

To:  
Municipal Stormwater Comments  
WA Department of Ecology  
Water Quality Program  
PO Box 47696 Olympia,  
WA 98504-7696

Transmitted Via Public Comment Form: <https://wq.ecology.commentinput.com/?id=T3iSC>

1 Dec 2022

**RE: Preliminary Drafts for the Municipal Stormwater General Permits and Stormwater Management Manuals (SWMMs) (2022)**

Dear Abbey Stockwell and Amy Waterman,

Thank you for taking the time to consider our comments on the preliminary draft of the storm water permits to be issued in 2024. The jurisdiction of our organization contains multiple Phase II permit areas, therefore, our comments are focused on this specific permit. Our monitoring and knowledge of the local waters in NW Washington cause us to have great concern about the toxic pollution that enters our waters on a daily basis. While improvements are being made to the permit, we are not convinced they will be enough to change the course of the widespread decline in our local water quality.

RE Sources is a non-profit organization located in northwest Washington and founded in 1982. We mobilize people in Northwest Washington to build just and thriving communities and to protect the land, water and climate on which we all depend. Our priority programs include Protecting the Salish Sea, Freshwater Restoration, Climate Action, and Fighting Pollution—all critical issues affecting our region. Our North Sound Baykeeper is also a member of the Waterkeeper Alliance, with over 300 organizations in 34 countries around the world that promote fishable, swimmable, drinkable water. RE Sources has thousands of supporters in Whatcom, Skagit, and San Juan counties, and we submit these comments on their behalf.

***Declining Water Quality With Current Permits:***

The 2021 State of the Sound report portrays a grim reality for the status of water quality in Washington State waters. Ten of the 12 water quality indicators are not meeting 2020 target goals and only one of these indicators (chemicals in marine sediment) is improving, all of the other indicators have mixed results, are not improving, or are even getting worse<sup>1</sup>. We have been witness to the declining health of the Salish Sea over the last few decades and stormwater is the leading cause of this current decline<sup>2</sup>.

Our organization has been conducting stormwater monitoring in Bellingham for the last 2 years - we have taken monthly water quality samples from 4 urban creeks and 7 outfalls and our data has found that exceedances of Washington State Water Quality standards occur on a regular basis particularly for *E. coli* bacteria and conductivity<sup>3</sup>. Continuous monitoring with the Se'ilhaem buoy in Bellingham Bay raises concerns about very low dissolved oxygen levels due to unknown causes<sup>4</sup>. And caged mussel studies carried out in Bellingham Bay show there are elevated levels of PFAS, antibiotics, and psychiatric pharmaceuticals in the Bay<sup>5</sup>. There are likely other water quality concerns originating from stormwater discharges but because there are thousands of unregulated chemicals and regular monitoring does not occur, these discharges go undetected.

We feel that the Stormwater Permit is not working to protect our Bay. In Section S4 of the current stormwater permit, it states:

In accordance with RCW 90.48.520, the discharge of toxicants to waters of the State of Washington which would violate any water quality standard, including toxicant standards, sediment criteria, and dilution zone criteria is prohibited. The required response to such discharges is defined in Section S4.F, below.

This Permit does not authorize a discharge which would be a violation of Washington State Surface Water Quality Standards (Chapter 173-201A WAC), Groundwater Quality Standards (Chapter 173-200 WAC), Sediment Management Standards (Chapter 173-204 WAC), or human health-based criteria in the National Toxics Rule (40 CFR 131.45). The required response to such discharges is defined in Section S4.F, below.

Our experience and research suggests that these two compliance standards are not being met regularly and as the permit is currently designed it would be impossible to actually confirm their compliance. We are recommending that the permit incorporate more ecosystem based principles such as more aggressive source control, climate change mitigation, ecological monitoring, and more collaboration with community scientists and organizations.

### ***Source Control of Toxicants***

There are thousands of chemical toxicants with unknown health risks that are discharged into our environment on a daily basis - we are living in a toxic world. We are thankful that the Department of Ecology (Ecology) has taken more aggressive measures to limit the amount of PBCs that enter our waterways. Despite PCBs being prohibited 46 years ago, we see amounts still accumulating in the marine food web<sup>6</sup>. We would like to see PFAS compounds, 6PPDq from tire wear particles, microplastics, dioxin and furans, and pharmaceuticals being managed in a similar fashion, let's not "wait and see" if these

molecules are able to persist and accumulate at the same rate as PCBs. We need to fast track our action on preventing more of these chemicals from entering our waterways.

More importantly, we need chemical toxicants to be proven safe before being authorized for use. Ecology is our regulatory body and should take responsibility for limiting and regulating the manufacturing of potentially harmful substances in Washington State. Source control begins at the point of chemical manufacturing, not just where it ends up being used and potentially discharged into the environment. Manufacturers of these toxicants need to be held accountable for their ecological harm. There should be no such thing as a “Chemical of Emerging Concern.”

The 6 Chemical Action Plans that are currently in play have made progress in managing these specific toxics but that leaves thousands of hazardous chemicals unrecognized, unreported, and unregulated that are causing acute and chronic illness to humans and wildlife<sup>7</sup>. As a natural resource agency, as a state, and as a nation we need to create policies to hold chemical companies accountable for this egregious pollution. While we recognize that this should not fall squarely on the shoulders of Ecology, nor the Municipal Stormwater Permit, we do feel they could be a bigger player in this endeavor.

### ***Stormwater Planning***

We agree with Ecology's idea of including a Tree Retention Plan for permittees. This is a great example of an ecosystem management technique. Not only do plants and trees filter out harmful toxicants but they also create shade and cooler temperatures and help regulate water quantity. Trees provide crucial habitat both on land and in the water as well as recreational and spiritual opportunities.

We hope that Ecology adds this to the permit and that it adopts a “net-gain” approach to tree canopy. We should look to historical, not current, levels of tree canopy as a restoration goal. In addition, we need to consider our changing climate that is experiencing hotter, drier weather and more extreme precipitation events when revegetating our urban landscape.

We agree with many other commenters that NPDES Permits, especially the Stormwater Permit, need to be operated on a more watershed or ecosystem level. More collaboration between permit holders and more access to community databases and resources could facilitate this.

### ***Mapping***

There are many community scientists and nonprofit organizations like ours that recognize and have responded to the budget shortfalls that natural resource agencies face. We have stormwater monitoring programs in place that provide regular (usually monthly) data points on stormwater quality. These contributions can be extremely helpful to permittees

in helping to understand where pollution is occurring and their work should be facilitated and encouraged. To aid these non-agency entities, information about the stormwater system and its outfalls should be clear, and easy to access.

We request that the elevation of the outfalls (Z coordinate) be improved from “recommend” to “required”. The outfalls that we monitor in Bellingham are major discharge points and most of them are underwater during high tide. This made finding them initially hard and also means you can only observe and monitor them at lower tides. When we reported a chronic exceedances at one of these outfalls, agency folks visited the outfall while it was underwater and were, therefore, unable to assess its condition: a follow-up visit was necessary which meant valuable time and resources had been wasted which in some cases could mean increased pollution entering our waterways. This information is clearly needed for permittees and community members alike.

There are several places on the shores of Bellingham Bay where there are numerous pipes coming out of the shoreline in a relatively small area - of different colors, sizes, and materials. It is very hard to determine what each pipe is draining when they are only a few feet apart from each other - currently they are not all mapped. If there is a way to differentiate these pipes in the mapping requirement that would be very valuable.

Taking an ecosystem approach to mapping would also be beneficial. Each municipality has a unique way of providing this information and it can be tricky to navigate all the permutations and sites. It is also more difficult to determine impacts to the greater ecosystem, in this case, the Salish Sea, when the data is spread by municipality and not by ecosystem. Having a centralized database to house this information that is easy to access by the public would help facilitate additional monitoring and understanding of impacts

In regards to the template to use for housing this information, we strongly recommend the most basic and universal. Of the template files Ecology provided, the Excel spreadsheet was the only one that we could open given our software capabilities. Free software such as Google Sheets can open Excel so it becomes more accessible to the general community but using Google Sheets would even be a level closer to being truly equitable. Otherwise, all documents should be required to be saved and published regularly in a format that can be universally viewed.

### ***Public Education and Outreach***

We feel that one of the biggest improvements to the Education and Outreach (ED/OR) section is to provide more opportunities for permittees and other organizations to share resources and collaborate on ED/OR. Providing universal messaging, a shared goal, materials, and programs could help facilitate and amplify these programs, especially in smaller municipalities where they may only be a partial FTE working on ED/OR. Currently, it seems that each permit holder is re-inventing the wheel which wastes time and resources.

The lion's share of the work is being done in King County right now and the STORM website already has a lot of resources - taking it a step further would be to make these resources more universal, user friendly, and detailed. We recommend that Ecology help universalize stormwater ED/OR and also help create a mentor program. More experienced municipalities could help those less experienced and Ecology could help facilitate these relationships.

The ED/OR programs also need to include more information about the health hazards associated with the exposure to stormwater pollutants. For example, people need to be aware that swimming in urban streams and marine waters is not safe after rain events, especially first fall and spring events. Our last month of stormwater sampling in Whatcom County revealed that 8 of the 9 sites sampled exceeded *E. coli* standards, some by over 10 times. A few of our sampling sites are popular places where people and dogs swim and wade regularly, yet there is no place where we can post this critical information so that the public can easily access it, currently it is only available on our website<sup>3</sup>.

We are encouraged by the efforts proposed in the new permit to provide the general public with information about PCBs in their environment. In addition, we feel that there should be warning labels on all buildings that are known to have PCBs or could have PCBs (basically those built between 1929 and 1979 that have not been properly assessed). Education and labeling campaigns should start with overburdened communities and schools.

We also feel that the public could benefit from learning more about tire wear particles and the toxicant 6PPDq and that this information should be incorporated into a campaign on the importance of street sweeping. This may encourage people to move their cars when street sweepers are expected to come by. Innovative approaches such as a text alert system or creative, reusable signage could also help.

Like other areas of the permit, the education and outreach programs also could benefit from taking a more holistic approach. People need to be made aware that climate change effects will only exacerbate stormwater discharges and that there are significant economic consequences to poor stormwater management. There are also considerable inequalities associated with stormwater pollution especially in regards to fishing and shellfish harvesting<sup>8</sup>.

### ***Operations and Maintenance (O and M)***

We agree that street sweeping could be a valuable practice to help reduce stormwater pollution from entering waterways and that sweeping at least once before the rainy season (Oct 1st) is important. We don't want to overlook the other valuable services that street sweeping can do such as removing dead leaves and branches that plug storm drains, contribute nutrients, and create obstacles for cyclists. Including guidance for sweeping to

remove debris at the most optimal time to serve these needs is encouraged and may not necessarily coincide with Oct 1st. With our unseasonably warm and windless fall this year, for example, there were not many leaves on the ground by Oct 1st. Could Ecology provide a more ecological time for street sweeping and not rely on historical data?

We would also like Ecology to recognize that street sweepers do not all perform equally and they, themselves, cause harm to the environment through emissions, tire wear particles, and noise pollution. We need to actively work to reduce unintended consequences from street sweeping programs. And as indicated above, people need to be informed about the significance of street sweeping and provide them with the information to comply.

### ***Monitoring and Assessment***

As described earlier, our stormwater monitoring program shows chronic water criteria violations at outfalls that are discharging into Bellingham Bay<sup>3</sup>. We feel that this information is critical in finding weaknesses in current stormwater management and Best Management Practices (BMPS), yet it is currently not a permit requirement. We understand that monitoring has become optional and that most permit holders opt to fund Stormwater Action Projects (SAM) in lieu of monitoring. While there are merits to this plan, we feel that this more generalized/regionalized way of taking data is causing data gaps to occur in local areas such as Bellingham.

We recognize that Stormwater programs are short staffed, but we believe that there are additional ways to get this critical data without huge expenditures in money or staff. Currently there are several organizations/communities in Western Washington, like ours, that are conducting their own stormwater monitoring. Currently this information is being housed within each organization and is being addressed by the individual permit holders. While there is some self-initiated coordination between these monitoring programs they are largely carried out independently and have various levels of cooperation from the permit holders.

The Quality Assurance Project Plan (QAPP) for monitoring that is in the permit is too complicated and expensive to carry out for most nonprofit and community groups. The methods laid out in the Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual, however, are on par with what these groups can execute<sup>8</sup>. Could a single QAPP be developed from the techniques outlined in this manual so that the data collected by these groups would be of consistent quality and that it could then be used more reliably by the permit holders and Ecology to address stormwater pollution? The data could potentially all be housed in a single database so more people would have access to it and regional trends could be spotted and worked on.

We feel that Ecology could take a more leadership role in supporting stormwater monitoring carried out by community groups; it would make these efforts even more



effective than they are currently. Not only could Ecology work on standardizing the methodologies but also provide mentoring to these organizations. Including language in the permit to support this work could also be very beneficial - some permit holders are more receptive than others in working with community stormwater monitoring groups, this is proving to be a barrier that is impeding important work. If there was a mechanism in place in the permit for this type of collaboration to take place, these monitoring efforts would likely be more successful.

The stormwater permit, as written, does not incorporate the ecological or biological effects that stormwater pollution has on our freshwater and marine water ecosystems. While that may be a big ask for a NPDES Permit to tackle, this protection is falling between the cracks. A first step would be to encourage more biological types of monitoring such as MusselWatch, Benthic-Index of Biotic Integrity (B-IBI), and Toxics Biological Observation System (TBioS) that helps to uncover the effects of toxics on biota not just the presence or absence of.

***A More Holistic, Ecosystem Based Permit:***

The banks and waters of Bellingham Bay house 12 Model Toxic Cleanup Sites and are in varying stages of remediation. The community of Bellingham is regaining the waterfront that has been dominated by industry for over 100 years. We are spending millions upon millions of dollars for these cleanup efforts yet we still have contaminated runoff entering our Bay. We want a Bay that is not just pretty to look at but that also supports fishing and harvesting, swimming and recreation, and a myriad of habitats for marine organisms.

We need to take a more holistic approach to managing our stormwater which starts at limiting the production and use of toxic chemicals. It also means incorporating ecosystem approaches to management - working on a landscape or ecosystem level rather than be confined to the boundaries of the permit. It means incorporating climate change mitigation at every level and focusing on underserved communities whenever possible. It means making materials more readable and accessible by the general public so community scientists are not held up by busy work. Lastly, it means creating more collaboration within the education and outreach community so they are not reinventing the wheel for all the work they don't have time to do as it is.

We appreciate the devotion of the Ecology staff and realize the mountain of limitations that exist but if Ecology does not figure out how to manage toxic chemicals on the landscape, who will?

Sincerely,

Kirsten McDade  
Pollution Prevention Specialist

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