

San Juan Islands Conservation District

To: Brandi Lubliner, Department of Ecology
From: Linda Lyshall and Mitch Lesoing
Date: 12/31/2015
Re: Quarterly Report – Project Management Status Update

San Juan Island site: 006 OUGA

Name: False Bay Creek West Fork.

Staff gauge coordinates at Index: 48.526210, -123.099040

Deliverable 2.2

SJICD sampled this single site in October, November and December 2015. The winter seasonal flow is greatly increased and consistent with what we observed at the index last season. The site remains accessible, wadeable and safe for the collection of water samples, stage measure, in-situ and flow measurements. The staff gauge is stable, elevation is unchanged with the location serviceable. The alternate stream profile transect location sited upstream from the staff gage, to access adequate water depth for an alternate method for measuring flow ("timed float"), proved suitable for the October lower flow. At the original index transect site a Swoffer 2100 current velocity meter was used to measure stream flow and discharge calculated on 20 Oct. 2015 and 08 Dec. 2015. Stage only was measured 18 Nov 2015.

The real-time "follow-up" communication system assuring sample delivery and pick up with airline carrier and Edge Analytical to meet QAPP time/ temperature matrix for the bacteria sample continued to be required. FedEx tracking was used as well due to winter storm alert conditions.

The staff gage was originally constructed with a pvc data logger well. A Solinst Levellogger and barologger have been deployed and will continue recording stage as stream water levels increase.

Suitability:

Net flow remained unidirectional at the index. Side channel near the mouth of the culvert has flooded for Nov. and Dec. The reach from the culvert mouth to the staff gage remains clear of obstructions during this quarter's work with the exception of several large windfall branches spanning the channel. Measuring flow with the Swoffer 2100 at the original location below the staff gage in December was feasible. Stream profile transect and flow measurements were relocated 8 meters upstream of the gage for the October discharge estimate. Water quality samples are taken near the mouth of the culvert in the stream main current for the Quarter. Anticipate continued higher flow rate through the winter months. Maintenance is required to remove debris hung up on the stage plate.

Monitoring Plan:

This completes the monitoring under the current program, however, we hope to continue recording stage, employ the Swoffer 2100 flow meter to measure velocity and calculate estimate of discharge as flow increases through the winter. We will use the Quanta to measure physical parameters and find a funding source to finance bacteria sampling.

We will record stage with Solinst levellogger, correct levels with paired barologger, utilize Solinst datalogger software to download values.

Deliverable 3.3

All water quality grab samples for the Quarter are 100% complete for MEL and EDGE Analytical samples. All samples were received within laboratory holding times and within temperature requirements. All Final Reports from MEL record that "all samples received in acceptable condition without analyst comment". All coolers arrived intact with no breakage as per QAPP/COC requirements. All in-situ measurements for the quarter were 100% complete and recorded per QAPP. All in-situ meters were pre and post calibrated as per manufacture specifications per QAPP. Calibration data copied and recorded. All In-situ field data report forms, Quanta calibration sheets, discharge worksheets and general field notes for October, November and December have been copied as PDFs and e-mailed to RSMP coordinator. All stream flow measurements and discharge calculations for the quarter are 100% complete with the following exception: 18 Nov. 2015 recorded stage only, no estimate of discharge.