

United States Department of the Interior

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To: Chelsea Morris, SAM coordinator

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From: Richard W. Sheibley

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Subject: Fourth quarter update for WY 2024 and 2025 SAM small streams work

This memo summarizes and documents the continued work by USGS for the SAM small streams project from October 1, 2023 through September 30, 2024.

During this period, a total of 26 of the 33 planned urban gradient sites were sampled this summer. Similar to past years, dry streams, getting owner permissions, and time were all factors in why the full suite of sites were not sampled. Over 60 sites were evaluated this summer and at the end of the sampling period we simply ran out of time to complete the remaining 7 sites. However, the minimum number of sites for each strata were sampled such that when this panel is revisited in 5 years (2029), we will have a complete set of 22 revisit sites available to sample. In addition to the urban gradient sites, 4 reference sites were also sampled in order to develop project-specific reference conditions. The list of sampled locations in included in a table at the end of this memo.

In addition to the summer sampling, continuous water level and temperature data were collected at 22 of these 26 sites. Not all sites had continuous data collection because as back ups are added to the sample list, it is too late in the water year to begin continuous data collection.

For water year 2025, sensors for continuous water temperature and water level data were installed at 24 of the 33 sites before September 1, 2024, ensuring that a full water year of data will be collected. This was the most successful year so far in getting sensors out in the field prior to the start of the water year. A total of 9 sites still need to be picked for summer 2025 sampling.

A list of sites selected to date for summer 2025 is included in a table at the end of this memo.

Please feel free to contact me at any time with questions about this quarterly summary or any other project related issues.

Table 1. Final list of sites sampled in summer 2024.

SiteID	Stream Name	Lat_DD83	Long_DD83	stratum
PSS05520-005413	Eaton Creek	46.98417565	-122.7335936	0 to 10
PSS05520-019116	White Creek	48.09382999	-123.4124125	0 to 10
PSS05520-011352	Canyon Creek	47.58260974	-121.9446122	0 to 10
PSS05520-004031	Beaver Creek	47.13441833	-121.9470004	0 to 10
PSS05520-019195	Finch creek	47.40679482	-123.1412529	0 to 10
PSS05520-017306	Carey Creek	47.42398021	-121.9522215	0 to 10
PSS05520-008596	Big Soos Creek	47.35431306	-122.1300886	10 to 20
PSS05520-001182	Hannah Creek	48.7515688	-122.4350971	10 to 20
PSS05520-006859	King Creek	48.0254804	-122.1298125	10 to 20
PSS05520-017625	Maddox Creek	48.39993117	-122.3222324	10 to 20
PSS05520-007928	Unnamed creek	47.72020544	-122.1242737	10 to 20
PSS05520-019752	Deep Creek	47.55327591	-121.8769765	10 to 20
PSS05520-003687	Matriotti Creek	48.1352065	-123.159388	10 to 20
PSS05520-016462	Quilceda Creek	48.09510521	-122.1652558	10 to 20
PSS05520-017755	Unnamed creek	48.7588967	-122.4489945	20 to 40
PSS05520-008040	Everest Creek	47.67353747	-122.1959102	20 to 40
PSS05520-010162	Lyon Creek	47.76910873	-122.293107	20 to 40
PSS05520-009968	Coal Creek	47.57299503	-122.1890004	20 to 40
PSS05520-017682	Allen Creek	48.05265652	-122.1641894	20 to 40
PSS05520-014824	North Creek	47.79321016	-122.203941	20 to 40
PSS05520-009074	Picnic Point Creek	47.88268172	-122.2980423	40 to 100
PSS05520-010502	Longfellow Creek	47.55656052	-122.3687516	40 to 100
PSS05520-012722	Thronton Creek	47.72172999	-122.3050704	40 to 100
PSS05520-001302	Miller Creek	47.45152921	-122.3425547	40 to 100
PSS05520-009554	Clear Creek	47.65283729	-122.6857263	40 to 100
PSS05520-010053	W. Hylebos Creek	47.28241808	-122.3192168	40 to 100
BIO06600-AUST02	Austin Creek	48.70792	-122.34374	Reference
BIO06600-OYST02	Oyster Creek	48.61868	-122.4395	Reference
BIO06600-SMIT02	Smith Creek	48.73228	-122.30772	Reference
SEN06600-GRIF09	Griffin Creek	47.60588	-121.8864	Reference

SiteID	Stream Name	Lat_DD83	Long_DD83	stratum
PSS05515-020891	French Creek	47.88526	-121.98858	0 to 10
PSS25515-006227	Little Minter Creek	47.38915	-122.68167	0 to 10
PSS05515-005879	Stossel Creek	47.72850	-121.85184	0 to 10
PSS05515-005892	Pederson Creek	48.05888	-123.26124	0 to 10
PSS05515-003875	Stimson Creek	47.42334	-122.91392	0 to 10
PSS05515-000831	Canyon Creek	48.02367	-123.13834	0 to 10
PSS05520-003563	MF Quilceda	48.11231112	-122.1628353	10 to 20
PSS05515-010563	Little Soos Creek	47.35755	-122.12673	10 to 20
PSS05515-000391	Coal Creek	47.56029	-122.17056	10 to 20
PSS05515-016983	Yarrow Creek	47.64008	-122.18555	10 to 20
PSS05515-032304	Padden Creek	48.71521	-122.48325	10 to 20
PSS05515-027812	Bell Creek	48.08485	-123.06708	10 to 20
PSS05520-004996	Soosette	47.34308271	-122.1570173	20 to 40
PSS05520-018582	Jenkins Creek	47.37718102	-122.0608974	20 to 40
PSS05515-001454	West Hylebos Creek	47.25348	-122.33350	20 to 40
PSS15515-256359	Trib to Willows	47.68592	-122.15176	20 to 40
PSS05515-029907	Honey Dew Creek	47.51370	-122.17984	20 to 40
PSS05515-013054	Lakota Creek	47.32259	-122.36677	20 to 40
PSS05515-000859	North Creek	47.77913	-122.18783	20 to 40
PSS05520-015026	Lyon Creek	47.7610285	-122.2896709	20 to 40
PSS05515-023787	Boeing Creek	47.75397	-122.36585	40 to 100
PSS05515-015067	Scriber Creek	47.80350	-122.26311	40 to 100
PSS05515-027199	Japanese Gulch	47.95027	-122.29354	40 to 100
PSS05515-000451	McSorley Creek	47.37553	-122.31570	40 to 100
SEN06600-GRIF09	Griffin Creek	47.60588	-121.8864	Reference

Table 2. Interim list of sites for summer 2025, as of 11/1/24.