



2022 Drainage Design and Erosion Control Manual

Record Of Public Comment and City of Olympia Response

Public Comment	City Of Olympia Response
Volume I Appendix F	
<p>The City of Olympia should consider major change or elimination of the stormwater fee-in-lieu program described in Appendix F:</p> <ul style="list-style-type: none">• The program is in direct conflict with the description of fee-in-lieu programs on p. 94 of the 2019 SWMMWW, which is limited to redevelopment sites.• In this section of the SWMMWW, Ecology cautions of the potential long-term consequences of allowing these types of programs. In order to continue this program, the City bears the burden of demonstrating that this policy of allowing development to occur without on-site stormwater controls has not had an adverse impact on impaired waters and habitats in the City. In addition, long-term planning to meet stormwater goals should ensure that residents are not burdened with the cost of future retrofits to offset these allowances to developers in the City.	<p>Thank you for the comment. Appendix F will be removed from the DDECM at finalization.</p>
<p>In addition, the City should consider the following in regards to Appendix F:</p> <ul style="list-style-type: none">• Fee-in-lieu programs are not in place in most urban settings in Western Washington. As an example, the City of Tacoma eliminated their limited fee-in-lieu programs in 2008.• A review of U.S. stormwater permit requirements (A Developer's Guide to Post-construction Stormwater Regulations, National Association of Home Builders, 2017) indicates that state permits rarely allow the degree of latitude that Olympia uses by funding unspecified out-of-basin mitigation at their discretion.	<p>Thank you for the comment. Appendix F will be removed from the DDECM at finalization.</p>
<p>If the City continues the employ a fee-in-lieu program that is equivalent to the process described by Ecology in the 2019 SWMMWW, it should consider the following:</p> <ul style="list-style-type: none">• The City should demonstrate to residents that fee-in-lieu program successfully achieves the dollar-for-dollar stormwater treatment requirements that it aspires to accomplish. An example would be a comparison of the pollutant loading of the development projects given access to the program with the pollutant reduction of the City's mitigation projects. Other metrics, such as impervious area treated, can provide a similar comparison.	<p>Thank you for the comment. Appendix F will be removed from the DDECM at finalization.</p>

<ul style="list-style-type: none"> • Residents should have access to documentation that historic stormwater mitigation projects funded by fee-in-lieu funds are in-place, functioning, and are adequately maintained. • The City should eliminate out-of-basin mitigation from the fee-in-lieu program, or provide a demonstration that City successfully targets projects to achieve strategic goals for all receiving waters. • The City should establish and publish specific criteria in the Manual for when a fee-in-lieu alternative is permissible. • The fee-in-lieu cost determination is inherently contradictory; the process allows for proponents to estimate costs based on alternative treatment devices on sites where stormwater allegedly cannot be effectively managed. It is unclear why proponents are given access to the program if they have an approvable stormwater treatment site alternative. • Stormwater requirements should be applied equitably across the City without consideration for the lot size or the proponents' willingness to adapt their site development to meet stormwater requirements. • Contrary to the narrative in Appendix F, municipalities in Western Washington are able to effectively manage stormwater on-site for road widening, bike line, and sidewalk projects. • The manual provides other off-ramps for project proponents who are not able to effectively manage runoff from site, including waivers/variances, and the stormwater transfer control program. 	
Volume 1, Page 49/188	
<p><i>The total cost of stormwater improvements to mitigate existing hard surfaces shall be capped at 30% of the total project costs.</i></p> <p>There is no equivalent statement in the 2019 SWMMWW.</p>	<p>Thank you for the comment. This item is unique to Olympia and is a carry-over from the 2016 DDECM. Please note that this language refers to <i>existing</i> hard surfaces, nor new or replaced surfaces. Therefore, Olympia exceeds the 2019 SWMMWW and no change in language is proposed.</p>
Volume I, Page 49/188	
<p><i>Other types of redevelopment projects shall comply with Core Requirements #1 through #9 for all hard surfaces and the converted vegetated areas if the total of new plus replaced hard surfaces is 5,000 square feet or more and the new hard surfaces add 50% or more to the existing hard surfaces within the project site, or if the total of new plus replaced hard surfaces is 5,000 square feet or more and the valuation of proposed improvements – including interior improvements –</i></p>	<p>Thank you for the comment. This item is unique to Olympia and is a carry-over from the 2016 DDECM. Please note that this language refers to <i>existing</i> hard surfaces, nor new or replaced surfaces. Therefore,</p>

<p><i>exceeds 50% of the assessed value of the existing site improvements. The square footage and improvement value thresholds shall be cumulative and include all projects permitted on or after December 29, 2021.</i></p> <p>Comment:</p> <p>The above statement adds a clause "...add 50% or more to the existing hard surfaces within the project site", and therefore is not equivalent to the SWMMWW. In addition, the last sentence adds a stipulation of a vesting date, and therefore is potentially less protective and not equivalent to the SWMMWW.</p>	<p>Olympia exceeds the 2019 SWMMWW and no change in language is proposed.</p>
<p>Volume I, Page 67/188</p>	
<p>Comment:</p> <p>Per the SWMMWW, runoff discharges should only be estimated using an approved continuous simulation model using 15-minute time steps. In addition, the SWMMWW does not have a stipulation to bypass the requirements of condition (c) in the event that the project proponent is unable to obtain easements.</p>	<p>Thank you for the comment. The following change will be made a DDECM finalization:</p> <p><i>Supplemental Guidelines</i></p> <p>Creating new drainage patterns results in more site disturbance and more potential for erosion and sedimentation during and after construction. Creating new discharge points can create significant stream channel erosion problems as the receiving water body typically must adjust to the new flows. Diversions can cause greater impacts than would otherwise occur by discharging runoff at the natural location.</p> <p>Where no conveyance system exists at the adjacent downgradient property line and the discharge was previously unconcentrated flow or significantly lower concentrated flow, then measures must be taken to prevent downgradient impacts. Drainage easements from downstream property owners may be needed and should be obtained prior to approval of engineering plans.</p> <p>The following discharge requirement is recommended:</p> <p>Where no conveyance system exists at the abutting downstream property line and the</p>

natural (existing) discharge is unconcentrated, any runoff concentrated by the proposed project must be discharged as follows:

- a. If the 100-year peak discharge as estimated using an approved continuous runoff model using 15 minute time steps, is less than or equal to 0.3 cfs under existing and will remain less than or equal to 0.3 cfs under developed conditions, then the concentrated runoff may be discharged onto outlet protection with riprap, such as those described in V-1.4.3 Outfall Systems, or to any other system that serves to disperse flow. ~~is less than or equal to 0.2 cfs (0.3 cfs using 15 minute time steps) under existing conditions and will remain less than or equal to 0.2 cfs under developed conditions, then the concentrated runoff may be discharged onto a rock pad or to any other system that serves to disperse flows.~~
- b. If the 100-year peak discharge as estimated using an approved continuous runoff model using 15 minute time steps, is less than or equal to 0.75 cfs under existing conditions, then the concentrated runoff may be discharged through a dispersal trench, such as those described in V-1.4.3 Outfall Systems, or other disposal system, provided the applicant can demonstrate that there will be no significant adverse impact to downhill properties or drainage systems. ~~is less than or equal to 0.5 cfs (0.75 cfs using 15 minute time steps) under existing conditions and will remain less than or equal to 0.5 cfs under developed~~

	<p>conditions, then the concentrated runoff may be discharged through a dispersal trench or other dispersal system, provided the applicant can demonstrate that there will be no significant adverse impact to downhill properties or drainage systems.</p> <p>c. If the 100-year peak discharge <u>as estimated using an approved continuous runoff model using 15 minute time steps, is greater than 0.75 cfs for either existing or developed conditions, is greater than 0.5 cfs for either existing or developed conditions or if a significant adverse impact to downgradient properties or drainage systems is likely, then a conveyance system must be provided to convey the concentrated runoff across the downstream properties to an acceptable discharge point (i.e., an enclosed drainage system or open drainage feature where concentrated runoff can be discharged without significant adverse impact).</u></p> <p>For (c) only, drainage easements from downstream property owners shall, if needed, be obtained prior to approval of engineering plans. If the proposed project is unable, after reasonable efforts, to obtain needed easements, the discharge approach described in (b) above may be used. Reasonable efforts to obtain needed easements along with communications regarding the alternatives shall be demonstrated through documented written correspondence.</p>
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	<p>Stormwater control or treatment structures should not be located within the expected 25-year water level elevations for salmonid-bearing waters. Such areas may provide off-channel habitat for juvenile salmonids and salmonid fry. Designs for outfall systems to protect against adverse impacts from concentrated runoff are included in V-1.4.3 Outfall Systems.</p>
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<p>Comment:</p> <p>Table I-3.1 provides an alternative core requirement #5 compliance method for public roadway development and redevelopment projects that is not allowed per the SWMMWW</p>	<p>Thank you for the comment. To address your comment, Table I-3.1 will be changed as follows at DDECM finalization.</p> <table border="1"> <thead> <tr> <th>Project Location and Parcel Size</th><th>Core Requirement #5 Compliance Options</th></tr> </thead> <tbody> <tr> <td>New development on any parcel within City limits</td><td rowspan="2"> <ul style="list-style-type: none"> Use the LID BMPs from List #2 for all surfaces within each type of surface in List #2. or Use any Flow Control BMPs desired to achieve the LID Performance Standard, and apply BMP T5.13: Post-Construction Soil Quality and Depth, Low Impact Development Performance Standard and BMP T5.13, or List #2 (applicant option). </td></tr> <tr> <td>Redevelopment on any parcel within the City limits</td></tr> <tr> <td>Public roadway development and redevelopment projects</td><td> <p>Low Impact Development Performance Standard and BMP T5.13 Post-Construction Soil Quality and Depth, or a combination of BMP T5.30: Full Dispersion, BMP T7.30: Bioretention, BMP T5.12: Sheet Flow Dispersion, and BMP T5.11: Concentrated Flow Dispersion, and BMP T7.10 or BMP T20 or BMP T7.30 BMP T5.15 Permeable Pavements shall be used only for sidewalks.</p> </td></tr> </tbody> </table>	Project Location and Parcel Size	Core Requirement #5 Compliance Options	New development on any parcel within City limits	<ul style="list-style-type: none"> Use the LID BMPs from List #2 for all surfaces within each type of surface in List #2. or Use any Flow Control BMPs desired to achieve the LID Performance Standard, and apply BMP T5.13: Post-Construction Soil Quality and Depth, Low Impact Development Performance Standard and BMP T5.13, or List #2 (applicant option). 	Redevelopment on any parcel within the City limits	Public roadway development and redevelopment projects	<p>Low Impact Development Performance Standard and BMP T5.13 Post-Construction Soil Quality and Depth, or a combination of BMP T5.30: Full Dispersion, BMP T7.30: Bioretention, BMP T5.12: Sheet Flow Dispersion, and BMP T5.11: Concentrated Flow Dispersion, and BMP T7.10 or BMP T20 or BMP T7.30 BMP T5.15 Permeable Pavements shall be used only for sidewalks.</p>
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Volume I, Page 70/188	
<p>Comments:</p> <p>The comment from page 69 (above) also applies to the flowchart on this page.</p> <p>In addition, the flowchart instructions for Flow Control Exempt Waters does not match the requirements of the List Approach in the SWMMWW, which stipulates considering the BMPs in the order listed in List #1 or List #2.</p>	<p>Thank you for the comment. To address your comment, the following text will be added following the revised Table I-3.1 at DDECM finalization. Additionally, Olympia's unique Figure I-3.3 will be replaced with the SWMMWW's Figure 1-3.3 at DDECM finalization.</p> <p><u>Flow Control Exempt Projects</u></p> <p><u>Projects qualifying as Flow Control exempt in accordance with the TDA Exemption in I-3.4.7 MR7: Flow Control shall either:</u></p> <ul style="list-style-type: none"> • <u>Use the LID BMPs from List #3 for all surfaces within each type of surface in List #3; or</u> • <u>Use any Flow Control BMP(s) desired to achieve the LID Performance Standard, and apply BMP T5.13: Post-Construction Soil Quality and Depth.</u> <p><u>If the project has multiple TDAs, all TDAs must be Flow Control exempt per the TDA Exemption in I-3.4.7 MR7: Flow Control for the project to use the options listed here.</u></p>
Volume I, Page 77/188	
<p><i>Flow Control is not required for projects that discharge directly to, or indirectly to:</i></p> <p>Comment:</p> <p>Please replace the word “projects” with “TDAs”</p>	<p>Thank you for the comment. “Projects” will be replaced with “TDAs” at DDECM finalization</p>
Volume I, Page 79/188	
<p>Comment:</p> <p>The second bullet of the Flow Control Performance Standard should be removed as this condition does not apply to Olympia.</p>	<p>Thank you for the comment. The second bullet will be removed at DDECM finalization.</p>
Volume V, Page 62/466	

<p>Comment:</p> <p>The Infiltration Drywell BMP describes sizing for soil types that fall outside the range of acceptable types for the equivalent BMP described in the SWMMWW.</p>	<p>Thank you for the comment. To address your comment, the following change will be made at DDECM finalization.</p> <p>Volume V, page 62/466, Infiltration Drywells, bullet item 3, sub-bullet 3:</p> <p>Hydrologic Group D soils (silts, clays, rock outcroppings, till soils with Group C or D surface soils, most fill materials), 750 cubic feet. Infiltration is not recommended in these soils.</p>
<p>Volume V, Page 122/466</p>	
<p>Comment:</p> <p>The BMP described in this section is a UIC well and should be clearly stated as such. Information such as the separation from seasonal high groundwater is in conflict with the stated minimums in Ecology's UIC rule. This information should be removed from the manual since most of this information is accurately described in the UIC sections.</p>	<p>Thank you for your comment. To address your comment, the new and unique to Olympia item "Special Case: Infiltration Galleries" beginning on page 122/466 will be removed from the DDECM at finalization. In the future, Olympia may consider proposing an update to the DDECM to address infiltration galleries. If so, your comments will be considered at that time.</p>
<p>DDECM General Comment</p>	
<p>Overall, I found many of the technical details, including the drawings and graphics in the document, easy to cross reference and navigate to.</p> <p>The DDECM though I found to be thorough and consistent in its approach, providing supporting references to legal requirements and its application of requirements to be supportive of the City's interest in improving the design and control of stormwater. *</p>	<p>Thank you for the comment. It is hoped that using Ecology's format as our new base will make it easier for the user.</p>
<p>Summary of Changes document</p>	
<p>pg. 1, Draft DDECM Summary} Usability Enhancements</p> <ul style="list-style-type: none"> Fully embracing the online user and maintaining the online format <p>That bullet point sounds a bit jargony... for those who might not be familiar with the use of the internet. But maybe that's me. Anyway, a suggestion along the lines of:</p> <p><i>Fully embracing internet online access to the Manual in order to improve the public's ability to review, consider and apply its requirements.</i></p> <p>I would also note there were a number of instances of what appeared to be linked reference points in the document (in blue) that I could not get to open.</p>	<p>Thank you for the comment. The requested change has been made to the Summary of Changes document.</p>