

Denis Law  
Mayor

City of  
**Renton**



Public Works Department - Gregg Zimmerman, P.E., Administrator

February 3, 2012

SWMMWW Comments  
Department of Ecology  
Water Quality Program  
PO Box 47696  
Olympia, WA 98504-7696

**RE: Comments on Ecology's Draft 2012 Stormwater Management Manual for Western Washington**

Dear Ecology Staff:

The City of Renton appreciates having the opportunity to review the 2012 Draft Stormwater Management Manual for Western Washington.

The City of Renton has reviewed the 2012 Draft Stormwater Management Manual for Western Washington that is proposed to be finalized and issued in July 2012. The City of Renton has many concerns related to the new guidelines, technical standards, requirements, and the manual adoption process. We request that these concerns, along with the concerns of other jurisdictions, be resolved prior to the Draft Stormwater Manual being finalized and made a mandatory regulatory requirement in the proposed new NPDES Phase II Municipal Stormwater Permit.

The Draft 2012 Stormwater Management Manual for Western Washington is incomplete. The proposed language includes numerous references to "Low Impact Development Standards" (LID) defined in the 2012 Low Impact Development Technical Guidance for Puget Sound. Multiple sections of the manual (sections 3.1.1, 3.1.2, 3.3.8, 3.4.2, 7.1, 7.9, 9.4, etc.) contain language that reads: *"this section will be updated to be complementary with chapter # in the updated Low Impact Development Technical Guidance Manual for Puget Sound"*. The Low Impact Development Technical Guidance for Puget Sound is currently under the review process and has not yet been finalized and adopted. It is impossible to fully understand the LID design criteria, technical requirements, and cost associated with implementing the LID requirements referenced in the Draft Stormwater Manual due to the missing LID information.

The Ecology workshop, the Ecology website, and the manual itself refer to the manual as a guidance document. However, the Ecology website and the presentations made at public workshops by Ecology staff, clearly indicates that the updates made to the 2012 Stormwater Management Manual for Western Washington are proposed so that the proposed Draft Stormwater Manual technical standards will be incorporated in the proposed new NPDES Municipal Stormwater Permits. Therefore, it is clearly Ecology's intent that this manual will be used as a regulatory document, and as such must go through the appropriate review processes, including SEPA review, economic impact assessment, and be adopted in accordance with the state's Administrative Procedures Act for rulemaking.

The City of Renton requests that Ecology defers the adoption of the proposed Draft 2012 Stormwater Management Manual for Western Washington and not make it a regulatory requirement in the proposed new 2013-2018 NPDES Phase II Municipal Stormwater Permit until the document is complete. Prior to moving forward with finalizing the Draft Stormwater Manual, Ecology needs to revise the manual to include all language and guidelines in the manual; address comments and concerns from jurisdictions; complete and adopt the Low Impact Development Technical Guidance for Puget Sound through the state's formal rulemaking procedure; develop, provide for technical review and finalize a new Western Washington Hydrology Model that will allow for the modeling of LIDs and; the standards for applying the LID performance standards are developed for technical review. After all items listed above are accomplished, the manual should go through a new public review process that will allow a complete review of all proposed requirements that are proposed to be included in the Draft 2012 Stormwater Management Manual for Western Washington followed by a formal rulemaking process.

The current NPDES Phase II Municipal Stormwater Permit already far exceeds the minimum federal requirements as established by the EPA and to increase the regulatory requirements will only create more of an economic disadvantage to the State of Washington to retain existing business and recruit new businesses and will harm economic recovery.

For the reasons listed above, we recommend that Ecology delay the issuance of the proposed new NPDES Phase II Municipal Stormwater Permit for 5-years and extend the current NPDES permit requirements for the next 5-year NPDES permit cycle. This will allow more time to address concerns about the proposed new NPDES permits; refine and gain concurrence on the new technical standards in the proposed LID manual and the proposed Draft 2012 Stormwater Management Manual for Western Washington;

ensure the technical accuracy of these manuals and the feasibility of their requirements; and allow for the evaluation of the economic and social impacts associated with the proposed new regulatory requirements.

Attached please find comments identified by the city as major issues of concern with the Draft 2012 Stormwater Management Manual for Western Washington.

We look forward to working cooperatively with Ecology and other jurisdictions to better understand and establish reasonable guidelines to be included in the Draft 2012 Stormwater Management Manual for Western Washington. If you have any questions, please contact me at 425-430-7248.

Sincerely,



Ronald J. Straka, P.E.  
Surface Water Utility Engineering Supervisor

Attachment

cc: Gregg Zimmerman, P.E., Public Works Administrator  
Lys Hornsby, P.E., Utility Systems Director  
Hebé Bernardo, Surface Water Utility Engineer

Project: Draft 2012 Stormwater Management Manual for Western Washington

Comments By: City of Renton

Date: February 3, 2012

Item #	Manual Section	Page number	City of Renton Comment:
1	Stormwater Management Manual Review Process and Issuance	All	<ul style="list-style-type: none"> <li>• The Stormwater Management Manual for Western Washington is incomplete. Proposed language includes numerous references to “Low Impact Development Standards” (LID) defined in the 2012 Low Impact Development Technical Guidance for Puget Sound. Multiple sections of the manual (see sections 3.1.1, 3.1.2, 3.3.8, 3.4.2, 7.1, 7.9, 9.4, etc.) contain language that reads: <i>“this section will be updated to be complementary with chapter # in the updated <b>Low Impact Development Technical Guidance Manual for Puget Sound</b>”</i>. The Low Impact Development Technical Guidance for Puget Sound is currently under the review process and has not yet been finalized and adopted. It is impossible to fully understand the LID design criteria and cost associated with implementing the LID requirements referenced in the DOE manual when there is missing information and the design criteria has not yet been adopted, implemented and included in the DOE manual.</li> <li>• The Ecology workshop, the Ecology website, and the manual itself refer to the manual as a guidance document. However, the Ecology website, and the presentations made at public workshops by Ecology staff, clearly indicates that the updates made to the 2012 Stormwater Manual for WW were in preparation for this document to be required by the NPDES stormwater permits. Therefore it is clearly Ecology’s intent that this manual will be used as a regulatory document, and as such must go through the appropriate review processes, including SEPA review, Economic Impact Assessment, and the rulemaking process.</li> <li>• Radical increase in LID practices, compliance with mandatory lists and performance standards will have a significant cost impact to jurisdictions and the benefit of implementing these is unknown. Compliance with new LID practices will require re-training of engineers, developers, builders and City staff which will result in an immeasurable increase in training cost, construction cost and City staff time.</li> <li>• The implementation of LIDs should be encouraged and incentivized rather than be required as mandatory, especially for projects only subject to Minimum Requirements 1-5 in the Ecology Stormwater manual. The LID code updates should be focused on encouraging the use of LID by emphasizing potential</li> </ul>

Item #	Manual Section	Page number	City of Renton Comment:
			<p>benefits and providing incentives for their use.</p> <p><b>Recommendation:</b></p> <ul style="list-style-type: none"> <li>• Ecology should defer the adoption of the 2012 Stormwater Manual and not be a requirement for the 2013-2018 NPDES Phase II Permit until all language and guidelines are included in the manual itself, comments from jurisdictions are addressed, the Low Impact Development Technical Guidance for Puget Sound is adopted, and a new WWHM model that will allow for the modeling of LIDs and the LID performance standards is developed and available to the general public. After all items listed above are accomplished, the manual should go through a second review process that will allow a complete review of the proposed requirements and comply with the state's Administrative Procedures Act for rulemaking.</li> <li>• For the reasons listed above (among others) we recommend that Ecology delay the issuance of the proposed new NPDES permit for 5-years and extend the current permit requirements for the next 5-year NPDES Phase II permit cycle. The current NPDES Phase II permit already far exceeds the minimum federal requirements as established by the EPA and to increase the regulatory requirements will only create more of an economic disadvantage to the State of Washington to retain existing business and recruit new businesses and will harm economic recovery.</li> <li>• We recommend that new LID practices be focused on encouraging the use of LID by emphasizing potential benefits and providing incentives for their use rather than requiring projects to follow mandatory lists.</li> <li>• Remove LID requirements from the 2012 Stormwater Management Manual for Western Washington. Both performance standards and mandatory list of LID BMPs should be an option for projects implementing MR5. The increased regulatory burden that the proposed 2012 Stormwater Manual will place on counties, cities, property owners, businesses, and citizens will deter new economic growth and impact the ability to retain existing businesses and recruit new businesses to this state. Jurisdictions are currently struggling to provide funding needed to meet the staffing, training equipment, and other costs associated with complying with the current stormwater standards.</li> </ul>

Item #	Manual Section	Page number	City of Renton Comment:
•	Volume I Section 2.3	2-9	<ul style="list-style-type: none"> <li>Proposed definition of receiving waters reads: "Bodies of water or surface water systems to which surface water runoff is discharged via point source of stormwater or via sheet flow. <u>Groundwater to which surface runoff is directed by infiltration.</u>"</li> </ul> <p><b><u>Recommendation:</u></b></p> <ul style="list-style-type: none"> <li>Please remove the last sentence from this definition and return it to its original form.</li> </ul>
•	Volume I Section 2.4	2.4.1 & 2.2.4	<ul style="list-style-type: none"> <li>Proposed language will require all projects irrespective of size and scope to implement erosion and sediment control methods. Many small projects in the City do not trigger a permit and therefore the City has no tools to review and regulate such projects.</li> </ul> <p><b><u>Recommendation:</u></b></p> <ul style="list-style-type: none"> <li>Update language included in the manual to read: "All new development projects triggering a Permit from the local permitting agency shall be required to comply with minimum requirement #2"</li> </ul>
•	Volume I Section 2.5.5	2-34 ► 2-36	<ul style="list-style-type: none"> <li>Both mandatory list #1 and mandatory list #2 appear to include "One-size-fits-all" requirements to be implemented in suburban developments rather than developments in the urban growth areas (like Renton), unless determined to be infeasible. Most sites in urban areas are small, complex, have complicated utility infrastructure and soils are not suitable for infiltration. Therefore, in most cases the implementation of LIDs is not feasible.</li> <li>Renton is concerned that Ecology's proposal for compliance with a site-based mandatory list or performance standard will increase staff time to assure compliance with feasibility criteria, increase staff time to review projects, increase cost for developers and builders to comply with mandatory lists, and increase design and construction cost.</li> <li>The proposal does not provide sufficient guidance for industrial, manufacturing, and other land uses.</li> <li>Renton is concerned about the availability of sufficient information regarding maintenance, life cycle cost, and structural performance of the required LIDs. Therefore, until more information is available regarding life cycle cost, rehabilitation (structural and surface), maintenance requirements, maintenance cost, funding source and availability of material, LIDs shall not be required but encourage on all projects.</li> </ul>

Item #	Manual Section	Page number	City of Renton Comment:
			<ul style="list-style-type: none"> <li>• Our efforts towards environmental protection of receiving waters must necessarily focus on addressing the flow control and water quality requirements; and encouraging the implementation of LIDs rather than making it mandatory.</li> </ul> <p><b><u>Recommendation:</u></b></p> <ul style="list-style-type: none"> <li>• We recommend that new LID practices be focused on encouraging the use of LIDs by emphasizing potential benefits and providing incentives for their use rather than requiring projects to follow mandatory lists.</li> <li>• Remove LID requirements from the 2012 Stormwater Management Manual for Western Washington. Both performance standards and mandatory list of LID BMPs should be an option for projects implementing MR5.</li> </ul>
<ul style="list-style-type: none"> <li>•</li> </ul>	<p>Volume I Section 2.5.5</p>	<p>2-37</p>	<ul style="list-style-type: none"> <li>• Requiring commercial sites greater than 10,000 sf of hard surface to provide a cost analysis that shows infeasibility for the use of a green roof (when infiltration, dispersion and/or infiltration are not feasible) is too stringent and will not help accomplish the intent and principals of LID implementation. The increased regulatory burden that this requirement will place on developers and businesses may deter new economic growth and impact the ability to retain existing businesses and recruit new businesses to this state.</li> </ul> <p><b><u>Recommendation:</u></b></p> <ul style="list-style-type: none"> <li>• Remove the requirement for commercial sites to provide a cost analysis to show infeasibility for green roofs.</li> </ul>
<ul style="list-style-type: none"> <li>•</li> </ul>	<p>Volume I Section 2.5.5</p>	<p>2-38</p>	<ul style="list-style-type: none"> <li>• Proposed language will require governments to review technical codes to minimize impervious surface and retain native vegetation in all development situations. This requirement may result in less zoning capacity or higher construction cost required for taller buildings, which could affect affordability and/or push more developments (and infrastructure) towards undeveloped areas. This could cause the need to expand the urban growth area boundary and will conflict with the intent of the GMA.</li> <li>• Impervious surface limitations and vegetation retention will apply to all projects in addition to mandatory list #1 or mandatory list #2. Projects implementing LIDs in accordance with mandatory list #1 or #2 shall not have a limit to the impervious surface allowed on the lot (other than those required by zoning codes).</li> </ul>

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			<p><b><u>Recommendation:</u></b></p> <ul style="list-style-type: none"> <li>• We recommend that new LID practices be focused on encouraging the use of LIDs by emphasizing potential benefits and providing incentives for their use rather than requiring projects to follow mandatory lists.</li> <li>• Remove the requirement to “review technical codes to minimize impervious surface and retain native vegetation in all development situations” from the 2012 Stormwater Management Manual for Western Washington. Both reducing the impervious surface allowed on lots and mandatory list of LID BMPs should be an option to be used by applicants, encouraged by the City and not required.</li> </ul>
•	Volume I Section 2.8	2-54	<ul style="list-style-type: none"> <li>• Proposed language reads “to determine whether...”</li> </ul> <p><b><u>Recommendation:</u></b></p> <ul style="list-style-type: none"> <li>• Please correct typo to read “to determine whether...”</li> </ul>
•	Volume I Section 4.2	4-3	<ul style="list-style-type: none"> <li>• Proposed manual language includes available LID credits to be incorporated into WWHM in order to reduce the size of the flow control facility or qualify for the 0.1cfs exemption. Proposed language includes only credits for the implementation of permeable pavement. Clarification is needed on the type of credits available for the use green roofs, rain gardens/ bioretention, and limited dispersion (downspout dispersion).</li> </ul> <p><b><u>Recommendation:</u></b></p> <ul style="list-style-type: none"> <li>• Include language that will clearly identify the types of credits available for the implementation of LID facilities such as green roofs, rain gardens/bioretention, and limited dispersion among others. A credit shall also be available for projects reducing the amount of impervious surface on their lots and/or detaining vegetation.</li> </ul>
•	Volume I Appendix I-F	All	<ul style="list-style-type: none"> <li>• We recommend the addition of the following to the feasibility criteria for low impact development best management practices to also include: <ul style="list-style-type: none"> <li>▪ Within area designated as erosion hazard area.</li> <li>▪ Within area designated as aquifer protection areas.</li> <li>▪ Within 10 feet of underground utilities.</li> </ul> </li> </ul>
•	Volume II Section 2.1	2-5	<ul style="list-style-type: none"> <li>• Proposed language reads: “disturb less than one acre of land area, if the project or activity is part of a larger common plan or development or sale” this language implies that all lots within a subdivision will be required to apply and obtain a Construction Stormwater General Permit.</li> </ul>

Item #	Manual Section	Page number	City of Renton Comment:
			<p><b><u>Recommendation:</u></b></p> <ul style="list-style-type: none"> <li>Remove proposed language from stormwater manual to allow for more flexibility and reduce construction cost and increase regulatory burden.</li> </ul>
<ul style="list-style-type: none"> <li></li> </ul>	<p>Volume II Section 2.1</p>	<p>2-6</p>	<ul style="list-style-type: none"> <li>Proposed language in first bullet reads: <i>"construction activities that meet the requirements of an Erosivity Waiver..."</i> The <i>Erosivity Waiver</i> was removed from the NPDES Permit language and therefore will not be allowed for projects in the City of Renton.</li> </ul> <p><b><u>Recommendation:</u></b></p> <ul style="list-style-type: none"> <li>Remove proposed language from stormwater manual to avoid confusion.</li> </ul>
<ul style="list-style-type: none"> <li></li> </ul>	<p>Volume II Section 3.4.2</p>	<p>3-116</p>	<ul style="list-style-type: none"> <li>Proposed manual language will require commercial properties and subdivisions to implement permeable pavement on parking lots, roads and walkways as a first option. This is contrary to what is included in mandatory list #2 which requires projects to verify feasibility for dispersion as a first option.</li> <li>The implementation of LIDs should be encouraged and incentivized rather than be required, especially for projects only subject to Minimum Requirements 1-5 in the Ecology Stormwater Manual. The LID code updates should be focused on encouraging the use of LID by emphasizing potential benefits and providing incentives for their use.</li> </ul> <p><b><u>Recommendation:</u></b></p> <ul style="list-style-type: none"> <li>Update manual language to encourage the implementation of permeable pavement rather than requiring the implementation of permeable pavement in all commercial and subdivision developments.</li> <li>We recommend that new LID practices be focused on encouraging the use of LIDs by emphasizing potential benefits and providing incentives for their use rather than requiring projects to follow mandatory lists.</li> </ul>
<ul style="list-style-type: none"> <li></li> </ul>	<p>Volume III Appendix III-B</p>	<p>B-14 ► B-18</p>	<ul style="list-style-type: none"> <li>This section of the manual is incomplete. This section of the manual (that included the WWHM computation steps) was deleted without the incorporation of guidelines for using the "new" WWHM model, verifying compliance with the LID performance standard (when required) or sizing of LID facilities required to comply with MR#5.</li> </ul> <p><b><u>Recommendation:</u></b></p> <ul style="list-style-type: none"> <li>Please add a section that incorporates a step-by-step computation method of all required facilities including LIDs</li> </ul>

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			<p>(such as permeable pavement) and the new optional LID performance standards.</p> <ul style="list-style-type: none"> <li>Ecology should defer the adoption of the 2012 Stormwater Manual and not make it a requirement for the 2013-2018 NPDES Phase II Permit until all language and guidelines are included in the manual itself, comments from jurisdictions are addressed, the Low Impact Development Technical Guidance for Puget Sound its adopted, and a new WWHM model that will allow for the modeling of LIDs and the LID performance standards is developed and available to the general public. After all items listed above are accomplished, the manual should go through a review process that will allow a complete review of the proposed requirements and comply with the state’s Administrative Procedures Act for rulemaking.</li> </ul>
<ul style="list-style-type: none"> <li>Volume III Appendix III-C</li> </ul>	<p>Volume III Appendix III-C</p>	<p>C-15</p>	<ul style="list-style-type: none"> <li>Approved list of approved trees that may qualify for a flow control credit was not included.</li> </ul> <p><b>Recommendation:</b></p> <ul style="list-style-type: none"> <li>Please update section to include list of approved trees that may qualify for a flow control credit.</li> <li>Ecology should defer the adoption of the 2012 Stormwater Manual and not be a requirement for the 2013-2018 NPDES Phase II Permit until all language and guidelines are included in the manual itself, comments from jurisdictions are addressed, the Low Impact Development Technical Guidance for Puget Sound its adopted, and a new WWHM model that will allow for the modeling of LIDs and the LID performance standards is developed and available to the general public. After all items listed above are accomplished, the manual should go through a review process that will allow a complete review of the proposed requirements.</li> </ul>
<ul style="list-style-type: none"> <li>Volume III Appendix III-C</li> </ul>	<p>Volume III Appendix III-C</p>	<p>C-16</p>	<ul style="list-style-type: none"> <li>Equation for impervious area mitigated or the credit per tree type needs to be revised. As written, after replacing the credit available per newly plant tree, the impervious area mitigated will be a percentage which we do not think is the intent. Please see example below with the assumption that 50 trees will be planted.  Impervious area mitigated = <math>\Sigma</math> Number of trees x credit (%) / 100  Impervious area mitigated = <math>50 \times 20\text{sf per tree} \% / 100 = 100\%</math></li> </ul> <p><b>Recommendation:</b></p> <ul style="list-style-type: none"> <li>Please revise impervious area mitigated formula to read as follows: Impervious area mitigated = <math>\Sigma</math> Number of trees x credit area per tree</li> </ul>

Item #	Manual Section	Page number	City of Renton Comment:
•	Volume III Appendix III-C	C-22	<ul style="list-style-type: none"> <li>Proposed language will allow for projects using the soils and compost specifications as defined in Chapter 7 of Volume V to assume an initial infiltration rate of six inches per hour or four inches per hour depending on the scope of the project. This approach is not taking under considerations the infiltration capacity of the soils below the media. This may result in undersize facilities and flooding.</li> </ul> <p><b>Recommendation:</b> Please update permit language to:</p> <ul style="list-style-type: none"> <li>Allow for projects with soils below the media with an infiltration rate smaller than six inches per hour to use an average infiltration rate between the soils below the media and six inches per hour or four inches per hour depending on the scope of the project.</li> <li>Restrict projects with soils below the media with an infiltration rate greater than six inches per hour to use a maximum infiltration rate of six inches per hour.</li> </ul>
•	Volume V BMP T7.30	7-8	<ul style="list-style-type: none"> <li>Proposed language reads: “... <i>help achieve compliance with the Performance Standard option of minimum requirement #5</i>” this implies that all projects have to comply with the LID Performance Standards. Only projects outside the UGB are required to show compliance with the LID performance standards. For projects inside the UGB this is optional.</li> </ul> <p><b>Recommendation:</b></p> <ul style="list-style-type: none"> <li>For clarification, please revise language to read :” ... <i>help achieve compliance with the Performance Standard option of minimum requirement #5, when required</i>”</li> </ul>