

## **Attachment A**

### **San Juan Conservation District -Detailed Scope of Work**

#### **Project Summary: Puget Lowland Small Streams Monitoring for the RSMP**

The Stormwater Work Group (SWG) members recommended a specific NPDES municipal permittee-funded plan for monitoring the effects of stormwater under the permits in the Puget Sound region. The resulting program, a subset of the overall strategy, is called the Regional Stormwater Monitoring Program (RSMP). The RSMP has three main components; one of which is a status and trends monitoring in Puget ecoregion lowland streams and Puget Sound marine nearshore. For the Puget lowland streams the focus for monitoring is water quality and "watershed health" (physical habitat, sediment chemistry, and biological communities) of wadeable streams.

The RSMP Coordinator at Ecology has formed a small streams monitoring team made up of federal, state, and local government entities to conduct the small streams monitoring. These team members include; King County, Skagit County, San Juan Islands Conservation District, and the United States Geological Survey (USGS) who will conduct the RSMP streams sampling. San Juan Islands Conservation District is one of these entities (referred to as RSMP Contractors) will conduct monitoring at RSMP small streams sites from January to December of 2015 in San Juan County.

#### **Project Activities, Tasks, and Deliverables**

Task A1: Planning: Confirm suitability, secure permission if necessary, and develop stage height/flow measurement plan for each site

Deliverable A1.1: Summary of select site visits for suitability, permissions and stage measurement approach. (Target Date January 31, 2015)

Task A2: Project Management and Quarterly Reporting

Deliverable A2.1: Prepare and send via email, project management status updates (quarterly) and attend coordination meetings (typically by phone monthly). (Target Dates: March 31 2015, June 30 2015, September 30 2015 and January 30, 2016).

Task A3: Conduct monthly water quality monitoring from January – December 2015

Deliverable A3.1: Monthly field measured data will be submitted quarterly with copies of field data sheets. (Target Dates: March 31 2015, June 30 2015, September 30 2015 and January 30, 2016).

Deliverable A3.2: Final water quality field and laboratory data deliverable sent to RSMP Coordinator. (Target Date: December 31, 2015).

## Project Schedule

Calendar Year	2014	2015				2016
Task	4	1	2	3	4	1
1. Site Summary						
2. Project Management & Quarterly reports						Optional extension
3. Water Quality monthly monitoring						

## Detailed Descriptions of Tasks and Deliverables

San Juan Conservation District staff will monitor suitable RSMP small stream sites located in the Puget Sound Lowland ecoregion.

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### Task A1: Visit sites, secure permissions and develop winter flow monitoring plan for each site.

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(Total Cost \$720)

Most streams are expected to still be wadeable and sample timing can be planned to accommodate better sampling conditions within that month timeframe. However, some creeks may have unsafe high flow conditions for wading or such low flows measurement using meters is impossible. The RSMP Coordinator needs to understand the extent of streams that may exhibit these conditions during 2015. Using best professional judgment, RSMP Contractors shall conduct a site visit to visualize low flow conditions and estimate tenable high flow conditions.

#### Deliverable A1.1: Summary of site visit for suitability, permissions and stage measurement approach.

**Due Date: January 31, 2015**

San Juan Conservation District will email the RSMP Coordinator providing a summary of site conditions: 1) dry in late summer, 2) anticipated to be hazardous for wading in winter months, and 3) how stage and discharge is planned to be monitored near the site. This letter will also discuss any pertinent local knowledge about the sites and/ or any outstanding permission necessary for monitoring.

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### Task A2: Project Management and Quarterly Reporting

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(Total Cost \$1,800)

Linda Lyshall will be the point of contact at the San Juan Islands Conservation District. As a RSMP Contractor, San Juan Conservation District will provide oversight of the field team monitoring crews, and interface with the RSMP Coordinator (Brandi Lubliner) to ensure the goals and reporting requirements are met. Project management by RSMP Contractor will include attending the coordination calls hosted by the RSMP Coordinator, managing the field team, resolving any monitoring issues, and preparation of deliverables. Project management time and expenses will be tracked and an invoice for time should be

sent with a general status report accompanying the quarterly data reports. The status summary of the project during the course of monitoring will be the billable item for project management. If the expenses associated with project management exceed the quarterly estimate (1/4 of the total deliverable), then timesheets and an expense report may be submitted as justification.

After the last monitoring event of the year, San Juan Islands Conservation District will send the RSMP Coordinator the final EIM data spreadsheet and a completeness report on samples taken for each parameter at each site.

**Deliverable A2.1: Send (email) quarterly project management status updates. Participate in coordination meetings (monthly calls) for sampling alignment and management.**

**Due Date: March 31, 2015; June 30, 2015; September 30, 2015, and December, 31, 2015.  
(Approximately \$350 per quarter)**

San Juan Conservation District will prepare and send a project management status update in the form of an emailed letter to the RSMP Coordinator. San Juan Conservation District will participate on the RSMP Coordination conference calls. These emails are encouraged to accompany the data deliverables, however if communication about monitoring or site conditions is important, then the county is expected to send independent correspondence. This status update will be comprehensive but concise. The use of tables is encouraged. Project management for which attending the coordination meetings, and preparing quarterly reports throughout the project is the deliverable.

The status report will contain a summary of the status of monitoring efforts to date, any QA/QC concerns and resolutions. Project management status updates will include an invoice for the costs associated with project management and preparation of deliverables. The final deliverable in December 2015 will briefly summarize performance and completeness of sampling. This will include the number of monitoring events, including attempted monitoring trips where monitoring was not successful. The final report deliverable will also include the finalized data for the field gathered parameters, stage height, and flow measurements in the provided EIM spreadsheet.

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### **Task A3: Conduct monthly water quality monitoring from January – December 2015**

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Monitoring will consist of both field measured parameters using a multi-meter and grab samples for laboratory measured parameters, listed in the table below and discussed in detail in the QAPP. Ecology's EIM data spreadsheet template will be provided by the RSMP Coordinator and populated with the field-measured data. This EIM spreadsheet and copies of the field data sheets will be sent to the RSMP Coordinator, who will verify and enter the data into EIM.

**Water quality parameters to be collected.**

Parameter	Where measured/Lab
Ammonia	MEL
Chloride	MEL
Dissolved organic carbon	MEL
Dissolved oxygen	Field Meter
Hardness	MEL
Fecal coliform	Edge Analytical Laboratory, Burlington, WA
Metals (total and dissolved)	MEL
Nitrate-Nitrite-N	MEL
Polycyclic aromatic hydrocarbons	MEL
pH	Field Meter
Orthophosphate	MEL
Specific Conductance	Field Meter
Temperature	Field Meter
Total nitrogen	MEL
Total phosphorus	MEL
Total suspended solids	MEL
Turbidity	MEL

MEL = Manchester Environmental Laboratory  
 WA State Department of Ecology  
 Attn: Sample Receiving  
 7411 Beach Dr E  
 Port Orchard, WA 98366-8204  
 Phone: 360-871-8800

**Sub-task A3(a): Monthly Water Quality Monitoring**

Total Cost \$8,460

Beginning January 2015, San Juan Conservation District will conduct monthly water quality monitoring at **one** RSMP sites, unless any of these sites is deemed unsuitable according to the criteria in the monitoring plan for this study *Quality Assurance Project Plan for Status and Trends Monitoring of Small Streams in the Puget Lowlands Ecoregion for Monitoring Conducted using Pooled RSMP Funds contributed by Municipal Stormwater Permittees (QAPP)*. This site is further described.

Strata	ORDER_#	Count	Longitude	Latitude	Notes on Site Visit
OUGA	6	San Juan County	-123.098948	48.52611	Point near outfall will work. Downstream of the weir about 250 meters across Wold Rd is a great site. Channel is well defined, developed stream bed, consistent flow, and within the required distance. 10/7/2014 field visit: There is very low flow. The weir is spilling water. May be or had been an ultrasonic sensor deployed there.

OUGA = Outside the Urban Growth Area

If site(s) identified in sub-task A3(a) fail suitability criteria at some point during the course of monitoring then, San Juan Conservation District will notify the RSMP coordinator immediately. A re-sample in the same month will be attempted and if the site still fails suitability, then that site will not be sampled that month. San Juan Conservation District should resume monitoring the following month if conditions improve, or discuss with the RSMP Coordinator for a full cessation of monitoring at that site.

**Optional Sub-task A3(b): Addition of Water Quality Sites (\$1,200 per site)**

Site suitability conditions may change at any point in the sampling program across all of the RSMP sites. These changes may be accommodated by this agreement by increasing (or decreasing) the number of sites monitored by San Juan County staff. The costs for these changes per site include travel and would be limited to the San Juan Islands. The anticipated change in the final number of sites is expected to be low and will be capped at 1 site. All replacement sites will come in order on the master list and must meet suitability criteria.

The RSMP coordinator will be notified by the other RSMP contractors about sites suitability and disqualifications in other counties. The RSMP Coordinator will notify San Juan Conservation District in writing to begin sampling the additional site(s). The timeline that replacement sites would begin monitoring is from January – July, otherwise a replacement site will not be sought after the summer watershed health monitoring.

**Deliverables A3.1 Quarterly field measured data and copies of field data sheets.**

**Due Dates: March 31, 2015; June 30, 2015; September 30, 2015, and December 31, 2015. Quarterly - divide by 4). Approximately \$250 per quarter**

San Juan Islands Conservation District will send field measured data in the EIM spreadsheet format to the RSMP Coordinator for sampling conducted at each RSMP monitoring site with each quarterly report. This will also include photocopies of field data sheets and notes taken in the field. This data package will be attached to an email to the RSMP Coordinator. The email will also provide a brief status update on the completeness of the grab samples for the laboratory parameters for each site. This deliverable will invoice the costs associated with monthly monitoring including labor, travel, equipment, and monitoring supplies.

**San Juan Conservation District - Budget Detail by Task**

	Task 1. Planning	Task 2. Project Management	Task 3. WQ Monthly for 22 sites <i>(per site amount)</i>	Total by Object
Salaries and Benefits	600	1,500	2,600	4,700
Supplies			500	500
Equipment			2,000	2,000
Indirect/Overhead % 20	120	300	520	940
Shipping			2,640	2,640
Travel			200	200
<b>Total Task</b>	<b>720</b>	<b>1,800</b>	<b>8,460</b>	<b>10,980</b>

Shipping consists of a monthly flight to Bellingham Edge for bacterial samples, and monthly shipping of other samples to the laboratory.

Bacterial samples flight: 100x12=1200

Other samples overnight: 120x12=1440

**Shipping Total: \$2,640**