2015 STORMWATER MANAGEMENT PROGRAM PLAN

Public Works Department
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CITY OF SEDRO-WOOLLEY STORMWATER MANAGEMENT PROGRAM PLAN

1. INTRODUCTION

1.1 STORMWATER MANAGEMENT PROGRAM PLAN

The City of Sedro-Woolley is required to develop and implement a Stormwater Management Program (SWMP). The SWMP is a set of actions and activities comprising the components listed in Section S5 of the Western Washington Phase II Municipal Stormwater Permit (Phase II Permit) and is designed, through inspections, maintenance and public awareness, to reduce the discharge of pollutants and protect water quality.

The Phase II Permit covers discharges from regulated small municipal separate storm sewer systems (MS4s) to receiving waters of the State. Based on criteria outlined in the Phase II Permit, Section S1, the City of Sedro-Woolley is an operator of a regulated small MS4.

The purpose of this Stormwater Management Program Plan is to provide an outline of the programs and actions that the City of Sedro-Woolley will take for implementing the City's SWMP and, to provide this information to the public. The City posts this plan on the City website in the Public Works, Stormwater Section for public review and welcomes any comments.

Appendix C includes acronyms and definitions from the Phase II Permit to help the reader understand the City's Stormwater Management Program Plan. The SWMP is required to be updated each year and submitted by March 31st as part of the annual reporting procedure.

1.2 THE POLLUTION PROBLEM

Stormwater runoff is a major transporter of pollutants to our urban waterways. As urban areas grow, the water quality issues associated with pollution continue to be one of Washington State's fastest growing environmental problems.

Pollutants in stormwater runoff can cause a wide range of impacts. Untreated runoff from urbanized and developed areas is not safe for people to drink and is not recommended for swimming because it often contains toxic metals, organic compounds and bacteria.

Some pollutants such as metals, oil and grease, and other organic compounds are toxic to aquatic organisms if concentrations are high enough. Sediments cause tissue abrasion and gill clogging in fish, reduce light and impair algal growth, smother fish

spawning habitat and are transporters of other pollutants. Nutrients accelerate eutrophication, a process where water bodies receive excess nutrients that stimulate excessive plant growth in lakes and ponds resulting in nuisance algal blooms, reduced clarity, odors and impaired water quality. Temperature sensitive fish and invertebrates cannot survive in overly warm water bodies (Ecology, "NPDES General Permit Fact Sheet," 2006).

There are a number of pollution sources that contaminate stormwater, including land use activities, operation and maintenance activities, illicit discharges and spills, atmospheric deposition, and vehicular traffic conditions. Many of these sources are not under the direct control of the permittees that own or operate the storm sewers.

In addition, the large impervious surfaces in urban areas increase the quantity and peak flows of runoff, which in turn have hydrologic impacts such as scoured streambed channels, in-stream sedimentation and loss of habitat.

The City's MS4, or storm drain system, collects and conveys the stormwater runoff from public roads and facilities as well as receiving conveyed stormwater runoff from some private roads and sites. Through various outfall locations, the City's MS4 discharges to Brickyard Creek, Hansen Creek, and Hart Slough. Eventually all these waterways discharge into the Skagit River.

1.3 REGULATORY 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, and these agencies have set permit conditions in accordance with and in addition to the minimum federal requirements. In Washington, the NPDES-delegated permit authority is the Washington State Department of Ecology (Ecology).

The Western Washington Phase II Municipal Stormwater Permit applies to operators of regulated small MS4s that discharge stormwater to waters of Washington State located west of the crest of the Cascade Range (west of the eastern boundaries of Whatcom, Skagit, Snohomish, King, Pierce, Lewis and Skamania counties). For cities, the Permit requirements extend to those areas of each city that drain to MS4s.

The Permit allows municipalities to discharge stormwater runoff from municipal drainage systems into the state's water bodies (i.e., streams, rivers, lakes, wetlands) 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 BMPs 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 (E&O)
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination (IDDE)
- Controlling Runoff from New Development, Redevelopment and Construction Sites
- Pollution Prevention and Municipal Operation and Maintenance (O&M)

The original Permit issued by Ecology became effective on February 16, 2007 and expired on February 15, 2012. Implementation of various Permit conditions have been phased in throughout the original Permit cycle. In accordance with 2011 legislation amending RCW 90.48.260, the Department of Ecology reissued the original permit to be in effect until July 31, 2013.

A new five year permit has been issued and took effect on August 1, 2013 and expires July 31, 2018. The programs and activities put in place during the initial permit cycle will be continued and updated throughout the new permit cycle. The new permit was modified in December 2014 and the modified permit became effective January 16, 2015.

In addition to continuing and updating established programs, new permit requirements will be phased in through this permit cycle. See Appendix A for a permit implementation schedule.

1.4 CITY OF SEDRO-WOOLLEY REGULATED AREA

The City of Sedro-Woolley first incorporated in 1898, when two cities decided to combine with each other. The City retains a rural character, although its economy recently has shifted from agriculture and timber industries to light manufacturing and services. The City has an operating stormwater utility, which the City adopted, along with an accompanying ordinance governing rates, upon receipt of its Phase II permit in 2007.

In Sedro-Woolley, areas south of SR-20 drain via a piped storm water system which sends runoff to Harts Slough and then the Skagit River. The area north of SR-20 and west of Fruitdale Road mostly drains to Brickyard Creek, to Hart's Slough and then to the Skagit River. Areas east of Fruitdale Road drain to Hansen Creek and the Skagit River. A small portion of the area to the northwest of the city drains to Wollard Creek and ultimately to the Samish River.

The Sedro-Woolley MS4 includes catch basins, pipes, culverts, ditches and detention/water quality facilities within the City limits. The City limits cover an area of approximately 2,500 acres. Included in the City's MS4 (City owned and operated

facilities) are approximately 1,900 catch basins and control structures, 22 flow control or water quality systems (ponds, detention pipes, infiltration systems), and approximately 263,000 feet of pipes (204,000 feet) and ditches (59,000 feet). The City also maintains two stormwater pump stations.

In addition to the City's roadway and facilities drainage systems, there are also 72 private systems with permanent onsite stormwater facilities. These private facilities include conveyance systems, pump stations, infiltration systems, ponds, swales, rain gardens and other various types of water quality controls. Of these private systems, there are 34 that connect directly to the City MS4. The remainder either discharge directly to receiving waters or infiltrate 100% onsite.

1.5 SWMP IMPLEMENTATION RESPONSIBILITIES

Within the City organization, staff from different departments contribute toward meeting permit requirements. The Stormwater Management Program is primarily the responsibility of the Public Works Department. The City Engineer is currently responsible for implementing and monitoring program and permit compliance activities.

This department manages the stormwater program and capital improvements in addition to stormwater related maintenance, mapping, and illicit discharge detection and elimination (IDDE). Public Works also conducts street maintenance, while the Public Works Inspector and the Code Enforcement Department handle code compliance. The Engineering and Planning Departments conduct development review, and Engineering provides site inspection services. The various department supervisors meet every other week to review interdepartmental issues and City projects. These meetings also provide the forum to discuss permit compliance issues which include illicit discharges, spills, facilities and system maintenance, inspections and repairs.

Police, Fire and Building & Planning Department staff have received training on IDDE identification and reporting. The Finance Department supports Public Works by providing utility billing.

The Skagit Conservation District assists the City with Public Education and Outreach through an Interlocal Agreement.

1.6 DOCUMENT ORGANIZATION

This document has been organized into sections that correspond with Special Conditions S5.C, S7 and S8 as follows:

- Section 2 - Public Education and Outreach, Component S5.C.1
- Section 3 - Public Involvement and Participation, Component S5.C.2
- Section 4 - Illicit Discharge Detection and Elimination (IDDE), Component S5.C.3

- Section 5 - Controlling Runoff from New Development, Redevelopment, and Construction Sites, Component S5.C.4
- Section 6 - Pollution Prevention and Operation and Maintenance for Municipal Operations, Component S5.C.5
- Section 7 - Compliance with Total Maximum Daily Load Requirements, Special Condition S7.
- Section 8 – Monitoring and Assessment, Special Condition S8.
- Section 9 – Conclusion
- Appendix A – Phase II Permit Implementation Schedule
- Appendix B – Acronyms and Definitions from the Permit.

Permit Special Conditions S1 through S4 and General Conditions G1 through G20, apply to permit holders, these sections do not result in specific program activities, nor is the SWMP required to document compliance with these activities. These additional conditions cover topics such as who is covered by the Phase II Permit, what discharges are authorized under the permit, legal guidelines for transferring, revoking, and appealing the permit, and penalties for non-compliance.

2. PUBLIC EDUCATION AND OUTREACH

2.1 PURPOSE

The purpose of the Public Education and Outreach program is to reduce or eliminate behaviors and practices that have adverse impacts to stormwater runoff and to encourage the public to participate in activities promoting stewardship and pollution prevention.

2.2 PLANNED COMPLIANCE ACTIVITIES

To achieve the goals of the program, the City is continuing its partnership with the Skagit Conservation District (SCD) to provide organized activities, open to the public, promoting practices that serve to reduce impacts to stormwater and other natural systems. Flyers for SCD sponsored activities are posted on the City's website and copies are available in the City Hall lobby. Skagit Conservation District staff works closely with Ecology to assure all projects meet the requirements of the Phase II program. Programs sponsored by SCD for 2015:

- February, SCD sponsored a meeting to review the results of the 2013-2014 Skagit Stream Team, Storm Team and Skagit County's water quality monitoring program
- Holistic Manure Management (March)
- Watershed Masters Volunteer Training Program (November)
- Backyard Conservation Stewardship Short Course (March-April)
- Two stormwater facility maintenance workshops for private system operators (April & May). The workshop in April will be held in Sedro-Woolley.

The SCD also surveys class participants for feedback on the training they received.

The City maintains partnerships with the City of Burlington, City of Anacortes, City of Mount Vernon, and Skagit County, which will allow our communities to work together in implementing a stormwater education and outreach programs through the SCD to meet the requirements of the Phase II planning process, avoid duplication of efforts, share resources, and save money.

In addition to coordination with the local permit holders, the permit coordinators from various North Sound permitted jurisdictions meet several times a year to discuss current permit issues, current outreach programs and to hear from various organizations that promote clean water for the Puget Sound as a whole (i.e. Puget Sound Starts Here). These meetings provide a forum to discuss current outreach strategies and their effectiveness and to provide new ideas for future education campaigns.

The City is planning to renew the contract with Ecology to participate in the Local Source Control program for the 2015-2017 period. The purpose of the program is to meet with local businesses to identify and eliminate sources of pollution that may reach ground and surface water or enter into the City's MS4. In the first contract period (2011 to 2013) 100 site visits were made with technical assistance and educational information provided to the local businesses. Another 100 site visits were made in 2013 to 2015.

2.3 LEAD DEPARTMENT AND SUPPORT

The Public Works Department will have primary responsibility for implementing Public Education and Outreach activities. The City's Public Works Department will coordinate activities with the Skagit Conservation District on a year by year contract. The system used to track and maintain records for public education and outreach activities is part of the responsibility of the Conservation Group.

3. PUBLIC INVOLVEMENT AND PARTICIPATION

3.1 PERMIT REQUIREMENTS

The permit requires the City to create and provide opportunities for the public to participate in the decision making process regarding the development, implementation and updates of the SWMP.

The SWMP is required to be posted to the City website by May 31st of each year.

3.2 PLANNED COMPLIANCE ACTIVITIES

Annual reports and the SWMP documents will be posted on the City website and the public is invited to provide comments. Hard copies of the SWMP Plan will be available at City Hall.

Public awareness of these documents is also maintained through some of the activities provided by the SCD.

4. ILLICIT DISCHARGE DETECTION AND ELIMINATION

This section describes the permit requirements, programs, and planned activities related to Illicit Discharge Detection and Elimination (IDDE).

4.1 PERMIT REQUIREMENTS

Section S5.C.3 of the Permit requires the City to:

- Continue the established program to detect and remove illicit discharges, connections and improper disposal, including any spills into the MS4 owned or operated by the City. Update this program as necessary.
- Continue to map the storm sewer system.
- Revisions to ordinances to prohibit illicit discharges, as needed, to comply with current permit requirements (by February 2, 2018).
- Publicize a hotline or other local telephone number for reporting of spills or other illicit discharges. Track illicit discharge reports and actions taken in response to calls.
- Provide appropriate training to staff on identification and reporting of illicit discharges.

4.2 PLANNED COMPLIANCE ACTIVITIES

The City completed its IDDE program document in September 2011. The City will continue this program and revise it as necessary. This document is posted on the City website.

The City continues to refine the GIS map for the stormwater system. Input from inspection and cleaning crews is used to note positional revisions of structures and to note structures that had not been previously accounted for (buried). System map books utilized by the City's Street and Sewer Departments for locates and maintenance will be updated and reissued. Keeping this map up-to-date will insure its usefulness in tracking illicit discharges should a more system wide investigation be necessary.

The original ordinance (effective August 2009) prohibiting illicit discharges and referencing operational and source control BMP's found in the then current Manual (2005) will be updated to reflect the current Manual as well as update enforcement procedures and actions if necessary.

The current permit requires that a field screening of at least 40% of the City's MS4 be completed by December 31, 2017 and an average of 12% per year thereafter. The field

screening consists of proactive activities to identify illicit discharges or connections. Some of the screening methodologies include:

- Business Inspections
- Catch basin & Manhole Inspections
- Ditch Inspections
- Outfall and discharge point Inspections
- Stormwater BMP Inspections
- Video Inspections

The City has been actively utilizing these methodologies for determination of maintenance needs. Visual observations for illicit discharges, spills and connections are now formally incorporated into routine maintenance procedures. Business inspections have been done under the Local Source Control program. An annual goal of 475 catch basin inspections has been established to satisfy Permit requirement S5.C.5.d relating to Municipal Facilities Operations and Maintenance, this goal along with regular maintenance and inspection activities will guarantee that the City will meet or exceed the 40% requirement by the end of 2017.

The IDDE Hotline is established and is posted on the City website. The City will continue to respond to calls, investigate and take appropriate actions

Flyers and posters generated by the Skagit Conservation District and other groups relating to IDDE will be distributed and made available at City Hall. In addition, some of these documents are posted on the City website.

Continue to track and maintain records of calls received, investigations and enforcement actions taken in response to Hotline calls, Environmental Report Tracking System (ERTS) or other reports from the public or City staff.

Provide follow-up training for Public Works staff who would respond to IDDE complaints to make them aware of revised permit requirements. Training is documented in the Staff Training file.

The City continues to rely on the Street Division and Sewer Division of Public Works, the Fire Department and Ecology for assistance with spill response.

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

This section describes the permit requirements, programs, and planned activities related to Controlling Runoff from New Development, Redevelopment and Construction Sites.

5.1 PERMIT REQUIREMENTS

Section S5.C.4 of the Permit requires the City to:

- Implement and enforce a program to reduce pollutants in stormwater runoff that enters the municipal separate storm sewer system from new development, redevelopment and construction site activities. The program must apply to both private and public projects. The minimum performance measures for this program include:
    - Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects to be adopted and effective by December 31, 2016 and apply to permits submitted on or after January 1, 2017. (S5.C.4.a)
    - Continue a permitting process with site plan review, inspection and enforcement for both public and private projects using qualified personnel. (S5.C.4.b)
    - Include provisions to verify adequate long-term operations and maintenance of stormwater treatment and flow control BMP's/facilities that are permitted. (S5.C.4.c)
    - Make available copies of Ecology's "Notice of Intent for Construction Activity" to representatives of proposed developments. (S5.C.4.d)
    - Train staff on the new codes, standards, processes and procedures as needed. (S5.C.4.e)
    - Low impact development (LID) code-related requirements. (S5.C.4.f)
    - Watershed-scale stormwater planning. (S5.C.4.g)
    - Continue to record and track all plan reviews, inspections, maintenance, and enforcement actions by staff for inclusion in the Annual Report.

5.2 PLANNED COMPLIANCE ACTIVITIES

The City's Municipal Code, Chapters 13.36 Stormwater Management and 13.40 Stormwater Maintenance currently adopt the 2005 Ecology Stormwater Manual for Western Washington (Manual). These chapters, in part, address stormwater management from new development and redevelopment projects as required by the

Permit. These chapters will be updated to reference the current Manual as applicable. The Sedro-Woolley Public Works Department Standards are in the process of update to reflect these code revisions. Any necessary revisions will need to be completed, adopted and effective by December 31, 2016.

The City's current permitting process includes site plan review and inspection of all proposed development sites. Inspections include pre-construction site inspections, inspections during construction and project completion inspections. These inspections are performed to insure that erosion and sedimentation controls are installed and maintained properly and upon completion, that the site is permanently stabilized. Throughout the construction process, deficiencies will be noted and enforcement actions taken as needed to bring into compliance. Prior to final approval, insure that maintenance plans are in place, and that the responsible party is assigned for the maintenance of on-site structural BMP's.

To insure that permitted and constructed stormwater treatment and flow control BMP's/facilities are maintained according to the relevant maintenance standards over time, annual inspections will be made for all facilities. There are 72 private facilities (residential and commercial) consisting of ponds, infiltration systems, swales, rain gardens, filters and permeable concrete. The City prioritizes these inspections by focusing on systems installed after 2007 first, then moving on to older systems. Results of City made inspections are sent to the developer or maintenance association for whom the City has or is able to find contact information. Private associations are requested to keep relevant contact information up-to-date with the City. Files have been created for each facility where inspection and communications documents for that system are kept.

During the project pre-application period, developers are informed of Ecology's "Notice of Intent for Construction Activities" (NOI) and advised to review the notice application requirements to see if their project is required to submit an NOI. Developers may download the most current NOI from the City website. The current version is December 2014.

Initial training for staff involved in permitting, plan review, inspection and enforcement procedures consistent with NPDES Phase 2 requirements was completed in August 2009. The City provides construction erosion control training to all staff involved with project inspections and construction activities. Departments receiving training and certification as Certified Erosion and Sediment Control Lead (CESCL) include engineering, streets, parks, sewer and solid waste. There are currently 12 staff members with CESCL certifications. Follow up training will continue as needed.

With the upcoming permit requirements for the mandatory use of Low Impact Development (LID) BMP's, the City will participate in upcoming LID BMP inspection training courses.

By December 31, 2016, the City is required to review, revise and make effective local development-related codes, rules, standards, or other enforceable documents to incorporate and require LID principles and LID BMP's. The document *Integrating LID into Local Codes: A Guidebook for Local Governments* (Puget Sound Partnership, 2012) will be used as a reference during this process. A summary of the review and revisions process will be included in the annual report due March 31, 2017.

For the upcoming code and standards revisions required, the Public works department will work with all necessary departments to insure relevant code and standard revisions are properly coordinated.

Section S5.C.4.g, Watershed-scale stormwater planning, does not apply to Sedro-Woolley as none of its coverage area in within a Phase I county, Skagit County is a Phase II permitted county.

5.3 LEAD DEPARTMENT AND SUPPORT

The Public Works Engineering Department will take the lead with implementing Controlling Runoff from New Development, Redevelopment, and Construction Sites, with assistance from the Planning, Building, and other Public Works Departments.

6. MUNICIPAL OPERATION AND MAINTENANCE

This section describes the permit requirements, programs, and planned activities related to Pollution Prevention and Operation and Maintenance for Municipal Operations.

6.1 PERMIT REQUIREMENTS

Section S5.C.5 of the Permit requires the following from the City:

- Develop and implement an operations and maintenance (O&M) program with the ultimate goal of preventing or reducing pollutant runoff from municipal operations.
    - Implement maintenance standards for the municipal separate stormwater system that are at least as protective as those specified in the current Department of Ecology Stormwater Management Manual for Western Washington and by December 31, 2016 have maintenance standards updated as needed to meet the requirements of the current permit. (S5.C.5.a).
    - Conduct annual inspections of stormwater flow control and treatment BMP's/facilities and take appropriate maintenance actions according to adopted maintenance standards. (S5.C.5.b)
    - Spot check for damage permanent stormwater treatment and flow control/BMP's/facilities after major storm events. (S5.C.5.c)
    - By August 1, 2017 have completed inspections of all catch basins and inlets owned or operated by the City at least once and every two-years thereafter. (S5.C.5.d).
    - Implement practices, policies and procedures 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 City, and to reduce pollutants in discharges from all lands owned or maintained by the City. (S5.C.5.f)
    - Implement an ongoing training program for staff whose job functions may impact stormwater quality. Document the training program. (S5.C.5.g)
    - Implement Stormwater Pollution Prevention Plans (SWPPPs) for all heavy equipment maintenance or storage yards and material storage facilities owned or operated by the City that are not covered by an Industrial Stormwater General Permit.
    - Summarize annual activities for the Annual Report. Include any updates to the SWMP document.

6.2 PLANNED COMPLIANCE ACTIVITIES

Current Sedro-Woolley activities in this area include the following:

The City maintains and inspects city owned storm drain facilities annually or on an as needed basis. These systems include ponds, detention pipes, outlet control structures, pump stations, and infiltration facilities. Maintenance standards currently in use are those specified in the 2005 Manual. The maintenance standards in the current Manual are not significantly different except for the inclusion of LID BMP's and will be formally adopted by December 2016.

After significant storm events, Street department personnel will perform drive-by inspections of the City's facilities to check operation and signs of damage.

All known municipally owned catch basins within the MS4 were inspected by the end of the last permit period. A goal of 475 catch basin per year has been set in order to meet the August 1, 2017 date to have all catch basins inspected at least once. Catch basins and associated lines are cleaned throughout the year when inspections indicate a maintenance standard has been exceeded.

The City performs periodic maintenance activities on stormwater conveyance and publicly owned stormwater facilities to maintain proper function.

Street sweeping and gutter cleaning operations are performed twice weekly with the circuit designed to cover all streets with drainage systems at least monthly on a year round basis.

Staff receives training on maintenance procedures on an as needed basis.

6.3 LEAD DEPARTMENT AND SUPPORT

The Public Works Department has the responsibility for implementing Pollution Prevention and Operations and Maintenance activities.

7. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS

Appendix 2 of the Permit lists the water bodies that have additional permit requirements related to specific TMDL's.

While the City of Sedro-Woolley has not been listed in Appendix 2 of the Permit, there are water quality impairments (303(d) listings for Brickyard Creek that may trigger TMDLs in the future.

Information on Ecology's TMDL program is available on Ecology's website at www.ecy.wa.gov/programs/wq/tmdl.

8. MONITORING AND ASSESSMENT

This section describes the Permit requirements related to water quality monitoring.

8.1 PERMIT REQUIREMENTS

The current Permit allows Permittees to either continue or start monitoring programs in accordance with this section or participate in a newly created Regional Stormwater Management Program (RSMP).

The RSMP was created to provide a collaborative, regional approach to stormwater monitoring in western Washington. The program is based on shared costs among the permittees with Ecology acting as the contracts administrator. By utilizing this collaborative approach, specific monitoring requirements were removed from the permit and individual permittees are not required to conduct Section S8 monitoring activities.

The assumed benefits from this regional monitoring approach include: Feedback on improvements in water quality in receiving waters, regionally consistent methods to collect comparable data, Creates a repository of information on pollution sources, and provides transferable studies of the effectiveness of specific stormwater program activities.

The RSMP is made up of three main elements:

- Status and Trends Monitoring (S8.B): To collect data on the conditions of the water bodies in western Washington
- Effectiveness Studies (S8.C): To collaboratively conduct studies of stormwater program effectiveness.
- Source Identification and Diagnostic Monitoring (S8.D): Provide an information repository related to improving illicit discharge detection and

elimination programs and analysis to support regional source control initiatives.

8.2 PLANNED COMPLIANCE ACTIVITIES

The City has opted to participate in all three of the program elements as attempting to comply with the permit monitoring requirements as an individual entity are cost prohibitive.

Sedro-Woolley's cost for participation in the RSMP will be $6,916 annually, starting in August 2014. The annual cost breakdown is as follows:

- Status and Trends Monitoring - $2,452
- Effectiveness Studies - $4,085
- Source Identification and Diagnostic Monitoring - $379

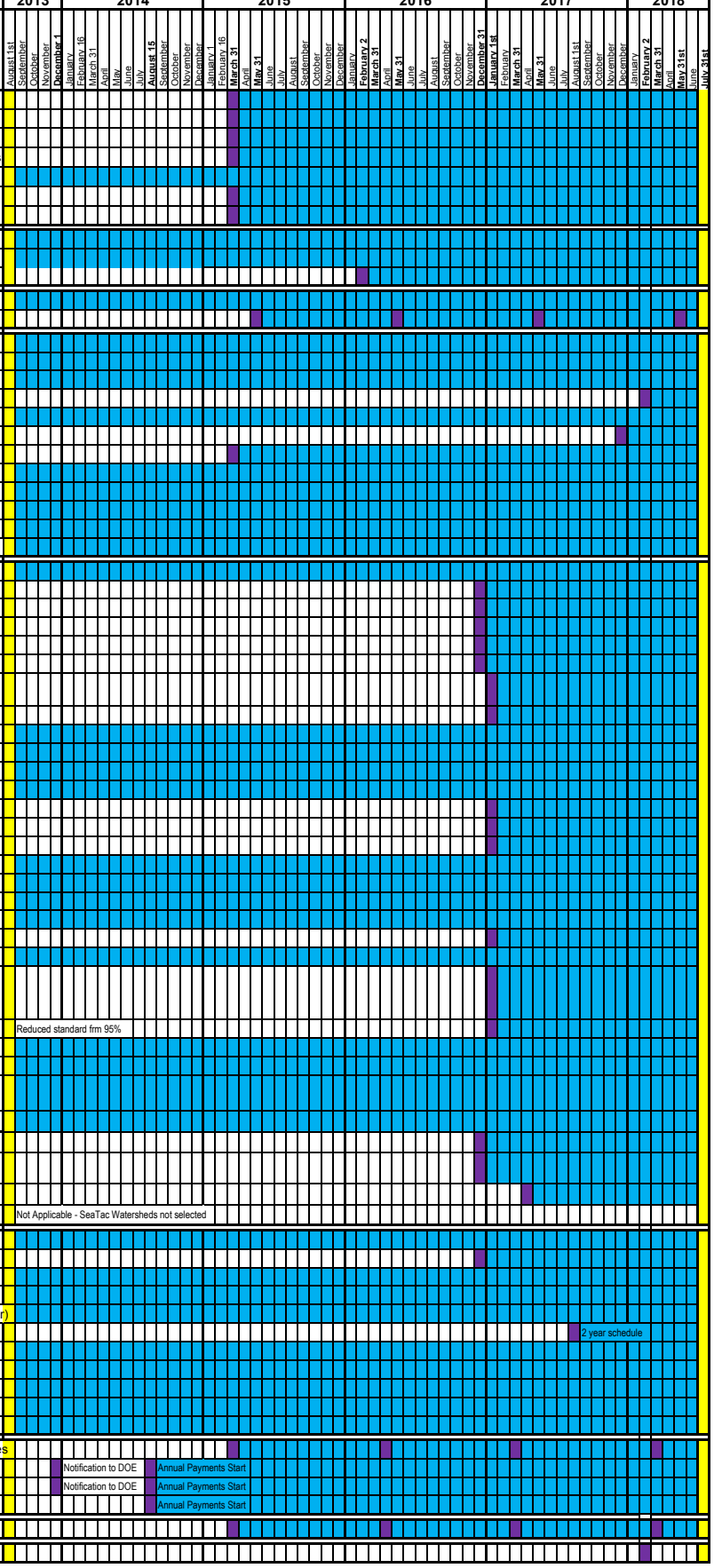
APPENDIX A

Phase II Permit Implementation Schedule

Courtesy of Skagit County

WESTERN WASHINGTON PHASE II MUNICIPAL STORMWATER PERMIT IMPLEMENTATION SCHEDULE

CHAPTER	SECTION	SUB-SECTION	TASKS
S5	A1		SWMP Develop & Implement
	A2		SWMP Plan Annually Updated
	A3	a.	Track Costs or Estimated Costs
		b.	Track Inspections, Enforcements & Public Educ. Activities
	A4		Continue Implementation of Exising Programs
	A5	a.	Include Coord. Mech. wi Other Entities (If Applicable)
		b.	SWMP Includes Internal Coordination Mechanisms
	C1	a.	Public Education & Outreach (Local or Regional)
		b	Create Stewardshp Opportunities
		c	Measure Understanding & Adoption of Behaviors
	C2	a.	Public Involvement & Participation (Create opport.)
		b.	SWMP & Annual Report Website Posting
	C3		Illicit Discharge Detection and Elimination
		a.	Ongoing Stormwater Mapping - periodically update
		a.v	Map All New Connections Since February 16, 2007
		b.	IDDE Ordinance Update
		c.	Illicit Discharge Detection & Elimination Program
		c.i	Field Screen 40% of MS4 12/31/17- 12% yrs thereafter
		c.i	Document Field Screen Methodology in Annual Report
		c.ii	Publically List Phone #'s for Reporting Spills
		c.iii	Ongoing Training all Muni. Field Staff - Lvl B (Tracked)
		c.iv	IDDE Education
		d	
		e.	Ongoing Training IDDE Staff - Lvl A (Tracked)
	C4		Construction Site Runoff Program
		a.	Update Construction Site Runoff Ordinance
		a.i	Adopt Appendix 1 or Approved Phase I Program
		a.i	Adopt Variance Criteria Equiv. to Appendix 1
		a.ii	Site Plan & BMP Select per Append 1 or Approved Ph I
		a.iii	Ord./ Reg. Mech. Giving Legal Authority to Inspect
		b.	Implement Permit Process / Plan Review & Inspect. wi new thresholds
		b.i	Review All Stormwater Site Plans
		b.ii	Pre-Con Site Inspection
		b.iii	Inspect All Sites for Erosion and Sediment Controls
		b.iii	Enforce ESC as Necessary
		b.iv	Final ESC Inspection
		b.iv	Maintenance Plan for New Facilities (Bond Program)
		b.iv	Enforce Maintenance Plan (Bond Program)
		b.v	Minimum 80% Compliance wi Inspect. Requirements
		b.vi	Enforcement Strategy
		c.	O&M for Private Stormwater Facilities & BMPs
			- Long Term Mnt - Treatment & Flow Control BMPS
		c.i	Enforce. Mech. Identifying Responsibilities for O&M
		c.ii	Est. Maint. Standard = to Ch.4 Vol.V of 12' SMMWW
		c.iii	Annual Inspection of Private Facilities Aprvd after 2/15/10
		c.iv	Inspect Bonded Resid. Facilities Every 6 Months until 90% of lots constructed (or when construction stops and sites are fully stabilized)
		c.vi	Compliance = records + 80% scheduled inspections
		c.vi	Perform Timely Maintenance
		c.vii	Track Inspections, Enforcements etc. (All Notices)
		d.	Make NOI for Const. & Industrial Site Avail. & Enforce Local Regs on NPDES Const. Sites
		e.	Train All Applicable Staff on Above Activities (Track)
		f.	Low Impact Development
		f.i.	Incorporate LID into Codes, Rules Stnds & Enf. Docs Making LID Prefered/Commonly Used Approach
		f.ii	Submit Summary of Results of LID Update Process
		g.	Watershed Scale Stormwater Planning wi Phase Is
	C5		O&M Program (for Municipally Owned or Operated)
		a.	Update Maint. Stnds = to Ch.4 Vol.V of 12' SMMWW
		a.ii	Perform Timely Maintenance
		b.	Annually Inspect All Treatment & Flow Cntrl. Facilities
		c	Spot Check Inspections After Major Storms (10 yr 24 Hour)
		d.	Catch Basin Insp. & Mnt. - All by 8/17 - then every 2 yrs
		e.	Ensure 95% compliance for O&M inspections
		f.	Establish & Implem. Practices to Reduce Impacts
		g.	O&M Training Program (Train to Standards)
		i	SWPPPs for All Heavy Equip. Mnt. & Storage Yards
		j	Track Maint. & Repair Activities Identified Above
S8	A		**Monitoring & Assessment** - Submit Stormwatwer Studies
	B1		Status & Trends Monitoring Notification & Contribution
	C1		Effectiveness Monitoring Notification & Contribution
	D		Source Ident. & Diagnostic Monitoring (Info. Repository)
S9	A1		Annual Compliance Report
G18			Apply for permit renewal



LEGEND: Effective & Expiration Dates of Permit | Ongoing Requirement | Permit Deadline

COURTESY OF SKAGIT COUNTY

APPENDIX B

Acronyms and Definitions

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

AKART means all known, and 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. This includes 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.

CFR means Congressional Federal Register.

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. 95-576, 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.

Discharge point [1] means the location where a discharge leaves the permittee's MS4 to another permittee's MS4 or private or public stormwater conveyance. Discharge point also includes the location where a discharge leaves the permittee's MS4 and discharges to ground, except where such discharge occurs via an outfall.

Ecology's Western Washington Phase I Municipal Stormwater Permit regulates discharges from municipal separate storm sewers owned or operated by Clark, King, Pierce and Snohomish Counties, and the cities of Seattle and Tacoma.

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 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 firefighting activities.

IDDE means 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). *Note: The Illicit Discharge Detection and Elimination program requires mapping of outfalls that are 24” or greater in diameter.

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.

MS4 – see **Municipal Separate Storm Sewer System**.

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, city, 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[1] means point source as defined by 40 CFR 122.2 at the point where a discharge leaves the permittee's MS4 and enters a receiving waterbody or receiving waters. Outfall also includes the permittee's MS$ facilities/BMP's designed to infiltrate stormwater.

O&M means 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 city, 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 city, town, or county.

Receiving waterbody or receiving waters[1] means naturally and/or reconstructed naturally occurring surface water bodies, such as creeks, streams, rivers, lakes, wetlands, estuaries, and marine waters to which a discharge occurs via an outfall or via sheet/dispersed flow. Receiving waters also include ground water to which a discharge occurs via facilities/BMP's designed to infiltrate stormwater.

Small Municipal Separate Storm Sewer System or Small MS4 is a conveyance or system of conveyances for municipalities having populations of less than 100,000 according to the 1990 US census. Such systems include road drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and/or storm drains that are:
a. Owned or operated by a city, 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.

SOPs, or standard operating procedures, are the best practice approach to executing tasks or activities. In this document, they primarily pertain to the activities that will be implemented to protect stormwater quality.

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.

[1] Definitions for Outfall and Receiving waterbody have been revised pursuant to permit appeals settlements. Pursuant to this same settlement, a definition of Discharge point was added.

End of Document