



IAA No. C1900018

INTERAGENCY AGREEMENT (IAA)

BETWEEN

THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY

AND

KING COUNTY

THIS INTERAGENCY AGREEMENT (“Agreement” or “IAA”) is made and entered into by and between the state of Washington, Department of Ecology, hereinafter referred to as "ECOLOGY," and KING COUNTY hereinafter referred to as the "COUNTY," pursuant to the authority granted by state law and King County Charter Section 120.

THE PURPOSE OF THIS AGREEMENT is to implement an effectiveness study through the Stormwater Action Monitoring Program (SAM) that provides National Pollutant Discharge Elimination System (NPDES) Municipal permittees information on the performance of oyster shell catch basin retrofits for treatment of dissolved metals and other stormwater contaminants. The study will also provide information about the relationship between catch basin fullness and treatment effectiveness for solids removal.

WHEREAS, ECOLOGY has legal authority (RCW 90.48 and WAC 173-220) and KING COUNTY has legal authority (King County Code Title 9) that allows each party to undertake the actions in this agreement.

THEREFORE, IT IS MUTUALLY AGREED THAT:

1) SCOPE OF WORK

The COUNTY shall furnish the necessary personnel, equipment, material and/or service(s) and otherwise do all things necessary for or incidental to the performance of the work set forth in Appendix A, Statement of Work and Budget, attached hereto and incorporated herein.

2) PERIOD OF PERFORMANCE

The period of performance of this IAA shall commence on **August 31, 2018**, or the date of final signature, whichever comes later, and be completed by **April 1, 2022**, unless terminated sooner as provided herein. Amendments extending the period of performance, if any, shall be at the sole discretion of ECOLOGY.

3) COMPENSATION

Compensation for the work provided in accordance with this IAA has been established under the terms of RCW 39.26.180(3). This is a performance-based agreement, in which payment is based on the successful completion of expected deliverables.

The source of funds for this IAA is General Fund/ Private-Local account for SAM.

The parties have determined that the cost of accomplishing the work identified herein will not exceed **\$273,605** including any indirect charges. Payment for satisfactory performance of the work shall not exceed this amount unless the parties mutually agree via an amendment to a higher amount. Compensation for services shall be based on the terms and tasks set forth in Appendix A, Statement of Work and Budget. ECOLOGY will not make payment until it has reviewed and accepted the completed work.

4) BILLING AND PAYMENT PROCEDURE

Payment requests shall be submitted on state form, Invoice Voucher A19-1A. Invoices shall describe and document to ECOLOGY's satisfaction a description by task and deliverable number, the work performed and related costs. Each invoice voucher shall reference the Agreement (IAA) number and clearly identify those items that relate to performance under this Agreement. Payment will be made within thirty (30) days of submission of a properly completed invoice (form A19-1A) with supportive documentation. All expenses invoiced shall be supported with copies of invoices paid.

Send invoices to:

**State of Washington
Department of Ecology
Attn: Brandi Lubliner
P.O. Box 47600
Olympia, WA 98504-7600**

Payment requests shall be submitted at the completion of the work and acceptance of the deliverables listed in Appendix A. Upon expiration of this Agreement, any claim for payment not already made shall be submitted to ECOLOGY within 30 days after the expiration date or the end of the fiscal year, whichever is earlier.

Payment will be issued through the Washington State Department of Enterprise Services Statewide Payee Desk. To receive payment you must be registered as a state-wide vendor. To register submit a state-wide vendor registration form and an IRS W-9 form at website, <http://www.des.wa.gov/services/ContractingPurchasing/Business/VendorPay/Pages/default.aspx>. If you have questions about the vendor registration process you can contact DES at the Payee Help Desk at (360) 407-8180 or email payeehelpdesk@watech.wa.gov.

5) ALTERATIONS AND AMENDMENTS

This Agreement may be amended by mutual agreement of the parties. Such amendments shall not be binding unless they are in writing and signed by personnel authorized to bind each of the parties.

6) ASSIGNMENT

The work to be provided under this Agreement, and any claim arising thereunder, is not assignable or delegable by either party in whole or in part, without the express prior written consent of the other party, which consent shall not be unreasonably withheld.

7) ASSURANCES

Parties to this Agreement agree that all activity pursuant to this agreement will be in accordance with all the applicable current federal, state, and local laws, rules, and regulations.

8) CONFORMANCE

If any provision of this Agreement violates any statute or rule of law of the state of Washington, it is considered modified to conform to that statute or rule of law.

9) DISPUTES

Parties to this Agreement shall employ every effort to resolve a dispute themselves without resorting to litigation. In the event that a dispute arises under this Agreement that cannot be resolved among the parties, it shall be determined by a Dispute Board in the following manner. Each party to this Agreement shall appoint one member to the Dispute Board. The members so appointed shall jointly appoint an additional member to the Dispute Board. The Dispute Board shall review the facts, agreement terms, and applicable statutes and rules, and then make a determination of the dispute. The determination of the Dispute Board shall be final and binding on the parties hereto, unless restricted by law. The cost of resolution will be borne by each party paying its own cost. As an alternative to this process, if state agencies, either of the parties may request intervention by the Governor, as provided by RCW 43.17.330, in which event the Governor's process will control. The parties may mutually agree to a different dispute resolution process.

10) FUNDING AVAILABILITY

ECOLOGYS ability to make payments is contingent on availability of funding. In the event funding from state, federal, or other sources is withdrawn, reduced, or limited in any way after the effective date and prior to completion or expiration date of this Agreement, ECOLOGY, at its sole discretion, may elect to terminate the Agreement, in whole or part, for convenience or to renegotiate the Agreement subject to new funding limitations and conditions. ECOLOGY may also elect to suspend performance of the Agreement until ECOLOGY determines the funding insufficiency is resolved. ECOLOGY may exercise any of these options with no notification restrictions, although ECOLOGY will make a reasonable attempt to provide notice.

In the event of termination or suspension, ECOLOGY will reimburse eligible costs incurred by the CONTRACTOR through the effective date of termination or suspension. Reimbursed costs must be agreed to by ECOLOGY and the CONTRACTOR. In no event shall ECOLOGYS reimbursement exceed ECOLOGYS total responsibility under the agreement and any amendments.

KING COUNTYS obligation to provide services under this Agreement is contingent on appropriation of funding by KING COUNTYS legislative body. If no such appropriation is made for any future year, this Agreement will terminate at the close of the appropriation year for which the last appropriation that funds these activities was made.

11) GOVERNING LAW AND VENUE

This Agreement is entered into pursuant to and under the authority granted by the laws of the state of Washington and any applicable federal laws. The provisions of this Agreement shall be construed to conform to those laws. This Agreement shall be construed and interpreted in accordance with the laws of the state of Washington, and the venue of any action brought hereunder shall be in the Superior Court for Thurston County.

12) INDEPENDENT CAPACITY

The employees or agents of each party who are engaged in the performance of this Agreement shall continue to be employees or agents of that party and shall not be considered for any purpose to be employees or agents of the other party.

13) ORDER OF PRECEDENCE

In the event of an inconsistency in the terms of this Agreement, or between its terms and any applicable statute or rule, the inconsistency shall be resolved by giving precedence in the following order:

- a. Applicable federal and state of Washington statutes, regulations, and rules.
- b. Mutually agreed upon written amendments to this Agreement.
- c. This Agreement, number C1900018.
- d. Appendix A, Statement of Work and Budget.
 - Any other provisions or term of this Agreement, including materials incorporated by reference or otherwise incorporated.

14) RECORDS MAINTENANCE

The parties to this Agreement shall each maintain books, records, documents and other evidence that sufficiently and properly reflect all direct and indirect costs expended by either party in the performance of the service(s) described herein. These records shall be subject to inspection, review or audit by personnel of both parties, other personnel duly authorized by either party, the Office of the State Auditor, and federal officials so authorized by law. All books, records, documents, and other material relevant to this Agreement will be retained for six years after expiration of this Agreement and the Office of the State Auditor, federal auditors, and any persons duly authorized by the parties shall have full access and the right to examine any of these materials during this period.

Records and other documents, in any medium, furnished by one party to this Agreement to the other party, will remain the property of the furnishing party, unless otherwise agreed. The receiving party will not disclose or make available this material to any third parties without first giving notice to the furnishing party and giving it a reasonable opportunity to respond. Each party will utilize reasonable security procedures and protections to assure that records and documents provided by the other party are not erroneously disclosed to third parties subject to state public disclosure laws.

15) RESPONSIBILITIES OF THE PARTIES

Each party of this Agreement hereby assumes responsibility for claims and/or damages to persons and/or property resulting from any acts or omissions on the part of itself, its employees, its officers, and its agents. Neither party will be considered the agent of the other party to this Agreement.

16) RIGHTS IN DATA

Unless otherwise provided, data which originates from this Agreement shall be "work made for hire" as defined by the United States Copyright Act, Title 17 U.S.C. section 101 and shall be owned by state of Washington, ECOLOGY. Data shall include, but not be limited to, reports, documents, pamphlets, advertisements, books magazines, surveys, studies, computer programs, films, tapes, and/or sound reproductions. Ownership includes the right to copyright, patent, register, and the ability to transfer these rights.

17) SEVERABILITY

If any provision of this Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, if such remainder conforms to the requirements of applicable law and the fundamental purpose of this Agreement, and to this end the provisions of this Agreement are declared to be severable.

18) SUBCONTRACTORS

The COUNTY agrees to take complete responsibility for all actions of any Subcontractor used under this Agreement for the performance. When federal funding is involved there will be additional subcontractor requirements and reporting.

Prior to performance, all subcontractor who will be performing services under this Agreement must be identified, including their name, the nature of services to be performed, address, telephone, WA State Department of Revenue Registration Tax number (UBI), federal tax identification number (TIN), and anticipated dollar value of each subcontract. Provide such information to ECOLOGY's agreement manager.

19) TERMINATION FOR CAUSE

If for any cause, either party does not fulfill in a timely and proper manner its obligations under this Agreement, or if either party violates any of these terms and conditions, the aggrieved party will give the other party written notice of such failure or violation. The responsible party will be given the opportunity to correct the violation or failure within fifteen (15) business days. If failure or violation is not corrected, this Agreement may be terminated immediately by written notice of the aggrieved party to the other.

20) TERMINATION FOR CONVENIENCE

Either party may terminate this Agreement without cause upon thirty (30) calendar day prior written notification to the other party. If this Agreement is so terminated, the parties shall be liable only for performance rendered or costs incurred in accordance with the terms of this Agreement prior to the effective date of termination.

21) WAIVER

A failure by either party to exercise its rights under this Agreement shall not preclude that party from subsequent exercise of such rights and shall not constitute a waiver of any other rights under this Agreement unless stated to be such in a written amendment to this Agreement signed by an authorized representative of the parties.

22) AGREEMENT MANAGEMENT

The representative for each of the parties shall be responsible for and shall be the contact person for all communications, notifications, questions regarding billing, and the performance of this Agreement. The parties agree that if there is a change in representatives that they will promptly notify the other party in writing of such change, such changes do not need an amendment.

The ECOLOGY Representative is:	The KING COUNTY Representative is:
Name: Brandi Lubliner Address: 300 Desmond Dr. SE (FedEx) P.O. Box 47600 (USPS) Olympia, WA 98504-7600 Phone: 360-407-7140 Email: Brandi.Lubliner@ecy.wa.gov	Name: Carly Greyell Address: 201 S. Jackson, Suite 600 Seattle, WA 98104 Phone: 206.477.4703 Email: carly.greyell@kingcounty.gov

23) ALL WRITINGS CONTAINED HEREIN

This Agreement contains all the terms and conditions agreed upon by the parties. No other understandings, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind any of the parties hereto.

The signatories to this Agreement represent that they have the authority to bind their respective organizations to this Agreement.

IN WITNESS WHEREOF, the parties below, having read this Agreement in its entirety, including all attachments, do agree in each and every particular as indicated by their below signatures.

**State of Washington
Department of Ecology**

**State of Washington
King County**

By: _____

Signature

_____ Date

By: _____

Signature

_____ Date

Print Name: Polly Zehm

Print Name:

Title: Deputy Director

Title:

Approved as to form only:
Office of Attorney General

APPENDIX A STATEMENT OF WORK AND BUDGET

Pilot Study for Non-proprietary Dissolved Metals Treatment: Oyster Shell Retrofits in Catch Basins

Project Purpose

This project will evaluate the effectiveness of adding oyster shells to stormwater catch basins to reduce dissolved metals. In addition, the project will evaluate the relationship between solids accumulation (sump fullness) and pollutant reduction in catch basins without oyster shell retrofits.

Background

It is well known that dissolved metals in stormwater can be toxic to fish and other aquatic life, especially copper, even at relatively low concentrations. Some metals, like copper and zinc, are especially toxic when hardness is low. Oyster shells are a natural source of calcium carbonate, which can be used to increase hardness. The Port of Seattle tested oyster shell retrofits for stormwater treatment under a variety of applications and found they increase hardness and bind dissolved copper and zinc in stormwater. The findings from Port of Seattle and additional studies indicate oyster shell retrofits of catch basins are relatively inexpensive and require no additional footprint.

The City of Mercer Island will retrofit two catch basins with oyster shells in the Town Center (at the intersection of 77th Ave SE and SE 27th St) by the end of 2018. The City will pay for all installation and maintenance costs, reimbursement is not sought in this contract. King County will conduct the effectiveness monitoring of this project.

Project Outcomes

The project outcomes are to:

- Determine if oyster shell retrofits provide dissolved metals treatment consistent with Technology Assessment Protocol-Ecology (TAPE) “enhanced treatment” requirements. This is a pilot-study, this BMP retrofit is not going thru the TAPE process. Calculate reduction of additional stormwater pollutants (total suspended solids, nutrients, and other metals) by the oyster shell retrofits.
- Evaluate stormwater metals (total and dissolved) concentrations from retrofitted catch basins and statistically compare to receiving freshwater quality standards during the sampled storm events.
- Evaluate whether catch basins with oyster shell retrofits reduce the measured stormwater pollutants more than un-retrofitted catch basins.

- Measure solids accumulation in un-retrofitted catch basins over the study timeframe, and observe whether oyster shell retrofits interfere with solids retention.
- Evaluate the relationship between solids accumulation and pollutant removal in un-retrofitted catch basins. This can be used to support future evaluation of the current 60% sump fullness threshold for catch basin maintenance.

Task 1.0: Project Management – (\$24,876; Throughout Project)

King County will manage the project and budget, as well as coordinate with the City of Mercer Island, the field team, and the laboratory. Semi-annual project reports will be created and submitted to ECOLOGY to communicate project status, and will include agendas, data summary tables, photos, etc. as needed to provide documentation of work performed. These billing packages will be delivered in the month following period end (i.e., January and July).

Deliverables:

- D 1.1: Semi-annual Project Report – Target: January 2019
- D 1.2: Semi-annual Project Report – Target: July 2019
- D 1.3: Semi-annual Project Report – Target: January 2020
- D 1.4: Semi-annual Project Report – Target: July 2020
- D 1.5: Semi-annual Project Report – Target: January 2021
- D 1.6: Semi-annual Project Report – Target: July 2021
- D 1.7: Semi-annual Project Report – Target: January 2022

Task 2.0: Planning and Quality Assurance Project Plan (QAPP) – (\$27,143; July 2018 – December 2018)

This task is to write the QAPP which requires site visits, project design planning, equipment purchase, coordination with field and laboratory personnel, and problem-solving. Most of the sampling equipment required for this project (i.e., all autosamplers, most flow meters) have already been purchased for previous SAM studies performed by King County. Equipment purchases will include up to one flow meter and two secure sheds to house the autosamplers on-site. King County will own the equipment. The QAPP will describe the final sampling design and data analysis details, and will follow Ecology guidance (Ecology Publication No. 01-03-00). A draft QAPP will be reviewed by the project team, field team, laboratory personnel, and partners prior to ECOLOGY review. A revised final QAPP will then be submitted to ECOLOGY for approval.

Deliverables:

- D 2.1: Draft QAPP – Target: September 2018
- D 2.2: Final QAPP – Target: November 2018
- D 2.3: Equipment Purchases – Target: December 2018

Task 3.0: Field Sampling and Analysis – (\$144,695; November 2018 – September 2020)

Flow meters will be installed in four catch basins (two with oyster shell retrofits, two without) to record continuous flow (target date: December 2018) through the end of the sampling period (approximately February 2020).

Time-weighted, composite water samples will be collected in the stormwater system directly upstream and downstream of the four catch basins for a total of 8 to 10 storms over two wet seasons (starting approximately January 2019). Solids accumulation will be measured in the four catch basins for each sampling event. The King County Environmental Laboratory (KCEL) will conduct all chemical analyses, including total suspended solids, metals (total/dissolved), nutrients (total/dissolved), organic carbon (total/dissolved), and field parameters (e.g., hardness). The data will be stored and managed in the King County Laboratory Information Management System (LIMS) database.

Deliverables:

D 3.1: Preliminary Flow Data – Target: January 2019

Flow data summary to document progress during the prior 6-months.

D 3.2: Preliminary Flow & Analytical Data – Target: July 2019

This deliverable will include: flow data summary, summaries of number of samples collected at each location, status of sample analysis by analytical group, and unvalidated data from KCEL, if available, to document progress during the prior 6-month period.

D 3.3: Preliminary Flow & Analytical Data - Target: January 2020

See deliverable description above (D 3.2).

D 3.4: Preliminary Flow & Analytical Data – Target: July 2020

See deliverable description above (D 3.2).

D 3.5: Preliminary Analytical Data – Target: September 2020

This deliverable will include: summaries of number of samples collected at each location, status of sample analysis by analytical group, and un-validated data from KCEL to document progress during the prior 6-month period.

Task 4.0: Final Report – (\$59,428 July 2019 – August 2021)

This task will include data validation (conducted by project manager), data analysis (comparison of inlet and outlet concentrations and other data summaries), and reporting. The final report will describe the study design and oyster shell availability, field and laboratory methods, data analysis methods, and study findings. Appendices will include validated data. A draft report will be reviewed by King County and other partners, and a final draft will be reviewed by Ecology. The final report will be submitted for approval by Ecology.

Deliverables:

D 4.1: First Season Data Validation – Target: November 2019

This deliverable will include: data validation for analytical data from first wet season.

D 4.2: Second Season Validation & Report Outline –Target: January 2021

This deliverable will include: data validation for analytical data from second wet season and an outline for the report.

D 4.3: Draft Report – Target: May 2021

D 4.4: Final Report – Target: August 2021

Task 5.0: Communication of Findings – (\$17,463; May 2018 – December 2021)

This task will include submission of data to the international BMP database, at least two presentations of results to permittees and other interested parties, and a project website to provide electronic access to project documents and results. A draft two-page summary of the project findings and photos will also be prepared by King County and finalized by Ecology to be the SAM fact sheet.

Deliverables:

- D 5.1: Post QAPP to project website – Target: December 2018
- D 5.2: Post Final Report to website – Target: December 2021
- D 5.3: Submit data to database – Target: December 2021
- D 5.4: Copies of presentations – Target: December 2021
- D 5.5: Draft two-page project summary – Target: December 2021

Project Budget and Schedule

Deliverables needing ECOLOGY approval will be submitted as completed. All deliverable costs are included within the cost of each task. Target deliverable costs are estimates and do not represent a maximum allowable limit. Amounts billed above these estimates will not result in an increase in total project cost.

Table 1: Target Deliverable Due Dates and Costs.

Deliverable by Task	Target Deliverable Date	Target Deliverable Cost
Task 1.0 Project Management		
D1.1 Semi-annual Progress Report	January 2019	\$ 6,219
D1.2 Semi-annual Progress Report	July 2019	\$ 3,731
D1.3 Semi-annual Progress Report	January 2020	\$ 3,731
D1.4 Semi-annual Progress Report	July 2020	\$ 2,488
D1.5 Semi-annual Progress Report	January 2021	\$ 2,488
D1.6 Semi-annual Progress Report	July 2021	\$ 2,488
D1.7 Semi-annual Progress Report	January 2022	\$ 3,731
Task 2.0 Planning and QAPP		
D2.1 Draft QAPP	September 2018	\$ 17,903
D2.2 Final QAPP	November 2018	\$ 5,060
D2.3 Equipment Purchases	December 2018	\$ 4,180
Task 3.0 Field Sampling and Analysis		
D3.1 Preliminary Flow Data	January 2019	\$ 21,704
D3.2 Preliminary Flow & Analytical Data	July 2019	\$ 36,174
D3.3 Preliminary Flow & Analytical Data	January 2020	\$ 28,939
D3.4 Preliminary Flow & Analytical Data	July 2020	\$ 36,174
D3.5 Preliminary Analytical Data	September 2020	\$ 21,704
Task 4.0 Final Report		
D4.1 First Season Data Validation (DV)	November 2019	\$ 5,943
D4.2 Second Season DV & Report Outline	January 2021	\$ 23,771
D4.3 Draft Report	May 2021	\$ 20,800
D4.4 Final Report	August 2021	\$ 8,914
Task 5.0 Communication of Findings		
D5.1 Post QAPP to website	December 2018	\$ 524
D5.2 Post Final Report to website	December 2021	\$ 349
D5.3 Submit data to database	December 2021	\$ 5,239
D5.4 Copies of presentations	December 2021	\$ 10,478
D5.5 Draft two-page project summary	December 2021	\$ 873
Total		\$ 273,605

Table 2: Project Schedule by Deliverable.

Schedule for Tasks and Deliverables	2018		2019		2020		2021	
	Q1/Q2	Q3/Q4	Q1/Q2	Q3/Q4	Q1/Q2	Q3/Q4	Q1/Q2	Q3/Q4
Task 1.0 – Project Management								
D 1.1 Semi-annual Project Report								
D 1.2 Semi-annual Project Report								
D 1.3 Semi-annual Project Report								
D 1.4 Semi-annual Project Report								
D 1.5 Semi-annual Project Report								
D 1.6 Semi-annual Project Report								
D 1.7 Semi-annual Project Report								
Task 2.0 – Planning								
D 2.1 Draft QAPP								
D 2.2 Final QAPP								
D 2.3 Equipment Purchases								
Task 3.0 - Field Sampling and Analysis								
D 3.1 Preliminary Flow Data								
D 3.2 Prelim. Flow & Analytical Data								
D 3.3 Prelim. Flow & Analytical Data								
D 3.4 Prelim. Flow & Analytical Data								
D 3.5 Preliminary Analytical Data								
Task 4.0 – Final Report								
D 4.1 First Season Data Validation (DV)								
D 4.2 Second Season DV, Report Outline								
D 4.3 Draft Report								
D 4.4 Final Report								
Task 5.0 – Communication of Findings								
D 5.1 Post QAPP to website								
D 5.2 Post Final Report to website								
D 5.3 Submit data to database								
D 5.4 Copies of presentations								
D 5.5 Draft two-page project summary								