



## **PUBLIC WORKS**

January 19, 2018

Washington State Department of Ecology  
Water Quality Program  
P.O. Box 47696  
Olympia, WA 98504-7696

RE: Comments on the 2019 Preliminary Draft Municipal Stormwater Permit and  
2019 Stormwater Management Manual for Western Washington

To Whom It May Concern:

The City of Everett appreciates the opportunity to provide comments on the preliminary draft of the 2019 Municipal Stormwater Permit and the 2019 Stormwater Management Manual for Western Washington (SWMMWW). Thank you for the efforts that the Washington State Department of Ecology (Ecology) has undertaken to listen to the concerns regarding the current and future permit as well as the dialogue about the process of reissuance. We sincerely hope that this effort is rewarded by a smooth reissuance in 2019. Please do not hesitate to contact me with questions about our comments. Additionally if you would like us to prepare additional proposed language please let us know. As experienced staff in operating a municipal stormwater system and issuing local permits to the development community we are willing to help draft language that doesn't have unintended consequences to municipalities.

### **S5.C.6 Structural Stormwater Control**

Credit should be given for removal of impervious/hard surfaces and establishment of a more permeable surfacing. Full credits could be given for projects that comply with BMP T5.13 and/or projects which restore pasture or forested conditions. This credit could be applied under project type 5 or folded into 1, 2, and 3. Example projects: adding sidewalk planter strips where sidewalks are over wide for demand, removing pavement in abandoned commercial/industrial facilities, adding planter islands to existing parking lots.

The following activities should be worth a larger number of points (.75 times rather than .25 times) due to the effectiveness of the activities for stormwater improvements:

Maintenance with capital construction costs  $\geq$  \$25,000 or other maintenance actions per S5.C.6.a.ii.(5). 0.25 times the area served by the maintenance activity, or 0.25 times (curb miles swept x # events/year), or 0.25 times the linear feet lines cleaned. See page 9 of <https://ecology.wa.gov/DOE/files/20/20061001-a5df-44ca-9e34-ea45c2e0d114.pdf>.

The new permit language should specifically list street sweeping as an eligible project in S5.C.6.a.i. consistent with the guidance.

### **S5.C.10 / S5.C.1 Education and Outreach**

Given the increased emphasis on behavior change versus awareness, there is concern that the timetable given in the new permit to evaluate and develop a new program based on social marketing methods (target groups, focus groups, determination of topic based on analysis, setup of metric to measure behavior change, etc.) and then to reevaluate and report on the revised program will cause an undue burden on municipalities. In the current permit, when the Phase II municipalities were required to measure and evaluate behavior change a simple end date was given for reporting. This one date allowed flexibility, enabling municipalities to work regionally and leveraging GROSS grant funding for a bulk of the costs to build a true evaluation of a behavior change program via community-based social marketing techniques.

If the municipality found that a regional approach to this requirement was the best option, that can be a great way to meet the requirement but it can also be a very complicated and time consuming endeavor, including but not limited to, multiple meetings to formulate the program and develop an evaluation plan for programming, pinpointing the agency to manage said program, and/or grants that may be used to offset costs, executing Interlocal Agreements that need to be signed and bought onto by various municipalities. That is a lot of steps that would need to occur to build the infrastructure, prior to implementing the developed program and evaluation plan.

We request the reduction of the number of milestones in this proposed section to allow greater flexibility and accommodate both local and regional approaches. Please take care in setting this deadline far enough out for municipalities to use the GROSS grant process toward this requirement.

### **S5.C.8/S5.C.3 IDDE tracking and reporting**

In regards to the following proposed language:

Recordkeeping: Each Permittee shall track and maintain records of the activities conducted to meet the requirements of this section. **In the annual report, each Permittee shall submit data for all of the ~~potential~~ illicit discharges, including spills and illicit connections, found by or reported to the Permittee during the previous calendar year. The summary shall include the information and formatting specified in WQWebIDDE. Applicable data shall be reported for all ~~potential~~ incidents, regardless of whether G3 notification was required, whether an illicit discharge was confirmed, or whether follow-up action was required by the Permittee. Each Permittee may either use their own system or WQWebIDDE for recording this data. Final submittal must follow the schema described in WQWebIDDE.**

Potential illicit discharges should not be tracked, delete the use of the word "potential" in all instances in this section. This will take a lot of time and not lead to improvement of water quality. Since there is no definition of a potential illicit discharge, every call about garbage, a homeless camp, a traffic accident, dirt on the street, dust, etc. could qualify. The focus should be on regionally tracking data of confirmed illicit discharges in a uniform way in order to determine trends and guide efforts for the improvement of water quality. Broadening the scope of effort to include potential illicit discharges would be substantial.

### **S5.C.2/S5.C.3 Mapping**

In the proposed new mapping section there is a requirement to map geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters. It is unclear what success looks like and what the purpose is. Everett has a robust Geographical Information System (GIS) that maps the MS4 along with private and other MS4 locations. Typically the information about whether the system is an Everett MS4 or a private (or other) MS4 is kept in the annotation. We do not draw a line around the areas served by any features since we have very accurate LiDAR and topographical information and very detailed mapping of structures and inverts that provide flow directional information. We propose that the language indicate that municipalities should map BMP's that discharge to the ground, not the geographical areas served by the BMP's the discharge to the ground.

### **S5.C.4/S5.C.5 Controlling Runoff – Site and Subdivision Scale**

We have no issues with the language and options for this section. Everett Municipal Codes adopted the "most current Ecology Stormwater Management Manual for Western Washington" and will thus move to the new manual once Ecology releases the final version. If there is a way to provide advanced notice of the final version this would enable us to notify the development community in advance of the transition that will take place. As with any change in the manual there will need to be a bright line (date of issuance) by which developments must comply with the updated manual and an associated action (presumably the submittal of a permit application or stormwater site plan). Please add information to clarify for the development community which actions and dates will trigger the need to comply with the updated manual.

### **S8. Monitoring**

Everett supports distributing the cost of the monitoring payments over the five years of the permit cycle. In general, we would appreciate having a time period after each additional permit requirement that allows enough data to be collected to determine whether those additional actions and requirements had a water quality benefit. This would also allow time for municipalities to stabilize rates for their citizens.

Though not part of S8, Everett also has multiple TMDL requirements written into our Municipal Stormwater Permit. We request more clarity and attention paid to the TMDL requirements in the permits. If given the option, we would make additional payments to the SAM program to also do the required TMDL monitoring, data analysis, reporting and annual entry to the EIM database. Please consider adding this element to SAM. If the end goal is clean water, it seems to us that the TMDL program should have a greater water-body coordinated effort that is commonly funded by all those along the shared TMDL. From our experience it appears not to be coordinated well or to have much value when this is implemented according to jurisdictional boundaries.

### **S5.C.X Source Control**

This program should not be added to the Municipal Stormwater Permit, as it is a program that should be managed by Ecology's Hazardous Waste section under the existing Local Source Control Partnership. In our past experience with attempting to implement this ahead of the required timeline with the use of a grant, the required effort and training involved didn't allow us to successfully use existing staff and for many smaller jurisdictions isn't an activity that they

can justify. A second attempt led to a partnership with a local health district. This requirement would necessitate additional staffing or payments to other entities.

We were unable to obtain inspection documentation entered into Ecology's source control database under a grant in 2011-12, as the Hazardous Waste Program didn't recognize Municipal Stormwater Permit Manager's as having valid credentials to access their own information. Additionally, the database that Ecology's Toxics Program manages was recently revised and streamlined to such an extent that those managing the database indicated that it would have little value in documenting information for source control programs under the Municipal Stormwater Permit (dates of initial and follow-up inspections along with other information). Entering the data into this database is a requirement of funding for the local health district positions that do county-wide inspections. As such it is disappointing to have followed all the steps required and yet still not end up with a body of available information to use and/or disclose when requested.

Municipalities have found that they have to setup their own database, in addition to the Ecology database, in order to have the information that they need. As with mapping and IDDE this will create a number of different ways of tracking this information instead of one regionwide consistent program.

Ecology should either have the program housed completely in the Hazardous Waste Local Source Control program or completely in the Water Quality Program, but not in both. Since the preliminary draft information clearly references the Hazardous Waste Source Control program it appears that would continue to be the most appropriate place for this program.

In terms of inspecting 20% of the business per year, it is unclear what this means and whether the local jurisdiction can repeatedly go to the problematic sites on a more frequent basis or whether all sites have to be visited regardless of whether they have good practices every five years. Please provide Appendix X so that we know what kinds of businesses are being included, and extend the period of time for commenting.

## **2019 Stormwater Management Manual for Western Washington**

1. Including flow control BMP's at the end of Volume V seems to imply a lower importance than the preceding sections. Propose moving the detention section up to either before or after the infiltration.
2. Regarding the proposed BMPs for potable water line flushing and S441, the City of Everett flushes over 400 dead end water mains on a bi-monthly basis, most of which happens after hours or on weekends. Adding any significant amount of effort to remove solids from curbs and the gutter line prior to each iteration of line flushing will potentially create significant scheduling and staffing issues. It is likely that potable water supply quality would suffer. The portion of the BMP requiring curb and gutter cleaning before flushing should be moved to the "Optional Operational BMPs" section. Additionally, we are not clear on the optional operational BMP language about "storm drain flushing". This can be removed.

The following comments represent concerns which have arisen through the implementation of the 2014 version of the SWMMWW. We request them to be addressed in the 2019 manual:

3. Consider numbering or titling the infeasibility criteria listed for various BMPs, especially on-site BMPs like permeable pavement. In the course of reviewing projects we routinely ask applicants to identify the specific infeasibility criteria which make each BMP infeasible when using the list approach. It is challenging to communicate this information in a succinct way when the items are presented in a bullet form without numbering. Most of this communication happens via electronic communication or by phone and numbering these elements would facilitate a more efficient process.
4. Clarify the use and applicability of the on-site stormwater management requirements for projects draining to exempt water bodies (top of page 2-24, Vol I.). We have had multiple engineers submit stormwater reports noting that they are not required to use the list approach or comply with the LID standard due to the exemption of being under 5,000 SF of applicable impervious surface. While the exemption text seems clear, the fact that multiple engineers have made the claim suggests that there is room for misinterpretation. This may stem, in part, from the referenced exemption criteria pointing to the entire MR 7 Section. We believe a direct reference to the exempt waterbodies list would reduce the misinterpretations and/or a clarification of the difference between an exemption and a threshold. Consider adding the following text:

**Projects qualifying as flow control exempt due to discharging to Flow Control Exempt Receiving Waters, in accordance with Section 2.5.7 of this chapter, do not have to achieve the LID performance standard, nor consider bioretention, rain gardens, permeable pavement, and full dispersion if using List #1 or List #2. However, those projects must implement BMP T5.13; BMPs T5.10A, B, or C; and BMP T5.11 or T5.12, if feasible.**

5. Please provide further clarification of the requirements for artificial turf sports fields. Questions that we are receiving/or asking about turf projects:
  - a. Are all turf materials considered pollution generating?
  - b. How should fields be modeled in WWHM?
  - c. Does turf constitute a hard surface for the purpose of threshold determination?
  - d. Does a conversion from an underdrained natural grass field to an underdrained artificial turf constitute a new hard surface for threshold analysis?
  - e. Do turf fields with an elevated drain (for storage) or no drain qualify as meeting LID standards without modeling?
  - f. What groundwater protection measures are needed under an artificial turf field?

- g. Should the threshold determination be limited to project site (disturbed) instead of the legal site? By way of explanation, universities and schools benefit from using the large value of adjacent buildings, whereas locations that have only a field without buildings do not have this benefit for the valuation portion of the threshold determination flowchart. By limiting to the project site, only values of the existing field and of the proposed improvements area is used in the flowchart determination.
  - h. Should turf/field replacement projects even follow the same flowcharts for threshold determinations, as they do not fit the typical model for which the flowcharts were created (development/buildings/pavement)?
6. Clarify the meaning of "Effective Impervious" in the MR 7 Thresholds section (page 2-33, Volume I) in regards to its connection to new/replaced impervious surfaces used in Figures 2.4.1 and 2.4.2. While the opening paragraph in the Thresholds section addresses the connection this is still one of the most mis-applied rules in the manual. A few extra words could save a lot of hassle in the permit submittal review activities at local agencies. Consider the following revision or something similar:

### *Thresholds*

**When assessing a project against the following thresholds, consider only those impervious, hard, and pervious surfaces that are subject to which this minimum requirement as determined in [Section 2.4](#) of this chapter.**

**The following circumstances require achievement of the standard flow control requirement for western Washington:**

- **Projects in which the total of effective impervious surfaces (*new and applicable replaced*) is 10,000 square feet or more in a threshold discharge area, or**
7. BMP T8.20 Sand Filter Vault notes that sand filter vaults are not suitable where high water tables are expected. This seems counterintuitive. Instead revise to note concerns about floatation or sealing the vault. Consider the following edits for clarification as we do indeed see this located in high water tables:

### *Application and Limitations*

- Use where space limitations preclude above ground facilities
- Not suitable where ~~high water table and~~ heavy sediment loads are expected
- *In high water table areas, buoyancy and infiltration must be accounted for in design*
- An elevation difference of 4 feet between inlet and outlet is needed

8. We request the addition of a small site infiltration testing procedure. The manual currently allows local agencies to adopt their own, but an Ecology adopted method would save effort and expense while also ensuring consistency across jurisdictional boundaries.
9. The manual doesn't talk about incremental development, which basically leads to projects remaining under the MR1-5 threshold.
10. Please allow additional review and comment time following the issuance of the rest of the draft manual.
11. In Volume V, Section 4.6 Table No. 21 – Maintenance Standards and Procedures for Bioretention Facilities is impractically long. Some bioretention is located on private residential properties and the table is especially daunting for that audience. Something more succinct is more likely to get implemented.
12. Please denote which elements of the maintenance checklist are required for proper function, versus those items that should get addressed but do not affect the function.
13. The maintenance tables should include criteria for vegetation control, fencing and gates, access roads. Since most O&M manuals prepared to meet MR 9 are primarily built with the tables from the SWMMWW these elements typically are left out since the appropriate tables are not available. We have prepared our own tables for these elements that could serve as a starting point for Ecology provided tables and they are provided on the next page.

The following three tables provide local maintenance requirements in addition to Volume V, Section 4.6 of the Surface Water Management Manual for stormwater facility maintenance requirements.

**No. 23 – Maintenance Checklist For Fencing/Shrubbery Screen/Other Landscaping**

<b>Drainage System Feature</b>	<b>Defect</b>	<b>Conditions When Maintenance Is Needed</b>	<b>Results Expected When Maintenance Is Performed</b>
General	Missing or broken parts/dead shrubbery	Any defect in the fence or screen that permits easy entry to a facility.	Fence is mended or shrubs replaced to form a solid barrier to entry.
	Erosion	Erosion has resulted in an opening under a fence that allows entry by people or pets.	Replace soil under fence so that no opening exceeds 4 inches in height.
	Unruly vegetation	Shrubbery is growing out of control or is infested with weeds. See also the Snohomish County noxious weeds list at <a href="http://www1.co.snohomish.wa.us/departments/Public_works/divisions/road_maintenance/Noxious-weeds/weeds_list.htm">www1.co.snohomish.wa.us/departments/Public_works/divisions/road_maintenance/Noxious-weeds/weeds_list.htm</a> .	Shrubbery is trimmed and weeded to provide appealing aesthetics. Do not use chemicals.
Fences	Damaged parts	Posts out of plumb more than 6 inches.	Posts plumb to within 1.5 inches of plumb.
		Top rails bent more than 6 inches.	Top rail free of bends greater than 1 inch.
		Any part of fence (including posts, top rails and fabric) more than 1 foot out of design alignment.	Fence is aligned and meets design standards.
		Missing or loose tension wire.	Tension wire in place and holding fabric.
		Missing or loose barbed wire that is sagging more than 2.5 inches between posts.	Barbed wire in place with less than three-fourths inch.
		Extension arm missing, broken, or bent out of shape more than 1.5 inches.	Extension arm in place with no bends larger than three-fourths inch.
	Deteriorated paint or protective coating	Part or parts that have a rusting or scaling condition that has affected structural adequacy.	Structurally adequate posts or parts with a uniform protective coating.
	Openings in fabric	Openings in fabric are such that an 8-inch diameter ball could fit through.	No openings in fabric.



**No. 24 – Maintenance Checklist For Gates**

<b>Drainage System Feature</b>	<b>Defect</b>	<b>Conditions When Maintenance Is Needed</b>	<b>Results Expected When Maintenance Is Performed</b>
Access gates	Damaged or missing components	Gate is broken, jammed or missing	Pond has a functioning gate to allow entry of people and maintenance equipment such as mowers and backhoe. If a lock is used, make sure the city field staff has a key.
		Broken or missing hinges such that gate cannot be easily opened and closed by one maintenance person.	Hinges intact and lubed. Gate is working freely.
		Missing stretcher bands and ties.	Stretcher bar, bands and ties in place.
	Misaligned gate	Gate is out of plumb more than 6 inches and more than 1 foot out of design alignment.	Gate is aligned and vertical.
Bollards	Damaged or missing bollard	Bollard is missing or is damaged to an extent where it cannot prevent vehicle access or creates a safety concern.	Bollard is in place and fully functional.
	Removable bollard cannot be removed	Removable bollard is stuck in place and cannot be removed by hand.	Bollard moves freely in its sleeve and can be moved by hand.
	Locking bollard not secured	Lockable bollard is missing lock or securing mechanism.	Bollard lock in place consistent with original design. City staff has a copy of the key.

**No. 25 Access Roads And General Easements**

Maintenance component	Defect	Conditions When Maintenance Is Needed	Results Expected When Maintenance Is Performed
Access road	Trash and debris	Trash and debris are readily visible within the easement.	Access road and easement are free of significant trash.
	Hazard debris	Access road contains debris or other materials which have the potential to damage maintenance equipment tires.	Access road is free of debris or materials which could damage tires.
	Overhanging obstructions	Vegetation or other materials overhang the access road restricting maintenance equipment access.	Access road overhead is clear to 14 feet high.
	Horizontal obstructions	Vegetation or other materials obstruct vehicular use of access road.	No obstructions present which reduce road width to less than the design width, or 12 feet, whichever is greater.
	Road surface	Maintenance vehicle access could be hampered by potholes or road surface failure.	Road surface smooth with no evidence of potholes, settlement, soft spots or ruts.
	Weeds in road	Weeds or vegetation is growing in the roadway.	Road surface is free of weeds greater than 6 inches high.
	Shoulder erosion	Access road shoulder is eroded.	Road shoulder is free of erosion and adequately stabilized.

Thank you again for the opportunity to provide comments on the preliminary drafts. While these comments focus on what we would like to see changed we appreciate all the effort that goes into crafting a well-written permit.

Sincerely,

*Heather Griffin*

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