Develop Watershed Boundaries for Stormwater Management Action Planning

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Developing SMAP watershed boundaries to the national standards will benefit a jurisdiction the most in a long run. It will be the HUC14 and HUC16 layers published and accepted nationally if the developed SMAP watershed boundaries can be accepted into the national WBD

1. Stormwater Management Action Planning (SMAP) is an important component in Municipal Stormwater NPDES Permit (2019–2024)

2. Delineating basins for the whole jurisdiction and identifying the receiving waters is the first step to successfully complete a SMAP for Phase II permittees

3. Desired basin size for a SMAP is between 1–20 miles²

4. Commonly acceptable standards should be used to develop watershed boundaries that are readily acceptable across different jurisdictions

5. The existing standard for developing watershed boundaries is “Federal Standards and Procedures for the National Watershed Boundary Dataset (WBD)”

6. The National WBD developed to the standard is accepted and used nationwide. In the WBD, a Hydrologic Unit Code (HUC) is used to uniquely identify the hierarchical nested Hydrologic Units (HUs), with the code increasing by two digits per nested level

Pierce County Watershed Boundary Development

SMAP watersheds with drainage area of 1–20 miles² are corresponding to the WBD 14- or 16-digit HUs in size; however, WBD HUC14 and HUC16 have not yet been developed for the Pacific Northwest region.

Pierce County Surface Water Management has been developing a county-wide SMAP watershed boundary dataset for commonly acceptable watershed boundaries across the County. The federal WBD standards for HUC14 and HUC16 development are used in the process.

We have preliminary results for ten 12-digit HUs for accepting feedback. We invite interested parties in the County and bordering the County to work with us for creating this dataset. Here, we present the results for HUC12s in Puyallup Watershed for the symposium

Areas with Preliminary Results

Invitation for Collaboration

Pierce County Surface Water Management invites interested parties to work together in developing HUC14/16 watershed boundaries for our shared areas. Contact Shuhui Dun at shuhui.dun@piercecountywa.gov for collaboration

Thank You!