



# Stormwater Action Monitoring Quarterly Report January 1 through March 31, 2023

## SAM accomplishments and key decisions reported for the quarter

- Two SAM effectiveness studies were amended
- Twelve project letters of interest were given peer reviews and asked to move on to the next stage of the SAM Project Solicitation process

## SAM budget for the previous quarter and anticipated in the next quarter

Table 1 shows the SAM budget for each account. Revenue is expected in August each year from 2020 thru 2024. The Pooled Resources Oversight Committee (PRO-C) approves encumbrance of SAM funds. Encumbrances in excess of projected revenues are due to projects that span multiple years. Indirect charges are applied quarterly to the individual accounts while SAM management staff costs are applied proportionally at the end of each fiscal year.

Table 1. Quarterly summary of revenues, expenditures, encumbrances, and available funds for each SAM account.

Reported and projected income and expenditures	Puget Sound status and trends Jan-Mar 2023	Lower Columbia status and trends Jan-Mar 2023	Effectiveness studies Jan-Mar 2023	Source ID projects Jan-Mar 2023	Admin Costs (Qtr) Ecology's Jan-Mar expenses
Balance at start of quarter	2,334,536	160,988	5,442,358	155,341	
Revenues	0	0	0	0	
Expenditures	87,508	72,794	222,176	0	44,349
Balance at end of quarter	2,247,028	88,194	5,220,182	155,341	
Encumbrances	2,281,515	153,209	3,001,800	135,605	

## SAM contracting activities

All contract scopes of work are reviewed and approved by the PRO-C and Ecology are posted online. The following contracting activities occurred this quarter:

- Signed new or amended Jan-Mar
  - Olympia's bioretention hydrology performance study was amended to add a 6-month date extension to account, now closes January 2024.
  - WSU's Business Source Control project amendment #2, extended and two additional trainings added for \$20,265 in February.
- Closed contracts Jan-Mar
  - WSU led Behavior Change project closed, February 2023. This project produced a valuable assessment guidance on picking and evaluating Education & Behavior Change projects for stormwater management.

## SAM summary by topic

### Communications

Routine deliverable and contracting updates to SAM website.

### Receiving water projects

SAM monitors the impacts of stormwater runoff in urban and urbanizing areas in the Western Washington small streams and nearshore environments. There are two active stormwater receiving water monitoring in Puget Sound region and one stream monitoring in Lower Columbia region.

### Effectiveness studies

SAM studies determine the effectiveness of operational or structural BMPs, maintenance and management actions, and outreach efforts to reduce stormwater runoff and transport of pollutants to receiving waters. The following are some key updates from the active effectiveness studies this quarter:

The stormwater education and outreach program evaluation was completed in February. Read SAM Fact Sheet: [#28 Behavior Change Design and Evaluation](#).

The QAPP for estimating the hydrologic value of young trees was finalized in February and the project is moving into the data collection phase.

The evaluation of bioretention soil infiltration performance at older facilities is looking for more participants. Contact Bill Taylor at [btaylor@raedeke.com](mailto:btaylor@raedeke.com) if you have a bioretention facility build before 2013 and would like to participate.

### Source Identification Projects

SAM projects on source control and source identification will improve illicit discharge detection and adapt our management solutions for pollutant sources in stormwater runoff. Milestones of the two active projects:

## SAM contract deliverable activity

Table 2: SAM’s contracts, end dates, and deliverable activity.

Receiving water agreements	Deliverables approved Q1 2023	Anticipated deliverables Q2 2023
<a href="#">Marine mussels – WDFW</a>	None expected	Data Upload for 2020/2021
<a href="#">Puget small streams – USGS, Manchester lab, Rhithron lab</a>	Quarterly reports for WY22 Q3 Q4 and WY23 Q1 Q2	Quarterly report, Final sampling sites for 2023, Data upload for 2021 and 2022, Final 2020 and 2021 reports
<a href="#">Lower Columbia urban streams - Clark County</a>	QAPP amendment	Semi-annual progress report, Data upload for 2022, Draft and Final 2022 Annual report
Source ID Contracts	Deliverables approved Q1 2023	Anticipated deliverables Q2 2023
<a href="#">Improving business source control programs – WSU (Sept 2023)</a>	Quarterly report, first additional training	Presentation at MuniCon and final additional training

<a href="#">Mobile business source control – King Co (Dec 2023)</a>	TAC meeting notes, final tech memo of business listings	Quarterly report, draft best practices for multi-jurisdiction coordination, Pilot Program in King Co plan and outreach material
<b>Effectiveness study contracts</b>	<b>Deliverables approved Q1 2023</b>	<b>Anticipated deliverables Q2 2023</b>
<a href="#">Paired watershed study – City of Redmond (Sept 2025)</a>	WY 2021 draft and final report, WY 21 and WY 22 data deliverables, WY 2022 and some 2023 progress reports	Opti Pond WY 22 discharge estimates
<a href="#">Longevity of bioretention toxicity prevention - WSU Puyallup (Nov 2024)</a>	None received	None expected
<a href="#">Hydrologic benefits of individual trees - WDNR (Aug 2024)</a>	Final QAPP amendment	Bi-annual report, equipment installation
<a href="#">Orifice control for bioretention - WSU Puyallup (Dec 2022)</a>	None received	draft and final modeling study report Presentation to SWG, draft and final project report, draft SAM factsheet
Evaluating stormwater education and outreach program - WSU (Feb 2023)	Final quarterly status report, final white paper, SAM fact sheet, and reporting guidance template. Contract completed.	NA
<a href="#">Improving ditches and maintenance - WSU Puyallup (Sep 2024)</a>	Progress report 1.2 & 1.3, final QAPP and installation memo.	Progress report, draft and final plant report
<a href="#">BMP maintenance condition - City of Bellevue (Apr 2024)</a>	Questions for Ecology staff	Progress reports, draft and final lit review on O&M data, tech memo on Ecology responses
<a href="#">Hydraulic conditions of old bioretention facilities - City of Olympia (Jul 2023)</a>	Contact amendment (dates only), Draft QAPP	Progress report, TAC kickoff meeting, Final QAPP, Site selection, Technical memos on hydraulic design, geotechnical, facility condition, vegetation, and maintenance
<a href="#">Lit review of particles in stormwater &amp; treatment -WDNR (Nov 2023)</a>	Literature synthesis, Data sources	Status updates, TAC Meeting Updates, White paper outline and flow charts, Draft and final white paper, Draft and final fact sheet, Presentation