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June 11, 2020

RE: Comments on 4 page draft outline of Puget Sound Nutrient Management Plan (PSNMP)

Dear Dustin:

Puget Soundkeeper (Soundkeeper) is a non-profit environmental organization whose mission is to protect and preserve the waters of Puget Sound. Soundkeeper's vision is a healthy Puget Sound ecosystem teeming with diverse marine life and providing safe opportunities for swimming, fishing, recreation and sustainable economic activity. We strive to improve water quality through our monitoring and enforcement, education and engagement, and policy and advocacy work. We appreciate this opportunity to comment on the PSNMP outline, and look forward to continuing to work with you on the Nutrients General Permit Advisory Group and on the Puget Sound Nutrient Forum to stop nutrient pollution to Puget Sound.

Primarily, we write to reiterate our strong support for an NPDES (Clean Water Act) Nutrients General Permit to ensure that Puget Sound meets water quality standards. We also would like to see clear, actionable steps to address watershed sources in the PSNMP, including actionable steps to control agricultural non-point source pollution. Finally, we strongly support the development of water quality standards for nitrogen.

## 1. Support for Strong Nutrients General Permit.

The Washington Department of Ecology (Ecology) has known for decades that wastewater treatment plants are causing or contributing to water quality violations throughout Puget Sound. Puget Sound is impaired for nutrients. Nutrient pollution is causing too much plant and algae growth, reducing the amount of dissolved oxygen in the water. Many parts of Puget Sound have oxygen levels that fall below what is needed for marine life to thrive, causing fish kills, and do



not meet our water quality standards. Some algal blooms are harmful to humans because they produce elevated toxins and bacterial growth. Nutrient pollution can make people sick if they come into contact with polluted water, consume tainted fish or shellfish, or drink contaminated water.

Research has shown that wastewater treatment plants are the most significant contributor to the nutrient pollution problem. Many wastewater treatment plants have antiquated treatment equipment, and outdated permits. Population growth and climate change are compounding pressures that make this dire situation even more urgent. According to the Washington State Office of Financial Management the region's total population is now 4.2 million, , and according to the Puget Sound Regional Council, it will grow to nearly 6 million people by 2050. Additional people means additional sewage flows heading to our wastewater treatment plants. Changing climate patterns, including rising temperatures, increased snowmelt and droughts, are also already impacting water quantity and quality, exacerbating existing pollution problems.

We strongly support Ecology's ongoing efforts to develop a Nutrients General Permit. We also support regulating nutrients from all wastewater treatment plants whose flows ultimately impact the Sound, including the 30 or so up-river wastewater treatment plants. These plants are causing or contributing to water quality violations and should also be regulated by the Nutrients General Permit. Even a very conservative fate and transport study designed to look at discharges from these upstream facilities would show that they have an impact on water quality in Puget Sound. A significant amount of pollution is coming from rural, upriver, and other watershed sources. As such, the PSNMP should articulate a solution to address nutrients from all wastewater treatment plants in the Puget Sound watershed.

## 2. Support for Clear, Actionable Steps to Address Watershed Pollution Sources, Including Agricultural Pollution.

Agriculture is the leading cause of water degradation worldwide. Many farms apply fertilizers and manure containing high amounts of nitrates and nitrogen to crops that are washed into local waters, causing nutrient pollution. In the United States, agricultural pollution is the top source of known contamination in rivers and streams.<sup>1</sup> The livestock sector is one of the top three contributors to the most serious environmental problems on the planet, including water-quality degradation, at every scale from local to global (FAO, 2006).<sup>2</sup> In addition to surface runoff that pollutes streams and other waterbodies, leaky manure lagoons and the over-application of nitrates, nutrients, and chemicals from manure can pollute groundwater. Nitrate from livestock agriculture is the most common chemical contaminant in the world's groundwater aquifers. *Id*.

As you are undoubtedly aware, agricultural pollution is a major problem in Washington State. There are approximately 36,000 farms in Washington and in 2018, according to the Washington State Department of Agriculture, approximately 250 of those were dairy farms. Per the

<sup>&</sup>lt;sup>1</sup> <u>https://ofmpub.epa.gov/waters10/attains\_nation\_cy.control#total\_assessed\_waters</u>

<sup>&</sup>lt;sup>2</sup> <u>http://www.fao.org/3/a-i7754e.pdf</u>



Department of Ecology's Clean Water Act permitting database (PARIS), despite the large number of farms in Washington, as of 2019 there were only twenty-seven (27) agricultural operations holding active federal, state, or combined federal + state CAFO NPDES permits. This means that only 27 of 36,000 or so farms in Washington were subject to a Clean Water Act permit last year. The remainder of these agricultural operations are largely unregulated, though producers can choose to participate in voluntary assistance programs to implement best management practices to protect water quality. Despite these voluntary programs, according to Ecology, Washington has more than 2,000 polluted waters listed in areas where agriculture is the primary land use activity.

The Puget Sound Partnership acknowledged, "Ecology has the responsibility to control and prevent the pollution of streams, lakes, rivers, ponds, inland waters, salt waters, watercourses, and other surface and underground waters of the state of Washington." To fulfill that duty, the Puget Sound Partnership found a need for increased enforcement, and set a goal for Ecology to "ensure compliance with regulatory programs designed to reduce, control, or eliminate pollution from working farms." [As of 2016] Ecology had received over \$1.5 million in funding from the National Estuary Program through Puget Sound Partnership since 2012, specifically for the purpose of increasing inspection and enforcement actions under its water quality program since 2012." [Internal citations omitted].<sup>3</sup>

Troublingly, the 4 page PSNMP outline does not contain either the word "regulation" or "enforcement."

We know that 69% of the anthropogenic caused nutrients impacting Puget Sound come from our wastewater treatment plants, and that watershed sources – including agricultural pollution – account for the other 31%.<sup>4</sup> Agricultural pollution therefore must be addressed in the PSNMP. Soundkeeper strongly encourages Ecology to continue to refine, improve, and develop new regulatory and voluntary programs to address agricultural non-point source pollution, and to include both regulatory and voluntary solutions as components of the PSNMP. Soundkeeper supports and looks forward to continued collaborative participation on the Voluntary Clean Water Guidance for Agricultural process to develop voluntary Best Management Practices to protect water quality, and we look forward to gaining a better understanding of how this document will be incorporated into the PSNMP.

<sup>&</sup>lt;sup>3</sup> <u>http://www.westernlaw.org/sites/default/files/Agricultural%20Pollution%20in%20Puget%20Sound%20-</u> %20April%202016%20-%20Web.pdf

<sup>&</sup>lt;sup>4</sup> <u>https://www.ezview.wa.gov/Portals/ 1962/Documents/PSNSRP/PSNF\_Dec19\_Webinar.pdf.</u>



## 3. Support for Nitrogen Standard, and TMDLs

A Nutrients General Permit is an appropriate tool to regulate wastewater treatment plants and reduce nutrient pollution in Puget Sound. However, issuance of a Nutrients General Permit should not replace other, additional actions necessary to meet water quality standards.

In addition to a general nutrients permit, Ecology should develop water quality criteria for nitrogen and phosphorus in Puget Sound. 40 C.F.R. § 131.11 mandates that States adopt water quality criteria that protect each designated use of a water body, based on sound scientific rationale and containing sufficient parameters or constituents to protect the designated use. While Ecology's failure to develop water quality criteria for nutrients does not preclude issuance of a general permit designed to reduce nutrient pollution by addressing dissolved oxygen, ultimately, Ecology must still develop these standards.

Ecology must also develop TMDLs for all impaired waterbodies in Washington. A general nutrients permit does not obviate this requirement, nor will a general permit address nutrient discharges from other sources that are causing or contributing to impairment.

In numerous presentations and discussions throughout the Puget Sound Nutrient Source Reduction Project process, Ecology has acknowledged and demonstrated that additional sources are causing or contributing to nutrient pollution throughout Puget Sound apart from the 70 plants that discharge directly to Puget Sound. These include non-point sources discharging to watersheds. TMDLs are not only legally required to clean up impaired waters, but a TMDL is an appropriate tool to fairly allocate necessary load reductions amongst both permitted and unpermitted dischargers. A TMDL or TMDLs to achieve clean water in Puget Sound would supplement a general nutrients permit and need not be a substitute.

We must act now to increase capacity, reduce pollution, and improve the handling of waste at municipal wastewater treatment plants in our region before Puget Sound becomes a dead zone. We therefore support the development of a PSNMP that includes a strong Nutrients General Permit and actionable regulatory and non-regulatory programs to address agricultural non-point source pollution as major components. We also encourage Ecology to develop a Nitrogen standard and to promptly develop TMDLs for Nitrogen impaired waterbodies.

We appreciate this opportunity to provide feedback on Ecology's 4 page PSNMP outline, and look forward to discussing the PSNMP in more detail with you as it is further refined.

Sincerely,

Chris Rilling Executive Director and Puget Soundkeeper Puget Soundkeeper Alliance