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To: [SW Permit Comments](#)
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Subject: comments on draft Municipal Stormwater Permit and LID Development Standards
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1/30/12

To: Department of Ecology

Re: Draft Municipal Stormwater Permit and Low Impact Development Standards

I am on the Edmonds Planning Board which has been reviewing the SMP update for our City over the last several months. We are seeing the need to strengthen the language in our SMP update but really need DOE to take the lead and require certain LID practices where needed. We are trying to protect the functions of our saltwater marsh for perpetuity given that sustainability is our primary goal for the sake of future generations whether they be humans or wildlife.

I have also designed a 5 star Built Green home which has been approved by the City after many months of back and forth trying to incorporate some green elements that we felt were critical for stormwater control and unburdening the current infrastructure. This was expensive. We designed two rain gardens, a green roof, pervious pavement, and the retention of a street tree despite the fact that it was in the pathway of the walkway. All rainwater would either infiltrate into the ground or be collected off the roof and into the rain gardens and rainwater cisterns. Essentially 100% of rain water would be infiltrated onsite or collected for irrigation. We really need support and help from DOE so that developers and land owners have to design in LID measures where feasible, not just encouraged to do so. The process of integrated design could become so much more streamlined throughout the permitting process as long as the city staff becomes educated and trained, presumably with your help. The City could then justify incentives for LID in order to make it more affordable and commonplace to develop a site. Public works dollars could be dedicated more to fixing leaks in current infrastructure or greening it as opposed to created further conventional outdated and non-durable infrastructure. The paybacks continue long into the future.

In the SMP update review process our planning board has been having to specify native plants, not just vegetation. It is essential that native plants be used to support habitats especially in critical areas and near shorelines. Vegetation that is not native nor is part of the local food chain doesn't adapt to Northwest weather, soils, or meet the food needs of native species. We should be looking at what it takes to restore hydrology to historic conditions. I also strongly recommend that you reduce the percentage maximum impervious surface coverage on lots in order to assist the normal hydrological process. These are the long term solutions we need to protect and restore our natural systems. The permit draft could be stronger with regard to these items.

I strongly support the training of staff in LID practices and review. If staff had been adequately trained beforehand, I wouldn't have had to pay so much for design dollars. Fortunately our house project offered a host of learning opportunities. All projects that come through the city should have a knowledgeable "green team" to help

guide the sustainable design project from considerations of site and water to sustainable construction practices.

An Ecology approved storm water manual appropriate for a region or something stricter ought to be mandated. That would ensure consistency and clearly defined standards so that expectations on any given project development are clear. Again, a trained team can smooth out the bumps in the road for developers/builders not accustomed to progressive storm water/LID practices.

Municipal projects should set an example for all the rest. Public right of ways have potentially tremendous impacts on water quality since parking lots and walkways often represent a significant square footage of surface area. Requiring LID for municipal projects would reduce pollution in our waterways and increase infiltration or absorption of rain water through plantings, rain gardens, and bioswales.

Requirements for municipalities to update their code (S5(C)5(c)) is a very good idea and I support that. It is clear that the City of Edmonds needs to address this and some guidance from DOE would be greatly appreciated. A more prescriptive approach regarding native vegetation and reduction of impervious surfaces would give clarity and necessary detail.

I support the idea of DOE not only reviewing plans but approving them as well. This would help define the direction that storm water management is taking and show that DOE is taking a strong stance on it.

I am all for storm water monitoring though I understand the difficulty in making that a requirement with budgets as they are. We have to know how we are doing though and without the corroboration provided by metrics, we'll have a hard time convincing folks that our actions are making a difference.

The one acre exception is a bad idea. Smaller parcels, especially if there are many spread apart, can have cumulative effects on the total amount of storm water runoff. Nature doesn't differentiate by size. All land, whether broken up into smaller parcels or larger ones, has significant impacts on the natural hydrology of any given area.

Please define rain gardens. I had to educate staff about how to construct gardens and explain how they perform for my green home project. Fortunately I had an expert, David Hymel from Raindogdesigns, design our rain gardens and assist staff in understanding all the details. I learned that soils that normally don't infiltrate well can still be amended and designed to appropriate size to handle storm water from significant roof area. Do take serious consideration of WSU's Rainwater Manual's calculations regarding soils with a low infiltration rate. With more trained contractors out there that understand rain garden design and construction, cities would be able to encourage current homeowners to unhook their downspouts and direct runoff into newly constructed rain gardens so that it infiltrates into the soil or can be appropriately routed to an overflow outlet. Sizing and amendment guidelines can ensure that rain gardens can perform adequately even during significant rain events.

I appreciate DOE's efforts in updating the Draft Municipal Stormwater

Permit and Low Impact Development Standards. Seeing how difficult it is to work on the SMP update as a planning board, I can appreciate the amount of time, discussion, and research that goes into this task. I applaud you for considering some bolder steps towards greater environmental protections. It's a balancing act that requires a great deal of foresight and sensitivity to all habitat needs. Thank you for considering my thoughts.

Kind regards,

Val Stewart