



Thurston County

NPDES PHASE II

DRAFT

Stormwater Management Program Plan

**Department of Water and Waste Management
Water Resources Program**

March 31, 2008

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Water and Waste Management would also like to acknowledge all the Thurston County departments that reviewed and provided comment to the plan. Those departments include WWM, Roads and Transportation Services (RaTS), Environmental Health (EH), Development Services (DevSer), Development Review (DevRev), GeoData, Central Services (CS), Facilities, and Parks

1. INTRODUCTION

1.1 Overview and Background

The National Pollutant Discharge Elimination System (NPDES) permit program is a requirement of the federal Clean Water Act, which is intended to protect and restore waters for “fishable, swimmable” uses. The federal Environmental Protection Agency (EPA) has delegated permit authority to state environmental agencies. In Washington, the NPDES-delegated permit authority is the Washington State Department of Ecology (Ecology).

Municipalities with a population of over 100,000 (as of the 1990 census) have been designated as Phase I communities and must comply with Ecology’s Phase I NPDES Municipal Stormwater Permit. With Thurston County’s 1990 census falling below the 100,000 threshold, the County must comply with the Phase II Municipal Stormwater Permit. About 100 other municipalities in Washington must now comply with the Phase II Permit, along with Thurston County, as operators of small municipal separate storm sewer systems (MS4s).

The Permit allows municipalities to discharge stormwater runoff from municipal drainage systems into the State’s waterbodies (i.e., streams, rivers, lakes, wetlands, etc.) as long as municipalities implement programs to protect water quality by reducing the discharge of “non-point source” pollutants to the “maximum extent practicable” (MEP) through application of Permit-specified “best management practices” (BMPs). The practices specified in the Permit are collectively referred to as the Stormwater Management Program (SWMP) and grouped under the following Program components:

- Public Education and Outreach
- Public Involvement
- Illicit Discharge Detection and Elimination
- Runoff Controls
- Pollution Prevention and Municipal Operations and Maintenance
- Monitoring

The Permit requires the County to report annually (March 31st of each year) on progress in Program implementation for the prior year. The Permit also requires submittal of documentation that describes proposed Program activities for the coming year. Implementation of various Permit conditions is phased throughout the five-year Permit term from February 16, 2007 through February 15, 2012. The Permit will be revised and reissued at the end of this period.

As of March 31st, 2008 the County meets the initial Permit requirements. This report is the County’s Draft Stormwater Management Program Plan compliance document. The remainder of this 2008 SWMP document describes actions Thurston County will take to maintain compliance over the second year of the Permit term (i.e., January 1, 2008 through December 31, 2008).

1.2 Phased Implementation of Permit Requirements

Ecology began work on the Phase II Municipal Stormwater Permit for Western Washington in the fall of 2004 and posted a preliminary draft for public comment on May 16, 2005. Ecology released a formal draft of the Permit in February 2006 and issued the final Permit on January 17, 2007. The Permit issued by Ecology became effective on February 16, 2007 and expires on February 15, 2012.

Ecology is phasing in many of the Permit requirements over the five-year Permit term. On March 31 of each year, beginning in 2008, the County must:

- Submit its Stormwater Management Program (SWMP) document to Ecology describing compliance activities planned for the coming year.
- Post the SWMP document on the web.
- Submit an annual report documenting Permit compliance activities for the previous calendar year.

This document includes the following attachments:

- Appendix A- Western Washington Phase II Municipal Stormwater Permit Special and General Conditions
- Appendix B- Annual Report Form for Cities, Towns, and Counties (Appendix 3 of the Permit).
- Appendix C- Acronyms and Definitions from the Permit.
- Appendix D- Ecology's Draft Guidance for City and County Annual Reports for Western Washington Phase II Municipal Stormwater General Permits.

Additional Permit information is located on Ecology's website:

http://www.ecy.wa.gov/programs/wq/stormwater/municipal/phase_II_ww/ww_ph_ii-permit.html.

1.3 Department Responsibilities

The Permit requirements affect departments across the County organization. One difficulty in assigning lead departments to address Permit sections is that those sections do not divide cleanly along department divisional lines. To encourage collaboration and efficient use of resources the County's Water and Waste Management (WWM) Department organized a NPDES Coordination Group in 2007, and sub-committees to address each Permit component. These sub-committees consist of members from affected departments. Those departments include WWM, Roads and Transportation Services (RaTS), Environmental Health (EH), Development Services (DevSer), Development Review (DevRev), GeoData, Central Services (CS), Facilities, and Parks.

1.4 Document Organization

The content in this document is based upon Permit requirements and Ecology's Draft Guidance for County and County Annual Reports for Western Washington Phase II Municipal Stormwater Permits. The remainder of the Stormwater Management Program document is organized similarly to the Permit:

- Section 2.0 addresses Permit requirements for administration of the County's Stormwater Management Program for 2008.
- Section 3.0 addresses Permit requirements for Public Education and Outreach for 2008.
- Section 4.0 addresses Permit requirements for Public Involvement and Participation for 2008.
- Section 5.0 addresses Permit requirements for Illicit Discharge Detection and Elimination for 2008.
- Section 6.0 addresses Permit requirements for Controlling Runoff from New Development, Redevelopment and Construction Sites for 2008.
- Section 7.0 addresses Permit requirements for Pollution Prevention and Operation and Maintenance for Municipal Operations for 2008.
- Section 8.0 addresses Permit requirements for the Water Quality Monitoring section of the Permit for 2008. Each section includes a summary of the relevant Permit requirements and a description of current and planned compliance activities.

2. **STORMWATER MANAGEMENT PROGRAM ADMINISTRATION**

This Section describes Permit requirements related to overall Stormwater Management Program administration, including current and planned compliance activities.

2.1 Permit Requirements

The Permit (Section S5.A) requires the County to:

- Develop and implement a Stormwater Management Program and prepare written documentation (SWMP document) for submittal to Ecology on March 31, 2008; and update the Program annually thereafter. The purpose of the Program is to reduce the discharge of pollutants from the municipal stormwater system to the maximum extent practicable (MEP) thereby protecting water quality. The Program is to include the actions and activities described in Sections 3 through 8 of this SWMP document.
- Submit annual compliance reports beginning in 2008 to Ecology by March 31st (for the previous calendar year). These reports are to summarize SWMP implementation status and present information from assessment and evaluation activities conducted during the reporting period.

2.2 Current Activities

The County currently has in place activities and programs that meet the Permit requirements. Current activities associated with the above Permit requirements include:

- The County is submitting the SWMP documentation by March 31, 2008. The Water and Waste Management Department is currently leading County development of the future planned activities along with an internal NPDES Coordination Group.
- The County is complying with Ecology's requirements and submitting the first Annual Compliance Report on March 31, 2008.

2.3 Planned Activities

Thurston County is currently compliant with the initial conditions of the Permit. The County has also positioned itself to maintain compliance as Ecology phases in the future Permit deadlines. Actions recommended for continued compliance include:

- Maintaining an on-going NPDES Coordination Group and organizational structure.
- Defining and implementing SWMP implementation cost accounting strategy.
- Defining and implementing an NPDES training program, including a tracking system.
- Defining roles and responsibilities and developing processes and procedures for completing updates to the 2008 SWMP document and the Annual Compliance Report annually for submittal to Ecology on March 31st.

Table 2-1 is the work plan for 2008 SWMP Administration activities. These tasks were developed through an iterative process of interviews and workshops with staff from affected County departments.

Table 2-1. 2008 SWMP Administration Activities				
Task ID	Task Description	Lead	Support	Schedule Notes
SWMP-1	Organize an NPDES Coordination group and organizational structure.	WWM	All	Completed in 2007
SWMP-2	Define NPDES cost accounting strategy & tracking system (to begin tracking costs Jan 2009)	WWM	All	Begin in 2008
SWMP-2.1	Itemize potential costs and determine which are covered by Permit and devise tracking options.	WWM	All	
SWMP-2.2	Review options with Directors.	WWM	All	Complete in 2008
SWMP-2.3	Define, implement, and maintain accounting structure for tracking system(s) for time spent on each component of Permit.	WWM	All	
SWMP-2.4	Train County staff to use NPDES cost tracking system.	CS	All	Begin in 2008
SWMP-3	Develop NPDES training management structure & tracking system	WWM	All	Begin in 2008
SWMP-3.1	Define NPDES training modules and staff attendance requirements.	WWM	All	Begin in 2008
SWMP-3.2	Identify and implement training tracking system	WWM	All	
SWMP-4	Define and implement strategy/system for managing NPDES processes & procedures.	WWM	All	Begin in 2008
SWMP-5	Develop overall strategy for code updates required by individual Permit components.	WWM	All	Begin in 2008

WWM = Water and Waste Management. CS = Central Services.

3. PUBLIC EDUCATION AND OUTREACH

This Section describes the Permit requirements related to Public Education and Outreach, including current and planned compliance activities.

3.1 Permit Requirements

The Permit (Section S5.C.1) requires the County to:

- Prioritize and target education and outreach activities to specified audiences, including general public, businesses, residents/homeowners, landscapers, property managers, engineers, contractors, developers, review staff and land use planners and other County employees to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.
- Have an outreach program that is designed to achieve measurable improvements in the target audience's understanding of the problem and what they can do to solve it.
- Track and maintain records of public education and outreach activities.

3.2 Current Activities

The County currently has activities and programs that meet the Permit requirements. The current compliance activities associated with the above Permit requirements include:

- The County currently conducts numerous education and outreach activities that addressing stormwater management. These programs directly address general public, residents/homeowners, businesses, developers, contractors, engineers and some industries and include but are not limited to:
 - General communication
 - Utility newsletter, *Splash*, distribution to 48,000 households
 - Volunteer storm-drain marking program
 - *Naturescaping for Water and Wildlife* class series
 - Free “Don’t Let Your Pooch Pollute” signs and pet waste bag dispensers
 - Used motor oil and hazardous waste recycling program
 - Elementary school assemblies and workshops program
 - Sponsorship of South Sound GREEN, watershed/water quality monitoring program in area public schools
 - Stream Team-led volunteer macroinvertebrate monitoring program
 - Annual GREEN Congress event for elementary – high school students at Evergreen State College to discuss water quality data and protection
 - Cooperating with WSU-Native Plant Salvage Project to design and conduct workshops, *Rain Gardens – Your Key to Managing Runoff and protecting Puget Sound*
 - Stream team workshops on a variety of water resources topics

- Stormwater maintenance and best management practices technical outreach through the municipal stormwater operations and maintenance and private drainage inspection programs
- The County is conducting a survey to create an awareness baseline from which to measure future improvements and is participating in a regional effort to find effective ways to track measurable improvements.
- The County tracks its education and outreach efforts.

3.3 Planned Activities

Thurston County will supplement its current public education and outreach program by updating it to maintain compliance as Ecology phases in the Permit requirements. Actions recommended for continued compliance include:

- Continuing collaboration with other NPDES municipalities to identify appropriate program evaluation techniques.
- Implementing new or modify existing education and outreach activities, including tracking and success monitoring.
- Evaluating understanding and adoption of target behaviors.
- Summarizing annual activities for the "Public Education and Outreach" components of the Annual Compliance Report; identifying updates to the Program document.

Table 3-1 is the work plan for 2008 SWMP public education and outreach activities. These tasks were developed through an iterative process of interviews and workshops with staff from affected County departments.

Table 3-1. 2008 SWMP Public Education and Outreach Activities				
Task ID	Task Description	Lead	Support	Schedule
EDUC-1	Organize an NPDES Coordination group and organizational structure.	WWM	All	Completed in 2007.
EDUC-2	Continue collaboration with other NPDES municipalities to identify appropriate program evaluation techniques.	WWM	EH, RaTS	Begin in 2008
EDUC-3	Develop NPDES plan (strategy/priorities) to supplement existing education activities.	WWM	EH	Begin in 2008

Table 3-1. 2008 SWMP Public Education and Outreach Activities				
Task ID	Task Description	Lead	Support	Schedule
EDUC-4	Develop strategy/process to evaluate understanding and adoption of target behaviors.	WWM	EH	Begin in 2008
EDUC-5	Summarize annual activities for "Public Education and Outreach" component of Annual Report; identify any updates to Program document.	WWM	All	The SWMP and Annual Compliance Report submittal is due on or before March 31st of each year.

WWM = Water and Waste Management. EH = Environmental Health. RaTS = Roads and Transportation Services

4. PUBLIC INVOLVEMENT

This Section describes the Permit requirements related to Public Involvement, including current and planned compliance activities.

4.1 Permit Requirements

The Permit (Section S5.C.2) requires the County to:

- Provide ongoing opportunities for public involvement through advisory boards and commissions, watershed committees, public participation in developing rate structures and budgets, stewardship programs, environmental activities or other similar activities. The public must be able to participate in the decision-making processes involving the development, implementation and update of the Program.
- Make the SWMP document and Annual Compliance Report available to the public, including posting on the County's website. Make other documents required to be submitted to Ecology in response to Permit conditions available to the public.

4.2 Current Activities

The County currently has activities and programs that meet the Permit requirements. The current compliance activities associated with the above Permit requirements include:

- The County has a Storm and Surface Water Advisory Board (SSWAB) that was established in 1989. SSWAB meets regularly throughout the year.

- The County has already defined a series of public involvement activities intended to meet the Permit requirements for public involvement in development of the first Stormwater Management Program.
- The County plans to make the SWMP document and Annual Compliance Report available to the public on the County website.

4.3 Planned Activities

Thurston County has a history of including the public in decision making on environmental issues. Actions recommended for continued compliance include:

- Defining public involvement opportunities for annual SWMP update and reporting process.
- Making SWMP document and Annual Compliance Report available to public by posting on the County website.
- Summarizing annual activities for the "Public Involvement and Participation" component of the Annual Report; including updates to the SWMP.

Table 4-1 is the work plan for 2008 SWMP public involvement activities. These tasks were developed through an iterative process of interviews and workshops with staff from affected County departments.

Table 4-1. 2008 SWMP Public Involvement Activities				
Task ID	Task Description	Lead	Support	Schedule
PI-1	Organize an NPDES Coordination group and organizational structure.	WWM	All	Completed in 2007
PI-2	Define public involvement opportunities for annual Program update and reporting process.	WWM	All	Ongoing process
PI-3	Make SWMP document and Annual Compliance Report available to public by posting on the County website.	WWM	All	Complete before March 31, 2008.
PI-4	Summarize annual activities for "Public Involvement and Participation" component of Annual Report; identify any updates to Program document.	WWM	All	The SWMP and Annual Compliance Report submittal is due on or before March 31st of each year.

WWM = Water and Waste Management.

5. ILLICIT DISCHARGE DETECTION AND ELIMINATION

This Section describes the Permit requirements related to Illicit Discharge Detection and Elimination (IDDE), including current and planned compliance activities.

5.1 Permit Requirements

The Permit (Section S5.C.3) requires the County to:

- Implement an ongoing program to detect and remove illicit discharges, connections and improper disposal, including any spills into the municipal separate storm sewers owned or operated by the County. An illicit discharge means “any discharge to a municipal storm system that is not composed entirely of stormwater...” and illicit connection means “any man-made conveyance that is connected to a municipal storm system without a permit (excluding roof drains and other similar type connections) such as sanitary sewer connections, floor drains, etc.”
- Develop a storm infrastructure system map, have ordinances that prohibit illicit discharges, and create a program to detect and address illicit discharges.
- Publicly list and publicize a hotline or other local telephone number for public reporting of spills and other illicit discharges. Track illicit discharge reports and actions taken in response through close-out, including enforcement actions.
- Train Program staff on proper IDDE response procedures and processes and to recognize and report illicit discharges.
- Summarize all illicit discharges and connections reported to the County and response actions taken, including enforcement actions, in the Annual Compliance Report; including updates to the SWMP document.

5.2 Current Activities

The County currently implements activities and programs that meet the Permit requirements. The current compliance activities associated with the above Permit requirements include:

- The County currently has an IDDE program.
- The County maintains a limited stormwater infrastructure map in electronic format.
- County codes and standards have sections that address illicit discharges and civil infractions.
- The County runs a hotline that allows citizens to report illicit discharges or illicit dumping. The calls to the hotline are usually recorded and then distributed to the appropriate response authority according to a spill response matrix.
- The County will summarize illicit discharges and connections, response actions taken, and enforcement actions in its first Annual Compliance Report on March 31st 2008. All subsequent Annual Compliance Reports will also include descriptions of SWMP updates.

5.3 Planned Activities

Thurston County has an illicit discharge detection and elimination program but will need to update current efforts in order to maintain compliance as Ecology phases in Permit requirements. Actions recommended for continued compliance include:

- Expanding the IDDE Program to apply it County-wide.
- Reviewing and updating codes.
- Reviewing and developing additional public education outreach and Standard Operating Procedures (SOP)s for minimizing pollutant releases from permitted non-stormwater discharges.
- Developing and implementing a stormwater outfall illicit discharge screening program.
- Reviewing and revising upstream illicit discharge source control program to respond to illicit discharges found and/or reported.
- Selecting and implementing IDDE issue tracking/resolution system.
- Creating IDDE training program.
- Summarizing annual activities for the "Illicit Discharge Detection and Elimination" component of the Annual Report; including updates to the SWMP document.

Table 5-1 is the work plan for 2008 SWMP illicit discharge detection and elimination activities. These tasks were developed through an iterative process of interviews and workshops with staff from affected County departments.

Table 5-1. 2008 SWMP Illicit Discharge and Elimination Activities				
Task ID	Task Description	Lead	Support	Schedule
IDDE-1	Organize an NPDES Coordination group and organizational structure.		All	Completed in 2007
IDDE-2	Define County-wide IDDE Program per Permit conditions and develop supplemental IDDE activities as needed.	EH	WWM, RaTS	Begin in 2008
IDDE-3	Continue updating storm system map to address data gaps and Permit conditions.	WWM	GeoData	Begin in 2008
IDDE-3.1	Correct and/or add missing or questionable attribute and connectivity data and clarify questionable storm system ownership (private or public).	WWM	GeoData	Begin in 2008

Table 5-1. 2008 SWMP Illicit Discharge and Elimination Activities

Task ID	Task Description	Lead	Support	Schedule
IDDE-3.2	Ensure all required attributes documented for outfalls greater than or equal to 24" in diameter.	WWM	GeoData	Begin in 2008
IDDE-4	Review and update codes as needed to address IDDE Permit requirements.	WWM	EH	
IDDE-4.1	Select code update approach (new code versus existing).	WWM	EH	Begin in 2008
IDDE-5	Review and develop additional public education outreach and SOPs for permitted illicit discharges.	WWM	All	Begin in 2008
IDDE-6	Revise current IDDE response process into a standard, County-wide IDDE response and enforcement process and procedure. Coordinate with requirements of other permits and resource agencies.	EH	WWM, DevSer	Begin in 2008
IDDE-6.1	Revise response roles in pollutant spill response matrix	EH	WWM	
IDDE-6.2	Revise immediate response procedures.	EH	WWM	
IDDE-6.3	Create standard enforcement process and procedure	EH	DevSer	
IDDE-6.4	Select issue tracking/resolution system and tie into current and/or new "hotline" for public reporting of spills and other illicit discharges.	EH	WWM	
IDDE-7	Select issue tracking/resolution system and tie into current and/or new "hotline" for public reporting of spills and other illicit discharges.	WWM	EH, RaTS	
IDDE-7.1	Research alternatives.	CS	WWM	
IDDE-7.2	Configure and deploy system.	CS	WWM	

Table 5-1. 2008 SWMP Illicit Discharge and Elimination Activities

Task ID	Task Description	Lead	Support	Schedule
IDDE-7.3	Set up queries for Annual Report.	WWM	CS	
IDDE-8	Develop curricula and define staff training requirements.	WWM	All	
IDDE-8.1	Coordinate with requirements of other permits and resource agencies.	WWM	All	
IDDE-8.2	Revise response roles in pollutant spill response matrix.	EH	WWM	
IDDE-8.3	Revise immediate response procedures.	EH	WWM	
IDDE-8.4	Create standard enforcement process and procedure.	EH	WWM	
IDDE-9	Incorporate awareness of illicit discharges into public outreach and education program.	WWM	EH, RaTS	
IDDE-10	Summarize annual activities for "Illicit Discharge Detection and Elimination" component of Annual Report; identify any updates to Program document.	WWM	All	The SWMP and Annual Compliance Report submittal is due on or before March 31st of each year.

WWM = Water and Waste Management. EH = Environmental Health. RaTS = Roads and Transportation Services. CS = Central Services. DevSer = Development Services

6. CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT AND CONSTRUCTION SITES

This Section describes the Permit requirements related to Controlling Runoff from New Development, Redevelopment and Construction Sites, including current and planned compliance activities.

6.1 Permit Requirements

The Permit (Section S5.C.4) requires the County to:

- Develop, implement, and enforce a program to reduce pollutants in stormwater runoff (i.e., illicit discharges) to the municipal separate storm system from new development, redevelopment and construction site activities. The program must apply to both private

and public projects, including roads, and address all construction/development-associated pollutant sources.

- Adopt regulations (codes and standards) and implement plan review, inspection, and escalating enforcement processes and procedures necessary to implement the program in accordance with Permit conditions, including the minimum technical requirements in Appendix 1 of the Permit (i.e., 2005 Ecology Stormwater Management Manual for Western Washington, equivalent Phase I Manual or one of the Manual options with a Thurston County-specific basin-planning overlay).
- Provide provisions and processes and procedures (plan review, inspection, and enforcement) to allow non-structural preventive actions and source reduction approaches such as Low Impact Development techniques (LID), measures to minimize the creation of impervious surfaces and measures to minimize the disturbance of native soils and vegetation.
- Adopt regulations (codes and standards) and provide provisions to verify adequate long-term operations and maintenance of new post-construction permanent stormwater facilities and best management practices (i.e., private drainage system inspections) in accordance with Permit conditions, including an annual inspection frequency and/or approved alternative inspection frequency and maintenance standards for private drainage systems as protective as those in Chapter IV of the 2005 Ecology Stormwater Management Manual for Western Washington.
- Provide training to staff on the new codes, standards, processes and procedures and create public outreach and education materials.
- Develop and define a process to record and maintain all inspections and enforcement actions by staff for inclusion in the Annual Compliance Report.
- Summarize annual activities for the “Controlling Runoff” component of the Annual Compliance Report; identify any update to Program document.

6.2 Current Activities

The County currently has activities and programs that meet the Permit requirements. The current compliance activities associated with the above Permit requirements include:

- The County has developed and implemented a program to reduce pollutants in stormwater runoff to the municipal separate storm system from new development, redevelopment and construction site activities. The County enforces this program through the 1994 drainage manual.
- The County has existing programs, codes, standards, processes and procedures and a data management system (Amanda) that addresses the Permit requirements for management of stormwater runoff from development, redevelopment, and construction sites.
- The County requires and completes construction and stormwater site inspections during pre- and post-construction phases. The County has had a post-construction inspection program for private stormwater facilities since 1994.

- The County records and maintains inspections and enforcement actions by staff.
- The County will summarize associated activities in its first Annual Compliance Report on March 31st, 2008. Subsequent Annual Compliance Reports will also include Program updates.

6.3 Planned Activities

Thurston County has a program to help reduce stormwater runoff from new development and construction sites but updates will be necessary to maintain compliance as Ecology phases in Permit requirements. Actions that are recommended for continued compliance include:

- Selecting and adopting a new Stormwater Manual equivalent to the 2005 Ecology Stormwater manual.
- Updating codes and standards to reflect the new manual.
- Developing new standardized plan review, inspection, enforcement and compliance documentation and tracking processes and procedures.
- Conducting staff training and public education and outreach on implementing new manual.
- Revising and adopting post-construction private drainage system maintenance standards to 2005 Ecology Stormwater manual.
- Continuing to support Ecology by distributing copies of the Notice of Intents for Construction Activity and Industrial Activity.
- Revising information management systems to track and report construction, new development and redevelopment permits, inspection and enforcement actions and Private Drainage Inspection Program inspections and enforcement actions.
- Summarizing annual activities for the "Controlling Runoff from New Development, Redevelopment, and Construction Sites" component of the Annual Report (including the post-construction private drainage system inspection and maintenance requirements); including updates to the SWMP document.

Table 6-1 is the work plan for 2008 SWMP activities related to control of runoff from new development, redevelopment and construction sites. These tasks were developed through an iterative process of interviews and workshops with staff from affected County departments.

Table 6-1. 2008 SWMP Controlling Runoff From New Development, Redevelopment, and Construction Sites Work Plan				
Task ID	Task Description	Lead	Support	Schedule
CTRL-1	Organize an NPDES Coordination group and organizational structure.	WWM	All	Completed in 2007
CTRL-2	Select Manual option and	WWM	RaTS,	Initiated in 2007

Table 6-1. 2008 SWMP Controlling Runoff From New Development, Redevelopment, and Construction Sites Work Plan				
Task ID	Task Description	Lead	Support	Schedule
	identify steps necessary to adopt new stormwater manual and update codes and standards.		DevRev	
CTRL-3	Develop new plan review, inspection, and enforcement processes and procedures.	WWM	RaTS, DevRev, DevSer	Complete in 2008
CTRL-3.1	Define workflow (roles, activities, systems, deliverables)	WWM	All	Complete in 2008
CTRL-3.2	Research and evaluate, select and configure appropriate record-keeping system(s) for all departments (e.g., AMANDA).	WWM	All	Complete in 2008
CTRL-3.3	Define staff training requirements.	WWM	All	Complete in 2008
CTRL-4	Continue to support Ecology by distributing copies of the Notice of intents for Construction Activity and Industrial Activity.	DevSer	WWM	On-going
CTRL-5	Submit post construction, modified inspection frequency request for private drainage systems to Ecology.	WWM	All	Begin in 2008
CTRL-6	Summarize annual activities for "Controlling Runoff from New Development, Redevelopment, and Construction Sites" component of Annual Report; identify any updates to Program document.	WWM	All	The SWMP and Annual Compliance Report submittal is due on or before March 31st of each year.

WWM = Water and Waste Management. EH = Environmental Health. RaTS = Roads and Transportation Services. CS = Central Services. DevSer = Development Services. DevRev = Development Review

7. POLLUTION PREVENTION AND OPERATION AND MAINTENANCE FOR MUNICIPAL OPERATIONS

This Section describes the Permit requirements related to Pollution Prevention and Operation and Maintenance for Municipal Operations, including current and planned compliance activities.

7.1 Permit Requirements

The Permit (Section S5.C.5) requires the County to:

- Develop and implement an operations and maintenance (O&M) program with the ultimate goal of preventing or reducing pollutant runoff from municipal separate stormwater system and municipal operations and maintenance activities.
- Establish maintenance standards for the municipal separate stormwater system that are at least as protective as those specified in the 2005 Stormwater Management Manual for Western Washington.
- Perform required inspection frequency of stormwater flow control and treatment facilities and catch basins, unless previous inspection data show that a reduced frequency is justified.
- Have processes and procedures in place to reduce stormwater impacts associated with runoff from municipal operation and maintenance activities including but not limited to streets, parking lots, roads or highways owned or maintained by the County, and to reduce pollutants in discharges from all lands owned or maintained by the County.
- Train staff to implement the modified processes and procedures and document that training.
- Prepare Stormwater Pollution Prevention Plans (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the County.
- Summarize annual activities for the “Pollution Prevention and Operations and Maintenance for Municipal Operations” component of the Annual Compliance Report; including any updates to the SWMP document.

7.2 Current Activities

The County currently has activities and programs that meet the Permit requirements. The current compliance activities associated with the above Permit requirements include:

- The County operates an operations and maintenance (O&M) program with the ultimate goal of minimizing pollutant runoff from municipal operations.
- The County has standard operating procedures (SOP) in place to reduce stormwater impacts associated with runoff from municipal operation and maintenance activities including but not limited to streets, parking lots, and roads owned or maintained by the

County. These procedures address such potential sources as utility installation, street cleaning, ditch maintenance and other County activities.

- Some ongoing O&M training is provided.
- The County has created a list of County owned properties that will need Stormwater Pollution Prevention Plans (SWPPP).
- The County will summarize associated activities in its first Annual Compliance Report on March 31st, 2008. All subsequent Annual Compliance Reports will also include SWMP updates.

7.3 Planned Actions

Thurston County performs many activities to limit stormwater pollution potential related to its municipal operations and maintenance program. However, updates will be necessary to maintain compliance as Ecology phases in Permit requirements. Actions recommended for continued compliance include:

- Updating inspection, operation and maintenance processes and procedures for Thurston County-owned or operated stormwater catch-basins and flow control and treatment facilities.
- Administratively adopting Ecology maintenance standards for County-performed maintenance activities.
- Updating and/or developing procedures for operation and maintenance of municipally owned or maintained streets, parking lots, and roads.
- Developing and establishing policies and procedures to reduce pollutants in stormwater discharges from lands owned or maintained by the County.
- Creating and implementing Stormwater Pollution Prevention Plans (SWPPPs) for County Facilities.
- Summarizing annual activities for the "Pollution Prevention and Operation and Maintenance" component of the Annual Report; including updates to the SWMP document.

Table 7-1 is the work plan for 2008 SWMP activities related to pollution prevention and operations and maintenance activities. These tasks were developed through an iterative process of interviews and workshops with staff from affected County departments.

Table 7-1. 2008 SWMP Pollution Prevention and Operations and Maintenance Activities				
Task ID	Task Description	Lead	Support	Schedule
PPOM-1	Organize an NPDES Coordination group and organizational structure.	WWM	All	Completed in 2007
PPOM-2	Update municipal storm system inspection and operations and maintenance processes and procedures as needed.	WWM	RaTS	Begin in 2008
PPOM-2.1	Update municipal stormwater facilities O&M data management and reporting strategy.	WWM	RaTS	Begin in 2008
PPOM-3	Develop curricula and define staff training requirements for pollution prevention training program.	WWM	RaTS	Begin in 2008
PPOM-4	Summarize annual activities for Pollution Prevention and Operations and Maintenance Activities component of Annual Report; identify any updates to Program document.	WWM	All	The SWMP and Annual Compliance Report submittal is due on or before March 31st of each year.

WWM = Water and Waste Management. RaTS = Roads and Transportation Services.

8. MONITORING

This Section describes the Permit requirements related to water quality monitoring, including current and planned compliance activities.

8.1 Permit Requirements

The Permit (Section S8) does not require municipalities to conduct water quality sampling or other testing during this Permit term, with the following exceptions:

- Water quality monitoring required for compliance with TMDLs [total maximum daily pollutant loads, a.k.a., water quality clean-up plans]; currently, not applicable to Thurston County because TMDLs developed for Thurston County's waterbodies were not adopted prior to this permit issuance.
- Any sampling or testing required for characterizing illicit discharges pursuant to Program's Illicit Discharge Detection and Elimination conditions.
- Preparation for future, comprehensive, long-term water quality monitoring efforts consistent with current Phase I monitoring requirements. According to the Permit, this program would include two components: general stormwater quality monitoring and targeted Stormwater Management Program effectiveness monitoring. The stormwater monitoring is intended to characterize stormwater runoff quantity and quality at a limited number of locations. This characterization would allow for analysis of pollutants and changes in conditions over time and across the County. The Stormwater Management Program effectiveness monitoring is intended to improve stormwater management efforts by evaluating various stormwater controls. Results of the monitoring will be used to support the adaptive management process for improving programs over time
- Identification of three outfalls where permanent stormwater sampling stations can be installed and operated for future monitoring (by the end of the Permit term and with the 4th Annual Report). The three outfalls must represent commercial use, high-density residential and industrial land uses. The monitoring shall include plans for stormwater, sediment or receiving water monitoring of physical, chemical, and/or biological characteristics.
- Identification of two suitable Program questions and sites where targeted Program effectiveness monitoring can be conducted together with development of a monitoring plan for these questions and sites. The proposed effectiveness monitoring should be prepared to answer the following types of questions:
 - How effective is a specific targeted action or a narrow suite of actions?
 - Is the Stormwater Management Program achieving a targeted environmental outcome?

In addition, the County is required to provide the following monitoring and/or assessment data in Annual Reports:

- A description of stormwater monitoring or studies conducted by the County during the reporting period. If stormwater monitoring was conducted on behalf of the County, or if studies or investigations conducted by other entities were reported to the County, a brief description of the type of information gathered or received shall be included in the Annual Report.

An assessment of the appropriateness of the best management practices identified by the County for components of the Stormwater Management Program; and changes made, or anticipated to be made, to the practices that were previously selected to implement the Program and why those changes are desirable.

8.2 Current Compliance Activities

The County has mapped some municipal stormwater outfalls and coordinates with the cities of Olympia, Lacey, and Tumwater to develop coordination of strategies for implementing the Permit monitoring requirements.

8.3 Planned Activities

Thurston County will need to create a Water Quality Monitoring Program to maintain compliance as Ecology phases in current and future Permit requirements. The County will:

- Implement the monitoring compliance strategy; including development of monitoring plans necessary to implement the following Permit requirements and activities:
- Implement an Illicit Discharge Detection and Elimination Program outfall screening.
- Implement Pollutant spill response (a.k.a., illicit discharge response) monitoring.
- Identify three outfalls for future, long term water quality monitoring.
- Identify two suitable Program questions and sites where targeted Program effectiveness monitoring can be conducted and develop a monitoring plan for these questions and sites.
- Continued to participate with the cities of Olympia, Lacey, and Tumwater monitoring work group.
- Summarize annual monitoring activities for the annual compliance report; including updates to the SWMP document.

Table 8-1 is the work plan for 2008 SWMP monitoring activities. These tasks were developed through an iterative process of interviews and workshops with staff from affected County departments.

Table 8-1. 2008 SWMP Monitoring Work Plan				
Task ID	Task Description	Lead	Support	Schedule
MNTR-1	Organize an NPDES Coordination group and organizational structure.	WWM	All	Completed in 2007
MNTR-2	Develop a monitoring strategy for the current and future Permit water quality monitoring conditions.	WWM	EH	Begin in 2008
MNTR-3	Participate in regional and state monitoring forums and future legislative actions in order to influence development of feasible and effective alternative future monitoring requirements.	WWM	EH	Begin in 2008
MNTR-4	Summarize annual activities for the monitoring component of Annual Report; identify any updates to Program document.	WWM	All	The SWMP and Annual Compliance Report submittal is due on or before March 31st of each year.

WWM = Water and Waste Management. EH = Environmental Health.

APPENDIX A

Western Washington Phase II Municipal Stormwater Permit Special and General Conditions

APPENDIX B

Annual Report Form

APPENDIX C

Acronyms and Definitions

The following definitions and acronyms are taken directly from the Phase II Permit and are reproduced here for the reader's convenience.

AKART means all known, available, and reasonable methods of prevention, control and treatment. All known, available and reasonable methods of prevention, control and treatment refers to the State Water Pollution Control Act, Chapter 90.48.010 and 90.48.520 RCW.

Basin Plan is a surface water management process consisting of three parts: a scientific study of the basin's drainage features and their quality; developing actions and recommendations for resolving any deficiencies discovered during the study; and implementing the recommendations, followed by monitoring.

Best Management Practices ("BMPs") are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by the Department that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.

BMP means Best Management Practice.

Component or Program Component means an element of the Stormwater Management Program listed in S5 Stormwater Management Program for Cities, Towns, and Counties or S6 Stormwater Management Program for Secondary Permittees of this permit.

CWA means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq. Discharge for the purpose of this permit means, unless indicated otherwise, any discharge from a MS4 owned or operated by the permittee.

Ecology's Western Washington Phase II Municipal Stormwater Permit covers certain "small" municipal separate stormwater sewer systems.

Entity means another governmental body, or public or private organization, such as another permittee, a conservation district, or volunteer organization.

Equivalent document means a technical stormwater management manual developed by a state agency, local government or other entity that includes the Minimum Technical Requirements in Appendix 1 of this Permit. The Department may conditionally approve manuals that do not include the Minimum Technical Requirements in Appendix 1; in general, the Best Management Practices (BMPs) included in those documents may be applied at new development and redevelopment sites, but the Minimum Technical Requirements in Appendix 1 must still be met.

Heavy equipment maintenance or storage yard means an uncovered area where any heavy equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are washed or maintained, or where at least five pieces of heavy equipment are stored.

Illicit connection means any man-made conveyance that is connected to a municipal separate storm sewer without a permit, excluding roof drains and other similar type connections. Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the municipal separate storm sewer system.

Illicit discharge means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

IDDE-Illicit discharge detection and elimination

Low Impact Development (LID) means a stormwater management and land development strategy applied at the parcel and subdivision scale that emphasizes conservation and use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely mimic pre-development hydrologic functions.

Major Municipal Separate Storm Sewer Outfall means a municipal separate storm sewer outfall from a single pipe with an inside diameter of 36 inches or more, or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 12 acres or more).

Material Storage Facilities means an uncovered area where bulk materials (liquid, solid, granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.

Maximum Extent Practicable (MEP) refers to paragraph 402(p)(3)(B)(iii) of the federal Clean Water Act which reads as follows: Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.

MEP means Maximum Extent Practicable.

MTRs means Minimum Technical Requirements.

Municipal Separate Storm Sewer System (MS4) means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(i) owned or operated by a state, County, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.

(ii) designed or used for collecting or conveying stormwater.

(iii) which is not a combined sewer; and (iv) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology.

Notice of Intent (NOI) means the application for, or a request for coverage under this General Permit pursuant to WAC 173-226-200.

Outfall means point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the State and does not include open conveyances connecting two municipal separate storm sewer systems, or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State.

O&M-Operations and Maintenance

Permittee unless otherwise noted, the term “Permittee” includes Permittee, Co-Permittee, and Secondary Permittee, as defined below:

(i) A “Permittee” is a County, town, or county owning or operating a regulated small MS4 applying and receiving a permit as a single entity.

(ii) A “Co-Permittee” is any operator of a regulated small MS4 that is applying jointly with another applicant for coverage under this Permit. Co-Permittees own or operate a regulated small MS4 located within or adjacent to another regulated small MS4.

(iii) A “Secondary Permittee” is an operator of regulated small MS4 that is not a County, town or county.

Small Municipal Separate Storm Sewer System or Small MS4 is a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels and/or storm drains which is:

- a. Owned or operated by a County, town, county, district, association or other public body created pursuant to State law having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer districts, flood control districts or drainage districts, or similar entity.
- b. Designed or used for collecting or conveying stormwater.
- c. Not a combined sewer system,
- d. Not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.
- e. Not defined as “large” or “medium” pursuant to 40 CFR 122.26(b)(4) & (7) or designated under 40 CFR 122.26 (a)(1)(v).

Small MS4s include systems similar to separate storm sewer systems in municipalities such as: universities, large publicly owned hospitals, prison complexes, highways and other thoroughfares.

Storm sewer systems in very discrete areas such as individual buildings do not require coverage under this Permit.

Small MS4s do not include storm drain systems operated by non-governmental entities such as: individual buildings, private schools, private colleges, private universities, and industrial and commercial entities.

Stormwater means runoff during and following precipitation and snowmelt events, including surface runoff and drainage.

Stormwater Associated with Industrial and Construction Activity means the discharge from any conveyance which is used for collecting and conveying stormwater, which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant, or associated with clearing grading and/or excavation, and is required to have an NPDES permit in accordance with 40 CFR 122.26.

Stormwater Management Manual for Western Washington means the 5-volume technical manual (Publication Nos. 99-11 through 15 for the 2001 version and Publication Nos. 05-10-029-033 for the 2005 version (The 2005 version replaces the 2001 version) prepared by Ecology for use by local governments that contains BMPs to prevent, control, or treat pollution in storm water.

Stormwater Management Program (SWMP) means a set of actions and activities designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable and to protect water quality, and comprising the components listed in S5 or S6 of this Permit and any additional actions necessary to meet the requirements of applicable

Vehicle Maintenance or Storage Facility means an uncovered area where any vehicles are regularly washed or maintained, or where at least 10 vehicles are stored.

APPENDIX D

Ecology's Draft Guidance for County and County Annual Reports for Western Washington
Phase II Municipal Stormwater General Permits