



July 26, 2022

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 D1.5: 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 Natural Resource Specialist III |
| Ecology Project Manager: | Keunyea Song, Stormwater Action Monitoring (SAM) Scientist |
| Reporting Period: | 2022 Q1 and Q2 (January through June) |
| Date Form was Completed: | 26July2022 |

2. Task Achievements (This reporting period)

Task 1: Project Management

| | |
|----------------------------|---|
| Percent of Task Completed: | 13% this period (50% Cumulative Completed) \$4,844 of budget used (\$24,755 of \$32,328.00 of budget used total) |
| Deliverable: | D1.4: Semi-annual progress report |
| Achievements: | The 2021 Q3 and Q4 D1.4: semi-annual progress report with target date January 31, 2022, 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 (80% Cumulative Completed) \$334 of budget used (\$82,373 of \$109,096.00 budget used total) |
| Deliverable: | Task completed in 2021. (Past Deliverables: D2.4: Confirmation email for equipment installation at three status monitoring stations; target September 30, 2021) |
| Achievements: | 2021 Deliverables completed for this task. D2.4: Confirmation email for equipment installation at three status monitoring stations was submitted to and accepted by Ecology. Three status sites are installed and collecting continuous data for WY2022. |

Task 3: Continuous Datalogger Operation and Field Data Collection

| | |
|----------------------------|--|
| Percent of Task Completed: | 17% (50% Cumulative Completed) \$8,679 of budget used (\$81,536 of \$191,402 budget used total) |
| Deliverable: | |
| Achievements: | On Target to meet deliverable D3.2 Email for monitoring completeness WY2022, confirming submission of the data collection event (DCE) file for each site compiled by the WHM e-forms and all required data and sample collection was submitted to Ecology by operating and maintaining continuous monitoring equipment and performing field data collection per the Ecology-approved LCUS QAPP. Site visits were performed in January 2022, March 2022, and May 2022 at all trend and status sites. Reviewed and attended Ecology field training for habitat assessment. |

Task 4: Data Management

| | |
|----------------------------|--|
| Percent of Task Completed: | 25% (45% Cumulative Completed of D4.1; 30% Cumulative Completed for Task 4) \$12,587 of budget used (\$32,436 of \$63,721 budget used) |
| Deliverable: | D4.1.8: Upload continuous data to Aquarius, and send an excel file with graphs to the Ecology project manager (Data October 1 st 2021 through January 2022) D4.1.9: Upload continuous data to Aquarius, and send an excel file with graphs to the Ecology project manager (Data October 1 st 2021 through March 2022) D4.1.10: Upload continuous data to Aquarius, and send an excel file with graphs to the Ecology project manager (Data October 1 st 2021 through May 2022). D4.2 Upload data from sampling WY2021 to EIM |
| Achievements: | On target to meet deliverable by performing data management and submittal per the Ecology-approved QAPP. D4.1.8, D4.1.9, and D4.1.10 (Three of 22 targeted bi-monthly, 10 cumulative) excel files with graphs have been completed and accepted by Ecology. D4.2 WY2021 data was uploaded to EIM and accepted by Ecology. |

Task 5: Data Analysis and Annual Reporting

| | |
|----------------------------|--|
| Percent of Task Completed: | 14% (28% Cumulative Completed \$23,695 of budget used (\$27,379 of \$73,131 budget used) |
| Deliverable: | D5.2 Annual report (WY2021) draft |
| Achievements: | Deliverable D5.2 was submitted to Ecology June 30 th , 2022. We are awaiting comments / approval. |

3. Challenges and Issues

There were a few challenges accomplishing Task 3: field data collection. Throughout the six-month time period (January through June 2022), coordinating field work during Covid-19 and making sure county staff can conduct work activity efficiently and safely has been a continuous challenge.

Two specific conductivity data spikes occurred during quarter one.

The high conductivity value in February at Suds creek was most likely an erroneous data spike. When the data is finalized, that data point will be removed. I make this judgement based on that both the data point before and after the single data spike being back to the “normal background” range. In other words, I don’t see the conductivity increasing or decreasing with the single data point spike so it is most likely not a real data point.

The increased conductivity at WDB creek lasted about an hour and a half in the middle of the night. This could be from something that got in the way of the sensor, but then dislodged after an hour. From previous experience, readings can be thrown off by cray fish in front of the sensor. The stage did not change before or after this conductivity increase which is more indicative of a sensor malfunction or error than picking up real conductivity readings. Also, there was no increase or rapid decrease in temperature during the increased conductivity. Again, this is indicative of sensor error.

High conductivity data points could be an indicator of illicit discharge however other indicators such as change in temperature and/or stage would also occur. In both instances temperature and stage remained consistently the same as before or after the specific conductivity increased and returned to background levels.

Another challenge was in meeting target dates for Task 5 Deliverable D5.3 Annual report final (WY2021). BIBI data was not received until after the target date for Deliverable D5.2 Annual report (WY2021) draft. This data is integral to the report and thus the report draft could not be completed without it. Habitat metric results were also delayed and a very important part of the annual report. The annual report draft has been completed (D5.2) and submitted to Ecology. Once Ecology approves of the draft annual report the final annual report (D5.3) can be accomplished.

4. General Comments

Project is on task to meet IAA deliverables.