

##### February 9, 2022, from 9:00 to 11:50 am

##### Zoom meeting

**Draft Summary**

**of the Meeting’s Key Discussions, Decisions and Agreements**

A list of acronyms is provided at the end of this document.

##### Attendees:

*Work Group members, and the organizations and interest groups they represent:*  
**Jessica Atlakson** (Redmond), Local Governments; **Gary Bahr** (WSDA), State Agencies; **Abby Barnes** (WDNR), State Agencies, and the SWG Vice-Chair; **Alyssa Barton** (Puget Soundkeeper), Environmental Groups; **Bob Black** (USGS), Federal Agencies; **Lori Blair** (Boeing), Business Groups; **Val Chu** (USFWS), Federal Agencies; **Aaron Clark** (Stewardship Partners), Environmental Groups; **Stella Collier** (Bainbridge Island), Local Governments; **Dana de Leon** (Tacoma), Local Governments; **Jane Dewell** (Port of Seattle), Public Ports; **Nick Hehemann** (WSDOT), State Agencies; **Todd Hunsdorfer** (King Co), Local Governments, and the PRO-C Chair; **Melissa Ivancevich** (Seattle), Local Governments; **Jenna Judge** (PSP), State Agencies; **Jeff Killelea** (Ecology WQP) State Agencies; **Don McQuilliams** (Bellevue, and the SWG Chair), Local Governments, and the SWG Chair; **Rich Sheibley** (USGS), Federal Agencies;

*Work Group alternates in attendance:*  
**Tony Bush** (WSDOT), State Agencies; **Annelise Hill** (USFWS), Federal Agencies; **Brian Husmillo** (Issaquah), Local Governments; **Chad Larson** (Ecology EAP), State Agencies; **Carol Maloy** (Pierce Co), Local Governments; **Daniel Nidzgorski** (King Co), Local Governments; **Laura Nokes** (Tacoma), Local Governments

*Invited speakers that participated in the meeting:* **Ani Jayakaran** (WSU), **Eli Mackiewicz** (Bellingham, and co-chair of SWG 6PPD Subgroup), **Doug Navetski** (King County, and member of “ad hoc” organizing committee)

*SAM staff (Ecology WQP):***Brandi Lubliner**, SAM Coordinator; and **Keunyea Song**, SAM Scientist.

*Work Group staff (Ecology WQP):***Karen Dinicola**, SWG Project Manager; and **Emma Trewhitt**, SWG Coordinator.

*Other participants:* **Rachel Bowen** (Port Angeles), **Aislin Gallagher** (Kitsap Co), **Chris Jorgensen** (U.S. Navy), **Laurie Larson-Pugh** (WSC), **Aimee Navickis-Brasch** (Osborn), **Mark Maurer** (Osborn), **Bob McKane** (USEPA), **Ryan McReynolds** (USFWS), **Maureen Meehan** (Pierce County), **Margaret McCauley** (USEPA), **Katie Rathmell** (Ecology WQP), **Jessica Schwing** (Ecology WQP), **Amanda Royal** (Bothell), **Abbey Stockwell** (Ecology WQP), **Royce Young** (DuPont), **Meng Zhang** (Beijing Normal University),

**Work group confirms new leadership positions**

Todd Hunsdorfer volunteered to be the new chair of PRO-C. The SWG Federal Caucus nominated Val Chu and Annelise Hill of USFWS for the non-permittee representative and alternate seats, respectively, and the SWG Local Government Caucus nominated Jessica Atlakson with the City of Redmond to fill the open permittee rep position, and Laura Nokes from the City of Tacoma as a permittee alternate seat on PRO-C. The workgroup approved all nominations.

A consultant volunteered to chair the SWG Effectiveness subgroup. The workgroup discussed this, and was generally supportive. This will be discussed further at our next SWG meeting when we get into details about reconvening the subgroup this summer in preparation for the Round 4 SAM solicitation.

**Work hears findings on “The effects of mulch on stormwater treatment and maintenance effort in bioretention systems” SAM effectiveness study.**

Ani Jayakaran of WSU shared findings on the SAM study evaluating effectiveness of mulch types to reduce weeds, provide carbon, and retain moisture in bioretention facilities. WSU used 16 bioretention cells located at the WSU-Puyallup Low Impact Development (LID) test facilities. The three types of mulch tested were: nugget bark mulch, medium bark mulch, and arborist wood chips.

Throughout the 18-month plant study, there was a decline in the health of all plants with no discernable differences amongst mulch treatment types, but shaded plants experienced less stress. Mulch did show some improvement with reducing nitrate-nitrite export from BSM. However, their results generally showed that cells with mulch and without mulch yielded similar water quality treatment results.

Measurements of weeding effort showed mulch's significant role in minimizing weed proliferation. The total time it took to remove weeds from cells ranged from approximately 30 hours for the 4 cells with nugget bark to almost 68 hours for the four control cells with no mulch. Further information can be found: <https://ecology.wa.gov/Regulations-Permits/Reporting-requirements/Stormwater-monitoring/Stormwater-Action-Monitoring/SAM-effectiveness-studies/Mulch-choices-for-bioretention>

**Work group briefed on PRO-C and SAM implementation**

Todd Hunsdorfer and Brandi Lubliner reported out on the last PRO-C meeting and status of study implementation. PRO-C met Jan 26, 2022 and discussed available funds for SAM’s Round 4 Study Solicitation, approximately $2.36M is available and the process should begin by mid-2022. Several projects are yet to be started from Round 3. SOW development is underway for FPs 1 and 7, however has not yet begun for 4 and 8. The recently started ditch maintenance project has a flooding complication that has suspended most of the work. WSU’s project lead is looking for new locations in western Washington to keep the project going. PRO-C gave 6 months for finding a new location.

Lots of amendments were approved since the last SWG meeting, including; Redmond paired watershed study amendment to extend monitoring through fall 2024, WSU’s Orifice control of bioretention project amendment to fund remainder of the project and add modelling, and a date extension amendment for the WSU led bioretention toxicity prevention longevity study. Anew SOW was approved for the 2 year Bellevue BMP maintenance study of ponds, vaults, trenches, and tanks.

Brandi is working on the next SAM newsletter for general updates, as well as the next SAM report card. These report cards come out twice per permit cycle.

WDFW is doing Mussel Round 4 data analysis and finishing Round 3 trend analyses and report; we will hear about this project at our next meeting. In May we will also hear about the first year annual report for Puget Sound streams.

The Work Group briefly discussed the status of the Lower Columbia Urban Stream (LCUS) Monitoring project, in relation to a proposed change in monitoring parameters. PRO-C oversees this SAM project contract, but SWG is not the stakeholder oversight group; Lower Columbia Fish Recovery Board and PNAMP (USGS) convene the stakeholders that oversee LCUS . ECY and PRO-C approved the original QAPP. The project is proposing removing the conductivity measurement, which is the only WQ measurement currently in QAPP. Any major changes in LCUS should be approved by Lower Columbia regional stakeholder group first.

Brandi and Keunyea gave the group some updates on active SAM effectiveness and source identification projects. The DNR Tree study is closing and the final report is overdue. A fact sheet will be developed as the first task of the next phase of the study (to study smaller trees) that was approved by SWG. WSU’s mulches for bioretention study draft final report is anticipated in March and the project closes April 30 2022. WSU’s project to provide permittee’s Guidance for E&O Effectiveness Evaluation and Reporting has completed its national survey of E&O programs and will be soon be piloting use of a draft website decision-support tool.

King County’s Mobile Business project had a survey for permittees that recently closed. This project needed a very high response rate per the contract and received over 70 responses in the first three days. WSU’s Business Source Control has 2 websites; one at WSU’s project page and the SAM (Ecology) project page. Their draft online guidance manual is anticipated in Feb 2022.

**Work group APPROVES updates to our work plan for 2022-2023**

The draft work plan has been re-organized into tasks related to implementation of the 2010 Stormwater Assessment and Monitoring Program for Puget Sound Scientific Framework and Implementation Strategy (collectively: SWAMPPS, or 2010 Strategy); and communication tasks. As requested at our last meeting, Karen Dinicola is writing a document describing the implementation of SWAMPPS according to the series of work group recommendations made in the years since. This document will inform whether the 2010 Strategy needs to be updated, and if so, provide context for doing so.

Work Group members voted to adopt the draft work plan as described.

**SWG 6PPD Subgroup co-chair briefs work group on panel discussions**

Eli Mackiewicz reported back to the SWG on the subgroup’s last two meetings. Please read the summary in the meeting agenda. At the December meeting, we heard perspective on salmon recovery from Nat Scholz of NOAA and Keith Dublanica from the Governor’s Salmon Recovery Office. At the January meeting, we discussed stormwater source control as it relates to 6PPD-Quinone.

One of the subgroup’s goals is to provide direction for future SAM studies and other funding sources to answer questions relevant to stormwater management and improve guidance for permittees. The subgroup has two more meetings scheduled in March and April to discuss: understanding the process to identify WQS and how WQS apply to the permits in the context of this newly discovered chemical; and how to best make recommendations for future study. The subgroup welcomes the broad participation as we all learn together about what can best be done to address toxicity of stormwater. We still have more questions than answers about environmental fate and transport of 6PPD and 6PPD-quinone.

**Work group updated on the MS4 Permit Appeal and MS4 permit reissuance**

Emma Trewhitt reported that the PCHB dismissed the last two remaining appeal issues in January. Ecology and the appellant, Puget Soundkeeper Alliance, were able to reach settlement agreement on the 2 remaining issues, by Ecology agreeing to consider retrofit requirements during the development of the western WA Phase II Permits as part of the public reissuance process. Any proposed retrofit requirement will include the opportunity for discussion and comment.

She also reminded the Work Group that early input for permit reissuance was due by February 25th.

**Work group updated on Ad Hoc discussions**

Doug Navetski reported on the preliminary outcomes of the Ad Hoc discussions. There were 16 topic groups, all of whom will submit White Papers to Ecology for early input. Of interest to the group was the SAM recommendations, which varied in content, but gave the group ideas on areas where further education may be needed.

**Work group updated on SSC PAC**

Emma Trewhitt reported that Ecology organized a seminar format for Phase I and several Phase II permittees to share out their current retrofit programs to provide a sense of baseline for this work. Puget Soundkeeper was also able to present on their newest ‘Nature’s Scorecard’ project, which focused on how retrofits are being implemented across western Washington. The PAC will develop recommendations for the Phase I permit SSC requirement, and advice on how to include a retrofit requirement in Phase II.

**Work group updates on communication**

Karen Dinicola updated the group on a few communications aspects, including our recent switch to GovDelivery as a n email sharing platform, her progress on documenting the implementation of the 2010 strategy and recommendations document, and plans to record a ‘SWG 101’ to help with onboarding new members, and educating interested parties.

**Work Group agrees to meet with PSEMP Modeling WG**

The work group discussed involvement with the PSEMP Modeling WG. The Modeling WG is keenly interested in holding joint meetings with other PSEMP Work Groups this year and into 2023. The overall goal of these joint meetings is to strengthen ties between the monitoring and modeling communities engaged in Puget Sound recovery. Work group members were supportive of this collaboration. Emma will work with Don, Abby and the Modeling WG to schedule a separate joint meeting.

**Future SWG meeting dates, communications, and expected discussion topics**

Our next meeting will be on **Wednesday, May 18, 2022 from 9 a.m. to 12 p.m.** We will:

* Hear findings of the bioretention longevity effectiveness study
* Hear findings of the SAM Puget Sound Streams status and trends monitoring
* Hear findings of Nearshore mussel contaminant monitoring-third round (2019-2020)
* Discuss plan for Round 4 SAM study solicitation
* Discuss subgroup recommendations about strategic needs and actions to address 6PPD/6PPD-q in stormwater
* Discuss the 2010 Strategy implementation update document
* Hear updates on SAM implementation and administration
* Decide on messages for the next issue of SWG Reporter
* Hear updates related to our work

Our scheduled meetings in 2022 are on May 18, September 14, and November 16. Please mark your calendars for all of these dates from 9am to noon. All of them fall on Wednesdays.

Looking ahead: at our September meeting we will also have a panel discussion about JEDI. We will send out more information as we schedule the meeting with the PSEMP Modeling WG.

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**Acronyms used in this meeting summary:**

JEDI – Justice, equity, diversity, inclusion, or a combination of Diversity, Equity, and Inclusion (DEI) and Environmental Justice (EJ)  
PAC – Policy Advisory Committee  
PI – Principal Investigator  
PRO-C – Pooled Resources Oversight Committee  
PSEMP – Puget Sound Ecosystem Monitoring Program  
PSP – Puget Sound Partnership  
S&T – Status and trends (regional monitoring in receiving waters)  
SAG – Strategic Advisory Group (for WSC)  
SAM – Stormwater Action Monitoring, the regional stormwater monitoring program funded primarily by permittees  
SSC – Structural Stormwater Controls (retrofit and other “above and beyond” stormwater management activities in Phase I permit)  
SWG – Stormwater Work Group  
TAC – Technical Advisory Committee  
USFWS – U.S. Fish and Wildlife Service

USGS – U.S. Geological Survey, Washington Water Science Center  
USTMA – U.S. Tire Manufacturers Association  
WDNR – WA Dept. of Natural Resources

WQP – (WA Dept. of Ecology) Water Quality Program Headquarters   
WQS – Water Quality Standards  
WSC – Washington Stormwater Center (at WSU-Puyallup)  
WSU – Washington State University   
WSDOT – Washington State Dept. of Transportation  
WWHM – Western Washington hydrology model