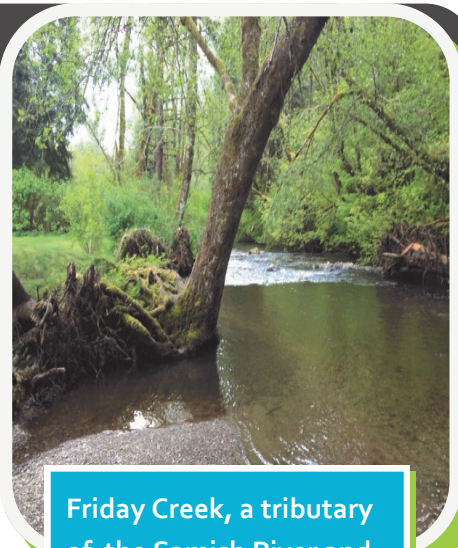
The Clean Samish Initiative

SPECIAL POINTS OF INTEREST

- Lower than average rainfall amounts March– June.
- Fecal Coliform levels were generally *very* low during dry weather & *very* high during heavy rain events.
- Four out of five shellfish bed closures were confirmed due to high levels of fecal coliform bacteria.



Friday Creek, a tributary of the Samish River and one of our focus areas.

90-Day Intensive Effort, Spring 2015

In the spring of 2015, the Clean Samish Initiative embarked on a 90-day intensive effort to identify and reduce sources of fecal coliform in the Samish Watershed and Samish Bay. Though fecal coliform levels have decreased significantly over the last 5 years that CSI has been working, state standards have yet to be met, and water quality remains unsafe during rainy times of the year. The CSI team used new approaches to identify remaining problems and find practical ways to mitigate those sources of fecal coliform.

Insights from the 90-Day Effort

- Fixes are often slow; rushing fixes may miss problems, waste resources and frustrate landowners
- Continued follow-up and site inspections are necessary after problem sites have been identified and addressed
- While all potential sources of pollution are important, focusing on the highest risk and/or confirmed sources are the most efficient use of finite resources

Stream Team volunteers

What Worked

- Weekly check-in meetings create increased collaboration between agencies and team members
- Selecting focus areas to concentrate monitoring and inspection efforts based on the loading contribution of bacteria rather than the bacteria concentration
- Sharing of water quality data with partners and public in an easy to use, interactive map
- Increased outreach to residents in focus areas and near “hotspots” to get the word out and ask for help in identifying sources
- Setting weekly goals weekly team meetings helped team members stay on track

Goal	Actions	Results	Challenges
Improve Communications with Residents	• 5 increasingly specialized mailings • Online interactive water quality map • Increased social media presence • Improved website • Held a community friendly open house event • Highlighted community benefits and resources available to residents	• Positive feedback from public and partners • Improved participation by landowners	• Collecting water quality data from multiple agencies and turning it into a map quickly was difficult 
Find and Fix Problems Quickly	• Increased water quality monitoring, totaling over 900 samples at 43 sites • Windshield and aerial surveys • Site visits by inspectors • Notifications to 529 property owners of overdue OSS inspections • Dye tested suspected failed septic systems	• 58 agricultural sites in focus areas selected for further review • 4 agricultural sites found with confirmed pollution discharges • 12 agriculture sites have fixes in process • 8 agricultural sites referred to Skagit Conservation District • 8 OSS failures found • 57% of septic systems are up to date on inspections	• Low rainfall made source tracking difficult • Some storms resulted in widespread high fecal counts, making source tracking difficult • Access to private property to pinpoint sources proved to be difficult • On site septic code needs revision to allow for greater enforcement capability • Some residents are unable to pay for inspections and/or fixes to problems

Moving Forward

- Continue and expand our ability to share water quality data in map format with partners and the public
- Improve tracking of efforts with databases for water quality and property assessments/inspections
- Study water quality around beaver dams, and continue to research new ways to track pollution
- Improve partners' access to data, property information and documents
- Revise Skagit County's onsite septic system code, and plan an improved approach for identification of OSS problems

Fecal coliform output per day	
Sheep:	180 billion
Cattle:	72 billion
Dogs:	5 billion
Duck:	2.4 billion
Humans:	1.9 billion
Goose:	800 million
Horse:	420 million
Deer:	347 million
Beaver:	200 thousand