



July 21, 2021

To: Keunyea Song, SAM coordinator
Washington State Department of Ecology, Olympia, WA

From: Marlena Milosevich
Natural Resource Specialist III, Clark County Public Works, Vancouver, WA

Subject: Deliverable D1.3: Semi-annual progress report

1. General Information

Contract Agreement Number:	C2000179
Project Title:	Status and Trends Monitoring of Urban Streams in Clark and Cowlitz Counties in the Lower Columbia River Region (LCUS)
Organization:	Clark County Public Works Clean Water Division (CWD)
CWD Project Manager:	Chad Hoxeng, CWD Interim Monitoring and Assessment Supervisor
Ecology Project Manager:	Keunyea Song, Stormwater Action Monitoring (SAM) Scientist
Reporting Period:	2021 Q1 and Q2 (January through June)
Date Form was Completed:	20JUL2021

2. Task Achievements (This reporting period)

Task 1: Project Management

Percent of Task Completed:	25% Completed \$11,054 of budget used (\$14,454 of \$32,328.00 of budget used total)
Deliverable:	D1.2: Semi-annual progress report
Achievements:	The 2020 Q4 D1.2: semi-annual progress report with target date January 31, 2021, was submitted to and accepted by Ecology. The project and budget were managed. Field, laboratory, and reporting tasks were coordinated.



Task 2: Station Set Up

Percent of Task Completed:	0% this period (50% Cumulative Completed) \$98.56 of budget used (\$75,230 of \$109,096.00 budget used total)
Deliverable:	Task completed in 2020. (Past deliverables: D2.1: Copy of receipt for purchase of two conductivity probes D2.2: Confirmation email for equipment installation at five trend monitoring stations D2.3: Confirmation email for equipment installation at three status monitoring stations.)
Achievements:	2020 Deliverables completed for this task. Equipment was purchased to replace two destroyed status sites, PCK010 and MOR010.

Task 3: Continuous Datalogger Operation and Field Data Collection

Percent of Task Completed:	17% \$30,542 of budget used (\$30,542 Of \$191,402 budget used total)
Deliverable:	
Achievements:	On target to meet deliverable D3.1 by operating and maintaining continuous monitoring equipment and performing field data collection per the Ecology-approved LCUS QAPP. Site visits were performed in February 2021, April 2021, and May 2021 at all trend and status sites. Reviewed and attended Ecology field training for habitat assessment. Please see 3. Challenges and Issues for more information.

Task 4: Data Management

Percent of Task Completed:	2.7% (18% of D4.1) \$10,037 of budget used (\$12,047 of \$63,721 budget used)
Deliverable:	D4.1.2: Upload continuous data to Aquarius, and send an excel file with graphs to the Ecology project manager (Data through February 2021) D4.1.3: Upload continuous data to Aquarius, and send an excel file with graphs to the Ecology project manager (Data through April 2021) D4.1.4: Upload continuous data to Aquarius, and send an excel file with graphs to the Ecology project manager (Data through May 2021)
Achievements:	On target to meet deliverable by performing data management and submittal per the Ecology-approved QAPP. D4.1.2, D4.1.3, and D4.1.4 (Three of 22 targeted bi-monthly, four cumulative) excel files with graphs have been completed and accepted by Ecology.

Task 5: Data Analysis and Annual Reporting

Percent of Task Completed:	0% \$289 of budget used (\$289 of \$73,131 budget used)
Deliverable:	N/A
Achievements:	On target to meet deliverable.

3. Challenges and Issues

There were a few challenges accomplishing Task 3: field data collection. Throughout the six-month time period (January through June 2021), coordinating field work during Covid-19 and making sure county staff can conduct work activity efficiently and safely has been a continuous challenge. There were also a few issues at status sites due to weather events or sensor malfunction.

Issues arose when status site, PCK010 (Packard Creek), was destroyed during a large rain event that occurred between the December 2020 and February 2021 bi-monthly field visits. Conductivity, stage, and temperature data were lost. A new conductivity/temperature probe was deployed to restart data collection. Clark County Public Works Clean Water Division (CWD) operates a Sontec IQ sensor approximately 100 ft upstream of the destroyed site that collects continuous stage which has been used in place of the lost stage data at this status site.

Additional challenges occurred at the status site, MOR010. The communication part of the stage sensor malfunctioned and lost data between February 26th, 2021 and March 2nd, 2021. We suspect the high flows that occurred in late February, over-topped the pipe containing the sensor and shorted out the Bluetooth enabled part of the sensor that allows for data download which is supposed to remain out of the water. The malfunction was discovered on 2/26/21 and replaced with a new sensor on 3/2/21.

A separate issue also occurred at MOR010. The conductivity and water temperature sensor stopped logging on March 13th, 2021 due to unknown sensor to malfunction. We are asking the manufacturer for a replacement sensor as this sensor is still under warranty. The malfunction was discovered during the site visit performed in April. A new sensor was placed at the site on April 20th, 2021. Data between March 13th, 2021 and April 20th, 2021 is lost.

There are a few potential budget challenges. Much of the cost is for Task 3: field data collection is related to WSH monitoring review, training, and equipment purchased for this type of monitoring. \$65,577 is budgeted for this year for the WSH. With training now complete, we are projected to be within the budgeted \$65,577 for this year for Task 3.

Task 1: project management and Task 4: data management are both over the budgeted amount for year but not the entire project. Project management cost is predicted be less in the future now that the project has started and is on target to meet all task goals which is now taking less time to manage. Task 4: data management costs are appropriate for the level of work needed to meet task deliverables. The CWD project manager will investigate the work involved with Task 4 to determine any way of bringing the existing expenditures in line with the predicted yearly budget.

4. General Comments