



City of Battle Ground

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Comments on NPDES Phase II Municipal Stormwater Permit Preliminary Draft

Thank you for the opportunity to provide comments on the preliminary draft of the NPDES Phase II permit changes. Upon review of the draft language the City of Battle Ground has prepared the following list of comments. We look forward to these issues being addressed in the next draft of the permit.

Phase II Municipal Stormwater General Permit Preliminary Draft Language

1. Controlling runoff from New Development, Redevelopment and Construction Sites

Comment: Removal of the 1 acre threshold will further stifle development in an already extremely difficult development climate. This provision should be left in place to allow at least some development to occur in small Phase II jurisdictions.

2. Low Impact Development

Comments:

Reviewing and revising Municipal Codes to remove barriers and to promote the use of LID is a good idea, and is required under the current permit. More discussion and clarification of what LID practices may be required in areas that are not suitable for common LID best management practices (i.e. high groundwater, poorly infiltrating soils) is needed before the permit calls for codes to REQUIRE LID. Additionally, LID requirements developed for Puget Sound that the current draft references may not be compatible with conditions found in the rest of Western Washington.

Further consideration must also be made for inspection of LID facilities. By its very nature LID will create several times the number of stormwater facilities that need to be inspected when compared to “traditional” stormwater management. These facilities will also often be located on private property that City staff may not be able to freely access. Furthermore, with the increased number of facilities there will be a corresponding increase in the staff time required to inspect these facilities. This is a difficult proposition in a time when most jurisdictions are operating at or below minimum staff capacity.

3. Watershed-scale stormwater planning

Comments:

Requiring an analysis of hydrology and water quality for annexations over 80 acres or for land use actions that increase impervious areas by more than 5% is illogical. Permittees are already required to ensure that new and re-development projects meet the minimum requirements of Appendix 1 of the permit. The basis of these minimum requirements is to reduce the discharge of pollutants to the maximum extent practicable and to require projects to provide flow control to reduce the impacts of stormwater runoff. By following these requirements flows off of development will not increase , and will likely decrease due to the pre-developed forested condition requirement.

Additionally the tools needed for modeling and analysis as required by the draft permit to perform such an analysis are not available to smaller Phase II Permittees. Meeting this requirement would require costly consultant work for most annexations and zoning changes. This would effectively kill any additional growth of Phase II cities. If such a requirement is going to be made it should only be for major annexations or land use actions, such as annexations over 200 acres or land use actions that increase impervious surfaces by more than 15%.

4. Monitoring

Comments:

The draft permit does not make any provisions for alternative monitoring plans, and requires all Permittees to pay the Department of Ecology to conduct monitoring to meet requirements imposed by the Department of Ecology. This is unacceptable. The monitoring requirement of the permit must include framework that allows for alternative monitoring approaches.

The Permittees in the Puget Sound area were given two years and Department of Ecology support to create a monitoring plan that is now being imposed on the entire Western side of the State. Southwest region Permittees have been working independently to create a monitoring plan, however the plan is currently in the preliminary stages and more time is needed to complete it. To be successful the Southwest Monitoring plan will need the support of the Department of Ecology in the form of prompt feedback and additional time to complete the plan like that that was provided to Puget Sound Permittees.

Appendix 1 Draft Revisions

5. 3.2 New Development and 3.3 Redevelopment

Comment: Requiring all development and redevelopment, regardless of size, to comply with minimum requirement 2 is unreasonable. While it may have made sense with the 1 acre threshold in place, it does not without it. The allowance in the permit to let the

Permittee to develop an abbreviated SWPPP process for sites under 1 acre is appreciated, however it is unrealistic to expect even the smallest projects to complete a SWPPP. A SWPPP that requires formal preparation and Permittee review should only be required for projects meeting the thresholds that trigger minimum requirements 1-5.

6. 3.4 Additional Requirements for Re-development Sites

Comment: Removal of the allowance for the Permittee to grant a variance to the flow control requirements in cases of severe economic hardship should be re-considered. This was an important provision that would protect property owners with sites that would be rendered un-developable by the requirements of the permit. Instead of removing this provision the permit should provide guidance on what constitutes a “severe economic hardship”.

7. 4.5 Minimum Requirement #5: On-site Stormwater Management

Comments:

For projects required only to comply with minimum requirements #1 through #5 how will inspection and operation and maintenance of the required permeable pavement , rain-gardens and bioretention areas be handled? These projects are not subject to minimum requirement #9: Operations and Maintenance. This further highlights the issues discussed in comment 2 regarding inspection of LID facilities.

The Low Impact Development Performance Standard requirement to match pre-developed durations from 8% to 50% of the 2-year peak flows will likely be difficult to model without changes to the Western Washington Hydrology Model. If LID best management practices such as rain gardens/bioretention areas and pervious pavement are going to be required a better method of modeling them must be created. The “work-arounds” included in the Low Impact Development Technical Guidance Manual for Puget Sound are unacceptable for features that will be modeled and reviewed by Permittees on nearly every project.

8. 4.6 Minimum Requirement #6: Runoff Treatment

Comment: The project thresholds make it unclear if and what type of runoff treatment is required by pervious pavement and green roofs. Both can be considered to be a “pollution generating hard surface” (despite the fact that this term is not defined in the permit) and would therefore require runoff treatment due to the first bullet point, however the second bullet point grants an exception to pervious pavement. The permit needs to clearly specify that the LID practices that are required by the permit meet the requirements for runoff treatment.

9. Section 8. Feasibility for Selected Low Impact Development Best Management Practices

Comments:

The feasibility for the LID BMPs required by the permit needs to be further evaluated in areas that have poor infiltration or high groundwater.

The draft language states that rain gardens and bioretention areas are infeasible for smaller drainage areas when a one foot separation to the seasonal high groundwater table cannot be achieved. Previous Department of Ecology guidance suggested a minimum separation distance of 3-feet. This is a more realistic requirement given the fact that the seasonal high ground water level can vary from year to year, and it can often be difficult to determine the level of the seasonal high ground water level accurately if geotechnical evaluation does not take place during the wettest month of the year. The one foot separation requirement does not leave any room for error if the seasonal high ground water elevation is underestimated, and these facilities will be rendered ineffective with higher groundwater levels.

The draft language also requires bioretention areas and rain gardens to be constructed with an under-drain system in areas with native soils that have a saturated hydraulic conductivity of less than 0.15 inches per hour. In poorly infiltrating soils bioretention areas and rain gardens should be deemed infeasible. In these soils the infiltration and flow control benefits of the facility are minimal when compared to the cost of the facility.

Feasibility of pervious pavements in areas with poorly infiltrating soils also needs to be evaluated. There is currently no feasibility criteria for areas with native soils that have poor hydraulic conductivity. This will require all projects to use costly pervious pavement when the benefits from the pavement is negligible. Permeable pavement should be considered infeasible if the native soil saturated hydraulic conductivity is less than 0.15 inches per hour.

Further feasibility criteria is also needed for green roofs. Particularly the cost analysis that is mentioned in the "Mandatory List" of minimum requirement #5 needs to be further detailed. Operation and maintenance and inspection of green roofs also needs serious consideration. It will be very difficult to ensure that commercial developments are properly maintaining their green roofs.

Again, thank you for allowing Permittees to review and comment on the preliminary draft. I look forward to continuing to work with the Department of Ecology to create a permit that protects our water quality and allows responsible growth in our community.

Sincerely,



Bryan Kast, P.E.