

February 23, 2023

## WESTERN WA PH II MUNICIPAL STORMWATER PERMIT

# Stormwater management for priority developed areas

Preliminary Draft “Fact Sheet”

The Washington Department of Ecology (Ecology) is working on reissuing the Phase I, Western and Eastern Washington Phase II Municipal Stormwater Permits. Ecology has prepared preliminary draft sections of Permit language and is accepting informal comments on these sections until **11:59 p.m. on March 23, 2023. Send your comments to:**

<https://wq.ecology.commentinput.com/?id=u7Yd3>.

Or mail hard copies to:

Municipal Stormwater Comments  
WA Department of Ecology  
Water Quality Program  
PO Box 47696  
Olympia, WA 98504-7696

## INTRODUCTION

The Western Washington Phase II Municipal Stormwater Permit contains requirements for Permittees to develop and implement stormwater management programs (SWMP) that take a comprehensive approach to address runoff from urban environments – including public education and outreach, operations and maintenance, controlling runoff from new and redevelopment project sites, to name a few of the required programs. However, addressing stormwater impacts from new development and redevelopment at the site and subdivision scale will not adequately address legacy impacts from previous development patterns and practices, nor will it serve to protect areas providing ecological services for stormwater management. It is clear that we cannot protect the state’s waters without also addressing degradation caused by stormwater discharges from existing developed sites. Emerging science on the impacts of road runoff, particularly the chemical 6PPD/6PPD-quinone, also highlights the urgent need to increase stormwater management infrastructure and other BMPs to help manage the issue based on what we know today. We will continue to learn and adapt as the research progresses.

## PROPOSAL BACKGROUND

The 2008 Pollution Control Hearings Board (PCHB) Phase I ruling acknowledged the need for a watershed-scale approach to stormwater management based on the testimony of stormwater experts on all sides of the appeal. Scientists and policymakers recognize that it is not possible to maintain water quality and aquatic habitat in Washington State without considering land use and how the landscape is developed. This must occur at a scale that is broader than individual site and subdivision projects. The PCHB directed Ecology to use Permit requirements to include watershed-scale planning as a water quality management tool to meet MEP and AKART. This preliminary draft proposal builds on previous planning permit requirements to begin implementation of those plans or relevant projects.

In developing the preliminary drafts for both Phase I Structural Stormwater Control (SSC) and the WWA Phase II “retrofit approach” Ecology considered early input on permit reissuance and the recommendations and conversations with the SSC Policy Advisory Committee (PAC); a committee made up of Phase I and Phase II permittees as well as environmental non-profit groups. Recommendations include to incentivize watershed collaboration in permit requirements, as well as right sizing or scaling permit requirements to better align with the variety of Phase II Permittees we cover under one general permit.

PAC members discussed a retrofit approach for Phase II Permittees and provided ideas and shared important considerations. Due to the make-up of the PAC members, there were multiple perspectives offered, ranging from not including these types of requirements in the Phase II permit, to having a simple reporting requirement, to requiring stormwater BMPs at some level based on a metric to scale the requirement (so that it is not the same level of effort for a small jurisdiction versus a larger jurisdiction). The feedback informed Ecology of Phase II’s potential limits in implementing a retrofit program, and the desire to address stormwater impacts to receiving waters.

Ecology is requesting informal comments on this proposed stormwater retrofit approach for the 2024 Permit cycle Western WA Phase II Permit. We are also providing a preliminary draft of the Phase I Municipal Stormwater Permit’s Structural Stormwater Control (SSC) section for informal comment.

## STORMWATER CONTROL FOR PRIORITY DEVELOPED AREAS

We propose adding a new section called “Stormwater control for priority developed areas” (very generally referred to in this document as a “retrofit program”) to the Western WA Phase II Permit’s Stormwater Management Program (SWMP) that builds on the Stormwater Management Action Plans (SMAP) and Phase I SSC Program requirements. The following provides the overall approach and is not permit language. We request your input on all aspects of this proposal. The proposed program will contain two main provisions:

1. Strategic investments for stormwater management actions: Aimed at leveraging the SMAP and implementing the projects identified through that process, this is intended to drive strategic investments in stormwater management actions and infrastructure. Strategic investments would prioritize structural BMPs such as stormwater facility

retrofits. If the SMAP development indicated these structural BMP's were infeasible or that an alternative management approach was more beneficial, other stormwater management actions, such as focused source control or land management strategies may be implemented.

2. Opportunistic stormwater controls: Aimed at encouraging eligible project types to improve stormwater management infrastructure. These projects do not need to be included in an SMAP to help address the stormwater runoff issues in the area. This is intended to drive stormwater investment wherever feasible and needed. This provision will be modeled after the Phase I SSC Program, including the list of eligible project types.

Permittees will be required to meet an overall "level of effort" (i.e. performance measures in the term use in the Permits) and be able to use one or both provisions to meet the requirement. This may change in the future permits as we learn how to best apply and determine level of effort.

### **Strategic investments for stormwater management actions**

Ecology has developed a preliminary draft proposal to create a Phase II "retrofit program" that builds on the Stormwater Management Action Plans (SMAP) required in the current 2019 permit, which required Permittees to:

1. Conduct a receiving water assessment to ensure that Permittees compile and review existing data and information on their receiving waters and contributing area conditions.
2. Develop a receiving water prioritization method and process to rank high priority areas where stormwater retrofits and other management actions would provide a water quality benefit to receiving waters.
3. Use the prioritized ranking as the basis for creating a plan for one priority area that takes into account tailored stormwater management strategies, including identification of the potential need for stormwater treatment or flow control BMPs to address existing or planned development.

The SMAP, or plan for one priority catchment, is required to identify:

- A description of the stormwater facility retrofits needed for the area, including the BMP types and preferred locations.
- Land management/development strategies and/or actions identified for water quality management.
- Targeted, enhanced, or customized implementation of stormwater management actions related to permit sections within S5, including:
  - IDDE field screening,
  - Prioritization of Source Control inspections,
  - O&M inspections or enhanced maintenance, or
  - Public Education and Outreach behavior change programs.

Identified actions shall support other specifically identified stormwater management strategies for the basin overall, or for the catchment area in particular.

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- If applicable, identification of changes needed to local long-range plans, to address SMAP priorities.
- A proposed implementation schedule and budget sources for:
  - Short-term actions (i.e., actions to be accomplished within six years), and
  - Long-term actions (i.e., actions to be accomplished within seven to 20 years).
- A process and schedule to provide future assessment and feedback to improve the planning process and implementation of procedures or projects.

SMAPs are to identify stormwater facility retrofits and targeted non-structural BMPs to improve receiving water conditions. Permittees are required to submit their SMAPs at the end of March 2023 and Ecology will be able to use those submittals to better inform this proposal for the formal draft. We believe it's important to propose this approach early on. We will use feedback to develop and propose more informed requirements for the formal draft permit, anticipated to be released for public comment in late summer 2023.

### **Opportunistic stormwater controls**

The proposed Phase II approach will use elements from the Phase I Structural Stormwater Control (SSC) Program, specifically the project types that are eligible for providing credit to the level of effort, as well as the method for calculating the area being treated by the stormwater BMP – i.e. the method to determine “equivalent area” that is meeting new and redevelopment standards from the permit’s Appendix 1. Although retrofit projects may not always be able to meet new and redevelopment standards for BMP sizing, the equivalent area calculation provides a means of comparing the water quality or flow control benefit of the project.

The Phase I SSC Program (Permit section S5.C.7) is on its fourth iteration in the 2019 permit, which requires Permittees to design and construct eligible SSC projects based on a locally developed program that includes a process to prioritize and implement projects. The SSC Program includes a list of eligible project types which can receive SSC Points, or credit, toward meeting a required level of effort to comply with this provision. The Phase II approach does not propose using the SSC Point process, but an alternative method described later in this document, in order to simplify the reporting and calculation metric. We expect to be able to adaptively manage this approach as needed for future permit cycles. The following SSC Qualifying Project Types are proposed to be included in the Phase II approach for determining the eligible project types that can receive credit towards the level of effort.

### **SSC Qualifying Project Types**

1. New flow control facility
2. New runoff treatment facility (or treatment and flow control facility)
3. New LID BMPs
4. Retrofit of existing treatment and/or flow control facility
5. Property acquisition
6. Maintenance with capital construction costs  $\geq$  \$25,000
7. Restoration of riparian buffer
8. Restoration of forest cover
9. Floodplain reconnection projects
10. Removal of impervious surfaces
11. Sweeping and line cleaning (previously called “other actions”)
12. Watershed collaboration (new – see Phase I SSC preliminary draft)

### **Non- Qualifying Project Types**

- Projects that do not have a nexus with the current MS4 or do not prevent future MS4 impacts.
- Projects that occur within the receiving water do not qualify, such as:
  - In-channel habitat and stream restoration
  - Fish barrier removal
  - Stabilization of down cutting
  - In-stream culvert replacement
  - Mitigation projects otherwise required to compensate for problems caused by excessive
  - Stormwater runoff peak flows and geomorphologically significant flows
  - Wetland restoration projects may qualify if existing degraded wetlands are designed to become treatment wetlands in accordance with the SMMWW. Such a project would be a “New Treatment Facility” Project Type.

These eligible project types, and the equivalent area calculation from the SSC Program will also be used to help quantify SMAP projects as well. SSC Project Types 5-12 above, are not a perfect fit for the Phase II proposed level of effort, Ecology is considering how to credit these types of projects for Phase II. Non-structural BMPs from SMAP and SSC are important source control practices – reporting these actions will be important to understand the efforts taken to improve receiving waters.

## WWA Phase II Proposed level of effort

This preliminary draft proposes a scaled level of effort to address the variety of Phase II Permittees covered by the Permit. We reviewed several retrofit programs that are included in other Municipal Stormwater Permits in the country, as well as looked at alternative metrics for scaling, including impervious surface, median household income, housing units, as well as some additional economic factors, such as stormwater utility revenue and grant funding. Each metric has its own advantages and disadvantages. This proposal landed on population as the method to scale the level of effort for Phase II jurisdictions because population data is available and reliable and population level balances some resources and challenges for permittees.

1. All Phase II Permittees will be assigned a level of effort of five acres area “managed” per 50,000 population.
  - a. Acres of land “managed” are based on equivalent area calculations from Phase I SSC Program. This means that a project will be given credit based on new and redevelopment standards. This equivalent area calculation is based on a scale that compares the amount of runoff treatment or hydrologic control achieved through the proposed project to the amount achieved if you designed the project to meet the new and redevelopment criteria for the area draining to the new BMP(s). For projects under an acre, the total basin area may be used rather than the equivalent area calculation. This calculation translates most easily for flow control, runoff treatment, or LID BMPs.
    - i. Equivalent area is determined according to [Appendix 12](#) of the Phase I permit. See Appendix 12 for guidance on calculating equivalent area per project type.
  - b. Assignment of acres of land “managed” by Permittee is proposed to be scaled:
    - i. Based on 2020 population, with a minimum of 0.3 acres to a maximum 15 acres.
  - c. Projects that have started construction on or after June 30, 2023 and projects not yet started but fully funded by June 30, 2029 can be included to meet this requirement.
  - d. Non-structural BMPs associated with the SMAP may also contribute to meeting this requirement. We request comments on how to provide credit for SMAP specific projects that are not aligned with the eligible project types from the Phase I SSC Program. SMAPs are required to identify if any of these actions are appropriate for the priority catchment but these actions do not easily translate to an acres managed calculation like the project types in the SSC Program:
    - i. Land Management/development strategies
    - ii. Targeted, enhanced or customized implementation of stormwater management actions related to permit section S5, including:
      - 1) IDDE field screening
      - 2) Prioritization of IDDE, Source Control, or O&M inspections, or
      - 3) Public Ed and Outreach behavior change programs.

The land area that benefits from these actions can be calculated and may provide a method to meet the assigned level of effort. We request comments on this approach or other methods to quantify the benefits of these actions, as well as the less traditional structural retrofits from SSC (Projects 5-12).

- e. No more than 50% of Level of Effort may be met through line cleaning and additional sweeping above the proposed new sweeping requirements.
- f. Individual requirement with collaborative allowance.
  - i. Each Permittee is required to implement 0.3 acres within their own jurisdiction but may contribute to meeting an overall regional goal.
    - 1) For Permittees assigned 0.3 acres, participation and in-kind services to regional collaboration/watershed projects may count as the contribution for this permit cycle, if there is regional agreement on the strategy.  
Permittees may contribute to a regional goal, which will be the sum of Phase II partners assigned acreage. Projects may be implemented outside of permit coverage areas to meet their individual requirement or regional goal, so long as the receiving waters within the permit coverage areas will benefit.
    - 2) If Phase II partners with a Phase I permittee, Phase I permittees are still responsible for their required level of effort as proposed in their respective permit programs.
    - 3) 3. If collaborative projects reach an interlocal agreement or committed funding stage, Phase II permittees would get up to 15 percent of their acreage credit towards these collaborative projects.
- g. Tribal Considerations – we request comments on how to incorporate benefits to Tribal Waters and resources.
- h. Overburdened Community considerations – we request comments on how to incorporate benefits to overburdened communities. SMAP guidance recommended stormwater planning consider needs of overburdened communities. This proposed program can also provide benefits to overburdened communities.

Permittees will need to complete or fully fund projects that will provide runoff treatment or flow control for the assigned equivalent acres (comparable to Appendix 1 new and redevelopment standards) or other SMAP or SSC projects that contribute to the assigned amount).

**Table 1: Proposed level of effort for Phase II Permittees.**

<b>PERMITTEE</b>	<b>POPULATION</b>	<b>PROPOSED ASSIGNED EQUIVALENT ACRES BASED ON 5 ACRES/50,000 POP.</b>
<b>CITY OF MEDINA</b>	2,915	0.3
<b>CITY OF CLYDE HILL</b>	3,126	0.3
<b>CITY OF ALGONA</b>	3,290	0.3
<b>CITY OF GRANITE FALLS</b>	4,450	0.4
<b>CITY OF BLACK DIAMOND</b>	4,697	0.5
<b>CITY OF BRIER</b>	6,560	0.7
<b>CITY OF STEILACOOM</b>	6,727	0.7
<b>CITY OF NORMANDY PARK</b>	6,771	0.7
<b>CITY OF FIRCREST</b>	7,156	0.7
<b>CITY OF PACIFIC</b>	7,235	0.7
<b>CITY OF DUVALL</b>	8,034	0.8
<b>CITY OF MILTON</b>	8,697	0.9
<b>CITY OF ORTING</b>	9,041	0.9
<b>CITY OF BURLINGTON</b>	9,152	0.9
<b>CITY OF SNOHOMISH</b>	10,126	1.0
<b>CITY OF DUPONT</b>	10,151	1.0
<b>CITY OF SHELTON</b>	10,371	1.0
<b>CITY OF SUMNER</b>	10,621	1.1
<b>CITY OF FIFE</b>	10,999	1.1
<b>COUNTY OF SKAGIT</b>	11,396	1.1
<b>CITY OF POULSBO</b>	11,975	1.2
<b>CITY OF GIG HARBOR</b>	12,029	1.2
<b>CITY OF EDGEWOOD</b>	12,327	1.2
<b>CITY OF SEDRO-WOOLLEY</b>	12,421	1.2
<b>CITY OF ENUMCLAW</b>	12,543	1.3
<b>CITY OF KELSO</b>	12,720	1.3
<b>CITY OF NEWCASTLE</b>	13,017	1.3
<b>COUNTY OF COWLITZ</b>	13,059	1.3
<b>CITY OF WOODINVILLE</b>	13,069	1.3
<b>CITY OF LAKE FOREST PARK</b>	13,630	1.4
<b>CITY OF SNOQUALMIE</b>	14,121	1.4
<b>CITY OF FERNDALE</b>	15,048	1.5
<b>CITY OF PORT ORCHARD</b>	15,587	1.6
<b>CITY OF LYNDEN</b>	15,749	1.6



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PERMITTEE	POPULATION	PROPOSED ASSIGNED EQUIVALENT ACRES BASED ON 5 ACRES/50,000 POP.
COUNTY OF WHATCOM	16,401	1.6
CITY OF ABERDEEN	17,013	1.7
CITY OF WASHOUGAL	17,039	1.7
CITY OF ANACORTES	17,637	1.8
CITY OF CENTRALIA	18,183	1.8
CITY OF MONROE	19,699	2.0
CITY OF ARLINGTON	19,868	2.0
CITY OF PORT ANGELES	19,960	2.0
CITY OF BATTLE GROUND	20,743	2.1
CITY OF COVINGTON	20,777	2.1
CITY OF MILL CREEK	20,926	2.1
CITY OF MOUNTLAKE TERRACE	21,286	2.1
CITY OF MUKILTEO	21,538	2.2
CITY OF BUCKLEY	21,750	2.2
CITY OF TUKWILA	21,798	2.2
CITY OF MAPLE VALLEY	23,013	2.3
CITY OF KENMORE	23,914	2.4
CITY OF OAK HARBOR	24,662	2.5
CITY OF BAINBRIDGE ISLAND	24,825	2.5
CITY OF TUMWATER	25,573	2.6
CITY OF MERCER ISLAND	25,748	2.6
CITY OF CAMAS	26,050	2.6
CITY OF BONNEY LAKE	26,065	2.6
CITY OF BOTHELL	28,956	2.9
CITY OF SEATAC	31,454	3.1
CITY OF DES MOINES	32,888	3.3
CITY OF UNIVERSITY PLACE	34,866	3.5
CITY OF MOUNT VERNON	35,219	3.5
CITY OF LAKE STEVENS	35,630	3.6
CITY OF LONGVIEW	37,818	3.8
CITY OF LYNNWOOD	38,568	3.9
CITY OF ISSAQUAH	40,051	4.0
CITY OF EDMONDS	42,858	4.3
CITY OF PUYALLUP	42,973	4.3
CITY OF BREMERTON	43,505	4.4
COUNTY OF THURSTON	50,611	5.1
CITY OF BURIEN	52,066	5.2
CITY OF LACEY	53,526	5.4

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PERMITTEE	POPULATION	PROPOSED ASSIGNED EQUIVALENT ACRES BASED ON 5 ACRES/50,000 POP.
<b>CITY OF OLYMPIA</b>	55,382	5.5
<b>CITY OF SHORELINE</b>	58,608	5.9
<b>CITY OF LAKEWOOD</b>	63,612	6.4
<b>CITY OF SAMMAMISH</b>	67,455	6.7
<b>CITY OF MARYSVILLE</b>	70,714	7.1
<b>CITY OF REDMOND</b>	73,256	7.3
<b>COUNTY OF KITSAP</b>	74,623	7.5
<b>CITY OF AUBURN</b>	87,256	8.7
<b>CITY OF BELLINGHAM</b>	91,482	9.1
<b>CITY OF KIRKLAND</b>	92,175	9.2
<b>CITY OF FEDERAL WAY</b>	101,030	10.1
<b>CITY OF RENTON</b>	106,785	10.7
<b>CITY OF EVERETT</b>	110,629	11.1
<b>CITY OF KENT</b>	136,588	13.7
<b>CITY OF BELLEVUE</b>	151,854	15
<b>CITY OF VANCOUVER</b>	190,915	15