

Ecology LID Standards Development Process

The Department of Ecology's Water Quality Program is initiating a process to develop definitions and standards for low impact development (LID) stormwater requirements in the Phase I Municipal Stormwater General Permit.

The Pollution Control Hearings Board (PCHB) ruled in August 2008 that Ecology must add requirements to the Phase I permit that apply to local governments covered under the permits. The PCHB ruled in February 2009 that Ecology begin to prepare Western Washington Phase II permittees for future implementation of LID. Ecology is convening this stakeholder advisory process to develop recommendations for those requirements.

EPA Region 10 funded Ecology to conduct an eight-to-ten month process to develop recommendations from two advisory committees: a **technical advisory committee** and an **implementation advisory committee**. At the end of the process, Ecology will make a decision on permit requirements and will amend the Phase I permit to include them. It will determine the timing to include LID requirements in a future Western Washington Phase II permit. Ecology also expects to incorporate these standards in the Stormwater Management Manual for Western Washington.

The Puget Sound Partnership (PSP) calls for these standards as a priority action in the 2008 Puget Sound Action Agenda. The PSP LID program has led the region in advancing LID, and is partnering with Ecology in this process.

Advisory Committees

Ecology is conducting a structured and facilitated stakeholder process to develop recommendations for the LID standards. The advisory committee meetings are open to the public with specific times on the agenda for public input.

The first meeting of the advisory committees will be a joint meeting of both committees:

Date: October 13, 2009

Location: Tacoma Convention Center

Time: 9am to 3pm

Timelines

Oct 2009 – June 2010	Stakeholder advisory committees develop recommendations
June 2010 - Dec 2010	Ecology modifies Phase I permit
June 2010 - June 2011	Ecology updates the WWA stormwater manual

**Department of Ecology
Developing Low Impact Development Standards**

Technical Advisory Committee

Ed O'Brien, Stormwater Engineer
Department of Ecology

Dave Tucker, Assistant Utilities Director
Kitsap County Public Works

Bruce Wulkan, Stormwater Program
Manager, Puget Sound Partnership

Tracy Tackett, Green Infrastructure
Program Manager, Seattle Public Utilities

John Palmer, Senior Policy Analyst,
Region 10 EPA Office of Water and
Watersheds

Curtis Koger, Principal Geologist and
Hydrogeologist, Associated Earth Sciences

DeeAnn Kirkpatrick, Fishery Biologist
National Marine Fisheries Service

Hans Hunger, Senior Engineer
Pierce County Public Works

Curtis Hinman, Director LID Research
Center, Pierce County WSU Extension

Ross Dunning
Kennedy Jenks, Consultants

Thomas Holz, P.E.
Consulting Engineer

Patrick Harbison, Consulting Engineer
Wallis Engineering

Alice Lancaster
Herrera Environmental Consultants

Implementation Advisory Committee

Bill Moore, PDS Section Manager,
Water Quality Program, Department of
Ecology

Jan Hasselman, Attorney
Earthjustice

Bruce Wulkan, Stormwater Program
Manager, Puget Sound Partnership

Harry Reinert, Dept of Development and
Environmental Services, King County

John Palmer, Senior Policy Advisor,
USEPA Region 10 Office of Water and
Watersheds

Wayne Carlson, Associate Principal
Planner, AHBL Inc.

Doug Peters, Growth Management
Division, Department of Commerce

Wally Costello
Quadrant Homes (retired)

Bruce Wishart, Policy Director
People for Puget Sound

Debby Hyde, Habitat Protection
Coordinator, Pierce County Utilities

Art Castle, Executive Vice President
Kitsap County Homebuilders
Association

Craig Doberstein
Herrera Environmental Consultants

Cathy Beam, Principal Environmental
Planner, City of Redmond

Jodi Slavik
Building Industry Association of
Washington

Larry Matel, Managing Engineer
City of Bremerton Public Works and
Utilities

Tribal government representative – To Be
Determined

Expectations of Advisory Committees (preliminary outline)

Technical Advisory Committee

1. Agree upon a definition of LID that will help direct the scope and timing of the necessary actions.
2. Recommend practices to include within the scope of LID that will be implemented this NPDES permit term
 - a. References
 - i. *LID Technical Guidance Manual for Puget Sound*
 - ii. Phase I NPDES Municipal Stormwater Permittees Proposal: LID Feasibility Matrix and Guidance
 - iii. USEPA Guidance
3. Identify criteria for determining feasibility for each practice (APWA Matrix a good starting point)
 - a. Site Conditions
 - b. Technical Constraints
4. Recommend (a) minimum performance standard(s) that will be required of each project
 - a. Hydrologic Options (all based on continuous runoff modeling) to be considered include:
 - i. Match historic flow durations down to more frequent flows, e.g. 6-month flow through the 50-year flow.
 - ii. A minimum detention pond volume reduction as compared to a standard development

- iii. A certain percentage reduction in the total volume of runoff from the project site as compared to a standard development; or a maximum increase in the total runoff volume as compared to the historic condition
- b. Site Options include:
 - i. Maximum % effective impervious area for each land use category
 - ii. Require a minimum number of LID practices unless infeasible per criteria above
 - iii. Require a specific approach to LID implementation (e.g., Seattle)
- 5. Recommend practices to include within the scope of LID that will be implemented next permit term.
 - a. Site and Subdivision scale: Reconsideration of site development standards (e.g., road widths, preferred subdivision layouts, preferred drainage features)
 - b. Basin scale: Land use planning that is intended to achieve Clean Water Act goals of maintaining and restoring beneficial uses

Implementation Advisory Committee

1. Provide review of the Technical Committee outputs and recommendations
 - a. Delineation of and distinction among LID practices to implement this permit term and next permit term
 - b. Feasibility criteria
 - c. Performance Standard recommendations
2. Recommendations for implementation deadlines this permit term
 - a. Adoption of code or rule changes
3. Recommend an administrative process and time frame for local governments to change Site/Subdivision scale development standards
 - a. Scope of standards to be amended
 - b. Recommendations re entities to be included in the local process
4. Recommend an administrative process and time frame for local governments to modify land use plans/decisions to be consistent with attainment of federal mandates, i.e., restore and maintain beneficial uses.
 - a. Scope of documents potentially needing reconsideration include:
 - i. Reconsider urban boundary in light of cumulative impacts of land cover change on water quality and beneficial uses.
 - ii. Reconsider zoning within Urban Growth Areas in light of cumulative impacts to a basin and updated site development standards.
 - b. Administrative process must include intergovernmental cooperation where more than one municipal entity occupies a basin. (Basins are watersheds ranging in size from 3 to 50 square miles.)