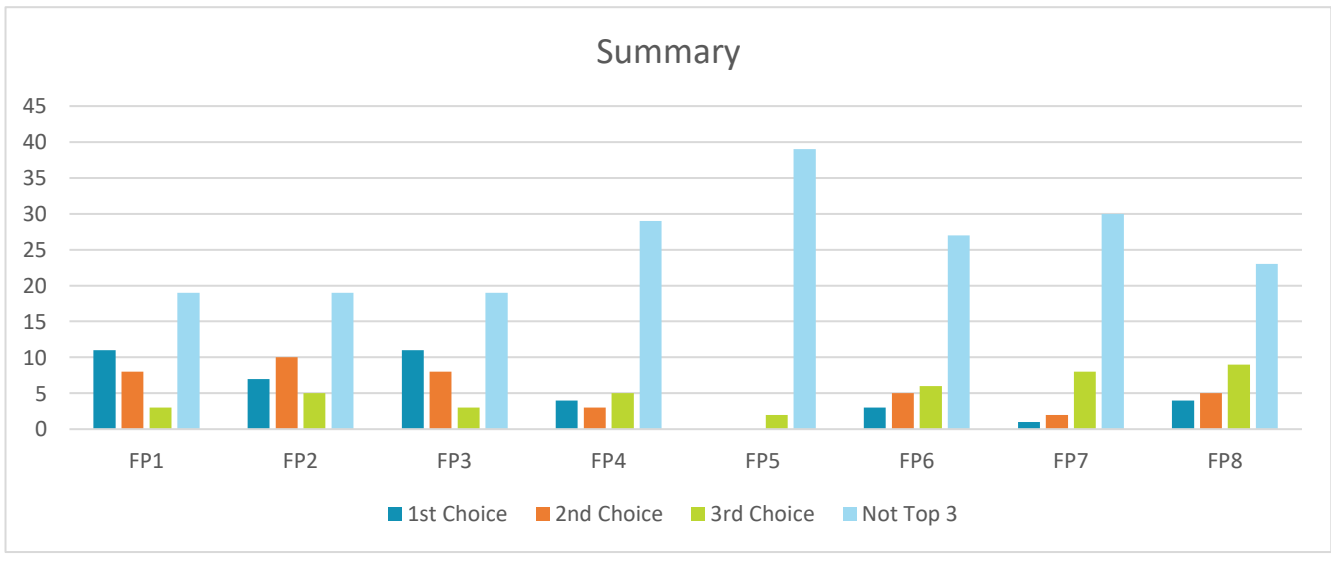
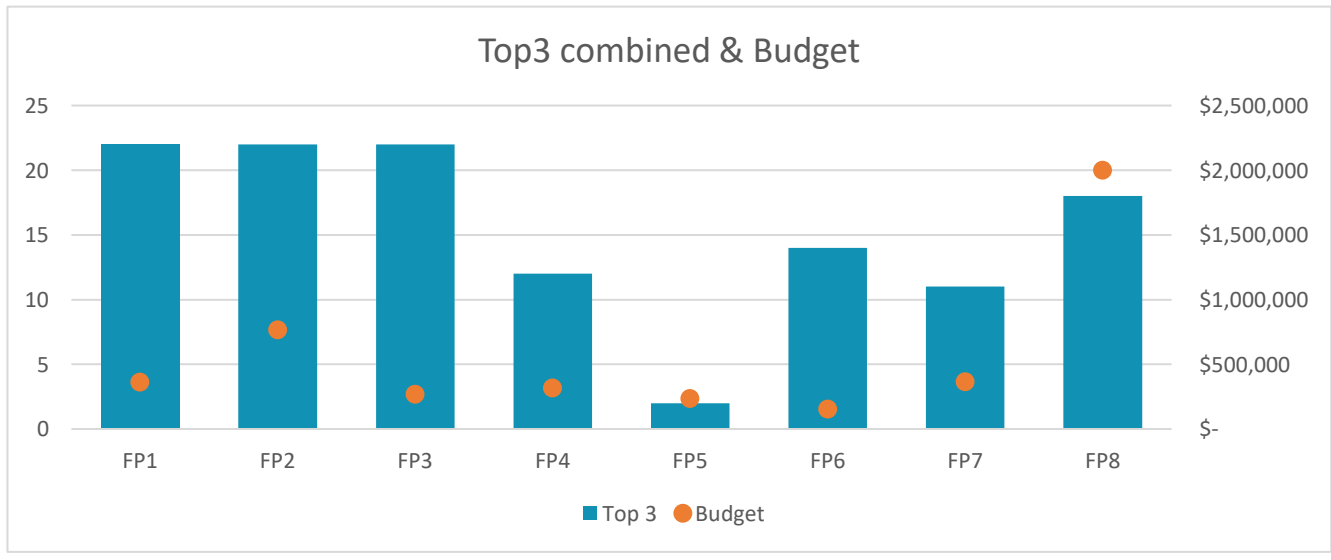
Round 4 Study Selection Permittee Survey Results

A total of 41 permittees voted

	1st Choice	2nd Choice	3rd Choice	Not Top 3	Top 3	Budget	Proposal Title
FP1	11	8	3	19	22	$ 362,500	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center
FP2	7	10	5	19	22	$ 764,500	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities
FP3	11	8	3	19	22	$ 267,000	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County
FP4	4	3	5	29	12	$ 317,100	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County
FP5	0	0	2	39	2	$ 233,800	FP5: Application of Continuous Monitoring and Adaptive Control for Water Quality and Flood Control – Flett Creek Ponds from City of Tacoma
FP6	3	5	6	27	14	$ 153,600	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma
FP7	1	2	8	30	11	$ 364,400	FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County
FP8	4	5	9	23	18	$ 1,998,310	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma





Prepared by Chelsea Morris, 9/11/2023

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FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center

The study from the Washington Stormwater Center would have the most reach to all MS4's. This should be considered first before individual Cities/County's are awarded funding for their own MS4.

Our general preference is for projects that have practical applications that are potentially useful to a broad range of permittees, and are efficient in both duration and cost. FP1 addresses source control, O&M, and permit requirements.
Strong support for FP1 & FP6 as their findings can meaningfully support improved stormwater program management priority areas.
In addition to the top three, early funding for FP1 to inform permittees how to focus their street sweeping programs would be beneficial.

FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities

6PPD is one of the top issues for salmon recovery and defining the best options to remove it from runoff is beneficial to all agencies.

FP2's narrow scope compared to what can be explored via FP1. Perhaps consider integrating the two proposals.

There is strong support to fund FP3 and FP2 due to the lack of approved bmps for 6PPD-q. The new SMAP language requires permittees to "include BMP types to address transportation related runoff, such as tire wear." These studies could support both operational and structural options. (It would be great to know the effectiveness of other facility types too.)
Clark County has a strong preference for FP8. We also have a strong preference for FP2. These proposals will collect scientifically valid data and reporting that will benefit Ecology and permittees.

FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County

6PPD is one of the top issues for salmon recovery and defining the best options to remove it from runoff is beneficial to all agencies.
Our general preference is for projects that have practical applications that are potentially useful to a broad range of permittees, and are efficient in both duration and cost. FP3 addresses water quality and the relatively-new HPBSM in an actual facility setting.

There is strong support to fund FP3 and FP2 due to the lack of approved bmps for 6PPD-q. The new SMAP language requires permittees to "include BMP types to address transportation related runoff, such as tire wear." These studies could support both operational and structural options. (It would be great to know the effectiveness of other facility types too.)

FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County

Intrigued by FP4, not so much for the purpose of catch basin cleaning, but its potential application as a predictive tool for sediment loading in general to help inform programs like street sweeping, stormwater CIP prioritization, and SMAP development. However, skepticism exists that such a model could be calibrated, and validated for broad application.
We have a preference against FP04 and FP07

FP5: Application of Continuous Monitoring and Adaptive Control for Water Quality and Flood Control – Flett Creek Ponds from City of Tacoma

FP5 is not relevant to any systems that the City of Bellingham currently utilizes.
Regarding FP5, concerned about the narrow applicability due to the small sample size (i.e., one location) as well as using public money to fund a study with a proprietary tilt.

FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma

Our general preference is for projects that have practical applications that are potentially useful to a broad range of permittees, and are efficient in both duration and cost. FP6 addresses flow control in terms of infiltration analysis which is critical in BMP design and has been in need of improvements in methodology.
Strong support for FP1 & FP6 as their findings can meaningfully support improved stormwater program management priority areas.
Funding for FP6/FP7 prior to beginning the next manual/permit update could inform beneficial changes.

FP6 is also a preferred project because it is simple and could improve design of infiltration facilities for permittees.

FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County

Could BIG group do this. Not a good use of SAM funds
Funding for FP6/FP7 prior to beginning the next manual/permit update could inform beneficial changes.
We have a preference against FP04 and FP07

FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma

Is this really an Effectiveness study? Does it meet the intent of this particular funding source?
Concerns around FP8 include its very high cost, study design shortcomings (e.g., correlation vs. causations; grab vs. continuous monitoring) and questions surrounding potential S4.F complications.
For FP8 - Monitoring study, we like the study but is this allowable as an Effectiveness Study or is it a Status and Trends study? Something I will ask the SWG to comment on as well.
Clark County has a strong preference for FP8. We also have a strong preference for FP2. These proposals will collect scientifically valid data and reporting that will benefit Ecology and permittees.

Additional comments for proposals

Olympia has concerns about the scope of allowed SAM proposals as articulated in Appendix A in addressing monitoring and effectiveness as intended by the initial RSMP/SAM program. Specifically how will some of these topics/proposals improve water quality and outcomes for receiving waters and benefit smaller municipalities. When RSMP was initially implemented Olympia and adjacent municipalities gave up local ambient monitoring capacity to fund the program. Trading local monitoring capacity for proposals that may not improve effectiveness and monitoring raises some questions. A larger discussion about the process, project scopes and appropriate use of these funds would be helpful, in part to articulate the benefits to local ratepayers.

Generally against proposals that do not have a tangible deliverable for Phase II municipalities immediate use or those that do not apply to all municipalities.
Clark County does not have strong preferences against any proposals.

Comments to SAM staff and for future workshop

The workshop was very well done!
Staff was appreciative of the August workshop opportunity, although it was difficult to follow the presentations on the virtual platform. It would have also been helpful to distribute the Q/A answers to the entire group of attendees rather than a select subset.

General comment regarding process: Recommend redesigning SAM's proposal development and selection process to where SAM stakeholders, via their caucuses: 1) identify the research questions they seek to answer, 2) SAM members prioritize those research questions, 3) solicit RFPs to investigate the top priority questions; 4) use an independent third-party (TAC) to evaluate proposed study designs presented in the RFPs, and 5) have contributing SAM members select the top RFPs to fund.
More time for voting would be helpful. We appreciate and support all this effort and work. Thanks
Feedback on the August workshop. Wished there would have been more time available for Q&A after each presentation. Snohomish County's questions were added to the chat as directed but responses were not received.

Permittee	Site Contact	First Choice	Second Choice	Third Choice
City of Arlington	Caitlin Dwyer	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County
City of Auburn	Chris Thorn	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County
City of Bothell	Janet Geer	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County
City of Centralia	Kim Ashmore	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County
City of Clyde Hill	Shaun Tozer	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County	FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County
City of Gig Harbor	Michael Abboud	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma	FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County
City of Lacey	Doug Christenson	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma
City of Renton	Kristina Lowthian	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma
City of Tukwila	Russell Betteridge	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP5: Application of Continuous Monitoring and Adaptive Control for Water Quality and Flood Control – Flett Creek Ponds from City of Tacoma
Port of Seattle	Jane Dewell	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County	FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County
Thurston County	Larry Schaffner	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma	FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County
City of Mukilteo	Meiring Borcherds	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma
City of Bellingham	Aaron Burkhart	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma
City of Granite Falls	Brent Kirk	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County
City of Kirkland	Rachel Konrady	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma
City of Lake Stevens	Shannon Farrant	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center
City of Vancouver	Kris Olinger	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma	FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County

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Snohomish County	Steve Britsch	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center
City of Anacortes	Diane Hennebert	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma
City of Bremerton	Chance Berthiaume	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities
City of Issaquah	Michael Vermeulen	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center
City of Lake Forest Park	Andrew Silvia	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County
City of Maple Valley	Halley Kimball	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma
City of Milton	Jose Magana-Bedolla	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County	FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County
City of Olympia	Jesse Barham	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County
City of Port Orchard	Zack Holt	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma
City of Shoreline	Stefan Grozev	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities
King County	Angela Gallardo	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County
Kitsap County	Aislin Gallagher	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma
City of Bellevue	Don McQuilliams	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma
City of Poulsbo	Rachel Bowen	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma
City of Redmond	Anne Dettelbach	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma

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Cowlitz County	Susan Eugenis	FP4: Development of a catch basin model to predict sediment accumulation and clean out frequency from King County	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities
City of Enumclaw	Eric Palmer	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP5: Application of Continuous Monitoring and Adaptive Control for Water Quality and Flood Control – Flett Creek Ponds from City of Tacoma
City of Mill Creek	Angela Bolton	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities
City of Tumwater	David Kangise	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County
Pierce County	Maureen Meehan	FP7: Annual Report Questions for Improved Regional Learning and Permittee Efficiency from King County	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma
City of Bainbridge Island	Stella Collier	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma	FP1: Synthesis of street sweeping research and practices: guiding program effectiveness and waste management from the Washington Stormwater Center	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma
City of Everett	Heather Griffin	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities
City of Seattle	Jessica Huybregts	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP3: Treatment effectiveness of a full-scale stormwater facility using high performance bioretention soil media for 6PPD-quinone and other toxic chemicals from King County
Clark County	Rod Swanson	FP8: Monitoring for Stormwater Contaminants of Emerging Concern in Western Washington from City of Tacoma	FP2: Measuring street sweeping 6PPD-q whole environment load reductions from Seattle Public Utilities	FP6: Updated Infiltration Methods in the Stormwater Manuals from City of Tacoma