



PUGET
SOUNDKEEPER®

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RE: WSDOT Municipal Stormwater Permit Reissuance - Questions

Dear Mr. Labib:

The undersigned submit these comments and questions on the draft 2019 WSDOT Municipal Stormwater Permit (“WSDOT Permit”). These comments and questions have been updated following our conversation on Friday, February 1st, 2019. Per that conversation, we would like to schedule a time to discuss the questions and concerns that we were not able to address last Friday.

I. GENERAL COMMENTS

The WSDOT permit presents a critical opportunity for the state of Washington to control a significant and perilous source of toxic pollution to state waterways. Polluted stormwater runoff is one of the seminal environmental challenges of our time. Moreover, better controlling roadway runoff from state-managed roadways and highways is a key opportunity that we must capitalize upon to better protect our waterways, our communities, and the beleaguered fish and wildlife populations that urgently depend on clean water. Department of Ecology has recognized the severity of polluted stormwater runoff in many studies, including the Puget Sound Toxic Loading study. Governor Inslee’s Southern Resident Killer Whale Task specifically calls for improved control of toxic runoff and better implementation and enforcement of permit standards in National Pollutant Discharge Elimination System (NPDES) permits issued under delegation of the federal Clean Water Act (See recommendations #31 and 32). Yet Washington Department of Ecology proposes to finalize a permit that will not ensure protection of our waterways from toxic pollution. Ecology has a trust responsibility to implement the strongest protections practicable to ensure that state and federal waters meet the necessary standards to support designated uses. Sadly, much more needs to be done as recreational opportunities, subsistence fishing, human contact, endangered species critical habitat and other designated uses are placed in jeopardy by waters that are impaired and fail to meet water quality standards due to polluted stormwater runoff.



Puget Soundkeeper implores Department of Ecology to seriously consider the following comments to improve protection of our waters as it moves to finalize the WSDOT permit.

II. COMMENTS REGARDING PERMIT IMPLEMENTATION

A. Permit

1. S5C: Stormwater Management Program.

a. S5C(3): Mapping.

- i. The 2009 WSDOT Permit (modified in 2012) required WSDOT to meet the following performance indicators:
 - “Initiate a program to map connection points between municipal separate storm sewers owned or operated by WSDOT and other municipalities or other public entities by the end of year two of the permit.” **Was this done?**
 - “Map and document all newly constructed stormwater facilities as part of the project closeout procedure into the *Stormwater Facilities Inventory Database* beginning in year 4 of the permit.” **Was this done?**
 - “Map and document all known municipal separate storm sewer outfalls and structural stormwater treatment and flow control BMPs WSDOT owns, operates, or maintains within Phase I and II designated areas into the *Stormwater Facilities Inventory Database* by the end of year five of the permit.” **Was this done?**
- ii. The 2014 WSDOT Permit, by comparison, then implemented these requirements:
 - “No later than two years from the effective date of the permit (i.e., April 5, 2016), establish an approach and pace for complete conveyance mapping of WSDOT’s MS4.”¹ **Was this done? What is the pace WSDOT proposed? Has Ecology approved this pace? Is it within 3 years of this requirement (i.e., April 5th 2019)?**
 - “By the end of the permit term (i.e., April 5, 2019), develop a process for mapping drainage areas associated with WSDOT owned or operated stormwater outfalls and discharge points.” *Id.* **Was this done?**
 - “Map and document all newly constructed stormwater outfalls, discharge points, and stormwater treatment/control facilities as part of the project

¹ Appendix 2, table 2-1.



closeout into the *Stormwater Features Inventory Database*.” Id. **Was this done?**

- “Starting year three of the permit (i.e., April 5, 2017), meet pace defined by the first two years for MS4 conveyance and connection mapping.” Id. **Was this done? And what is the pace self-defined by WSDOT?**
- iii. S5C(3)(c) (p. 8): The draft Permit reads: “No later than three year [sic] from the effective date of this permit, WSDOT shall develop a process and an implementation plan to map drainage areas associated with known WSDOT owned or operated stormwater outfalls and discharge points ...” This requirement was already spelled out in the 2014 Permit, and so should have been completed already per our comment A.1.a.2 bullet 2 above. **Why was the draft Permit not updated to reflect that this requirement is now past due?**
- iv. On February 1st, Ecology indicated that WSDOT is deemed to be in compliance if they have “mapped some of the features, but not 100% of the features.” This is unacceptable. Section 402(p)(4) of the Clean Water Act, 33 U.S.C. § 1342(p)(4) requires that permits “provide for compliance as expeditiously as possible, but in no event later than 3 years after the date of issuance of such permit.” Ecology must therefore spell out specific deadlines for all permit requirements and deliverables, such as the mapping of features, and deliverables must be provided within 3 years. Maps may need updating if there are new outfalls, but that should be minimal and should be done within the year (and should have been kept up under the existing permit).
- v. Ecology is responsible for clearly articulating concrete, timebound requirements, checking to confirm that WSDOT is complying with those requirements, and then updating those requirements in the next Permit cycle. Ecology should be pushing the Permit forward with each Permit cycle to ensure that the Permit is tightened and becomes more protective of water quality over time. Therefore: Ecology should revise the permit language around mapping to clearly articulate that:
- WSDOT was required to “Map and document all known municipal separate storm sewer outfalls and structural stormwater treatment and flow control BMPs WSDOT owns, operates, or maintains within Phase I and II designated areas into the Stormwater Facilities Inventory Database by the [March 6th, 2014].”
 - WSDOT was required to “Map and document all newly constructed stormwater outfalls, discharge points, and stormwater treatment/control facilities as part of the project closeout into the Stormwater Features Inventory Database” by the end of the 2014 Permit Cycle [April 5th 2019].



- To comply with the Clean Water Act, all other mapping requirements should include a specific deadline, not later than 3 years after the Permit's effective date (i.e., March 6, 2020).
 - Ecology should specify that updates for mapping of features in new areas coming under the jurisdiction of the 2019 WSDOT Permit must likewise be completed by no later than 3 years after the Permit's effective date (i.e., March 6, 2020).
- vi. When Soundkeeper requested to see WSDOT's maps on February 1st, Ecology advised we can obtain the maps at WSDOT, and that Ecology staff had never requested to see WSDOT's maps. This is unacceptable. WSDOT's maps should be in Ecology's possession, or at least, accessible to Ecology and periodically reviewed by Ecology. It is Ecology's responsibility to ensure compliance with the Permit terms. **How does Ecology confirm that WSDOT is in compliance with the mapping requirements in the Permit if Ecology has never requested to view the maps?**
- b. S5C(4)(a) and S5C(4)(c)(i) (p. 8): Traffic Collision Related Spills, Illicit Discharges, and Illicit Connections.
- i. On February 1st, 2019, we requested whether Ecology has provided a guideline, template or example of an adequate traffic spill related response program. Ecology indicated that Section 3 of the 2014 Stormwater Management Program Plan (SWMP), page 8 and the footnotes, provide such guidance and will apply in 2019.
 - ii. We have not been able to obtain a copy of this document to review it, despite searching PARIS. Even so, the Ecology is responsible for spelling out the spill response standards or guidance that WSDOT must follow. WSDOT's own prepared SWMP should not be the source of Ecology's standards or guidance for WSDOT. Ecology should spell out the traffic spill related response program requirements in the Permit, or in a separate guidance document. Ecology should provide specific examples of steps that constitute "appropriate action" to address illicit discharges include spills under Section S5C(4)(c)(i). Further, the traffic spill related response program should be updated each Permit cycle to reflect changes in the state of knowledge around spill response and control.
- c. S5C(6): Stormwater Retrofits for Existing Highways.
- i. S5C(6)(c)(i) (p. 10): The 2009 Permit was modified in 2012 pursuant to a settlement agreement to incorporate a 20% cost obligation for retrofit projects. **What are the results of the 20% cost obligation on the ground? Namely, how much of WSDOT's existing highways have been retrofitted to date?**



(e.g., how many acres of hard surfaces have been retrofitted out of how many acres total)? And at what cost? Please provide a chart or list of the projects, locations, acreage, and costs? How will this Permit draft build upon the last Permit cycle's progress?

- ii. S5C(6) (a) and (d) (p. 10): WSDOT retrofit tracking requirement. Soundkeeper has formally requested to review WSDOT's list of highway segments prioritized for stormwater retrofits, and are awaiting a response. **How has Ecology responded to WSDOT's priority retrofit lists? Where are you seeing improvements, and which alternative is favored?**
- iii. **Why has Ecology not directed WSDOT to consider culvert replacement projects in conjunction with stormwater retrofit projects?** Culvert replacement projects provide an opportunity to dovetail projects and thereby gain more "bang for your buck" – if ground is already being torn up to replace culverts, this provides a great opportunity to install retrofits. Ecology should mandate that WSDOT consider culvert replacement projects when prioritizing retrofits.
- iv. Ecology should mandate that WSDOT consider Urban Mortality Runoff Syndrome (URMS) data and the health of salmon-bearing streams and waters when prioritizing and selecting retrofits. Ecology explained that WSDOT uses bioswales and not bioretention. First, WSDOT should be required to use bioretention where feasible. Second, regardless of the Best Management Practices (BMPs) being used on the ground, Ecology should still mandate that WSDOT consider the documented presence of URMS in waterbodies that receive runoff from WSDOT roads when prioritizing and selecting roads for retrofits, because BMPs presumptively are the scientifically proven best methods to address stormwater runoff and improve water quality regardless of the type used.
- v. Ecology should also require WSDOT to consider environmental justice areas as part of its retrofit prioritization criteria and selection process. We are concerned that there are not presently enough environmental justice considerations written into the draft. History has demonstrated that it is most often communities of color and low-income communities burdened disproportionately by our pollution. As retrofit and stormwater management planning leads to prioritization of watersheds and retrofit efforts, this habitual inequity must be addressed. Furthermore, processes should be developed that prioritize future project work where wastewater discharge indicators place a disproportionate burden of risk on already disadvantaged communities.



- vi. **Why has Ecology not set a certain minimum quantity of retrofit projects for WSDOT to perform in the next permit cycle?** As with the Municipal Stormwater Permits for Phase I and Phase II's, Western Washington, Ecology should define a level of effort for WSDOT to meet the WSDOT Permit's retrofits requirement. Ecology has already assigned points levels of 1, 2, and 3 to different watershed characteristics in Table 6-1 of the 2014 WSDOT Permit: Stormwater Retrofit Prioritization Scheme (page 6-4). There should be a total minimum points requirement/level of effort defined by Ecology for the next Permit cycle, that builds upon the amount of projects performed in the 2014 Permit cycle.
- d. S5C(7)(b)(iii)(5): Maintenance. **Has WSDOT submitted annual reports including lists of repairs needed that exceed \$25,000 in cost? How many maintenance projects are on that list waiting to be completed? May we obtain a copy of the most up-to-date list?**

2. S7: Monitoring

- a. **What are the results of WSDOT's effectiveness monitoring for vegetated filter strip efficacy? Has this been published? Will it be? When?**
- b. After discussing the WSDOT Permit monitoring requirements for some time, it became apparent on February 1st through conversations with Ecology that the WSDOT Permit does not include any set deadlines for completion of effectiveness monitoring. This is absurd. For adaptive management to be effective, the Permit must include deadlines for completion of effectiveness monitoring, review of data, and incorporation of results and feedback into the next iteration of the Permit.

B. Factsheet

1. P. 19: "WSDOT shares basins with Phase I and Phase II permittees, have interconnected conveyance systems, and discharges into many of the same water bodies. In areas where conveyance systems are interconnected or discharges go to the same water body, successful implementation of stormwater management programs requires coordination between WSDOT and local jurisdictions." If sending discharges to municipal storm systems, WSDOT must first pretreat the water being discharged. **Has Ecology required WSDOT to obtain pretreatment permits?** If so, please provide data regarding the location and permits.
2. First flush toxicity testing should remain a requirement of the WSDOT Permit. Ecology says it is eliminating this requirement (p. 39) but the parameters of interest chart on page 40 still includes this requirement. **Could you clarify whether this requirement is being eliminated, and if so, why?**



C. Highway Runoff Manual (HRM)

1. **How frequently has WSDOT utilized the “infeasible” or “not cost effective” loophole to avoid the 20% retrofit obligation? (i.e. how many times in the last Permit cycle?)**
2. Section 3-3.5.2 Minimum Requirement 5 in the Manual says that repaving projects are exempt from the treatment requirements in Requirement 5. **What does this mean on the ground? How many project/road miles does this cover over the course of a permit? How big are the projects on average, including the size of the project budgets?**
3. **Why are projects that are new construction but involve only new sidewalks or bikepaths adjacent to the roadway totally exempt from structural stormwater controls? If WSDOT has the budget to tear up the ground, shouldn't they also be installing infiltration between the roadway and new sidewalk/bikepath that takes runoff from the existing road?** This is a perfect retrofit opportunity that has been missed.
4. In Section 3-3.5.3 of the Manual, it says that minimum require 5 applies only to nonexempt projects. But then it seems to “recapture” and place some obligations on certain projects, but the language is very opaque. **What projects specifically fall within this recapture language?**

III. **QUESTIONS AND CONCERNS REGARDING PERMIT LANGUAGE**

A. Permit

1. Section S4F: Adaptive Management Plans. The WSDOT Permit draft is too vague in terms of implementation details, decision points and deadlines to ensure that adaptive management will actually work. For example:
 - a. Excessive timelines
 - i. S4F(1) (p. 4): WSDOT should notify Ecology within 48 hours of becoming aware, based on credible site-specific information, that a discharge from the MS4 owned or operated by WSDOT is causing or contributing to a known or likely violation of Water Quality Standards in the receiving water” – not 30 days.



- b. No Deadlines
 - i. S4F(2) (pp. 4-5): Ecology does not provide a timeframe within which it will notify WSDOT in writing that an adaptive management response is necessary. Ecology should notify WSDOT of the next steps needed, if any, within 30 days of WSDOT's notification per S4F1.
 - ii. S4F(3)(b) (p. 5): Ecology should notify WSDOT of receipt of its adaptive management response plan within 48 hours and provide a response and revisions to the report, if needed, within 60 days.
 - iii. S4F(3)(d) (pp. 5-6): If the next annual report submitted by WSDOT subsequent to the implementation of an adaptive management plan shows an ongoing violation, Ecology should require WSDOT to stop the violation by modifying the adaptive management plan within 60 days. Ecology should accept or revise the adaptive management plan within 30 days. To effectively stop the violation the modified adaptive management plan should include specific additional BMPs that will be implemented, and a strict compliance schedule for implementation identified by Ecology which should not exceed 1 year.
- c. Implementation details
 - i. The HRM includes BMPs to achieve compliance with the Clean Water Act and State Water Quality Standards. Where adaptive management is triggered, Ecology should work with WSDOT by visiting the site, identifying all additional BMPs that are feasible on site, and requiring same to be implemented within a specific, tight compliance schedule – such as within 1 year. These steps should be clearly articulated in the WSDOT Permit.
- 2. S6 and Appendix 3: TMDL Requirements. We feel strongly that 303(d) listed waterbodies should be given the same consideration as TMDL-approved waterbodies. 303(d) listed bodies are more at risk than TMDL-approved waterbodies – they are impaired and waiting for a TMDL to be implemented to clean up the waterbody, where as TMDL-approved waterbodies already have a pollution control program in place. The TMDL creation and approval process is lengthy and time consuming, and often waters may remain on the 303(d) list for years awaiting a TMDL. These waters deserve special consideration and protective measures, and Ecology is in the unique position to require same through the WSDOT Permit.

B. Factsheet

1. In developing the Factsheet, on February 1st, 2019 Ecology indicated that 90% of the Factsheet was pulled from the 2014 WSDOT Permit's Factsheet and not updated, and the Ecology really only updated sections where Permit requirements were added or



- where the Permit was edited. Ecology should review up-to-date scientific resources on stormwater and stormwater pollution, such as those available through the Washington Stormwater Center, Puget Sound Ecosystem Monitoring Program, the Stormwater Work Group, Stormwater Action Monitoring Program, and other sources, to ensure that the Factsheet contains the most up-to-date and accurate local stormwater data. The Factsheet is in some ways the backbone of Ecology’s Clean Water Act NPDES Permits, providing the background and up-to-date science upon which the Permit must be based to require reduction of pollutants to the Maximum Extent Practicable, and use of All Known Available Reasonable Technology (AKART). By failing to update the Factsheet Ecology has failed to live up to its requirements under the Clean Water Act.
2. P. 6: Under the “Stormwater Problem” section, there is no mention of Urban Runoff Mortality Syndrome (“URMS”), orca recovery, PCBs, nutrients, copper- which has known lethal and sub-lethal impacts on salmonids. **Why did Ecology fail to discuss some of the most critical problems (URMS, orca recovery, PCBs, nutrient pollution, and copper) impacting Puget Sound water quality in the “Stormwater Problem” section?** The WSDOT Permit should explicitly address these issues, including by requiring WSDOT to address URMS through its S5 Stormwater Management Program requirements.
 3. **Why are PCBs, Mercury, and DDT excluded from Table 1 in the Factsheet, which lists “Common Pollutants in Stormwater and Some Potential Sources?”** This is a glaring error.
 4. PP. 8-9: Data from a 1990 study from Oregon is relied upon to characterize Washington Stormwater in the Factsheet (Tables 1 and 2). **Why was more recent and/or Washington specific stormwater data not included in the Factsheet to characterize stormwater here?**
 5. The Municipal Stormwater Permits emphasize the critical role of stormwater retrofits in reducing toxic pollution in stormwater. **Why is there no mention of retrofits, and the importance of retrofits in achieving the goals of the CWA, in the Factsheet?** The “Controlling Stormwater Discharges” section of the WSDOT Permit Factsheet should mention the central role and necessity of retrofits to achieve the goals of the CWA.
 6. Paragraph 1 on page 12 of the Factsheet reads: “The effectiveness and feasibility of treatment BMPs is variable, subject to some debate, and much remains to be learned.” This sentence does not draw from and is not supported by the previous paragraphs, which do not discuss the effectiveness or feasibility of BMPs. This sentence is thus unsupported. The purpose or point of this sentence is unclear. This sentence should be removed.



7. Paragraph 3 on page 12 of the Factsheet concludes: “In summary, the complexity inherent in stormwater discharges and the difficulty of controlling such discharges will require many years to fully implement a program to adequately mitigate or prevent adverse environmental impacts.” This paragraph does not draw from and is not supported by the previous paragraphs, which do not discuss complexity or difficulty of stormwater control. This paragraph is thus unsupported, and moreover, the purpose or point of this paragraph is unclear. This paragraph should be removed.
8. The Limitations of the Permit section on page 12 should discuss the strengths of the WSDOT Permit and how the Permit will ensure that WSDOT meets State and Federal water quality laws and regulations.
9. P. 21: **When is The Western Washington Hydrologic Model due to be completed? Is this the same as the version that came out on October 10th, 2018, located at: <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Stormwater-manuals/Western-Washington-Hydrology-Model>? If yes, has the permit been updated to incorporate data from the model? If not, why not?**
10. P. 26: S4 Compliance with standards: “Consistent with Ecology’s priority of preventing future impacts to water quality from municipal stormwater discharges, existing discharges **were** to meet the MEP standard by implementing the SWMP in Appendix 5 plus any TMDL requirements, and new discharges **were not to** cause or contribute to a violation of water quality standards.” [Emphasis added]. **Why is this language in the past tense?** By using past tense, Ecology has failed to clearly state the current Permit requirements for WSDOT.
11. P. 26: Ecology has adopted “an interim BMP-based approach towards meeting the goals of the Clean Water Act and eventual compliance with water quality standards.” The Factsheet does not define a timeline within which WSDOT must comply with Washington’s water quality standards or the Clean Water Act. Ecology must include a timeline with a deadline by which WSDOT must come into compliance.
12. P. 27: The Factsheet erroneously states that “permit requirements established by Ecology must be tempered and limited by state law.” This is incorrect. State law does not supercede the Clean Water Act. “For example, the application of post construction stormwater controls on new development and re-development required by this permit must be done within the context of state vesting laws. Similarly, the inspection requirements of this permit must be carried out in a manner that is consistent with the state constitution and state law.” These statements are incorrect. *Snohomish County v. Pollution Control Hearings Board* (2016) held that stormwater regulations adopted pursuant to the Washington State’s National Pollutant Discharge Elimination System (“NPDES”) Municipal Stormwater Permit are not “land use



control ordinances” that are subject to the state’s statutory vested rights doctrine. Statements indicating otherwise must be removed from the Permit.

13. First flush toxicity testing should remain a requirement of the WSDOT Permit. Ecology says it is eliminating this requirement (p. 39) but the parameters of interest chart on page 40 includes this requirement. This must be clarified.

IV. GENERAL CONCERN

During other NPDES permit reissuance processes - for example, the Municipal Stormwater permits for Eastern and Western WA Phase I and II municipalities - Ecology engages in a public pre-draft process that includes stakeholder feedback early on. Providing a longer, more transparent public process whereby stakeholder concerns are addressed up front can result in a tailored draft that better addresses both policy and technical concerns known to those who work with the permit on the ground day to day, and those who experience the impacts of the permit firsthand. By not providing stakeholders a process to engage more deeply in the WSDOT Permit drafting process, Ecology has missed an opportunity to start off with a stronger draft permit that is more protective of water quality.

Conclusion

We have before us a critical opportunity to make meaningful strides to improve water quality in the Puget Sound region and throughout state waterways through the stormwater permits as envisioned in the Clean Water Act’s NPDES program, and to help stop the decline of our iconic but endangered salmon and orca whales. Unfortunately, Ecology’s Draft WSDOT Permit falls short of those goals at this time.

Thank you for your time and consideration, and for working with us to ensure that Washington’s WSDOT NPDES Permit protects water quality, recreational opportunities, endangered species recovery and human health.

Sincerely,

Alyssa Barton
Policy Analyst and Executive Coordinator

Chris Wilke
Puget Soundkeeper and Executive Director