

# Phase I Municipal Stormwater General Permit

## Preliminary Draft Language

May 16, 2011

### Note to Reviewers:

The Department of Ecology is soliciting comments on the preliminary draft language in this document for reissuance of the Phase I Municipal Stormwater General Permit. As the permit reissuance process moves from preliminary draft language to the formal draft permit, and then to the final permit, each version will have significant changes as a result of public comments.

The 2011 legislature passed Engrossed Substitute House Bill 1478, which is awaiting the Governor's signature as Ecology begins this informal comment period. While this bill specifically applies to the phase II permits, if the bill becomes law, Ecology is proposing a similar two permit approach for the re-issuance of the phase I permit. During the current public review and comment period, Ecology is asking for feedback on these proposed deadlines for low impact development and monitoring. Ecology is also soliciting comments on a two permit approach for the phase I permit. All the deadlines presented in this proposed preliminary draft language are based on a **permit issuance date of July 1, 2012.**

## Low Impact Development Preliminary Draft Language

### Note to Reviewers:

The preliminary draft language in this section is intended to implement low impact development (LID) requirements in construction and post-construction runoff controls for new development and redevelopment in permitted cities and counties. Preliminary draft changes to Appendix 1 referenced in this section are available online at

[www.ecy.wa.gov/programs/wq/forms/lidspubcomments.html](http://www.ecy.wa.gov/programs/wq/forms/lidspubcomments.html) .

The draft language for review in this document addresses only the implementation of LID requirements in S5.C.5, and does not include draft revisions to other requirements of this program component. Changes to language from the 2007 permit are shown in a line in/line out format. We ask that you limit your comments to the LID-related requirements in this section. Ecology will issue a complete draft permit with all proposed changes to permit language in October 2011 for formal public comment. The formal draft permit and final permit will require permittees to continue to implement existing program requirements, consistent with special condition S5.B.

### 5. Controlling Runoff from New Development, Redevelopment and Construction Sites

- a. The SWMP shall include a program to prevent and control the impacts of runoff from new development, redevelopment, and construction activities. The program shall apply to private and public development, including roads.
- b. Minimum performance measures:
  - i. The Minimum Requirements, thresholds, and definitions in Appendix 1, or Minimum Requirements, thresholds, and definitions determined by Ecology to be equivalent to Appendix 1, for new development, redevelopment, and construction sites shall be included in ordinances or other enforceable documents adopted by the local government. Adjustment and variance criteria equivalent to those in Appendix 1 shall be included. More stringent requirements may be used, and/or certain requirements may be tailored to local circumstances through the use of basin plans or other similar water quality and quantity planning efforts. Such local requirements and thresholds shall provide equal or similar

protection of receiving waters and equal or similar levels of pollutant control as compared to Appendix 1.

- ii. The local requirements shall include a site planning process and BMP selection and design criteria that, when used to implement the minimum requirements in Appendix 1, will protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy the state requirement under chapter 90.48 RCW to apply all known, available, and reasonable methods of prevention, control and treatment (AKART) prior to discharge. Permittees shall document how the criteria and requirements will protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy the state AKART requirements.

Permittees who choose to use the site planning process, and BMP selection and design criteria in the 2005<sup>1</sup> Stormwater Management Manual for Western Washington, or an equivalent manual approved by Ecology, may cite this choice as their sole documentation to meet this requirement.

- iii. Low Impact Development

(1) Permittees shall review and revise their local development-related codes, rules, standards, or other enforceable documents to incorporate and require LID principles and Best Management Practices (BMPs) to the maximum extent practicable. The intent of the revisions shall be to make LID the preferred and commonly-used approach to site development. In reviewing the local codes, rules, standards, or other enforceable documents, Permittees shall look for opportunities to ~~The program must require~~<sup>2</sup> ~~non-structural preventive actions and source reduction approaches including Low Impact Development Techniques (LID), to minimize the creation of impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations. and measures to minimize the disturbance of soils and vegetation where feasible.~~ Permittees shall conduct a review and revision process similar to the steps and range

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<sup>1</sup> Ecology plans to make selected edits to the 2005 Stormwater Management Manual for Western Washington to reflect the LID requirements incorporated into Appendix I. Draft revisions to the manual will be available for review in fall 2011, concurrent with the draft permit.

<sup>2</sup> ~~In order to implement the Pollution Control Hearings Board's language in S5.C.5.b.iii, Ecology will initiate a process to define the scope of LID techniques to be considered, criteria for determining the feasibility of LID techniques, and a LID performance standard. When the process is complete, Ecology will incorporate the results and a deadline for implementation of S5.C.5.b.iii(2) into the permit through a permit modification.~~

of issues outlined in the following document: Integrating LID into Local Codes: A Guidebook for Local Governments (Puget Sound Partnership, 2011).

(2) Permittees shall submit a summary of the results of the review and revision process in (iii) above with the Third Year Annual Report,<sup>3</sup> including at a minimum, a list of the parties participating, the codes, rules and standards and other enforceable documents reviewed, and the amendments made to those documents to implement the LID requirements.

- iv. No later than August 31, 2014<sup>4</sup>~~18 months from the effective date of this permit~~, each Permittee shall adopt and make effective a local program that meets the requirements in S5.C.5.b.i through iii(1), above. Ecology review and approval of the local manual and ordinances is required. Approved manuals and ordinances are listed in Appendix 10. Permittees shall provide detailed, written justification of any of the requirements which differ from those contained in Appendix 1 of this permit.

The Permittee shall submit draft enforceable requirements, technical standards and manual to Ecology no later than December 31, 2013<sup>4</sup>~~12 months after the effective date of this permit~~. Ecology will review and provide written response to the Permittee. If Ecology takes longer than 690 days to provide a written response, the required deadline for adoption will be automatically extended by the number of calendar days that Ecology exceeds a 690 day period for written response.

In the case of circumstances beyond the Permittee's control, such as litigation or administrative appeals that may result in noncompliance with the requirements of this section, the Permittee shall promptly notify Ecology and submit a written request for an extension.

- v. ~~No later than 18 months after the effective date of this permit, t~~he program shall include establish legal authority to inspect private stormwater facilities and enforce maintenance standards for all new development and redevelopment approved under the provisions of this section.

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<sup>3</sup> The Third Year Annual Report covering calendar year 2014 is due no later than March 31, 2015.

<sup>4</sup> Deadlines are based on an issuance date of July 31, 2012.

**Note to Reviewers:** Ecology is asking for comments on options and suggested alternatives for maintenance requirements for LID BMPs. The dispersed nature of many LID BMPs across a development site, many of which are on private property, may require a different approach to maintenance. Maintenance requirements must address maintenance standards for engineered facilities, inspection frequency and time interval for completing the maintenance action.

Options for maintenance standards include but are not limited to those in the *Stormwater Management Manual for Western Washington*, development of standards by Permittees, or adoption of standards already developed by another jurisdiction (for example, the City of Bellevue's 2010 Storm Maintenance Standards at [http://www.ci.bellevue.wa.us/utilities\\_codes\\_standards\\_intro.htm](http://www.ci.bellevue.wa.us/utilities_codes_standards_intro.htm)).

Options for inspection frequency include those already outlined in the permit language below (annual inspections) or alternatives that reflect issues of access to private property and the reduced consequences of failure for a small dispersed facility in comparison to a large, single facility.

Options for time intervals for completing the maintenance actions include those already included in the permit (6 months for typical maintenance) or alternatives that reflect accommodations for seasonal performance of specific maintenance actions.

~~No later than 18 months after the effective date of this permit, t~~The program shall include a process of permits, plan review, inspections, and enforcement capability to meet the following standards for both private and public projects, using qualified personnel:

- Review all stormwater site plans submitted to the Permittee for proposed development involving land disturbing activity that meet the thresholds in S5.C.5.b.i., above.
- Inspect prior to clearing and construction, all permitted development sites that meet the thresholds in S5.C.5.b.i., and that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7.
- Inspect all permitted development sites involving land disturbing activity that meet the thresholds in S5.C.5.b.i., above, during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection.

- Inspect all development sites that meet the thresholds in S5.C.5.b.i., upon completion of construction and prior to final approval/occupancy to verify proper installation of permanent erosion controls and stormwater facilities/BMPs. Enforce as necessary based on the inspection. A maintenance plan shall be developed for permanent stormwater facilities/BMPs, and responsibility for maintenance shall be assigned.
  - Compliance with the above inspection requirements shall be determined by the presence of an established inspection program designed to inspect all sites involving land disturbing activity that meet the thresholds in S5.C.5.b.i. Compliance during this permit term shall be determined by achieving at least 80% of scheduled inspections. The inspections may be combined with other inspections provided they are performed using qualified personnel.
  - The program shall include a procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities shall be maintained.
  - The program shall include an enforcement strategy to respond to issues of non-compliance.
- vii. No later than the effective date of this permit, the Permittee shall make available the "Notice of Intent for Construction Activity" and/or copies of the "Notice of Intent for Industrial Activity" to representatives of proposed new development and redevelopment. Permittees will continue to enforce local ordinances controlling runoff from sites that are covered by other stormwater permits issued by Ecology.
- viii. ~~No later than 18 months after the effective date of this permit,~~ each permittee shall ensure that all staff whose primary job duties are implementing the program to Control Stormwater Runoff from New Development, Redevelopment, and Construction Sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. As determined necessary by the Permittee, follow-up training shall be provided to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

c. Watershed<sup>5</sup>-scale stormwater planning

1. After the effective date of this permit, Permittees shall conduct an analysis (described in S5.C.5.c(2) below) of the impacts to hydrology and water quality for the following actions, prior to taking any of these actions:
  - a. For counties:
    - i. A cumulative expansion of the Urban Growth Area of >80 acres within a watershed, and/or
    - ii. A planned land use action<sup>6</sup> that is projected to increase the total impervious surface area of a watershed by 5% of existing impervious area (e.g. from 10% to 10.5% or from 20% to 21%).
  - b. For cities:
    - i. A cumulative expansion of the incorporated area of the city of >80 acres within a watershed, or
    - ii. A planned land use action that is projected to increase the total impervious surface area of a watershed by 5% of existing impervious area (e.g. from 10% to 10.5% or from 20% to 21%).

2. The analysis required in S5.C.5.c(1) shall include at a minimum the following:
  - a. An assessment of the predicted water quality impacts of the proposed land use action. The assessment shall be conducted at the appropriate scale to address impacts to hydrology and water quality and shall quantify such impacts using computer modeling and other best available science.
  - b. The combination of site, structural, or managerial approaches to minimize the impacts to water quality, such as pollution prevention, treatment, and low impact development measures.
  - c. Measurable targets established to protect the water quality and aquatic habitat of the watershed.
  - d. A statement of the public benefits and costs of the proposed action, including the social, environmental, and economic benefits.

Minimum performance measures:

- a. An analysis that demonstrates compliance with water quality standards in receiving waters and protection of designated beneficial uses.

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<sup>5</sup> For purposes of this section, “watershed” refers to a drainage of between 2 square miles and 40 square miles in size.

<sup>6</sup> Ecology’s proposed language is intended to refer to land use actions such as changes in zoning, UGAs, and densities, rather than site specific projects, unless the project involves a broader land use action such as a change in zoning.

a-b. Compliance with this requirement is achieved by completing the analysis and conducting a public process for review and comment. The Permittee may conduct the public process as part of the State Environmental Policy Act (SEPA) review, or under the Growth Management Act public process, or separate from other processes.

### 3. Reporting

- a. The Permittee shall submit with the annual report for the year in which the proposed land use action is taken a description of the land use action taken and the analysis completed.
- b. The Permittee shall track progress toward meeting measurable targets established in the analysis.
- c. Permittees shall submit with the Fifth Annual Report a report summarizing progress toward achieving these targets.

## Monitoring Preliminary Draft Language

### Note to Reviewers:

The Department of Ecology is soliciting comments on the preliminary draft language in this document for reissuance of the Phase I Municipal Stormwater General Permit. The preliminary draft language in this section is intended to implement S8 Monitoring requirements.

The draft language for review in this document addresses only the implementation of monitoring requirements in S8. We ask that you limit your comments to the monitoring-related requirements in this section. Ecology will issue a complete draft permit with all proposed changes to permit language in October 2011 for formal public comment.

### S8. Monitoring

- A. All Permittees, including Secondary Permittees, are only required to conduct water sampling or other testing during the effective term of this permit under the following conditions:
1. Any water quality monitoring required for compliance with TMDLs, pursuant to section *S7 Compliance with Total Maximum Daily Load Requirements* and Appendix 2 of this permit; and
  2. Any sampling or testing required for characterizing illicit discharges pursuant to sections S5.C.8, S6.D.3, or S6.E.3 of this permit; and
  3. Permittees, including the Port of Seattle and Port of Tacoma, shall continue to implement and complete monitoring studies required under S8.D, S8.E, S8.F and S8.F.7 of the previous permit cycle (Phase I Municipal Stormwater Permit, Feb. 16, 2007 – Feb. 15, 2012).
    - a. For S8.D, *Stormwater Monitoring* is complete when the permittee has collected three complete water years of data.
    - b. For S8.E, *Targeted Stormwater Management Program Effectiveness Monitoring* is complete when the permittee meets Quality Assurance Project Plan (QAPP) schedules, goals, and objectives.
    - c. For S8.F, *Stormwater Treatment and Hydrologic Management Best Management Practice (BMP) Evaluation Monitoring* is complete when the permittee has collected a minimum of 12 samples from both the influent and effluent monitoring stations at each BMP type monitored. In addition, one of the following conditions must also be met:

- i. Statistical goals (determine mean effluent concentrations and mean percent removals with 90-95% confidence and 75-80% power) are met for each monitored parameter.
- ii. A maximum of 35 samples are collected from both the influent and effluent monitoring stations for each BMP type monitored (Ecology's Guidance for Evaluation of Emerging Stormwater Treatment Technologies, 2008).
- d. For S8.F.7, *Flow Reduction Strategy*, this program is complete in accordance with approved QAPP schedules, goals and objectives.
- e. Each Permittee is required to submit an Annual Stormwater Monitoring Report for the previous water year with each Annual Report until monitoring programs are completed.

B. All Permittees shall provide, in each annual report: a description of any stormwater monitoring or stormwater-related studies conducted by the Permittee during the reporting period. Permittees are not required to provide descriptions of any monitoring, studies, or analyses conducted as part of the regional stormwater monitoring program (RSMP) in annual reports. If other stormwater monitoring or stormwater related studies were conducted on behalf of the Permittee, or if stormwater-related investigations conducted by other entities were reported to the Permittee, a brief description of the type of information gathered or received shall be included in the annual report(s) covering the time period(s) during which the information was received.

C. The cities of Seattle and Tacoma, and Snohomish, King, Pierce, and Clark counties, and the Ports of Seattle and Tacoma shall pay into a collective fund and enter into an agreement with the Department to implement a regional stormwater monitoring program (RSMP). The Department will administer the collective fund and implement the monitoring program in accordance with the arrangements between the Department and each Permittee. The agreement will specify the tasks and deliverables of the RSMP. Each Permittee shall pay the amounts prescribed in this section, according to the following schedule:

- 1. The first payment is due October 15, 2012, and subsequent payments are due annually beginning August 15, 2013.

**Note to reviewers:**

- 1. The proposed payment dates above correspond roughly with SWG recommendations. How much time do local governments need to incorporate these requirements into their budgets? What month of the year works best for payment due dates for local governments?

2. The payment amounts are:

Permittee	First payment	Second and Third Payments <i>(option 1)</i>	Second and Third Payments <i>(option 2)</i>	Second and Third Payments <i>(option 3)</i>	Fourth and Subsequent Payments <i>(option 1)</i>	Fourth and Subsequent Payments <i>(option 2)</i>	Fourth and Subsequent Payments <i>(option 3)</i>
Clark County	\$ 15,000	\$ 80,195	\$ 75,802	\$ 23,845	\$119,449	\$ 88,742	\$ 63,099
King County	\$ 15,000	\$116,411	\$107,788	\$ 28,112	\$290,544	\$216,854	\$202,245
Pierce County	\$ 15,000	\$144,928	\$133,654	\$ 30,764	\$361,716	\$265,374	\$247,552
Port of Seattle	\$ 5,000	\$ 47,667	\$ 45,434	\$ 21,722	\$118,970	\$ 99,888	\$ 93,024
Port of Tacoma	\$ 5,000	\$ 28,600	\$ 28,140	\$ 19,949	\$ 71,382	\$ 67,447	\$ 62,731
City of Seattle	\$ 15,000	\$233,379	\$213,884	\$ 38,987	\$582,477	\$415,871	\$388,085
Snohomish County	\$ 15,000	\$114,712	\$106,247	\$ 27,955	\$286,304	\$213,963	\$199,546
City of Tacoma	\$ 15,000	\$ 77,869	\$ 72,829	\$ 24,529	\$194,349	\$151,276	\$141,009

**Note to Reviewers:**

2. What do you think is the best method to equitably allocate monitoring costs among permittees, and why? The costs proposed in the **three options above** were generated by:
  - a. *Option 1*: distributing all RSMP costs among Phase I and II permittees according to population;
  - b. *Option 2*: evenly dividing **half** of the total costs of the Puget Sound receiving water monitoring among the permittees located in Puget Sound, and **all** of the southwest Washington receiving water monitoring costs among the permittees in southwest Washington, and then distributing the remaining RSMP costs among Phase I and Phase II western Washington permittees according to population; and
  - c. *Option 3*: evenly dividing and distributing costs for effectiveness studies and the source identification information repository among all permittees and dividing the remaining RSMP costs according to population.

See the explanatory notes for more information.

**Note to reviewers:**

3. The SWG recommended that there be an option for permittees to decline to participate in the regional effectiveness studies component of the RSMP, but **not** the other components (the status and trends monitoring and the source identification data repository). Ecology has not included an option in this preliminary draft permit for permittees to opt out of the effectiveness study component of the RSMP.
  - a. Do you think there should be such an option?
  - b. If so, what would it look like?
  - c. How would Ecology administer it?
  - d. What would be the assurances that having some permittees opt out of the RSMP efforts would not compromise its chances for success?

**Note to reviewers:**

4. The proposed payment amounts in S8.C.2 for Clark County include a placeholder for a receiving water monitoring program in southwest Washington. Ecology will work with Phase I and Phase II permittees and other stakeholders in southwest Washington to develop a receiving water monitoring program to include in the October formal draft permit. See the explanatory notes for more information.