



Stormwater Management Manual for Western Washington

**Volume I - Minimum Technical Requirements
and Site Planning**

Volume II - Construction Stormwater Pollution Prevention

**Volume III - Hydrologic Analysis and
Flow Control Design/BMPs**

Volume IV - Source Control BMPs

Volume V - Runoff Treatment BMPs

Prepared by:

Washington State Department of Ecology
Water Quality Program

November 2011 Draft

Publication Numbers _____ through _____
(Replaces Publication Numbers 05-10-029 through 05-10-033)

Executive Summary

On November 4, 2011, the Department of Ecology (Ecology) issued the Draft 2012 Stormwater Management Manual for Western Washington (Manual) for a 90 day public comment period (November 4, 2011 – February 3, 2012). Ecology revised the 2005 Manual to more effectively support Ecology's stormwater permits, to correct errors, add approved BMPs, clarify statements, update design criteria and procedures, and apply recent research. Ecology expects to issue a response to comments and the finalized 2012 Manual in the summer of 2012.

The single greatest use of the Manual is through incorporation into NPDES stormwater permits, and in particular the municipal stormwater general permits. The 90 day comment period for the Manual coincides with the comment period for the draft municipal stormwater general permits.

Local municipalities use the Manual to set stormwater requirements for new development and redevelopment projects. Land developers and development engineers use the Manual to help design site plans, create construction stormwater site plans, and determine stormwater infrastructure. Businesses use the Manual to help design their stormwater pollution prevention plans.

The method by which the Manual controls the adverse impacts from quality and quantity of polluted stormwater is through the application of Best Management Practices. This draft of the Manual revises BMPs to improve their effectiveness for protecting water quality and to meet the intent of the antidegradation provisions of the water quality standards.

In addition, Ecology revised the Manual to include low impact development (LID) related definitions, requirements, and an LID performance standard. Ecology made the LID revisions based on rulings by the Pollution Control Hearings Board, an LID advisory process, and to support the new LID requirements in the western Washington municipal stormwater permits.

Other major changes include revised guidelines on protecting wetlands, determining infiltration rates, and modifications to, and guidance for use of the Western Washington Hydrology Model.

How to Find the Stormwater Management Manual on the Internet

The November 2011 Draft of the Stormwater Management Manual for Western Washington is available on Ecology's website. The Internet address is:

<http://www.ecy.wa.gov/programs/wq/stormwater/wwstormwatermanual/2012draft/2012draftSWMMWW.html>

Public involvement leading up to this draft

Ecology provided public involvement opportunities and received public comments in preparation of the November 2011 Draft Manual through advisory committees, listening sessions, surveys and meetings with experts in selected fields.

- **Low Impact Development (LID) Advisory Committees** To support the development of LID requirements, Ecology formed two advisory committees comprised of representatives from local government permittees, state government, ports, environmental groups, scientists, consultants, and the development industry. The advisory groups met in 2009 and 2010 and provided input to Ecology on the definition of LID, a performance standard, feasibility criteria, and a number of implementation issues. In August 2010, Ecology presented an outline of the proposed LID requirements and took comments from

the committee members and the broader interested public. Meeting materials, summaries, references, and comments on Ecology's proposal are available on Ecology's website. The committees met jointly again in May 2011 to provide input on Ecology's preliminary draft LID proposed language. See LID advisory process materials at: <http://198.238.211.77:8004/programs/wq/stormwater/municipal/LIDstandards.html> The LID requirements are found primarily in Volume I of the manual. Ecology acknowledges the participants of the LID Advisory committees in Volume I.

- **Listening Sessions** In August and September 2010, Ecology hosted listening sessions statewide to announce the reissuance schedule and gather input for preparing to reissue the 2012 permits and update the Manual. More than 200 people attended the listening sessions statewide. Participants largely agreed that the Manual should not be substantively revised, except to include new technical information about LID implementation, add BMPs approved as equivalent, and remove non-working BMPs.
- **Surveys on the Volumes in the Manual** Ecology sent out surveys specific to Volumes II-V to permittees, internal experts, and outside experts asking for comments and advice on revisions for the 2012 draft Manual. Ecology acknowledges those that actively participated in the surveys in the Acknowledgment sections of Volumes II-V.
- **Meetings with experts** In a very few cases, Ecology met with internal and external experts to discuss needed changes to the Manual. Ecology acknowledges those that participated in these meetings in the Acknowledgment section of each volume.

How to Submit a Comment

Ecology invites public comment on the proposed draft Manual until 5p.m. on Thursday, February 3, 2012. Send written comments to Ecology by one of the methods below:

- Send manual comments by e-mail to: SWPermitComments@ecy.wa.gov
- Send manual comments in hard copy by mail to:

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Public Workshops on the Manual

Ecology will hold five workshops, in January 2012, throughout western Washington (Vancouver, Lacey, Mt Vernon, Poulsbo and Renton) on the draft 2012 Manual. At the workshops Ecology will explain the proposed revisions to the Manual and the public will have the opportunity to ask questions. For more information visit Ecology's website:

<http://www.ecy.wa.gov/programs/wq/stormwater/wwstormwatermanual/2012draft/2012draftSWMMWW.html>