

# What's Happening in the Samish River anyway?

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If you monkey around in the Samish River during or after a rainstorm, wash your hands before eating. Always. The same is true for many of the tributary streams – Friday Cr., Thomas Cr., Swede Cr., Parsons Cr., Skarrup Cr., and an old friend – Bob Smith Creek. Ok, washing your hands before you eat is usually a good idea anyway, but what's the deal with the river, and its tributaries in particular? Fecal bacteria is the problem, bunches of it, gallons of it, and the various viruses and other pathogenic bacteria that go with it. Like E. coli. Yuck! And it's nothing new.



Samish River sign posted by Mrs. Russell's Allen students

There has been water quality sampling done in the Samish watershed since at least 1959. Prior to winter 2008/9, most water sampling was done on a regularly scheduled basis, and was not targeted on weather events. Sampling has been done by a wide range of organizations, not just volunteers. This changed in spring 2008. Routine sampling by Skagit County in April 2008 discovered water highly polluted with fecal bacteria entering Samish Bay during a rain event. The federal standard for surface waters is 100 fecal colonies/100 milliliters of surface water sampled. This is the safe level, above which waters are unsafe. The county's sampling found 17,000 FC/100 ml! County staff did more sampling throughout the spring, and continued finding very high fecal

counts. The State Health Dept. shut down commercial shellfish harvest in Samish Bay on a number of occasions, only re-opening the bay after the fecal plume had dissipated. The shellfish industry in the Bay is fairly large scale, going back to a time before Statehood. Such shutdowns, and product recall, are costly to this industry. County staff came to Stream Team volunteers (organized by Skagit Conservation District and the Padilla Bay National Estuarine Research Reserve) to see if we could sample throughout the Samish watershed, particularly targeting storm events. So, some of us have been collecting water samples throughout the watershed, processing the samples in the Padilla Bay Reserve's volunteer lab, and counting the bacterial colonies grown from those water samples. We inform both the County, and State Health Dept. of our results, and they use the data to help manage the shellfish closures. We have been finding out what happens in the Samish River watershed over the past winter, rain or shine. And it's not pretty!

Winter or spring, when it rains at least 0.3 inches in the Samish River watershed, most sample stations are well in excess of the clean water standard of 100 FC/100 ml. When it hasn't rained for awhile, the river is usually within standards. When it has rained, and we find very high fecal numbers, a few days later when the rain has stopped and the river drops in flow, the river cleans up fast. The fecal issues in the main river seem to start downstream of the Highway 9 bridge north of Sedro Woolley. Even during high rainfall, river samples taken up here are usually well within the clean water standard. By the time

the river is sampled downstream near Parson's Creek Road, most often the fecal content has jumped into the 100's or 1,000's, and continues to rise throughout the river basin. Most often, there are significant increases in the stretch from Parson's Creek Road to Grip Road, and from Grip Road to Old 99. In May, near the mouth of the river at Thomas Road bridge, there was a count of 9000 FC just after a rainy day. Many tributary streams are no better. Upstream reaches of most tributaries come out of forested watersheds, and the fecal numbers are very low. Once these creeks have gotten to our homes, and pastures, the fecal numbers jump up fast. Many creeks sampled are also in the 1,000's near their mouths. An example of this is our old friend Bob Smith Creek, SFEG's first stream restoration project (1991). This small tributary originates just north of Bow Hill Road, and dumps into the Samish River just below the Old 99 bridge. The creek is stuffed with chum salmon, and coho, and cutthroat trout. During May 2009 storms, fecal numbers at the upstream end were within standards; near its downstream end it was 7,500 FC! And you can just about see from one end of that watershed to the other. What is causing this huge jump in fecals? The only sources appear to be a few homes, and livestock. It should be easy to figure out the sources, and to solve them. The regulatory agencies involved are Skagit County, and Department of Ecology. They have not yet engaged. Will there be political will to clean up the pollution? Should SFEG play a role in cleaning up the problems in this very small watershed, and in the larger Samish watershed? SFEG started in Bob Smith Creek, I think it only makes sense that we continue what we began, and once again make this creek good for the people who live there, and good for the fish. Tell us what you think.

Please join us Saturday, September 26 for a watershed tour of the Samish. This all day tour will include stops at SFEG restoration sites, Stream Team water quality monitoring sites, salmon viewing (if we're lucky) and will also include lunch. Reserve your seat in the van no later than Wednesday September 23 at 360-336-0172 or [ldegrace@skagitfisheries.org](mailto:ldegrace@skagitfisheries.org).