



---

# Skagit County Natural Resources Department 2020 Annual Report

## **NRD Mission Statement:**

To provide responsible stewardship of Skagit County's natural resources and environment while providing for safety, protection, enhancement, and use by all Skagit County residents.



# Table of Contents

<b>A Message From the Commissioners .....</b>	<b>3</b>
<b>History of the Clean Water Program .....</b>	<b>3</b>
<b>Skagit County's Clean Water Program:</b>	
Skagit Marine Resources Committee .....	4
Pollution Identification and Correction (PIC) .....	5
Water Quality Monitoring Program .....	6
Fish Habitat Restoration Program .....	7
On Site Sewage and Septic Systems .....	8
Natural Resources Stewardship Program .....	9
Skagit County Lake Management Districts .....	10
<b>Skagit County's Drainage Utility Program:</b>	
Drainage Utility .....	11
Stormwater Management Program .....	12
<b>NRD Budget Summary .....</b>	<b>13</b>
<b>Contact Us.....</b>	<b>14</b>

## A Message from the Commissioners

As your commissioners, we are dedicated to ensuring our waters remain clean and safe. We all need clean water to ensure healthy lives, safe recreation, and viable habitat for fish, and shellfish.

The purpose of this report is to share with you our mission to enhance water quality for everyone in Skagit County. This report illustrates a variety of programs and activities aimed at improving water quality throughout the county.

We engage with our community to improve water quality as we work with tribes, state and local governments, the Skagit Conservation District, and numerous other conservation organizations to make steady progress.

Our Pollution Identification and Correction Program is producing positive results in the Samish and Padilla watersheds. Our staff and volunteers are dedicated to working with landowners to help them be good stewards of this beautiful area. We encourage you to take part in the ongoing clean water efforts to improve the health of our watersheds and communities.

Sincerely,  
Skagit County Board of Commissioners



**Ron Wesen**

*District 1*

**Peter Browning**

*District 2*

**Lisa Janicki**

*District 3*

---



---

## Overview of the NRD

The Natural Resources Division (NRD) of Skagit County Public Works is made up of multiple programs from several distinct funding sources. The two primary funding sources are the Clean Water Program and the Drainage Utility Program.

The Clean Water Program (CWP) was developed from the Clean Water (Shellfish Protection) District created in 1995, which was originally designed to reduce bacterial pollution in Samish Bay by correcting failing septic systems in Edison and Blanchard.

From 1999 – 2005, Skagit County monitored water quality throughout the Samish Watershed. This monitoring revealed an ongoing fecal coliform pollution problem. As a result of the continually-high bacterial levels, Skagit County created the CWP to strengthen non-point pollution reduction measures, educate the public, control non-point pollution, and develop a more thorough water quality monitoring program. The CWP currently provides funding for our Water Quality Monitoring Program, Pollution Identification and Correction Program, Clean Samish Initiative, and the Natural Resource Stewardship Program.

The Drainage Utility Program is a special assessment which was initiated in 1997 to address drainage concerns within unincorporated Skagit County and provide a multitude of benefits to our citizens. The Drainage Utility provides a source of funding to address drainage and stormwater projects and programs which otherwise would not have a funding source or would be too large of a burden for individual residents. Programs funded by the Drainage Utility include Watershed Planning, Drainage Concern Response, Surface Water Projects, Habitat Restoration, and compliance with the County's NPDES Municipal Stormwater Permit.

In addition to the Clean Water Program and Drainage Utility Program, the NRD provides oversight for four individual Lake Management Districts, each with their own special assessment, and the County's Noxious Weed Board which is funded by General Fund dollars.

# Skagit County Marine Resources Committee

Established in 1999, the Skagit County Marine Resources Committee (SMRC) is one of seven community-based advisory committees formed under the congressionally-authorized Northwest Straits Initiative (NWSI). SMRC has been primarily supported by federal and state grant funding through the NWSI, and partly by the CWP. Below are some of the 2020 highlights:

## Education and Outreach

**Fidalgo Bay Day:** Fidalgo Bay Day is a free, fun, educational event for people of all ages who want to learn about the marine environment and what they can do to help protect it. In 2020, the Fidalgo Bay Day event had to be quickly adapted to a virtual format in response to the COVID-19 pandemic. As a result, an activity guide was created and filled with a variety of fun educational activities aimed at getting families outside and exploring our shorelines.

**Salish Sea Stewards:** SMRC's signature Salish Sea Stewards program provides over 40 hours of training for volunteers. The classes are taught by qualified experts and cover marine science-related topics and important issues impacting the Salish Sea. 21 new volunteers completed the training in 2020, for a combined total of 272 trained volunteers in Skagit County. Since the program was established in 2014, over 35,000 hours of volunteer time have been contributed.



**Kids on the Beach:** The Kids on the Beach (KOTB) program engages middle-school students in a variety of authentic hands-on marine science research in the classroom and on the beach. In 2020, the spring KOTB program went virtual due to the COVID-19 pandemic. The online curriculum focused primarily on the invasive mud snail *Batillaria*. A total of 580 students and 11 teachers from 8 different schools participated in the program.

## Marine Habitat Protection and Restoration

**Nearshore Restoration Monitoring:** SMRC partnered with the Northwest Straits Foundation in a coordinated effort to collect five years of post-construction monitoring data at SMRC's Bowman Bay and March's Point nearshore restoration sites with the help of trained volunteers. Nearshore monitoring parameters include forage fish spawning surveys, beach seining, intertidal monitoring, and beach wrack and large woody debris surveys. In 2020, volunteers contributed over 658 volunteer hours to nearshore monitoring and outreach.

**Bowman Bay Nearshore Restoration:** SMRC partnered with the Skagit Fisheries Enhancement Group to recruit and train volunteer stewards to help maintain the riparian vegetation at the Bowman Bay restoration site. 12 volunteers contributed over 97 hours in 2020. Overall, plant mortality has been reduced and the native plant coverage has increased. Plant maintenance will continue at this site until the native shoreline vegetation becomes well established and self sustaining.

## Marine Species Protection and Restoration

**Pinto Abalone Recovery:** The pinto abalone population is in serious decline and was recently listed as Endangered in Washington State waters in 2019. As part of an ongoing collaborative effort to recover the pinto abalone population, over 13,700 hatchery-raised juvenile abalone have been introduced to 8 different outplant sites in Skagit County since 2009. In 2020, SMRC partnered with Puget Sound Restoration Fund (PSRF) to outplant a total of approximately 3,454 abalone at 6 different sites in Skagit County (an average of 576 abalone per site). Survey data indicates that abalone are growing larger in size and density and spreading beyond the original restoration sites. Roughly 29% of the abalone surveyed were outside or the original plot boundaries.

**Olympia Oyster Restoration:** Since 2002, SMRC has been working collaboratively with PSRF and other partners to establish a sustainable native Olympia population in Fidalgo Bay. In 2020, due to COVID-19 restrictions only 2 volunteers were able to assist with oyster restoration, contributing over 42 hours. We now have over 3 million oysters (4.5 acres) in Fidalgo Bay. Monitoring has been reduced. More intensive surveys will now only occur once every 3-5 years. The next intensive survey will be in 2022.

For more information: [www.skagitmrc.org](http://www.skagitmrc.org).

Questions about Skagit County's Marine Resources Committee can be directed to Tracy Alker at: [tracya@co.skagit.wa.us](mailto:tracya@co.skagit.wa.us) or (360) 416-1462.

## Pollution Identification and Correction (PIC) Program

The mission of Skagit County's Pollution Identification and Correction (PIC) program is to protect the public from waterborne illness and other related water-quality hazards. Skagit County's PIC program has been operating since 2010 and has been successful in reducing levels of fecal coliform bacteria in the Samish Bay and Padilla Bay watersheds.

Water quality monitoring is the core of our program. Sampling sites near the mouths of streams are monitored on a regular basis. Where we find high levels of pollutants, we sample upstream to identify where the pollution is coming from. We follow up with site visits with property owners to identify the source of pollution, and work with them to correct any problems. Common sources include dog poop, leaking septic systems, and manure from livestock such as horses, cows, and pigs.

The PIC Program partners with other organizations to offer resources to property owners. Resources include low interest loans and grants for septic system repairs or replacements, free and confidential farm assessments by trained farm planners, and financial help for fencing, invasive plant removal, native plantings, and other projects.



### Clean Samish Initiative

The Clean Samish Initiative (CSI) is a partnership established in 2008 between state and local agencies, tribes, and volunteers to identify and correct sources of bacterial pollution in the Samish Bay watershed. Led by Skagit County, the CSI partners work to reduce fecal coliform bacteria levels in the watershed to meet state water quality standards and protect commercial shellfish beds from pollution.

We are continuing to make progress, and we are closer to our goal than ever. A good number of livestock pollution problems and failed septic systems were identified, and many were fixed. We also continued our collaboration with the University of Washington to look for chemicals in the water that might indicate the source of pollution.

Outreach and education is a core function of our program. Our PoopSmart campaign ([poopsmart.org](http://poopsmart.org)) has reached thousands of residents to share our messages. Though the pandemic affected our ability to attend in-person events, we continued working with local media, share messages on social media, launched an e-newsletter with more than 1,000 subscribers, and increased our direct mailings to residents. Skagit County is committed to experimenting with new methods to improve our work.

Questions about the Clean Samish Initiative or PIC Program can be directed to Karen DuBose at: [kdubose@co.skagit.wa.us](mailto:kdubose@co.skagit.wa.us) or (360) 416-1460.

# Fish Habitat Restoration Program

## Restoration:

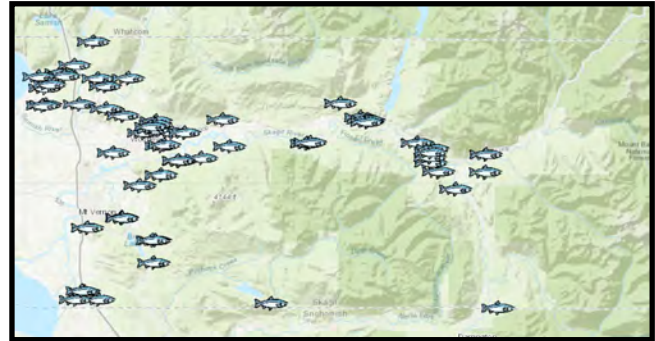
The Fish Habitat Restoration Program (FHRP) is an ongoing County program dedicated to protecting water quality and fish habitat. The Fish Habitat Program works with partners to complete projects. The goal of the County is to restore salmonid habitat and improve water quality using planned projects from the HIP and allowing flexibility to work on opportunistic projects.

Skagit County has actively partnered with Skagit Fisheries Enhancement Group, Skagit River System Cooperative, and the Upper Skagit Indian Tribe to assess culverts that are County owned for fish passage. The County identified over 100 culverts that currently block fish from migrating. This impacts their ability to feed, find cool water during the warm summer months, and to seek refuge during flood flows. Many of these culverts are also reaching the end of their functional life. The County is working on identifying those culverts that block passage and starting design. You can find a list of completed County Fish Passage projects on iMap.

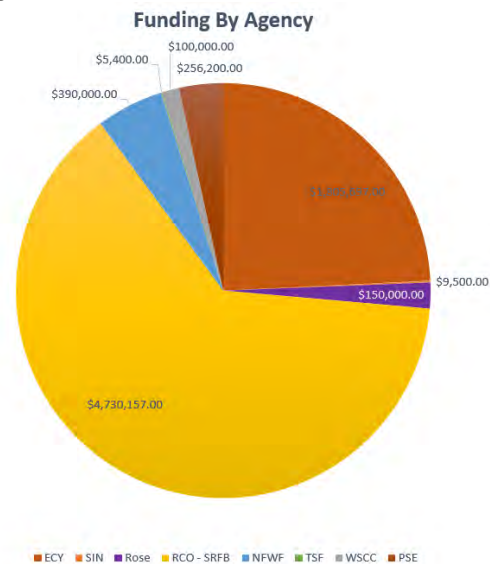
The County routinely applies for grants from various agencies including the State Recreation and Conservation Office, Salmon Recovery Funding Board, Department of Ecology, National Fish and Wildlife Foundation, and private sources. Additionally, we partner with various organizations throughout the County including local Tribes, Skagit Fisheries Enhancement Group, Skagit Land Trust, and others. Since 2007 the County has been awarded over \$7.4 million dollars to complete restoration actions. The County is using this funding to complete projects that benefit salmon, water quality, infrastructure, and general ecological health within the Skagit watershed. In 2020 the County closed-out two grants and we currently have eleven on-going projects with additional in the funding pipeline.

## Some 2020 Projects:

1. County culvert analysis and optimization
2. Design of Ovenell Slough Project
3. Construction of Maddox Creek
4. Natural Resource Stewardship Program (see additional page)



Completed culvert improvement projects within Skagit County through 2020.



Maddox Creek in a restored state.

## Feature Project: Maddox Creek

Maddox Creek was constrained within a 210-foot long culvert that was rusted, failing, and blocking all fish passage to over 1.2 miles of habitat upstream. The culvert was owned equally by the County and the City of Mount Vernon. Using a variety of funding sources the culvert was removed, wood was added to the stream, and native vegetation was planted along the banks. You can find more information at <https://www.skagitcounty.net/Departments/PublicWorksCleanWater/MaddoxCreekProject.htm>

**BE PART OF OUR CITIZEN SCIENCE!** Help us track the recovery of the site by taking pictures. Find more information at the website above.

Questions about Skagit County's Habitat Restoration Program can be directed to Emily Derenne at: [emilyd@co.skagit.wa.us](mailto:emilyd@co.skagit.wa.us) or (360) 416-1449.

# Water Quality Monitoring Program

Skagit County's Water Quality Monitoring Program (SCMP) was initiated as part of the Monitoring and Adaptive Management component of the Critical Areas for Ongoing Agriculture (SCC 14.24.120; Ag-CAO). The monitoring program began in October 2003 and now consists of 39 sites throughout western Skagit County.

Each sampling site is visited every other week (26 times per year), and staff measure parameters such as dissolved oxygen, temperature, pH, turbidity, conductivity, and salinity. Samples are also obtained for laboratory analysis of fecal coliform bacteria and E. coli (each visit), and nutrients such as nitrates and phosphates (quarterly).

The intent of the SCMP is to assess current water quality conditions and analyze for positive or negative statistical trends that may be occurring at each site. As of the end of 2020 (latest data available), positive trends outnumbered negative trends across the 17-year length of the study, although there are vastly more positive trends than negative in the last five years. Positive and negative trends occurred in both agricultural and non-agricultural locations.

**“Water quality is an important barometer of natural resource conditions”**

Several years ago, SCMP monitoring revealed fecal coliform problems in the Samish River. This finding led to the formation of the Clean Samish Initiative (CSI). Part of the CSI's effort is the Pollution Identification and Correction (PIC) program, designed to locate and remediate sources of pollution through cooperative, common-sense measures.

Water quality monitoring remains an important component of the Skagit County Public Works - Natural Resource Division's functions. Water quality is an important barometer of natural resource conditions as we seek to both protect and restore our aquatic resources.



## Statistically significant trends observed across 40 sites in Skagit County:

Last 17 years		Last 10 years		Last 5 years	
Positive	Negative	Positive	Negative	Positive	Negative
182	145	46	33	44	9

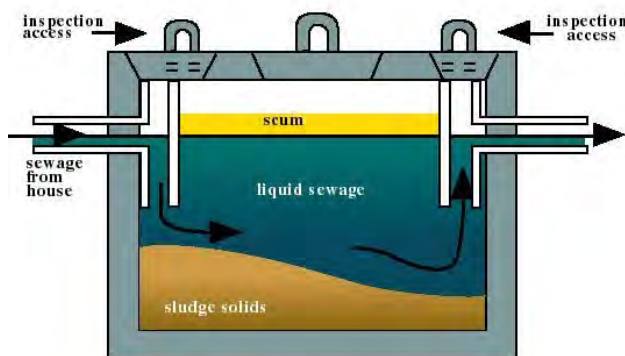
\* At each site, 18 trends were analyzed during the 17 year period, while only 6 trends were analyzed during the 10 and 5-year periods.

Questions about Skagit County's Annual Water Quality Monitoring program can be directed to Kevin Jackman at [kevinj@co.skagit.wa.us](mailto:kevinj@co.skagit.wa.us) or (360) 416-1443.

# On-site Septic Systems – Skagit County Public Health

## On-site Sewage (Septic) Systems Inspections

Skagit County Public Health (SCPH) ensures that on-site sewage systems are designed, installed and maintained so that discharged effluent does not contaminate ground or surface water. The CWP funds the operations and maintenance (O/M) program. Like cars, septic systems need to have regular check-ups and maintenance to make sure they work as designed. Maintenance specialists certified by our department check all parts of a septic system, which can include tanks, filters, pumps, control panels, and drain fields.



A Typical Septic System Design

## Inspections and Repairs

Septic systems are required to have periodic inspections by a SCPH-certified O/M specialist. All septic systems must be inspected annually, except conventional gravity systems (tank and drainfield only), which may be inspected every three years.

Our inspection efforts this year are focused on properties that are most delinquent in meeting the inspection requirement. Septic systems on shorelines pose a greater threat of contamination to surface waters.

A septic system owner whose property is not on a shoreline and whose system is a conventional gravity system may be eligible to do their own inspection after appropriate education and oversight by SCPH.

Failures and deficiencies are reported by certified O/M providers at the time of inspection or by homeowners who experience problems with their septic systems. SCPH staff offer technical assistance and financial recommendations as needed with property owners to assure that failures and deficiencies are addressed as quickly as possible.

## Quality Assurance

Public Health increased emphasis on the quality assurance program for our certified O/M specialists. Our goal is to conduct joint inspections with each certified O/M provider to assure that inspections are thorough, consistent and that the submitted inspection information is complete. Annual certification may be denied if repeat deficiencies are observed. If anyone has concerns about an inspection or O/M provider, the Health Department should be notified. Public Health tracks and follow up on any complaints received from property owners about inspectors or the quality of their work.

## Septics Education

Septics 101 training is a free, online tool to help educate homeowners about proper care of their septic systems. There is also a Septics 201 class available online. After completing these trainings, homeowners with gravity septic systems may perform their own inspections.

## Low-Income Inspection Assistance

SCPH can assist with the cost of inspection for eligible low-income residents.



Questions about Skagit County Health Department can be directed to [EH@co.skagit.wa.us](mailto:EH@co.skagit.wa.us) or (360) 416-1500.



# Natural Resource Stewardship Program (NRSP)

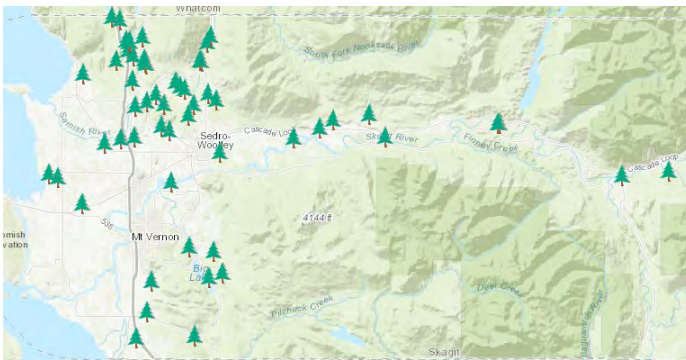
Skagit County has offered the Skagit County Natural Resource Stewardship Program (NRSP) since 2009. By enrolling in the program, landowners can enhance their property at ***no cost***. Projects must be next to a stream, waterbody, or ditch, and can include work with the intent of protecting the property from bank erosion, removal of invasive vegetation, replanting with native vegetation, or the simple desire to enhance their property for the improvement of water quality or fish habitat. NRSP is currently focusing on the Samish, Padilla, and Nookachamps watersheds, but does have funding for County-wide projects. See testimonies from participants at [www.skagitcounty.net/nrsp/](http://www.skagitcounty.net/nrsp/)

Since 2009, Skagit County has worked with more than **78 landowners** or community groups on **66 projects**. They have included removal of invasive plants and planting native vegetation, installation of livestock exclusion fencing and livestock crossings for safe passage, and the installation of logs to provide bank stabilization while benefitting fish habitat and water quality. County residents have restored more than **137 acres** of land including planting over **54,000 native plants** along more than **12 miles of stream**. NRSP has installed **6 livestock crossings**, **over 6 miles of fencing**, and **278 pieces of large woody debris** used for bank stability and improved salmon habitat. Projects have ranged from 0.1 acres to more than 8 acres. **No project is too small or too large for NRSP.**

## **PROJECTS CAN INCLUDE:**

### **Restoring Riparian Areas**

Removing invasive plants or converting grassy yards and planting native plants can help stabilize stream banks, shade the stream, reduce pollution, provide a food source for invertebrates in the stream that are eaten by juvenile salmonids, and beautify local properties. Staff work with the landowner to select native plants. The County provides maintenance for three years to help ensure a successful replanting. Native plants are better at dealing with our weather patterns, so they require less maintenance!



***NRSP Projects Completed Throughout Skagit County***

### **Bank Stabilizing and Restoring Fish Habitats**

Many streams in our area have failing and eroding banks caused by natural stream migration, and often exacerbated by removal of riparian vegetation and loss of deep root strength from native plants. Changes upstream can also impact residents downstream, leading to erosion where there hadn't been any in recent history. Unrestricted bank erosion increases fine sediment in the system, which is bad for water quality, salmon, and property loss.



***Bank Stabilization Project Completed Through NRSP***

### **Livestock Exclusion**

Livestock negatively impact streams when their access to waterways is unrestricted. NRSP will install a variety of fencing types. NRSP staff works with landowners to ensure their needs are met and their animals are contained in an effective and safe manner. NRSP is also able to install livestock crossings to reduce bank erosion and limit direct access to the water. Impacts from unfenced areas can include:

- ◆ Reduced vegetation along stream banks
- ◆ Compacted soil and increased runoff
- ◆ Increased erosion resulting in property loss and poor salmon spawning gravel
- ◆ Manure-contaminated runoff resulting in high fecal coliform counts downstream and ultimately, shellfish bed closures.

**For more information, contact Emily Derenne at [emilyjd@co.skagit.wa.us](mailto:emilyjd@co.skagit.wa.us) or (360)416-1449.**

# Skagit County Lake Management Districts (LMDs)

Lake Management Districts are self-taxing special assessment districts that are formed by lake communities who vote to charge themselves a special assessment to finance lake management activities. Skagit County includes four lake management districts, which are generally formed for a ten-year period. Skagit County's LMDs include the Big Lake District, Lake Campbell and Lake Erie District, the Clear and Beaver Lake District, and the Lake McMurray District. Skagit County provides technical and administrative assistance to the LMDs for the control of noxious and nuisance aquatic weeds. Each LMD has an Advisory Committee of lakefront property owners to provide input to the County on management decisions within the context of the LMD charter. Each LMD has an integrated Aquatic Plant Management Plan that is followed by Skagit County Staff, which examines alternatives and costs for managing aquatic plant growth while maintaining a healthy ecological balance using the most affordable and effective solutions.

## LMD 1: Big Lake District

The LMD 1 aquatic weed control program was first established over 22 years ago. Northwest Aquatic Eco-Systems provided weed control services for Big Lake in 2020. Limiting boating activity for better plant control is recommended. Targeted noxious species include Eurasian watermilfoil (Milfoil), Brazilian elodea, fragrant white water lily and yellow flag iris. Milfoil has been greatly reduced to just a few small patches along the southwest shoreline. A small patch of Brazilian elodea was also recently found at the south end of the lake. Native plant growth has become more problematic than noxious weeds and is now targeted for some control. Post-treatment survey results show the overall plant growth in 2020 was reduced from the previous year.



*H-200 aquatic weed harvester used on Lake McMurray to control white water lily.*

## LMD 2: Lake McMurray District

The LMD 2 aquatic weed control program has been in place for over 21 years. Eurasian Milfoil was successfully eradicated from the lake in 1999. Now the primary noxious weed problems are white water lily and yellow flag iris. In 2020, AquaTechnex used a two-pronged approach to control the lilies in Lake McMurray. A weed harvester was deployed to cut and remove the noxious lilies within the McHaven Resort's 1/4 mile potable water intake buffer zone. And herbicides were used to control the lilies outside the buffer zone. Water was tested for herbicide residue.

## LMD 3: Lake Campbell and Lake Erie District

The LMD 3 aquatic weed control program has been in place for over 19 years. In 2020, Northwest Aquatic Eco-Systems was contracted to provide aquatic weed control services for Lakes Erie and Campbell. In Lake Campbell, there was an unusually heavy amount of Milfoil growth with matts visible at the surface lake-wide. The herbicide treatments appeared to be successful because no Milfoil was observed in Lake Campbell during the post-treatment survey in the fall. Lake Erie was dominated by native weed growth lake-wide, similar to years past. The excessive growth of native aquatic plants has proven problematic for many lake users. In addition, a resurgence of Milfoil was observed in the northwest corner of the lake. 15 acres of native weed control was performed along residential shorelines and one acre of Milfoil was treated. Unfortunately, the post-treatment survey showed an expansion of Milfoil growth along the southeastern area of the Lake Erie.

## LMD 4: Clear Lake and Beaver Lake District

2020 marked the 13th year of providing aquatic weed control services for Clear and Beaver Lakes. Northwest Aquatic Eco-Systems was contracted to do the work in 2020. Milfoil and fragrant white water lilies are the primary targets for control in Clear Lake. There are now only a few small patches of Milfoil located along the northwest shoreline. Noxious lilies have also been greatly reduced. In recent years, native pondweeds have become more problematic in Clear Lake than Milfoil and are now targeted for control in some areas. The post-treatment surveys in 2020 noted only three Milfoil plants along the northeast shoreline. Native plant densities and lily growth also appeared to be reduced. In Beaver Lake, there were only a few small patches of Milfoil along the northeast shoreline that were targeted for treatments in 2020. Unfortunately, during the post-treatment survey there was an ongoing algal bloom that prevented an accurate account of the control efforts.

Questions about Skagit County's Lake Management Districts can be directed to Tracy Alker at [tracya@co.skagit.wa.us](mailto:tracya@co.skagit.wa.us) or (360) 416-1462

# Drainage Utility

Skagit County's Drainage Utility started in 1997 to address drainage concerns within unincorporated Skagit County. Drainage concerns in the County are innumerable, and often fall within the categories of ditch maintenance/grading, culvert maintenance, lack of infrastructure, failing infrastructure, inadequate conveyance, and sedimentation. The source of a drainage issue is often from surface water or runoff that has traveled from other parts of the County. Drainage issues in the County are interrelated and ongoing, resulting in Drainage Utility (DU) personnel examining concerns on a watershed scale.

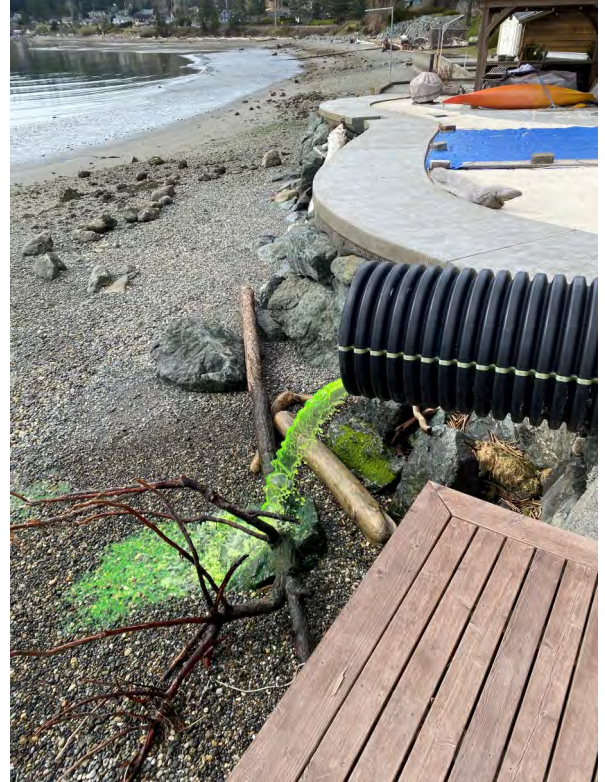


**2020 DU project to reestablish historical drainage flow path in Sedro-Woolley.**

In 2019, on Hoehn Road in Sedro-Woolley, a landowner called for assistance with ponding on their property. The excessive ponding had flooded their septic system and rendering it unusable. The Drainage Utility personnel investigated the issue and determined that the historical drainage flow path had filled with sediment over time, which resulted in the increased ponding.

In 2020, the DU worked with the landowner and neighboring parcels to re-establish the grade to help move the water along and reduce the chance of ponding in the future.

## How do you locate underground leaks or drainage system failures?



**Fidalgo Island; water tracing agent to find leaks in DU systems.**

On Fidalgo Island, the DU had a concern that a drainage system had failed and was spilling water. Failed drainage systems spill water in the surrounding area, eroding the sediment nearby. It was also possible that the eroding sediment was caused by an underground spring, for which Fidalgo Island has numerous. To determine whether the sediment erosion was from the drainage system or the underground springs, DU personnel added a tracing agent to the water. The environmentally safe and biodegradable water tracing agent turns bright green when added to water. This allows the DU to spot any leaks from the system, in this case it was a failing culvert. Repairs to the system will take place in 2021.

**For more information about the Skagit County Drainage Utility, contact Kara Symonds at [karas@co.skagit.wa.us](mailto:karas@co.skagit.wa.us) or by phone at (360) 416-1447.**

# Stormwater Management Program

The Federal Clean Water Act (CWA), through the National Pollutant Discharge Elimination System (NPDES) permit program, regulates runoff from rainfall and snowmelt.

Since January 1, 2007, Skagit County has held a Western Washington Phase II Municipal Stormwater Permit. This permit is developed and administered by Washington State Department of Ecology (ECY) and requires local governments to manage and control stormwater runoff in order to prevent pollution from entering downstream waters.

To carry out permit requirements, local governments had to create a Stormwater Management Program (SWMP). The purpose of the SWMP is to manage the elements of the permit in order to protect water quality and stay in compliance with the NPDES program. Examples of actions taken by Skagit County's SWMP include things like outreach and education at public events and at local schools, establishing Low Impact Development (LID) as the preferred and commonly-used approach to site development, and using good housekeeping practices for all Skagit County owned and operated sites and relevant activities to eliminate polluted runoff from harming our natural resources.



*Skagit County staff taking water samples on Big Lake*

## Unmanaged runoff from rain can:

- Contribute to flooding and drought.
- Have economic impacts to fisheries, shellfish beds, tourism, and recreation related businesses.
- Have economic impacts to private and public property caused by flooding.
- Damage salmon habitat.
- Contaminate swimming areas.
- Cause excessive erosion of streambanks, which can affect property and water quality.
- Pollute shellfish beds.
- Contaminate the groundwater you drink.
- Degrade water quality.



*Illustration of stormwater runoff*

Stormwater runoff from impervious surfaces is the biggest source of pollution for both fresh and marine water systems in the region. Much of the work required by the permit seeks to eliminate this type of pollution through a set of components that guide the SWMP's efforts.

The components listed below help the SWMP to educate both the people of our community and Skagit County staff about what we can do to prevent runoff pollution from degrading our natural waters and the precious, valuable resources those waters support. The components are as follows:

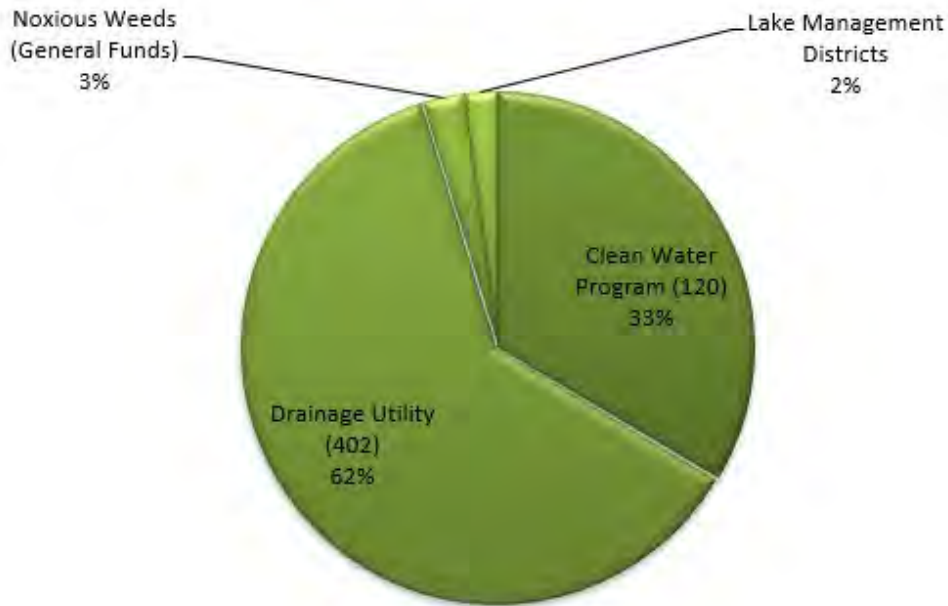
- Stormwater Planning
- Public Education and Outreach
- Public Involvement and Participation
- MS4 Mapping and Documentation
- Illicit Discharge Detection and Elimination
- Controlling Runoff from New Development, Redevelopment, and Construction Sites
- Source Control Program for Existing Development

**For more information about the Stormwater Management Program, contact Jason Quigley at [jasonq@co.skagit.wa.us](mailto:jasonq@co.skagit.wa.us) or by phone at (360) 416-1400.**

# Skagit County Department of Natural Resources Budget Summary

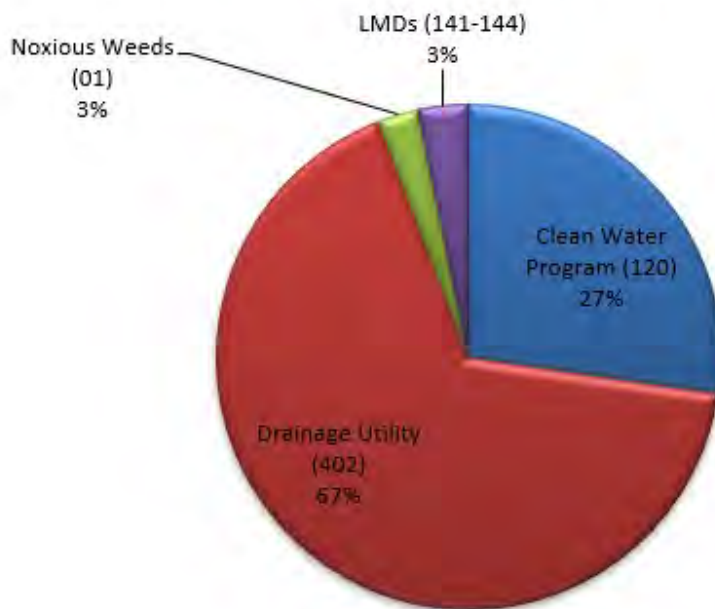
## 2020 Budgeted Revenue

Total Revenue= \$5,840,123



## 2020 Budgeted Expenses

Total Expenses= \$5,914,930





## Where to Find Us:

### Skagit County Public Works

1800 Continental Place  
Mount Vernon, WA 98273  
Phone: 360-416-1400  
E-mail: [pw@co.skagit.wa.us](mailto:pw@co.skagit.wa.us)  
[www.skagitcounty.net/CleanWater](http://www.skagitcounty.net/CleanWater)

Find us on 

[@SkagitCountyCleanWater](https://www.facebook.com/SkagitCountyCleanWater)

 **YouTube**

<https://bit.ly/SkagitYouTube>



[twitter.com/SkagitGov](https://twitter.com/SkagitGov)