

Comments on the Draft 2019 SWMMWW		
Draft 2019 SWMMWW Section (select from drop down)	Comment	Comment Made By
I-3.4.7 MR7: Flow Control	Page 148 - Section: How do I reconcile the flow control performance standard with MR8. - The situation described in this section with a wetland separated from a stream by some conveyance facility that one could install a flow control device is rare. From experience most streams run through wetlands and there would be no way to hydraulically separate to install a flow control device.	Mark Villwock, PE
I-4 UIC Program Administration and Design Guidelines	Facilities should be exempt from the UIC program if they follow the Stormwater Manual	Mark Villwock, PE
I-C.2 Levels of Wetland Protection	Level 1 protection - Wetlands with habitat scores over 8 have been added. We believe that this is an over reach and this section should be limited as previously to Category I and II wetlands until the modeling can be vetted to a greater extent.	Mark Villwock, PE
I-C.5 Hydro period Protection Guidelines for Wetlands	This modeling requirement is new. It would be very helpful if Ecology could provide some sample projects and calculations so show how this works. Also has the been pilot tested with projects using the manual as written?	Mark Villwock, PE
I-C.5 Hydro period Protection Guidelines for Wetlands	Why is this section in metric?	Mark Villwock, PE
I-C.5 Hydro period Protection Guidelines for Wetlands	1 year of Hydro period monitoring is a long time to delay projects and will only increase the cost of housing etc. with not much certainty that the modeling will be better with the cost of waiting that long. In addition many times the wetland in question is not on the property being developed so in order for the project to move forward would permission from a neighboring property owner be mandatory? If they aren't willing to give permission to monitor the surface water does that mean the project doesn't move forward?	Mark Villwock, PE
I-C.5 Hydro period Protection Guidelines for Wetlands	Flow monitoring - This becomes difficult when in many situations the wetland in question is offsite and applicant may not have permission to enter the property that the wetland is on.	Mark Villwock, PE
I-C.5 Hydro period Protection Guidelines for Wetlands	Strategies to protect the Hydro period - Is it required that an applicant reduce the scale of their project if they can't get modeling to be favorable? Given the uncertainty of the model asking someone to give up their property rights seems over reaching. There needs to be more discussion on how the permitting agency is supposed to implement this section. There should be a pilot test in one jurisdiction for this modeling and associated requirements before it is applied across western Washington.	Mark Villwock, PE
V-5.4 Determining the Design Infiltration Rate of the Native Soils	Option 2 should be acceptable if a licensed Geotech or Geologist feels that the soil most likely not be able to infiltrate at a rate that makes LID BMP's feasible. If the small scale test shows that the infiltration rate is good enough to allow infiltration then Option 1 should be required as outlined in the manual. It is very expensive to do the large scale test when the Geotech or Geologist knows the results will be below 0.3 inches/hour.	Mark Villwock, PE
BMP T5.12: Sheet Flow Dispersion	A new requirement is that dispersion areas is not allowed in critical areas or buffers. Critical areas are understandable for most types but the undisturbed area that storm water is dispersed through should be allowed in buffers. Also not allowed on slopes over 20%. A very large portion of western Washington is over 20%. These requirements will make it so fewer projects can use dispersion	Mark Villwock, PE
BMP T7.30: Bio retention	On page 913 it states that that the distance between the bottom of the Bio retention soil mix and the crown of the pipe must be not less than 6 inches and not more than 12 inches. The question is why can't the designer specify a larger washed rock reservoir and lower the underdrain? This would help support more infiltration and a larger storage area mitigating flows.	Mark Villwock, PE
III-1.2 Choosing Your Runoff Treatment BMPs	Page 486 Step 5 - The Enhanced treatment Performance Goal. Has levels of metal removal increased? If so have the associated BMP's been tested for there effectiveness? It is also concerning that all multifamily sites have the same treatment requirement as commercial and industrial sites. This could be a small 3 unit townhome project that has the same treatment requirement as a commercial or industrial site.	Mark Villwock, PE
I-3.4.4 MR4: Preservation of Natural Drainage Systems and Outfalls	Page 127 - Supplemental Guidelines. The statement that easements may be needed and should be obtained prior to engineering approval for down stream flow path is a new statement in the manual and could be very problematic for implementation. We have relied on common law that as long as the Stormwater is discharged in the same (natural) location , the flows are mitigated per the manual and there is no risk to downstream property damage by the proposed project an easement is not required. This langue should be clarified so that local agencies have clearer guidance of what to ask for from project applicants.	Mark Villwock, PE
Glossary	Adjacent Steep Slope - A slope of 15 percent within 500 feet of the site. This definition needs to be tightened up. First a 15% slope is not very steep at all. Much of western Washington is greater than 15%. Secondly there should be a vertical grade change tied to it. For example slopes over a certain percentage and withe a grade change of least 10 feet. Lastly the steep slope could be upstream of the site and per the definition there is an adjacent steep slope. Shouldn't the definition be if the slope is downstream of the site?	Mark Villwock, PE
III-2.2 Continuous Simulation Models	Page 508 last bulleted item under Vegetation data. This paragraph seems to conflict with the last paragraph on page 509 in how BMP T5.13 areas are handled. If the area is on the project site areas that have used BMP T5.13 can be modeled as pasture and don't need to be set aside with legal restrictions.	Mark Villwock, PE