Welcome to the 3rd edition of the Clean Samish Initiative Quarterly Report, the newsletter for the Samish watershed community. This newsletter is being published to inform residents of activities that are being conducted in the Samish watershed and to bring local attention to the need for clean, safe, water - and community action and stewardship to address water pollution in the basin. As residents of the Samish Bay watershed you have a vested interest in the quality and health of the fresh water and marine waters in your community. We hope the newsletter will serve as a communication network to provide useful information that will increase your knowledge and interest of local water resource issues.

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“Above” Photo © by Dave Ward Photography
A Message from the Skagit County Commissioners

Clean water is of great importance to Skagit County.

We all need clean water to ensure healthy lives, safe recreation, cleaner stormwater, viable habitat for fish and wildlife, and healthy shellfish beds. As your County Commissioners, we are dedicated to ensuring that our waters remain clean and safe.

High fecal coliform levels in Samish Bay continue to threaten our health, shellfish beds, food production, and quality of life in Skagit County. Through our Clean Water Program and Clean Samish Initiative, however, we are committed to implementing a locally-led effort to resolve the water quality issues facing the Samish. In 2011, Skagit County will dedicate around $473,000 towards cleaning up the Samish River Watershed; $152,504 will come from the Skagit County Clean Water Fund, with $320,659 from an EPA grant leveraged by Clean Water Program dollars.

In an effort to clean up the Samish in a more expedient manner, engage more personnel in the effort, and provide a more thorough and dedicated response to water quality issues, we will also be enhancing our efforts by implementing new action items, including:

- Increased landowner contact
- Enhanced media campaign
- A hotline number and water pollution report form for reporting water quality concerns
- Installation of waste facilities for both pets and humans within the Samish watershed
- Continued ambient and storm monitoring
- Continued outreach and education

In recognition of the fact that we need to work collectively to resolve water quality problems, it is essential that all of Skagit County continue to have accessible and reliable clean water. We encourage you take part in the ongoing clean water efforts to improve the health of our watersheds and communities.

We all have a part in this issue; therefore, we all need to make an effort to correct it. Skagit County has a long and colorful history of environmental stewardship and it is going to take a dedicated and collaborative effort to effect change in the Samish Basin, and return it to a healthy, productive state.
High levels of bacteria periodically found in the Samish Bay have led the state Department of Health to place restrictions on the harvest of shellfish from much of the area. Five-day closures will happen whenever extremely high levels of fecal coliform bacteria enter the bay from the Samish River.

Samish Bay usually has good water quality, but tests show that when there is a lot of runoff into the river, it contaminates the bay. As a result, the department has changed the classification of most of the bay from “Approved” to “Conditionally Approved.” In 2010, based on the same conditions, the area was closed 14 times for a total of 63 days.

US Food and Drug Administration (FDA) guidelines require that states monitor fecal coliform bacteria and take protective actions when the levels may threaten the public’s health. If FDA guidelines are not followed, shellfish from Washington would not be allowed to be shipped to other states.

The Samish Bay watershed is now under closer scrutiny by federal, state and county environmental inspectors as they pursue cleaner water and safer shellfish in Samish Bay. In early April, Governor Gregoire directed state agencies to enhance support for local efforts and create and coordinate a targeted action plan to reverse the recent downgrade of 4,000 acres of commercial shellfish beds by September 2012 (see accompanying article from the State Department of Health).

The Puget Sound Partnership responded to the directive by bringing together the State Departments of Health, Ecology, Agriculture, the Washington Conservation Commission, Fish and Wildlife, Skagit County, and the Clean Samish Initiative Executive Committee to develop a Targeted Action Agenda to address the fecal coliform crisis in Samish Bay. The action plan was designed to boost current efforts of the Clean Samish Initiative and to accelerate the process of finding and correcting pollution sources by June 2012.

The new plan includes increased compliance efforts, including aerial overflights being conducted by the EPA; designating the entire Samish Basin as a Marine Recovery Area (MRA) to address onsite sewage systems consistent with state law (RCW 70.118A.040); coordinated site visits to parcels in priority stream reaches; improved communication with landowners; providing sanitcans for recreationalists in the basin; utilization of Microbial Source Tracking (DNA analysis) to evaluate the contribution of waterfowl and wildlife to the fecal contamination program; updating the CSI work plan to incorporate the targeted action agenda items; and access to the Puget Sound Corps to assist with fencing and other best management practices.


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**SAMISH BAY RECLASSIFIED**

*By: Lawrence Sullivan, Public Health Advisor, WA State Dept. of Health*

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Student Service Learning Project will Benefit Samish Bay

This article was written and submitted by Shannon Flory’s 8th Grade Students from Shuksan Middle School:

Have you ever gone to Taylor Shellfish Farm? If you haven’t, you have missed out on a lot of things. Like getting muddy, working in the rain, and having to smell like fish! As 8th graders from Shuksan Middle School we spent 5 days at the Taylor Shellfish Farms as our service learning project. On our first day there we sorted and bagged oysters. We did this to learn how to process oysters. We learned how to distinguish living and dead oysters from the sound they make when clacking them together. The dead ones made a hollow sound. The next week we built pet waste stations. If you are asking “what is a pet waste station?” – it is a garbage can where people need to be responsible to put their pets’ waste. We did this to help clean the Samish Bay. A clean bay is important because water can get contaminated because the runoff from the rain carries the waste to the ocean. The third week we picked up trash around the Taylor Shellfish Farms property. Melissa Mendoza said, “I didn’t think picking up trash would be so fun!” We did this because it’s bad for the shellfish health and all the other creatures in the ocean. The fourth week we processed clams. We did this to learn the strategy of processing clams. The last week we were there we went out during low tide and harvested clams. Our teacher told us to wear boots because it was real muddy, but we didn’t take her too seriously. That’s why when we went back home we were wet and muddy. We did this because we were interested in seeing how clams are dug up. At the end of the five weeks we enjoyed tasting the clams and oysters (some of us for the very first time!).

Thank you Taylor Shellfish Farm for working with us.

Shannon Flory’s 8th Grade Students, Shuksan Middle School

SCOOP THE POOP, BAG IT, AND PUT IT IN THE TRASH!

Roundworms, E. coli, and Giardia are just a few of the many harmful microorganisms that can be transmitted from pet waste to humans. Some can last in your yard for as long as four years if not cleaned up. Children who play outside and adults who garden are at greatest risk of infection. Pet waste is one of the leading causes of bacterial contamination of streams in urban areas. When it rains, the bacteria is carried from our backyards, neighborhoods, parks, and trails, into our storm drains, creeks, lakes, and marine waters. Pet waste also causes the same nitrogen related problems as fertilizer and livestock manure.

What are the solutions?
The best solution is safe and easy. 1) Scoop the poop, 2) put it in a plastic bag, 3) place it in the trash, and 4) wash your hands. This is the preferred disposal method. From a surface water perspective it removes the pollution source from human and surface water contact and contains it in a landfill situation where discharges are monitored and containment levels are known. Landfills are designed to safely handle substances such as dog waste, cat litter, and dirty diapers.

Note: Residents using onsite septic systems for sewage disposal (the majority of rural Skagit County), should not flush pet waste, which can potentially exceed the design capacity of the septic system. High volumes of hair and ash, not normally found in human waste, can interfere with septic system functions and clog drain fields.

Did you know that an average-sized dog dropping produces three billion fecal coliform bacteria?

Left: Several of the pet waste stations made by Shuksan Middle School 8th graders have been placed on Samish Island for the convenience of local dog walkers.
The shellfish resources of Samish Bay are one of Skagit County’s most historic and treasured resources. The bounty of clams and oysters that flourish on Samish tidelands were an important food source for Native Americans and early settlers and are a local delicacy that many of us enjoy and appreciate today (yum!). The very first certified oyster farm in Washington State was located on Samish Bay - in 1921, the Steele family opened the Rockpoint Oyster Company, which was located on Chuckanut Drive (and later purchased by Taylor Shellfish Farms in 1991). Blau Oyster Company has been farming Pacific Oysters on Samish Island since 1935. Today, there are ten Washington licensed shellfish companies on Samish Bay.

While shellfish provide a nutritious food source and contribute to our economy, they also play a crucial role in maintaining the health of the estuary and are considered an important keystone species (which means that despite their small size, they have the potential to greatly impact the environment that they live in). The interactions between shellfish beds and other organisms and elements of the coastal ecosystem are numerous and complex. Shellfish serve as powerful water filters, provide habitat for plant and animal life of all kinds, and play an important role in the food web. They also play a particularly important role in the uptake and recycling of energy and nutrients.

The ability to harvest shellfish locally is a clear measure of the health of our rivers and water quality. Like the “canary in the coal mine,” polluted shellfish beds are often an early warning to a larger problem, upland in the watershed that needs immediate attention. When Samish bay shellfish beds are closed it is an indicator that the health of our upland streams and rivers are also at risk. Fecal coliform pollution is one of the key environmental issues facing our community. Whether your passion is eating fresh local oysters, clams, and mussels, finding them on the beach, or improving the health of our watershed and community, we can all do our part by taking actions in our own backyard and joining in this local effort to protect water quality and the shellfish resources in the Samish watershed.

Did You Know….?

- Shellfish do not need clean water to grow, BUT shellfish must have clean water to be eaten safely. That is because shellfish are not choosy. They filter out all particles – including any chemicals, biotoxins, bacteria and viruses. If the water contains human sewage, animal wastes, disease-producing organisms, or chemicals, then these contaminants concentrate in shellfish tissue as well.
- Filter-feeding shellfish improve water quality! Shellfish feed by filtering microscopic plants from the water column. This removes problematic sediments and phytoplankton and their associated nutrients. A single adult oyster clears over 15 gallons a day and the combined efforts of millions of shellfish can have a dramatic impact!
- Commercial shellfish growing areas, like Samish Bay, are classified by the State Dept. of Health and routinely monitored to determine how clean the water is – and it must be very clean! This helps ensure that shellfish reaching seafood markets, restaurants, and our kitchens are safe to eat!
- We can all help protect Skagit County’s valuable shellfish resources by keeping on-site septic systems in good working order, keeping livestock and domestic pet waste out of streams and drainage ditches, and using port-a-potties or other restroom facilities when recreating.

New Samish Shellfish Closure Advisory Signs

Skagit County, with support from Samish volunteers, will be placing signs throughout the watershed to advise the public when shellfish beds are closed due to fecal coliform pollution. Samish shoreline residents should also refrain from eating shellfish from their private beach when the signs are posted.

Attention recreational shellfish harvesters! Always call the State Health Department hotline before harvesting shellfish from any beach. In addition to fecal coliform pollution, other toxins may be present at various times of year which can cause serious illness or even death. Know before you dig!

HOT LINE: 1-800-562-5632 or visit the web page at:
www.doh.wa.gov/ehp/sf/biotoxin.htm
Samish watershed farmers and livestock owners may not need to look further than “over the back fence” for help and support with land management questions and solutions. In support of the Clean Samish Initiative, several experienced Samish farmers have been offering on the farm “peer to peer” support and assistance to neighbors seeking advice and assistance with conservation practices. Nels Lagerlund, a Samish farmer and chair of the Agricultural Advisory Board, notes that “Working together with our neighbors provides an opportunity to improve the Samish River, keep it a place everyone can continue to live and work in, as well as help assure agriculture continues to be an important part of the watershed.”

The Samish peer to peer program, organized by the Skagit Conservation District, is a locally led and citizen driven approach to solve potential water quality impacts from agricultural practices. Other residents, like Jack Sekora, are also available to offer support and share personal experiences with their neighbors. Jack recently participated in Skagit County’s Natural Resource Stewardship Program (NRSP) to complete a riparian enhancement project designed to keep his horses out of a small Samish tributary and is willing to share his experiences with other Samish residents.

**Samish Peer-to-Peer Contacts:**
- Nels Lagerlund, Chair, Agricultural Advisory Board – 757-0642
- Oscar Lagerlund, Drainage District 14 Commissioner – 707-5526
- Janet McRae, Cattle Rancher & SCD Board of Supervisors - 724-3022
- Jack Sekora, NRSP program participant – 856-0314
- Don Stewart, Samish farmer – 724-3834

**Resource Conservation Planning and Technical Assistance for Farms Large and Small:**
The Skagit Conservation District (SCD) is also available to provide technical assistance to farmers and landowners who seek out ways to minimize the impacts of livestock operations on soil and water resources. Conservation planning provides landowners with useful guidance on pasture rotation, fencing design, gutters and downspouts, waste storage design, alternative water facilities, stream protection projects, manure management and more. All programs provided by the SCD are voluntary and free of charge. Contact John Schuh, 428-4313 or email: john@skagitcd.org

**BE A GOOD NEIGHBOR**
Individuals who do not live next to a stream, river, or other waterbody may find it difficult to understand how their actions can impact water quality. No matter how distant you are from a waterway, through drainage ditches, storm drains, creeks, rivers, and underground aquifers we are all connected because we “All Live Downstream.”

When you get involved in protecting local water quality you can take pride in knowing your efforts will extend beyond the boundaries of your backyard and help improve the quality of life in your neighborhood and neighborhoods located further downstream.
Over the last several months, a group of dedicated Friday Creek watershed neighbors and volunteers have been working together to kick off a grassroots effort that will provide an opportunity to achieve national designation for the Friday Creek area through the National Wildlife Federation’s “Community Wildlife Habitat” program. This project is a multi-year effort initiated by neighborhood residents and volunteers.

The basic idea of the program is that by becoming healthier for wildlife, communities become healthier for people. Residents benefit from landscapes designed to keep water and air resources clean, require little use of pesticides and fertilizers, and pack a powerful aesthetic punch. And, the community wildlife habitat distinction promotes pride in neighborhoods.

In order to become a certified “Community Wildlife Habitat,” a community must register with the National Wildlife Federation, and then work its way through a rigorous set of projects and requirements, earning points along the way for each achievement. The Friday Creek Habitat Stewards have been busy compiling their work plan to meet the requirements, which includes hosting educational workshops/field tours, conducting a wildlife habitat enhancement project at the Alger Community Hall, hosting educational displays at local events, providing support and inspiring neighbors, schools, churches, and businesses to certify their own backyards, and more. The group hosted an educational workshop at the Alger Hall on March 31st, in partnership with the Skagit Conservation District, to promote the program with over 50 neighbors attending.

Samish River Family Festival and Friday Creek Backyard Wildlife Habitat Project Kickoff

Join us on Saturday, October 8, from 11 am to 3 pm at Donovan County Park in Alger for a family-friendly, fun-filled event to celebrate the natural and cultural resources of the Samish River. A kick off celebration for the Friday Creek Backyard Wildlife Habitat project will also be celebrated at this FREE event! The festival will feature fun educational activities for kids all ages related to water quality, salmon, shellfish, and the river ecosystem. Participants will enjoy music, demonstrations, and presentations by natural resource professionals, an appearance by Sammy Salmon and more. Food will be available for purchase.

For more information: 360-336-0172 or ldegrace@skagitfisheries.org

Friday Creek Habitat Stewards project team: Ward Krkoska, Sue Mitchell, Donna Schram, Kathy Orlich, Sylvia Weber, and Bud Weber. Missing from photo: Brigid Stockton, Melissa Thompson, and Kristi Carpenter

How to get involved:
1) Join the Friday Creek Habitat Stewards project team!
2) Certify your yard as a backyard wildlife habitat - certifying your yard as a backyard wildlife habitat or sanctuary is easy and its fun! This program is an informal volunteer activity - no one comes to inspect your yard and it does not limit homeowner rights or your ability to develop your property. To learn how to make your home a certified backyard wildlife habitat or sanctuary, visit www.nwf.org/backyardwildlifehabitat or http://wdfw.wa.gov/living/backyard/
3) Volunteer or participate in upcoming activities and projects.

For more information, an application packet to certify your yard, or to participate in the program or upcoming activities, email fridaycreekhabitatstewards@gmail.com or contact Sue Mitchell at 724-0397 or Sylvia Weber at 724-3762.
Share a favorite Samish photo or tell us what you are doing to protect water quality in the Samish!

“Samish Bay” by Evan Weymouth

“Mud is Good” by Jon Rowley

Clean Water is Everyone’s Business

The Clean Samish Quarterly Report is being published by the Skagit Conservation District, Skagit Conservation Education Alliance (SCEA), Skagit County, and the US Environmental Protection Agency (EPA).

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