



# STORMWATER WORK GROUP

**To:** PSEMP Steering Committee  
**From:** Stormwater Work Group  
**Date:** November 26, 2013  
**Subject:** Priority status and trends/ecosystem condition monitoring gaps

The PSEMP Stormwater Work Group (SWG) prioritized monitoring needs as part of completing the [2010 Stormwater Monitoring and Assessment Strategy for the Puget Sound Region](#). A subset of those priorities will be conducted as part of the Regional Stormwater Monitoring Program (RSMP) funded by municipal stormwater NPDES permittees. In June we sent you our list of 16 priorities and highlighted six gaps and one lost program for consideration in your cross-workgroup prioritization exercise. Following your November 5 meeting, you requested a smaller list of five stormwater-related monitoring priorities for consideration in cross-workgroup prioritization.

We understand that our priority needs to inform management actions through effectiveness monitoring or other studies will be discussed in a subsequent process, and that this entire process will be revisited in a few years. The RSMP will begin in 2015 and we urge you to give additional consideration to opportunities to leverage that sampling effort and reduce overall costs. Please contact SWG Chair [Jim Simmonds](#) or SWG Staff [Karen Dinicola](#) if you have any questions.

| What is the gap?   | Why is it important?   | What is the approximate cost?*                           |
|--|--|--|
| 1. Flow monitoring in small streams  | Streamflow data are critical for understanding impacts of stormwater runoff on instream habitat conditions. Our existing gaging network continues to shrink due to budget cuts. Recent analyses will help set priorities for what existing gaging locations between should be preserved and what new sites should be added. Likely a total of fewer than ten gaging sites.               | \$28K/gage to install and \$15K/gage per year to operate |
| 2. Conditions in marine nearshore areas outside Urban Growth Area (UGA) boundaries, specifically for sediment chemistry, toxics in mussels, and bacteria | In 2015-16 the RSMP will collect information inside UGAs to characterize (and in later years track) condition and help us better understand stormwater impacts and the effectiveness of stormwater management programs in protecting water quality and biota. What is missing is similar information outside UGA boundaries to draw a comparison and inform other management strategies. | \$200K per year on average                               |
| 3. Presence and persistence of current urban and agricultural use pesticides, esp. in receiving water sediments  | Relatively little pesticide sampling occurs in a design and at a scale that informs how these chemicals impact water quality and biota in Puget Sound. Better pesticide use data are needed, and targeted sampling leveraging the upcoming RSMP stream sampling should be done to inform a long term status and trends study design.   | \$150K once  |
| 4. Watershed scale monitoring in small streams   | The RSMP is sampling at the Puget Sound scale. WRIA-scale monitoring can be more useful for local decision making. The original RSMP design proposed 30 sites per salmon recovery area in Puget Sound.   | \$30K/site once per five years                           |
| 5. Conditions in lakes, specifically levels of nutrients and metals  | There are thousands of lakes in the Puget Sound basin, yet very few are monitored and there is no regional plan to evaluate lake condition to better understand whether our stormwater management actions working to improve conditions. A regional assessment should be followed by a status and trends study design process.   | \$150K once  |

\*These are preliminary cost estimates that need to be confirmed.