City of Kirkland
Comments on the preliminary draft of the new
NPDES Phase II Western WA Municipal Stormwater Permit

Appendix I Comments

- ***Minimum requirement #1*** states "SSPs shall use site-appropriate development principles to retain native vegetation and minimize impervious surface to the extent feasible". What criteria does a city use when reviewing if an applicant has done this? What enforcement does a city have?

- ***Minimum requirement #2***, item 12 to protect LID BMP area during construction. Typically we have one Public Works inspection of a storm facility after it is installed, and the inspection is only performed when the applicant calls for an inspection. This new requirement would require multiple pro-active inspections by the City inspector, to ensure the area is not adversely impacted by compaction and sediment during construction. Multiple inspections instead of just one will be more costly to the city and the developer. And will the permit be more specific about what triggers the inspections to make sure the areas are expected?

    - Regarding a road to be installed with pervious pavement, it is hard to protect the road from sedimentation and compaction during construction, since this is how people and equipment get to the areas of construction.

- ***Minimum requirement #5***, on-site stormwater management. Are LID BMPs supposed to be used for 100% of runoff, or some other percent? Is 100% realistic? A lower percent, like 50% would be more realistically feasible than 100%.

    - Why is the "Low Impact Development Performance Standard" listed under req. #5, and not under minimum requirement #7 for Flow Control? Please clarify permit language on the differences in both standards.

    - Under the Mandatory List, it says to "use all applicable BMPs on this list…". Does this mean a project needs to have one of every BMP type listed? What if a project can infiltrate or disperse all the runoff, then why would they need to install pervious pavement?

    - Requiring pervious pavement for all public and private streets is not reasonable or feasible. What are cities supposed to do about utility maintenance cuts and repairs? Small batches of pervious concrete or asphalt are hard to obtain and expensive. The permit can set an AADT threshold for pervious pavement, but even low volume streets contain utilities and must be cut and maintained on a regular basis. Also, city staff would need to keep separate records for public streets that are impervious and pervious, so a pervious pavement street does not get overlain with impervious under our routine street overlay program.

    - Requiring pervious pavement for all public sidewalks is not reasonable or feasible. If a sidewalk can be sloped to disperse the runoff, then why would pervious pavement be required?

- Requiring stormwater LID on all projects requires additional soil and geotechnical information that is not currently required for small projects. Will the permit specify if a soils report or other geotechnical information is required? If so, will it be required on every project with 2,000ft^2 impervious (one house), or just for short plats with 4 houses or more, or projects with 10,000ft^2 impervious, or some other threshold? Required soil information will be an additional expense for developers, and require additional city staff review time, and will require cities to have staff with geotechnical knowledge.

- ***Minimum requirement #9***, operation and maintenance. More detail is needed in the permit about the responsibility of maintenance of LID BMPs. Since LID BMPs are typically close to a house (in a front or back yard), and not in a road or public right-of-way, they are more difficult to inspect. Our City requires a signed private maintenance agreement for all rain gardens and pervious pavement installed, but it requires a lot of extra paperwork and recording costs, and extra staff time to ensure the documents are created and enforced. Will the permit require all jurisdictions to obtain maintenance agreements from property owners, and will there be a sample document for consistency?

- ***Section 8, feasibility criteria for LID BMPs***. The criteria proposed are primarily site and engineering constraints. Will the permit include a "cost" feasibility exemption to LID? There is a "cost analysis" mentioned under the vegetated roof section (under the Mandatory List on page 24), but the permit does not explain the criteria or thresholds for the cost analysis, so how is a city supposed to review one if it is submitted?

- ***LID section, relating to the 80% compliance level.*** Removing the 1 acre threshold for minimum requirements creates a huge impact on cities (as acknowledged by Ecology). Allowing jurisdictions to review and inspect only 80% does not help cities because local codes require we review and inspect 100% of development and re-development projects.

Watershed-scale Stormwater Planning Comments

- Add language in the permit that allows a city to annex an area, but not do a watershed analysis if the zoning does not change.

- We are not aware of modeling available that shows entire watershed impacts, only impacts for each site, so this would make it difficult to do the analysis required.

- The permit needs to include the list of assumptions used when analyzing the expected percent increase in impervious surface area. The result can vary depending on the assumptions used. As an example, look at the assumptions listed in Appendix B of the City of Kirkland's 2005 Surface Water Master Plan, at: http://www.kirklandwa.gov/depart/Public_Works/Storm___Surface_Water/Surface_Water_Master_Plan.htm