manual, the same or similar to the manual adopted by the Sonoma County Department of Transportation and Public Works, that addresses water quality and fish protection while providing for public safety. A review of existing guidance manuals will be completed and recommendation made for adoption by the end of Year 2. Within a year after adoption, training will be provided to road maintenance personnel on the guidelines.

Measurable Goals:

- Continue to provide training to staff as needed.
- The Public Works Department will evaluate adoption of a Road Maintenance Standards Manual, similar to the manual adopted by Sonoma County, that addresses water quality and fish protection while providing for public safety. A review of existing guidance manuals will be completed and recommendation made for adoption by the end of Year 2. Within a year after adoption, training will be provided to road maintenance personnel on the guidelines.

4.6 Parking Facilities Management

Goal: Reduce the discharge of storm water pollutants to the storm drain system with a focus on maintaining debris free parking facilities and minimizing excessive oil build-up.

4.6.1. Sweeping/Spill Clean-up

The goal of this component is to reduce the water quality impact of City parking facilities with greater than 25 parking spaces. The following activities are performed by the Public Works Department to remove debris from parking facilities:

- Sweeping is generally performed weekly at the Municipal Services Corporation Yard at 55 Stony Circle and at City Hall Downtown. Also, sweeping is usually performed at the Bennett Valley Senior Center at 704 Bennett Valley Road on a monthly basis.
- The Transit and Parking Department contracts the sweeping and pressure washing of City-owned public parking lots garages (5 garages and 9 lots). Pressure washing discharge water and debris is vacuumed and properly disposed in a manner to prevent it from entering the storm drain system.
- Timing of spill clean-up responses within City-owned and operated parking lots and garages is *immediate* for priority calls and *within one business day* for non-urgent small spills.

Measurable Goals:

- Continue to sweep public parking lots and garages weekly and pressure wash annually. Maintain records in the Transit and Parking Department
- Provide timely clean-up responses for spills within City-owned and operated parking lots and garages. *Immediate* response will be provided to priority calls and *within one business day* for non-urgent small spills.

4.7 Emergency Procedures

The City of Santa Rosa has an Emergency Operations Plan that guides staff in responding to and recovery from natural disasters or other emergencies. Where feasible, fire-fighting water from fire incidents in the City is vacuumed up and disposed of in 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.

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 effective BMPs into emergency response activities.

4.7.1 Hazardous Material Response Plan

The City Hazardous Material Response Plan is an extension of the City Emergency Operations Plan and meets the requirements of Chapter 6.95, California Health and Safety Code and Title 19, Article 3, California Code of Regulations. The 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.

Measurable Goals:

- Continue to implement the Emergency Operations and Hazardous Materials Response Plans.

4.8 Public Events on City Property

Recreation and Parks Department maintenance staff is present during all public events to insure site cleanliness and timely removal of trash and as required following each event for cleanup activities. Non-routine occurrences that may threaten the storm drain system are dealt with as they arise and addressed in a prompt manner commensurate with their severity utilizing whatever are resources necessary.

For any event in the public right-of-way where it is foreseeable that substantial quantities of trash and litter may be generated, the City Special Event Permit requires that the Permittee provide portable toilets and refuse and recycle cans. Permittees are referred to the waste hauling franchisee for such services. For particularly large public events, such as the Downtown Market, the City sweeps the streets early the following morning to pick up any remaining litter.

With regard to food vendors for public events in City parks, educational materials which describe requirements for proper disposal of food, cooking oils, wash waters, etc. to prevent these materials from entering the storm drain system will be attached to all park reservation permits beginning January 1st, 2008. This will pertain to park reservation permits for group picnics, food vendors, and special events.

Measurable Goals:

- Continue requiring the proper management of trash and litter generated from public events for which the City issues a Special Event Permit.
- Educational materials for food vendors at public events in City parks will be developed to describe requirements for proper disposal of food, cooking oils, wash waters, etc. to prevent these materials from entering the storm drain system. These materials will be attached to all park reservation permits beginning January 1st, 2008. This will pertain to park reservation

permits for group picnics, food vendors, and special events. A copy of these materials will be included in the Annual Report for Year 1.

5.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

Goal: Detect and minimize illegal non storm-water discharges (except those that are exempt or conditionally exempt) from entering the storm drain system and to reduce pollutants from such discharges to the maximum extent practicable

5.1 Spill Response

Preventing spills to the storm drain system including creeks and channels is an ongoing educational and proactive process that is an inherent part of permit compliance. The City has demonstrated a commitment to this process in Term 1 and Term 2 and will continue with these efforts in Term. The Sonoma Green Business Program is a voluntary compliance and incentive program implemented by the City and County that continues to certify businesses in the auto repair, printing and winery industries for compliance with environmental regulations and voluntary efforts towards energy and water conservation, recycling, spill and pollution prevention, and waste reduction measures.

In addition, Santa Rosa - Build It Green (SR-BIG) is a voluntary program to promote environmental protection through building and remodeling with a more sustainable approach. Contractors and homeowners are encouraged to build and design their homes to increase energy and water efficiency, resource conservation, and indoor air quality by following the SR-BIG certification guidelines. These guidelines promote protecting native soils, minimizing the disruption of existing plants and trees, implementing construction site storm water practices, protecting water quality with landscape design and providing for on-site water catchment/retention.

Spill Prevention Coordination:

During Term 1, funding was approved for a Police Department, Environmental Crimes Investigator. Funding for this position is provided annually by the Storm Water Enterprise and Utility Fund and the Utilities Department. The Environmental Crimes Investigator assists the Public Works, Utilities, Community Development (CD) and Fire Departments with investigating incidents of environmental crime. Monthly coordination meetings with the Environmental Crimes Investigator and staff from the Fire, Utilities, Community Development, and Public Work Departments are held to discuss and share information about recent illicit discharges.

The Utilities Department, Environmental Compliance Section routinely responds to potential incidents of violation of the Sanitary 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 Public Works Department Storm Water Section for locations within the City limits that do not have an active Industrial Waste Permit. Public Works Department, Storm Water Section coordinates with the Utilities Department, Environmental Compliance Section to ensure that illicit connections are eliminated and that appropriate steps are taken to prevent future illegal illicit discharges.

In addition to coordination among City departments, City staff actively participates in 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. During these meetings, roundtable discussions are encouraged in which compliance staff relates their experiences in conducting storm water pollution prevention inspections.

Spill Containment, Clean-up and Investigation:

Non-Hazardous Materials:

Under the storm water discharge permit, the City is responsible for cleaning up non-hazardous materials from City right-of-way within the Permit boundary. The Public Works Department, Storm Water Section developed Spill Response Procedures to provide appropriate response for discharges to the storm drain system (available upon request). Typical response to a report of potential or actual discharge is to immediately dispatch a Public Works Department, Field Services Section 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, the Police and/or Fire Department(s) respond. Public Works Department Field Services Section staff are on call 24 hours a day, seven days a week. During normal business hours, a Public Works Department, Storm Water Section spill response staff 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 education and enforcement. Unfortunately, it is not always possible to identify a discharger to pursue appropriate follow-up. In these cases, Public Works Department, Field Services Section crews perform any required clean-up using the appropriate equipment to remove any pollutants that have entered or threatened to enter the storm drain system and if appropriate, door tags are placed on residences in the vicinity. In cases where the discharger is identified, the cost of the clean-up may be assessed and the discharger 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 the storm drain system or natural waterway.

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.

5.2 Private Sanitary Septic Systems (6.1.9)

The City of Santa Rosa contracts with the County of Sonoma to be the lead agency with well and septic issues. The Sonoma County Permit and Resource Management Department Well and Septic Section (County Well & Septic) 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.

When a complaint is received of a possible failing septic system within City limits, a Community Development Department Building Code Compliance Section 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 the Sonoma County Permit and Resource Management Department, Well and Septic Section for proper testing, evaluation and to obtain a repair permit, if possible.

If the property owner is unable to obtain a septic repair permit and City sanitary sewer is available, the owner must pay hook-up fees to the Santa Rosa Utilities Department, obtain a Public Works Department encroachment permit, and obtain a plumbing permit from the Community Development Building Code Compliance Section. The owner must also obtain a septic abandonment permit from Sonoma County Permit and Resource Management Department, Well and Septic Section, and properly abandon the septic system. Inspections are required for all three: Public Work Department, Encroachment Section for the tie-in in the public right-of-way, Sonoma County Permit and Resource Department, Well and Septic Section for abandonment of the septic system; and Community Development Department, Building Division for inspection of the new sanitary sewer connection.

If the inspector finds raw sewage above ground, the Community Development Department, Building Code Compliance Section inspector will contact the Sonoma County Permit and Resource Management Department, Well and Septic Section directly and request one of their inspectors come out to the property for immediate evaluation of the septic system. If the Community Development Department, Building Code Compliance Section inspector finds raw sewage being pumped into a storm drain, drainage ditch or creek the Public Works Department, Storm Water Section spill response staff are notified immediately. If the Community Development Department, Building Code Compliance Section inspector can locate who is doing the pumping, that individual is ordered to stop immediately via a Correction Notice and Stop Work Order.

As described in Part V-Monitoring, the City is proposing to conduct one infrared imagery flight over Santa Rosa Creek and all tributaries upstream of Downtown Santa Rosa during Term 3. The technique will be used to locate septic system/illicit discharges to receiving waters that may contain elevated levels of pathogens. The technique has been used by other municipalities to locate leaking sewer lines and other discharges warmer than the receiving waters. The flight will likely identify numerous “hotspots” requiring follow-up investigation, analysis, educational outreach and possible enforcement. The City will coordinate with the Sonoma County Permit and Resource Management Department, Well and Septic Section to determine appropriate measures to respond to identified problem areas. Progress and pertinent data will be reported in applicable Annual Reports and a project summary will be provided after the project is complete.

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 any reported illicit septic discharge contained within the property boundary and which poses no immediate threat to public health or the environment.
- An infrared imagery flight will be conducted over Santa Rosa Creek and all tributaries upstream of Downtown Santa Rosa in Year 1. Investigation and analysis of “hotspots” will be performed in Year 2. Possible enforcement and/or outreach will be performed before the end of Year 3. Progress and pertinent data will be reported in applicable Annual Reports and a project summary will be provided after the project is complete.

5.3 Enforcement Procedures

Enforcement procedures were established for general violations which formalize a plan of action to be taken pursuant City Code Chapter 17-12, Storm Water or other State law violations (Appendix III-C, Spill Response Procedures). 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. As needed, correspondence related to enforcement procedures has and will continued to be translated into Spanish language to promote understanding and compliance with illicit discharge prevention and elimination requirements.

Measurable Goals:

- Continue to implement existing enforcement procedures.

5.4 Record Keeping and Documentation/Data Coordination (6.1.8)

The City continues to use and update its computerized databases to track activities related to the Storm Water 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.

Public Works Department, Storm Water Section illicit discharge (spill) responses and inspections are currently entered into a CartêGraph[®] database. The CartêGraph[®] database records illicit discharge complaints and enforcement actions. The program has significantly reduced staff resources spent reporting complaints and facilitates the creation of reports.

The CartêGraph[®] database is used by the Public Works Department, Field Services and Storm Water Sections. Illicit discharge data are tracked using the following major categories:

- Location address
- Source/Industry of the discharge
- Discharge category (discharged to storm drain, street, gutter, creek, etc)
- Material type of the discharge
- Affected water body (Creek Name)
- Clean-up by?
- Action taken category (enforcement action)
- Notes about the discharge
- Date
- Assumed Responsible Party (name, address, phone, business name)
- Attachments (photo, scanned images, additional documentation, etc)
- Labor, equipment, and materials

Near the end of Term 2, there were over 1,400 illicit discharges recorded in the Public Works Department, Storm Water Section CartêGraph[®] database.

To allow different departments to view the illicit discharge data collected by the Public Works Department, Storm Water Section spill response staff, reports from the CartêGraph[®] database are automatically generated daily and posted to the City internal Storm Water webpage. This webpage includes year-to-date information on spills and past history as described below:

- The number of illicit discharges are tracked by:

- Source/Industry of the illicit discharge
- Material of the illicit discharge
- Discharge category (discharged to storm drain, street, gutter, creek, etc)
- Type of action taken by the spill inspector or business name
- Graphical reports:
 - Pie charts for source/industry and materials
 - Bar chart showing number of illicit discharges by month
- Details on all illicit discharges for the past 40 days.
- Past historic data by fiscal year.

Although a written description by the inspector is part of the data collected about the illicit discharges, qualifying and categorizing statements may be difficult at times. The Action Taken category fields are used to summarize what resulted from the illicit discharge inspection. The Action Taken category includes the tracking of:

- Educational materials provided
- Cease and Desist Order
- Administrative Action
- Verbal Warning
- Written Warning
- Civil Action
- Notice of Violation
- Cost Recovery

Customized forms have been developed to allow users of CartêGraph[®] to mine the database without the chance of inadvertently changing the existing data. This gives a greater freedom to search the database in many different ways. Customized forms may be used in conjunction with various report styles.

To facilitate reinspection of illicit discharge sites, an electronic schedule reminder has been developed to work in conjunction with the CartêGraph[®] database. A reinspection date can be set as part of the illicit discharge information entered into CartêGraph[®] which results in an email being sent automatically before the due date.

The CartêGraph[®] database is also used by the Public Works Department, Field Services Section to record labor, equipment, and materials cost. The clean-up cost of an illicit discharge performed by Public Works can be quickly ascertained by running Cost Recovery reports.

Information about the Spills (material, source, location, watershed) has been and will continued to be used in conjunction with the SWMP outreach program to provide appropriate education and outreach material to the public. During the next permit term, the Public Works Department, Storm Water Section's capacity to illustrate the data collected by CartêGraph[®] database will be expanded to track spill locations on GIS maps. (See Appendix III-D for examples of special illicit discharge summary reports.)

Measurable Goals:

- Continue to update Cartêgraph[®] database as illicit discharge inspections are completed. Information will include:

- Location address
 - Source/Industry of the discharge
 - Discharge category (discharged to storm drain, street, gutter, creek, etc.)
 - Material type of the discharge
 - Affected water body (creek name)
 - Clean-up by?
 - Action taken category (enforcement action)
 - Notes about the discharge
 - Date
 - Assumed Responsible Party (name, address, phone, business name)
 - Attachments (photo, scanned images, additional documentation, etc.)
 - Labor, equipment, and materials costs
- Summarize illicit discharge detection and elimination activities in each Annual Report.
 - Each year, special illicit discharge summary reports which use GIS tracking to illustrate the location and respective watersheds of actual spills will be included in each Annual Report.

5.5 Illicit Connection Investigation

Illicit connections are 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 are reported they are forwarded to the Utilities Department for investigation. If 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 illicit connections, the Utilities Department, Environmental Compliance Section reviews plans and inspects construction for commercial improvements. If Public Works, Field Services street maintenance crews note odors or substances in catch basins while doing routine catch basin maintenance they contact the Utilities Department for further investigation.

Storm drain inspection and illicit connection identification by field screening is conducted by a Field Services crew dedicated to storm drains. If the Field Services crew has a reason to suspect an illicit connection or illegal discharge as a result of this screening process, they will coordinate with the Public Works Department, Storm Water Section and/or the Utilities Department, Environmental Compliance Section 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 to begin illicit connection investigation and elimination, the following criteria are used to prioritize potential problem areas:

- Areas of old commercial/industrial facilities and areas of heavy industry.
- Drainage systems older than 30 years.
- Areas with the highest number of detected or reported 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.

Measurable Goals:

- Continue to implement existing procedures.

5.6 Illicit Connection Termination

If an illicit sanitary sewer connection to the storm drain system is discovered, the City Sanitary Sewer Use Code, Chapter 15-16.020, specifies measures to correct an illicit sanitary sewer connection. The person responsible for the illicit connection is subject to enforcement procedures as authorized by the City Storm Water Ordinance.

Measurable Goals:

A description of any identified illicit connections to the storm drain system and steps taken to eliminate the connection will be included in each Annual Report

5.7 Disposal of Used Oil and Toxic Materials (6.1.7)

The Sonoma County Waste Management Agency (SCWMA) provides used oil and toxic materials disposal services within Sonoma County including the City of Santa Rosa. Activities by SCWMA related to the City of Santa Rosa's concern to keep hazardous waste and litter out of the storm drain system include the following:

- Preparation of a recycling guide to services and locations within Sonoma County that is included in the AT&T phonebook Yellow Pages, annually;
- Free drop-off for recyclable materials at the central disposal site on Mecham Road;
- Household toxics facility open every week for free drop-off of most toxics at Mecham Road;
- Community toxics collection every week rotating through the cities and county areas of Sonoma County. At least one pick-up a month is scheduled in Santa Rosa;
- Toxics rover home pickup service for a fee that rotates throughout the cities and county areas of Sonoma County.
- Businesses that are Small Quantity Generators can use the household toxics facility and a community toxics collection services for a low processing fee.
- There is a used oil and oil filter curb side pickup along with regular trash and recycling collections

Measurable Goals:

- Continue to distribute recycling guides at outreach events attended by Public Works Department, Storm Water Section;
- Continue to provide recycling guide or information on the Household Toxics Facility to responsible parties of illicit discharges;
- Continue to work directly or indirectly (such as through Russian River Watershed Association) with SCWMA on toxics collection and recycling programs.
- The quantity of recycling guides distributed will be included in the Annual Report.
- Other significant activities will be reported in the permit year of occurrence.

5.8 Training of Targeted Staff

During Term 1 and Term 2, the Public Works Department, Storm Water Section provided annual presentations to staff of the Public Works Department, Field Services, Facilities Maintenance, Garage, and Electrical Shops Sections; the Utilities Department, Water and Sewer crews; and the Recreation and Parks Department, Maintenance crews. The presentations focused on the City Storm Water Permit and the role employees play in observing, responding to, and reporting any incidents of pollutant discharges to the storm drain system.

These educational programs will continue during Term 3 to provide annual training to appropriate City employees.

Measurable Goals:

Provide training annually and document in each Annual Report.

6.0 PUBLIC EDUCATION AND OUTREACH

Goal: Increase the community's knowledge of the municipal separate sewer system and the impacts of urban storm water runoff, encourage behavior changes thereby reducing pollutant release to the receiving waters.

In Term 3, the objectives of the public education and outreach element of Santa Rosa's SWMP will continue to be:

- Increasing public understanding about storm water pollution prevention, including translation into Spanish or other languages as deemed necessary to reach Santa Rosa's ethnic communities.
- Clearly identifying problem behaviors and solutions and providing sustained effort to change specific problematic behaviors, honing outreach efforts toward specific behaviors/target audiences.
- Education of target audiences about specific methods to prevent storm water pollution.
- Promotion of community ownership and protection of water resources.
- Identification of potential target audiences based on past outreach efforts and tracked reports of illicit discharges.
- Coordinate with other agencies which are involved with environmental education throughout the watershed to maximize the effectiveness of all of the programs.

In Year 4 of Term 2, the Public Works Department hired a Marketing and Outreach Coordinator. This position is partially funded by the storm water assessment. In Term 3, the Marketing and Outreach Coordinator will compliment current outreach efforts with the tools of social marketing focused on sustainable behavior change in order to increase the program's effectiveness.

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. Efforts to increase public awareness will include an evaluation of census data to determine translation needs

for outreach materials in order to reach Santa Rosa's ethnic communities. Currently, a number of outreach materials have already been translated into Spanish and in Term 3 additional materials may be translated.

A variety of media channels will be used in Term 3 to reach out to the general public as a whole and to focus educational messages about specific pollutants and sources. Specific sources will be determined from the City database of past illicit discharges as well as the results of Term 2's Community Survey. In addition, information gleaned from other storm water programs within the state will also be considered. An evaluation of spill sources for spills that occurred during Term 2 showed that resident/residential activities had the highest number of spills in the community. As a result, the Term 2 Community Survey was designed toward determining the general community's awareness about how certain household activities can relate to storm water and storm water pollution and thereby affect the natural environment.

In addition, as described in Section 4.2.8, Term 3's residential outreach campaign will also specifically include litter prevention and will address summer discharges from specific types of nuisance flows (including but not limited to swimming pool discharges and residential car washing) to educate the community about environmental concerns resulting from summer discharges, to encourage reduction of summer discharges and to encourage reporting of problem locations for follow-up.

Measurable Goals:

- In Year 1 of Term 3, the results of the data collected in a Year 5 of Term 2 Community Survey, the illicit discharge database, information gleaned from other storm water management programs will be evaluated, and a residential outreach strategy developed including an appropriate schedule for implementation. Efforts to increase public awareness will include an evaluation of census data to determine translation needs for outreach materials in order to reach Santa Rosa's ethnic communities. Term 3's outreach will also include litter prevention and address summer discharges from specific types of nuisance flows (including but not limited to swimming pool discharges and residential car washing) to educate the community about environmental concerns resulting from summer discharges, to encourage reduction of summer discharges and to encourage reporting of problem locations for follow-up. Outreach to residents will be implemented by the end of Year 5 of Term 3.
- In Year 4 of Term 3, another Community Survey will be performed to determine outreach strategies for Term 4. An evaluation of the survey results will occur in Year 5 during the Permit reapplication process.

6.1.1 Storm Drain Inlet Decal Program

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 include 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, explaining the difference between the sanitary sewer and storm drain system, and stressing 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.

6.1.2 Environmental Column in Local Newspapers

Local newspapers reach a large number of citizens and businesses within Sonoma County. During Term 2, the Russian River Watershed Association (RRWA) established a monthly environmental column with local newspapers. The column reports on a variety of ecological topics, including storm water pollution prevention. The City continues to support RRWA's coordination of the submittal of environmental columns to local newspapers. Currently, the environmental columns are distributed to the following local newspapers: Sonoma West Times, Healdsburg Tribune, Windsor Times, Ukiah Daily Journal, West County Gazette, Russian River Times, Community Voice and The Press Democrat.

In addition, the City will continue to issue periodic media releases to the local media (including the *Press Democrat*) to highlight storm water program items of interest and /or important seasonal pollution prevention messages.

Measurable Goals:

- RRWA environmental columns will be referenced in each Annual Report. Other published newspaper articles pertinent to the City Storm Water Management Program may be referenced or included in each Annual Report.
- Each year, a minimum of two media releases will be issued to local media to highlight storm water program items of interest and/or important seasonal pollution prevention messages. Copies of each media release will be included in each Annual Report as well as a description of any follow-up media coverage related to the release.

6.1.3 Storm Water Management Program –Storm Water and Creeks Website

The City created a Storm Water and Creeks website which includes the Storm Water Management Program, at the address: <http://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. Topics for specific pages include current events, NPDES Permit, Storm Water Ordinance, flood control, environmental crimes, pollution prevention, how to report spills and contact Storm Water, creeks, Creek Stewardship, website resources as well as pages for kids and teachers. (see Appendix III-E).

The web site is updated and revised periodically. Term 2 updates included a street sweeping map and establishment of a counter as a means of tracking the number of visits to the City Storm Water and Creeks webpages. In Term 3, the Storm Water and Creeks website will be updated periodically to keep it current.

Measurable Goals:

- A counter will track the number of visitors to each page of the Storm Water and Creeks website. Numbers of significance will be reported in each Annual Report.

6.1.4 Creek Stewardship Program

The Adopt-a-Creek elements of the Storm Water Permit are implemented through the Agency's and City Creek Stewardship Program. The Program's goals are to:

1. provide public outreach on storm water pollution prevention, the benefits provided by creeks, and ways the public can protect water quality;
2. support public participation in the care of creeks, follow-up on citizen reports of pollution, habitat destruction, recreation needs and homeless encampments and promote the involvement of individual Creek Stewards who adopt a specific reach of creek;
3. provide coordination for clean-up and maintenance of City and Agency creeks.

During Term 2, the Creek Stewardship Program continued to organize outreach activities which promoted citizen involvement such as creek walks, educational presentations, community creek events, creek restoration projects, and volunteer creek clean-ups, often in conjunction with schools, churches, non-profit organizations and community groups. The program provides gloves, garbage bags, and trash removal to support volunteer clean-ups.

Each spring, in Term 3, an email reminder will be sent to Creek Stewardship volunteers asking them to report on locations of outfalls that they observe with summer flows to the Creek Stewardship Coordinator for appropriate follow-up by City staff. (Section 4.2.8)

Creek Stewardship activities are promoted in a number of ways. A description of the program, current events, and a link to report problems are posted on the City Storm Water website. Each issue of the City tri-annual Adventure Guide includes a Creek Stewardship page that lists upcoming creek activities and encourages individuals and groups to help care for their local creeks. Periodic email updates from the Program Coordinator promote upcoming events and discuss topics such as water quality, wildlife habitat, flood control, and watershed processes. In addition, Creek Stewardship activities are also periodically announced in the City Manager's weekly email. Brochures are available at City facilities and distributed at outreach events. A display case on Brush Creek is updated at least quarterly. Newsletters from community based organizations that partner with the Creek Stewardship Program occasionally include announcements of upcoming events. Creek Stewardship presentations are made to community and youth groups on request.

Measurable Goals:

- During Term 3, Creek Stewardship Program activities will be continued and accomplishments reported in each Annual Report. Specifically,
 - Each year, a minimum of three creek walks, three creek presentations, and six volunteer creek clean-ups will be coordinated to involve citizens in Creek Stewardship activities.
 - Creek Stewardship activities will continue to be promoted in the City Adventure Guide, published three times each year and delivered to all households within Santa Rosa. A copy of these promotions will be included in each Annual Report.
 - Community partners and all creek events involving citizens will be reported.
- A copy of the email reminder sent to the Creek Stewards each spring will be included in each Annual Report.
- Tracking of homeless encampments will be initiated in Year 1. By the end of the Permit term, GIS tracking will be used to document homeless encampment locations.

6.1.5 Informational Signs and Waste Receptacles Along Creeks in Santa Rosa

Signs that remind pet owners to protect water quality by cleaning up after their pets have been designed subject to the Santa Rosa Creek Design Guidelines. To date, 155 have been installed at all trailheads to Water Agency service roads that serve as public pathways in the Permit area. In the Term 3, replacement of pet waste signs will continue as needed.

The posting of informational signs is being anticipated at major public access points to creekside trails during Term 3. It is currently expected that six interpretive signs with information covering creek health, wildlife habitat and storm water pollution will be installed along Santa Rosa Creek in the Prince Memorial Greenway in Downtown Santa Rosa during Term 3.

In Year 5 of Term 2, the City is finalizing the design for creek name signs that will advise motorists of locations where creeks are crossed by streets. These creek identification signs may also promote awareness about creek flow patterns through the City and citizens' connection to their local creek. During Term 3, manufacturing and installation of these signs is anticipated as City crews and resources are available.

Trash accumulates in creeks and along creek trails through dumping, littering, and entry via storm drain culverts. Ten trash receptacles will be placed at the intersections of creek trails and streets to reduce the impact of littering. The City collection service, currently North Bay Corporation, will empty the containers on a regular basis.

Presently, nine pet waste bag dispensers along creek trails are maintained by volunteers and City Parks staff. Five additional dispensers will be installed during Term 3.

Measurable Goals:

- Interpretive, pet waste and creek crossings signs installed or replaced during each permit year will be quantified and described in each Annual Report.
- Provide a list of locations with pet waste signs, pet waste dispensers and trash receptacles in each Annual Report.
- Ten new trash receptacles and five pet waste bag dispensers will be installed by the end of Year 5 of Term 3. New locations will be reported in each Annual Report.

6.1.6 Public Events

The City actively pursues opportunities to participate in general outreach events to reach a broad spectrum of community members including festivals, wellness fairs, workshops, community events and farmers markets. Participation in previous events has included the Santa Rosa Rose Parade, Wednesday Night Downtown Markets, Cinco de Mayo Festival, Roseland Cesar Chavez Health Fair, City Citizen Academy and the Multicultural Diversity Fair.

Measurable Goals:

- In Term 3, the City will participate in a minimum of six public events each year. A summary of the City participation in general outreach events will be provided including materials distribution numbers in each Annual Report.

6.1.7 Hazardous Waste Disposal (5.8)

The Sonoma County Waste Management Agency (SCWMA) provides used oil and toxic materials disposal services within Sonoma County including the City of Santa Rosa. Activities by SCWMA related to the City of Santa Rosa's concern to keep hazardous waste and litter out of the storm drain system include the following:

- Preparation of a recycling guide to services and locations within Sonoma County that is included in the AT&T phonebook Yellow Pages, annually;
- Free drop-off for recyclable materials at the central disposal site on Mechem Road;
- Household toxics facility open every week for free drop-off of most toxics at Mechem Road;
- Community toxics collection every week rotating through the cities and county areas of Sonoma County. There is at least one pickup in Santa Rosa each month;
- Toxics rover home pickup service for a fee that rotates throughout the cities and county areas of Sonoma County.
- Businesses that are Small Quantity Generators can use the household toxics facility and a Community toxics collection services for a low processing fee.
- There is a used oil and oil filter curb side pickup along with regular trash and recycling collections.

Measurable Goals:

- Continue to distribute recycling guides at outreach events attended by Public Works Department, Storm Water Section;
- Continue to provide recycling guides or information on the household toxics facility to responsible parties of illicit discharges;
- Continue to work directly or indirectly (such as through Russian River Watershed Association) with SCWMA on toxics collection and recycling programs.
- The quantity of recycling guides distributed will be included in the Annual Report.

6.1.8 Illicit Discharge Incidents

Pollution prevention outreach materials designed for private citizens during response to accidental or illicit discharges were developed during Term 1. These outreach materials will continue to be distributed to citizens as part of spill response duties during Term 2. As needed, correspondence related to enforcement procedures has been and will continued to be translated into Spanish to promote understanding and compliance with illicit discharge prevention and elimination requirements.

Term 3 will use of a variety of media channels to reach out to the general public as a whole and will also focus educational messages about specific pollutants and sources. Sources will be evaluated from the City database of past illicit discharges, summer discharge observations, trends noted from other jurisdictions, and the results of the Year 5 of Term 3 Community Survey. At the end of each year within Term 3, past year tallies of spill sources and spill locations from the illicit discharge database will be reviewed and evaluated for trends and to determine whether any immediate needs for increased outreach exist. Outreach will consider the tools of social marketing focused on sustainable behavior change to increase program effectiveness.

Measurable Goals:

- Production/distribution of outreach materials will be reported in each Annual Report.
- At the end of each year within Term 3, past year tallies of spill sources and spill locations from the illicit discharge database will be reviewed and evaluated for trends and to determine whether any immediate needs for increased outreach exist. Results will be reported in each Annual Report.
- As described in Section 5.4, each year, special illicit discharge summary reports which use GIS tracking to illustrate the location and respective watersheds of actual spills will be included in each Annual Report.

6.1.9 Private Septic Systems

As described in Section 5.2 and in Part V-Monitoring, the City is proposing to conduct one infrared imagery flight over Santa Rosa Creek and all tributaries upstream of Downtown Santa Rosa during Term 3. The technique will be used to locate septic system/illicit discharges including sanitary sewer system leaks to receiving waters that may contain elevated levels of pathogens. The technique has been used by other municipalities to locate leaking sewer lines and other discharges warmer than the receiving waters. The flight will likely lead to numerous “hotspots” requiring follow-up investigation and analysis and educational outreach or possible enforcement. The City will coordinate with the Sonoma County Permit Resource Management Department, Well and Septic Section to determine appropriate measures to respond to identified problem areas. Progress and pertinent data will be reported in applicable Annual Reports and a project summary will be provided after the project is complete.

Outreach materials focused on the proper maintenance of private septic systems and signs of potential system failure were previously developed and are available to residents within Santa Rosa.

Measurable Goals:

- As described in Section 5.2, an infrared imagery flight will be conducted over Santa Rosa Creek and all tributaries upstream of Downtown Santa Rosa in Year 1. Investigation and analysis of “hotspots” will be performed in Year 2. Outreach and possible enforcement will be performed before the end of Year 3. Progress and pertinent data will be reported in applicable Annual Reports and a project summary will be provided after the project is complete.

6.1.10 Gardening/Nurseries

During Term 1 and Term 2, 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 included raising public awareness that pesticides can affect water quality and providing information on less-toxic pest management methods and products as well as the proper use and disposal of pesticides. In addition, the City participated in the IPM Store Partnership Program called “Our Water, Our World,” to encourage the inclusion of less-toxic pest management products at local hardware stores and nursery businesses. The City will continue to stock and distribute IPM Fact Sheets at outreach events during Term 3.

The Master Gardeners Program IPM program partnership with the City ended during the Year 4 of Term 2. As a result, the City of Santa Rosa hired a consultant associated with the regional “Our Water, Our World” program to contact and work directly with as many local hardware stores and nursery businesses as possible. The consultant encourages these businesses to stock more non- and low- toxic products for pest control, trains store employees about the new products and conducts occasional outreach tables at the stores. In Term 3, the City intends to continue its association with the regional “Our Water, Our World” program and this outreach effort will be supplemented with pollution prevention inspections to aid nurseries/nursery centers in minimizing nutrient pollutant runoff resulting from fertilizer use at their facilities. The City will also continue to provide IPM Fact Sheets in direct support of the participating retail stores within Santa Rosa’s Urban Growth Boundary area.

Measurable Goals:

- In Term 3, the City of Santa Rosa will pursue hiring the same consultant associated with the regional “Our Water, Our World” program to contact and work directly with as many local hardware/nursery businesses as possible. This consultant will encourage businesses to stock more non- and low-toxic products for pest control, train store employees about the new products and conduct occasional outreach tables at the stores. This outreach effort will be supplemented with pollution prevention inspections to aid nurseries/nursery centers in minimizing nutrient pollutant runoff resulting from fertilizer use at their facilities. The City will also continue to provide IPM Fact Sheets in direct support of the participating retail stores within Santa Rosa’s Urban Growth Boundary area. These activities will be described in each Annual Report, as appropriate.

6.1.11 Landscape Irrigation and Maintenance

Outreach materials address proper storage, disposal and use of pesticides, herbicides and fertilizers (including integrated pest management practices); information on lawn care and water conservation practices including proper irrigation scheduling and plant selection; and information on use of mulch or other erosion control measures when soils are exposed. The Water Conservation Program and the Storm Water Program offer a series of workshops each spring and fall about proper plant selection and irrigation practices. Materials are distributed at City facilities, through participation in public events, through the residential developers with new homeowner packets, and through new utility account welcome packets. For users of recycled water, the Recycled Water User’s Guide is incorporated by reference into each user agreement and distributed to each user.

Since January 2007, Santa Rosa’s water rate structure has included higher charges for landscape watering above a prudent level. The Utilities Department, Water Conservation staff perform individual irrigation audits on request to instruct homeowners on proper irrigation practices and plant selection to minimize water overspray and runoff.

Measurable Goals:

- Materials distribution , new utility account welcome packet numbers, number of self-inspections for recycled water customers, workshop attendance numbers, and site inspection numbers will be included in each Annual Report.

6.2 Industrial/Commercial Outreach

During Term 1, 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. These materials continued to be reprinted as needed and distributed upon request in Term 2. This effort will continue into Term 3.

In addition, the City participated in the Sonoma Environmental Quality Assurance Committee (SEQAC) during Term 1 and Term 2. This organization comprises 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. In Term 3, the City will continue to participate in SEQAC as part of its ongoing outreach to industry.

The Public Works Department, Storm Water Section reviewed the storm water discharge/illicit discharge (spill) inspection data collected during Term 2 to determine which industries/businesses had the greatest history of storm water pollutant discharge issues. The combined grouping of contractors, landscapers and painters had highest number of spills for this period in the industrial/commercial category. (Overall, when considering all sources of illicit discharges, single family residential homes had the highest number of spills.) As a result, in Term 3, current outreach materials for contractors, landscapers and painters will be evaluated and updated as needed and an educational/outreach strategy determined and implemented.

Measurable Goals:

- In Year 2 of the third permit term, current outreach materials for contractors, landscapers and painters will be evaluated and updated as needed. These materials will be translated into Spanish as deemed appropriate to promote awareness and understanding of native Spanish speaking contractors and employees. In Year 3, the City will coordinate with appropriate industry/trade group representatives to identify an effective educational/outreach strategy. Outreach efforts will then be implemented in Year 4.

6.2.1 Automotive Repair, Food Facility, and Cleaning Industries

During Term 1 the Co-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 third permit term.

Measurable Goals:

- Distribute prepared educational materials on storm water pollution prevention during inspections.
- Track and report in each Annual Report the type and number of educational brochures distributed.

6.2.2 Landscaping Companies

Outreach materials have been developed for landscaping companies which install and maintain residential and/or business landscaping to provide information on proper storage, disposal and use of pesticides, herbicides and fertilizers (including integrated pest management practices); information on lawn care and water conservation practices including irrigation scheduling and plant selection; information on use of mulch or other erosion control measures when soils are exposed; information regarding periodic inspection of irrigation system to ensure that the right amount of water is being applied and that excessive runoff is not occurring, and regarding minimizing excess watering and repairing leaks in the irrigation system as soon as they are observed.

Any incident of irrigation overspray, run-off or water escaping from a break that is reported by a citizen or City staff is in violation of the Water Waste Ordinance and will receive prompt follow-up from the Utilities Department, Water Conservation Program.

The Utilities - Water Conservation Program trains landscape professionals through the Qualified Water Efficient Landscaper (QWEL) program. Additionally, training on water-efficient landscape practices in both English and Spanish is held annually for landscape professionals.

Measurable Goals:

- As detailed in Section 3.4, in Year 2 of Term 3, current outreach materials for landscapers, together with contractors and painters, will be evaluated and updated as needed. These materials will be translated into Spanish as deemed appropriate to promote awareness and understanding of native Spanish speaking contractors and employees. In Year 3, the City will coordinate with appropriate industry/trade group representatives to identify an effective educational/outreach strategy. Outreach efforts will then be implemented in Year 4.
- Materials distribution numbers and water waste response numbers will be reported in each Annual Report. The number of QWEL-trained professionals and attendance at annual workshops will be reported in each Annual Report.

6.2.3 Building and Construction Industries

In Term 1, outreach materials for the building and construction industry were developed and distributed. Information was provided during site inspections as well as during industry-sponsored workshops. The City has continued to print and distribute these outreach materials during Term 2. A large portion of the public outreach effort during Term 2 was focused on the development and distribution of materials and training related to the Standard Urban Storm Water Mitigation Plan (SUSMP).

In Term 3, the SUSMP program will encourage low-impact development (LID) designs for all SUSMP projects. In addition each project will be evaluated for the inclusion of LID BMPs, where applicable, which may minimize soil compaction, minimize disturbances to natural waterways, maximize infiltration and retention, provide detention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to the minimum widths necessary. LID training for Co-Permittees' staff as well as the local design community will be planned and conducted in Year 1.

Also during Term 3, the SUSMP program will include a Measurable Goal to educate property

owners and home owners regarding SUSMP BMPs on their property. The intent of educating property and home owners on SUSMP BMPs is to educate the owner of the functioning of the SUSMP BMP on their property and provide guidance on how to maintain the BMPs. One idea is to develop a generic template brochure onto which developers could then add their customized information via electronic cutting and pasting. An outreach strategy will be developed based on input from the development community and area realtors before the end of Year 3 and implemented in Year 4.

Currently, the Community Development Department. sends a letter of notice to contractors involved with private construction with active grading operations prior to the onset of the rainy season. This letter has provided educational outreach in reminding them of their storm water pollution prevention responsibilities. In Term 3, a copy of this letter will be used to highlight key points of interest and responsibility based on past season observations and concerns.

Measurable Goals:

- Materials distribution numbers will be reported in each Annual Report. Measurable goals related to the SUSMP outreach are detailed in Part VI-SUSMP of the Permit reapplication.
- In Term 3, a copy of the Community Development Department's pre-rainy season letter sent to applicable parties regarding key points of interest and responsibility based on past season observations and concerns will be included in each Annual Report.
- As detailed in Section 3.4, in Year 2 of Term 3, current outreach materials for contractors and painters as well as landscapers will be evaluated and updated as needed. These materials will be translated into Spanish as deemed appropriate to promote awareness and understanding of native Spanish speaking contractors and employees. In Year 3, the City will coordinate with appropriate industry/trade group representatives to identify an effective educational/outreach strategy. Outreach efforts will then be implemented in Year 4.
- LID training for Co-Permittees staff as well as the local design community will be planned and conducted before the end of Year 1.
- Regarding the education of property owners and home owners with SUSMP BMPs on their property, an outreach strategy will be developed based on input from the development community and area realtors before the end of Year 3 and implemented in Year 4.

6.2.4 Retail Gasoline Outlets (3.3)

Outreach materials have been developed with input from retail gasoline outlet operators and owners (RGO). Practical, simple techniques to implement every day to prevent storm water pollution are highlighted. Best management practices including methods for spill prevention and containment and good housekeeping are also described and the detrimental impacts of pollution from RGOs to creeks, aquatic species and wildlife noted.

In Term 2, the Public Works Department, Storm Water Section staff performed RGO inspections during Year 1 and Year 4. However, it was since determined that the Fire Department's annual RGO inspections explicitly include a review of measures undertaken and maintained toward storm water pollution prevention. As a result, in order to conserve City staff resources and avoid duplication of efforts, RGO inspections described in the SWMP will be performed by the Fire Dept. and any significant items of concern noted in each Annual Report.

Outreach materials previously developed by Public Works will be provided to the Fire Department for distribution during RGO inspections. These outreach materials focus on proper housekeeping practices and effective storm water BMPs.

Measurable Goals:

- Outreach materials that promote the use of best management practices at Retail Gasoline Outlets (RGO) will be provided to the Fire Department for distribution during their annual RGO inspections.

6.3 High School/Educational Facilities Outreach

6.3.1 Sonoma County Water Agency Education Program

The Sonoma County Water Agency Education Program and associated measurable goals are described in the Water Agency's Storm Water Management Plan in Part IV. This program includes schools within Santa Rosa.

6.3.2 High School Aquatic Macroinvertebrate Bioassessment Program

The City continues to educate high school students in Santa Rosa about storm water pollution prevention through the Macroinvertebrate Bioassessment Program. This program includes classroom and field coursework during spring and fall of every school year. Students learn how to identify aquatic macroinvertebrates and about the ecology of creeks within Santa Rosa. The primary focus and goal of this program is to educate high school students and teachers about how human actions affect water quality. The curriculum includes watershed dynamics, riparian and aquatic habitat and aquatic macro-invertebrates (aquatic insects).

Secondly, the program is design to teach students how to use a water quality monitoring technique to evaluate biological and physical conditions of Santa Rosa's creeks. Students utilize the California Department of Fish and Game (CDFG) protocol, "California Stream Bioassessment Procedures (Habitat Assessment and Biological Sampling for Citizen Monitors)" (CSBP). The CSBP is a method of taking macro-invertebrates out of a creek (organisms such as mayflies, stoneflies and caddisflies) and determining water quality based on their diversity and abundance.

Measurable Goals:

- The number of students involved in this program and total teaching hours by City staff will be reported in each Annual Report. As in prior permit terms, since, it is ultimately the decision of each individual school's administration whether to continue the Bioassessment Program each year, the minimum number of students reached for each year will not be set.
- In addition, a goal will be established to measure the change in high school student awareness/understanding of basic storm water pollution prevention concepts. The methods used to determine any change in awareness and measured results will be reported in each Annual Report. A proposed method is to use before and after testing.

6.3.3 Spring Lake Environmental Discovery Center

The 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 to highlight the natural resources of Sonoma County. The EDC uses the facility location resources of Spring Lake and other regional parks for interpretive displays, docent-lead programs, habitat restoration projects and field laboratories. The EDC also provides environmental education at school sites throughout the County. The facility currently hosts two rotating programs throughout the year, each featuring a different aspect of Sonoma County's unique natural resources to highlight what local agencies, businesses, and citizens are doing to encourage environmental stewardship and the enjoyment of natural resources within the community.

The first program at the EDC was “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 Waterwaze game and other programs), a movie theater with short video films and an interactive watershed model (Enviroscape). The return of this program to the EDC is planned for each spring during Term 3.

Measurable Goals:

- Attendance to the “Down the Drain” display at the ECD 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.

6.3.4 Outreach Partnership with Santa Rosa Junior College

In past years, the Public Works Department, Storm Water Section has had a display at the Junior College’s Wellness Fair for their employees each fall. During this event, 300-plus employees wander through displays and have an opportunity to stop and ask questions. Although it is described as a wellness fair, the Junior College event organizers have defined its scope very broadly and have included environmental health. Since it’s held outside, a number of students generally stop by.

In Term 3, the City intends to continue to participate in the Junior College’s annual Wellness Fair. In addition, since the Regional Water Board has recently asked Santa Rosa Junior College (Junior College) to develop and submit a storm water management plan, the City will aim to expand its outreach relationship with the Junior College and will offer storm water pollution prevention educational and outreach materials to distribute to their students and staff. Collaboration between the City and the Junior College may take the form of using Junior College resources to develop outreach materials such as videos and posters, and making City updates on the status of City creeks available to Junior College students and staff. Finally, representatives of the Junior College will be invited to attend the Co-permittee monthly coordination meetings.

Measurable Goals:

- The City will offer educational and outreach materials to Santa Rosa Junior College students and staff. Initial contact for collaboration will occur in Year 1 of Term 3. Coordination efforts will be documented in the Year 1 Annual Report and subsequent reports as appropriate.
- During Term 3, the City will attempt to develop at least two collaborative outreach projects regarding storm water pollution prevention with the Santa Rosa Junior College. Collaborative outreach projects will be described in applicable Annual Reports.
- Representatives of the Junior College will be invited to the Co-permittee monthly coordination meetings and will be included in the email distribution list for meeting notices. Copies of monthly meeting minutes including those in attendance will be included in each Annual Report.

6.4 Corporate Outreach

The City will continue to provide outreach to local businesses and corporations to promote awareness about storm water pollution prevention and BMPs. Recently, the Public Works Department, Storm Water Section has attended an annual environmental education fair on the Agilent Technologies Santa Rosa Campus. The event is attended by Agilent employees and is an excellent opportunity to distribute educational materials about pollution at work and at home that can enter the City waterways. In Term 3, the City shall identify a minimum of three local businesses categorized as major employers in Santa Rosa (those 50+ employees) to provide materials and information regarding storm water pollution prevention. Corporate outreach may take the form of:

- Distribution and discussion of educational material regarding storm water pollution prevention and BMPs.
- Providing managers with recommendations to promote employee and facility compliance with storm water regulations and BMPs aimed at protecting and enhancing City waterways.

Measurable Goals:

- In Term 3, the City shall identify a minimum of three local businesses categorized as major employers in Santa Rosa (those 50+ employees) to provide materials and information regarding storm water pollution prevention.
- Beginning in Year 1 of Term 3, the City will contact the target corporations at least once a year to provide information and materials regarding storm water pollution prevention and BMPs. These efforts will be documented in each Annual Report.
- The City will continue to attend the annual environmental education event on the Agilent Technologies Santa Rosa Campus, as appropriate. The event is an opportunity to provide Agilent Technologies staff with educational materials about pollution that can enter City waterways.

6.5 City Staff Awareness and Education

As described in Section 4.1.6, in Term 3, general storm water awareness and educational outreach materials will be created for all new employees. These materials would focus on increasing City staff awareness of storm water pollution concerns and appropriate measures for pollution prevention.

In addition, the materials will describe the City Storm Water Permit, the illicit discharge detection and elimination procedures as well as the Environmental Crimes Program. In addition, a voluntary survey will be performed to determine the level of storm water awareness among current City staff. The results of this survey will determine training needs for existing City staff and an appropriate plan developed and implemented to improve the awareness of all City employees.

Another method to reach City employees is through the City Manager's weekly email which is distributed to all City employees as well as a number of community leaders/organizations. Articles of interest related to Storm Water Program activities and the Creek Stewardship Program will be provided to promote awareness of storm water pollution prevention and creek restoration activities. Also, the City website's Master Calendar will show Creek Stewardship Program events.

Measurable Goals:

- In Year 1 of Term 3, a general storm water awareness and educational outreach materials will be created for all new employees. These materials will focus on increasing City staff awareness of

storm water pollution concerns and appropriate measures for pollution prevention and describe the City Storm Water Permit, the spill response program which includes illicit discharge detection and elimination procedures as well as the Environmental Crimes program.

- In addition, a voluntary survey will be performed in Year 2 to determine the level of storm water awareness among current City staff. The results of this survey will determine training needs for existing City staff and, in Year 3, an appropriate plan will be developed and implemented to enhance staff awareness of storm water pollution prevention including the City's spill response program all City employees. In Year 4, another a voluntary survey will be performed to determine any change in the level of storm water awareness among City staff. Results will be documented in the respective Annual Reports.
- Briefings of interest related to Storm Water Program activities and the Creek Stewardship Program will be provided at least twice a year to promote awareness of storm water pollution prevention and creek restoration activities in the City Manager's weekly email. Copies will be provided in each Annual Report.

7.0 EFFECTIVENESS EVALUATION

Goal: Provide the City and the Regional Water Board an assessment of the City program implementation and permit compliance

7.1 Storm Water Management Plan

The objective of the City of Santa Rosa Storm Water Management Plan is to provide a comprehensive approach to protect and enhance water quality by preventing, reducing and/or eliminating storm water pollutants to the maximum extent practicable. 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 Regional Water Board 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 of each of the program elements.

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 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.

The Effectiveness Evaluation is a "self-assessment" of the SWMP's implementation status.

In Term 3, the Effectiveness Evaluation will consist of a review of the Measurable Goals for each plan component with a deliverable or a reporting task. Plan components will be evaluated to determine whether or not the goal was accomplished. Evaluations will be included in applicable

sections of each Annual Report. Any deviations from the stated work plan objectives will also be identified in the Annual Report. In addition, an At-A-Glance summary will serve as a checklist for an annual evaluation by City staff to determine the progress of implementation of the SWMP. At-A-Glance summaries will be included in each Annual Report.

Additional measures to prevent, reduce or eliminate storm water pollution performed by City staff beyond those specified in the SWMP will be described as “Beyond Compliance” in each Annual Report.

An example of an evaluation of a measurable goal that specifies a deliverable can be found in Section 4.3.2 Clean and Inspect Storm Drain Pipe and Inlet Structures. This section requires the inspection and cleaning of 130,000 linear feet of storm drain pipe and 1,200 drainage structures. An effectiveness evaluation would tally the total amount of storm drain pipe and drainage structures inspected and cleaned during the permit year and the results reported.

Conversely, the measurable goal defined under Section 4.6, Emergency Procedures does not contain a deliverable or a reporting task. The stated goal is to follow the HAZMAT Response Plan. As a result, this section would not be evaluated for program effectiveness.

Each year’s Effectiveness Evaluation will also identify and breakdown activities that either directly or indirectly improved water quality. The analysis will include SWMP activity-based permit requirements, program elements that promote changes in knowledge and awareness of the general public or in school children, SWMP requirements related to behavioral changes and permit requirements that result in load reduction benefits to the City waterways.

During the Permit renewal process for Term 3, the City evaluated its five-year SWMP that was initially designed to promote activities to control urban storm water pollution to the maximum extent practicable. The attached At-A-Glance Work Plan summarizes the planned activities of the associated departments with the approved SWMP, identifies the responsible lead department and presents the implementation schedule.

Measurable Goals:

- In each Annual Report, an Effectiveness Evaluation will be performed consisting of a review of the Measurable Goals for each plan component with a deliverable or a reporting task. Plan components will be evaluated to determine whether or not the goal was accomplished. Any deviations from the stated work plan objectives will also be described in the Annual Report.
- Additional measures to prevent, reduce or eliminate storm water pollution performed by City staff beyond those specified in the SWMP will be described as “Beyond Compliance” in each Annual Report
- Each Annual Report’s Effectiveness Evaluation will identify and breakdown activities that either directly or indirectly improved water quality. The analysis will include SWMP activity-based permit requirements, program elements that promote changes in knowledge and awareness of the general public or in school children, SWMP requirements related to behavioral changes and permit requirements that result in load reduction benefits to the City waterways.
- Each year, the At-A-Glance Work Plan which summarizes the planned activities of the associated departments with the approved SWMP, identifies the responsible lead department and presents the implementation schedule will be evaluated for compliance to proposed work activities and implementation schedules.

7.2 Public Outreach Evaluation (6.1)

A formal evaluation of past outreach efforts was conducted during Year 5 of Term 1 and is again being conducted in Year 5 of Term 2. This study will generate an accurate and statistically valid representation of community awareness and opinions in issues related to storm water and storm water pollution. Specifically, it will provide a current measure of residents' knowledge about how common residential activities such as individual car washing and changing/disposal of automotive fluids, disposal of dog droppings and yard waste, and watering after fertilization can generate storm water pollution and affect the water quality in local creeks.

An evaluation of spill sources for spills that occurred during Term 2 showed that residents had the highest number of spills in the community. As a result, the Year 5-Term 2 Community Survey was designed toward determining the general community's awareness about how certain household activities can relate to storm water and storm water pollution and affect the natural environment. As indicated above, this survey will be completed in Year 5 of Term 2.

Measurable Goals:

- The data obtained in the second community survey will serve as a guide for Term 3's Public Education and Outreach program. The survey will be submitted upon completion but no later than with the submittal of Annual Report No. 5 for Term 2.
- Another public outreach survey will be conducted in Year 4 of Term 3. The survey results will be reported in the fifth Annual Report of Year 5 of Term 3 and will be used to determine outreach efforts needed in Term 4.

8.0 FISCAL ANALYSIS

Each Annual Report includes a description of the funding sources required to meet the estimated expenditures for the upcoming fiscal year. The City established a Storm Water Enterprise and Utility Fund for permit compliance activities within the City limits in 1996. The Storm Water Enterprise and Utility Fund has been the funding source for the City compliance with the Storm Water Discharge Permit. Each year the increases to the Storm Water Permit portion of the storm water utility are based on the Consumer Price Index - San Francisco - Oakland so that increased permit compliance costs due to inflation will be funded.

Permit-related expenses are tracked throughout the fiscal year and budgeted each year through the City's budget review process. The categories of expenses included in the City Storm Water budget are described below:

a) Storm water public education

Outreach to the development industry, participation in the Environmental Discovery Center at Spring Lake Park, contract to promote integrated pest management outreach, reprinting of previously developed outreach materials, and continuation of the Storm Drain Decal Program. Public Works-Storm Water's portion of the Public Works Marketing and Outreach Coordinator.

b) Storm water quality testing

Staff salaries and benefits, equipment purchases, 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 GIS mapping of the 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 the storm drain system using a combination vacuum/jet truck, software and equipment for tracking cleaning activities, and filters and absorbent materials used in spill clean-up.

e) Storm water discharge permit

Spill response, follow-up education and enforcement actions, coordination with Co-Permittees, other related programs and Regional Water Board staff, grading inspector (salaries, benefits and equipment costs), administrative support staff, preparation of Annual Reports to Regional Water Board, staff training, and annual NPDES Storm Water Permit fee.

f) Storm water program administration

Management of storm water program (budget and staff), dues to California Storm Water Quality Association (CASQA) and Water Environment Federation, participation in general storm water management meetings (CASQA, Bay Area Storm water Management Agencies Association, California Water Environment Association), Public Works portion of Police Dept.'s Environmental Crimes Investigator and general government overhead associated with the Storm Water Enterprise and Utility Fund.

Each Annual Report also includes a description of shared funding among the Co-Permittees to lead agency coordination work.

The storm water utility is sufficient to fund activities comparable to those implemented during Term 1. Any permit requirement imposing significant additional expense would need to be evaluated and the entire SWMP evaluated to reduce or eliminate some programs as needed to maintain a balance between available funding and permit compliance activities.

Measurable Goals:

- Continue to report on permit-related expenses as described in the preceding section (i.e., storm water public education, storm water quality testing, storm water maps, hydraulics and surveys, storm water system operations and maintenance, storm water discharge permit and Storm Water Permit administration) and the funding of lead agency work for each fiscal year in each Annual Report in the Fiscal Analysis section.
- Each year the Co-Permittees will meet with the Regional Water 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.
- 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.

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Part IV

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

NPDES Permit No. CA0025054

Storm Water Management Plan Sonoma County Water Agency

Sonoma County Water Agency
City of Santa Rosa
County of Sonoma

November 2007

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SONOMA COUNTY WATER AGENCY STORM WATER MANAGEMENT PLAN

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-storm water 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 Storm water 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 lay 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 are 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 four 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 storm water 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.

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 Water 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.

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.

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 four 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 Water 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 Water Board, these activities are not described in the SWMP.

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).

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.

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 Water 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.

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 Storm Water 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 Storm Water Permit.

The primary source of funding for Zones 1A and 5A is 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.

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.

Measurable Goals:

Use the Water Agency's existing legal authority as it relates to this program element.

1.10 Standard Urban Storm Water Mitigation Plan

Existing Program:

The Standard Urban Storm Water Mitigation Plan (SUSMP) is a new program developed by the Co-permittees. 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.

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.

Measurable Goals:

None

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 Water 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.

Measurable Goals:

Incorporate appropriate BMP measures as part of the provisions contained in Revocable Licenses.

2.4 Inspection of Construction and Vineyard Sites

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.

Measurable Goals:

None

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 Water 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).

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.

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. 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 Storm Water Permit, the Water Agency will notify the Regional Water Board of the non-filer status.

Measurable Goals:

Notify the Regional Water Board within 48 hours of situations where the Water Agency is aware of a non-filer status.

2.7 Education of Targeted Staff

Existing Program:

The Water Agency provides training to its inspectors on appropriate BMP measures. The Water Agency has an in-house expert that is used to train other Water Agency personnel on appropriate BMP implementation. The Water Agency provides the appropriate personnel information on the applicable requirements of the SWMP and the newly adopted NPDES storm water permit.

Measurable Goals:

Continue to provide training to the appropriate personnel on the components of the SWMP and the NPDES storm water permit.

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 storm water 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.

Measurable Goals:

Continue to 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.3.

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 Storm Water Permit when it undertakes a project that will disturb more than an acre of land.

Measurable Goals:

File NOI for applicable flood control projects, as required.

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.

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 storm water 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.

Measurable Goals:

Use the enforcement mechanisms available to the Water Agency for public construction projects.

4.1.5 Education of Targeted Staff

Existing Program:

Operations, Maintenance, and inspection staff have been trained on storm water BMPs.

Measurable Goals:

Maintain CPESC or CPESC-in-training on staff

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 Water 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.

Measurable Goals:

Continue with low-impact pesticide management.

4.2.2 Fertilizer Management

Existing Program:

The Water Agency uses recycled water from the City of Santa Rosa's Laguna 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.

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.

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 Aviation and West College Facilities.

Measurable Goals:

Continue to use landscape waste as mulch on flood control channels.

4.2.5 Minimize Pollutants from Entering Co-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.

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:

None

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.

Measurable Goals:

Review existing mapping by the end of permit year three. Modify maps, as needed by the end of permit year five.

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.

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 80 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 120 miles of natural waterways for which the Water Agency holds easements within the permit boundary. Maintenance activities are limited to debris removal and downed trees. 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 maintenance easements on.

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-6.1.4.

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.

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.

Measurable Goals:

Apply stenciling in Aviation and West College Avenue parking lots. 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.

4.3.5 Storm Drain Outfall Identification

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. These channels are inspected annually to assess their condition.

Measurable Goals:

During annual inspection and normal stream maintenance activities Agency will identify storm drain outfalls, which are located within channels the Agency is responsible for, by using GPS. In addition, the day, time, and amount of flow, if any, will be recorded at the same time the outfall coordinates are determined. A summary of outfalls identified and flow, if any, will be summarized in each annual report.

4.3.6 Storm Drain Outfall Visual Flow Monitoring

Existing Program:

There are 80 miles of constructed channels within the county, most of which are within the permit boundary. These channels are inspected annually to assess their condition and determine the required level of maintenance activity.

Measurable Goals:

During normal stream maintenance activities Agency will visually inspect storm drain outfalls, which are located within channels the Agency has responsibility, for discharge. Outfalls with flows greater than 15 gallon per minutes and not preceded by measurable rainfall will be recorded and reported to Agency Storm Water Coordinator. A summary of outfalls identified and flow will be summarized in each annual report.

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.

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 4.2.4 above. Trash and excess vegetation removed from Water Agency channels is disposed of at a landfill.

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.

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.

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.

Measurable Goals:

Continue to provide refuse receptacles. Sweep Aviation and West College Ave Facility at least once between August 15 and October 15 each year.

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.

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

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-storm water 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, the 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.

Measurable Goals:

Continue to implement spill response procedure as outlined above. Report of summer discharges, greater than 15 gallons per minute (gpm) into creeks from storm drains. Summarize the number of locations and volumes entering creeks in the permit boundary.

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.

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 storm water 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.

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.

Measurable Goals:

Continue tracking reported spills. List reported spills in each annual report.

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.

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.

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.

Measurable Goals:

None

6 PUBLIC EDUCATION AND OUTREACH

The goal of the public education and outreach element is to: (1) increase the community's knowledge of storm water systems and the impacts of storm water runoff, (2) to encourage behavioral changes thereby reducing pollutants released to the storm water system, and (3) to encourage public participation in storm water issues.

The public outreach program is a coordinated effort among the three Co-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.

Measurable Goals:

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.

6.1.2 Ecology/Environmental Column in Local Newspapers

Existing Program:

None.

Measurable Goals:

Publish an environmental/ecology articles, through the Russian River Watershed Association, to The West County Gazette, Ukiah Daily Journal, the Russian River Times, and the Sonoma West Times (includes Healdsburg Tribune and Windsor Times).

6.1.3 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.

Measurable Goals:

Add information regarding the Creek Stewardship Program to the Water Agency's website by the end of permit year three.

6.1.4 Creek Stewardship

Existing Program:

The Adopt-a-Creek elements of the storm water permit are implemented through the Agency and City's Creek Stewardship Program. The Program's goals are to:

1. provide public outreach on storm water runoff, the benefits provided by creeks, and ways the public can protect water quality;
2. support public participation in the care of creeks and the involvement of individual Creek Stewards who adopt a specific reach of creek;
3. Provide clean up and maintenance of City and Agency creeks.

A full time Program Coordinator (employed by the City with half of the funding and supervision provided by the Agency) assists the public and facilitates cooperation between Co-permittees, the public, and other responsible agencies on issues regarding public safety, creekside trail improvements, and the protection of water quality and wildlife habitat.

Measurable Goals:

To implement this program, the Water Agency has worked 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.

6.1.5 Pet Waste Signs

Existing Program:

The Water Agency began working with the City of Santa Rosa in 2001 to install signs that encourage the public to pick up after their pets at all access points to Water Agency owned creeks within the permit boundary.

Measurable Goals:

Maintain Pet Waste signs at all public access points to Water Agency creeks.

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-away 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.

Measurable Goals:

Participate in the Sonoma County Fair in permit years one through five. Provide outreach materials to those visiting the booth.

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.

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 Water Board or other regulatory entity of the problem.

Measurable Goals:

Continue with the existing program of providing informal education to responsible parties.

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.

Measurable Goals:

None

6.2 Industrial/Commercial Education

Existing Program:

The Water Agency does not have a storm water outreach program for industrial and commercial uses. The City and County conduct these programs.

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.

Measurable Goals:

None.

6.4 Building and Construction

Existing Program:

The Water Agency does not have a storm water outreach program for the construction and development sector. The City and County conduct such programs.

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 storm water 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-12. 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.

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.

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.

Measurable Goals:

Provide fiscal support up to and including fiscal year 2006-07.

6.7 Employee Newsletter

Existing Program:

As part of the Phase II storm water program, the Water Agency has begun to include a storm water article in the Water Agency employee newsletter.

Measurable Goals:

Submit three storm water related articles to the Employee Newsletter

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 storm water quality, (2) determine if the program is being implemented, as proposed, and (3) determine if these efforts are impacting storm water 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 third permit term, the Water Agency did not participate in special studies.

Special Studies:

For the next permit term, the Water Agency and the County are proposing to conduct a storm drain outfall special studies. This study will involve two similar neighborhoods (either residential or commercial/industrial). One neighborhood will have storm water BMPs implemented and the other will be held as a control. Over the course of a number of years monitor the two outfalls and summarize the findings. See Part 5, Monitoring. For additional details.

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 storm water 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.

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 Co-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 Co-permittees for lead agency coordination work.

Measurable Goals:

Report on expenditures and sources of funding for work related to the NPDES Phase I permit as part of each Annual Report.

Attachment IV.1 “At a Glance” Storm Water Work Plan 2008-13

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 Co-permittees, Regional Water Board and other appropriate entities. Ensure the SWMP elements are implemented on schedule and that all requirements of the Permit are met.			
Co-permittees Monthly Coordination Meetings	Participate in monthly meetings Continue through Permit term	Operations	Ongoing
Annual Work Plan	Develop preliminary work plan for Regional Water Board staff Final work plan submitted with each Annual Report	Operations	Complete
Annual Report	Submit to Regional Water Board on time October 1, Annually for the first four years in Term 3. The report for the fifth year in Term 3, will cover the period from July 1 to the following June 30 and will be submitted in March of the following year.	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	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
	existing legal authority as appropriate.		
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 Regional Water Board	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
	within 48 hrs.		
Industrial/Commercial Element Goal: Reduce the potential for pollutants to contact storm water to MEP			
No measurable goals planned			
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 BMPS to determine if they are adequate. Submit needed changes, if any, in subsequent Annual Reports 2. Completed. It is infeasible to incorporate BMPs into contracts. Permits require SWAAP by contractor and is reviewed by engineering.	Operations, Engineering	Ongoing
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. Update, if necessary.	Operations/Engineering	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
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
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.	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
	<i>Annually, as needed</i>		
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
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 lots at Aviation and 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

<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
Illicit Discharge Detection and Elimination Element Goal: Detect and minimize illegal non storm water discharges			
Spill Response	Implement current program. Copermitees are in the process of finalizing a county wide program.	Operations and Maintenance	Ongoing
Private sanitary septic systems	Notify City, County or Regional Water Board if a problem with a private sanitary septic system is discovered and not immediately corrected by land owners.	Operations	Ongoing
Enforcement Procedures	Water Agency will work with responsible party, City, County, and other regulatory agencies to correct the problem.	Operations and Maintenance	Ongoing
Record Keeping and Documentation	Tracking system developed List reported spills in annual report. Will develop tracking system for spills within channels based on sewer spills tracking system. Report of spills referred to other agencies will not be tracked	Operations	Ongoing
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.	Operations and Maintenance	Ongoing
Disposal of used oil and toxic materials	Rely on existing programs by others. Provide outreach material developed by others	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
	where appropriate.		
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	Replace, at a minimum, five storm drain decals that have faded or have been damaged. Evaluate efficacy of incorporating storm drain labeling program into creek stewardship program. <i>Permit Year 2</i>	Operations	Ongoing
Website	Post flood control activities on website Include information regarding the Creek Stewardship program by the end of Permit Year 23. (not completed)	Operation/Public Information	Ongoing
Creek Stewardship	Conduct outreach.	Operations and Maintenance	Ongoing
Billboard	A billboard containing a storm water pollution prevention message is posted along Highway 101	Public Information	Ongoing
Pet waste signs	Pet waste signs have been posted at major access points to creeks, Water Agency will continue to participate in the	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
	pet waste signs.		
Public Events	Participate each year in Sonoma County Fair. Distribute outreach materials at fair . <i>Ongoing, Annually</i>	Public Information	Ongoing
Illicit discharge	Continue existing program of providing informal education to parties responsible for illicit discharges	Operations and Maintenance	Ongoing
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	Ongoing
Spring Lake Environmental Discovery Center	Provide financial support through fiscal year 2007/08	Public Information	Ongoing
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	Ongoing
Monitoring Program	Review monitoring data for	Operations	Monitoring data will be

<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
	trends. <i>Permit Year 3 and 5</i>		summarized in Permit Year 3 and 5.
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	Ongoing
Monitoring Plan Goal: Assess the receiving water quality to direct resources toward local pollutants of concern			
Chemical Monitoring	Collect samples for first flush and one representative storm. Collect two sample between May and September <i>Annually</i> Include results and proposed changes to program in annual reports. Analyze data for trends in . <i>Permit Year 3 and 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 Regional Water Board approval. Place fees in project fund		
Provide training to staff	Update Train targeted staff within 22 months of Term 3	To be spearheaded by County	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
	Program implementation		
Provide workshop to the development community	Prepare and conduct workshop within 24 months of Program implementation	To be spearheaded by County	Ongoing
Implement SUSMP measures on City / County capital improvement projects	Design applicable Zone 1A flood control projects with SUSMP measures	Engineering	Ongoing
Implement SUSMP measures on applicable projects within Urban Growth Boundary within Permit Boundary	Condition, plan check and inspect projects to meet SUSMP requirements		

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Part V

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

NPDES Permit No. CA0025054

Monitoring Plan

Sonoma County Water Agency
City of Santa Rosa
County of Sonoma

November 2007

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1. OVERVIEW

1.1 Goals

In Term 3, the goals of the monitoring program are to assess receiving water quality, assist in gathering data for development of Total Maximum Daily Loads (TMDLs), and direct resources towards local pollutants of concern. Other possible beneficial uses of the monitoring data include: (1) assessing the chemical, physical, and biological impacts to receiving waters resulting from urban runoff; (2) assessing the overall health and evaluating long-term trends in receiving water quality; (3) measuring and improving the effectiveness of BMPs; and (4) identifying sources of pollutants.

1.2 Summary of Program

The monitoring program is comprised of chemical, biological and visual monitoring. In Term 3, the Co-permittees (City of Santa Rosa (City), County of Sonoma (County) and Sonoma County Water Agency (Water Agency)) are proposing to continue the monitoring program elements implemented in Terms 1 and 2, with some modifications. These modifications have been made so that the Co-permittees can better meet the Term 3 monitoring program goals of (1) assessing receiving water quality, (2) gathering data for TMDL development, and (3) directing resources towards pollutants of concern.

Chemical Monitoring of Receiving Waters:

The County and Water Agency perform the chemical monitoring component for Santa Rosa Creek. This program component involves taking samples of Santa Rosa Creek upstream and downstream of the urban area of Santa Rosa. The purpose of this component is to assess changes that Santa Rosa Creek may undergo as it passes through the urban area and to evaluate long-term trends in receiving water quality.

During the previous sampling events in Term 1, a “first flush” sample and three representative storm samples were collected. The first flush is the first storm that produces at least 0.1” of rainfall and generates runoff at both the upstream and downstream sampling locations. As allowed for in the Permit, the chemical monitoring component was modified to eliminate the monitoring of some constituent (organics and pesticides) monitoring after the first flush, if that constituent was below detection levels in the first flush sample. The representative storm criterion was also modified to attempt to capture all three storms during a wet season. In Year 5 of Term 1, bacterial samples were evaluated at higher dilutions in order to provide more “measurable” values.

In Term 3, the Co-permittees propose to modify the chemical monitoring component in the following ways:

- Monitor for total suspended solids (TSS), total dissolved solids (TDS), temperature, pH, BOD, TOC, Total Nitrogen, Total Kjeldahl Nitrogen (TKN), Ammonia, Nitrate as N, Nitrite as N, Phosphorus (total and dissolved), total

coliform, E. coli, Enterococcus, and orthophosphate to better focus on pollutants of concern.

- Modify the sampling requirements to capture the first flush and one representative storm.
- Conduct two sampling events during the low-flow period of May through September.

Biological Monitoring

The City performs the biological monitoring component. This component, which includes a benthic macroinvertebrate survey and bioassay testing at locations throughout the city, seeks to assess the biological impact of urban runoff and the overall health of the receiving water. Additionally, because these samples are taken at dispersed sites within the City, a sudden change in benthic communities or drop in survival rates can help to identify areas of new pollution sources. Bioassay testing will be continued because it has the potential to detect all toxicants to living organisms, including those that may not be selected for chemical analysis.

During the first two permit terms, the City changed its protocols for the professional benthic survey to allow for a more detailed analysis of water quality using a standardized method used by other research professionals to allow for comparison of data. The City also added additional species to compliment acute bioassay testing. In Term 3, the Co-permittees plan to change the biological monitoring component in the following ways:

- Conduct three species chronic bioassay sampling of receiving waters and outfalls following EPA protocols.
- Collect benthic macroinvertebrate samples following the Surface Water Ambient Monitoring Program (SWAMP) bioassessment procedures twice during the permit term rather than every other year to offset the cost of changing to a more detailed and scientifically collaborative protocol.

Chemical Monitoring of Outfalls

The City conducted an external review of its monitoring program in 2005 and added chemical monitoring of two outfalls in the Colgan and Piner Creek watersheds. In Term 3, sampling will be conducted during the first flush and a representative storm event. Samples are analyzed for pollutants of concern (sediment, nutrients, and pathogens) to characterize outfalls that drain residential (Piner Creek) and residential, commercial, and industrial areas (Colgan Creek). For Term 3, the City is adding two additional dry-weather sampling events to characterize flows during the low flow season. Additionally, the City is proposing to add constituents needed for development of TMDLs for nutrients and pathogens.

Chemical Monitoring of Receiving Waters to Support TMDLs

Monthly chemical monitoring of two sites on Santa Rosa upstream and downstream of the urban area are proposed by the City. Sampling would include nutrients and bacteria to support TMDL data needs throughout the year. This component would need Regional Water

Board or other funding to support laboratory costs associated with the sampling. The City can provide staff time to complete the sampling.

Infrared Aerial Imagery

The City is proposing to conduct a flight with infrared imagery to locate illicit discharges to receiving waters that may contain elevated levels of pathogens. The technique has been used by other municipalities to locate leaking sewer lines and other discharges warmer than the receiving waters.

Temperature Monitoring

The City is proposing to deploy remote data loggers to record summer stream temperatures in Santa Rosa, Brush, Colgan, and Paulin Creeks. Data will supplement TMDL efforts for excessive temperatures in the Russian River watershed.

Visual Flow Monitoring

Volunteers and City staff visually monitor flows in streams and the City's storm drain system to detect excessive summertime flows or abnormal discharges.

Special Studies

The Co-permittees are proposing two special studies during Term 3. Concepts of studies are described below.

BMP Effectiveness Special Study

The County and Water Agency are proposing to develop and implement a water quality based study to 1) provide storm drain outfall monitoring data and 2) evaluate the effectiveness of specific BMPs through a controlled study. Storm water discharges from storm water drainage will be collected and analyzed in response to rain events. BMP(s) will be installed and monitoring will be completed to quantify the effectiveness of the BMP(s).

Aerial Deposition Special Study

The City is proposing to complete an aerial deposition study to help quantify the amount of nitrogen deposition within the Santa Rosa urban area. Data is needed to help Regional Water Board staff develop nutrient TMDLs for the Laguna de Santa Rosa

City Farm Runoff Monitoring

The City is proposing to monitor the Laguna Subregional Water Reclamation System's Kelly Farm for nutrient runoff during storm events

2. REPRESENTATIVE STORM

Samples of receiving water are a snapshot of the creek at the moment in time the sample is taken. The timing of sample collection determines, to some extent, what may be present in the sample. The monitoring program is designed to collect storm water samples when water quality is at its worst. The following United States Environmental Protection Agency (EPA) guidance is used as a starting point:

- From each outfall or field screening point selected, samples must be collected from three separate storm events.
- Each sampling event must be at least one month apart.
- Each sampled storm event must have a rainfall of at least 0.1 inch in the drainage area.
- There must be no storm event in excess of 0.1 inch in the drainage area for at least 72 hours prior to the sampled storm event.
- The rainfall event should not vary by plus or minus 50% from the average or median per storm volume and duration for the region.

The first two constraints are intended to compel the analysis of different storm events throughout the season, as different pollutants may be present at different times. The third is to ensure that the storm sampled will be large enough to produce runoff. The fourth is to allow for a buildup of pollutants between storm events. The fifth is to try to encourage the collection of what would be a “representative” storm for the region.

During Term 1, the Co-permittees used this procedure and rainfall data from Brown’s Farm, located southwest of the permit area to determine the representative storm. A storm qualified as “representative” during Term 1 if the rainfall depth was between 0.7 and 2.2 inches, and the duration of the storm was between 3.3 and 9.8 hours. Unfortunately, this criterion provided less than three opportunities to take a sample in some years. Subsequently, the Regional Water Board suggested to the Co-permittees to revise the protocol to capture more storm events.

The average storm was determined using four years of rainfall data starting in 1996 from Water Agency’s rain gauge at 2150 West College Avenue, which is located inside the permit boundary. Results are summarized below:

	Duration (hours : minutes)	Depth (inches)
50% of Average Storm Event	3:01	0.21
Average Storm Event	6:03	0.42
150% of Average	9:05	0.63
50% of Median Storm Event	1:37	0.06
Median Storm Event	3:15	0.12
150% of Median Storm Event	4:52	0.18

Upon a further evaluation of collected rainfall data, the Co-permittees are proposing to collect a sample when a minimum of 0.3 inches of rain falls within a three-hour period¹. Based on the Co-permittees experience during Term 1, approximately 0.3 inches of rainfall was needed to produce runoff at the upstream chemical sampling site, C2. Using this protocol, at least three samples would have been collected in the four years of rainfall data available. Per data from the composite sample collector, 0.3 inches of runoff in three hours is enough time and sufficient intensity to produce runoff, as shown by a rise in creek level. No upper depth or duration limits are proposed in the “representative storm” criteria.

For purposes of this sampling program, a rainfall event will begin at the first measurable precipitation (0.01 inch) preceded by three hours with no measurable precipitation (0.01 inches or more).

The first flush can qualify as a representative storm if it meets the above criteria.

The Co-permittees can verbally request a variance from Regional Water Board from the criteria stated above, as was done during Terms 1 and 2. If Regional Water Board staff verbally approves the variance request, the Co-permittees will confirm the approval in a letter from the Co-permittees to the Regional Water Board within fourteen days of verbal approval. If the Co-permittees are unable to sample an event, or the sampling criteria is not met for the required sampling events, the Co-permittees will report this in the Annual Report.

3. SAMPLING COORDINATION

For each year of the Permit, the Water Agency will coordinate all sampling including both wet and dry sampling events.

A storm water sampling phone list with contact information for those involved in sampling coordination among the Co-permittees is included in Attachment V-A.

Using the decision chart from the EPA guidance document as a guide, the sampling coordinator will:

- Monitor weather daily;
- Contact Co-permittees on the morning of the last working day before a potential sampling event;
- Confirm with other Co-permittees that storm was within required parameters prior to delivery of samples to laboratories, or cancel the sampling event.

Weather information is provided by the National Weather Service (NWS) and the Water Agency rain gauges. NWS collects and processes satellite imagery and other atmospheric data, and runs the major weather forecast models. This information is available on the NWS website, <http://www.nws.noaa.gov>. The satellite imagery and radar images are used to predict when a qualifying storm may occur. This information will be used to ensure that the automatic samplers are ready for use and will alert staff to monitor the rain

¹ This three-hour period does not need to coincide with the start of the rain event as long as the three-hour period begins before a total of 0.1 inches has fallen during the rain event.

gauges at 2150 West College and at the sampling station at the confluence of Piner and Santa Rosa Creeks. The Water Agency's rain gauge at 2150 W. College Avenue will be used to determine if the storm was "representative".

When the rain gauge at Santa Rosa Creek near the confluence of Piner Creek (C1) has recorded 0.3 inches of rain in 3 hours, the Water Agency's automatic sampler begins to collect a composite sample. The automatic sampler also calls the designated staff person to alert them that a sample is being collected. At this time, the staff person will travel to the sample collection site to collect a grab sample. The Water Agency may need to begin manual sampling if the automatic samplers are inoperable. In the event that the rain gauge at the sampling location is inoperable, the Water Agency will use the rain gauge at 2150 West College Avenue to determine when sampling criteria has been met.

The County sampler is triggered in the same way. If it is the first flush and first representative storm sample collection round, the sample coordinator for the month will contact City personnel to inform them that they should to collect the bioassay samples. The City collects two bioassay samples during the first flush and a representative storm event. For safety reasons, City personnel only collect samples during daylight hours.

4. CHEMICAL MONITORING OF RECEIVING WATERS

The Water Agency and the County, currently perform chemical monitoring on Santa Rosa Creek, which assesses chemical inputs to the creek from the urbanized area of Santa Rosa. The Water Agency's monitoring site (C1) is located on Santa Rosa Creek downstream from the urbanized area, just upstream of the confluence with Piner Creek (east of Fulton Road). The County's monitoring site (C2) is located on Santa Rosa Creek near the Melita Road Bridge, upstream of most urbanized development. Together, these sites give a representation of the impacts to storm water quality through the Santa Rosa urbanized area.

4.1 Sampling Frequency

A first flush event and one additional qualifying sampling event (a representative storm) will be sampled each permit year for the chemical constituents, provided the sampling criteria is met. The first flush event is defined as the first rainfall event with greater than 0.1 inch of precipitation that produces runoff at both sampling site locations. In addition, two dry weather sampling events will occur. Samples will be collected at sites C1 and C2 between May and September each year. Samples will be taken at least one month after the last measurable rainfall (>0.1 inch) and events will be separated by at least one month between sampling events.

4.2 Chemical and Physical Properties Monitored

During Term 1, samples were analyzed for total suspended solids (TSS), total dissolved solids (TDS), pH, temperature, nitrite and nitrate nitrogen, total Kjeldahl nitrogen, total phosphates, dissolved phosphates, fecal coliform, fecal streptococcus, and the priority pollutants (a selection of 126 metals, volatile organic compounds (VOCs), and semi-volatile

organic compounds (SVOCs)). A narrative description of the color, odor, turbidity and presence of oil sheen and surface scum was noted by the sampler on the chain of custody form.

Many of the chemical constituents for which analysis was performed were never detected² in the 17 rounds of sampling performed during Term 1. These constituents, the VOCs and SVOCs, have been eliminated from the future sampling program, as there is no reason to suspect that they will be detected in future sampling events.

Additionally, the Co-permittees eliminated metals from analysis during the second permit term. Of the 17 samples that were analyzed during Term 1, there was only one detection of any of the metals above the California Toxics Rule (CTR) aquatic life criteria³. Mercury was detected in the downstream sample in October 1998. The detection was slightly above the detection limit of 0.0002 mg/l, and is suspect, as the dissolved mercury fraction was reported as higher than the total mercury concentration. Nonetheless, none of the 11 samples taken after the one suspicious detection incident have detected mercury. Based on the fact that Santa Rosa Creek has met the CTR criteria consistently in the past, metals will no longer be monitored for on a regular basis.

To address pollutants of concern, specifically sediments, the Co-permittees plan to monitor for the following constituents in Term 3:

Total Dissolved Solids (TDS)	Phosphorus (total and dissolved)
Total Suspended Solids (TSS)	Total Organic Carbon
pH and Temperature - (field measurements)	Orthophosphate
Total Nitrogen	Biological Oxygen Demand (BOD)
Total Kjeldahl Nitrogen (TKN)	Total Coliform
Ammonia	Fecal Coliform
Nitrate as N	E. Coli
Nitrite as N	Enterococcus

The Co-permittees will continue to provide a narrative description of the color, odor, turbidity and presence of oil sheen and surface scum on the chain of custody form.

4.3 Sampling Methodology

Samplers will be set to collect a flow-weighted composite sample, once the sampling criteria have been met. The criteria will be set to try to capture the first three hours of runoff. Settings may be adjusted to better measure the storm event.

² There were detections of only two of the organic compounds, Bis (2-ethylhexyl) phthalate and 1, 2 Dichloropropane. Bis (2-ethylhexyl) phthalate was present in concentrations not exceeding 45 µg/l, in roughly half of the samples. The source was determined to be the sample tubing. 1,2 Dichloropropane has only been detected in one of eleven samples, and is a common lab contaminant

³ The monitoring results are presented in Annual Reports 1 through 5, submitted to the Regional Board each year.

- For composite samples, each aliquot collection will be separated by approximately 15 to 20 minutes, and a minimum of three sample aliquots will be taken within each hour of discharge.
- For qualifying sampling events, the samplers will be set to begin collecting aliquots when 0.3 inches of rain has occurred within three hours. Samplers will be set to collect at flow-based intervals, or at intervals of 20 minutes, whichever occurs first.
- If a sampler fails to function properly, grab samples will be taken after detection at 15-minute intervals.
- The required grab samples will be collected near the time the samples are retrieved for analysis.

Chemical monitoring follows the sampling procedures described in the EPA manual *NPDES Storm Water Sampling Guidance Document* (EPA-833-B-92-001). All samples must be handled and preserved in accordance with 40 CFR Part 136. Samples retrieved later than twelve hours after the last collected composite sample will be considered past the allotted holding time and disqualify that sampling event at both chemical sampling sites.

Each Co-permittee is responsible for arranging testing services. All laboratories used shall be certified by the State Department of Health Services under the Environmental Laboratory Accreditation Program (ELAP). All samples will be delivered to and analyzed by respective laboratories within allowable holding times. The Co-permittees will use the same laboratory for the chemical sampling event. Sample events will only be validated if samples from both the upstream and downstream locations are collected.

40 CFR Part 122, Appendix D lists the reporting limits and test methods to be used for analysis for each constituent. The permittees may, at their discretion, substitute alternate test methods providing that the methods are EPA-approved, have at least the same precision, and detect constituents at levels no higher than the methods prescribed in 40 CFR 122.

Chain of custody documentation shall be maintained for all samples.

5. BIOLOGICAL MONITORING OF RECEIVING WATERS

The City performs the biological monitoring component, which can be used to assess overall stream health and evaluate the quality of storm water runoff. The City's biological monitoring is comprised of both bioassessments which survey the benthic macroinvertebrate communities inhabiting reaches of perennial streams and bioassay sampling. The status of biological communities reflects the integrity of the stream corridor system as a whole, taking into account chemical and physical characteristics. Bioassessment sampling assesses overall stream health and is sensitive to water quality and habitat conditions over time. Bioassays are good indicators of instantaneous water quality and can be used to assess the impact of storm water runoff on living organisms. Bioassay sampling is planned to be enhanced by using three species chronic testing with fathead minnow (*Pimephales promelas*), water fleas (*Ceriodaphnia dubia*), and algae (*Selenastrum capricornutum*). The City is also proposing to change the bioassessment program to follow the SWAMP Bioassessment Procedures. Data

will be reported in each Annual Report or submitted annually as a supplemental report dependent on when monitoring results are received .

5.1 Monitoring Sites

Biological monitoring sites are located in Santa Rosa Creek and at two storm drain outfall locations within the permit boundary. All monitoring creeks have bioassay sampling sites and bioassessment sampling is planned along each creek. Bioassay monitoring sites will be set up at the following locations:

- B1 Santa Rosa Creek at Piner Creek
- B2 Santa Rosa Creek at Melita Road
- B3 54-inch Outfall to Colgan Creek at Hearn Avenue
- B5 48-inch Outfall to Piner Creek at Creekfield Drive

The number of sites has been reduced to enable the City to perform three species chronic bioassay testing and other monitoring under the NPDES permit. The proposed chronic testing is significantly more expensive than previous two species acute bioassay testing conducted during the last permit term.

5.2 Professional Bioassessment Monitoring

Professional bioassessment monitoring will be accomplished using the Full SWAMP Bioassessment Procedures (Ode 2007). This protocol is derived from protocols outlined in *EPA's Environmental Monitoring and Assessment Program (EMAP)*.

Five sampling reaches will be randomly selected along Santa Rosa, Brush, Colgan, Matanzas, and Piner Creeks. Sampling will be performed by a City Environmental Specialist with assistance from other City personnel. At each site, physical habitat and water quality characteristics are measured according to the protocols. Reachwide benthos samples are collected along eleven transects in each 150-meter reach. Samples are collected during the spring/early summer when creek depths have dropped to summer base flows. Samples are preserved in 60% ethanol and shipped to a qualified laboratory recommended by DFG for analysis. Each sample is accompanied by a chain-of-custody form. Included in each jar is a waterproof label containing the sample identification number, location, date and sampler's name.

Prior to 2007, the professional samples were analyzed using the DFG protocols outlined in the *California Stream Bioassessment Procedure*. This protocol calls for 300 macroinvertebrates per sample to be identified to genus level (Level 3 in the protocol) with the data analyzed based upon this taxonomic level. The updated bioassessment protocol (SWAMP) is more expensive to conduct, however it provides a more detailed and descriptive biological analysis of water and habitat quality. However, with consideration to the additional cost, the City proposes to collect samples twice during Term 3. During Term 2, sampling was completed three times during the term. All samples collected will be retained for 5 years to allow for any possible future analysis. Analyzing samples twice instead of

every other year will reduce field and laboratory costs and still provide data to track long-term trends in overall stream health.

5.3 Bioassay of storm water runoff

During the previous permit terms, bioassay tests consisted of 96-hour static test of the survival rate of rainbow trout fry (*Oncorhynchus mykiss*) in undiluted runoff from storm event(s) following the *Acute Toxicity of Effluents to Freshwater and Marine Organisms Standard Operation Procedure* (EPA 600/4-90-027F). The City is proposing to change the sampling to a three species chronic bioassay test using 100% sample water (EPA Methods 1000.0, 1002.0, and 1003.0). Test species will include fathead minnow (*Pimephales promelas*), water fleas (*Ceriodaphnia dubia*), and algae (*Selenastrum capricornutum*). Samples will be collected at the two sites on Santa Rosa Creek (B1 & B2) for the first flush and a representative storm event each year. Additional sites will include outfall sites on Colgan or Piner Creeks (B3 & B4). One outfall site will be sampled during each sampling event along with the two Santa Rosa Creek sites. The outfall locations are a 54" outfall to Colgan Creek at Hearn Avenue and a 48" outfall to Piner Creek at Creekfield Drive.

A grab sample of the storm water runoff at each site will be taken at the middle of the flow or as near to this point as is feasible. Field measurements of temperature, dissolved oxygen, specific conductivity, pH, and turbidity will also be recorded. Samples shall be taken in a clean container provided by a professional laboratory and preserved in ice. Delivery shall be made to a professional laboratory within 24 hours of time of collection. Chain of custody will document time and location of sampling, who took the sample, time when custody of sample was given to the laboratory, name of laboratory personnel receiving the sample, and name of laboratory performing test. Laboratory shall document the results of the tests, the test protocol used and its certification to perform the tests.

If sampling is triggered during nighttime hours, the City may collect bioassay samples the following day during safe light conditions. Weather permitting, samples of another storm event will be taken. This second storm event will be a representative storm, as defined above in Section 2, the Representative Storm Component, occurring at least 30 calendar days after the end of the first flush storm.

Bioassay samples will be collected for the first flush and one representative storm at three sites during sampling events.

6. CHEMICAL MONITORING OF OUTFALLS

As recommended in the prior peer reviews of the City's monitoring program, the City has collected chemical grab samples for pollutants of concern from two outfalls within the City of Santa Rosa since the 2005/2006 monitoring year (Figures V.A and V.B). The two outfalls are located on Piner and Colgan Creeks and drain 57 and 99 acres, respectively (Sites B5 & B3). The Piner Creek outfall is 48 inches in diameter and the drainage area consists of primarily residential use. The 54-inch outfall sampled on Colgan Creek primarily drains commercial areas. Other land uses in the Colgan Creek watershed include industrial and residential areas

Chemical testing will be conducted for the first flush and a representative storm event each rainy season. Previously, grab samples were analyzed for the local pollutants of concern, including sediment (TSS, TDS), nutrients (total Phosphorus, dissolved Phosphorus, total Nitrogen, TKN, nitrate as N, nitrite as N, and Ammonia), and pathogens (fecal coliform and fecal streptococcus). To improve the data collected the City is proposing to sample the following constituents.

Total Dissolved Solids (TDS)	Phosphorus (total and dissolved)
Total Suspended Solids (TSS)	Total Organic Carbon
pH and Temperature - (field measurements)	Orthophosphate
Total Nitrogen	Biological Oxygen Demand (BOD)
Total Kjeldahl Nitrogen (TKN)	Total Coliform
Ammonia	Fecal Coliform
Nitrate as N	E. Coli
Nitrite as N	Enterococcus

In order to assist in the data gathering needed for TMDL development, two additional sampling events are proposed during the dry season (between May – September) to characterize urban runoff during that time each year. Therefore, four sampling events (first flush, representative storm, and two dry season events) are proposed each year. Data will be reported in each Annual Report.

7. CHEMICAL MONITORING OF RECEIVING WATERS TO SUPPORT TMDLS

If Regional Board or other funding can be obtained to pay for laboratory analysis, the City is proposing to perform monthly chemical grab sampling at two locations on Santa Rosa Creek.

The samples would be collected with discharge measurements to allow the calculation of pollutant loadings. Constituents analyzed would include total nitrogen, ammonia, nitrate, nitrite, TKN, phosphorus (total & dissolved), orthophosphate, TSS, TDS, total coliforms, fecal coliforms, E. coli, and Enterococcus. Sampling would be performed for 1 to 2 years, dependent on funding availability to help support TMDL data needs.

8. INFRARED AERIAL IMAGERY

The City is proposing to conduct one infrared imagery flight over Santa Rosa Creek and all tributaries upstream of downtown Santa Rosa during Term 3. The flight is planned for the first year of the permit term. The technique will be used to locate illicit discharges to receiving waters that may contain elevated levels of pathogens. The technique has been used by other municipalities to locate leaking sewer lines and other discharges warmer than the receiving waters (such as failing septic systems). The flight will likely lead to numerous “hotspots” requiring follow up enforcement or outreach. Data will be reported in an Annual Report after the project is complete.

9. TEMPERATURE MONITORING

In order to assist in data gathering for TMDL development regarding excessive temperatures in the Russian River watershed, the City is planning to monitor stream temperatures during the low-flow season within the Santa Rosa urban area. Remote data loggers would be deployed between May and October each year following the modified Forest Science Project protocol used by the Russian River Temperature Working Group. Hourly temperature data would be collected and yearly maximum, maximum weekly average, and maximum weekly maximum temperatures would be computed. Sites include Santa Rosa Creek at Fulton Road, Railroad Street, Yulupa Circle, and CA State Highway 12; Brush Creek at Flat Rock and downstream of Austin Creek; Colgan Creek at Burgess Drive and Corby Avenue; and Paulin Creek at Marlow Road and Mendocino Avenue.

10. VISUAL FLOW MONITORING

City staff and volunteer Creek Stewards monitor streams and the City's storm drain system on a regular basis to identify excessive summertime flows or non-storm water discharges. Over 150 volunteers patrol numerous miles of creeks within the Santa Rosa urban area and report abnormal observations to the City or Water Agency. The City's Public Works Department Field Services Section cleaning crew works year around cleaning the storm drain system with a combination water jetting/vacuum truck. Typically, the crew annually cleans over 30 miles of pipe and reports unusual findings to the City's Storm Water Team for further investigation.

11. SPECIAL STUDIES

The Co-permittees are proposing two special studies during Term 3. Concepts of studies are described below and detailed study plans will be submitted to the Regional Board for final approval.

BMP Effectiveness Special Study

The County and Water Agency are proposing to develop and implement a water quality based study to 1) provide storm drain outfall monitoring data and 2) evaluate the effectiveness of specific BMPs through a controlled study.

At least two sub-watershed land areas, within the permit boundary, with similar features (size, rainfall regime, runoff coefficients, and land uses) will be identified and evaluated for inclusion in this study. Storm water discharges from each sub-watershed's storm drain system will be collected and analyzed in response to rain events. Non-storm water discharges will also be collected and analyzed should they occur. The data will be reviewed to determine an appropriate BMP(s) to study. A BMP or suite of BMPs will be tailored with the goal being to reduce or eliminate one or more constituents of concern(s) identified in the analytical results. The selected BMP(s) will be installed or implemented. Storm drain discharge monitoring will continue and results will be analyzed to determine BMP effectiveness.

Aerial Deposition Special Study

The City is proposing to complete an aerial deposition study to help quantify the amount of nitrogen deposition within the Santa Rosa urban area. The study is planned for 2008 to make the results available to assist in TMDL development for nutrients in the Laguna de Santa Rosa. The City will identify a site, appropriate methods, and install a monitoring station to collect one year of data. Sampling will include wet and dry collection methods to quantify the total amount of deposition occurring in the Santa Rosa area.

12. REFERENCES

Ode, P.R. 2007. Standard operating procedures for collecting macroinvertebrate samples and associated physical and chemical data for ambient bioassessments in California. California State Water Resources Control Board Surface Water Ambient Monitoring Program (SWAMP) Bioassessment SOP 001.

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FIGURE V.A

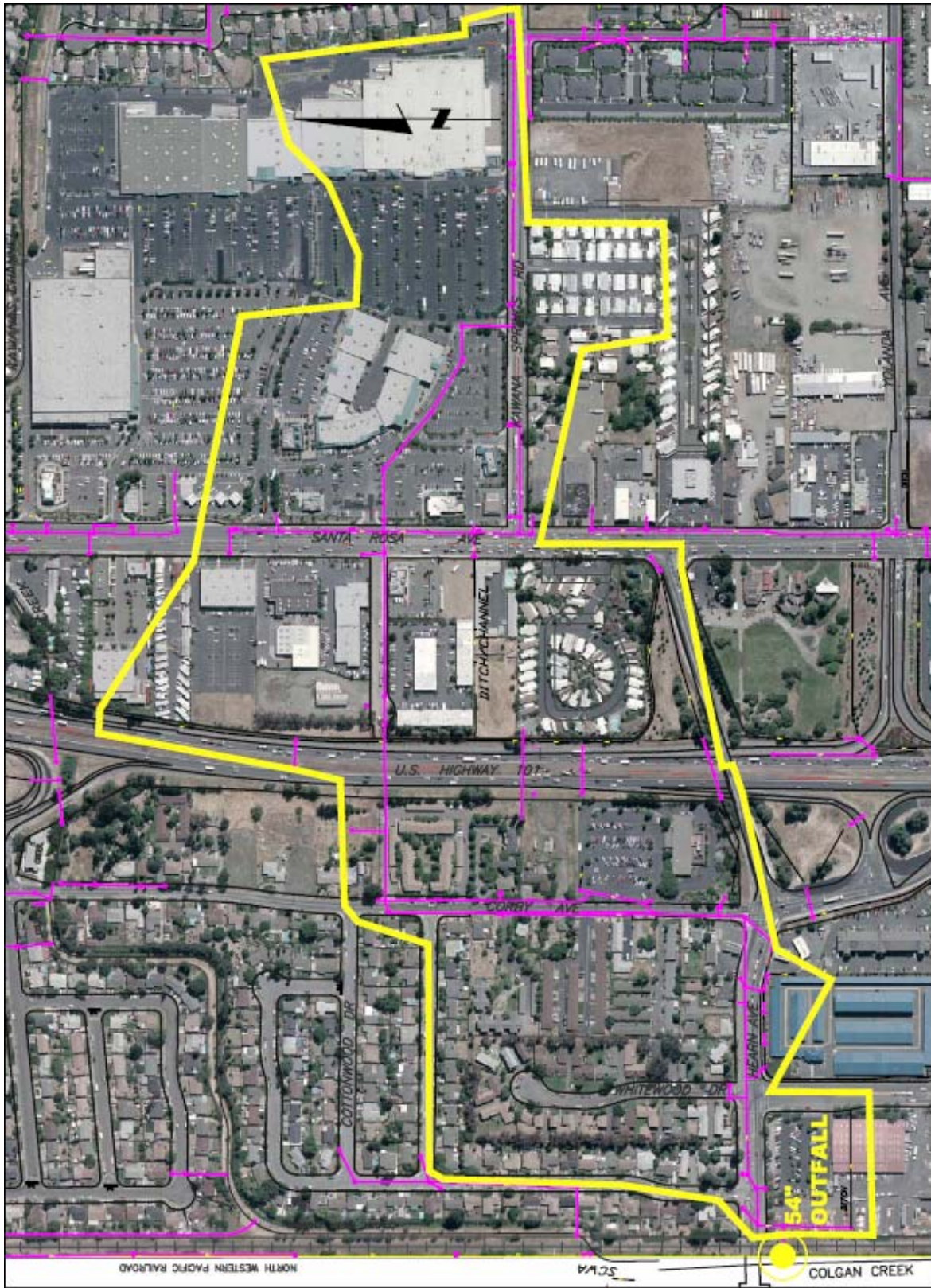


Fig. V.A 2005/06 Discharge Characterization - Colgan Creek Drainage Boundary and Outfall Location Scale : 1" = 400'
Drainage Area: 99 acres Primary landuse type: Commercial Date of Aerial: 2002

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FIGURE V.B

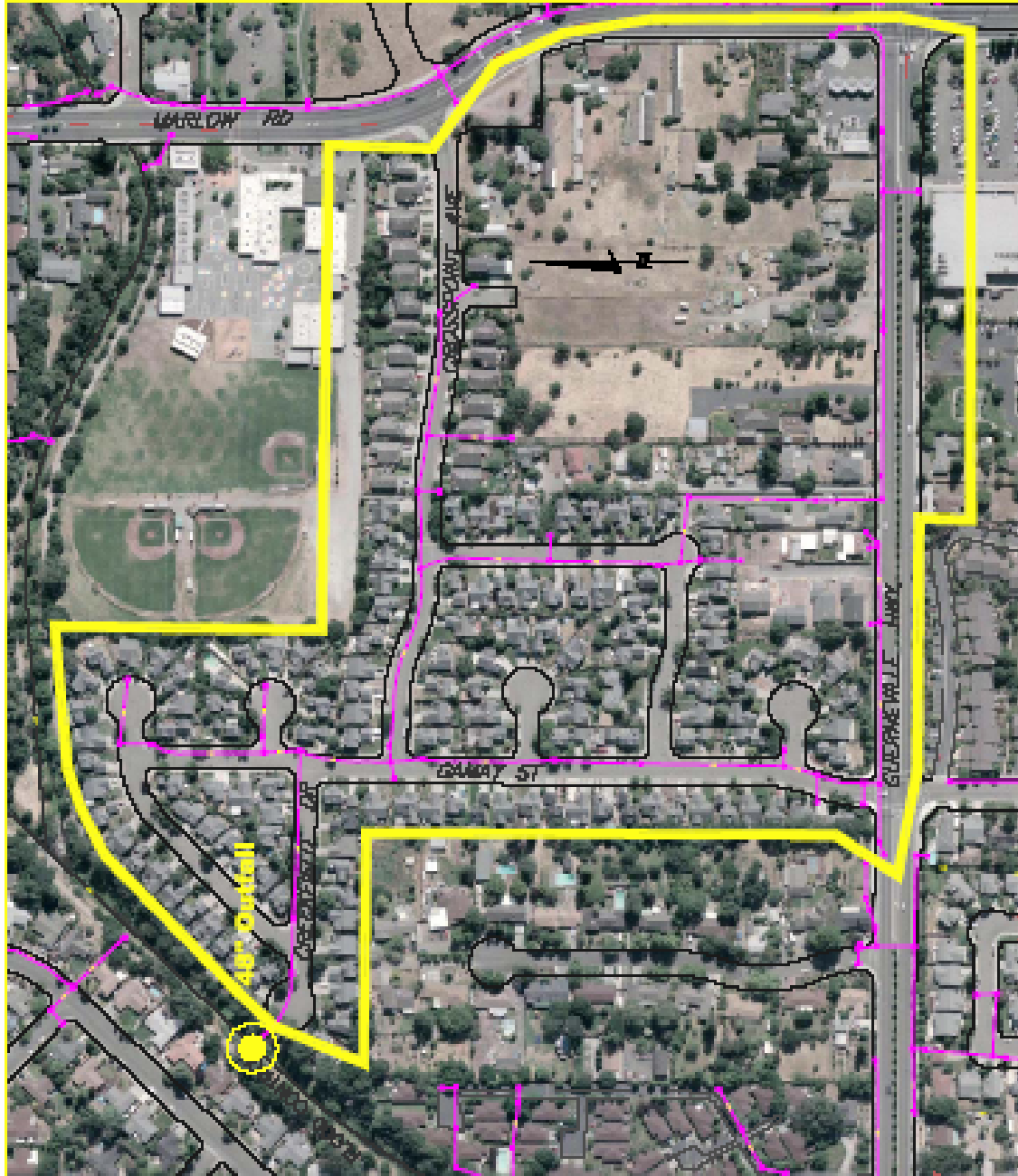


Fig. V.B 2005/06 Discharge Characterization - Pliner Creek Drainage Boundary and Outfall Location Scale: 1" = 300'
Drainage Area: 57 acres Primary landuse type: Residential Date of Aerial: 2002

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ATTACHMENT V-A

Storm Water Sampling Phone List

Sonoma County Water Agency

EBA Wastechologies - David Noren	544-0784
Kevin Booker	521-1865

Sonoma County

EBA Wastechologies - David Noren	544-0784
Nathan Quarles	565-3507

City of Santa Rosa

Steve Brady	543-3919
Dale Tressler	543-3873
Rita Miller	543-3879

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PART VI

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

NPDES Permit No. CA 0025054

Standard Urban Storm Water Mitigation Program (SUSMP)

Sonoma County Water Agency
City of Santa Rosa
County of Sonoma

November 2007

Introduction

The SUSMP program for the Santa Rosa area Co-Permittees is just over two years old, is in its infancy, and not mature. Many local engineering firms are still grappling with the essential elements of SUSMP. No SUSMP projects have been completed in County jurisdiction. Mostly, preliminary SUSMP plans have come to the County for review through last fiscal year. There have been several private projects under City SUSMP applicable jurisdiction since the requirements were implemented in 2005.

In the third permit term, the Co-Permittees intend to continue the development and refinement of funding sources for maintenance of BMPs, the waiver program, and the approach to channel-forming discharge (hydrograph modification) within the SUSMP program.

Currently, SUSMP requirements apply to discretionary projects and the Co-Permittees desire the SUSMP program remain a discretionary-based program through Term 3. Also, considering the recent implementation of the SUSMP program, the need to continue development and refinement of SUSMP standards as well as the significant impact to review staff workload if the impervious area threshold would be lowered, the Co-Permittees propose to keep the one acre threshold for new impervious surface as a criterion for SUSMP applicable projects.

The impact of reducing the threshold will certainly increase the amount of projects that require SUSMP BMPs and would likely act to improve water quality. So, reduction of this threshold may be considered in future permit renewals. However, until the SUSMP program is more robust, it is inopportune to generate more SUSMP projects for review. That is, the Co-Permittees need to accumulate the experience of SUSMP projects going from design review to construction through completion with a funded and functioning maintenance program before the area threshold is decreased.

In the third permit term, the Co-Permittees will continue to require SUSMP applicable projects to conform to the requirements of the SUSMP Guidelines (2005). Additionally, the following thirteen SUSMP Measurable Goals (MGs) are proposed as part of the Storm Water Management Plan for Phase I, Term 3.

1. SUSMP Treatment Offset Program

Develop details for the SUSMP treatment offset program. Treatment offset sites will be considered in the following order: same stream reach, same sub-watershed, same watershed, adjoining watershed, or nearby watershed. Regional mitigation banking will be considered as part of the offset program. Complete first draft for Regional Water Board review by end of Year 2. Finish program policy by end of Year 3.

2. Channel-forming Discharge (Hydrograph Modification)

Develop details for addressing channel-forming discharge. Evaluate recommendations and requirements pertaining to hydrograph modification included in the Regional Water Board's Stream and Wetlands Protection Policy and the San Francisco Bay Municipal Regional Urban Runoff NPDES Permit once finalized. This evaluation will be distilled into an outline on the approach that applicants should take when addressing channel-forming discharge. Complete first draft one-year after one or both of these documents are adopted. Finish policy within two-years after one or both of these documents are adopted.

3. Low Impact Development (LID)

Encourage LID designs for all SUSMP projects. In addition, for all proposed development projects each Co-Permittee shall, during the planning process and prior to project approval and issuance of local permits, evaluate each project for the inclusion of LID BMPs, where applicable, which may minimize soil compaction, minimize disturbances to natural waterways, maximize infiltration and retention, provide detention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to the minimum widths necessary. LID training for Co-Permittees' staff as well as the local design community will be planned and conducted before the end of Year 1. Information about LID including references to established websites will be included on County and City websites by the end of Year 1. An LID Guidance document or an LID Section in an existing document will be drafted to promote LID design for proposed development projects before the end of Year 5.

4. Retail Gasoline Outlets

Apply post-construction conditions that address water quality on proposed new and redeveloped retail gasoline outlets (RGO). (Redeveloped RGOs would include existing RGOs that propose underground storage tank modifications that involve pipe replacement and under dispenser containment replacement.) *Example* conditions are: 1) fuel dispensing areas shall be paved with Portland cement concrete (or, equivalent smooth impervious surface), with a 2% to 4% slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents runoff of storm water to the extent practicable, 2) the fuel dispensing area shall be covered with a roof canopy, and the roof canopy's minimum dimensions shall be equal to or greater than the area within the grade break or the fuel dispensing area, as defined above. The cover shall drain directly into the storm drain system and not drain onto the fuel dispensing area. The storm drain located under the roof canopy shall include an oil separator, or equivalent, to collect minor fuel and oil spills. An ongoing maintenance plan for the oil separator shall be submitted for review and approval by the Storm Water Section of PRMD prior to issuance of County grading and building permits or by the City's Fire Dept. prior to issuance of any City permits for new/redevelopment RGOs, and 3) the applicant shall prepare and implement a Storm Water Spill Prevention Control and Countermeasure (SW SPCC) Plan to be integrated into the grading and drainage plan. The SW SPCC Plan shall be

designed to address minor fuel and oil spills. Existing City codes shall be reviewed and modified to include specific conditions and site requirements before the end of Year 2 and implemented thereafter. Continuous implementation for County permits.

5. Auto Repair/Auto Body Service Facilities

Apply post-construction conditions that address water quality on proposed new and redeveloped auto repair/auto body service facilities (SIC 5013, 5014, 7532-7534 and 7536-7539) with 10,000 square feet or more of impervious area and that perform services outside. Prohibit discharges of wash water from entering storm drain systems resulting from hosing or cleaning vehicles for all sites. *Continuous*

6. Implementation of safety factors to ensure that treatment BMPs accommodate the minimum design storm (Provision 29 from the current MS4 permit)

The sizing of filtering treatment devices shall recognize potential clogging and loss of capacity during operations and shall be sized to provide full treatment of the design storm. The City and County will prepare safety factors for treatment BMPs during the next permit phase as we gain experience with the maintenance of BMPs and as we evaluate the final requirements of the San Francisco Bay Municipal Regional Urban Runoff NPDES Permit and other state NPDES Phase I storm water permits. Safety factors will be proposed by the end of Year 3.

7. Tracking SUSMP projects

The Co-Permittees use tracking databases to record SUSMP information for projects. PRMD added a SUSMP screen for projects within PermitsPlus: this screen has fields to record: disturbed area, impervious surface, number and types of source control BMPs, number and types of treatment control BMPs, total BMPs installed, waiver field, and mitigation APN. The Measurable Goal would be for both the County and the City to review and refine the tracking of SUSMP projects using their respective databases. Complete review and refine tracking of SUSMP projects by the end of Year 2.

8. Ordinance constraints

The Co-Permittees shall review respective ordinances for conflicting requirements that would prevent or restrict the installation of post-construction BMPs. Complete review by the end of Year 4.

9. Conserve natural areas

This is already one of the three goals of the SUSMP program. However, the Co-Permittees will expand on this goal during the next permit term to complement LID concepts. This guidance will be included to supplement the SUSMP Guidelines. Complete guidance on conserving natural areas by end of Year 5.

10. Educating Property Owners and Homeowners regarding SUSMP BMPs on their property

The intent of educating property and homeowners on SUSMP BMPs is to inform them on the proper functioning of the SUSMP BMPs on their property and to provide guidance on how to maintain the SUSMP BMPs. One idea is to develop a generic template brochure onto which developers could then add their customized information via electronic cutting and pasting. An outreach strategy will be developed based on input from the development community and area realtors before the end of Year 3 and implemented in Year 4.

11. Long-term Maintenance Program

The intent of developing a long term maintenance program for SUSMP facilities is to have a systematic method for the City and County to initiate and track inspection and maintenance activities, as applicable. Complete analysis of SUSMP maintenance programs by end of Year 1.

12. Update SUSMP Guidelines

Reconvene SUSMP Technical Advisory Committee to jointly determine which of the BMPs that have been used on projects to date are effective, are focused on pollutants of concern, can be constructed per plan, and can be efficiently maintained. Add information to guide selection of treatment control BMPs based on site-specific pollutants. Set a minimum level of source control that will be required of every SUSMP project. Complete by the end of Year 3.

13. Storm Drain Decals

Establishment of a standard condition that requires standard storm drain decals on any storm drain inlet basins proposed as part of any discretionary permit application in the City or applicable SUSMP project within the County. Complete by the end of Year 1.

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

Appendices

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
December 2007**

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December 2007**

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Appendix III City of Santa Rosa

- III-A Pretreatment Program Enforcement Response Plan (3.0)
- III-B Retail Gasoline Outlet – Fire Department Inspection Checklist (3.3)
- III-C Municipal Service Center Storm Water Pollution Plan (4.2)
- III-D Spill Response Procedures (5.3)
- III-E Sample Illicit Discharge Summary Reports including GIS Tracking (5.4)
- III-F Storm Water and Creeks Website-Overview Page (6.1.3)

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**SANTA ROSA PRETREATMENT PROGRAM ENFORCEMENT
RESPONSE PLAN**

Appendix III.A

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CITY OF SANTA ROSA
PRETREATMENT PROGRAM
ENFORCEMENT RESPONSE PLAN

INTRODUCTION

The City of Santa Rosa's Pretreatment Program Enforcement Response Plan outlines operational procedures intended to ensure that commercial and industrial dischargers to the sanitary sewer system are permitted and monitored. It is carried out by the Environmental Compliance Section of the Utilities Department of the City. To assure compliance by commercial and industrial dischargers the Environmental Compliance Section implements enforcement procedures specified by the U.S. Environmental Protection Agency. The Enforcement Response Plan specifies criteria by which Environmental Compliance personnel determine the enforcement action most appropriate to the nature of the violation. The Environmental Compliance Section consists of the following personnel:

Environmental Compliance Supervisor	(1)
Environmental Compliance Inspector I	(2-Sampling)
Environmental Compliance Inspector II	(2-Commercial)
Environmental Compliance Inspector III	(2- Industrial)
Environmental Crimes Officer	(1/2 time)
Senior Administrative Assistant	(1/2 time)

The Response Plan consists of six parts:

PART 1 INDUSTRIAL USER INVENTORY

Specifies procedures to maintain and update the Industrial User Inventory. That is, those industrial and commercial facilities which require a Wastewater Discharge Permit.

PART 2 PERMITTING

Permitting specifies personnel, procedures and time frames for the Wastewater Discharge permitting process from the receipt of the application to the issuance of the final permit. Includes information on creation of computer and hard files, pre-permit inspections and the permit approval process.

PART 3 DATA SCREENING PROCEDURES

Specifies personnel, procedures and time frames for screening compliance data including systems to track due dates for self-monitoring reports, compliance schedule milestones and compliance status generally. Also specifies procedures for tracking and response to compliance violations.

PART 4 ENFORCEMENT RESPONSE GUIDE

Details a specific range of responses to specific instances of noncompliance, which take into account circumstances related to the noncompliance. Also specifies Environmental Compliance personnel responsible for Enforcement Response Plan.

PART 5 PENALTY POLICY

This outlines the procedure for determining penalty, including seriousness, frequency, and persistency of violation(s).

PART 6 DEFINITIONS

Defines terms related to the Enforcement Response Plan.

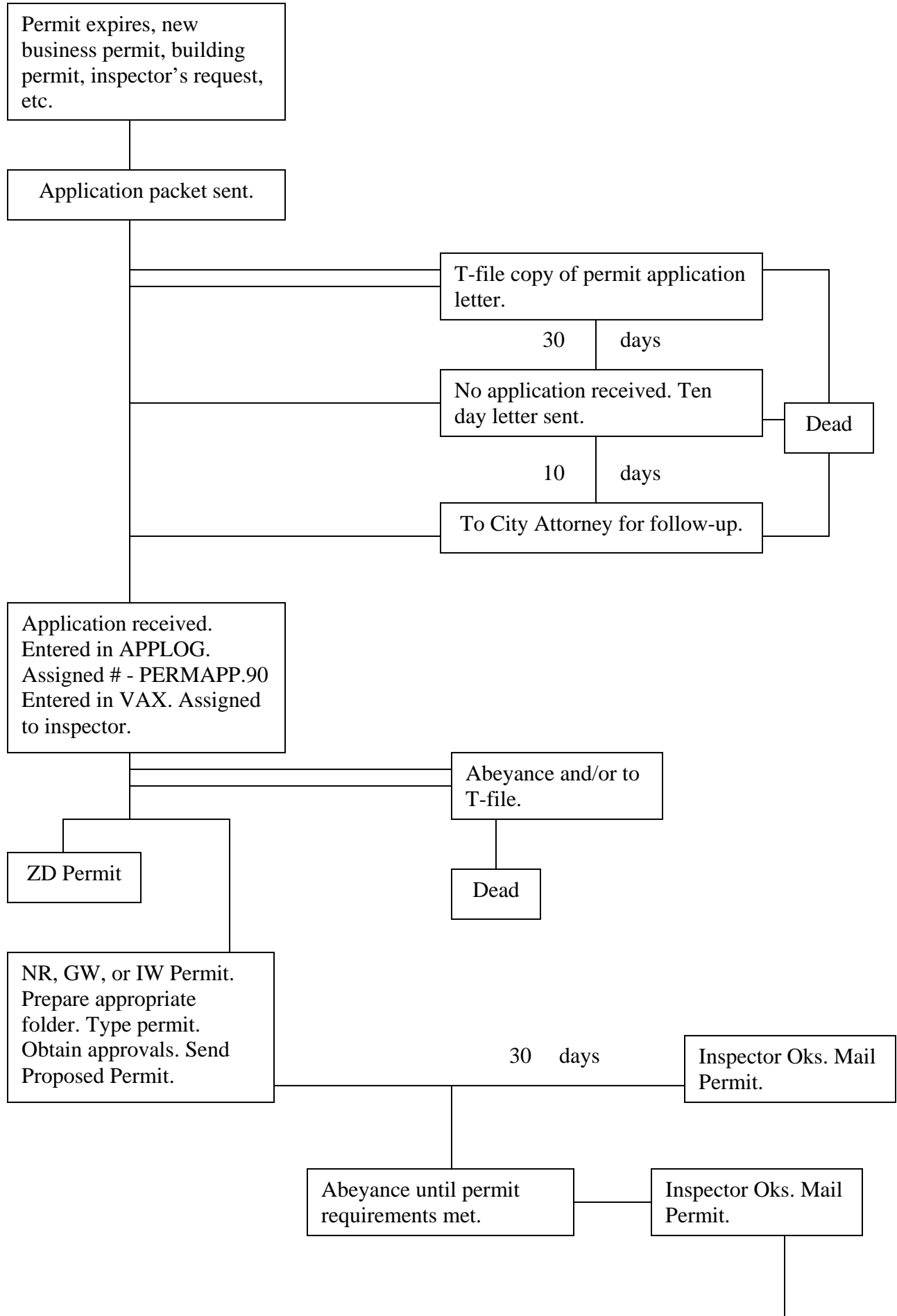
PART 1 INDUSTRIAL USER INVENTORY

A. The development of the Industrial User Inventory (IUI) was originally accomplished at the time of Pretreatment Program approval in 1983.

B. Sources for IUI updates:

1. City of Santa Rosa Business License Department and sub regional partners forward business license applications list to the Environmental Compliance Section (EC) on a monthly basis.
2. City of Santa Rosa and sub regional partner's building departments forward building permit application lists to EC on a monthly basis.
3. City of Santa Rosa Community Development forwards use permit applications list to the EC on a monthly basis.
4. ECI III works with the Zoning Administration Review Committee (ZARC), which meets bi-weekly.
5. Regular inspection of commercial and industrial areas by EC inspectors for new business operations.
6. All users identified as "Industrial" are inspected a minimum of one time per year to assure dry processes remain dry and to ascertain whether new processes have been added. Users identified as "Non Residential" are inspected on varying frequency 1-3 year frequencies.

PERMIT APPLICATION PROCESS



PART 2 PERMITTING

A. Permit process initiated (Permits Desk).

1. Records of all building permits, use permits and business license applications routed to Environmental Compliance Permits Desk by various Sub regional City and County Departments. Or, request for mailing of permit application received from EC Inspectors or Supervisor based on field investigations.
2. Application packet mailed. Tickle for response due date (30 days).
3. Completed application received and logged in at Permits Desk.
4. Computer file created for each business, six character Application Number assigned to file. Hard file created including completed application and all necessary paperwork and forms. File assigned to inspector.

B. Pre-permit inspections (Environmental Compliance Inspectors).

1. Pre-permit inspections and meetings with business representatives.
2. Inspector makes recommendations and sets time frames for special conditions if required.
3. Inspector sets sampling, inspection, and report submission schedules.
4. Inspector routes file back to Permit Desk with permit writing instructions.

C. Proposed Permit preparation and approvals (Permit Desk).

1. Application number deleted and six character Permit Number assigned in computer and hard files.
2. Proposed Permit prepared incorporating any special conditions and sampling, inspection and report submission schedules.
3. File routed for approvals:

EC Inspector

EC Supervisor

Deputy Director of Environmental Services

Sub regional Partner Representative (if outside the City of Santa Rosa)

Director of Utilities/City Engineer

Permits Desk

4. Proposed Permit mailed to business for review and comment. Final permit cover sheet held pending 30-day response period.

D. Final Permit Issuance.

1. Business comments reviewed by EC Supervisor and staff and adjustments made if warranted.
2. Response period extended if required to accommodate completion of requirements of Proposed Permit.
3. Final Permit issued.

PART 3 DATA SCREENING PROCEDURES

A. City (Control Authority) Sampling (Compliance Desk).

1. All Significant Industrial Users (SIU's) sampled two (2) to four + (4+) times per year.
2. Samples transported to laboratory along with appropriate documentation (date, time, location of sample, sampler, type of sample, i.e. grab or composite, chain of custody form including log #, type of preservation and analyses requested.
3. Master Sample Log entry – Log #, location, date, analysis type.
4. Upon completion of analyses results forwarded to Compliance Desk (CD).
5. Analyses results logged in and data entered into computer file.
6. Computer program automatically compares to appropriate local or federal limit, and violations highlighted.
7. Results routed to EC Supervisor and ECI IIIs for review and determination of appropriate response.
 - a. Compliance Letter
 - b. Warning Notice
 - c. Notice of Violation (NOV)
 - d. Second Notice of Violation
 - e. Administrative Order (AO)
 - f. Referral to District Attorney
8. File routed back to CD.
 - a. In compliance.

Compliance Letter sent.

b. Violation

Violation date entered in computer and hard files.

Appropriate letter generated and sent certified mail.

Response due date entered in computer and hard file.

Industry required to re-sample.

Computer program tickles file on response due date.

c. Response received.

Resample for compliance/re-inspect.

- In compliance

Resume normal sample schedule.

- Not in compliance

Escalation, 2nd Notice of Violation, Administrative Order.

Industry required to resample.

d. No response

Escalation, 2nd Notice of Violation, Administrative Order, resample by city staff.

B. Industrial User (IU) Self Monitoring (Compliance Desk).

1. Self monitoring constituents, methods, sample locations and schedules set at time of issuance of Wastewater Discharge Permit.

a. Categorical Industries

All categorical industries required to self-monitor quarterly at a minimum.

b. Other Industrial Users.

Non-categorical IU's required to self-monitor dependent on processes and discharges.

c. Non-residential Users

Non-residential users required to self-monitor and/or submit reports dependent on discharges.

2. Self monitoring schedules, etc. entered into computer and hard files at time of permit issuance.

3. During the last week of each month Compliance Desk tickles computer files for self-monitoring reports due during the coming month. Program automatically generates notice to user that self-monitoring results are due on a specified date.

4. Notice mailed to users.

5. Compliance desk checks self-monitoring results received against computer generated self-monitoring due list at the end of each month.

6. Self monitoring results received on time and routed to EC Supervisor for review and determination of appropriate response.

a. Compliance Letter.

b. Warning Notice.

c. Notice of Violation.

d. Second Notice of Violation.

e. Administrative Order.

f. Referral to District Attorney.

7. File routed back to CD.

a. In compliance

Compliance letter sent.

b. Violation

Violation data entered in computer and hard file.

Appropriate letter generated and sent certified mail.

Response due date entered in computer and hard file.

Computer program tickles file on response due date.

c. Response received.

Resample for compliance/reinspect.

- In compliance.

Resume normal sample schedule.

- Not in compliance.

Escalation, 2nd Notice of Violation, Administrative Order.

d. No response.

Escalation, 2nd Notice of Violation, Administrative Order, resample.

8. Self monitoring results not received on time.

a. Notice of Violation

PART 4 ENFORCEMENT RESPONSE GUIDE

SAMPLING, MONITORING, OR REPORTING VIOLATIONS

<u>NONCOMPLIANCE</u>	<u>CIRCUMSTANCES</u>	<u>RANGE OF RESPONSE</u>	<u>PERSONNEL</u>
Failure to sample, monitor, or report (routine reports, BMR's).	Isolated or infrequent	Phone call or Notice of Violation (NOV) requiring a report within 10 days. If no response, Administrative Order (AO) issued.	Compliance desk, Inspector
Failure to sample, monitor, report or notify.	IU does not respond to letters, doesn't follow through on verbal or written agreement, or frequent violation.	AO or judicial action, including penalties if no response received request criminal investigation.	Supervisor
Failure to notify of effluent limit violation or slug discharge.	Isolated or infrequent. No known effects.	Phone call or NOV if no response within 10 days of AO.	Inspector, Supervisor
Failure to notify of effluent limit violation or slug discharge.	Frequent or continued violation – SNC.	Show cause meeting, AO, or judicial actions, including penalties.	Supervisor
Failure to notify of effluent limit violations or slug discharge.	Known environmental or POTW damage results – SNC.	Judicial action and penalties. Sewer ban.	Supervisor, Utilities Director
Minor sampling, monitoring, or reporting deficiencies (computational or typographical errors).	Isolated infrequent.	Phone call or NOV corrections to be made on next submittal. AO, if continued.	Compliance desk, Inspector, Supervisor
Major or gross sampling, monitoring, or reporting deficiencies (missing	Isolated or infrequent.	NOV or AO. Corrections to be made on next submittal.	Inspector, Supervisor
Major or gross reporting deficiencies.	Continued. Remains uncorrected 30 days or more – SNC.	AO or judicial action.	Supervisor

COMPLIANCE SCHEDULES (Construction phases or planning)

<u>NONCOMPLIANCE</u>	<u>CIRCUMSTANCES</u>	<u>RANGE OF RESPONSE</u>	<u>PERSONNEL</u>
Reporting false information.	Any instance – SNC.	Request for criminal investigation. Judicial action, penalties, sewer ban	Supervisor, Deputy Director
Missed interim date.	Will not cause late final date or other Interim dates.	NOV.	Inspector
Missed interim date.	Will result in other missed interim dates. Violation for good or valid cause.	NOV or AO.	Inspector, Supervisor
Missed final date.	Violation due to force majeure (strike, act of God, etc.).	Require documentation of good or valid cause; show cause.	Supervisor
Missed final date.	90 days or more outstanding. Failure or refusal to comply without good or valid cause.	AO or judicial action including penalty.	Supervisor
Failure to install monitoring equipment.	Less than 30-day delay.	NOV.	Inspector
Failure to install monitoring equipment.	30 days or more delay.	AO to begin monitoring (using outside contracts if necessary) and install equipment in minimal time. Penalty for each additional day. Temporary sewer ban.	Supervisor, Deputy Director

EFFLUENT LIMITS

<u>NONCOMPLIANCE</u>	<u>CIRCUMSTANCES</u>	<u>RANGE OF RESPONSE</u>	<u>PERSONNEL</u>
Exceeding final limits (categorical local or prohibited).	Infrequent or isolated minor violations.	Phone call. NOV.	Compliance desk, Supervisor
Exceeding final limits.	Infrequent or isolated significant (no harm).	AO to develop spill prevention plan and penalty.	Inspector, Supervisor
Exceeding interim limits (categorical or local).	Without known damages.	NOV or AO.	Supervisor
Reported slug load.	Isolated without known damage.	Show cause or AO.	Supervisor
Reported slug load.	Recurring – SNC.	Judicial action, including penalty. Sewer ban.	Supervisor, Deputy Director
Discharge without permit or approval.	One time without known environmental or POTW damage. IU unaware of requirement.	Phone call, NOV with application form.	Permits desk, Inspector, Supervisor
Discharge without permit or approval.	One time that results in environmental damage or continuing violation. IU unaware of requirement – SNC.	AO or judicial action and penalty. Request for criminal investigation.	Supervisor
Discharge without permit or approval.	Continuing violation with known environmental or POTW damage – SNC.	Judicial action and penalty. Request for criminal investigation. Disconnect from sewer.	Supervisor, Deputy Director
Discharge without permit or approval.	IU does not submit application within 10 days of due date.	Phone call, NOV.	Permit desk, Inspector

NON-COMPLIANCE DETECTED THROUGH INSPECTIONS OR FIELD INVESTIGATIONS

<u>NONCOMPLIANCE</u>	<u>CIRCUMSTANCES</u>	<u>RANGE OF RESPONSE</u>	<u>PERSONNEL</u>
Entry denial.	Entry denied, copies of records denied.	Notify police, District Attorney, obtain warrant, return to IU.	Inspector
Minor violation of analytical procedures.	Any instance.	NOV.	Inspector, Supervisor
Major violation of analytical procedures.	No evidence of intent.	NOV or AO.	Inspector, Supervisor
Major violation of analytical procedures.	Evidence of negligence or intent – SNC.	AO or judicial action and penalty (possible criminal action).	Inspector, Supervisor
Minor violation of permit condition.	No evidence of negligence or intent.	NOV. Immediate correction required.	Inspector
Minor violation of permit condition.	Evidence of negligence or intent – SNC.	AO or judicial action and penalty (possible criminal action).	Supervisor
Major violation or permit condition.	Evidence of negligence or intent – SNC.	AO or judicial action and penalty (possible criminal action). Sewer ban.	Supervisor, Deputy Director
Failure to report additional monitoring.	Inspection finds additional files.	NOV.	Inspector, Supervisor

PART 5 PENALTY POLICY

The Penalty Policy developed for the City of Santa Rosa's Sub regional Pretreatment Program is based on the Environmental Protection Agency guidance documents Guidance Manual for Calculation of Economic Benefit of Noncompliance with Pretreatment Standards and Guidance for Developing Control Authority Enforcement Response Plans

(A) General Provisions

(1) The penalty associated with violations reflects the seriousness, frequency, and persistence of the violation. A mathematical method has been developed to compute a penalty amount for pollutant violations and reporting violations. **Any costs associated with the violation(s) (such as sampling, analysis, investigation) and any damage to the environment or the City's system is an additional charge which will be billed to the violator** (City of Santa Rose Sewer Use Ordinance #2286, Section 20.68).

(2) Based on EPA guidance the violator should not be allowed to enjoy any economic benefit from having been in violation and should be caused to suffer economically. However, once a penalty is computed, the amount may be increased or decreased due to consideration for recalcitrance, litigation costs, and ability to pay.

(3) The Director of Utilities or his representative may impose the penalties provided herein by Administrative Order, which provides that the violator may request a hearing before the Director of Utilities or hearing officer if a written request is made within ten (10) days of receipt of the Administrative Order. The written request must specify the issues and/or grounds upon which a review hearing is requested.

(B) Violations of Permit Conditions

The penalty for violation of permit conditions will be a maximum fine per violation per day of \$25,000. For failure to perform an analysis required by permit, the amount will generally be double the costs saved. The following penalty amounts should be considered minimum, and represent the normal penalty for failure to do the analysis required:

1) Metals analysis	\$240.	4) 601/602	\$350.
2) Cyanide, CR+6	\$100.	5) BTEX	\$150.
3) TTO	\$1,120.	6) Oil & Grease	\$100.

(C) Discharge Limit and Reporting Violations

The base penalty for late or missing reports and violations of discharge limitations are computed from the formula:

\$ Penalty = \$100 x (1 + Factor A + Factor B + Factor C + Factor D)

For each violation, a separate calculation is performed per day. The formula represents a base amount which shall be multiplied by a sum of factors as determined from the Magnitude of Components Table set forth in subparagraphs one (1) through four (4) attached.

MAGNITUDE OF COMPONENTS TABLE

1. Factor A – Significance of Violation

<u># of Days a Report is Late</u>	<u>% Exceedance of Daily or Slug Limit</u>	<u>% Exceedance of Average Limit</u>	<u>Factor</u>
6 - 15	N/A	N/A	0
16 - 30	1 - 50	1 - 20	1
31 - 60	51 - 100	21 - 40	2
61 - 90	101 - 200	41 - 100	3
91 - 120	201 - 600	101 - 300	4
121 - 150	601 - 1000	301 - 500	5
151 - 180	1001 - 2000	501 - 1000	6
181 - 210	2001 - 3000	1001 - 1500	7
211 - 240	3001 - 4000	1501 - 2000	8
241 - 270	4001 - 5000	2001 - 2500	9
>270	>5000	>2500	10
<u>pH Violations</u>	4.0 - 4.49 and 10.0 - 10.99, Factor = 0		
	3.0 - 3.99 and 11.0 - 11.99, Factor = 1		
	<3.0 or > 11.99, Factor = 4		

2. Factor B – Health and Environmental Harm – Potential Harm

<u>Discharge Volume (gpd)</u>	<u>Health Effects*</u>	<u>Aquatic or Sludge</u>
to 10,000	0.2	0.1
10,001 - 25,000	0.4	0.2
25,001 - 50,000	0.8	0.4
50,001 - 100,000	1.2	0.6
100,001 - 250,000	2.0	1.0
> 250,000	4 – 10	2 – 10

* Applies to pH, CR+6, Cyanide, Sulfides, Residual Chlorine, VOC's, or any other material posing a threat to workers in the system or the public.

3. Factor C – Number of Violations

This factor accounts for the number of violations occurring in a given month, or frequency of the violations. For violations of both an average limit and daily limit(s), the same factor should be applied to both computations.

Determine the percentage of the number of measurements that were violations and multiply this percentage by 2.5. Repeat this calculation for the average limit and then add the two results to arrive at a factor.

Example:

Four (4) violations of the daily copper limit and one (1) violation of the monthly copper limit occur in March. There were eight (8) daily measurements made and one (1) computation (measurement) of the monthly average.

Note: This frequency computation is performed separately for self-monitoring and City monitoring. Do NOT combine either the number of violations or the number of measurements.

$$\begin{aligned} 4 \text{ daily violations} / 8 \text{ measurements} &= 50\% \\ 1 \text{ average violation} / 1 \text{ measurement} &= 100\% \end{aligned}$$

$$\begin{array}{rcl} 2.5 \times 0.50 & & = 1.25 \\ 2.5 \times 1.00 & & = 2.50 \\ \hline \text{The factor then is} & & = 3.75 \end{array}$$

4. **Factor D – Duration of Non-Compliance**

Factor = 0 – 5

Number of months in a six month period in excess of one month in which the parameter was violated.

MAGNITUD.TBL

PART 6 DEFINITIONS

Administrative Order (AO) – Enforcement document that directs industrial users to undertake or cease specified activities. There are four common types of Administrative Orders.

1. **Cease and Desist Orders** – A Cease and Desist Order directs a non-compliant user to cease illegal or unauthorized discharges immediately or to terminate its discharge altogether.

2. **Consent Orders** – An agreement between the City and the industrial user normally containing three elements:

- A. Compliance schedules
- B. Stipulated fines or remedial actions
- C. Signatures of City and industry representatives.

3. **Show Cause Orders** – 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.

4. **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.

Categorical Industries – Those Industries defined by the Environmental Protection Agency in the Code of Federal Regulations 40 CFR, Parts 400 through 499.

Compliance Desk (CD) – Senior Clerk Typist's workstation. All clerical activities related to compliance tracking and enforcement are assigned to this workstation.

Compliance Letter – Informs industrial or commercial users that self-monitoring samples or City monitoring samples have been taken and that results of analyses indicate compliance with permit conditions and discharge limitations.

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.

Penalty – A monetary fine assessed for certain permit and/or discharge violations 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.

Permits Desk (PD) – Senior Clerk Typist's workstation. All clerical activities related to Wastewater Discharge Permit application, issuance, and maintenance are assigned to this workstation.

**RETAIL GASOLINE OUTLET – FIRE DEPARTMENT
INSPECTION CHECKLIST**

Appendix III.B

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Santa Rosa Fire Department

Checklist Summary of Violations for Hazardous Materials Waste (page 1 of 2)

Business Name:	Business Address:	Facility ID:	Inspector:
Business Owner/Occupant:		Business Phone: Emergency Phone:	
Inspection Type: <input type="checkbox"/> Triennial <input type="checkbox"/> Re-inspection		Email Address:	



1. Violations summarized on this checklist are further denoted on the **Notice To Comply/ Notice of Violation**. Violations require compliance within 30 days unless otherwise noted.

2. **Corrective action must be verified by re-inspection or by written "proof of compliance"**. If noted on the Notice to Comply/Notice of Violation, completion & submission of the *Corrective Action Statement* is acceptable.

Facility status is evaluated for each item on this Checklist as follows:
 C= Compliance V= Violation N/A= Not Applicable RV= Repeat Violation

Violation Code	Authority	Requirement	Facility Status			
			C	V	N/A	RV
HW00	SRCC 17-34-040	Has permit for hazardous waste generation, storage and disposal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW01	22CCR66262.12	Has valid EPA ID Number	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW10	22CCR66262.11	Proper characterization/testing of waste streams.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW11	2CCR 66262.40(c)	Hazardous waste analysis retained for 3 years.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW20	19CCR 2729.2	Adequate submission/completion of Business Activities/Owner Operator ID forms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW21	19CCR 2729.1	Adequate submission/completion of chemical inventory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW22	19CCR 2729.2	Adequate submission of site map.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW23	22CCR66265.51	Adequate completion/submission of Consolidated Contingency Plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW24	22CCR66265.53(a)	HMP is maintained on site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW25	SRCC 17-34	HMP has been completed in unidocs.org	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW30	22CCR 66265.35	Adequate aisle space is provided.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW31	22CCR66265.32(b)	Has access to communication equipment for emergency response	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW32	22CCR66265.32(c)	Has portable fire extinguishers available affixed with service tag.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW33	22CCR66265.32(c)	Adequate spill control/mitigation materials available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW34	22CCR66265.31	Has protection for storm drains, sumps & sewer outlets from unplanned release.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW35	22CCR66265.16	Has MSDS Sheets on site and available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW38	22CCR66265.31	Electrical panel/emergency shut offs labeled and accessible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW39	22CCR66265.171	Containers are not leaking.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW40	22CCR66265.173	Containers, tanks (fixed or portable) are kept closed unless removing or adding waste.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW41	22CCR66265.171	Containers, tanks are in good condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW42	22CCR66265.173	Containers are securely stored.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW43	22CCR66265.172	Containers compatible with contents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW44	22CCR662262.31-34	Containers labeled properly. (accumulation start date, generator info EPA ID, contents, hazards)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW45	22CCR66261.7	Containers >5 gallons managed properly when empty (recycled, returned to vendor within 1 yr)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW46	22CCR66265.31	Minimal spills in storage area. Spills promptly removed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW47	22CCR66265.174	Storage area inspected weekly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW48	22CCR66265.172	Incompatible materials are properly separated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HW49	22CCR66265.31	Storage is unlikely to cause unintended discharge to storm drain, sump or sewer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Santa Rosa Fire Department

Checklist Summary of Violations for Hazardous Waste (page 2 of 2)

Facility status is evaluated for each item on this Checklist as follows:
 C= Compliance V= Violation N/A= Not Applicable RV= Repeat Violation

Violation Code	Authority	Requirement	Facility Status			
			C	V	N/A	RV
HW50	22CCR66279.21& 22CCR66266.130	Proper handling, labeling, management & recycling of waste oil and waste oil filters.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input type="radio"/>
HW51	22CCR66266.81	Proper handling, labeling, management & recycling of spent automotive lead acid batteries.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW52	22CCR66273.13	Proper handling, labeling, management & recycling of universal wastes.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW53	CHSC25143.9	Proper handling, labeling, management & recycling of other excluded recyclable materials.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW54	CHSC 25143.10	Completion of Recyclable materials report every 2 years if recycle on site >100kg/27 gallons per month excluded recyclable materials.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW60	CHSC25163	Haz Waste transported by a licensed haz waste hauler.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW61	CHSC25163	Haz Waste shipped to an authorized TSDF or recycler for disposal.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW62	22CCR66263.42	Haz waste manifests &/or consolidated manifests compiled properly.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW63	22CCR66263.42	Haz waste manifests &/or consolidated manifests kept on site for 3 years.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW64	22CCR66262.34(a)	90 day rule Haz waste disposed of every 90 days from first day of accumulation. (<u>required</u> if generate 1000kg/270 gallons per month)	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW65	22CCR66262.34(d) & CHSC25123.3(c)	CESQG 180 day allowance Haz waste disposed of within 180 days of accumulating 100kg/27 gallons. (eligible only if generate <100kg/27 gallons per month & never store more than 1620 gallons)	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW66	22CCR66262.34(d) & CHSC 25123.3 (c)	CESQG 270 day allowance Haz waste disposed of within 270 days of accumulating 100kg/27 gallons. (eligible only if meet 180 day CESQG criteria and waste destination is more than 200 miles away)	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW67	22CCR66262.34(d) & CHSC25123.3(c)	SQG 180 day allowance Haz waste disposed of within 180 days of first day of accumulation. (eligible only if generate <1000kg/270 gallons per month & never store more than 1620 gallons)	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW68	22CCR66262.34(d) & CHSC25123.3(c)	SQG 270 day allowance Haz waste disposed of within 270 days of first day of accumulation (eligible only if meet 180 day SQG criteria & waste determination is more than 200 miles away)	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW69	22CCR66262.34(e)	Satellite storage Haz waste disposed of at least once per year even if <100kg/27 gallons accumulated. OR within 90 days of accumulating 55 gallons <u>whichever comes first.</u> (Eligible only if waste accumulated at/near point of generation and meet labeling and storage conditions)	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW70	22CCR 66262.40(a)	Copies of waste manifest retained for 3 years.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW72	22CCR 66262.40(a)	Copies of TSDF retained for 3 years.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW73	22CCR66262.42(a)	Facility has taken action if TSDF copy has not been received within 35 days.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW80	22CCR66265.16(a)	Employees trained on emergency response procedures, equipment use, chemical handling & safety.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW81	22CCR66265.16(a)	Employees trained on proper hazardous waste management practices.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW82	22CCR66265.16(b)	Employee training completed within 6 months for new hires.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW83	22CCR66265.16 ^o	Employee training includes an annual refresher component.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW90	22CCR66265.16(e)	Written documentation of employees training kept for 3 years.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW91	22CCR66265.16(d)	Written documentation of employee training includes an outline of training program & dates of training.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW92	22CCR66265.16(d)	Written documentation of employee training includes employee names, job titles, job description.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW93	22CCR66268.7(a)(1)	Generator has determined if waste destined for land disposal at TSDF meets standards or requires further treatment.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW96	22CCR66265.195	Haz waste storage tanks/tank systems inspected daily.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW97	22CCR66265.194	Haz waste storage tanks/tank systems have spill prevention controls and overfill prevention controls.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW98	22CCR66262.41	LQGs of RCRA waste submitted biennial report to DTSC and have retained a copy on site for 3 years.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>
HW99	22CCR67100.3	Haz waste source reduction requirements met for facility routinely generating >12,000kg/3165 gallons haz waste per year. (automotive fluids exempt) Requirements include source reduction plan, HW management performance report, submission of summary progress report every 4 years with records retained for 3 years.	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="radio"/>

SPILL RESPONSE PROCEDURES

Appendix III.C

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Public Works Storm Water Spill Response/Enforcement Procedures

A. Notification Procedures

Get Information	Appropriate Response																
<p>1. Where did incident occur? (street address and cross street)</p> <p>a. City? b. County? c. Water Agency?</p>	<p>a. Emergency response warranted or ANY discharge to a creek or waterway.</p>	<ul style="list-style-type: none"> • FIRST: Call COMM CENTER (543-3666 or 911), REDCOM (568-5933), or direct caller to call • SECOND: Page PW Spill Notification Group • NOTE: SW Responder is responsible for notifying RWQCB (576-2220) and CDFG (944-5512 weekdays or (916) 445-0045 24 hr. dispatch) if discharge has reached a creek. SW Responder must also report all significant releases of hazardous materials to the Office of Emergency Services (1-800-852-7550). 															
<p>2. When did incident occur? Or is it presently occurring?</p> <p>3. Background:</p> <p>a. What happened or is happening?</p> <p>b. What materials are involved?</p> <p>c. What amount of material?</p> <p>d. Particularly, does the situation affect or threaten to affect a creek?</p>	<p>b. Non-emergency response, cleanup or investigation is required.</p>	<ul style="list-style-type: none"> • FIRST: Page PW SPILL NOTIFICATION GROUP (includes Field Services) or SW SPILL RESPONSE GROUP <p>And contact as appropriate: COMM CENTER: 543-3666 STORM WATER RESPONSE TEAM* PW FIELD SERVICES: 543-3881 UTILITIES: 543-4200 INDUSTRIAL WASTE 543-3369 (All permitted sites) CD: (Non-compliance with City Code) 543-3235 COUNTY PW ROAD DEPT: 565-7280 (spill on road during business hours) SHERIFF: 565-2121 (spill on road outside business hours) COUNTY HAZMAT: 576-1371 COUNTY HEALTH: 565-6560 WATER AGENCY: 526-5370 or 523-1070 (24 hr) CALTRANS: (510) 286-5726 CHP: 588-1400 Santa Rosa or 648-5550 Vallejo</p>															
<p>4. Does the caller know who or what caused situation?</p>	<p>c. No immediate response required, education or follow-up needed, or you need to speak with someone on the SW RESPONSE TEAM.</p>	<ul style="list-style-type: none"> • PAGE PW SW SPILL RESPONSE GROUP 															
<p>5. Ask if person calling wants to leave name, phone number, and whether the caller wishes to be contacted later. (The City must provide the name if it is requested by another party.)</p>	<p>IN ALL CASES:</p> <ul style="list-style-type: none"> • Prepare Call Link entry form to create a work order for the incident. 																
<p>6. Determine appropriate response</p>	<p>*STORM WATER RESPONSE TEAM (7:30 am - 4:00 pm):</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">SW ENGR RESPONSE PAGER 581-5906</td> <td style="width: 33%;">Storm Water Eng.</td> <td style="width: 33%;">543-3467</td> </tr> <tr> <td>Steve Brady 543-3919 (477-3884 cell)</td> <td>Sheri Emerson</td> <td>543-4225 (738-0264 cell)</td> </tr> <tr> <td>Forest Frasier 543-4224 (953-6458 cell)</td> <td>Dale Tressler</td> <td>543-3873 (481-6352 cell)</td> </tr> <tr> <td>Ken Hutchins 543-3923 (583-5174 cell)</td> <td>Rita Miller</td> <td>543-3879 (540-2591 cell)</td> </tr> <tr> <td>Colleen Ferguson 543-3852</td> <td></td> <td></td> </tr> </table>		SW ENGR RESPONSE PAGER 581-5906	Storm Water Eng.	543-3467	Steve Brady 543-3919 (477-3884 cell)	Sheri Emerson	543-4225 (738-0264 cell)	Forest Frasier 543-4224 (953-6458 cell)	Dale Tressler	543-3873 (481-6352 cell)	Ken Hutchins 543-3923 (583-5174 cell)	Rita Miller	543-3879 (540-2591 cell)	Colleen Ferguson 543-3852		
SW ENGR RESPONSE PAGER 581-5906	Storm Water Eng.	543-3467															
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Colleen Ferguson 543-3852																	

B. Incident Response and Enforcement

<p>1. REPORT OF INCIDENT</p>	<ol style="list-style-type: none"> 1. Upon receiving spill report, inform PW front counter of the Storm Water Response Team's estimated time of arrival on site. If Storm Water Response Team is unable to respond they communicate with other City staff to ensure effective response. 2. Request PW front counter to send 2nd alpha page to PW Spill Notification Group with status and name of Storm Water Response Team responder. 3. Storm Water Response Team responder communicates en route or at site with Ron Simi (481-1412) and Jeremy Gundy (529-6143). Jeremy will begin to mobilize for response when initial alpha page is received. Contact Jeremy if he is not needed.
<p>2. ASSESS SITUATION</p>	<p>Safety first! Upwind, Uphill, Upstream. Determine what material has been discharged, its source, and outfall. Stop or reduce discharge. Contain spill. Determine responsible party.</p>
<p>3. CONTACT (in the following order)</p>	<ol style="list-style-type: none"> 1. In case of emergency, call COMM CENTER 543-3666 or 9-1-1. 2. Non-emergencies: Notify appropriate departments or agencies. 3. Notify Colleen Ferguson (543-3852) if appropriate. 4. If discharge has reached a creek, notify RWQCB (576-2220) and CDFG (944-5512 weekdays or (916) 445-0045 24 hr. dispatch). 5. All significant releases of hazardous materials must be immediately reported to the Office of Emergency Services (1-800-852-7550). 6. A press release may also be needed to alert the public of significant incidents with affects on human health and/or the environment.
<p>4. CLEAN UP must occur in a timely manner. Ascertain how clean up will be performed.</p>	<ol style="list-style-type: none"> 1. When responsibility <i>cannot</i> be determined, perform clean up or request that PW Field Services, Utilities, or SRFD Hazmat crews handle clean up. Assist with clean up if appropriate. 2. If responsibility for the discharge <i>can</i> be clearly determined inform discharger that they are responsible for clean up. Direct the discharger to perform the cleanup themselves if this can be done safely and effectively. 3. If discharger is unable to perform clean up provide discharger with ASpill Clean Up Resources@ list of companies that clean up the particular type of spill. Request a schedule for clean up procedures, notification when clean up begins, and a copy of billings for clean up services performed. 4. If discharger cannot safely perform the cleanup in a timely manner or the situation requires an immediate cleanup, the City may perform the cleanup and bill discharger for clean up costs. The City may charge for cleanup costs if: <ol style="list-style-type: none"> a) discharger has been responsible for a previous discharge, b) discharger operates a business that has been targeted for storm water public education, or c) the City has determined that the community's awareness of storm water issues has been raised to the level that the unacceptability of the actions leading to the discharge is generally known. 5. In emergency or time sensitive situations (where the detrimental impacts of spill, may increase or cause disruption of business or traffic) PW Field Services may clean up spill. Discharger may be billed a Cost Recovery for some or all of the costs incurred by the City. 6. If the discharger has been required to perform the clean up or has been assessed some of the costs, inform Rick Moshier and Colleen Ferguson of your observations and actions.
<p>5. EDUCATION & FOLLOW UP</p>	<p>If necessary, reinspect the site in a timely manner to ensure thorough clean up and reduce the potential for future discharges. Stress the seriousness of storm drain system pollution, clarify the concepts of pollution prevention and BMPs, and provide educational material.</p>

<p>6. PREVENTION OF FUTURE INCIDENTS</p>	<ol style="list-style-type: none"> 1. Determine if there is a reasonable likelihood of recurrence. 2. If responsibility for incident <i>cannot</i> be determined and the likelihood of recurrence exists, the City shall evaluate the practicability of implementing BMPs to reduce this likelihood and take appropriate action. 3. In cases of <i>actual</i> discharges to the storm drain system where the responsibility for the discharge <i>can</i> be determined and there is the likelihood of recurrence, the discharger may be asked to implement appropriate BMPs or ordered to develop and submit a plan, acceptable to the Director of Public Works, to eliminate or reduce the likelihood of recurrence using the Best Conventional Technology. The requirement to develop and implement such a plan and a time frame to submit the plan for approval shall be encompassed in a Notice of Violation or Cease and Desist Order. 4. In cases of <i>potential</i> discharges to the storm drain system where the responsibility for discharge <i>can</i> be determined and a likelihood of recurrence exists, the discharger may be issued a Warning or Notice of Violation and asked to implement appropriate BMPs. 5. Provide educational material.
<p>7. ENFORCEMENT</p>	<ol style="list-style-type: none"> 1. Take appropriate enforcement action according to Enforcement Options guidelines. 2. Inform supervisor, SW Response Team and other departments/agencies of actions taken. 3. Be sure to CC the RWQCB and property owners on all enforcement letters.

ENFORCEMENT OPTIONS	Informal			Formal
	Written or Verbal Warning	Notice of Violation	Cease & Desist Order	Admin Order, Criminal, or Civil Actions
1. Evidence of discharge present (stains, sludge, eroded concrete).	X			
2. Failure to effectively minimize exposure of potential pollutants to storm water.	X	X		
3. Release of small quantities of pollutants where there is the <i>potential</i> to reach the storm drain system.	X	X		
4. Actual discharge of small quantities of pollutants to the storm drain system.	X	X	X	
First Failure to correct violations 1-4.		X	X	X
5. Discharge of pollutants from sources where the community's awareness of storm water issues has been raised to the level that the unacceptability of the discharge is generally known.		X	X	X
6. Illegal connections to storm drain system, such as a floor drain.		X	X	X
Second failure to correct violations 1-4 or first failure to correct violations 5-6.			X	X
7. Discharge of significant quantities of pollutants to the storm drain system.			X	X
8. Discharge of industrial wastewater or sanitary sewage to the storm drain system.			X	X
Failure to correct violations 7-8.				X

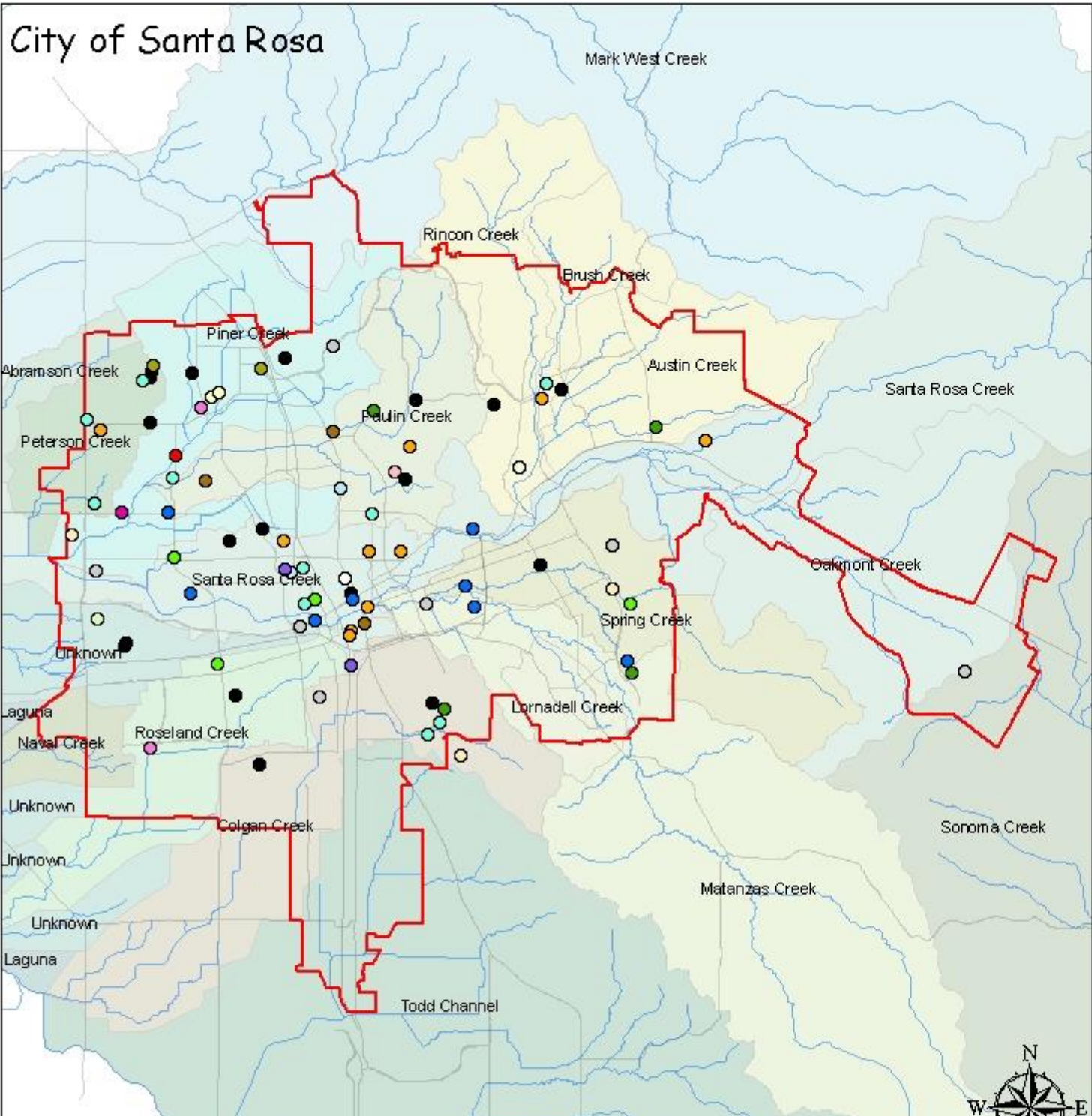
	<p>The following cost recovery procedure shall be followed when a responsible party is identified for a potential or actual discharge in violation of the City's Storm Water Ordinance or NPDES permit in which Public Work crews perform a clean up.</p>
<p>8. Cost Recovery</p>	<p>1. Public Works Field Services personnel involved in the cleanup document the activity on their worksheets.</p>
	<p>2. Field Services Crew Supervisor submits expenses associated with the cleanup (labor, materials, equipment, etc.) to the Storm Water Response Team.</p>
	<p>3. Public Works Engineering expenses associated with the response are submitted to the Storm Water Response Team.</p>
	<p>4. The Storm Water Response Team checks to see if any other City departments are going to bill and informs Administrative Services - Accounts Receivable of the findings when the Request for Billing is submitted to for all Public Works clean up expenses. Attach the SW Incident Report, Cost Recovery Spreadsheet, and letter sent to the responsible party. Payment received is credited to the Storm Water Utility Fund (Acc. #0671-3860) for Storm Water expenses and the Hazardous Materials Clean up Fund (Acc. #0100-3860) for PW Field Services expenses</p>
	<p>5. When the Request for Billing is submitted, the Storm Water Response Team notifies the discharger in writing that the process for collection of clean up expenses is underway. (In most cases the discharger will have already have been verbally informed that a cost recovery will be undertaken for the clean up.) The letter may also serve as a Written Warning or Notice of Violation. Notification of discharger shall include a statement that the charges reflect only Public Works Department's costs and that other City departments may be undertaking cost recovery for their expenses related to the incident. Copy Ron Simi, Public Works Field Services Crew Supervisor, on all cost recovery letters involving Field Services clean ups.</p>
	<p>6. Administrative Services bills the discharger and handles collection of funds.</p>
	<p>7. If payment is not received, a letter of delinquency is sent to the discharger by Administrative Services.</p>
	<p>8. A collection agency is contacted if the letter of delinquency produces no response. (Note: steps 7 and 8 are City procedures followed for all unpaid bills and are not specific to storm drain system related clean ups).</p>
<p>9. Reporting</p>	<p>1. Upon arrival to the office fill out as much of the Cartegraph storm water incident form as possible even if the investigation is continuing. 2. Attach photographs by saving them in Project_Home on 'pw-fieldservice'/photos and attaching them to the incident. 3. Attach attachments (letters, drawings, etc.) by saving them in Project_Home on 'pw-fieldservice'/attachments and attaching them to the incident.</p>

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SPILL DATA SHOWN ON GIS

Appendix III.D.1

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2006-2007 Spill Materials

- Animal Waste, 1
- Antifreeze, 1
- Chemicals, 2
- Concrete, 7
- Debris, 3
- Drywall, 1
- Food Waste, 2
- Fuel, 5
- Hazardous Waste, 1
- No Information, 1
- Oil, 18
- Paint/Stain, 10
- Sawcutting, 2
- Sewage, 3
- Silt/Dirt/Mud, 10
- Soap/Detergent, 2
- Trash/Garbage, 1
- Water, 8
- Wine Waste Product, 2
- Yard Waste, 4

Information presented is for visualization. In some cases, the spill location may have changed to the closest available street address. Spill data from Public Works Storm Water Engineering and might not represent sp...



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GRAPHIC MONTHLY SUMMARY OF SPILLS

Appendix III.D.2

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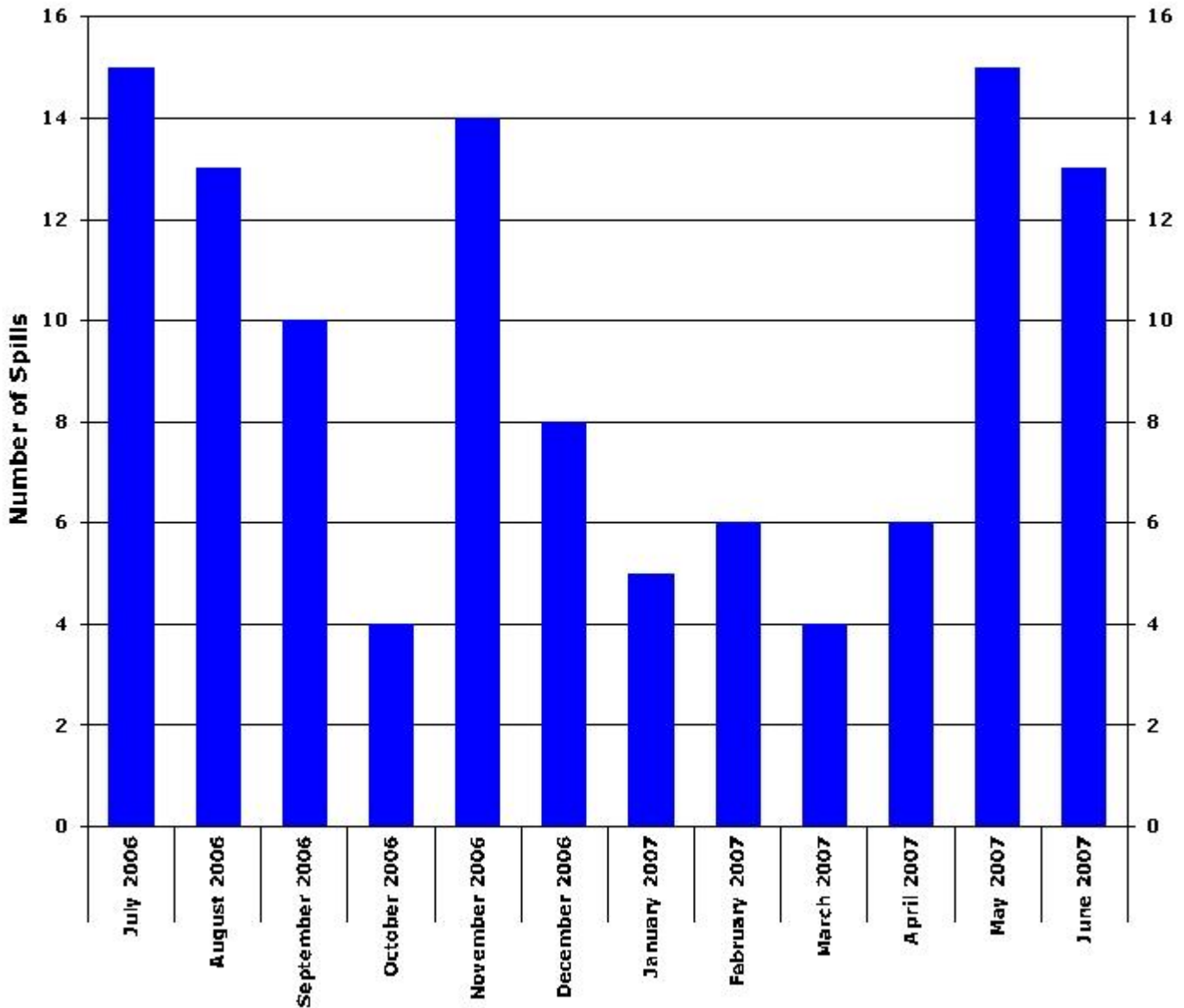
Storm Water Engineering



Spills Per Month

Start Date:
07/01/2006

Stop Date:
06/30/2007



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LIST OF 2006-2007 SPILLS

Appendix III.D.3

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City of Santa Rosa

SW Business Name Report

Report Date Range:
Start: 07/01/2006 12:00:00 AM

Stop: 06/30/2007 11:45:00 PM

<u>Date:</u>	<u>Business Name:</u>	<u>Material:</u>
7/3/2006	Goats are Us	Water- Waste
7/5/2006	PB Renovations	Paint/Stain- Latex Base
7/6/2006	Northbay	Oil- Hydraulic
7/12/2006	Zap	Water- Wash Soapy
7/13/2006	Energy Mizer	Chemicals- Base
7/28/2006	Shell	Water- Wash Soapy
7/27/2006	Brickyard Cove	Trash/Garbage
8/3/2006	Trino's Concrete Pumping	No Spill Material Present/Found
8/7/2006	Amy's Kitchen	Food Waste
8/17/2006	76 Station	Soap/Detergent
8/24/2006	Terrecon	Debris- Asphalt
9/5/2006	North Bay Corporation	Oil- Hydraulic
8/30/2006	Salvation Army	Water- Wash Soapy
9/16/2006	CREATIVE CONCRETE	Concrete
9/19/2006	Holiday Pool	Concrete- Waste/Wash Water
11/15/2006	Felix Contreras Landscaping	No Spill Material Present/Found
11/28/2006	Pipeline Excavator	Silt/Dirt/Mud
11/28/2006	PAX winery	Wine Waste Products
	Northbay	
12/8/2006	George Young Construction	Debris- Construction
1/3/2007	West Coast Painting	Paint/Stain- Latex Base
1/23/2007	Almendariz Mofles	No Spill Material Present/Found
2/9/2007	New College of California	Fuel- Diesel/Gas/Kerosene
2/27/2007	Vision Painting	Paint/Stain- Latex Base
2/27/2007	The Perfect Touch	Soap/Detergent
3/1/2007	Sequoia Landscaping	Silt/Dirt/Mud
3/13/2007	Actis Investments	Silt/Dirt/Mud
4/2/2007	SilverCreek Tile & Stone	Sawcutting- Tile/Brick
4/24/2007	MCM Construction	Silt/Dirt/Mud
5/3/2007	Northbay	Oil- Hydraulic
5/4/2007	Brookwood Park Inc.	Yard Waste
5/18/2007	Redwood Enterprises	Silt/Dirt/Mud

<u>Date:</u>	<u>Business Name:</u>	<u>Material:</u>
6/4/2007	Northbay	Oil- Hydraulic
5/29/2007	Peter A. Davis Engineering Contractor	Sawcutting- Concrete
6/6/2007	Rubio's Restarant Inc	Oil- Food- Vegetable
6/8/2007	North Bay Concrete, Inc	Concrete- Waste/Wash Water
6/13/2007	Santa Rosa Memorial Park	Animal Waste
6/21/2007	Tri-County Concrete Pumping	Concrete- Waste/Wash Water
6/6/2007	Sonoma Kitchen & Bath	No Spill Material Present/Found

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STORMWATER AND CREEKS WEBSITE OVERVIEW

Appendix III.E

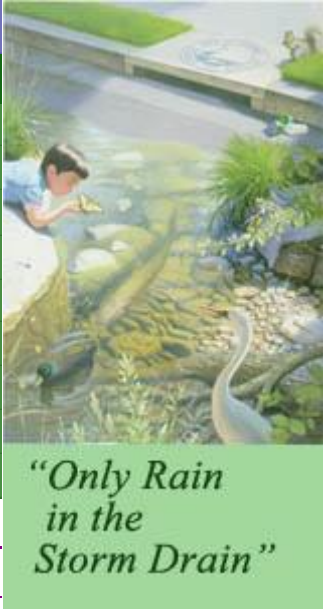
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- Home
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- Business
- City Council
- News
- eConnect
- Services
- Contact Us

Public Works

- City Departments ▶
- Public Works ▼**
 - Overview
 - City Maps
 - Aerial Photos
 - Contracts
 - Permits
 - Engineering
 - Field Services
 - Traffic
 - Storm Water
- Overview**
- About Us
- Current Events
- NPDES Permit
- Storm Water Ordinance
- Flood Control
- Environmental Crimes
- Pollution Prevention
- Report Spills and Contact Storm Water
- Creeks
- Creek Stewardship
- Bioassessment
- Photo Album
- Kids Page
- Teachers Page
- Web site Resources
- Contact Numbers
- FAQ



"Only Rain in the Storm Drain"

Overview

[print friendly](#)

This section offers detailed information on the Storm Water Program.

STORM WATER PROGRAM RESOURCES:

- [Review the City of Santa Rosa's Storm Water Management Plan](#)
- [Get the Storm Water Program Annual Report and Appendices for FY2006-07](#)
- [Stay informed of the Citywide CREEK MASTER PLAN process](#)
- [Learn about contaminated water in local creeks](#)
- [Storm Water Guidelines for New Development and Re-development](#)

To Locate Your Nearest Recycling or Household Hazardous Waste Collection Center go to [Sonoma County Eco-Desk](#). Making Every Day Earth Day!

[Click here](#) to access local weather conditions!

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