



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
WATER AND
WATERSHEDS

FEB 03 2012

Reply To: OWW-135

Kelly Susewind, P.E., P.G., Manager
Water Quality Program
Washington State Department of Ecology
Post Office Box 47696
Olympia, Washington 98504-7696

Dear Mr. Susewind:

The U.S. Environmental Protection Agency Region 10 has reviewed Ecology's draft Phase I and Western Washington Phase II municipal separate storm sewer system (MS4) permits that are proposed to be effective on August 1, 2013. The EPA would first like to acknowledge the tremendous amount of hard work your staff has put in over the past several years developing these draft permits. As you know, the Western Washington MS4 permits are critically important to protect and restore Puget Sound and to aid in recovery of Endangered Species Act (ESA) listed salmon species and killer whales.

The EPA has summarized its comments below in two sections. The first section provides comments on new permit provisions that the EPA supports; we believe these provisions are necessary in order for these MS4 permits to meet Clean Water Act (CWA) requirements for discharges from MS4s. The second section provides the EPA's recommendations for improving the MS4 permits. Also, the enclosure to this letter identifies permit provisions that the EPA believes warrant further clarification. Lastly, pursuant to Section III.C.3 of the 1989 NPDES Memorandum of Agreement between the EPA and the Washington Department of Ecology (Ecology), the EPA requests the opportunity to review the proposed final permits prior to final issuance.

Important New Permit Provisions

Removal of the Phase II 1-acre threshold – the EPA supports the proposed new development project size thresholds in the updated Phase II MS4 permit. The EPA believes these thresholds are necessary to protect aquatic uses and are practicable for Phase II MS4s to implement. Studies done in the Puget Sound basin have shown that a significant amount of new development projects are less than 1-acre and that the cumulative impact of these projects in a watershed can adversely affect streams. New development requirements for the Phase I MS4s (e.g., King and Pierce Counties and the cities of Seattle and Tacoma) have applied lower project thresholds for many years. Ecology's stormwater manuals for Western Washington have recommended thresholds similar to those proposed for the updated Phase II MS4 permit since 1992 and the Phase I MS4 permit has required these lower thresholds since 1995. Further, as noted in the Phase II Fact Sheet, the vast majority of Phase II jurisdictions already include thresholds lower than 1-acre in their municipal codes.

Low Impact Development (LID) requirements– the EPA has some comments on the LID requirements as set forth in more detail in the section below; however, the EPA is very supportive of the LID requirements, in general. The shortcomings of sole reliance on traditional stormwater management methods (e.g., pipes and ponds) and the environmental and economic benefits of LID are well established.

The EPA supports the overall framework to include LID requirements at the site and subdivision scale, in local codes, and at the watershed scale. The EPA appreciates Ecology’s consideration of EPA and other stakeholder comments in the development of the LID provisions. Specifically, the EPA commends Ecology for directive, yet flexible, requirements for code revisions. In addition, the EPA is supportive of the inclusion of the watershed scale LID requirement for Phase I MS4s which requires these MS4s to lead watershed planning projects in selected basins.

Stormwater monitoring – the EPA supports the monitoring provisions in the Western Washington MS4 permits. A comprehensive stormwater monitoring program for the Puget Sound basin is long overdue. The EPA commends Ecology for its collaborative process of working with local jurisdictions to develop the monitoring program.

New permitted areas – the EPA supports inclusion of the MS4s for the Cities of Lynden and Snoqualmie and portions of Clallam, Island, Lewis, and Whatcom Counties as proposed in the Phase II MS4 permit. The EPA believes these areas easily meet the criteria for permit coverage. As discussed below, EPA believes more areas within the Puget Sound watershed need to be covered by the Phase II MS4 permit and would support the designation of these areas as regulated Phase II MS4s.

Recommended Changes to the Western Washington MS4 Draft Permits

When projects must meet the updated new development requirements – the EPA supports Ecology’s inclusion of permit language to define when the new development requirements apply to projects. However, the EPA believes language needs to be added that would clarify that any “stormwater site plan” submitted by a building applicant after the effective date of the MS4s updated stormwater ordinance (no later than January 1, 2015 or January 1, 2016 in Phase I and Phase II jurisdictions, respectively) must comply with the new and redevelopment requirements in the updated ordinance. This language would clarify that when an applicant submits a vague site plan lacking detailed plans to meet stormwater requirements (e.g., a preliminary plat) prior to the effective date of the updated stormwater ordinance, and then subsequently submits a “stormwater site plan” after the effective date of the updated ordinance, the stormwater requirements in the updated ordinance apply to the “stormwater site plan.”

LID Mandatory List #2 – the EPA has concerns about Mandatory List #2 because protection of native vegetation is not included, especially where the majority of the listed best management practices (BMPs) are deemed infeasible. The EPA recognizes that the required revisions to local codes may result in some protection of vegetation on project sites. However, since Mandatory List #2 is likely to be the option selected for many projects and poor draining till soils will cause many listed BMPs to be infeasible in the Puget Sound region, the EPA is concerned that the result will be very little LID implementation for a significant number of projects. Thus, EPA recommends that for new development outside Puget Sound Regional Council’s (PSRC) regional growth centers, a native vegetation area requirement be included as part of Mandatory List #2. The EPA believes the native vegetation percent targets developed as part of the Puget Sound Partnership’s LID local regulatory assistance project are reasonable and should be used. The EPA believes current local codes related to set-backs, plantings,

buffers, and open space already provide a significant amount of non-buildable space to meet a native vegetation requirement. The EPA also notes that including a native vegetation requirement as part of this mandatory list is reasonable because the list is an *optional* alternative to the LID performance standard.

LID feasibility criteria – the EPA recognizes there are limitations to LID on certain project sites and that the permits must have provisions to address those circumstances. The EPA also believes that for almost all projects, some amount of LID is feasible. Below are the EPA’s recommendations on the feasibility criteria in Section 8 of Appendix 1 of the Western Washington MS4 permits:

1. For both bioretention and permeable pavement, clarify that an infeasibility determination for one portion of the site does not make the use of these techniques infeasible on other locations on the site.
2. Remove the general “geotechnical evaluation recommending that infiltration not be used” infeasibility criterion for both bioretention and permeable pavement. A geotechnical evaluation should be able to cite one of the other listed criteria as a reason for infeasibility.
3. Remove the bioretention “not compatible with surrounding drainage system” infeasibility criterion because it is vague.
4. Restrict the bioretention “lack of useable space” infeasibility criterion and specify that it only applies to allow for not fully achieving the 5% sizing requirement for Mandatory List #2. Limit to PSRC regional growth centers and for redevelopment projects outside regional growth centers where the *current* building limits the ability to achieve the 5% sizing requirement. It should also state that bioretention should be used on these sites to the extent space is available where it is otherwise technically feasible.
5. The “less than 0.3 inches per hour soil infiltration” infeasibility criterion for permeable pavement should be lower. Relative to bioretention, permeable pavement has a smaller requirement for drawdown time (because water is stored underground) and the surface available for infiltration is greater.
6. Remove the “native soils that do not meet treatment criteria” infeasibility criterion for permeable pavement. In this case, soil amendment should be required.
7. Remove the “local codes, standards, and rules” competing needs infeasibility criterion for the on-site Stormwater Management requirements or only provide this criterion for PSRC regional growth centers. The EPA believes this situation is most likely to arise in urban growth centers that include zero set-back and other zoning features for higher density development. The EPA also believes this situation could also be addressed through a process where specific codes are submitted by a local jurisdiction and are approved by Ecology for this purpose.

Structural “retrofit” stormwater program – the EPA recommends that additional reporting and a performance target be added to the Phase I MS4 permit. In addition, the EPA recommends that a basic structural retrofit program be included in the Phase II MS4 permit. Reducing and treating stormwater runoff from already developed areas is necessary in order to achieve the goal of a clean Puget Sound and to improve salmon habitat in urban and urbanizing watersheds. The EPA believes including a meaningful retrofit program as a requirement in the MS4 permits is essential to meet these goals.

The EPA recommends the Phase I MS4 permit require jurisdictions to report their annual expenditures on stormwater retrofit projects, including a separate accounting of local, state, and federal funds for each specific project. This will help Ecology and others characterize and track stormwater investments at the regional scale. The EPA also recommends that 0.5% of the impervious area (with little or minimal stormwater controls) within each Phase I jurisdiction be treated or controlled over the 5 year term of the permit. As a point of reference, the EPA's recently issued MS4 permit for Washington D.C. includes a requirement to retrofit 418 acres over the permit term, which is approximately 1% of the area of the city.

The EPA recommends the Phase II MS4 permit require jurisdictions with a population greater than 10,000 to develop a structural stormwater control plan to prioritize stormwater retrofit projects and report their annual project expenditures from local, state, and federal funds. The EPA believes most Phase II jurisdictions already do this to some extent as part of the 6-year stormwater capital improvement plan (CIP). At the very least, this requirement will help direct state and federal funding to priority projects.

New permitted areas – the EPA believes it is important for new development projects throughout the entire Puget Sound region to meet the requirements that are proposed in the Western Washington MS4 Draft Permits. Given the efforts to protect and restore the Puget Sound watershed, it makes no sense for development projects to add impervious surface and remove tree cover anywhere in the region without appropriate stormwater mitigation.

Although covering all Puget Sound jurisdictions under the MS4 permits may not be the only way to ensure this level of protection, it is one reasonable approach. Another approach that the EPA recommends in the near term is to ensure that all Puget Sound Urban Growth Areas (UGA) are covered under the MS4 permits. This is reasonable because these areas will receive most of the growth in the future and will include discharges from MS4s.

The additional areas that Ecology proposes to cover under the Phase II MS4 permit are a step in the direction of covering all Puget Sound UGAs. However, there are other UGAs that EPA believes meet the designation criteria and should be covered under the Phase II MS4 permit. Those areas include: the cities of Blaine, Stanwood, Sulton, Eatonville, Yelm, Shelton, Port Townsend, and Sequim and the currently unpermitted UGAs in Whatcom, Thurston, Mason, Kitsap, Jefferson, and Clallam counties.

PSRC regional growth centers – the EPA shares the view expressed by others that stormwater requirements, including LID requirements, need to be designed to ensure compatibility with the State's Growth Management Act goals of discouraging sprawl and focusing growth into urban areas supported by adequate facilities. Some have expressed particular concern around the potential for LID requirements to interfere with higher density urban development. Although the EPA believes LID is feasible in the urban environment, there are likely to be more limitations in a highly urban setting relative to a sub-urban setting.

Thus, more flexibility regarding LID implementation may be warranted in highly urbanized areas. The EPA, therefore, suggests that the PSRC regional growth centers be utilized to differentiate LID

requirements and feasibility criteria as a means to allow greater flexibility in implementing LID requirements in highly urbanize areas. Some of the EPA recommendations above follow this approach and it may be the case that other permit provisions could differentiate on this basis.

Thank you for consideration of our comments. If you have any questions or concerns, please contact me at (206) 553-4198 or John Palmer at (206) 553-6521.

Sincerely,

A handwritten signature in black ink, appearing to read "Christine Lough for", written in a cursive style.

Mike Bussell, Director
Office of Water and Watersheds

Enclosure

Enclosure: Additional Comments on Specific Draft Permit Provisions

Regarding Permit Parts S5.A.3, (tracking of the # of inspections) and S5.C.5.a.v.4 (presence of an established inspection program) – EPA believes that it is important for the MS4 permittee to include information regarding the number of inspections that were conducted in a given year in each corresponding Annual Report. In addition, the EPA believes that the MS4 permittee should also be required to provide a description of the inspection program and inspection schedule in the Annual Report. At the very least, the EPA would like Ecology to clarify its rationale for how it will determine compliance with these requirements and/or why such information is not necessary?

Regarding Permit Part S5.C.8.b.ii.5 (other non-stormwater discharges) – EPA interprets this Part to mean that “Other discharges shall be in compliance with the requirements **dependent on** a pollution prevention plan reviewed **and approved** by the Permittee which addresses such discharges.” Can Ecology clarify its intention with the provision as currently drafted?

Regarding Permit Part S5.C.9.c.ii – EPA recommends that Ecology provide a definition for “major storm event.”

Regarding Permit Parts S6.D.3.d and S6.D.7.d (number of outfalls screened and inspected, respectively) – As drafted, these provisions could be interpreted as though the same 20% of selected outfalls may be screened each year. The EPA recommends that the provisions be revised to explicitly require, by the end of the permit term, that 100% of the MS4 outfalls have been evaluated in the field and/or inspected. Can Ecology clarify why such an expectation is included in the permit text?