

From: [Emily Bishton](#)
To: [SW Permit Comments](#)
Subject: Department of Ecology's Draft Municipal Stormwater Permit and Low Impact Development Standards
Date: Thursday, February 02, 2012 9:44:55 AM

Hello,

I am writing to comment on the draft, because I support much of what has been proposed but I have concerns about a few areas:

I believe that the new LID requirements, expanded requirements to monitor discharges, and expansion of permit coverage in key areas are essential elements to the success of this program and I applaud your hard work in creating the draft. My concerns are about specific elements of the permit:

- I feel strongly that LID techniques must be the first choice or default option for all stormwater treatment. If there are cases where it can be *proven* that infiltrating LID techniques are not appropriate, the traditional end-of-pipe methods should be considered, but only as a partial management tool. LID solutions such as native vegetation, soil amending/preservation/restoration, minimizing pervious surfaces, green roofs, cisterns, pin pile foundations, and other non-infiltrating methods can be used to help with flow and quality control regardless of limiting soil conditions, therefore *these* should be the default solutions on non-draining soils.
- Protection of native vegetation on site and reduction of impervious surfaces are crucial LID techniques that are not fully integrated into the draft. If it is *proven* that impervious surfaces must be used on a site, the standards should require that the stormwater flow be directed into smaller infiltration rain gardens to help mimic historic hydraulic flow patterns.
- The standards for green roofs seem weak, an extremely conservative soil standard has been used for engineered rain gardens, and the feasibility and competing needs exemptions are also broad enough to allow jurisdictions and developers to avoid compliance.
- Since many of the LID techniques proposed in the new permit will be new to many designers, reviewers, inspectors, contractors, supervisors, and maintenance personnel, there should be a training requirement so that qualified individuals can be certified by the Dept. of Ecology. Training classes should also be held in each County covered under the NPDES permit: during the first year after its adoption it is especially vital for classes to be held at least once a month and rotating to various locations. In the years afterward, classes should continue regularly and certified individuals should be required to complete continuing education to maintain their certification and cover all fees for this themselves, as in other similar training programs. In order for the required LID techniques to be successful, it is imperative that they be designed, built and cared for by professionals who are trained and certified to do so.
- All municipalities should be required to adopt the approved Ecology Stormwater Manual as appropriate for their region, and the option to adopt an alternate, equivalent stormwater manual should be eliminated. Many of the professionals involved in LID permit work will be working in more than one

region, and having to navigate multiple manuals puts an onerous burden on them and increases the chances for mistakes in design of stormwater facilities. Not to mention the onerous cost for municipalities, DOE, etc. if alternate manuals are allowed.

- The permit should contain differentiation between Rain Gardens and Bio-Retention facilities. Rain Gardens should be defined in such a way that allows them to be non-engineered facilities that can be installed by home owners or other professionals, and limits how many square feet of impervious area runoff they accept. This designation will help to promote small scale stormwater retrofits that will help encouraging property owners to install Rain Gardens. Bio-Retention should be defined in such a way that clarifies them as facilities providing flow control and water quality treatment to large sq ft areas of pollution-generating impervious surfaces, and their installation done with the supervision of a professional civil engineer specializing in stormwater design.

Thanks very much for your time in reading and considering my input in the next phase of your work.

Sincerely,
Emily Bishton

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"More grows in a garden than is sown there." anonymous

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