

Neskowin: Hawk Creek Bacteria Monitoring Plan

Purpose and Background

Hawk Creek at the Salem Ave. Bridge has been showing elevated enterococcus bacteria concentrations during the summer months since the Tillamook Estuaries Partnership began sampling in 2014. The community of Neskowin is interested to collecting samples from streams that could possible being contribute bacteria to Hawk Creek at the bridge. This additional information will help the community and partners determine what geographic location the bacteria might be originating.

Sampling Methods

Samples should be collected from 4 sample location once a week. Samples will be collected from June through Oct and analyzed for enterococcus bacteria. If it is not possible to analyze for enterococcus, E. coli bacteria will be the target bacteria.

ID	Site Location	Lat	Long
NW1	Hawk Cr at Hawk St and Golf course access rd.	45.10567	-123.982
NW2	Butte Cr at upper golf course access bridge	45.10847	-123.978
NW3	Kiwanda Cr at Hillsboro Ave golf course access br.	45.10923	-123.979
NW4	Kiwanda Cr at tsunami route access bridge	45.11200	-123.978

Local volunteers will be recruited to collect water samples. During sampling volunteers will document the time samples were collected and the presence and direction of stream flows. Samples will be delivered to the established location for analysis within a maximum of 8 hours from the sampling time. The samples will be and transported in a cooler on ice to the destination. Results from the analysis will be provided to the Tillamook Estuaries Partnership for comparison to State water quality standards. Based on the results the number, location, and frequency of samples may be adjusted to provide the most relevant information.

Cost Estimates

4 samples, collected once a week, for 18 weeks, = 72 samples per season

Samples analyzed using local IDEXX Equipment:

IDEXX supplies cost per sample is \$8.00

Season cost = \$576.00*

*supplies may be available through DEQ Volunteer Monitoring Program free of cost

Samples analyzed using a commercial lab:

Cost per sample estimated at for enterococcus or E. coli is \$40

Season cost = \$2,880.00*

*Sample would have to be delivered to the Portland area for processing within the 8 hour time limit