

January 27, 2012

Washington State Department of Ecology
PO box 47600
Olympia, WA 98504-7600

**RE: PUBLIC COMMENTS FOR 2012 DRAFT STORMWATER MANAGEMENT MANUAL
FOR WESTERN WASHINGTON**

Dear Department of Ecology:

Land Development Consultants, Inc. (LDC) is a civil engineering and land surveying firm that provides design services to corporations, homebuilders, and the general public. We have extensive experience in stormwater design in western Washington and have designed over 500 projects in the last 8 years.

Upon review, the largest change in the new manual is the mandate of LID BMPs. It is our position that LID should not be mandated, but instead should be an allowed alternative. Design professionals and professional developers are the ones that should be determining where LID makes the most sense. Under the current regulations, LID will be implemented where it makes economic and marketing sense. By trying to mandate LID on every project and attempting to develop a "recipe" of when it is and is not feasible is a dangerous approach because no process can capture every site-specific constraint, and therefore this mandate may have large unintended consequences. Following are our comments to the proposed Stormwater Manual.

GENERAL COMMENTS

The following comments are general in nature and therefore there is not a specific section of the draft manual to reference to attach to the comments. DOE should provide the public with sample projects to show the true impact of development the new manual will have. We believe that there are three basic types of projects:

- Single Family Residence
- Residential Development (Plat)
- Commercial Development

A sample project of each of the types above should be modeled with two soils types (outwash and till) so that the public can fully understand the impact of the proposed changes. The challenge in this case is that because DOE has not released the updated stormwater model, a design professional such as I, let alone the general public, cannot accurately walk through the design process with a sample project to determine the impact. DOE has released the draft manual prematurely before the resources were available to analyze the draft manual and its impact fully. Without providing information regarding sample projects, the general public does not have the resources to understand and comment productively on the manual. We are very concerned that the proposed changes will have a very large, unintended impact to affordable housing. The public needs to be aware of the cost of implementation of this new manual so that they can provide informed feedback. DOE should provide information regarding

increased cost to development by following this manual, as well as the increased cost to cities in implementing the additional inspection and project review that is required in conjunction with the manual and new permit.

SPECIFIC COMMENTS

Minimum Requirement #5 Section 2.5.5 page 2-34 Cost Feasibility of LID

In order to ensure that affordable housing can continue to be provided in western Washington, there should be an overriding cost feasibility test in the implementation of LID. In some cases the cost of implementing LID could greatly increase the cost of construction for a housing or commercial development with little benefit to the environment. A cost feasibility test will also help insure that there are not large unintended impacts to affordable housing through the implementation of this manual. Therefore we are proposing the following:

Proposed Requirement - Cost Feasibility of LID

After providing a conceptual design that meets the requirements of this manual, the applicant may assess the cost of the mandatory LID BMPs to determine feasibility. If the cost of the proposed storm with the LID BMPs is greater than 5% more than a storm system designed without LID BMPs, including the cost of design, required testing, and construction, the applicant is only required to provide LID BMPs up to 5% more than a standard system. The cost estimates shall be provided by a licensed civil engineer.

Minimum Requirement #5 Section 2.5.5 page 2-34 Developable area test of LID

Our second comment also is intended to protect against impact of this manual on affordable housing, and against a “taking” by the state of developable areas from property owners who have been paying taxes as if the land were developable. Based on our experience, we are concerned that the space required for implementing LID BMPs on some sites may have an unintended impact to the developable area of the site. Therefore we are proposing the following requirement in this section:

Proposed Requirement - Developable Area/Yield Feasibility of LID

After providing a conceptual design that meets the requirements of this manual, the applicant assesses that the impact to the developable area of the site for a commercial project or the lot yield on a residential development shall not be required to be reduced by more than 5% in the implementation of LID BMPs.

Minimum Requirement #8 Section 2.5.8 page 2-46 Allowable Discharge rate to wetlands

In review of this section, the requirement that the flows to wetland must be within 20% of the flows currently going there will be in conflict with Core Requirement #7 in some cases. The issue is that under Core Requirement #7 for stream protection the site is modeled in the existing conditions as forested, whereas Core Requirement #8 requires the site to be modeled in its current condition. Therefore, if a site has a

wetland at its low point the requirement states that storm water be discharged per Core Requirement #8 at a greater rate (if the conditions are other than forested) than allowed by Core Requirement #7. We believe that there will not be a negative environmental impact of just having the project meet Core Requirement #7 for stream protection in cases where both requirements cannot be met. Therefore we are proposing the following clarification in this section:

Proposed Requirement - Allowable Discharge Rate

If it is not feasible to meet the requirements of both Core Requirement #7 in for stream protection and the flow rates required in Core Requirement #8 for wetland protection Core Requirement #7 shall govern, and the site shall be designed to meet the stream protection flow rates in the discharge to the wetland.

Section 3.3.4.7 page 3-70

Construct the Faculty and Conduct Performance Testing

DOE needs to provide additional information regarding how this requirement will be implemented and what is the expectation of DOE of all parties involved to comply with this requirement. This requirement is too vague to be implemented, and additional detail and direction should be provided for public input.

SUMMARY

The above items are the major items that we identified in our review of the manual. In our opinion it is too difficult to mandate that all projects provide LID. It opens up every project to appeal, as the environmentalist movement could always claim that more should be done. At this point in time, given the current weakened state of the economy, it is important to place clear limits on what the cost impact should be on a project based on these regulations. There has to be some consideration regarding the cost of the project in comparison to the environmental impact of implementing or not implementing the BMPs.

Let us know if you have any questions or comments regarding our findings above.

Regards,

LDC, Inc.



Mark Villwock, P.E.
Vice President