



DEPARTMENT OF  
**ECOLOGY**  
State of Washington  
**IAA No. C2200195**

## **INTERAGENCY AGREEMENT (IAA)**

**BETWEEN**

**THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY**

**AND**

**THE STATE OF WASHINGTON, DEPARTMENT OF NATURAL RESOURCES**

**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 the state of Washington, Department of Natural Resources hereinafter referred to as the “**DNR**” and “**CONTRACTOR**,” pursuant to the authority granted by Chapter [39.34](#) of the Revised Code Washington, Interlocal Cooperation Act.

**THE PURPOSE OF THIS AGREEMENT** is for a literature review on the size of particles in stormwater, the potentially bound contaminants, and effectiveness of a range of treatment approaches.

**WHEREAS**, **ECOLOGY** has legal authority (RCW 90.48 and WAC 173-220) and **DNR** has legal authority (RCW 90.48) that allows each party to undertake the actions in this agreement.

**THEREFORE, IT IS MUTUALLY AGREED THAT:**

### **1. SCOPE OF WORK**

**DNR** 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 will commence on **May 15, 2022**, (*or the date of final signature, whichever comes later,*) and be completed by **November 1, 2023**, unless the Agreement is 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 39.34.130 and RCW 39.26.180(3). This is a performance-based agreement, under 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 Stormwater Action Monitoring**. Both parties agree to comply with all applicable rules and regulations associated with these funds.

The parties have determined that the cost of accomplishing the work identified herein will not exceed **\$128,422** dollars, 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 work.

ECOLOGY may, at its sole discretion, terminate or suspend this Contract, or withhold payments claimed by the CONTRACTOR for services rendered, if the CONTRACTOR fails to satisfactorily comply with any term or condition of this Agreement.

### 4. BILLING AND PAYMENT PROCEDURE

Payment requests shall be submitted on state form, Invoice Voucher A19-1A. Invoice voucher shall reference the Agreement (IAA) number and clearly identify those items that relate to performance under this Agreement. Invoices shall describe and document to ECOLOGY's satisfaction a description of the work performed, the progress of the work, and related costs. Attach supporting documentation to the invoice.

Send invoices to:

State of Washington  
Department of Ecology  
Water Quality Program  
Attn: Brandi Lubliner  
PO Box 47600  
Olympia, WA 98504-7600

Payment requests may be submitted on a semi-annually basis **or** at the completion of the work. 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 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.

Payment will be issued through Washington State's Office of Financial Management's Statewide Payee Desk. To receive payment, CONTRACTOR must register as a statewide vendor by submitting a statewide vendor registration form and an IRS W-9 form at website, <https://ofm.wa.gov/it-systems/statewide-vendorpayee-services>. For questions about the vendor registration process, contact Statewide Payee Help Desk at (360) 407-8180 or email [PayeeRegistration@ofm.wa.gov](mailto:PayeeRegistration@ofm.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**

ECOLOGY's 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 ECOLOGY's reimbursement exceed ECOLOGY's total responsibility under the agreement and any amendments.

## **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 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 C2200195.
- d. Appendix A, *Statement of Work and Budget*.
- e. 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 materials 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 materials relevant to this Agreement must be retained for six years after expiration of this Agreement. 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. Each party will utilize reasonable security procedures and protections for all materials related to this Agreement. All materials are 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 act 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, and register these items, 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**

CONTRACTOR 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 contractor and subcontractor requirements and reporting.

Prior to performance, all subcontractors 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. SUSPENSION FOR CONVENIENCE**

ECOLOGY may suspend this Agreement or any portion thereof for a temporary period by providing written notice to the CONTRACTOR a minimum of seven (7) calendar days before the suspension date. CONTRACTOR shall resume performance on the first business day following the suspension period unless another day is specified in writing by ECOLOGY prior to the expiration of the suspension period.

## **20. 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.

## **21. 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.

## **22. 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.

### **23. AGREEMENT MANAGEMENT**

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

#### **The ECOLOGY Representative is:**

Name: Brandi Lubliner, P.E.  
Address: PO Box 47600 (Standard mail)  
Phone: 360-407-7140  
Email: Brandi.Lubliner@ecy.wa.gov

#### **The DNR Representative is:**

Name: Erika Shaffer  
Address: 1111 Washington St SE, Olympia,  
WA, 98504  
Phone: 360-742-4110  
Email: Erika.shaffer@dnr.wa.gov

**24. 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 signatures below.

**State of Washington  
Department of Ecology**

**State of Washington  
Department of Natural Resources**

By:

By:

\_\_\_\_\_  
Signature Date

\_\_\_\_\_  
Signature Date

\_\_\_\_\_  
Vincebt McGowan

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Water Quality Program Manager

\_\_\_\_\_  
Title

## APPENDIX A STATEMENT OF WORK AND BUDGET

### *Stormwater Particle Size Distribution and Implications for BMP Effectiveness*

#### PROJECT BACKGROUND AND INTRODUCTION

Selecting a suitable stormwater BMP for a specific site is typically based on site constraints, receiving water body conditions, pollution generating surfaces, approved BMP functions, and regulatory requirements for runoff treatment and flow control. However, not all pollutant sources are the same with respect to pollutant types and loads, and not all BMPs are as effective across a range of conditions. Specifically, particle size distribution (PSD) may vary, affecting the chemistry of stormwater runoff (e.g., ratio of particulate to dissolved contaminants, etc.), and subsequently the treatment mechanisms needed to reduce and/or control the total pollutant load. The purpose of this study is to evaluate how pollutant types and loads vary with particle size and summarize the pollutant removal mechanisms and effectiveness of a range of BMP types to develop guidance that will assist permittees towards selecting the most effective BMP for their site based on the anticipated particle size distribution. Evergreen StormH2O (ES) the subcontractor will assist DNR with all project deliverables.

#### TASK 1.0: PROJECT ADMINISTRATION AND MANAGEMENT

**Objective:** Provide project administration and management which is expected to include tracking and reporting project costs; developing, managing, and adjusting the project schedule as needed; preparing quarterly progress reports and invoices; and general project communications and coordination. This task also includes forming, coordinating with, and collecting feedback from a Technical Advisory Committee (TAC) throughout the project.

- Invoices and Status Reports - Prepare invoices and status reports with a summary of deliverables completed and planned for the following quarter.
- Budget and Schedule Management - Track and manage the project budget with calculations of percent project completion. Identify budget and schedule issues and make recommendations for their remedy.
- Communication - General communication by email, phone, and/or webinar with the consultant project team, DNR, and Ecology including check-in meeting agendas, notes, and action items. This includes monthly one hour check-in meetings between the Sub-consultant Project Manager and DNR.
- TAC meeting materials preparation
  - The subcontractor will prepare draft deliverables for TAC review by 10 business days before each meeting.
  - The subcontractor will develop and manage a shared site such as OneDrive or SharePoint for sharing project documents with DNR and the TAC.
  - The subcontractor will assist DNR with developing an agenda for each of the 3 TAC meetings and attend each meeting to provide insight into the project work complete since the last meeting and work planned before the next TAC meeting.
  - The subcontractor will provide comment responses to TAC comments in Microsoft Word using the track changes and comment option within 5 business days of each TAC meeting.



**DNR Responsibilities:**

- DNR is the main point of contact with Ecology.
- DNR will submit all deliverables to Ecology.
- Process subcontractor payment of invoices within 30 calendar days of invoice.
- Develop DNR invoices for Ecology that include subcontractor costs.
- Coordinate and facilitate TAC meetings-DNR will assemble a TAC of 5-6 members and coordinate 3 2 hour meetings over Zoom or Microsoft Teams. DNR will be the primary point of contact for the TAC.
- DNR facilitation will include developing meeting minutes, which will be limited to an overview of discussed topics, key decisions, and action items.

**Assumptions:**

- The subcontractor is responsible for developing all deliverables described in this scope of work. Deliverables will be sent to DNR.
- All TAC meetings will be held through a virtual format such as Teams and Zoom.
- Two members of the subcontractor team will attend TAC meetings.
- The project schedule will be developed and managed using Excel or similar program.
- The dates provided throughout this document for completing project deliverables are target dates that will be updated after the project is executed.
- The project duration is 9 months starting from when the contract is executed.
- The subcontractor will submit invoices to DNR quarterly.
- The subcontractor will provide an internal QC review of all deliverables before they are submitted to DNR to submit to Ecology.
- Requests for revisions to project deliverables by Ecology, DNR, and/or TAC will be and limited to one iteration of changes/revisions.
- Subcontractor will provide the TAC and DNR with access to the shared site which will serve as the repository for all TAC communication, including working copies of deliverables, review comments, response to comments, meeting agendas, and final deliverables.

**Table 1. Task 1 Deliverables and Schedule**

Costs	DNR Costs	Consultant Costs	Total Costs	Target Date 2022
D1.1. Refined Project Scope	\$0	\$2,336	\$2,336	June 1 2022
D1.2. 1 <sup>st</sup> Status Report	\$0	\$3,764	\$3,764	September 1 2022
D1.3. 2 <sup>nd</sup> Status Report	\$0	\$3,764	\$3,764	December 1 2022
D1.4. 3 <sup>rd</sup> Status Report	\$0	\$3,764	\$3,764	March 1 2023
D1.5 Confirmed List of TAC Members	\$0	\$0	\$0	June 2022
D1.6 TAC Meeting #1 Agenda & Minutes	\$0	\$4,137	\$4,137	September 2022
D1.7 TAC Meeting #2 Agenda & Minutes	\$0	\$4,137	\$4,137	December 2022
D1.8 TAC Meeting #3 Agenda & Minutes	\$0	\$4,137	\$4,137	March 2023
<b>TASK TOTAL:</b>		<b>\$26,039</b>	<b>\$26,039</b>	

## TASK 2.0: LITERATURE SEARCH & SYNTHESIS OF LITERATURE

**Objective:** Conduct a systematic review of available literature, databases, and regional reports on PSD and suspended sediment. The information, data, and sources collected will be synthesized into tables which will be used to develop the Task 3 summary and guidance documents.

### Consultant Services

- **Conduct a systematic review of available literature**, databases, and regional reports to develop tables that summarize the data collected, topic areas listed below. Sources of data are expected to include the following: journal articles, the National Urban Runoff Program (NURP), the Highway Runoff Database (HRDB), the International BMP Database, local reports from completed effectiveness studies (e.g., Ecology, WSDOT studies) and studies conducted following Ecology’s TAPE guidelines, the National Stormwater Quality Database (NSQD), data files in the P8 model that provide summary tables of PSD data from many previous studies, and any reports or articles that support these databases.
- The information collected will be summarized into a table format (D2.1). This is expected to include consolidating the data in the table using basic statistics (D2.3). A list of data sources will also be developed that summarizes the source related to how it was applied in this study (D2.2).
- The specific areas of the literature searches
  - **Identify methods for measuring PSD** - Common sampling practices and testing methods found in the literature for PSD and suspended sediment of total suspended solids (TSS) will be reviewed and summarized. The information will be used to assess the comparability and transferability of the data before including it in this study and to recommend testing methods that maybe more readily available than methods defined in the 2018 Technology Assessment Protocol Ecology (TAPE) Guidance Document. This is expected to include:
    - Review literature and summarize sampling practices and methods for measuring PSD and suspended sediment in stormwater.
    - Compare and contrast the reported methods to recommended PDS methods defined in TAPE (ASTM 2007 Method D3977-97 modified Suspended Sediment Concentration using wet sieve filtration (Method C) and glass fiber filtration (Method B)).
    - Develop a ranking system and rank the methods used in the available data sources. The ranking system will be based upon items such as data quality, transferability, availability of testing methods, comparability the methods defined in the 2018 TAPE Guidance Document, etc.
    - Results from the ranking will be used to determine which data to include in this study as well as develop recommendations for future testing methods more readily available than the current methods defined in TAPE.
  - **Characterize sources of particulates to stormwater** - Building upon the jurisdictional conditions identified in the Structural Stormwater Control (SSC) Science Review and Synthesis Project, identify how site-specific conditions (e.g., land use, zoning, etc.) could influence particle size distribution. This information will be used to guide the estimation of the pollutant loads and the selection of BMPs. Specifically:

- Review literature to identify what is known about the sources of suspended sediment particles that can become part of stormwater (e.g., atmospheric, windblown, erosion, land use, etc.) including the particle size range and common land uses where these sources are expected.
  - Based on the information collected, the subcontractor will attempt to characterize PSD using common Washington jurisdictional conditions (identified from interviews during the SSC project and noted in the final SSC report).
- **Identify the influence of PSD on stormwater chemistry** - Stormwater chemistry will be evaluated as a function of PSD to aid in the estimation of more accurate assessment of pollutant transport. Weighting factors for land-use based loads will be assessed and developed. These load weighting factors could potentially be used in stormwater infrastructure and watershed planning, total daily maximum load (TMDL) studies, or for estimating BMP credits. Specifically:
- Review literature and identify what is known about the influence of PSD on the speciation and mass of regulated stormwater pollutants and pollutants of concern; and identify the treatment mechanism needed to remove the respective pollutants.
  - The information collected will be combined with information from characterize sources of particulates to stormwater (last section) and the subcontractor will attempt to determine the PSD effects on land-based pollutant loads. Depending on the information and data available, weight factors for different jurisdictional conditions may be developed (using basic statistics or a qualitative ranking system such as high, medium, low) to predict pollutant loading which could be used for selecting an appropriate BMP for a site.
  - The Task 3 deliverables will include discussion and guidance regarding how this information could be used in watershed plans, total daily maximum load (TMDL) studies, and for estimating BMP credits.
- **Identify detrimental impacts of different particle sizes to receiving water bodies** - Identify what is known about the stormwater related impacts on receiving water bodies based on specific ranges of particle sizes. This information will also be used to guide the selection of BMPs based on discharge locations (e.g., infiltration vs. surface water bodies). Specifically:
- Review literature and identify what is known about the stormwater-related impacts of PSD on receiving water bodies for specific range of particle sizes. This information will be used in Task 3 to guide the selection of BMPs based on discharge locations (e.g., infiltration vs. discharge to water bodies).
  - Using the information collected assess whether a threshold or categories of impact can be determined for whether/when there is a benefit to receiving waters for targeting removal of different PSD and selecting BMPs based on PSD effectiveness. Using the information available, qualitative categories of impact will be developed that identify species and/or conditions that are more sensitive (e.g., high, medium, low).
  - The Task 3 deliverables will include discussion and guidance regarding how this information could be used to identify receiving water bodies that need to be protected and when to locate BMPs that are more effective for reducing specific PSD ranges upstream of these water bodies.

- **Determine BMP effectiveness as a function of PSD** - For structural, operational, and source control BMPs, we will report on BMP effectiveness based on the range of particle sizes and considerations for maintenance. This information will be used to identify BMPs that are more effective at removing specific ranges of particles. Specifically:
  - Identify the specific types of BMPs that will be included in this study which will be confirmed at the first TAC meeting. This is expected to include structural, maintenance, and source control types BMPs.
  - For each BMP identified, we will develop a permit-related definition that includes the physical characteristics, treatment mechanisms, and stormwater related function. For BMPs included in the SSC Project, we will use that definition.
  - Collect and synthesize BMP effectiveness data for a range of particle sizes. This will include developing tables that summarize BMP effectiveness as a function of PSD, sources, and discharge locations. This is expected to include consolidating the data/information in the table using basic statistics.

### Assumptions

- The list of data sources maybe expanded to include sources recommended by the TAC.
- The subcontractor will develop and utilize standardized templates for collecting and managing data to ensure consistency across all team members.
- Requests for revisions to project deliverables by Ecology, DNR, and/or TAC will be and limited to one iteration of changes/revisions.
- The subcontractor will provide a QC review of deliverables before the final is submitted to Ecology.

**Table 2. Deliverables and Schedule for Task 2**

Deliverable	Consultant Costs	Target Date 2022
D2.1 Synthesis of Literature	\$25,475	December 2022
D2.2 List of Data Sources	\$6,116	December 2022
D2.3 Data Summary Tables	\$15,216	December 2022
<b>TASK TOTAL:</b>	<b>\$46,807</b>	

### TASK 3.0: SUMMARIZE, REPORT, AND COMMUNICATE FINDINGS

**Objective:** Summarize and recommend how to incorporate the study findings into the current BMP selection process outlined in the Ecology Stormwater Manuals. Specifically, we will provide guidance for selecting the most effective BMP for the respective PSD based on the contributing basin area (source) and discharge location (e.g., water body vs. infiltration).

#### Subcontractor Services

- Summary with Flowcharts - Flow charts will be developed that can be integrated into the BMP selection process defined in the Ecology Stormwater Management Manual for Western

Washington. The flow charts will assist permittees with selecting the most effective BMP based on site specific conditions and discharge locations.

- White Paper - A white paper in the SAM short report format will be developed that provides an overview of the work completed, reports on the study findings, and provides guidance for applying the study results along with recommendations for future research. The white paper outline will be finalized with feedback from the TAC.
- Fact Sheet - A fact sheet (2 pages) that summarizes the findings of the study in language that is accessible to a broad audience will be developed. The study fact sheet will also serve as the White Paper Executive Summary.
- Presentations - Prepare a draft and final power point presentation that provides an overview of the project and White Paper contents. The draft copy will be submitted to the TAC, the final version will incorporate TAC comments. Prepare for and present the final power point presentation to a Stormwater Work Group meeting and a local conference, dates to be decided later.

### Assumptions

- The White Paper language and format will meet the Americans with Disabilities Act and Accessibility.
- Requests for revisions to project deliverables by Ecology, DNR, and/or TAC will be and limited to one iteration of changes/revisions.
- The subcontractor will provide a QC review of deliverables before the final is submitted to Ecology.

**Table 3. Task 3 Deliverables and Schedule**

Deliverable	Consultant Costs	Target Date 2022
D3.1 Report Outline	\$2,564	Sept. 2022
D3.2 Draft Flowcharts	\$13,925	Dec. 2022
D3.3 Final Flowcharts; TAC comments addressed	\$3,565	March 2023
D3.4 Draft White Paper	\$17,522	Dec. 2022
D3.5 Final White Paper w/ TAC Comments Addressed	\$3,565	March 2023
D3.6 Draft Fact Sheet	\$4,881	Dec. 2022
D3.7 Final Fact Sheet w/ TAC Comments Addressed	\$1,169	June 2023
D3.8 Final SAM and local conference presentations; w/ TAC Comments Addressed	\$8,385	June 2023
<b>TASK TOTAL:</b>	<b>\$55,576</b>	

**Document Accessibility Requirements:**

ECOLOGY has identified those documents intended to be published, posted, or hosted on ECOLOGY’s public web site, namely, the final white paper. The CONTRACTOR shall provide these documents in both their “native format” (such as Word, Excel, or PowerPoint) and in PDF format (latest version of Adobe Acrobat Pro or compatible). The CONTRACTOR shall run the PDF Accessibility Checker’s report and provide the report with the delivered documents. The PDF documents must satisfactorily pass the Adobe Acrobat Pro Accessibility Checker (Full Check). ECOLOGY will review the PDF Accessibility results and may request the CONTRACTOR remedy any known issues. ECOLOGY reserves the right to perform independent testing to validate accessibility and may require the CONTRACTOR remedy any identified issues before acceptance of the documents. For assistance concerning accessibility, visit Washington State Office of the Chief Information Officer, OCIO Policy no. 188, Accessibility (<https://ocio.wa.gov/policy/accessibility>).

**PROJECT BUDGET & SCHEDULE**

All deliverables need ECOLOGY approval. The budget may be shifted between tasks, with pre-approval from Ecology, but the total budget may not be exceeded without an approved amendment from Ecology. The estimated total contract amount to complete the professional services identified in this Scope of Services is offered on a time-and-materials basis not-to-exceed **\$128,422**. Table 6 provides a summary of the contract fees by task and Figure 1 provides an overview of the Project Schedule.

**Table 6. Project Budget – Task Summary**

Task #	Task Name & Deliverables	DNR	Consultant	Total Cost
1	Project Administration and Management	\$0	\$26,039	\$26,039
2	Literature Search & Synthesis of Literature	\$0	\$46,807	\$46,807
3	Summarize, Report, and Communicate Findings	\$0	\$55,576	\$55,576
<b>Total Estimated Cost:</b>		<b>\$0</b>	<b>\$128,422</b>	<b>\$128,422</b>

**Figure 1. Project Schedule**

Calendar Year	2022							2023		
Quarter	Q1				Q2			Q3		
Task and Deliverables	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb
<b>1. Project Administration &amp; Management</b>										
D1.1 Project Schedule										
D1.2. 1 <sup>st</sup> Status Report										
D1.3. 2 <sup>nd</sup> Status Report										
D1.4. 2 <sup>nd</sup> Status Report										
D1.5 Confirmed List of TAC Members										
D1.6 TAC Meeting #1: Agenda/Minutes										
D1.7 TAC Meeting #2: Agenda & Minutes										
D1.8 TAC Meeting #3: Agenda & Minutes										
<b>2. Literature Search and Synthesis of Literature</b>										
D2.1 Synthesis of Literature										
D2.2 Annotated Bibliography										
D2.2 Matrices of data										
<b>3. Report and Communicate Findings</b>										
D3.1 Report Outline										
D3.2 Draft Summary Spreadsheet w/ Flowcharts										
D3.3 Final Summary Spreadsheet w/ Flowcharts										
D3.4 Draft Whitepaper										
D3.5 Final Whitepaper addressing TAC comments										
D3.6 Draft Factsheet										
D3.7 Final Factsheet addressing TAC comments										
D3.8 Draft/Final Presentation to SAM and local conference										