

# Deliverable D1.3: Semi-Annual Project Report

## Stormwater Action Monitoring Program: Effectiveness Studies

Send progress report to: Keunyea Song  
Department of Ecology  
PO Box 47600  
Olympia, WA 98504-7600

*Instructions: Please fill out the light grey boxes*

### 1. General Information

Contract / Grant Agreement Number:	C1900018
Project Title:	Pilot Study for Non-proprietary Dissolved Metals Treatment: Oyster Shell Retrofits in Catch basins
Your Organization:	King County Water and Land Resources Division
Your Project Manager:	Carly Greyell - KC; Keunyea Song - Ecology
Reporting Period:	2019 Q3/Q4
Date this Form was Completed:	

**2. Briefly Describe Task and Milestone Achievements** (for current report period only) and check the box associated with each task to verify completion.

#### Task 1: Project Management

Percent of Task Completed:	4% this period (11% cumulative)
Deliverable	D1.3 - Semi-annual Progress Report
Description of your Achievements:	Completed semi-annual progress report and managed the budget.

#### Task 2: Planning

Percent of Task Completed:	0% this period (100% cumulative)
Deliverable	Task complete. (Past deliverables: D2.1 - Draft QAPP; D2.2 - Final QAPP; D2.3 - Equipment Purchases).
Description of your Achievements:	Task complete.

## Deliverable D1.3: Semi-Annual Project Report

### Task 3: Field Sampling and Analysis

Percent of Task Completed:	15% this period
Deliverable	D3.3 - Preliminary Flow Data & Analytical Data
Description of your Achievements:	Samples from three storms have been collected and analyzed. (A fourth storm has been sampled, but analytical results and billing will fall to the next period.) Equipment issues prevented all samples to be collected at all sites during each event. A total of 19 samples have been analyzed for the full suite of parameters: 5 samples for Storms #1 and #2 (one catch basin pair, plus one field replicate) and 9 samples for Storm #3 (both catch basin pairs, plus one field replicate). Preliminary flow data are available for 6 months at three sites. The flow meter at the fourth site stopped functioning and was not replaced over this period.

### Task 4: Final Report

Percent of Task Completed:	0% this period
Deliverable	NA
Description of your Achievements:	NA

### Task 5: Communication of Findings

Percent of Task Completed:	0% this period (2% cumulative)
Deliverable	No deliverables this period. (Past deliverables: D5.1 - Post QAPP to website).
Description of your Achievements:	No actions this period.

### 3. Tasks/Milestones not achieved and why:

Did not complete data validation for season 1 data (Deliverable D4.1). This will be completed in the next period.

### 4. Potential Future Challenges to Performance (time delays, staff changes, etc.):

Clogging issues appear to be resolved, even through heavy leaf litter. Preliminary results do not suggest dissolved metals treatment is being provided by the oyster shell retrofits. It is possible that the larger shell pieces are not providing a sufficient surface area to volume ratio for observable treatment. We will want to regroup and decide whether or not to continue with sampling in 2020.

### 5. General Comments:

NA

### 6. List the cumulative totals for all "outputs" (numerically measurable accomplishments) under this contract or grant to date:

Draft and final QAPP completed. Baffles installed in all four monitored catch basins (only two were paid for through this project). Flow monitoring data collected over 6 months at three sites. One equipment blank sample collected and analyzed. Website developed and one deliverable (QAPP) posted. Nineteen samples collected and analyzed for full suite of parameters over a total of three storm events. (Fourth storm event sampled, but will be billed in the next period).