WSDOT Comments to Ecology regarding the LID proposals.

Proposed Requirements and Timelines to Update Development Codes to Incorporate LID

Page 2, End Note 1: We are glad to see that the proposed approach is consistent with past practices of setting a performance standard and providing a menu of BMPs and practices to achieve that performance standard. The larger the range of available options, the better.

Proposed Requirements for Basin-Scale Approach

General comment: As part of the analysis, WSDOT would also like to see a component to identify high quality areas and at risk areas. By doing this, a strategy could be developed that directs protection/recovery efforts to areas that are more vulnerable and that would realize more ecological benefit than spending limited resources in highly degraded areas where achieving positive outcomes are more expensive and success uncertain.

For projects such as road projects, off site mitigation may be easier to do and provide more environmental benefit depending on the location. As such, basin planning is important to an agency like WSDOT. If high priority areas are identified in a watershed then we might be able to provide more benefit by doing work offsite than by buying expensive property adjacent to our roadways and doing the work in an area that might not receive much environmental benefit from the increased protection.

Please provide a checklist or list of questions that a basin plan should address. It will help the preparers to know what Ecology is looking for and provide more consistency between plans.

Ecology Proposal for LID Site and Subdivision Technical Requirements

General Comment: *Mandatory List* or *Performance Standard* (applicant option). Language needs to be added to clarify that developers would have to do all the items in the mandatory list <u>or</u> develop the project using the performance standard. This seems akin to the presumptive vs. the demonstrative approach compliance pathway. WSDOT would like to work with Ecology to develop LID technical requirements and feasibility guidelines applicable in highway settings.

The proposed mandatory list seems too restricting (e.g., it excludes rainwater harvesting options). WSDOT was also troubled by the statement made by Ecology staff during the August 12th meeting that "If we don't have a way to model it, it isn't considered LID". Bioinfiltration swale was used as an example of such a BMP. Yet Bioinfiltration swales, like many other BMPs that incur incremental water losses, meets the LID definition that emerged from this committee process. We strongly encourage Ecology to reconsider their position regarding the role these categories of BMPs can play in meeting LID requirements and support efforts to enhance modeling capabilities for these BMPs.

Page 3, *6. Flow Control Exempt Areas*:
Recommending incorporating the 91% treatment target described in "5. *Treatment Credit*" as an additional option for projects to demonstrate that they met the LID treatment requirement for runoff for pollution-generating surfaces.

Page 4, *D. Technical Considerations*: WSDOT looks forward to working with Ecology to help identify areas of permeable pavement infeasibility and to update the guidance on procedures for identifying hydraulic conductivity. As you may know, we have been working on a document requested by the legislature to study where permeable pavements might be used on our state system. We will share this with you when we have finished our review. However, a new investigation would be required to identify the feasibility of re-distributing runoff below the pavement for the state's highway system. We feel that Ecology should reach out to the County Road Administration Board (CRAB) and the Transportation Improvement Board (TIB) for additional help in identifying the infeasibility of permeable pavements. We would also like to explore the best ways to determine hydraulic conductivity on our projects so that we can better use LID practices where feasible. We are embarking on several research projects that will explore water losses through such systems as biofiltration swales, vegetated filter strips, and CAVFS. We look forward to working with you on these projects and adjusting our models as appropriate to account for incremental water losses through these systems.

Page 5, end note 1. We question the wisdom of dismissing rainwater harvesting and use in western Washington. By solely looking at infiltration as the "workhorse" in LID you ignore the role that evaporation plays in a natural system. Furthermore, infiltrating the evaporation portion into the ground may lead to other unintended consequences. The portion of the hydrologic cycle that used to be taken up by evaporation needs somewhere else to go especially in tight soils. Rainwater harvesting is a way to do that. It should be a requirement unless it's shown to be infeasible.

Page 1, *Attachment #1: Feasibility Review Criteria*: As mentioned previously, WSDOT would like to work with Ecology to develop LID feasibility guidelines and criteria applicable in highway settings.

Page 3, *Attachment #1: Competing Needs*: WSDOT supports the need to grant relief from a requirement where it conflicts directly with another state or federal mandated. However, we feel the more information on the basis for the statement "GMA requirements are compatible with LID" needs to be included in the proposal.