



City of Vancouver • P.O. Box 1995 • Vancouver, WA 98668-1995  
www.cityofvancouver.us

June 17, 2011

Bill Moore  
Program Development Services Section - Water Quality Program  
Washington State Department of Ecology  
P.O. Box 47600  
Olympia, WA 98504-7600

Subject: Comments on preliminary draft LID and Monitoring permit language

Dear Mr. Moore,

The city of Vancouver appreciates the opportunity provided by the Washington State Department of Ecology to collect comments on the two new and significant sections of the Stormwater Phase II NPDES permit. This is preliminary draft language and we recognize that Ecology went beyond your obligation by allowing this comment period.

Vancouver values Ecology's efforts to get input early from all stakeholders. Please understand, this limited comment period hasn't allowed sufficient time for us to fully comment or share and collect comments from local stakeholders. Expect further comments to be submitted with the next comment period. In particular, LID is an area of where more meaningful comments can be anticipated on how it's prescribed within the draft permit language.

The following comments are submitted for your consideration for inclusion into the draft permit language to the Western Washington Stormwater Phase II NPDES Permit.

**1. Permit Reference:** S5.C.4.a(iv)(1),(2) – Review and revise development codes  
**Comments:** The purpose of (1) seems to be to make sure LID and BMP requirements are in the local codes, etc. It isn't necessary to mandate a "review" nor is clear how that mandate could be enforced. Stating that Permittees shall "revise" assumes that the current codes, etc. need to be revised, which may not always be the case. Both terms can be eliminated and the regulatory purpose still served. Also, "enforceable documents... to incorporate and require LID principles... to the maximum extent practicable", is written

in confusing syntax; it could be read that goal is to incorporate a maximum number of principles into the documents where the goal is really to include code requirements to implement low impact development to the maximum extent practicable.

**Suggested Permit Language:**

(1) The Permittee's local development-related codes, rules, standards, or other enforceable documents shall incorporate requirements for low impact development and best management practices to the maximum extent practicable. The intent 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 minimize the creation of impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations. Permittees shall use the following document for guidance on steps to follow and the range of issues to include in the process: Integrating LID into Local Codes: A Guidebook for Local Governments (Puget Sound Partnership, 2011).

(2) Permittees shall submit a summary of the process of incorporating LID into local codes, (iv) above, with the Third Year Annual Report including, at a minimum, a list of the participating parties, the codes, rules and standards and other enforceable documents reviewed, and any amendments made to those documents to implement the LID requirements.

**2. Permit Reference:** S5.C.4.g. - Watershed-scale stormwater planning

Section references incorrect:

ii. The analysis required in ~~S5.C.5.d(i)~~ shall include... Should be S5.C.4.g(i)

(a) an assessment of ... (as outlined in ~~S5.C.5.gi(a)(2)~~ above)... Should be S5.C.4.gi(a)(2)

**Comments:** The Explanatory Notes for this section state that these provisions would apply to areas where "a land use action increases the total impervious area of a watershed by a significant amount." Land use actions are described as "changes in zoning, UGAs and densities, rather than specific projects". These actions, therefore, don't apply to development or re-development projects. Land use changes in and of themselves will not have watershed-scale water quality or hydrologic impacts; they are typically just boundary or zoning changes which don't affect watershed drainage.

Development and redevelopment projects already trigger hydrologic analysis and modeling, and water quality impacts are theoretically mitigated by stormwater treatment requirements.

**Suggested Permit Language:**

g. Watershed-scale stormwater planning

i. After the effective date of this permit the Permittee shall track and record any of the following land-use actions:

a. For counties:

(1) A cumulative expansion of the Urban Growth Area of >80 acres within a watershed, and/or

(2) A planned land use action<sup>4</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:

- (1) A cumulative expansion of the incorporated area of the city of >80 acres within a watershed, or
- (2) 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%).

ii. For all land use actions taken as defined in this section, i(a) or (b), the Permittee shall prepare an assessment of a possible development or redevelopment scenario which could occur as a result of the land use change. The assessment shall be conducted at the appropriate scale to consider watershed hydrology and water quality factors and shall include the following:

- (a) An explanation why the assumed development or redevelopment scenario might be undertaken as a result of the land use action.
- (b) Potential impacts to stormwater drainage.
- (c) Site, structural, or managerial approaches that could be implemented to minimize impacts to water quality such as treatment and low impact development measures.
- (d) An overview of costs and benefits resulting from incorporating LID into each scenario.

iii. Reports

- (a) The Permittee shall submit with the annual report a description of all watershed-scale land use actions taken during the active permit period.
- (b) The Permittee shall include watershed-scale assessments required to be prepared by this section in the annual report for the year in which the land use action is taken
- (c) Permittees shall submit with the Fifth Annual report a summary of all land use actions and development/redevelopment progress occurring in all of these areas

**3. Permit Reference:** Appendix 1, Section 2 Definitions, pg. 6 – Receiving waters

**Comment:** This section defines groundwater as a receiving water. The current NPDES permit states in S2 - Authorized Discharges that discharges to groundwater through facilities regulated under the UIC program are not covered by this permit. Since groundwater is regulated under the Safe Drinking Water Act, it doesn't seem that an NPDES permit regulated under the Clean Water Act is an appropriate place to add groundwater regulations.

**Suggestion:** Eliminate this new language in the definition.

**4. Permit Reference:** S8.C - Monitoring

**Comment:**

In order to pursue a defensible regional stormwater monitoring program (RSMP) in SW Washington, significantly more time is necessary for permittees and other stakeholders in SW Washington to work out a proposal. Ecology notes in the explanatory statements for the recently proposed permit language that two years were required for the Stormwater Work Group (SWG) in the Puget Sound area to develop a RSMP specific to

the Puget Sound basin, using legislative funding and Ecology staff in the process. Ecology is proposing a similar timeframe for Eastern Washington permittees to explore the possibility of a RSMP and develop a proposal. The Recommendations for Municipal Stormwater Permit Monitoring Report to Ecology, delivered by SWG on October 29, 2010) specifically states; "We have not addressed how to address other land uses, other water bodies, and other NPDES permits [outside of the Puget Sound area]."

While many of SWG's recommendations appear to be relevant to SW Washington, particularly the potential economic advantages of reducing the number of QAPPs and contracts necessary to do the work, many of the scientific recommendations are only relevant to monitoring within a single watershed. SWG also recognizes the shortcomings of their recommendations when applied outside of the Puget Sound basin; "Some, but not all, of the SWG's recommendations can be expanded to include and benefit permittees outside of Puget Sound" (SWG website FAQs). Hydrogeologically and geographically, SW Washington more closely resembles the Eastern Washington Region than the Puget Sound Region, with permittees dispersed over many distinct and disconnected watersheds. It seems appropriate, then, that permittees in SW Washington be granted the same opportunity as permittees in Eastern Washington, who were also not a part of the SWG efforts in Puget Sound, to fully engage the region's stakeholders and explore the feasibility of a meaningful RSMP.

Vancouver is committed to working with our regional partners on developing a monitoring program that meets all of our respective needs but we have real concerns about whether a regional approach to stormwater monitoring is appropriate for SW Washington. The principle issues yet to be resolved for SW Washington are listed below.

- 1) There is neither hydrologic nor geographic continuity among SW WA permittees, nor is there a unifying watershed for the region, making the scientific and statistical validity of a probabilistic status & trends sampling approach questionable. The smallest receiving water common to all of the permittees in SW Washington is the Pacific Ocean.
- 2) The number of permitted entities is small (10) and population is centralized in just two of the permitted areas; Clark County and Vancouver. Population-based cost allocation for regional monitoring results in two parties contributing nearly 70% of the total amount. While we can appreciate the challenges faced by the smaller Phase II communities, a regional status & trends monitoring program that effectively exports resources from Vancouver to subsidize monitoring outside of our NPDES-permitted area would not be fair to the citizens of Vancouver.
- 3) The economies of scale appear to be fundamentally different in SW Washington than in Puget Sound. In SW Washington the vast majority of the population is clustered in Clark County and its cities (Vancouver, Battle Ground, Camas & Washougal). Clark County and Vancouver already have water quality monitoring programs in place, including sampling equipment, historical sampling locations and professional staff. A regional status & trends monitoring program must not render these investments in water quality obsolete and it must preserve the relevance of historic data.
- 4) Vancouver's primary watercourse, Burnt Bridge Creek, is the subject of extensive study and will have a TMDL implementation plan developed in the very near future. We are concerned that a regional monitoring approach would detract from our ability to leverage monitoring resources to efficiently meet

multiple goals related to our NPDES permit and anticipated TMDL implementation.

- 5) Local stewardship of the watersheds we inhabit is critical to the long term protection of our water resources. Because the permittees in SW Washington do not share a common watershed, a regional monitoring program would represent a step backwards in our effort to improve local stewardship by taking monitoring out of the hands of local governments and minimizing it's relevance to specific watersheds.
- 6) 40 CFR 122.34(g) requires Phase II MS4s to evaluate program compliance and EPA guidance for MS4s specifically calls for "clear monitoring objectives to help determine compliance and water quality impacts". The most appropriate question for Vancouver's water quality monitoring program is therefore; "Is water quality improving in the water bodies receiving stormwater runoff from the areas subject to Vancouver's NPDES Phase II permit?" This question can be best answered by a targeted monitoring program that is based on specific watershed boundaries and the infrastructure conveying stormwater to specific receiving waters. It is not clear how a regional status and trends monitoring approach could accomplish this task for all of the SW Washington permittees in the absence of a unifying receiving water such as the Puget Sound.
- 7) Vancouver is concerned that the adoption of a regional approach could leave the individual permittees vulnerable to expensive third-party lawsuits on a number of fronts.
  - a. There are questions about whether simply writing a check is an allowable compliance measure;
  - b. whether non-compliance by the administrative entity, be it Ecology or another party, could still result in third-party lawsuits against contributing permittees given the language of S3.B;
  - c. whether the elimination or scaling-down of existing monitoring programs in favor of a regional program could be considered "backsliding", particularly if the regional program results in fewer sampling locations within a given municipality or less frequent sampling events;
  - d. whether a regional approach that is not able to demonstrate the effectiveness of a specific municipal stormwater management plan satisfies EPA requirements for NPDES-related monitoring.
- 8) Specifying costs without a clearer description of deliverables makes it impossible to perform cost-benefit evaluations with an acceptable degree of accuracy to justify the expenditure of public resources.

**Suggestion:** The permit should specify the objectives that must be met by a monitoring program, whether it be regional or permittee-specific, and no more. The permit would thereby allow for individual permittees to implement monitoring programs specific to their stormwater management programs and the watersheds in which they reside and also partner with other organizations (municipal and other) within their watersheds. The approach used in the Eastern Washington permit allowing a two year timeframe to explore watershed-based monitoring seems appropriate. If watershed-based programs can not be developed then individual permittees should have the flexibility to pursue

individual monitoring programs that meet the needs of their specific stormwater management programs. Specific dollar amounts to be spent on monitoring should not be specified in the permit, as the investments of individual permittees can be expected to vary widely based on the needs of their stormwater management program, nature of waterbodies within their permit areas, availability of partner organizations, TMDL status, etc. The permit should not require permittees to write checks to Ecology. Example permit language:

The permittee must continue to implement, and revise as necessary, a comprehensive monitoring and assessment program, a description of which must be included in the permittee's stormwater management plan. The monitoring and assessment program can be conducted jointly with other parties on a watershed basis subject to the provisions of S1.D.2&3 and S3.B. The monitoring and assessment program must be designed to meet the following objectives:

1. assess compliance with this permit
2. assess the effectiveness of the permittee's stormwater management program
3. identify sources of specific pollutants
4. assess the chemical, physical and biological impacts to receiving waters resulting from stormwater discharges
5. assess the overall health and evaluate long-term trends in receiving water quality

#### **5. Comments: RSMP Effectiveness Studies discussed in Preliminary Draft Explanatory Notes**

a. It looks like "BMP effectiveness studies" will be considered equivalent to "stormwater program effectiveness studies", although this is not very clear in the notes and is not actually the case (SWMPs include much more than BMPs).

**Suggestion:** Settle on specific wording and phrases for the components so that terms like "regional", "monitoring", "effectiveness", etc. are presented for specific components in a less confusing way. Use "BMP Effective Studies" if that is what is meant.

b. On page 23 the discussion of "regionally prioritized and collaboratively conducted studies of stormwater effectiveness" includes cost estimations for these studies of up to \$6 million per year. Based on the type of studies described the dollar amounts seem unrealistically high. There should be few if any assets being purchased for what will be essentially research and reporting. The \$1.855 million per year forecast (pg. 26) for costs of studies to be funded by all of western WA could support a work staff of 15-20 researchers working 100% of their time on strictly researching BMPs for the entire 5 year permit term. That's excessive.

**Suggestion:** Develop a realistic BMP research program with sufficient goals to meet EPA and PCHB mandates and use real life cost estimates. Two people working on these effectiveness research projects should be able to easily produce enough reports for all of western WA (and probably for the entire state).

Estimated total cost - \$250,000 per year.

Again, the city of Vancouver appreciates the opportunity provided by the Washington State Department of Ecology to collect comments on the two new and significant sections of the Stormwater Phase II NPDES permit. Please note that at this point a lack of comment does not imply approval. We look forward to continued opportunities to provide more meaningful comments and specific suggestions to Ecology on the permit language.

Thank you for your time and consideration,

A handwritten signature in black ink, appearing to read 'Brian Carlson', with a long horizontal flourish extending to the right.

Brian Carlson, P.E.  
Public Works Director  
City of Vancouver

Cc: Lisa Cox, WA Dept of Ecology, Municipal Stormwater Manager  
Ted Gathe, Vancouver City Attorney  
Linda Marousek, Vancouver Assistant City Attorney  
Dan Swensen, Vancouver Construction & Engineering Manager  
Annette Griffy, Vancouver Engineering Program Manager