

December 2, 2022

Abbey Stockwell  
Washington Department of Ecology  
Headquarters  
P.O. Box 47600, Olympia, WA 98504-7600

RE: WA Municipal Stormwater General Permits: Preliminary Drafts for Informal Comment

Ms. Stockwell:

Thank you for the opportunity to provide preliminary comments on several sections of 2024 municipal stormwater permits. Washington Environmental Council (WEC) is a state-wide non-profit organization founded in 1967, and we represent over 20,000 members and supporters. For over 50 years, WEC has worked to pass, defend, and enforce environmental laws like the State Environmental Policy Act, Shoreline Management Act, and Growth Management Act that will ensure that Washington remains a vibrant place to live, work, and enjoy for future generations. Our mission is to protect, restore, and sustain Washington's environment for all, and we are committed to healthy habitat and clean water protections for all Washington waters.

WEC has been a staunch supporter of cleaning up stormwater pollution, which is the largest source of toxic to pollution to Washington's streams, rivers, lakes, and marine waters. We firmly believe that each iteration of municipal stormwater permits must grow more stringent and must decrease pollution and impacts to habitat. WEC and our partners have pushed Ecology in past permit cycles to do more than the status quo often proposed by municipal governments. While the state is doing better in managing stormwater as a result of implementing the municipal stormwater permits over the past several cycles, the pace is not acceptable and aquatic species continue to struggle. WEC will continue to advocate for stormwater solutions at faster time scales and larger geographic scales than reflected by status quo management. We offer the following preliminary comments.

## **Standard outfall reporting**

**We concur that the permit needs to include outfall location mapping in a centralized database.** The public has a right to know where sources of pollution are in their neighborhoods or in areas where they work or gather food. While some municipalities have mapped information, the quality of the information is inconsistent across utilities and not available in a central location. Particularly where more than one municipality has infrastructure, such as a county and cities within the county, outfall locations need to be available to the public.

The current permit requires permittees to map these locations already, which is the majority of the workload. Each municipality likely has a different database or GIS for storing this information. Ecology has identified a pragmatic template that municipalities can use to map the attributes to the centralized system housed at Ecology.

We urge Ecology to clarify whether all of the options will be available to municipalities or if Ecology intends to require one single mechanism for delivering the information. We recommend that Ecology ensure that

permittees perform the work rather than rely on Ecology staff to upload the information on behalf of the municipalities due to staffing constraints at Ecology.

**We also strongly support Ecology’s intent to require Phase I permittees to continue mapping tributary conveyances to outfalls.** Permittees were required to map only those mostly outside of previously mapped urban or higher-density rural subbasins, and this is a reasonable next step to require mapping of flow elements needed to characterize sources and transmission of stormwater.

## Tree retention

**We support Ecology’s intent to prioritize tree retention and the need to restore insufficient canopy.** Tree canopy acts as a distributed stormwater retention mechanism that also provides multiple non-stormwater benefits that include public health, biodiversity, and carbon sequestration. As Ecology notes in its fact sheet, watershed and riparian canopy cover strongly influence the health of streams. While this has been noted for years in scientific publications, the Stormwater Action Monitoring (SAM) Status and Trends work recently reiterated this connection in the May 2018 publication, and the importance of both watershed and riparian canopy cover. As Ecology notes, canopy cover provides significant stormwater benefits from intercepting rain and also evaporation and transpiration to decrease runoff to nearby surface waters in a way that more closely aligns with forest functions. **We urge you to clarify specific requirements** before finalizing the draft stormwater permit language to be released for public comment in 2023.

Previous western Washington permits required municipalities to update local codes to identify low impact development as the preferred and commonly used approach to development. Compliance has been mixed (<https://naturesscorecard.files.wordpress.com/2019/05/lid-nature-scorecard-for-web.pdf>). Among other requirements, permittees were required to identify specific tree species for their communities (“Growing the Right Trees” in Nature’s Scorecard). Out of 83 permittees, 19 had not done so as of 2019. Canopy cover is one example of LID that needs more specific requirements to actualize the benefits of retaining and expanding tree cover.

We agree with the intent to document existing canopy cover and to set canopy retention and restoration objectives. However, many municipalities have already done so, and this would simply be status quo. Instead, we urge Ecology to **require implementation plans**, including documentation of the programs by which municipalities intend to meet their targets. One example is the City of Tacoma, which has extensively mapped tree canopy cover and found that it has the least amount of tree canopy as a percentage of land cover for all communities assessed in the Puget Sound Region<sup>1</sup> at 20%. Tacoma established a target of 30% canopy cover by 2030<sup>2</sup> then subsequently terminated the position responsible for this within city government. Establishing a target with no mechanism to achieve that target is simply a paper exercise and not one that results in increased stormwater improvements within municipal boundaries.

We agree with adopting the same language in the Stormwater Planning section of the Phase I Permit (S5.C.6.c) and Western Washington Phase II Permit (S5.C.1.c), and in either a new provision in Condition S8 Monitoring

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<sup>1</sup> <https://www.cityoftacoma.org/cms/one.aspx?pageId=35885>

<sup>2</sup> <https://www.cityoftacoma.org/cms/One.aspx?portalId=169&pageId=179775>

and Assessment or Condition S5.B.X Stormwater Planning for the Eastern Washington Phase II Permit. Whether a municipality already has a tree canopy cover target or not, implementation is key.

Furthermore, tree canopy is an environmental justice issue. Several studies have found that tree canopy cover is often lower in communities of color. House Bill 1114 in the 2021 legislative session addressed the Urban Heat Island effect<sup>3</sup> and encouraged utilities to develop tree planting programs that specifically “give special consideration to achieving environmental justice in goals and policies, avoid creating or worsening environmental health disparities, and make use of the Department of Health’s EHD map to help guide engagement and actions,” and references “protect[ing] public health by removing harmful pollution from the air and prioritize in communities with environmental health disparities.” The same law outlines benefits to stormwater control as well, requiring that tree planting “protect water quality and public health by reducing and cooling stormwater runoff and keeping harmful pollutants from entering waterways, with special attention given to waterways vital for the preservation of threatened and endangered salmon.” The Washington Health Disparities Map<sup>4</sup> provides important context relative to environmental exposures and socioeconomic information. Census blocks do not match municipal boundaries, though can be clipped to those boundaries for analyses. **Tree canopy retention and expansion must address environmental justice explicitly.**

We suggest that Ecology incorporate these concepts and edit the proposed language as follows:

“No Later than ~~6/30/25~~ ~~XX/XX/20XX~~, Permittees shall document existing landscape canopy cover and riparian tree canopy for the permit coverage area, **including analyzing by census block and watershed and document canopy change over time.** No later than ~~6/30/26~~ ~~XX/XX/20XX~~, Permittees shall adopt and implement tree canopy retention/restoration objectives **at 5-year increments through 2050** in order to support stormwater management and water quality improvement in receiving waters, **including specific goals for watersheds with salmon-bearing waters and for vulnerable communities.** No later than ~~6/30/27~~, Permittees shall begin **implementing the tree canopy plan, including staffing and resources directed toward the program, and report progress on canopy change over time by census block and watershed.**”

## **PCBs outreach and education, IDDE, O&M**

We agree with Ecology’s intent to add specific requirements around addressing PCBs in building materials. As Ecology notes, these harmful compounds persist in Washington’s air, water, land, animals, and people. Stormwater has been clearly identified as the dominant pathway by which these compounds reach water, and building materials represent the major existing reservoir for PCBs. Even though they were banned from commercial uses, at least at high levels, harmful levels are still found in common building products such as caulking, paint, roofing, siding, fluorescent light ballasts, and other joint material and sealants. While we agree with adding requirements around education and outreach, we urge Ecology to adopt specific performance recommendations to ensure that these programs are completed at the right scale and reach the right audiences.

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<sup>3</sup> <https://app.leg.wa.gov/billsummary?BillNumber=1114&Year=2021&Initiative=false>

<sup>4</sup> <https://fortress.wa.gov/doh/wtnibl/WTNIBL/>

We agree with goal of the proposed additions to the Education and Outreach in Phase 1 permit S5.C.11.a, Western Washington Phase II permit S5.C.2.a, and Eastern Washington Phase II E&O S5.B.1.a.iii. However, most people do not understand that PCBs remain in building materials produced today, and we suggest a minor clarification:

**“Ongoing presence of PCBs and other pollution in building materials, and the p**Proper handling of materials to reduce pollution to stormwater **and downstream waters,**~~including PCBs in building materials.”~~

We agree with striking the language exempting building washdowns in the Illicit Discharge Detection and Elimination sections of the permits and developing specific requirements for buildings built between 1950 and 1980. However, generic pollution prevention plans are insufficient to prevent further contamination in stormwater basins that are tributary to waters on the 303(d) list for PCB contamination or that have sensitive populations of juvenile salmon. We recommend modifications to the proposed language:

**“For buildings built between 1950-1980 outside of watersheds that are tributary to waters on the 303(d) list for PCB contamination,** routine external building washdown (without detergents) may be conditionally allowable when following pollution prevention plan guidance to address pollution from building materials that may enter the storm systems, e.g. PCB-containing building materials. **For buildings built between 1950-1980 within watersheds that are tributary to waters on the 303(d) list for PCB contamination, washdown water must be collected and treated at an appropriate facility.”**

We agree on the need to add specific provisions to address PCBs and building materials in Operations and Maintenance, O&M Plans to Phase I permit section S5.C.10.e. and Western Washington Phase permit section S5.C.7.d, and to add a new Eastern Washington Phase II permit section S5.B.6.a.i.(d). However, the plans and procedures need to include specific provisions for buildings within watersheds that are tributary to waters on the 303(d) list for PCB contamination. This provision would not trigger for most municipalities but would be an important source-control mechanism in areas with legacy and ongoing PCB contamination. We suggest the following edits:

**“xv. Building exterior cleaning and maintenance, including proper management of washdown water from buildings built between 1950-1980 outside of watersheds that are tributary to waters on the 303(d) list for PCB contamination and buildings with PCB-containing materials that will come into contact with washwater. More stringent management is needed for buildings built between 1950-1980 within watersheds that are tributary to waters on the 303(d) list for PCB contamination, including the collection and treatment of washdown water.**

**xvi. Proper handling of building materials and implementing other source controls to prevent PCBs from entering stormwater in preparation for, and during demolition and renovations. More stringent management is needed within watersheds that are tributary to waters on the 303(d) list for PCB contamination.”**

## **Sweeping**

We appreciate the development of the technical report summarizing the effectiveness of street sweeping as an effective mechanism to keep pollutants out of streams, rivers, lakes, and marine waters. As summarized in the fact sheet, the majority of jurisdictions already sweep roads to some degree. Therefore, incorporating the street

sweeping permit language as proposed is a restatement of status quo, whether or not these activities were covered in the current permit. The proposed permit language simply requests that municipalities develop a street sweeping program, identify both geographic focus areas, and sweep at least three times per year. While Ecology proposes a performance measure of sweeping 90% of the municipality's self-identified high-priority areas each year, there are no teeth to this proposal. For example, a municipality could identify a de minimis amount of high-priority, pad it slightly with 10%, then accomplish what they already do simply by proposing a low areal estimate.

We appreciate that this proposal could “bring along” municipalities not as diligent as others on sweeping. However, there are no new proposals for the majority of jurisdictions. Given that street sweeping is such an effective mechanism to keep pollutants out of waters, we propose that Ecology further identify the bounds of what constitutes high-priority areas for street sweeping. At a minimum, high-priority areas for street sweeping should include:

- All paved surfaces contributing to water bodies that are impaired by toxic chemicals, including rivers and streams discharging to 303(d)-listed marine waters
- All paved surfaces within commercial and industrial land use areas
- All paved surfaces contributing to water bodies with endangered or threatened stocks of salmonids
- All paved surfaces contributing to water bodies where pre-spawn mortality of coho salmon has been identified
- All paved surfaces directly connected to streams or water bodies with stormwater conveyance structures
- All roads with Annual Average Daily Traffic (AADT) greater than 5,000

This specificity generally scales the effort with the size of the municipality yet would prioritize regionally important areas across municipal boundaries that are known hot spots of contamination or that require additional requirements to protect species of concern and human health.

In addition to specifics on the geographic areas covered by street sweeping, Ecology should also address the vast range of street sweeper equipment effectiveness. A bad outcome would be for municipalities to invest in low-effectiveness equipment that are cheaper and allow them to comply with permit requirements yet achieve little to no pollution-control outcomes. While Ecology refers to following “equipment design performance specifications” not all street sweepers are designed for fine particles that are known to be associated with 6PPD-quinone contamination. **We suggest that Ecology confer with WSDOT or other agencies on acceptable equipment performance specifications that achieve the removal efficiencies evaluated in the SAM report.**

We propose the following edits to the proposed language:

“No later than July 1, 2027, develop and implement a street sweeping program to target priority areas and times during the year that would reasonably be expected to result in the maximum water quality benefit to receiving waters. Document the Annual Average Daily Traffic (AADT) of roads swept, frequency, type of sweeper, curb miles, a map of the routes, and approximation of street waste volume removed.

The following program elements shall be included:



- Apply street sweeping program to MS4 drainage areas that directly discharge to surface receiving waters (1). Within those areas, sweep the following high priority areas, where applicable:
  - **All roads with Annual Average Daily Traffic (AADT) greater than 5,000** ~~high AADT roads~~ (iii)
  - accessible curb and gutter streets - permittees may need to implement parking
  - restrictions or other effective methods to optimize pollutant removal
  - Areas identified with significant traffic and turning, e.g. municipal parking lots, roundabouts, high AADT intersections.
  - **All paved surfaces within** Commercial and industrial land use areas.
  - MS4 basins that discharge to surface receiving waters that support salmonids, **including water bodies where pre-spawn mortality of coho and other salmon has been identified**
  - **All paved surfaces contributing to water bodies that are impaired by toxic chemicals, including rivers and streams discharging to 303(d)-listed marine waters**
  - **All paved surfaces directly connected to streams or water bodies with stormwater conveyance structures**
- Permittees must sweep at least once prior to October 1 each year and ~~five~~ **two** additional times a year as determined by the Permittee to provide additional water quality benefit.
  - Permittees may document reasoning for alternative sweeping timing and frequency based on local conditions (e.g. climate) and pollutant loads.
  - If a permittee's existing overall street sweeping program provides equivalent or greater street sweeping frequency relative to the requirements above, the permittee may continue to implement its existing street sweeping program.
- Permittees shall annually sweep, on average, 90% of the **high-priority areas** ~~MS4 drainage area that directly discharges to surface receiving waters.~~
- **Permittee shall ensure that equipment used for sweeping conforms to specifications that achieve effective removal efficiencies.**
- Permittee shall follow equipment design performance specifications to ensure that street sweeping equipment is operated at the proper design speed with appropriate verification, and that it is properly maintained.
- Permittee shall ensure proper sweeper waste material disposal and be in accordance with Appendix 6, Street Waste Disposal.
- Sweeper operator training – Street sweeper operators shall be trained to enhance operations for water quality benefit.”

## **Controlling Runoff / Appendix 1 – Western Washington and Controlling Runoff / Appendix 1 – Eastern Washington**

We agree with reducing project thresholds to increase the amount of urban lands receiving treatment of stormwater runoff. Each permit iteration must make significant progress toward the overall goal under the NPDES program of eliminating pollution, and not just reducing slowly. Current redevelopment rates have been estimated at 1-2% of lands each year, which would require 50-100 years just to adapt to today's stormwater

regulations. We look forward to future comments on the Structural Stormwater Controls language. Meanwhile, this permit needs to increase the pace of retrofits and redevelopment significantly, and one mechanism is adapting the triggers for treatment. This will help address 6PPD-quinone as well as the toxic soup of contaminants found in runoff from transportation, commercial, industrial, and residential lands.

Redevelopment thresholds for road-related projects and commercial or industrial sites: We agree with the changes Ecology has proposed for replacing surfaces for road and commercial/industrial projects. This closes a loophole in the current permit and ensures that modern standards apply to many road projects and repaving commercial and industrial sites. However, we suggest that Ecology also reduce the trigger for additional surfaces from 5,000 square feet to 2,000 square feet. Otherwise, this change merely closes a loophole but does not establish incremental improvements. In addition, 2,000 square feet is the new development trigger in Figure 3 and the redevelopment trigger in Figure 4 for Minimum Requirements #1-5.

#### Section 4.6, Minimum Requirement #6, Runoff Treatment

TDA Thresholds: We agree with Ecology's proposal to decrease the threshold for runoff treatment from 5,000 square feet to 2,000 square feet of added pollution-generating hard surfaces. This reflects an incremental reduction in pollution generation compared with the current permit.

Runoff Treatment Performance Goal Thresholds for Enhanced Treatment: The threshold for triggering enhanced treatment is proposed as an Average Annual Daily Traffic (AADT) value of 7,500 inside Urban Growth Areas (UGAs) but 15,000 outside of UGAs. This inadvertently provides an incentive to projects outside of UGAs because they would be less stringent. However, areas outside of UGAs also impact state waters and wildlife and should have identical triggers and levels of protection. UGA boundaries also change periodically, yet infrastructure remains for decades. **Rather than have different values, the thresholds should both be AADT of 7,500, inside or outside of a UGA.** In addition, parking areas within ports should be added to the other project sites anticipated to have high pollution generation. We suggest a new bullet to follow Transit center bus stops:

- Ports

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Thank you for the opportunity to provide preliminary comments on drafts of the 2024 municipal stormwater permits; we have not provided exhaustive comments at this point and will be delving into these in greater detail during the formal comment period. We appreciate your work on stormwater. WEC and our supporters have worked hard to reduce stormwater pollution for many years. Implementing the above comments will strengthen the permit when it goes out for formal public comment in 2023.

Feel free to contact me ([mindy@wecprotects.org](mailto:mindy@wecprotects.org)) if you need any clarification on these comments. We look forward to working with you to protect and accelerate the recovery of Washington's waters.

Sincerely,

Mindy Roberts, Ph.D., P.E.

Puget Sound Program Director, Washington Environmental Council