

**Department of Ecology—Water Quality Program
Development of Low Impact Development (LID) Standards
for the Municipal Stormwater General Permits**

**Implementation Advisory Committee Meeting #2
January 5, 2010, 10:00am–3:00pm
Ecology Headquarters – Lacey
Room ROA-36**

The attached list of discussion topics and key questions is provided in response to input at the first IAC meeting. Please review these questions prior to the meeting and be prepared to discuss your responses. The agenda below refers you to a description of the topic and specific questions that correlate to that discussion.

- 10:00 Introductions and Review of Agenda
- 10:15 Overview of process to date
- Overview of TAC meeting #2
 - Building on “Proposed Permit Framework” reviewed at IAC.
 - TAC is working on methods for determination of hydrologic performance standards
 - IAC focus on key questions regarding implementation approach
- 10:30 Roles for Ecology and Municipalities in Setting LID Requirements
- Discussion of Key Questions 1, 2, and 3. See attached.*
- 11:30 Public Input
- 11:45 Grab Lunch - it is recommended that everyone bring a sack lunch.** Although lunch can be purchased at the cafeteria, there will just be a brief break.
- 12:00 Implementation Schedule for Hydrologic Performance Standards
- Discussion of Key Questions 4, 5, and 6. See attached.*
- 12:30 Different Performance Standards for Different Conditions or One Stringent Performance Standard with a “Variance” Process?
- Discussion of Key Questions 7, 8, 9, and 10. See attached.*
- 1:30 Break

- 1:45 Implementation Barriers
Discussion of Key Questions 11 and 12. See attached.
- 2:30 Public Input
- 2:45 Next steps and prep for next meeting
- 3:00 Adjourn**

Location: Department of Ecology Headquarters in Lacey
300 Desmond Drive SE
Lacey, WA 98503
http://www.ecy.wa.gov/directory_hq.html

Parking at Ecology: *We apologize that Ecology’s parking for visitors is extremely limited, especially during the current repair project for our parking garage. Please plan to carpool to the meeting if possible. When you arrive at Ecology, if there is no visitor parking available, you may park across the field behind Sawyer Hall (about a 5 minute walk to Ecology building – to get there go straight at the top of the drive). Another alternative is to park in the Top Food shopping center lot across Martin Way and walk across to Ecology. Please use the main entrance and sign in at the front desk to be directed to the meeting room: ROA-36. Thank you.*

IAC Meetings		TAC Meetings	
5-Jan-10	Ecology - Lacey		
8-Feb-10	Federal Way City Hall chambers	25-Jan-10	Federal Way City Hall chambers
15-Apr-10	Federal Way City Hall chambers	18-Mar-10	Ecology - Lacey

Joint Meetings	
12-May-10	GA Building - Olympia
23-Jun-10	TBD

**Discussion Topics and Key Questions
for IAC Meeting #2**

Roles for Ecology and Municipalities in Setting LID Requirements

Two options have been discussed in the meetings to date:

- a) Ecology would set hydrologic performance standards in the permit. Municipalities would determine what to require of developers to achieve it (Municipalities could require developers to do modeling, or use a prescriptive checklist, or a combination).¹

This is the approach described in the permit framework document. The rationale for this approach is that Ecology does not have authority over code changes; this approach allows for flexibility and differences among municipalities; and it allows for changing ways of meeting goals over time.

- b) Input has been received that alternatively, Ecology could define specific requirements for use of LID techniques and development principles with a checklist/prescriptive approach. The rationale for this approach is that it would provide consistent application across western Washington and reduction of municipal effort to define a system. See SPU's Table below as an example.

Table 1. Green Stormwater Infrastructure Evaluation Category Prioritization

GSI Evaluation Category		GSI BMPs	Stormwater Manual Vol. 3 Section
No.	Name		
1	Green Stormwater Infrastructure – Runoff reduction methods	Maintain Existing Trees	4.4.2
		Dispersion (downspout or sheet flow)	4.4.3 / 4.4.4
		Plant New Trees	4.4.2
2	Green Stormwater Infrastructure – Infiltrating and reuse facilities	Bioretention Cells (without underdrain)	4.4.5
		Rainwater Harvesting	4.4.6
		Permeable Pavement Facilities (with storage reservoir and overflow)	4.4.7
3	Green Stormwater Infrastructure – Impervious surface reduction methods	Green Roof	4.4.8
		Permeable Pavement Surfaces	4.4.7
		Bioretention Cells (with detention)	4.4.5
4	Green Stormwater Infrastructure – Non infiltrating facilities	Bioretention Cells (with underdrain)	4.4.5
		Detention Cisterns, aboveground with harvesting capacity ^a	4.6.6

^a Detention cisterns with harvesting capacity are considered green stormwater infrastructure for single family residential projects only.

¹ Hydrologic performance standards would be applicable to most properties, whereas small properties, and properties in flow-control exempt settings could follow a checklist/prescriptive approach.

Table taken directly from DPD Directors Rule 12-2009/SPU Director's Rule 209-007.

IAC Questions:

1. *Which method would be preferred by municipalities – why?*
2. *Which method would be preferred by developers – why?*
3. *Which method would be preferred by Ecology – why?*

Implementation Schedule for Hydrologic Performance Standards

In the Permit Framework document, Ecology proposed the idea of setting near-term and longer-term hydrologic performance standards. This was based on the concept that in the near-term, with changes to stormwater codes that are rapid to implement, LID “engineering techniques” could be utilized; while longer-term performance would be based on utilization of LID “development principles”, requiring broader development code changes that take longer to implement.

IAC Questions:

4. *What is the most likely code change process? Does it make sense that the stormwater code would be changed first, and development codes take longer?*
5. *How should permit deadlines be set to synch with the code change process?*
6. *What should be the differences for Phase I and Phase II permittees?*

Different Performance Standards for Different Conditions or One Single Performance Standard with an “Exceptions” Process?

Two options have been discussed in the meetings to date:

- i. In the Permit Framework document, Ecology proposed the idea of setting different hydrologic performance standards for differing soil types, development densities and types of development (eg residential, commercial, redevelopment) – based on what combination of LID measures are judged to be feasible for those conditions.
- ii. Input has been received that alternatively Ecology could set a single hydrologic performance standard, acknowledging that site and project feasibility constraints will limit the ability for all sites to fully meet it. In this process, the Municipality would have a developer use a checklist and feasibility exceptions to show that they have achieved the best performance possible given site constraints and development density.

IAC Questions:

7. *Which method would be easiest for municipality to implement?*
8. *Which method would make the most sense for developers?*
9. *If different requirements are set for different densities, what density categories would you recommend be used?*



10. How should requirements be different for redevelopment?

Implementation Barriers Discussion

This discussion will outline the range of implementation barriers members have experienced and others that can be anticipated.

IAC Questions:

- 11. What are the key barriers to implementing LID, and what are their implications to this permit process?*
- 12. What are recommended approaches to removing those barriers?*