

November 14, 2018
WP63914

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

RE: Pierce County Formal Comments Regarding for 2019 Formal Draft Phase 1 Municipal Stormwater General Permit – Language and Guidance

Dear Ecology:

Thank you for the opportunity to provide comments on the formal draft language for the 2019 Phase 1 Municipal Stormwater General Permit. Staff's comments seek to add clarity and consistency to permit conditions, while increasing the effectiveness of the permit to protect and improve water quality in receiving waters of Pierce County.

If you have any questions, feel free to contact me at (253) 798-6793 or Maureen.Meehan@piercecountywa.gov

Sincerely,

Maureen Meehan
Water Quality Manager

Pierce County's comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

S.5.C.2.MAPPING

S.5.C.2.a.v The Ongoing Mapping section appears to require new mapping. The verbiage: "For counties, this requirement applies to the area of the county within urban/higher density rural sub-basins mapped under the previous permit. For cities, this requirement applies throughout the city." should be restored.

S.5.C.2.b.i Pierce County GIS staff recommend that size and material definitions remain with the pipe or channel they describe. We are asking that Ecology remove the requirement to assign size and material to an outfall for the following reasons.

An outfall is an occurrence in GIS, not a physical thing. The physical thing is the pipe or channel that the outfall relates to. The pipe or channel, not the outfall holds the attributes the material type and size in our GIS system.

Assigning attributes, such as size and material to something that is not a physical thing is duplication and creates an opportunity for data errors. As infrastructure is altered, the GIS features are updated by layers. Outfalls are a separate layer from pipe and channels, and therefore may not be updated with the pipe or channel update. Size and material must continue to reside with the pipes and channels referenced in GIS for asset management purposes.

It is possible for an outfall to be the lid of a catch basin, rather than a pipe or a channel. It is not possible to assign material or size as an attribute.

S.5.C.2.c Include the mapping standards in the permit as an appendix. The example is very difficult to find on Ecology's website. Staff reviewing this requirement searched Ecology's website using the search tools but were unable to find the example description.

S.5.C.5. & Appendix 10 CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDVELOPMENT AND CONSTRUCTION SITES

The proposed paragraph on page 20 states that "*Ecology review and approval of the local manual and ordinances is required. Manuals and ordinances approved under this section are listed in Appendix 10, Part 3. Permittees shall provide detailed, written justification of any of the requirements which differ from those contained in Appendix 1 and Appendix 10, Part 2.*" This paragraph seems to contradict the previous section (S5C5biii) which states that the only changes that have to be made in Phase 1 stormwater manuals that were determined to be equivalent in the 2013 - 2018 permit period is what is contained in Appendix 10. As this paragraph is written it would appear that in addition to the Appendix 10, existing permittees would also have to review and modify our previously approved Manuals to comply with the other changes being made in Appendix 1.

Pierce County’s comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

We can see where the wording in the proposed paragraph would be applicable to a new Phase 1 permittee. However we are concerned that, unless reworded, this paragraph would be interpreted to mean that existing permittees would have to make additional changes in our equivalent Manuals other than what is in Appendix 10.

S.5.C.6 COMPREHENSIVE STORMWATER PLANNING

The comprehensive stormwater planning reporting required by S.5.C.6.a.i.(a and b) is redundant. Pierce County’s Comprehensive plan will have been updated before this permit becomes effective. The subsequent update begins after the two dates listed in the permit (March 31, 2020 and 2022). We strongly recommend that this reporting effort be reduced to one event during the permit term.

The level of reporting detail is not clear in this section. An example of a report format and detail is needed, preferably as an appendix to the permit. We continue to have concerns about the permit requirements being in conflict with the Growth Management Act requirement for density. Rather than putting permittees in an untenable situation, Pierce County recommends that Ecology provide grant funding for pilot programs to develop a sustainable basin within an urban growth area. Ecology should fund the full cost, described in the Ecology’s Fact Sheet as 10’s of thousands of dollars per acre. Ecology should ground truth the costs and benefits before requiring permittees to undertake this effort.

S.5.C.6.b.i Permittees have completed the LID review and revision process described here. It was a huge effort. There is no benefit to revisiting the process annually. This language should be struck from the permit.

We recommend as an alternative that Ecology require a list of updated land-use codes in each annual report. Permittees, with no unnecessary expenditure of staff time, could submit updated ordinances. Ecology could review the submitted ordinances for barriers to LID. Ecology also could forbid the creation of additional barriers to LID, unless it is based on infeasibility criteria. We believe this will address the intent, without creating additional reports.

S.5.C.6.c.i --- Pierce County’s Watershed Plan demonstrated that water quality was too heavily influenced by ground water to be improved with stormwater facilities or low impact development projects. We are requesting that Ecology change this language to allow implementation of water quality improvement projects in a basin of the permittee’s choosing.

S.5.C.7 and Appendix 12 STRUCTURAL STORMWATER CONTROLS

S.5.C.7 Structural Stormwater Control is a particularly important special condition in a Permittee’s Stormwater Management Plan (SWMP) and of significant concern to Pierce County. Over the past

Pierce County's comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

three NPDES permit cycles, Pierce County (the County) has invested significant capital toward structural stormwater quality improvement projects, including a substantial build-out of its street sweeping program.

We appreciate the recent court decisions requiring the Department of Ecology (Ecology) to develop a NPDES permit defined level of effort metric for reporting S5.C.7 Structural Stormwater Control (SSC) investments by permittees. The County understands the proposed point system was designed to demonstrate that Phase I NPDES Permittee's maintained at least a minimum and consistent level of investment in their capital stormwater (SSC) programs through subsequent 5-year permit cycles. Nevertheless, Pierce County strongly recommends Ecology not include its proposed level of effort criteria (point system) in the 2019-2024 Permit because it has several elements that are fundamentally impractical and administratively difficult to endorse. The S5.C.7 requirements need considerably more input and development from the Permittee's before imposing it as a matter of Permit compliance.

The current S5.C.7 point system is tied to the Maximum Extent Practicable (MEP) concept of Permit compliance. The MEP concept is a blanket approach to stormwater management, which directs the Permittee to build structural controls within or near their MS4 in order to maintain NPDES municipal Permit compliance. MEP doesn't incentivize building the right SSC project in the right place, at the right scale, or the right price, to treat the right pollutants known to be impairing the Permittee's receiving waters. The currently proposed point system doesn't measure how a Permittee's structural BMP investments provide demonstrable pollutant reductions to receiving waters within its jurisdiction. Instead it compels stormwater managers to prioritize capital investments that generate points over directing investments to achieve the highest priority environmental outcomes (i.e. pollutant reductions that directly achieve water quality standards in the jurisdiction's receiving waters).

The County appreciates Ecology's proposal for a 5-year gradual introduction to the S5.C.7 points system and agrees it does lower the risk that the proposed system will inordinately redirect capital investment priorities during the upcoming Permit cycle. However, if this approach is officially ushered-in as proposed (i.e. un-altered) to future permit cycles (i.e. 2024), it may result in the unintended consequence of disincentivizing projects with the greatest environmental benefit.

Pierce County recommends a more cost-to-benefit type of system be developed. We recommend using a structural BMP performance-based metric that considers dollars spent relate to stormwater flow and/or pollutants reduced. The use of concepts and terms everyone understands (e.g. dollars spent, gallons of stormwater reduced or treated and tons of sediment reduced) allows investments to be clear and meaningful to the broadest audience. What did we spend, what did we get for it, and how was that SSC investment linked to attaining water quality standards in the Permittee's receiving waters (i.e. why did it matter)?

- This would be a robust approach for revealing the patterns and trends of a Permittee's investments in their NPDES program achievements (i.e. improving water quality in the receiving water and protecting beneficial uses).
- It would help obtain the critical public and elected support needed to implement capital-intensive programs over time.

Structural stormwater controls installed as retrofits test the performance assumptions associated with the Basic Treatment Menu (BTM) design standard. These retrofits are rarely able to meet the full BTM flow-based or volume-based design requirements (i.e. 91 percent of the local hydrograph). Consequently, the commensurate performance assumption of 80 percent Total

Pierce County's comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

Suspended Solids (TSS) removal is not clearly supported because there is no mention in the Stormwater Management Manual of Western WA (SWMMWW) as to whether the 80 percent TSS removal can be achieved by structural stormwater controls (BMPs) that are designed consistent with, but can't fully meet the BTM volumetric or flow-based design standard due to site constraints.

Given this lack of certainty—and the increasing need to develop other more meaningful performance-based metrics for structural BMPs—the County suggests a Permittee stakeholder process be undertaken. There is an urgent need during the 2019 permit cycle to collaboratively create an improved framework for a defining a level of programmatic effort into meaningful, commonly understood terms. Points do not translate effectively outside of the limited NPDES Permit manager audience.

The Ecology/Permittee stakeholder process should develop recommendations to improve S5.C.7 requirements and better direct millions of dollars of investments to the highest priority environmental outcomes. The process should gather and evaluate local, regional, and national information on the BMP performance and benefits for different structural stormwater controls in different environmental settings (e.g., urban vs. rural). For example, a system that can translate (report) dollars spent for a quantifiable level of pollutants reduced from catchments which are directly connected to receiving waters.

The Ecology/Permittee stakeholder process needs additional technical support because an investment-based BMP performance system will require developing a new metric and a new defined level-of-effort approach for Permit reporting (Appendix 12 reporting and demonstrating program compliance). Washington should look to other settings around the country, such as certain regional Permits in CA (i.e. central coast), and a host of SSC metrics developed by the EPA, and the six (6) states involved with the Chesapeake Bay program.

Pierce County's specific comments on the draft permit are not limited to the issues discussed below. The County believes the proposed framework needs to be reexamined in a more holistic manner by multiple Permittee stakeholders rather than an iterative, ad hoc, process over a 5-year permit cycle.

Street Sweeping Programs – The City of Seattle's Integrated Plan required an exhaustive paired catchment street sweeping study to more closely examine and confirm the water quality benefits associated with dedicated street sweeping. This recently-completed study clearly indicates that sweeping does not provide a reliable end-of-pipe water quality benefit that is quantifiable and repeatable. Ecology should closely reexamine the water quality benefits it attributes to regenerative-air street sweeping, because the final destiny of the materials picked-up by this mobile technology cannot be correlated with the load reductions that are expected at the end-of-pipe. More importantly, the study indicates that material loads associated with stormwater runoff entering the MS4 infrastructure inlets were not statistically different between swept and un-swept catchments. Awarding retrofit incentive points for a Permittee's street-sweeping program based on curb miles swept and frequency of sweeping is not supported by the current state of knowledge regarding receiving water quality benefits.

Street Sweeping Programs are very helpful to asset managers working for road operations and maintenance departments. Street Sweeping has been demonstrated to reduce catch basin cleanout maintenance which translates into less vector truck visits and decant facility use. These attributes alone are very valuable to stormwater managers regardless of the uncertain end-of-pipe water quality benefits.

Pierce County's comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

Additionally, the following “Qualifying Project Types” listed in Table 1 of the Draft Phase I Permit do not fall under any part of the EPA definition of the Municipal Separate Storm Sewer System (MS4):

5. Property acquisition
7. Restoration of riparian buffer
8. Restoration of forest cover
9. Floodplain reconnection projects

Washington State's 2013 Phase I NPDES Permit cites the identical MS4 definition as the federally defined MS4 version found in the Code of Federal Regulations, cited below:

40 CFR 122.26(b)(8), “municipal separate storm sewer system” means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law)...including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges into waters of the United States.*
- (ii) Designed or used for collecting or conveying stormwater;*
- (iii) Which is not a combined sewer; and*
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”*

Ecology's draft permit guidance provides no evidence or explanatory narrative establishing what constitutes “nexus” between the following listed project types and the definition of the MS4 cited above. The five (5) qualifying project types listed above (from Table 1) are indisputably outside the legally defined boundaries and jurisdiction of the MS4, and thus the NPDES permit program. This is particularly true when compared to the discussion on Non-Qualifying Project Types found in the draft permit guidance.

The following projects and project characteristics DO NOT qualify:

Projects that do not have a “nexus” with the current MS4 or do not prevent future MS4 Impacts, including:

1. In-channel habitat and stream restoration
2. Fish barrier removal
3. Stabilization of down cutting
4. In-stream culvert replacement

Ecology has failed to provide a clear distinction between a “Stabilization of down cutting” or “In-channel habitat and stream restoration” project (defined by Ecology as non-qualifying actions) and a “Floodplain Reconnection” or “Restoration of Riparian Buffer” project (defined by Ecology as qualifying projects). All these activities take place within the confines of the ordinary high-water mark and on properties located adjacent to the creek, draining directly to the receiving waters

Pierce County's comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

without a connection to a Permittee's MS4. Properties and settings, that in a TMDL, would be appropriately assigned to the non-point load allocation requirements. In practical terms, any professional with river project design and construction oversight experience would point out that most projects in riverine settings are a blend of all four actions. A stabilization of down cutting project would require a design that builds the channel substrate through enhanced deposition, raising the invert of the channel over time. This project would result in floodplain reconnection, the enhancement of in-channel habitat and would require the restoration of the riparian buffer. None of the project types listed are within the defined boundaries of the MS4, qualifying or otherwise. They are all outside of the MS4 and are only associated with receiving water.

Ecology must expand the guidance narrative to explain the legal and hydrologic nexus requirements and their rationale. The guidance must clarify the qualifying criteria surrounding project type eligibility, including the terms "directly and indirectly related". The guidance should be placed in the body of the Permit at S5.C.6, or as a supporting Appendix. It would be insufficient to include Permit requirements, or key details that are critical to complying with the proposed requirements, and locate them in a separate, free-standing document or a Fact Sheet.

Other examples of where the current framework is not robust enough for prioritizing projects, especially once the ramp-up period is over. The following bullet point analysis warrants notice, however the County is not making specific recommendations at this time.

- A Runoff Treatment Project that provides basic treatment receives a 1.5 Incentive Factor, while a project that provides enhanced treatment receives a 1.75 Incentive Factor. That enhanced treatment should receive more points may be valid, but why 0.25 more? Why not 0.5 more? Or 0.1 more? What was that based on? It appears arbitrary.
- When comparing other project types, the basis for the Incentive Factor assignments become even more unclear. How can one value flow control versus treatment? How can other project types be valued relative to each other?
- The same number of points are awarded to a one-acre roadway project that provides enhanced treatment, whether the roadway is a rarely travelled roadway in a rural area or an arterial in an industrialized urban area. Although both projects receive the same points, the industrial roadway project most likely has a greater environmental benefit. It is also likely to cost significantly more. A stormwater manager faced with limited funding may be forced to prioritize the rarely-travelled rural roadway project to get points to meet S5C7 requirements.

S5.C.9 ILLICIT CONNECTIONS AND ILLICIT DISCHARGES DETECTION AND ELIMINATION

S5.C.9.c.i The language in this section should reference the outdated Herrera Manual as *potential guidance* but not require its use. Recommended language change from "shall" to back to "may". This manual restricts Pierce County's flexibility to implement field screening that considers the unique characteristics of our MS4. Of particular concern is requirement to perform water quality monitoring during dry weather. The definition of dry weather in the manual is problematic, as Pierce County has significant shallow ground water which impacts MS4 conveyances year round.

Pierce County's comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

Recommended language "Screening for illicit connections and non-stormwater discharges may shall be conducted using the Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual"

S5.C.9.g Eliminate this new requirement. Ecology's database is burdensome to staff and fails to add value to permittees understanding of illicit discharges. Ecology should make an effort to work with permittee staff involved directly in IDDE investigations and tracking to build a streamlined reporting database. This could be completed over the next permit cycle to allow permittees time to develop a database, while avoiding the excessive data collection required by Ecology's current proposed database. An increased staff effort will be required to design, collect, and report these data. Data reporting is already required by General Condition G3, and by existing Annual Report Question 48 summarizing IDDE actions taken to characterize, trace, and eliminate illicit discharges.

S.5.C.11 EDUCATION AND OUTREACH

S5.C.11 Pierce County staff are recommending the following language refinement to the Education and Outreach section of the permit

Reword "Build general awareness about impacts from, and methods to address and reduce stormwater runoff" to "Build general awareness about how stormwater is managed, including how to reduce stormwater flows and impacts to water quality."

Globally this section uses the terms program and campaign somewhat interchangeably. The terms program and campaign should be defined and the text of this section should be reviewed to ensure both terms are used in the correct context

Reword the last sentence of introductory paragraph provided after program bullet points: "If a Permittee chooses to adopt on or more elements..." to "the Permittee shall participate in the regional group and implement each of the selected element(s) of the regional program in the local jurisdiction"

Last bullet point outlining the components of the E+O program: "Create stewardship opportunities" needs a definition and/or examples of acceptable stewardship opportunities.

S5.C11.a.i The language of this section reads: "General Awareness: To build general awareness, Permittees shall target the following audiences and subject areas:"

Based on previous discussions with Ecology staff, it is the understanding of Pierce County staff that all of the listed target audiences (specifically school-aged children, overburdened communities, home-based businesses and mobile businesses for (a) and engineers, contractors, developers and land uses planners for (b)) and all of the subject areas need to be addressed. However, some of the subject areas are not relevant to some of the target audiences. In addition, trying to address all of

Pierce County’s comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

the subject areas for all of the target audiences may result in muddled messaging and/or oversaturation. We recommend refining this section and allowing for more targeted outreach based on jurisdiction needs.

S5.C11.a.i(a) Subject areas First bullet point under "Subject Areas" has a typo: "General impacts of stormwater on surface waters, including impacts ~~form~~ from impervious surfaces".

S5.C11.a.ii. Behavior change The language of this section reads: "Behavior change: To effect behavior change, Permittees shall target the following audiences and BMPs"

Based on previous discussions with Ecology staff, it is the understanding of Pierce county staff that only one target audience and one BMP needs to be selected based on the local jurisdictions key water quality issues. However, the language used is similar to that used in the "General Awareness" section where all target audiences and all BMPs must be addressed. Language will need to be refined to confirm the expectations of the Department of Ecology for compliance with this requirement.

S5.C.11.a.iii The language of this section reads: "Each permittee shall create and advertise..." We request that Ecology provide specific guidance on what it means to "advertise"

S5.C.11.a.ii.(a) Pierce County staff are requesting clarification of the term “audience specific” Source Control BMPs and locally important, stormwater-related subject area.

The 2020 evaluation (11.b) and the 2024 evaluation (11.e) raise concerns about what compliance looks like and the cost of said compliance. Please describe in detail the acceptable level of effort. This type of evaluation will require many Permittees to hire consultants. Will grant funds be available to support the evaluation effort? An allowance for regional efforts should be included in the permit language.

What is considered successful? – 5% behavior change? 10%?

The Phase I communities need to talk about how to tackle these two sections. I see the potential of some jurisdictions doing a lot more work than needed and others doing too little. We request that Ecology provide additional information to create some level of consistency across jurisdictions.

S7 and Appendix 2: COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

Name of TMDL	Clarks Creek Dissolved Oxygen and Sediment Total Maximum Daily Load
Document(s) for TMDL	<i>Clarks Creek Dissolved Oxygen and Sediment Total Maximum Daily Load – Water Quality Improvement Report and Implementation Plan, December 2014, Ecology Publication No. 14-10-030.</i>

Pierce County's comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

	https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Total-Maximum-Daily-Load-process/Directory-of-improvement-projects/Clarks-Creek
Location of Original 303(d) Listings	Clarks Creek 35407 47590 47591 47592 Meeker Creek 7510 47578 47579 Rody Creek 47593 Silver Creek
Area Where TMDL Requirements Apply	Requirements apply in all areas regulated under the Permittees' municipal stormwater permit and discharging to water bodies listed within the specific requirement in this TMDL section.
Parameter	Dissolved Oxygen and Sediment
EPA Approval Date	May 27, 2015
MS4 Permittee	Phase I Permit: Pierce County Phase II Permit: Puyallup

Actions Required

Preamble: The WA State Department of Ecology (Ecology) issued the Clarks Creek Dissolved Oxygen and Sediment TMDL in 2014. This TMDL uniquely applied the use of surrogate measures (stormwater flow) to demonstrate attainment with a numerically expressed Waste Load Allocation (WLA). In response to this unprecedented approach, the County entered a Dispute Resolution process with Ecology to confirm the details of project implementation and numerical compliance. A Dispute Resolution Agreement (DRA) was officially approved on June 30th, 2015. The Clarks Creek Restoration Plan (Plan) fully complies with all the content criteria set forth by the DRA. The final draft of the Clarks Creek Restoration Plan (Plan) has been submitted to Ecology but is pending approval.

The Plan's implementation strategies are innovative and multifaceted. Among the agreements represented in the DRA is the development and use of a pollutant reduction crediting system. This crediting system was created to estimate the performance of upland water quality improvement projects (structural BMPs) and instream restoration projects. The system allows the County to relate their capital program's pollution reduction performance to the attainment of the two numerical WLAs. Ecology and the County have embarked on a collaborative demonstration of new implementation accounting tools to better track capital investments and the attainment of the TMDL clean water targets. Demonstration projects are intentional efforts created to share risk while providing an opportunity to explore new innovations that may lead to greater levels of success without creating unintended precedents that obligate future Permit conditions (for Pierce County or other jurisdictions).

For the first five (5) years of the Plan, the DRA directs the County to operate, inspect and maintain all past capital projects credited since 2003. It also directs the County to construct, operate, inspect and maintain the six (6) future water quality improvement projects (i.e. new structural stormwater control facilities and instream restoration projects) listed in Section 4. The Clarks Creek TMDL report and the DRA expressly allow for instream restoration projects to be credited toward the Sediment WLA. For this limited five-year period the sediment reduction credits generated by instream projects will be allowed to offset the limited sediment reduction credits that could be generated by new upland structural stormwater controls located within the MS4. The credits earned from both instream and upland project

Pierce County's comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

categories will be applied to the Sediment WLA. In Year five (2022), the County and Ecology will jointly conduct a public process to reassign all future instream restoration credits to an adjusted General Load Allocation (LA) for Sediment. This reallocation of waste load sources and their controls will require the readjustment the Sediment WLA to account for upland sediment sources only.

The Five-Year Reassessment Project is a collaborative water quality assessment study that is an expressed commitment of the DRA. The County is coordinating with Ecology and the Puyallup Tribe of Indians on this intensive water quality reassessment project. The information resulting from this study will be used to guide the reapportionment of the Sediment WLA and LA responsibilities for years six through 20.

The following NPDES requirements are derived from Sections 3 and 4 of the Plan. For more than a year, Pierce County has been implementing the water quality improvement projects and programs listed in the Clarks Creek Restoration Plan. The County has diligently proceeded in good faith with its obligations, with the expectation that Ecology is equally committed to honoring all their agreements regarding the County's approach to implementation. The County looks forward to fulfilling its 5-year list of obligations for designing, constructing and operating structural stormwater control facilities and instream restoration projects. It also is committed to resolving important administrative details regarding the TMDL at the 5-year milestone.

Pierce County

1. The Permittee shall operate, inspect and maintain all past capital projects listed in Section 4. The Permittee shall construct, operate, inspect and maintain the six (6) future water quality improvement projects (i.e. new structural stormwater control facilities and instream restoration projects) listed in Section 4 by December 31, 2021. The combined average annual sediment reduction credits achieved by the projects listed is estimated to be 54.4 tons per year. The annual sediment reduction credits generated by the six (6) future water quality improvement projects will be based on the "constructed as built" scale of each project's implementation. The annual sediment reduction credits from all projects listed are estimated to achieve 40 percent attainment of the 20-year Sediment WLA implementation target.
2. The Permittee shall operate, inspect and maintain all past capital projects listed in Section 4. The Permittee shall construct, operate, inspect and maintain the four (4) new structural stormwater control facilities listed in Section 4 by December 31, 2021. The combined volume of treated stormwater achieved by all the listed projects is estimated to be 15.8 MG annually. The combined annual volume of treated stormwater was calculated based on the October 21, 2003 storm event. The future water quality improvement projects submitted by the County for annual stormwater treatment volume credit will be based on the "constructed as built" scale of each project's implementation. 15.8 MG of stormwater treated per year achieves an estimated 53 percent attainment of the 20-year Dissolved Oxygen WLA implementation target.
3. The Permittee shall develop a database reporting ledger for the Pierce County Pollutant Load Reduction crediting system by January 1, 2020. The database reporting ledger will be used to account for the annual sediment reduction (tons) credits and stormwater volume treated (MG) credits awarded to all operational projects based on their corresponding inspection reports and maintenance actions taken between January 1, 2017 and December 31, 2019. This database ledger will serve as the official reporting instrument to track each year's credits

Pierce County's comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

and apply them toward the numeric targets assigned WLAs. All projects constructed since October 21, 2003 shall receive annual sediment reduction credit (tons) and/or stormwater volume treated (MG) credit for each year the project was inspected, maintained and deemed operational.

4. The Permittee shall submit an update of the Clarks Creek Restoration Plan, listing the water quality improvement projects proposed for the January 1, 2022 to July 31, 2024 reporting period. The Plan update must be submitted to Ecology by July 1, 2020 for review and approval. Ecology reserves the right to require changes to the Plan. If Ecology takes longer than 90 days to provide an approval, the start of the updated Plan's implementation will be extended by the number of days Ecology exceeds 90 days. The proposed projects in the updated Plan will be assessed using the Pierce County Pollutant Reduction Crediting System. The annual reporting ledger will account for the annual sediment reduction credits (tons) and stormwater volume treated (MG) credits represented by those constructed projects based on the corresponding inspection reports and maintenance actions. Pierce County's pollutant reduction credit reporting ledger will serve as the database to track each year's earned credits and apply them toward the numeric targets associated with the Permittee's two assigned WLAs.
5. The Permittee shall submit an update of the Clarks Creek Restoration Plan, listing the water quality improvement projects proposed for the five-year reporting period beginning August 1, 2024. The Plan update must be submitted to Ecology by February 1, 2023 for review and approval. Ecology reserves the right to require changes to the Plan. If Ecology takes longer than 90 days to provide an approval, the start of the updated Plan's implementation will be extended by the number of days Ecology exceeds 90 days. The proposed projects in the updated Plan will be assessed using the Pierce County Pollutant Reduction Crediting System. The annual reporting ledger will account for the annual sediment reduction credits (tons) and stormwater volume treated (MG) credits based on their annual inspection reports and corresponding maintenance actions. Pierce County's pollutant reduction credit reporting ledger will serve as the database to track each year's earned credits and apply them toward the numeric targets associated with the Permittee's two assigned WLAs.
6. All past capital projects and future water quality improvement projects which have been constructed and deemed complete shall receive annual sediment reduction credits (tons) or stormwater volume treated (MG) credits for each year the project was inspected, maintained and deemed operational. Projects which have been inspected and need maintenance action(s) to correct the facility's impaired function cannot receive sediment reduction credit or stormwater volume treatment credits during the period in which facility's function was impeded.
7. Public Education and Outreach: The Permittee shall conduct public education and outreach activities that increase awareness among residents of the sources of polluted runoff affecting Clarks Creek and its tributaries.

S8 MONITORING AND ASSESSMENT

The requirement in S8.B.3 that *"All Permittees shall submit records of SWMP activities tracked and/or maintained in accordance with S5 and/or S9 in response to requests from the Stormwater Action Monitoring (SAM) Coordinator for information associated with regional effectiveness and source*

Pierce County's comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

identification studies that are under active SAM contracts." creates undue costs by Permittees that are not receiving project funding through SAM.

Data submittal should remain voluntary, but Ecology should provide an incentive for data sharing. Permittees should be reimbursed for their time and materials to voluntarily collect, format, and deliver data. Reimbursements could be from a set-aside percentage of pooled pay-in fees, or from the study budget.

If data submittal remains mandatory, we recommend "sideboards" to this requirement:

- A project must demonstrate commitments from data providers before the project is approved or funded; and
- Data providers are reimbursed for time and materials; and
- To prevent being overly burdened, no Permittee is required to submit data more than once annually, and data can be provided as part of the next annual report.
- Permittees will not be required to provide data collected outside of the Permit (this should remain voluntary); and
- If a Permittee does not have the requested data, noting this in their annual report demonstrates full compliance with this condition.

The budgetary impacts of S8 fees on local stormwater programs is a recurring concern. We recommend that S8.B.2.c be broadened. It should allow permittees to redirect 50% of their effectiveness contributions toward data collection, modelling, and analytics needed to support local stormwater management-related programs and obligations. This money should help local data-driven efforts be more effective.

Example uses of the balance could include:

- 1) Identifying priority target audiences for education and outreach programs,
- 2) Identifying high risk businesses to target source control efforts;
- 3) Support GIS analyses to define watershed units for stormwater management planning; or
- 4) Support diagnostic monitoring to direct IDDE efforts.

This funding strategy could sustain or improve the effectiveness of local stormwater programs. The permit could include the criteria that permittee's local efforts need to meet in order to be eligible to participate in such an option.

Regarding S8.A.3, we agree that Clark County should have the option to pay into a collective fund, managed by Ecology, to implement urban streams status and trends monitoring in the Lower Columbia River Basin (LC Study). The permit remains silent on who will administer the LC Study, although the Fact sheet says that Clark County sent a letter to Ecology expressing their intent to enter into a contract to conduct LC Urban Streams monitoring as a SAM project.

The Stormwater Work Group (SWG), which oversees SAM, is under the Puget Sound Ecosystem Monitoring Program umbrella. Status and trends data produced in the Puget Sound and Lower Columbia studies may not be applicable to each other, and Puget Sound Permittees may be

Pierce County's comments on the Formal Draft Phase 1 Municipal Stormwater General Permit

reluctant to volunteer time to assist with studies outside their basin. We recommend that LC stakeholders fully participate in the SWG Pooled Resources Oversight Committee to assist with project oversight, or that Ecology directly manages the LC Study. Technical review of data produced in the study should be paid out of the SAM fund.

We support the revised fee structure in Appendix 11 and SAM's goal to support approximately five new regional effectiveness and source identification studies per year.

Appendix 1

Section 3.4 "Additional Requirements for Redevelopment" The first paragraph in this section states " Road-related projects shall comply with all the Minimum Requirements for the new and replaced hard surfaces (including pavement, shoulders, curbs, and sidewalks) and the converted vegetation areas if the new hard surfaces total 5,000 square feet or more and total 50% or more of the existing hard surfaces within the Site." This proposed paragraph removes the limits of the road - related projects and replaces it with the word "Site". Since road-related projects are located in right-of-way, and right-of-way conceivably does not have a beginning and an end we request that a definition of "Site" be added to the "Definitions and Acronyms" part of the draft Phase 1 Permit. If the definition of "Site" that is contained in the 2019 Draft SWMMWW is added to the Definitions and Acronyms part of the draft Phase 1 Permit this would address our concern.

(Page 29)Table 1-10.1: Minimum Requirement # 5 Compliance Options for Projects Triggering Minimum Requirements #1 - # 9. This table seems to be missing compliance options for Projects outside the UGA, on a parcel smaller than 5 acres.

Appendix 10

In the second column of the first row the word "second" should be added as follows: Replace "second" bullet with: "Demonstrate compliance with the LID Performance Standard....."

In the second column of the last row there appears to be a typo in the citation. It appears this citation should be criterion "2014 SWMMWW Volume III, Appendix III-C, Part1, Section C.11.3".