

Town of Windsor Phase II NPDES Storm Water Management Plan



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1.0 BACKGROUND

1.1 Regulatory Background

The quality of water in our nation's waterways has improved greatly since the Clean Water Act was passed in 1976. In spite of this, many water bodies, approximately 40 percent, remain impaired or degraded. The leading source of this impairment is polluted storm water runoff. Because of this, the United States Environmental Protection Agency (U.S. EPA) promulgated a national storm water program in 1990. The Storm Water Phase I Rule (Phase I Rule) addresses storm water runoff from cities with populations over 100,000, construction sites over 5 acres in size, and 10 categories of industrial dischargers by using the National Pollutant Discharge Elimination System (NPDES) permit coverage program.

The federal Storm Water Phase II Final Rule (Phase II Rule) is the follow up to the Phase I Rule and requires operators of small municipal separate storm sewer systems (MS4s) to obtain an NPDES permit. The Phase II Rule automatically requires compliance for all small MS4s that are located in urbanized areas as defined by the Census Bureau and which are not already permitted under the Phase I program. The state or federal government can also designate cities outside of urban areas due to their high population density, growth potential, and/or proximity to sensitive water bodies.

The Town of Windsor (Town) was automatically designated by the US EPA due to meeting the "urbanized area" criteria. Other cities in Sonoma County, including Cotati, Rohnert Park, Petaluma, Sonoma, Healdsburg and Sebastopol are also new Phase II permittees. Once an MS4 is designated into the storm water program based on urbanized area boundaries, it cannot apply for a waiver.

In order to achieve compliance with the Phase II Rule, the Town is required to prepare a Storm Water Management Plan (Plan) and submit a Notice of Intent and a permit fee. The Plan will serve as the Town's permit, describing actions that include Best Management Practices (BMPs), measurable goals, and timetables for what are defined as Minimum Control Measures (MCMs). MCMs are storm water program areas that must be addressed by all regulated MS4s. During the first five-year permit term, the Town must submit annual reports to the North Coast Regional Water Quality Control Board (Regional Board) that document and convey progress in implementing the six MCMs. For subsequent permit terms, reports must be submitted in years 2 and 4 only, unless the permitting authority requests otherwise. The first annual report will be due to the Regional Board after the Town becomes officially permitted under the Phase II program.

The Final State General Storm Water Permit (General Permit) was adopted on April 30, 2003. On March 10, 2003, the Town submitted a Notice of Intent (NOI) form, a permit fee, and a draft Plan. The Town submitted its Final Plan in July 2003. Upon review of the Final Plan, the Regional Board requested in a letter dated October 7, 2003 that certain additional information be included. Those additions have been incorporated into this version of the Plan. This Plan delineates how the Town will comply with the Phase II Rule. The Plan has been developed around the six required MCMs required by the permit. They are:



- Public Education and Outreach:
- Public Involvement and Participation;
- Illicit Discharge Detection and Elimination;
- Construction Site Storm Water Runoff Control;
- Post-Construction Storm Water Management in New Development and Redevelopment;
 and
- Pollution Prevention/Good Housekeeping for Municipal Operations.

1.2 Town Resources

The Town will utilize personnel and resources from many departments to implement the Plan. In fact, many Town departments are already performing activities that can be credited as BMPs under the Phase II Rule. A general description of each Town department, its function, and storm water-related activities are provided below.

1.2.1 Public Works Department

The Public Works Department is responsible for several maintenance functions of publicly owned properties within the Town. The Public Works Department maintains the water delivery system and the Town's wells, and is responsible for the treatment and disposal of wastewater generated within the Town. The Public Works Department is also responsible for administering the Town's franchise agreement with the waste hauling contractor, West Sonoma County Disposal (WSCD). WSCD's services include comprehensive curbside recycling, refuse disposal, and street sweeping.

The Public Works Department currently conducts or contracts the following specific activities that reduce pollutants in storm water runoff:

- Storm drain system maintenance;
- Pre-treatment program; and
- Street sweeping operations

The Public Works Department will be taking a lead role in the implementation of the Plan. The Public Works Director, Mr. Richard Burt, will be the Storm Water Program Leader (Program Leader).

1.2.2 Planning Department

The Planning Department is responsible for administration of the Town's planning activities, including implementation of the General Plan, coordination of environmental requirements, processing development applications, zoning enforcement, and the provision of technical and administrative support to the Planning Commission.

The Town's Planning Department is already implementing several activities that are included as BMPs in the Plan, including enforcing California Environmental Quality Act (CEQA) requirements for new development, and several Town policies for open space, riparian zone enhancement, and tree preservation.



The Planning Department will be instrumental in the implementation of the Plan. The Planning Department will be particularly involved in implementation of BMPs pertaining to modifications of Town ordinances and new development requirements for post-construction runoff control. Please see Table 1 for further details.

1.2.3 Building Division

The Building Division is responsible for conducting building plan checks, issuing building and other construction-related permits for commercial and residential building, performing inspections of permitted construction and building improvements for compliance with all applicable codes and regulations, and for enforcing mandated state and federal codes, as well as Town-adopted Uniform Codes.

The Town's Building Division will play an important role in the implementation of the Plan, particularly with regard to Construction Site Runoff Controls. Please see Table 1 for further details.

1.2.4 Economic Development and Community Services Department

The Town of Windsor Economic Development and Community Services Department is responsible for a number of Town services related to economic development, redevelopment, parks and recreation, and facility maintenance. In managing the Town's community and neighborhood parks, the Department will play an important role in the implementation of several municipal operations BMPs, such as pet waste collection and landscape maintenance. Department personnel will also be involved in the implementation of several public outreach and education BMPs, including the development of a storm water web-page. Please see Table 1 for further details.

1.2.5 Administrative Services Department

The Administrative Services Department of the Town of Windsor is responsible for the daily operations of the Town, including finance, personnel, purchasing, and utility billing. The Department will play an important role in the implementation of several BMPs, including the development and distribution of storm water educational materials to Town residents and businesses, and the management of storm water call-in telephone lines. Please see Table 1 for further details.

1.3 Outside Agencies

Other local agencies also contribute to many activities that ultimately reduce storm water pollution to the Town's waterways, and ultimately to the Russian River and its tributaries. The following agencies will contribute to the Town's Storm Water Management Program (SWMP) through their activities. These activities are also described in Table 1.

- The Sonoma County Water Agency (SCWA) maintains specific creeks and flood control channels within its jurisdiction throughout the flood control zones of Windsor (Figure 1);
- The SCWA maintains a citizen complaint call-in telephone line for the reporting of illicit discharges to waterways;



- The Sonoma County Department of Emergency Services (SCDES) handles spill prevention and response within the Town limits, as well as inspections for sites that store or generate hazardous materials;
- The Sonoma County Department of Environmental Health (SCDEH) conducts inspections of restaurants, which include inspection for proper cleaning practices to prevent storm water pollution; and
- The Sonoma County Waste Management Agency (SCWMA) is managing a storm drain labeling program and aids citizens and businesses with the proper disposal of hazardous wastes.

2.0 ADMINISTRATION, PLANNING AND FUNDING

2.1 Administration

As mentioned previously, Mr. Richard Burtt has been designated as the Program Leader for the Town. As the Program Leader, he will be responsible for ensuring that the program is moving forward on schedule, and that individuals designated to implement certain BMPs have the resources to do so. Additionally, he will ensure that all activities that are performed are documented for the purposes of preparing the Annual Report.

To ensure the efficient administration of the program, the Program Leader will meet with implementers (likely upper-level staff) on a quarterly basis to evaluate progress in achieving goals, and to identify any obstacles to success. At this time, adjustments can be made to the Plan to keep the program viable, and to ensure the dynamic nature of the program as a whole.

2.2 Planning

Implementation of the maximum extent practicable (MEP) standard will require the development and implementation of BMPs and the achievement of measurable goals to satisfy each of six defined MCMs. MEP refers to the technology-based standard established by Congress in the Clean Water Act that municipal dischargers of storm water must meet. To achieve the MEP standard, municipalities must employ whatever BMPs are technically feasible and are not cost prohibitive. The Plan is a guideline for a SWMP that coordinates the six MCMs, so that when they are implemented together, they should result in significant reductions in pollutants discharged to waterways.

The Town has already put into practice many of the measures required by the General Permit, but will need to formalize and document what has been done and what will be done in future permit years for reporting purposes. Other program requirements and BMPs will be implemented over the five-year permit term.

The Public Works Department will be taking the lead on the implementation of the Plan and will be working closely with other departments to put the Plan in place over the next five years. The Program Leader will be working cooperatively with the SCWA, the SCWMA, and the SCDES, as applicable, to ensure that resources are utilized efficiently, and that BMPs implemented by each of the agencies do not conflict with one another.



2.3 Funding

Estimates of the additional resources, personnel, and costs associated with the implementation of the Plan were calculated for the Town. These calculations are based on the resources, personnel, and costs that are estimated to be incurred in addition to those already expended. Therefore, the total cost for the implementation of all BMPs in the Plan would be what is currently expended plus the estimates of additional costs.

The costs for materials, preparation of the Annual Report, and the annual permit fee are estimated at between \$40,000 and \$50,000 for the first year of implementation, and between \$50,000 and \$60,000 per year for the remainder of the permit term. In addition to these costs, personnel estimates to implement and manage the program (Program Leader) are estimated at one full-time equivalent (1.0 FTE). This time will include the organization, coordination, and supervision duties associated with the implementation of the Town's SWMP.

Other departments will also need to devote time to implementing their respective responsibilities for the program. For example, the Planning Department will review plans for post-construction storm water BMPs for all applicable projects within the Town. The Building and Public Works Departments will develop a formalized erosion control plan ordinance and inspection process, as well as training staff and providing workshops to the development community in the new construction and post-construction runoff control measures. At least initially, most of these additional activities will be accomplished with existing staff. However, it is possible that new staff will need to be hired in future years to perform SWMP activities. Of course, other departments as described in Table 1 will also contribute to the implementation of the SWMP.

If possible, the Town should consider developing an existing or new administrative staff position, such as a Storm Water Program Specialist, to oversee the data entry, data tracking, word processing, and other administrative tasks involved in managing the SWMP. The paperwork and record-keeping portion of the SWMP is substantial, and the Program Leader's time would be spent more efficiently in program development and coordination, while delegating the program administrative tasks to this staff position. The Program Specialist position could be the central point of communication between other departments and the Program Leader. Ideally, each of the other departments with SWMP tasks should designate a person to track the individual department's BMPs, and provide tracking sheets to the Program Leader and Specialist on a quarterly basis for merging into a Town-wide tracking mechanism. These designated staff should attend the quarterly SWMP meetings as well.

The Town has an approved budget for the first two fiscal years of the permit of \$100,000. This money will come from the Town's General Fund. Specific sources for funding beyond the first two years of the permit have not yet been determined.

2.4 Geographic and Land Use Description

2.4.1 Watershed

The watershed of the Town is generally defined by the Mayacama Mountains to the east, rolling hills to the west, Mark West Creek to the south, and the Town of Healdsburg to the north. The



watershed includes land that drains through the Town and ultimately discharges into the Russian River (Figure 2).

Several creeks are located within the watershed and traverse the Town. These are the Windsor, East Windsor, Gumview, Pool, Pruitt, Starr, and Sotoyome Creeks (Figure 2). Windsor Creek is the most significant of these, and is designated as a 100-year flood zone with a significant flood plain located at the southwestern boundary of the Town. Sotoyome Creek discharges directly to the Russian River northwest of the Town limits. The remaining aforementioned creeks are tributaries to Windsor Creek, which then discharges to Mark West Creek southwest of the Town limits. Mark West Creek ultimately discharges to the Russian River near Mirabel Park.

The climate in Sonoma County is typically dry in the summer, with seasonal rainfall in the period from October through April. The average annual precipitation over the basin is approximately 34 inches. General area-wide storms of 2 or 3 days in duration produce most of the rainfall.

2.4.2 Land Use Description

The most intensively developed area within the watershed is the area within the Town limits, which consists largely of residential and commercial land use (Figure 3). A small area in the southern part of the Town is designated for industrial development. The majority of the area within the Town limits is designated as low to medium density residential land use. Beyond the Town boundaries, land use is characterized by rural residential, agricultural, and open space. The Sonoma County Airport Industrial Area is located to the south of the Town limits.

3.0 POLLUTANTS OF CONCERN & TARGET AUDIENCES

3.1 Pollutants of Concern

An important aspect of a storm water management plan, such as this Plan, is an assessment of the beneficial water uses that are to be protected. The beneficial uses of the Russian River, the ultimate point of discharge for Windsor's creeks, are defined by California's Porter-Cologne Water Quality Control Act and the Water Quality Control Plan for the North Coast Region. The beneficial uses of the Russian River include agricultural supply, industrial service supply, water contact recreation, non-contact water recreation, commercial and sport fishing, cold freshwater habitat, wildlife habitat, and the potential beneficial use of aquaculture.

As defined by the Regional Board, Windsor is located within the Mark West Creek hydrologic subarea of the Russian River. Impacts from agricultural runoff, hillside development, and urban runoff have resulted in the inclusion of the Mark West Creek hydrologic subarea on the 2002 Clean Water Act Section 303(d) List for sedimentation and temperature. Because of the recommended 303(d) listings and the identification of the primary pollutants of concern by the Regional Board, addressing sediment and temperature in Windsor's storm water runoff will be a primary focus of the Town's SWMP. However, the Town's SWMP also addresses non-point source pollutants common to most municipalities, including hydrocarbons from parking lots and streets, and fertilizers, pesticides, and herbicides used by homeowners and businesses throughout the Town.



3.2 Target Audiences

The following table identifies the common sources of each priority pollutant identified in Section 3.1, as well as the target audiences and BMP examples addressing the pollutants.

Pollutant of Concern	Common Pollutant Sources	Target Audiences
Sediment	Construction Sites	Construction Contractors
	 Removal of Riparian 	 Developers
	Vegetation	Homeowners
	Streambank Erosion	
Temperature	Hydromodification	Developers
	Removal of Riparian	Owners of properties along
	Habitat	creeks
		Public Works
Nutrients	 Fertilizers 	Homeowners
	Pet Waste	Landscape Contractors
	Sanitary Sewer Overflows	Pet owners
	Improper Restaurant	Public Works
	Practices	Restaurants
	Excessive Organic Debris	
Hydrocarbons	Parking Lots	Automotive Facilities
	• Streets	Public Works
	 Automotive Facilities 	• Homeowners
	Illicit Discharges	
Pesticides/Herbicides	Residential Use	Homeowners
	Commercial Use	Landscape Contractors

4.0 MINIMUM CONTROL MEASURES

The Phase II Rule defines a SWMP as a program consisting of six elements, or MCMs, that when implemented together, are expected to achieve significant reductions of pollutants discharged into receiving water bodies. Each of the six MCMs is described below, along with a brief description of some of the activities that are included in the MCM. Table 1 provides detailed information pertaining to each current and planned BMP, including implementation plans, dates, measurable goals to monitor the success of BMPs, pollutants addressed, audiences targeted, and the individuals or agency responsible for the implementation.

4.1 Public Education and Outreach

The Public Education and Outreach MCM consists of distributing materials and performing outreach activities to educate and inform citizens about the impacts polluted storm water runoff can have on receiving water bodies. Most citizens are not aware that everyday activities can have negative impacts on the creeks near their homes and businesses. Even when citizens are aware that they may be contributing some form of pollution, the impacts of their actions, when multiplied by the activities of other inhabitants of the area, are not completely realized. A greater degree of compliance with the Phase II Rule can be expected as the public becomes aware of their personal responsibility to protect water quality.



The Town is currently a member of the Russian River Watershed Association, which is a group of cities and agencies working together to develop projects to improve the watershed and to help local governments meet regulatory requirements and other needs collectively at reduced cost. The Town believes that a coordinated effort with other Phase II municipalities to promote a regional storm water message will have the greatest impact and maximize the cost-effectiveness of implementation.

One example of a Russian River Watershed Association BMP that the Town is participating in is a series of surveys to determine the public's awareness of storm water issues. The first baseline survey will characterize the public's current awareness. A follow up survey will be conducted in the second permit term, and the Town will compare the results of the two surveys to determine how effective its storm water educational program has been in increasing public awareness of storm water issues. A complete list of the education and outreach BMPs that the Town is proposing to implement in order to further its compliance with the Phase II Rule requirements of this MCM are described in Table 1.

4.2 Public Involvement and Participation

The Public Involvement and Participation MCM has the goal of providing opportunities for citizens to participate in storm water program development and implementation, including, for example, public involvement and participation classroom education, stream cleanup and monitoring, and storm drain stenciling.

The Town has identified potential opportunities for local schools and nonprofit groups to assist the Town with the implementation of the Plan. One example is the potential to coordinate with Windsor High School in their School-to-Career Program that juniors and seniors currently take part in. The students in the environmental focus area of the program currently participate in field days with the restoration firm Circuit Rider Productions, the non-profit group LandPaths, and the Town's current refuse contractor WSCD. Through these programs, students learn about watershed processes and practice watershed assessment and restoration techniques.

The possibility of the Town becoming involved in the School-to-Career program was discussed with the head of the environmental focus area at Windsor High School. The Town plans to hold meetings with Windsor High School to further discuss the potential to participate in the School-to-Career program. The goal will be to develop a program that will allow students to participate in the implementation of the Town's Plan, including activities such as baseline monitoring of storm water quality and storm drain stenciling.

The Town will also begin advertising the Russian River First Flush Study training sessions on the Town's website and through various other media and will begin tabulating the analytical results of sampling conducted in Windsor Creeks to create a comprehensive table. The Town will also develop a storm drain stenciling program that documents and prioritizes stenciling options, including participation in grants and use of volunteers groups and schools, and will begin implementing the program with the goal of 100% of the existing storm drains having been stenciled at the end of the permit term.



In order to attract involvement from a broad spectrum of the Town's residents and businesses, the Town will identify various media that could be used to advertise citizen volunteer opportunities related to the Town's Plan. Annual advertisements will then be placed in the various media that list all of the volunteer opportunities related to the Town's Plan.

Finally, in order to include the public in developing, implementing, and reviewing its future program, the Town plans on holding a citizen's storm water meeting during the last year of the permit. The Town will first develop a purpose and structure for the meeting, advertise the meeting to potentially interested parties via various media, and ultimately conduct the meeting to get public input on developing and implementing the Town's Plan for the next five-year permit term.

Additional BMPs that the Town is proposing to implement in order to further its compliance with the Phase II Rule requirements of this MCM are described in Table 1.

4.3 Illicit Discharge Detection and Elimination

The Illicit Discharge Detection and Elimination MCM consists of activities including developing a storm drain system map, informing commercial businesses of hazards associated with illegal discharges and improper disposal of wastes, and checking for illicit connections between the storm drain system and the sanitary sewer system at businesses storing or generating hazardous materials. Examples of illicit discharges are commercial car wash and laundry wastewaters, grease and food wastes from restaurants, radiator flushing disposal, spills from auto accidents, and improper disposal of household toxics and automotive fluids.

Several components of the Illicit Discharge Detection and Elimination requirements for MS4s are currently being implemented in the Town by other local and state agencies. The Town has developed implementation plans to expand on these existing activities, and will be coordinating with the appropriate agencies throughout the permit term. Examples of these BMPs are described in the table below, as well as in Table 1.

At this time, the Town of Windsor, through the Russian River Watershed Association, is working with the Regional Water Board to address incidental runoff of recycled water. Based on those ongoing discussions, this Plan may be applied to such incidental runoff.



Current and Future BMPs for Illicit Discharge Detection and Elimination

BMP	Detailed Description of Existing and Future Program
SCWA Illicit Discharge Call-In Telephone Lines	Existing During working hours, the public can call (707) 521-1845 to report a problem in a SCWA flood control channel directly to the Flood Control Channel Maintenance Coordinator. Additionally, the public can call (707) 523-1070, the SCWA's number that is staffed 24-hours per day. The staff member answering this line will contact the appropriate response personnel. If the spill is not located in a SCWA channel, the caller will be referred to the proper local authority for response.
	The SCWA will be developing a record-keeping system for tracking public calls and their responses over their next five-year permit term. The information will include: who called, why, and any follow-up activities, including forwarding the call to another appropriate agency, dispatching a SCWA crew to the site (or both), or other appropriate response.
	Future The Town will be adding a message to an existing 24-7 call in line that lists the appropriate contact information for callers wishing to report illicit discharges. The Town will use the website and other various media to advertise the phone number and to educate the public regarding illicit discharges. All public comments received via the call-in line will be documented, including follow-up procedures. In addition, the Town will coordinate with the SCWA to update them on the appropriate response personnel who should be notified, and to obtain a record of calls for reporting purposes.
Sonoma County Department of Emergency Services (SCDES) CUPA Program	Existing The SCDES has the responsibility of regulating the County's Certified Unified Program Agency (CUPA) programs within Windsor. These programs include the Hazardous Materials Business Plan Program, the Hazardous Waste Program, the Underground Storage Tank Program, the Accidental Release Program, and the portions of the Uniform Fire Code that address hazardous materials. Inspections of businesses in the Town that are included in any of these programs are conducted on a routine basis.
	Future The Town will be coordinating with the SCDES to become familiar with current inspection protocols and to establish criteria for inspecting facilities for verification of storm water BMPs in the Town. The Town will work with the SCDES to implement the established inspection criteria and to obtain inspection activity information to be summarized in the Annual Reports.

BMP	Detailed Description of Existing and Future Program
Sonoma County	Existing
Department of	The SCDHS maintains a database with an inventory of all retail food
Health Services	facilities within Sonoma County, and conducts unannounced inspections of
(SCDHS)	retail food facilities in the Town. All food facilities are inspected at least
Restaurant	once per year. In the past, the SCDHS and the City of Santa Rosa Public
Inspections	Works Department have entered into a Memorandum of Understanding to establish criteria for inspecting retail food facilities for verification of storm water BMPs. Documents related to storm water inspection reports, complaints, and enforcement actions are maintained in the retail food facility files at the SCDHS office.
	Future
	The Town will be coordinating with the SCDHS to become familiar with current inspection protocols and to establish criteria for inspecting facilities
	for verification of storm water BMPs in the Town. The Town will work with
	the SCDHS to implement the established inspection criteria, possibly
	through a memorandum of understanding. The inspection activity
	information will be summarized in the Annual Reports.

In order to further address illicit discharges, the Town will develop an ordinance to prohibit non-storm water discharges into the storm sewer system and implement appropriate response procedures and actions for such discharges. The Town will also be providing training for Public Works employees regarding storm water and pollution prevention. Training Public Works personnel on these topics will provide great benefit to the Town in its Storm Water Management Program. Employees who understand pollution prevention and storm water management concepts can be the "eyes and ears" of the Town, and will establish positive examples for other city employees and the citizens they serve. A maintenance form will be developed that the field crews will use to document storm system maintenance activities, including observations of illicit discharges, excessive debris, structural damage, and more.

Another program that the Town will utilize to address illicit connections and to provide educational outreach to businesses is the pre-treatment program that is required by the Town's Waste Water Treatment Plant NPDES Permit. The requirements of the permit include a waste survey to identify high-risk dischargers and a public outreach program, both of which the Town will utilize for the stormwater program as well, by adding storm water educational components. In addition, a component will be added to industrial inspections conducted as part of the pre-treatment program that will check for illicit connections to the Town's storm drain system.

Finally, a citizen call-in telephone line will be established that citizens can use to notify the Town of spills, illicit discharges, and construction sites with poor housekeeping practices. The Town's web-site will be used to advertise the phone number and to educate the public regarding illicit discharges and poor housekeeping practices. A plan for responding to complaints will be established, and the complaints and actions taken in response will be documented in the Annual Reports.



Additional BMPs that the Town is proposing to implement in order to further its compliance with the Phase II Rule requirements of this MCM are described in Table 1.

4.4 Construction Site Storm Water Runoff Control

The Construction Site Storm Water Runoff Control MCM consists of developing, implementing, and enforcing an erosion and sediment control program for construction activities that disturb one or more acres. The soil that can be carried from a construction site during a relatively short period of time would take much longer to erode under naturally vegetated conditions. Excess sediment requires periodic dredging of navigable waterways and destroys aquatic habitat. Because of the importance of sediment reduction to the success of this program and the health of the Russian River and its tributaries, the Town will be placing special emphasis on the BMPs in this MCM. Examples of pollutants discharged from construction sites include sediment, fertilizers, pesticides, oil and grease from vehicle fueling and maintenance, wash water from concrete trucks, construction chemicals, and trash.

The Town will be implementing several new practices aimed at addressing sedimentation generated during construction activities, which is considered to be the Town's priority pollutant of concern. Currently, the Town has adopted Appendix Chapter 33 "Excavation and Grading" of the California Building Code to regulate excavation and grading within the Town. To expand on this, the Town will develop an Erosion and Sediment Control Ordinance requiring erosion control plans, construction site control measures, Town review and approval, and inspection and enforcement of construction site activities. The Town will review and use model ordinances, such as the US EPA Erosion and Sediment Control Model Ordinance, to assist in the development of the ordinance. The Town will adopt the ordinance through appropriate Town Council procedures, to be followed by training of the appropriate staff, and implementation.

The Town will develop a plan for construction site inspections that includes a methodology for prioritizing inspections based on construction site size and other factors. The development of the plan will also include inspection checklists and procedures, data management protocols, schedules for initial inspections and follow-up activities, and enforcement escalation procedures.

The Town will also be adding a storm water educational component to the construction site inspections. The Town has developed a series of simple, informative brochures for distribution to developers and contractors. These will be coordinated with a checklist for the construction inspectors to take to the job site. Inspectors will be trained on how to use the Storm Water Pollution Prevention Record/Report and brochures during future construction site inspections.

All staff involved with plan review, approval, and construction site inspections will receive inhouse training on the new requirements and procedures. The Town will also provide outreach to contractors during pre-construction meetings, ensuring that they are aware of the Town's requirements and commitment to storm water pollution prevention.

Additional BMPs that the Town is proposing to implement in order to further its compliance with the Phase II Rule requirements, including training for inspectors, are described in Table 1.



4.5 Post-Construction Storm Water Management

The Post-Construction Storm Water Management MCM is necessary in areas undergoing new development and redevelopment because of the impact of storm water runoff from those areas. Many studies have indicated that advance planning and designs that minimize pollutants in post-construction discharges are the most cost-effective means of storm water quality management.

The Town has several programs already in place that address post-construction storm water runoff. These include the Town's Tree Preservation Plan, CEQA compliance, creek setback requirements, open space policies, and the requirement for Riparian Revegetation and Enhancement Plans. Each of these programs/requirements promotes the conservation of natural areas, helping to ensure the protection of riparian corridors, which reduces migration pathways for sediment and other pollutants into creeks.

As required, the Town will develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development. Due to the Town's growth rate exceeding 25 percent between 1990 and 2000, the Town is obligated to at least require the design standards contained in Attachment 4 of the General Permit.

Development of the program will include designating a post-construction program development coordinator and team, which will then hold strategy-planning meetings to determine program goals, scope, and requirements applicable to the Town. This will include the review of design standards of Attachment 4 of the General Permit, as well as the City of Santa Rosa and County of Sonoma SUSMP ordinance/guidance manual. The team will then begin developing the program, including outlining requirements during the planning, design and construction/post-construction phases, design standards for site planning measures and source/treatment control BMPs, and requirements for long-term monitoring and maintenance.

The Town will develop an ordinance based on the applicable goals, scope, and requirements, which will be reviewed by the Town attorney, approved by the planning commission, and presented at a Town Council meeting to obtain input from council members and the public. Following the Town Council adoption of the ordinance, in-house training will be provided for all applicable staff. Outreach to the development community will include the development of a flowchart describing the new requirements. The flowchart and the new ordinance will be distributed to 100 percent of developers during pre-design meetings.

The ordinance will include requirements for property owners of new developments to monitor and maintain source and treatment control BMPs at least once a year or as specified by the designer or manufacturer of the BMP. The Town will develop a program to ensure compliance with this requirement. The Town will conjunctively develop a post-construction BMP maintenance program for existing and future post-construction BMPs on Town owned properties, including a BMP inventory and schedules for inspection and maintenance.

Additional BMPs that the Town is proposing to implement in order to further its compliance with the Phase II Rule requirements are described in Table 1.



4.6 Pollution Prevention/Good Housekeeping for Municipal Operations

In order to implement the Pollution Prevention/Good Housekeeping for Municipal Operations MCM, the responsibility of reducing polluted storm water runoff falls on the municipality operating the storm sewer system. This MCM requires municipalities to examine and alter their actions in order to reduce polluted runoff from municipal facilities, streets, parking lots, open spaces, and corporation yards into local water bodies. For example, this measure requires training employees on good housekeeping techniques and storm drain maintenance.

The Town will improve the efficiency of storm drain system maintenance by coordinating a meeting with the appropriate Public Works employees to discuss and identify problem areas that need cleaning more frequently during the rainy season. In addition, the Town will provide training for Public Works employees regarding storm water and pollution prevention, and the crews will begin using maintenance forms to document activities, including observations of excessive debris, suspicious and dry-weather flows, odors, and structural problems.

The Town will also develop an educational program that publicizes the Town's street sweeping schedule and the significance of street sweeping as a means of improving storm water quality. By implementing such a program, the Town hopes for an improvement in public adherence to "no parking" times, resulting in greater access to street edges and a resulting increase in the volume of debris collected without an increase in sweeping frequency. Additional BMPs that the Town is proposing to implement in order to further its compliance with the Phase II Rule requirements are described in Table 1.

5.0 MONITORING AND EVALUATION

The Regional Board requires that an Annual Report be submitted that captures the previous fiscal year's storm water management activities, and the results of those activities. The first report will likely be due on September 15, 2005, after the Town has obtained official coverage under the Phase II program. Subsequent Annual Reports are due on September 15th of each year and will summarize the activities performed July 1st of the preceding year through June 30th of the current year.

The Town will periodically document activities that took place during the fiscal year, regularly determine if measurable goals were achieved, and assess the success or failure of the selected BMPs included in the attached tables. If modifications need to be made to alter a BMP to make it more successful, the Town will make those changes on an as-needed basis and note the decision in the Annual Report.

The tracking of storm water activities will be done via the use of Excel spreadsheets (or similar) for each individual department, as well as for the program as a whole. Each of the departments' tracking spreadsheets as well as the Program Leader's program spreadsheet will be developed concurrently and will use the same format for ease of information sharing. The Annual Report will be prepared using summary tables based on the format of Table 1 of this Plan. These summary tables would be accompanied by text for explanation of, and elaboration on, the



activities conducted during the year, as needed. Regional Board staff has expressed a preference for the use of spreadsheets to summarize program progress.

The Plan is a dynamic document that will be revised and updated annually to reflect the progress of the program. The Annual Reports will demonstrate the Town's efforts to reduce pollutants particularly priority pollutants, to the MEP, as well as future plans for the SWMP.

6.0 SIGNATORY REQUIREMENT

This Storm Water Management Plan must be signed and certified by a principal executive officer, ranking elected official, or duly authorized representative.

"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, to the best of my knowledge and belief, the information submitted is 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."

Richard Burtt	Date	
Director of Public Works Director		
Town of Windsor		

7.0 ACRONYM LIST

Acronym	Definition
BMP	Best Management Practice
CEQA	California Environmental Quality Act
General Permit	Final State General Storm Water Permit adopted April 30, 2003
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
Plan	Storm Water Management Plan
Regional Board	North Coast Regional Water Quality Control Board
RRWA	Russian River Watershed Association
SCDEH	Sonoma County Department of Environmental Health
SCDES	Sonoma County Department of Emergency Services
SCWA	Sonoma County Water Agency
SCWMA	Sonoma County Waste Management Agency
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
U.S. EPA	United States Environmental Protection Agency
WSCD	West Sonoma County Disposal



	#			Imple	mentati	on Dat	e					
Minimum Control Measure	BMP#	Activity / BMP	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	Implementation Plan	Measurable Goal	Message (s) / Pollutants Addressed	Target Audience(s)	Implementer(s)
Public Education and		Russian Rive	er Wat	tershed	l Assoc	iation						
Outreach	la.	RRWA	x-				-	The Town of Windsor is a member of the Russian River Watershed Association (RRWA). The RRWA is a group of cities and public agencies working together to develop projects to improve the watershed and to help local governments meet requirements for clean water and other needs collectively at reduced cost.	Continue to implement: Expand on existing program by implementing BMP 1b through 1c.	Education / Effectiveness monitoring	Cities / Agencies / Public	Program Leader or assigned Staff represents the Town at the meetings
	1b.		х	х	Х	х	х	Attend RRWA meetings and collaborate on BMPs that would be effective in the Town's storm water program.	Attendance at 100% of meetings	Priority Pollutants	Program Leader or assigned staff	Program Leader or assigned staff
	lc.		х					Storm Water Awareness Surveys - The Town of Windsor is participating in a series of surveys to determine the public's awareness of storm water issues. The first baseline survey will characterize the public's current awareness. A second survey will be conducted in the second permit term, and the Town will compare the results of the surveys to determine how effective the Town's storm water educational program has been in increasing public awareness.	Evaluate the results of the survey to determine the subjects that the Town's educational programs should focus on.	Storm Water Awareness	Public	Program Leader or assigned staff to work with RRWA
		Educationa	l Mate	rials D	Pevelop	ment						
	2a.	Educational Materials	х					Research existing educational materials pertaining to the Town's priority pollutants and general storm water issues available from U.S. EPA, the State, and other organizations.	Educational materials related to each priority pollutant have been identified	Priority Pollutants	Program Leader, Town Residents	Program Leader, Administrative Services Dept.
	2b.		х					Develop a pamphlet series describing storm water pollution prevention measures for specific types of construction activities. Distribute the pamphlets during pre-construction meetings and construction site inspections.	Pamphlet series developed and distributed to 100 % of construction contractors during pre-construction meetings and construction site inspections.	Sediment	Construction Contractors	Building Division
		Educationa	al Mate	erials I	Distribu	ition						
	3a.	Storm Water Materials Distribution		х	х	х	х	Coordinate with Pam Davis of WSCD to add storm water related information annually to the Waste Watcher newsletter. This could include advertising household toxic roundup events, appropriate disposal of hazardous materials, and storm water pollution prevention tips for homeowners.	At least one storm water related article published in the newsletter annually	Pollution Prevention	Town Residents	Program Leader, Administrative Services Dept.
	3b.			х	х	х	х	Add storm water educational materials to "goody bags" currently conducted as part of the Town's Water Wise program	Storm water materials included in 100 % of "goody bags"	Pollution Prevention	Town residents who call in to receive "goody bags"	Administrative Services Dept.
	3c.		х	х	х	х	х	Make storm water educational materials available at the Town's administrative offices.	Storm water materials available 100 % of the time	Pollution Prevention / Priority Pollutants	Town Residents	Administrative Services Dept.
	4	Using Media			х	х	х	Develop a storm water web-page describing the Town's SWMP, ordinances, storm water pollution prevention tips, public participation opportunities, etc.	Storm water page developed	Pollution Prevention	Town Residents	EDCS
	5	Education / Outreach for Commercial Activities						BMPs for educational outreach for commercial activities are described in the Illicit Discharge Detection and Elimination section	N/A	N/A	N/A	N/A

				Impler	nentati	on Dat	e					
Minimum Control Measure	BMP#	Activity / BMP	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	Implementation Plan	Measurable Goal	Message (s) / Pollutants Addressed	Target Audience(s)	Implementer(s)
Public Involvement / Participation		Sch	nool P	articipa	tion							
1	la.	Classroom Education	X-				-	Already Implemented - Windsor High School (WHS) implements a School-to-Career program where juniors and seniors choose a focus area. Students in the environmental studies focus area currently participate in field days with CRP, LandPaths, and WSCD.	Continue to implement: Expand on existing program by implementing BMP 1b through 1d.	Priority Pollutants / Storm Water Awareness	WHS, Students	WHS, CRP, LandPaths, WSCD
	1b.			х				Program Leader to meet with Erin Fender of WHS to discuss participating in WHS's Schools to Careers program.	A list of goals and program scope developed	-	Erin Fender	Program Leader, EDCS
	lc.			х				Work with WHS to develop an applicable program for students.	Program developed		WHS, Students	Program Leader, EDCS, WHS
	ld.				х	x	х	Pilot test the program	Pilot test conducted, records maintained for evaluation of program			
		Cı	reek F	Restorati	ion	•	•					
	2a.	Stream Cleanup and Monitoring	X-				-	Already Implemented - WHS students work with CRP in a School to Career Program. Field work includes creek restoration projects in the area.	Continue to implement: Expand on existing program by implementing BMP 2b through 2d.	Sediment, Temperature	Students	Program Leader, WHS, CRP
	2b.			х				Develop a prioritized list of creek reaches currently contributing to sedimentation and temperature impairment	The top five reaches of creeks identified		Program Leader	Program Leader, Other Staff To Be Identified
	2c.			х				Program Leader to hold meeting with WHS and CRP representatives to discuss the Town's priority pollutants and the possibility of restoration to be performed on the prioritized list of impaired creek reaches through the School to Career Program.	Coordination conducted		WHS / CRP	
	2d.				х	х	х	If possible, have WHS and CRP begin performing restorations on the reaches of creeks identified in BMP 2b.	Restoration performed by WHS in at least one reach of creek per year			WHS / CRP
		Water	Qual	lity Mon	itoring		•					
	3a.	Russian River First Flush Study	Х	х	х	X	X	Advertise the Russian River First Flush Study training sessions on the Town's website and other media.	Training sessions advertised	Volunteer participation	General Community	EDCS
	3Ь.		х	х	х	х	х	Tabulate the analytical results of sampling conducted in Windsor Creeks to create a comprehensive table.	Results evaluated annually and used to develop future educational outreach as needed	Baseline data	Town of Windsor, Regional Board	To Be Determined

				Imple	mentat	ion Da	te					
Minimum Control Measure	BMP#	Activity / BMP	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	Implementation Plan	Measurable Goal	Message (s) / Pollutants Addressed	Target Audience(s)	Implementer(s)
Public Involvement / Participation		Stor	m Dr	ain Sten	nciling		•					
	4a.	Storm Drain Stenciling	X				-	Already Implemented - Approximately 100 storm drains were stenciled by WHS students in 1996.	Continue to implement: Expand on existing program by implementing BMP 4b.	Pollution Prevention	Town Residents	Public Works Dept.
	4b.		Х	х	х	х	х	City to develop a storm drain stenciling program that documents and prioritizes stenciling options, including participation in SCWMA grants and use of volunteers groups and schools	100% of storm drains stenciled at end of permit term	Pollution Prevention	Town of Windsor	Public Works Dept.
		Commun	nity C	utreach	ı Meeti	ngs						
	5a.	Stakeholder Meetings	x					Already Implemented - Public Meeting #1 - Overview of Phase II NPDES program was presented at Town Council meeting held on March 5, 2003. The public was invited to attend and comment.	NA NA	Awareness of and participation in Town's Storm Water Management Program	Residents, Town Council	Town of Windsor - Program Leader, Town Council
	5b.		х					Already Implemented - Public Meeting # 2 - The final draft of the Storm Water Management Plan was presented for public and Council comment and approval on June 18, 2003. The public was invited to attend and comment.	NA	Awareness of and participation in Town's Storm Water Management Program	Residents, Town Council	Program Leader, Town Council
	6a.	Citizen's SWMP Meeting					Х	Program Leader and appropriate staff to hold a strategy planning meeting to develop the purpose and structure for a citizen's storm water meeting	Purpose and structure developed	Public Involvement	General Community	Program Leader
	6b.						х	Advertise the meeting to potentially interested parties via various media	Ads placed annually in at least three different types of medias	5		
	6c.	-					х	Hold a meeting to get public input on developing and implementing the Town's Plan for the next permit term.	Development of a prioritized list of goals and BMPs to be implemented during the following permit term			
	7a.	Public Involvement Opportunities Advertisement		х	х	х	х	Identify all public involvement opportunities related to the storm water plan annually. Includes creek restoration events, household toxic roundups, Russian River Cleanup, storm drain stenciling, Russian River First Flush monitoring, storm water meetings, surveys, etc.	100 % of public involvement opportunities identified annually at the beginning of the year.	Public Involvement Opportunities	General Community	Program Leader, EDCS
	7b.			х	х	х	х	Advertise all public involvement opportunities annually on the Town's website and additional media, such as the Windsor Times, Recreation Program, local watershed group list serves / websites, community bulletin boards, local radio stations, newsletters, etc.	Ads placed annually in at least two different types of medias			EDCS
	8a.	Russian River Clean- Up	X				-	Already Implemented - A Town council member has been one of four coordinators of the Russian River Cleanup since 1990.	Continue to implement: Expand on existing program by implementing BMP 8b.	Creek Cleanup	Watershed Residents	Mayor Pro Tem
	8b.	_	x	х	X	Х	х	Advertise the annual Russian River cleanup event on the Town's website.	Posting of event on website	-	Town Residents	EDCS

	#				nentati	on Dat	e					
Minimum Control Measure	BMP #	Activity / BMP	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	Implementation Plan	Measurable Goal	Message (s) / Pollutants Addressed	Target Audience(s)	Implementer(s)
Illicit Discharge Detection and		Storm	Sewer	System	п Мар							
Elimination	la.	Storm Drain Maps	х-				-	Already Implemented - The Town has developed storm drain, sanitary sewer, and water distribution system maps.	Continue to implement: Expand on existing program by implementing BMP 1b.	Storm System Inventory	Public Works Maintenance Crews	Public Works Department
	1b.						х	Keep storm drain maps up-to-date by mapping all drain inlets and outfalls and corresponding receiving water bodies.	Maps updated by end of permit term			
		Storn	n Wate	r Ordi	nance	ı	1					
	2a.	Storm Water Ordinance	х					Research and review existing storm water ordinances, including the City of Santa Rosa's and the model ordinance from the MURP	At least two different ordinances reviewed	Illicit Discharges	Program Leader, Public Works Dept.	Public Works Dept.
	2b.	_	х					Develop a storm water pollution prevention ordinance	Ordinance developed	_	Public	
	2c.	_	х					Have the ordinance reviewed by the Town Attorney	Ordinance reviewed by Town Attorney		Town Attorney	Town Attorney
	2d.		х					Adopt ordinance through appropriate Town Council procedures	Ordinance adopted		Town Council	Public Works
	2e.			х				Public Works to conduct in-house training related to ordinance enforcement	100 % of applicable staff received training		Public Works	
	2f.			x				Use utility bill inserts, brochures, and website to educate the public about the storm water ordinance	Outreach conducted		Public	Administrative Services
	2g.			х	х	х	х	Implement ordinance	Ordinance being applied		Town of Windsor	Public Works
		Pre-Treatment Program										
	3a.	Pre-Treatment Program		х				Complete the waste survey required by the Town's WWTP NPDES permit to identify high risk dischargers and to perform a public outreach program.	100 % of high risk dischargers identified and provided educational outreach	Illicit Discharges	Businesses	Public Works Departmen
	3b.				x	х	х	Add a component to industrial inspections conducted as part of the pre- treatment program that checks for illicit connections to the Town's storm drain system	Component implemented at 100% of pre-treatment inspections / Determine if the additional storm water inspection component is resulting in improvement of storm water pollution prevention.		Businesses	
	4a.	Illicit Discharge Detection		х				Develop and use a storm system maintenance log to document the location and observations made during storm drain maintenance, including excessive debris, suspicious discharges, odors, dry-weather flow, structural problems, and others.	Maintenance form developed and used to track 100 % of storm drain maintenance	Illicit Discharges	Public Works	Program Leader, Public Works Staff
	4b.	-		х	х	Х	х	Track the locations of illicit discharges to determine areas of concern to be targeted for outreach and additional monitoring / maintenance	Areas of concern identified and additional outreach, monitoring and maintenance conducted	Illicit Discharges	Areas of concern to be identified	Program Leader, Public Works Staff
	4c.	-			х	х	х	Perform additional outreach, monitoring, and maintenance as necessary	Additional outreach, monitoring, and maintenance performed to 100 % of identified areas of concern	Illicit Discharges	Areas of concern to be identified	Public Works Staff

				Impler	nentat	ion Dat	e				1	
Minimum Control Measure	BMP#	Activity / BMP	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	Implementation Plan	Measurable Goal	Message (s) / Pollutants Addressed	Target Audience(s)	Implementer(s)
Illicit Discharge Detection and Elimination (cont'd.)		Comr	munity	y Involv	ement							
	5a.	Call-in Line		х				Establish a call-in line that citizens can use to report illicit discharges.	Call-in line established	Illicit Discharges	Public	Public Works Dept., Administrative Services Dept.
	5b.			x				Use the website and educational materials to advertise the phone number and to educate the public regarding illicit dischargers	Outreach conducted			
	5c.	-		х				Public Works staff to respond to complaints	100 % response to complaints		Contractors / Town Inspectors	Public Works Dept.
	5d.	-		х	х	х	х	Document all public comments received via the call-in line, including follow-up procedures	100 % of calls and follow ups documented		Town of Windsor	Public Works Dept.
	5e.	-		x	х	х	х	Coordinate with the SCWA to obtain the record keeping information for public calls and the response procedures.	100 % of calls tracked		SCWA	Program Leader
		Edu	cation	nal Outr	each		1					
	6a.	Education / Outreach for Commercial and Industrial facilities	X-				-	Already Implemented - The Town has a Hazardous Materials Management Ordinance which requires annual inspections of hazardous materials storage facilities within the Town limits. In addition, the SCDEH conducts annual unannounced inspections of retail food facilities in the Town, during which educational materials are handed out during the inspection. The SCDES oversees the CUPA program, and inspects retail gasoline outlet and automotive service facilities in the Town.	Continue to implement: Expand on existing program by implementing BMP 6b through 6e.	Illicit Discharges	Residents, Businesses	Windsor Fire Dept., SCDEH, SCDES
	6b.	-			х			Coordinate with the appropriate agencies to become familiar with current inspection protocols, including the Windsor Fire Department, the SCDEH, and the SCDES	Coordination conducted regarding inspection protocols		Windsor Fire Dept., SCDEH, SCDES	Program Leader
	6c.					х	х	Obtain and evaluate the results of the commercial / industrial inspections performed by the Fire Department, the SCDEH, and the SCDES.	Evaluate inspection results to determine areas of concern to be targeted for outreach and additional monitoring / maintenance			Program Leader
	6d.				х	х	х	Distribute educational materials to areas of concern, and to the high risk dischargers identified in the waste survey.	100 % of areas of concern and identified high risk discharges receive storm water pollution prevention educational materials		Establishments Identified as High Risk	Public Works Dept., Administrative Services Dept.
	6e.			x				Use bill insert or other method to educate businesses about the Town's storm water ordinance and storm water program	100 % in one business license renewal		Businesses	Administrative Services Dept.

				Imple	mentat	ion Da	te					
Minimum Control Measure	BMP#	Activity / BMP	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	Implementation Plan	Measurable Goal	Message (s) / Pollutants Addressed	Target Audience(s)	Implementer(s)
Construction Site Storm Water Runoff Control		Grading and I	Erosio	on Cont	rol Or	dinanc	e					
	la.	Grading and Erosion Control Ordinance	x-				-	Already Implemented - The Town has adopted Appendix Chapter 33 "Excavation and Grading" of the California Building Code to regulate excavation and grading within the Town.	Continue to implement: Expand on existing program by implementing BMP 1b through 1h.	Sediment	Developers, Engineers, and Contractors	Building Division
	1b.		х					Review model ordinances, including the US EPA Erosion and Sediment Control Model Ordinance	Model ordinances reviewed	-	Building Division	
	lc.		х					Develop an erosion and sediment control ordinance requiring ECPs for applicable projects, as well as requirements for construction site control measures, review and approval, and inspection and enforcement for construction activities.		7	Developers, Engineers, and Contractors	
	1d.		х					Town Attorney to review ordinance	Ordinance reviewed by Town Attorney		Town Attorney	Town Attorney
	le.		х					Adopt erosion and sediment control ordinance through appropriate Town Council procedures	Revised Grading and Erosion Control Ordinance Adopted	ī	Town Council	Building Division
	1f.			х				All staff involved with plan review, approval, and construction site inspections to undergo in-house training on new requirements.	100 % of appropriate staff receive in-house training		To Be Identified	
	lg.			х				Develop outreach materials for developers and contractors	Requirements and outreach materials distributed to 100 % of developers during pre-construction meetings		Developers / Contractors	
	1h.			х	Х	х	х	Implement ordinance	Ordinance being applied		Contactors and Developers	
		Standardized Conditions of Approval	x-					Already Implemented - The Town requires various construction site controls through its Standardized Building and Engineering Conditions of Approval. The conditions include general construction requirements and design standards, grading and ECPs, and compliance with the	Continue to implement: Expand on existing program by implementing BMP 2b.	Sediment	Developers, Engineers, and Contractors	Public Works Dept. & Building Divisions
	2a.		Α-					Regional Board General Construction Activity Storm Water Permit.				
	2b.			х				Add language to Standardized Building Conditions to require the control of wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at construction sites	Language added			Building Division

				Imple	mentat	ion Da	te						
Minimum Control Measure	BMP#	Activity / BMP	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	Implementation Plan	Implementation Plan Measurable Goal Message (s) / Pollutants Addressed	Target Audience(s)	Implementer(s)		
Construction Site Storm Water Runoff Control		Revi	ew and	d Inspe	ctions								
(cont'd.)	3a.	Review and Inspection Procedures	х-				-	Already Implemented - The Town currently contracts with Coastland Engineering for plan review, inspection, permit issuance, and additional general services.	Continue to implement: Expand on existing program by implementing BMP 3b through 3d.	Sediment	Developers & Contractors	Building Division, Contractor	
	3b.	-		х				Develop guidelines and review procedures with the appropriate Town and Coastland staff for reviewing ECPs and determining compliance with the erosion and sediment control ordinance.	100% of projects > 1 acre have approved ECPs and SWPPPs prior to start of construction.		Coastland	Building Division	
	3c.	-		х				Review and revise the Storm Water Pollution Prevention Record / Report and brochures	Review and revisions completed	Sediment	Construction Contractors	Building Division	
	3d.			х				Develop a plan for construction site inspections, including prioritization, pre-storm and post-storm inspections, educational materials, checklists, schedules, and enforcement escalation procedures.	Plan developed and implemented at 100 % of construction sites	Sediment	Inspectors	Building Division	
	4a.	Construction Inspector Training	X-					Already Implemented - The Town's Building Official has arranged for contracted inspectors to attend Sedimentation and Erosion Control Seminars presented by Regional Board staff. Coastland Engineering also provides in house and outside training for their inspectors.	Continue to implement: Expand on existing program by implementing BMP 4b through 4c.	Sediment	In-house and contracted inspectors	Building Division	
	4b.	-	х	х	х	х	х	Continue to coordinate possible joint inspector training opportunities with the Regional Board and Phase I and II MS4s.	100 % of applicable staff received training			Building Division	
	4c.	4c.			х				Provide in-house training to appropriate staff on new construction site inspection protocols	100 % of appropriate staff receive training			Building Division
		Publi	ic Inpu	ıt Proc	edures								
	5a.	Call-in Line		х				Establish a citizen call-in telephone line that citizens can use to notify the City of construction sites with poor housekeeping practices	Call-in line established	Sediment	Public	Program Leader, Building Dept.	
	5b.	-		х				Use the website and educational materials to advertise the phone number and to educate the public regarding poor housekeeping practices	Outreach conducted				
	5c.			х				Establish and implement a plan for responding to complaints	Response to 100 % of complaints		Contractors		
	5d.			Х	х	х	x	Document complaints and actions taken in response	100 % of complaints and response actions documented	-	Building Division		

	BMP#			Impler	nentat	ion Dat	e				d Target Audience(s)	Implementer(s)
Minimum Control Measure		Activity / BMP	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	Implementation Plan	Measurable Goal	Message (s) / Pollutants Addressed		
Post-Construction Storm Water Management in New		Existing Pos	st-Con	structio	on Pro	grams						
Development and Redevelopment	1	Open Space	х-				-	Already Implemented - Town incorporates creeks as open space, purchases flood easements, clusters development, and creates conservation easements around creeks.	Continue to implement	Reduce migration pathways for priority pollutants	Developers and Engineers	Planning Dept.
	2a.	Creek Setback	X-					Already Implemented - The Town adheres to creek setbacks established by the SCWA; 30 feet or 2.5 times the top of the bank; The area is zoned as open space.	100 % of applicable projects comply with creek setback requirements	Reduce migration pathways for priority pollutants	Developers and Engineers	Planning Dept.
	2b.			Х				Develop and implement criteria for evaluating creek setback variance requests	Determine effectiveness of variance request criteria in improving development			
	3	Tree Preservation Plan	x-				-	Already Implemented - Ordinance No. 2003-172 amended the Town's Zoning Ordinance Chapter 27, Section 27.36 to implement the Town's Tree Protection Policy		Conservation of natural areas	Developers, Engineers, & Contractors	Planning Dept.
	4	Riparian Revegetation and Enhancement Plans	x-				•	Already Implemented - The Town's standardized planning conditions requires Riparian Revegetation and Enhancement Plans with the design goal of habitat establishment along creek frontages.	100 % of applicable projects comply with requirements	Sediment, Temperature	Developers, Engineers, & Contractors	Planning Dept.
	5a.	CEQA Checklist Revision	X-					Already Implemented - All projects constructed within the Town that require environmental review are reviewed for potential significant impacts using an internal CEQA checklist.	Continue to implement: Expand on existing program by implementing BMP 5b through 5e.	Priority Pollutants	Developers, Contractors	Planning Dept.
	5b.		х				Review sample MURP revisions to Environmental Information Forms.	Review conducted	1	Planning Dept.		
	5c.			х				Review Town's current CEQA checklist and consider language amendments that directly address storm water issues, including review of current exemptions.	Review conducted			
	5d.			х				Revise the existing internal checklist to increase project information pertaining to effects on surface waters	Revisions made			
	5e.				х	х	х	Begin using updated checklist	Effectiveness Measure: What proportion of all projects being reviewed using the updated CEQA checklist are required to make changes to plans to mitigate storm water impacts.			

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Minimum Control Measure	BMP	Activity / BMP	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	Implementation Plan	Measurable Goal	Message (s) / Pollutants Addressed	Target Audience(s)	Implementer(s)
Post-Construction Storm Water Management in New		Post Construction	Storn Develo			ff Prog	gram					
Development and Redevelopment (cont'd.)	6a.	Program Development			х			Designate program development coordinator and team	Identification of department staff to be involved in development of the program	Planning / Design Phase Storm Water Control	Developers, Engineers, Contractors	Public Works & Planning Depts.
	6b.				х			Hold strategy planning meetings with development team to review / discuss the design standards of Attachment 4 of the General Phase II Municipal Storm Water Permit, as well as the City of Santa Rosa and County of Sonoma SUSMP ordinance / guidance manual.	Identification of program goals, scope, and requirements applicable to the Town of Windsor	Planning / Design Phase Storm Water Control		
	6c.				х			Develop program addressing storm water pollution prevention in development planning for private and public improvement projects. Includes outlining requirements during the planning, design and construction / post-construction plases, design standards for site planning measures and source / treatment control BMPs, and requirements for long-term monitoring and maintenance.	Program developed	Planning / Design Phase Storm Water Control		
	6d.	-				х		Hold meeting with Regional Water Board to discuss Draft Program and design standards	Draft program approved by Regional Water Board		Regional Board	
	7a.	Ordinance Development				х		Develop ordinance based on applicable goals, scope, and requirements identified in BMP 8b and approved in BMP 8c.	Ordinance developed	Planning / Design Phase Storm Water Control	Developers, Engineers, Contractors	Public Works & Planning Depts.
	7b.					х		Town Attorney to review ordinance	Ordinance reviewed for legal authority	Planning / Design Phase Storm Water Control	Town Attorney	
	7c.					х		Present ordinance at Town Council meeting to provide the development community an opportunity to comment on the requirements	Public meetings held; Ordinance ultimately adopted	Planning / Design Phase Storm Water Control	Town Council, Developers, Public	
	8a.	Training / Outreach					х	Identify all applicable staff and provide in-house training on new requirements	100 % of appropriate staff received training	Program Implementation / Enforcement	To Be Identified	Public Works & Planning Depts.
	8b.						х	Develop outreach materials for the development community such as flowcharts describing the Post-Construction Program requirements.	Distribute ordinance and any guidance documents / outreach materials to 100 % of developers during the initial planning phases	Public Outreach / Education	Developers, Engineers, Contractors	
	9	Implementation					х	Begin ongoing implementation of ordinance	100 % of applicable projects comply with program	Planning / Design Phase Storm Water Control		
	10a.	Water Quality Standard (WQS) Exceedance Response Plan				х		Develop a WQS Response Plan to ensure that individual dischargers who have a release or violation of the WQSs, as defined in Attachment 4 of the General Permit, have a standardized method to communicate with the Town to notify them of the violation so it can be reported to the Regional Board.	Development of WQS Response Plan	All pollutants with numerical & narrative standards in all categories	Industrial and Construction NPDES Dischargers	Public Works Dept.
	10b.	-				Х	Х	Implementation of the WQS Exceedance Response Plan	Implementation of Plan			
	11a.	BMP Inspections and Maintenance				х		Develop a program to enforce the ordinance requirements for property owners of new developments to monitor and maintain source and treatment control BMPs	All new source and treatment control BMPs are maintained at least once a year or as specified by the designer or manufacturer of the BMP	Operation & Maintenance	Property Owners	Public Works Dept.
	11b.					х	х	Develop a post-construction BMP maintenance program for existing and future post-construction BMPs on City owned properties	Program developed and implemented that identifies existing post-construction BMPs on City owned properties and schedules for operation and maintenance.	Operation & Maintenance	Public Works	Public Works Dept.

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Minimum Control Measure	BMP #	Activity / BMP	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	Implementation Plan	Measurable Goal	Message (s) / Pollutants Addressed	Target Audience(s)	Implementer(s)
Pollution Prevention / Good Housekeeping for Municipal		Sta	aff Coo	rdinati	ion							
Operations	1	Quarterly SWMP Meetings	х	х	х	х	Х	Quarterly meeting of the Program Leader and other administrative staff who are involved in the implementation activities and record-keeping for the SWMP to document and discuss progress of BMP implementation and for the Program Leader to obtain feedback.	4 meetings held per year	Forum to discuss progress and potential issues	Personnel administering the SWMP	Program Leader
		Wa	ter Co	nserva	tion							
	2a.	Water Conservation Practices	Х	х	х	х	х	Already Implemented - As a member of CUWCC, the Town has implemented many water conservation BMPs	Meet requirements of Memorandum of Understanding of the CUWCC	Water conservation BMPs / fertilizers pesticides, herbicides	Town water customers	Public Works Dept.
	2b.		x-					Already Implemented - Oops Tag Program - Program utilizing Town staff to be on the lookout for water waste, including recycled water. If observed, a tag describing the violation and Ordinance 99-123 is left on the door, and a follow up letter requesting correction of the problem is sent. If problem is not fixed, an additional letter is sent, requesting correction of the problem and threatening actions, such as a water	100 % corrective action	Water conservation BMPs / fertilizers pesticides, herbicides	Town Residents	Public Works Dept.
								waste fee or termination of water service.				
			ployee	Train	ing		r					
	3a.	Pollution Prevention Employee Training		x				Provide in-house training to Public Works staff regarding basic storm water pollution prevention principles.	100 % of appropriate staff received training	Pollution prevention	Public Works Dept.	To Be Determined
	3b.		X	х	х	х	х	Coordinate with Regional Water Board and other Phase I and II communities on possible joint training opportunities	100 % of appropriate staff received training by end of permit term			Program Leader
		Storm Sewer System Maintenance										
	4a.	Storm Drain Cleaning	х—				-	Already Implemented - Town performs maintenance of the storm drain system. Includes periodic cleaning of drop inlets and outfalls, and responding to complaints or problems as they arise.	Continue to implement: Expand on existing program by implementing BMP 4b through 4e.	Debris, Sediment Deposits, Leaves	Public Works Dept.	Public Works Dept.
	4b.			х				Meet with maintenance staff to discuss problem areas and to identify DIs that need cleaning more frequently during the rainy season	Prioritized list developed	Identification of problem areas to focus maintenance on		
	4c.			х				Develop a maintenance form that field crews can use to document activities, including observations of illicit discharges, etc.	Maintenance form developed	Record keeping system, illicit discharge detection		
	4d.			х				Train field crews on use of maintenance forms, illicit discharges, etc.	100% of field staff receive training			
	4e.			х	х	х	х	Field crews to begin using the maintenance forms to document storm drain maintenance activities	Maintenance forms used 100% of the time			

				Imple	nentati	ion Dat	e				d Target Audience(s)	Implementer(s)
Minimum Control Measure	BMP#	Activity / BMP	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	Implementation Plan	Measurable Goal	Message (s) / Pollutants Addressed		
Pollution Prevention / Good Housekeeping for Municipal		s	Street S	Sweepir	ıg							
Operations (cont'd.)	5a.	Street Sweeping	x-					Already Implemented - WSCD provides weekly street sweeping in the Town's thoroughfares, and bi-monthly sweeping in residential areas.	Continue to implement: Expand on existing program by implementing BMP 5b.	Debris in streets, including leaves, trash, and loose soils	NA	Public Works Dept.; WSCD
	5b.					х	х	Develop and implement an educational program geared to the public that publicizes the Town's street sweeping schedules and the importance of street sweeping as a means of improving storm water quality	Educational program developed and implemented / Additional measurable goal to be developed to evaluate effectiveness of educational program	Storm water awareness, and how street sweeping and improved storm water quality are intertwined	Town residents	
		Dechlo	orinati	on Pro	edures	3						
	ба.	Alternative Discharge Options for Chlorinated Water					х	Develop procedures for dechlorinating water generated during fire hydrant flow testing, water system flushes, and other large-scale dewatering operations.	Procedures developed	Chlorine neutralization	Fire Dept., Public Works Dept.	Public Works Dept.
	6b.	water					X	Obtain training for key implementers of program	100 % of appropriate staff received training			
	6с.						X	Implement procedures	Procedures implemented 100 % of the time			Fire Dept., Public Works Dept.
		Pet	Waste	e Collec	tion							
	7a.	Pet Waste Collection		x				Conduct a pet waste disposal station pilot project in Old Vineyard Park to determine if pet waste disposal stations will be expanded to trail system and other parks	Implementation of pilot project	Appropriate disposal of pet waste / Nutrients	Pet Owners	EDCS
	7b.			х				Document results of pilot project in Annual Report and decide on expansion of program	Summary of pilot test provided in Annual Report and reasons for or against expansion		Regional Board	EDCS
		Landscape Activities										
	8a.	Landscape Maintenance					Х	Review current landscape policies, including an inventory of pesticides, herbicides, and fertilizers used.	Inventory completed	Fertilizers, pesticides, herbicides	Public Works Dept.	EDCS
	8b.						х	Strategy planning meeting to discuss priority pollutants and existing municipal landscape and lawn care protocols.	Identify potential modifications to existing landscape protocols to minimize sources of fertilizers, herbicides, and pesticides	Fertilizers, pesticides, herbicides	Public Works Dept., Contractor	EDCS
	9a.	Spill Response Measures	X_					Already Implemented - Sanitary sewer overflow procedures	Respond to, document, and report 100 % of applicable sanitary sewer overflows	Nutrients, Pathogens	Public Works	Public Works
	9b.			x				Provide in-house training to appropriate staff regarding spill response procedures, including internal and interagency coordination	100 % of appropriate staff receive training	Illicit Discharges	Public Works	Public Works

Notes: Placement of an "X" under Implementation Date indicates the year the activity will begin. Arrows signify activities that are already implemented and will continue to be implemented throughout the permit term.

Acronym Definitions: BMP = Best Management Practice

CEQA = California Environmental Quality Act

CRP = Circuit Rider Productions

CUWCC = California Urban Water Conservation Council

ECP = Erosion Control Plan

 $EDCS = Economic\ Development\ \&\ Community\ Services\ Dept.$

MS4 = Municipal Separate Storm Sewer System NPDES = National Pollutant Discharge Elimination System

RRWA = Russian River Watershed Association

Regional Board = North Coast Regional Water Quality Control Board

SCDES = Sonoma County Department of Emergency Services

SCDEH = Sonoma County Department of Environmental Health

SCWA = Sonoma County Water Agency

SCWMA = Sonoma County Waste Management Agency

SUSMP = Standard Urban Storm Water Mitigation Plan SWPPP = Storm Water Pollution Prevention Plan

WSCD = West Sonoma County Disposal

WQS = Water Quality Standard

WWTP = Waste Water Treatment Plant