

Stormwater Work Group Final Summary

Wednesday February 7, 2024

9:00 a.m. to 12:00 p.m.

Microsoft Teams Meeting

ATTENDEES

65 Total Attendees

Madison Rose Bristol, Joanna Larson, James Packman, Emma Trehitt, Dara Osborne, Jessica Huybregts, Zachariah Van Ry, Katrina Radach, Kym Foley, Morgan Baker, Todd Hunsdorfer, Susannah Rowles, Jeff Killelea, Blaine Chesterfield, Emma Froembling, Stefan Grozev, Amanda Royal, Laurie J Larson-Pugh, George Reed-Harmon, Carly Michiels, David Kangiser, Laura Reed, Mauro Heine, Eli J. Mackiewicz, Nicole Chen, Katie Rathmell, Jennifer Bare, Stephan Rosen, Nicholas Wegener, Cleo Neculae, Brian Hite, Don McQuilliams, Alison Schweitzer, Stella Collier, Keith Estes, Aimee Navickis-Brasch, Jenna M. Schroer, Nick Hehemann, Dana Deleon, Sadie Drescher, Royce Young, Abby Barnes, Erin McCabe, Brian Monnin, Chelsea Morris, Heidi Siegelbaum, Teizeen Mohamedali, Shawn D. Christensen, Troy Fields, Dimitrios Athanasiou, Dorie Sutton, Sara J. Hutton, Shelby Giltner, Heather Martin, Erin McNeill, Frances Bothfeld, David Mora, Casey R. Remmer, Joel Prock, Jesus A., Meiring Borchers, Leslie Connelly, Patrick W Moran, Julia Stinson Ebert, Kelsey Furman

MEETING NOTES

Presentation of findings from SAM Mobile business stormwater source control and coordination project (Alison Schweitzer, King County and James Packman, Herrera Environmental Consultants)

[Presentation Slides](#)

- King County is the sponsor, and the project will be wrapping up around June 2024
- This SAM project included 7 core tasks:
 - Task 1: Technical advisory committee and project management
 - Task 2: Survey of municipal mobile businesses source control
 - 65 responses to the survey
 - Included representation from all 4 types of permittees
 - The survey included an assessment of barriers to waste handling. Of survey responses, proper disposal method was the most selected response

- Task 3: Business listing generation procedure
 - This project developed a process to inventory and prioritize mobile businesses of interest to stormwater source control and help permittees with prioritizing mobile businesses for source control
 - To generate deliverables, they used business license data and NAICS codes per permit guidance
 - Worked with WA Department of Revenue’s Business License Service and some cities in King County with alternative license services
 - The project focused on identifying a “fingerprint” of mobile businesses
- Task 4: Analyze permittee Illicit Discharge Detection & Elimination (IDDE) Data on mobile businesses
 - More than 1,800 records of IDDE incidents as reported by municipal permittees in 2020
 - Most common illicit discharges:
 - Automobile and equipment-related, construction activity, sewage or animal waste
 - 41% of reported IDDE incidents discharged to the MS4
 - Most common were fuel and vehicle-related
- Task 5: Best Management Practices
 - Target audience was municipal stormwater permittees
 - Materials included in the guidance document include 26 existing 20 BMPs, 26 existing outreach brochures and 3 new outreach brochures
 - Imagery and pictures were determined to be the most common and best way to convey the information
 - Materials described stormwater best management practices (BMPs) for common mobile business activities
- Task 6: Pilot Program
 - Purpose: Use and test methods and procedures from the study
 - Pilot occurred February to August 2023, and 18 municipal stormwater permittees (cities) in King County participated
 - The pilot Program report includes case studies from participants and of source control at mobile businesses
- Recommendations:

- Use keyword search procedure, developed for study, which can be customized by business type, keyword selection, and risk of business activity
- The WA Department of Ecology should consider updating Appendix 8 of MS4 permits to better represent businesses of interest to stormwater, including mobile businesses
- Jurisdictions are encouraged to communicate, collaborate, and share information about source control and mobile businesses with neighboring jurisdictions
- The WA Department of Ecology and WA Department of Revenue should continue communicating about business licenses and stormwater, including considering adding a mobile business option to the license

Q&A

Question: Could you say more about the weighting? Why auto and wrecking not of interest and appliance businesses had a fairly high weighting (.75)?

Answer: Weighting was a subjective determination in this study. In this project, we focused on businesses that don't have other regulations or are not regulated by other programs – aka business that tend to fly under the radar. Therefore, we excluded words that are regulated by regulations and permits.

Question: Why was "plumb" excluded if they conduct side sewer repairs and (if uninformed) could discharge to the MS4? Perhaps because they have an office too?

Answer: We did not want to include plumbers in this study as they are not perceived as of particular interest for stormwater management and source control.

Question: When the mobile business goes out to go their work, are they required to post a sign or provide info to a customer showing what their regulations are?

Answer: That is not a standard requirement, but they do have to post their construction permit. A challenge is when the business is working in an unknown area or private location. This could be a potential opportunity for accountability – and getting people in the community involved in the process as well.

Question: Drawing attention to work that was done with the Department of Revenue (DOR), a big level of effort was required to get the data they were working with. There is a new relationship with DOR and we are thinking differently about how we manage stormwater.

There hasn't been a large-scale effort to work directly with DOR and this could be a potential opportunity. Any recommendations on how to build on that relationship?

Answer: There has been a significant focus on a peer-to-peer communication line between DOR and Ecology. DOR is not interested in stormwater, but there is a cross over now with facilities. A challenge is trying to show DOR why they should care about stormwater, and there is an opportunity for discussion on this between agencies. The purpose from the stormwater perspective is to help streamline permittees' work, including identifying sites for source control and pollution prevention.

Suggestions: Maybe a 'Salmon-Safe' certification for Mobile Businesses? Like EnviroStars? There is a marketing opportunity for mobile businesses with stormwater savvy practices.

Question: When doing IDDE research – how many potential spills are happening that go completely unreported?

Answer: We don't know the number of spills that occur if they are unreported.

PRO-C and SAM Project Updates (Todd Hunsdorfer, PRO-C Chair)

- Brandi has left the SAM team - Chelsea Morris is temporarily stepping in to take over for Brandi
- SAM is currently running 10 active projects, the majority of which are scheduled to end this year, but will be replaced by 4 new projects
 - Round 4 Full Proposals 2, 3 & 8 are approved for funding and moving forward. A permeable pavement study is starting this year.
- SAM booklet that Ecology produces is the culmination of the permit cycle. Contact Chelsea if anyone is interested in having a [past booklet](#)
- At upcoming meetings, we will hear about roadside ditch maintenance work, infiltration performance testing, and the effects of small urban trees
- Washington State University (WSU) completed their source control training project and they got a little money back
- Clark County extending contract to continue into next cycle – going well.
- US Geological Survey is expected to release status reports that will be out shortly. They are also working on extending their contract.
- PRO-C did get a request for amendment related to the WSU bioretention project

- They will inform the proponent and may bring it forward as a formal vote at a future meeting
- Abby Barnes, SWG Co-chair: If we ask for a vote by SWG, all the information should be provided ahead of time

Partner Updates Related to Our Work (Katrina Radach, PSEMP Manager, Madison Rose Bristol, 6PPD Stormwater Planner, Morgan Baker, 6PPD Management Analyst)

- PSEMP
 - PSEMP Strategic Planning: We are continuing to work on updating the strategic plan. In the January Steering Committee meeting, there was more discussion and feedback on the draft goals for PSEMP in the next 4 years. Between January to March, the strategic actions will be developed and discussed at the March Steering Committee meeting.
 - Public Comment Opportunity - Puget Sound Salmon Recovery Plan Addendum: The public comment period is open from Jan. 8 until Feb. 21. The Puget Sound community has an opportunity to [provide feedback on the Puget Sound Salmon Recovery Plan Addendum through an online platform](#) and by submitting letters. Letters can be sent via email to Ashley Bagley at ashley.bagley@psp.wa.gov, salmon policy advisor at the Puget Sound Partnership.
 - Work Group Meetings: Please view the [PSEMP Calendar](#) for the latest updates on work group meetings and scheduling.
- WA Department of Ecology
 - 6PPD
 - Soliciting for new best management practices (BMP) effectiveness studies: Ecology has over \$3 million available for new 6PPD BMP effectiveness studies through three funding opportunities: 6PPD Interagency Agreements (IAAs), 6PPD Request for Proposals (RFP), and the Stormwater Strategic Initiative Lead (SIL) RFP.
 - We are actively accepting pitches for IAAs. If you are a member of a public organization, including Tribal Nations, government agencies, and public universities, and have a 6PPD project idea, please reach out to madison.bristol@ecy.wa.gov to start the IAA process.
 - The 6PPD RFP and the SIL RFP will be published in early 2024. We will share more about these opportunities on [our project webpage](#) and via the SWG listserv in February 2024.
 - The SIL RFP is not just for 6PPD-q, but also for studying hot spots and contaminants of emerging concern

- Manchester Environmental Lab (MEL): MEL has been officially accredited for 6PPD-quinone water samples. MEL is the first lab in the state to be accredited for 6PPD-q.
- The Environmental Protection Agency (EPA) published a [draft method](#) for sampling 6PPD-q in water samples
- [6PPD Action Plan](#)
 - The Washington State Departments of Ecology and Health are developing a 6PPD Action Plan. The 6PPD Action Plan will identify and consider actions that could be taken to mitigate current impacts from 6PPD-quinone and phase out 6PPD use in the future. Currently, the Action Plan is in Phase 1, which focuses on research needs, data gaps, and developing recommendations for WA state agency budget requests.
 - The 6PPD Action Plan Advisory Committee held its first kick-off meeting on January 24, 2024. The Advisory Committee is open to more members and listeners. If you would like to receive an invite, please reach out to madison.bristol@ecy.wa.gov.
- Contracting status of SAM Full Proposal 1 – Street Sweeping Synthesis: After being approved for funding at the last SWG meeting, Ecology has proceeded with developing the scope of work (SOW) for FP1. PRO-C is in the process of reviewing this SOW. This proposal will be fully funded using Ecology’s 6PPD funding.
- Stormwater Strategic Initiative Lead (SIL): Depending on available funding, the SIL might re-open 2 RFPs for applications on March 15: Climate Resiliency in Stormwater Management and Increasing Stormwater Parks in Puget Sound. For more information, visit <https://pugetsoundestuary.wa.gov/stormwater-sil-rfp/> or contact derek.day@ecy.wa.gov.

Q&A

Question: Have you heard anything from EPA about how long they expect it to take to finalize the draft 6PPD method? I think we’re still waiting on PCB method 1628.

Answer: This is the fastest EPA has ever been with a method. Possibly 18 months to 2 years, but that is a rough estimate.

Question: What are the implications of only one lab being accredited in WA for 6PPD-q? What’s the plan for avoiding a backlog of need and limited supply opportunity?

Answer: This is a valid concern. Ecology is required by agency policy to use an accredited lab for studies like this. State law RCW 90.48.85 describes credible data requirements, including following quality assurance procedures and developing agency policies. We are restricted right

now to use Manchester Environmental Lab. There are some alternate processes where Ecology can get waivers and use other labs. MEL is keeping us up to date on any impending capacity issues. If MEL does reach capacity, projects may seek waivers from MEL to use other labs. There are other labs within the state being considered for accreditation. Additionally, the EPA has released a draft method, and MEL's Lab Accreditation Unit is working to review all submitted accreditation applications by other labs.

Comment: The City of Tacoma's lab has developed a slightly different method for 6PPD. As soon as we look over the draft EPA method, we will be submitting our lab accreditation packet for 6PPD using our method or the EPA draft method.

Improving SWG Member Engagement (Don McQuilliams and Abby Barnes, SWG Chairs and Madison Rose Bristol, SWG Interim Coordinator)

Presentation Slides

- Abby Barnes gave a brief presentation on the current status of SWG member engagement
- Madison Rose Bristol shared the [SWG Webpage](#), which is an up-to-date resource for all SWG attendees
- The co-chairs are seeking up-to-date information about who SWG voting members and alternates are. Please reach out to madison.bristol@ecy.wa.gov if you have membership updates.
- Additions to our member list:
 - Melissa Ivancevich, City of Seattle (not Jessica Huybregts)
 - Alison Halpern is now with State Agriculture
 - Aaron Clark has also left Stewardship Partners
 - Swap out Jennifer Adams with Ior
- Todd Hunsdorfer is going to send Abby an updated list

Discussion Questions

Question: What are SWG member's ideas around hosting an in-person SWG meeting?

Feedback:

- Always love a good field trip!
- The spring/summer at Washington Stormwater Center is glorious - we had a bear visit this year:) Right next to the salmon lab and berry patch...
- An eastern WA field trip this spring?

- Keep in mind that it's much easier for people to attend online than in person. The number of people attending will likely be lower.
 - Abby, Co-chair confirmed that they will try to offer a hybrid option
- Tacoma is too far south for those of us from the northern part of the state.
- Looking forward to an in-person meeting – possibly with a meal provided.
- To state the obvious... of course thoughtful planning would be appreciated. Not during Winter or in Quarter 1 due to annual reports, etc.
- If it is helpful - Many of the other PSEMP WGs have been testing with hybrid meetings, but also just liking having one meeting in-person with the rest being just virtual.
 - So far, the co-chairs are planning for one in-person per year in the Summer/Fall, with a hybrid option offered.

SWG Member Engagement Survey

- During this meeting, we asked attendees to fill out the SWG Member Engagement Survey. If you would like to provide feedback on any of the following information, please email madison.bristol@ecy.wa.gov
- 32 SWG members filled out this survey
- Several SWG members confirmed their status as voting members or voting alternates. 8 individuals also expressed interest in becoming a voting member. We will be reaching out to folks individually to confirm and finalize the official SWG voting member and voting alternates list.
- Some respondents indicated that they participate in SWG Subgroups:
 - 20 people – 6PPD Subgroup
 - 7 people – Effectiveness Study Solicitation
 - 2 people - Receiving Waters Status and Trends
- Some respondents participate in SWG Caucuses:
 - 10 people – Municipal
 - 3 people – State
 - None of the respondents participate in the federal, business, environmental, Tribal, port, and agricultural caucuses
- 3 respondents currently participate in PRO-C. 10 other people stated that they might also want to participate in PRO-C.
- A few respondents attend PSEMP meetings:
 - 1 respondent participates in all PSEMP meetings due to job requirements
 - 2 respondents only attend the Toxics Monitoring Workgroup

- 1 respondent only attends the Modeling and Marine Workgroup
- 81% of respondents would be willing to attend one in-person SWG meeting per year. Others stated that they may or may not be able to attend depending on the location, hybrid options, schedule, and agenda.
- Some communications methods were seen as more useful than others:
 - 81% of people benefit from direct emails from SWG Coordinators
 - 78% of people use the Ecology listserv
 - 40% of people use [Ecology's Website](#). It is important to note that some items on this website are outdated, as the [SWG Website](#) is the most up-to-date resource for information. However, based on this feedback the SWG Coordinators will work to make all information current and accessible on Ecology's site.
 - 38% of people use the [SWG Website](#)
- We received additional open-ended feedback, which will be discussed further between the co-chairs and the SWG coordinator

2024-2025 SWG Work Plan (Don McQuilliams and Abby Barnes, SWG Chairs and Madison Rose Bristol, SWG Interim Coordinator)

[Draft Workplan](#)

Discussion Questions

Question: Do SWG members prefer the co-chairs attending PSEMP work group meetings or having a separate liaison?

Feedback:

- Don's preference is having a designated liaison to attend meetings.
- There have been more meetings this year than usual because of the strategic planning process which is important and will lead to good changes in the future.
- The survey had a question about this – could be a good starting point.
- Meiring Borchers volunteered to be the PSEMP Liaison. The co-chairs will follow up with Meiring about this responsibility.
- Katrina Radach: I can also help with answering any questions folks may have. PSEMP is aimed to break down silos and make the network of people and science more available for folks.

Question: Which option is preferred? Should just the 6PPD Subgroup have a work plan, or other subgroups as well?

Feedback:

- Subgroups should come out of work groups. Subgroup fulfills the work plans needs identified by the larger work group.
- Some subgroups convene on an as-needed basis and are project-based. These groups develop a project plan. Therefore, for these subgroups it might make the most sense to not include their project plans in the SWG Work Plan.
- Sounds good, just be sure to make the linkage on the webpage and work plan between subgroups and the work plan.

Question: Should we approach SWG voting member approval differently? Should we vote to renew or add members on an annual or biannual basis?

Feedback:

- There is also a question about this in the survey that may be a good starting point for answering this question.
- Proposal for considering term limits is a great idea. Connecting with representatives and alternates before the meeting via email to know who is there for voting is a good practice. Reviewing the voting members is a good idea, but how do we maintain the ratio that exists now? The ratio for voting membership was originally designed to represent the financial burden of the local caucus.
 - Co-chairs agree that sending an email prior to meetings to confirm voting member attendance is a good practice.
- Suggestion for at least a 2-year term limit for voting members
 - Term limits are fine as long as you have overlap that not everyone is new at the same time. Rotating people for when they come in and when they leave.
 - We could accomplish this by caucus.
 - Several attendees like the idea of term limits.

VOTE: Which method of approving the 2024-2025 SWG Work Plan is preferred by SWG members? Voting virtually via email or voting at the May 15 meeting? Type “email” in the chat if voting by email is preferred or “meeting” if voting during the May meeting is preferred.

- 9 voted for an email vote
- 1 voted for a vote in the May meeting
- Therefore, the co-chairs will send the final SWG Work Plan to voting members via email between February – March 2024. Voting members should review the Work Plan on their own and vote. Clear instructions will be provided for how to submit your vote.

Feedback:

- Voting buttons in an email or a Microsoft Form could be good options for a vote
- For future votes via the chat in meetings, it was suggested for the SWG Coordinator to type options in the chat, and for people to give a thumbs up to their preferred option.

Debrief the SWG 6PPD Subgroup Meeting (Eli Mackiewicz, 6PPD Subgroup Co-Chair)

- The last meeting was on December 13, 2023. View these [meeting notes](#) for more details.
- Shelby Giltner was recently hired by Ecology as a stormwater engineer. A significant portion of her job will be focused on 6PPD. She will be the new SWG 6PPD Subgroup Coordinator for the foreseeable future. To get in contact with Shelby, email shelby.giltner@ecy.wa.gov
- At this meeting, Curtis Hinman on behalf of King County gave [a presentation](#) on the preliminary results of King County's "Testing Removal of 6PPD-q and Coho Salmon Lethality by High Performance Bioretention Media Blends" project:
 - Study Design: Column array using a media lab at Western Washington University in Bellingham to test ECY's compost-based bioretention soil media (BSM) and high performance bioretention soil media (HPBSM). Contaminated stormwater from the I-5 Ship Canal Test Facility is ran through the soil mixes. Samples of influent and effluent are tested for concentrations of 6PPD-q, total suspended solids (TSS), conductivity, pH, and additional parameters. The study is also testing acute mortality directly with juvenile coho salmon.
 - Preliminary Results: Influent concentrations for 6PPD-q were between 0.23 - 0.79 ug/L, all BSM mixes were able to reduce 6PPD-q levels in the effluent to below the LC50 for coho salmon (0.04 - 0.10 ug/L) - aka the concentration at which half of the test population experiences acute mortality. Coho survival significantly increased from only 5% survival in the influent to 100% survival in the effluent. Additional rounds of testing are ongoing and final results are still pending.
- Next meeting: Will elevate the discussion on education and outreach for permit requirements – how do we use those resources to provide better water quality?

Feedback:

- Who are you bringing in to help with that conversation ("experts")?"
- There is a regional social marketing association to support more training and funding in this area.

Additional Updates Related to Our Work (Attendees share other updates)

- Todd Hunsdorfer, Don McQuilliams, Dana de Leon, and Sadie Drescher will get together to talk more about how Chesapeake Bay Trust operates. Sadie was a guest from this organization.
- Tony Bush from WSDOT – they currently have [a survey](#) about which sections of highways are most important to prioritize for 6PPD. They are actively looking for feedback on their prioritization process.
- [The Green Infrastructure Summit](#) in Bothell will have speakers from Herrera Environmental Consultants and WA Ecology who will be talking about 6PPD.

FUTURE MEETING DATES:

The next regular SWG meeting is **May 15, 2024**. Please mark your calendars for May 15, September 11, and November 13, 2024 – all Wednesdays, from 9am-noon. We may occasionally extend our meeting time; any extended meeting time will be determined at the previous meeting.

At our meeting on Wednesday, May 15, we will:

- Present on the mussel monitoring program
- Hear findings and updates from additional SAM studies
- Hear updates from the SWG 6PPD Subgroup
- Hear additional updates related to our work

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VIEW THE SWG WEBSITE:

We regularly update the [SWG website](#) with information about upcoming meetings, past meeting materials, and important SWG documents. If you have additional questions about the SWG, contact madison.bristol@ecy.wa.gov.