

Dedicated to Restoring Salmon for Future Generations

# Fixing Passage Barriers in Carey's Creek

It has been almost exactly 2 years since Skagit Fisheries Enhancement Group (SFEG) staff were last hip deep in Carey's Creek, a clear, cold, stream located in Hamilton Washington. We found ourselves back again on August 30th 2022 for yet another successful construction project and fish rescue/relocation.

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Carey's Creek connects Carey's Lake, Carey's Slough and the Skagit River and is teeming with native salmonids and other native fish, mollusks, crustaceans, and amphibians. Over the past century humans have done quite a **By ERIN MATTHEWS - Habitat Restoration Coordinator** 

bit of damage to this habitat, including building at least 19 road crossings, several of which blocked adult and juvenile salmon and trout from utilizing parts of this watershed for decades. SFEG, the Washington Department of Transportation, The City of Hamilton, Skagit County Public Works, Forterra (a Seattle based non-profit), Puget Sound Energy (PSE), the US Fish and Wildlife Service (USFWS), the Salmon Funding Recovery Board (SRFB), and local tribes have all been working in Hamilton to improve these undersized culverts and enhance the aquatic habitat here.

Not only do these projects allow fish to access the high-quality habitats in this system, they also put local contractors to work, and restore natural water flow regimes by allowing water to drain into the Skagit River instead of being held up upstream of inadequate pipes. This August, with the support of a willing private landowner and funding from PSE, Skagit Fisheries Enhancement Group staff oversaw the complete removal of a problem culvert and restoration of the stream channel. Locals who utilize the Rails to Trails trail in Hamilton may be familiar with this crossing. From the public trail, locals can stand on the public bridge and look north to see the undersized pipes. Those familiar with this creek know that these culverts are often plugged by beaver dams or debris. In the summer, schools of salmon can often be observed swimming just downstream of this crossing.

#### **CONTINUED ON PAGE 3**

An SFEG technician uses a photarium to identify a healthy juvenile coho salmon during a construction native organism rescue

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An excavator places sand dam blocks (foreground) while the SFEG fish rescue crew identifies and releases rescued fish (background)



**REDD:** A female salmon uses her tail to dig a nest in the gravel. After she deposits *her eggs the male fertilizes them. The female then covers the fertilized eggs* and the resulting nest is called a redd.

#### MISSION

Our mission is to educate and engage the community in habitat restoration and watershed stewardship to enhance wild salmonids.

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# From the Director

#### **By ALISON STUDLEY - Executive Director**

It's a wonderful thing to have interns working among us again here at Skagit Fisheries! Usually, we are fortunate to have several interns helping us with monitoring, planting, and education programs at any given time of the year. Back in March of 2020, we were sad to tell interns that their internships had suddenly ended due to the pandemic and colleges closing. However, interns are back in full swing again this year. Since this spring we have had 8 interns with us increasing our ability to get great work done.

Four student interns were with us this spring and summer primarily assisting with vegetation monitoring and plant care at our native plant nursery. These four interns collectively gathered data at 26 planting sites to determine the success of our riparian planting efforts and gather data about how well different techniques worked. We also had a fifth intern working with us on a GIS project this summer, using his newly learned skills to help develop projects for salmon.

This fall, we are thrilled to have 3 more student interns with us. Two (Tori and Kaitlyn) are specifically helping with school education programs. They are visiting schools, providing lessons to students and most importantly leading field activities by local creeks teaching kids about salmon and watershed stewardship. Later they will be helping students fill giant aquariums at their schools with salmon eggs and teaching them about the incredible salmon life cycle. This is such a wonderful program to help students learn about salmon, water quality, and watershed health. And it's an even better program to also get to have the opportunity to provide young adults the opportunity to gain valuable

experience to further their own careers in science and education.

This fall, we also welcome Chaney as a spawner survey intern. This internship involves going out each week to conduct spawner surveys with our staff and assist our staff with data entry and reporting. Of course the most fun part is going in the field and learning to identify redds and the different salmon species. Spawner survey data is shared with state and tribal co-managers to document numbers of salmon returning and help inform future escapement goals.

Interns serve an incredible valuable purpose here at Skagit Fisheries, not only for the work they are doing for us, but for the knowledge they can share with us as well. We love having young adults passionate about conservation and the environment working with us and sharing their enthusiasm for learning with us.

This year, we made a commitment to raise funds so that we can offer paid internships. We realize that offering free internships provides valuable experiences for interns, however, there are many young people who couldn't afford to take a free internship. In order to make our internships available to all, the board of directors initiated a fundraising campaign to build an Internship Fund to enable us to provide paid internships so that individuals will not need to choose between a paid job or pursuing an internship that may further their career in conservation.

We look forward to this initiative expanding the number of internships we can offer to local students and expanding the diversity of young people who can apply.

## Fixing Passage Barriers

**CONTINUED FROM PAGE 1** 

Our construction projects always occur during the time of year when they are the least impactful to salmonids, however Carey's Creek is a productive nursery habitat for many species of native fish all year round! That is why our crew was out in late August with nets and buckets, safely relocating the fishes, amphibians, and invertebrates from the construction area to a safe downstream area. We identified many healthy coho salmon, minnows, lamprey, crayfish, freshwater mussels and more! The project was completed in less than one week.

Before this restoration project these two side by side culverts were less than 8 feet across. They often collected debris and became plugged. This prevented salmon passage, disrupted normal water flows, and caused sediment to collect at this site. Now the new channel is nearly 50 ft wide. Even the tiniest freshly hatched salmonid can reach the 3.8 miles of upstream salmon habitat including 4.5 acres freshwater emergent wetland, 27 acres freshwater forest/shrub wetland, and 7 acres of pond habitat.



An SFEG staff member holds a live freshwater mussel before moving it out of the restoration construction area





Erica and Meredith walking on an overgrown trail at the Gilligan site









07/30/2022 06:28AM CAMERA 1

# Wildlife at Conservation Areas

#### **By BENGT MILLER - Stewardship Coordinator**

While the mission of the Skagit Fisheries Enhancement Group is to restore wild salmon populations for future generations, that does not happen in a vacuum. One of the overarching principles of ecology is the interconnectedness of everything. If one chooses to scale this up it can easily become overwhelming. Instead of spiraling out of control I prefer to do the mental gymnastics required to get to a place where I can simplify it by saying 'What is good for salmon is good for everything else.' This was most recently demonstrated to me when I looked at the pictures I had downloaded from a game camera installed at a conservation property owned by Seattle City Light. SFEG has been doing

restoration work at this particular site for about a decade. The large field that was once the main feature of the property is now dappled with mid-size native trees planted by volunteers and school groups. This planting was ostensibly done for the purpose of salmon habitat restoration but as the following photographs demonstrate myriad other species have also benefited. The game camera also showed people using their public lands for a variety of purposes. When done responsibly human use does not exclude wildlife use: we are part of the interconnectedness. Again, what's good for the salmon is good for the whole; it's a pacific northwest mantra.

# Fish and Farms in Skagit County a Personal History

**By RICK HALEY - SFEG Board Member** 

I joined Skagit County Public Works as the Water Quality Analyst in July, 2002 after spending the first half of my career in stream ecology and environmental toxicology. At that time the County was right in the middle of what some thought of as the Fish vs Farms battles. The battlefield was the County's attempt to enact a Critical Areas Ordinance for agricultural areas, and the battle lines were drawn around compliance with the Growth Management Act.

Each public meeting on the subject brought out passionate advocates for what some viewed as diametrically opposed stances: Ensuring protection for our dwindling salmon populations, or protection of farming as a viable economic activity. Hard feelings and strong words were common. Any activity to protect riparian areas was seen by some as the death knell for agriculture in the Skagit Valley, while any compromise to ensure agricultural viability was cast

as putting Skagit salmon on the fast track to extinction. There were plenty of unreasonable proposals from all sides of the issue. State, Tribal, and Federal entities (Ecology, EPA, Department of Agriculture, Department of Fisheries and Wildlife, Upper Skagit and Swinomish Tribes, and



Fence showing riparian restoration on left, pasture on right

others) got involved as the issue gained state and regional attention. Local special interest groups such as the Friends of Skagit County and the Skagit County Cattlemen were also active participants in the process.

At the County we were caught right in the middle. We had a statutory requirement to comply with the Growth Management Act (GMA) and provide protection to salmon-bearing streams, but a compelling need to maintain Skagit County's status as the leading agricultural area of western Washington. Plus the GMA also required preservation of agricultural lands. The County had previously tried a couple of approaches, including ignoring the GMA requirements or requiring stream buffers in ag areas that were smaller than those required on non-agricultural lands but were to be managed to provide enhanced functionality. The first approach resulted in lawsuits from fish advocates, the latter approach drew fire from all sides

as either an unconstitutional imposition on farmland or as not sufficient enough for fish protection. There were frequent letters to the editor in the Skagit Valley Herald castigating County staff (including me) for not catering to one side or the other.

County staff, including me, a rookie to local government proceedings, were tasked with coming up with a Critical Areas for Agriculture ordinance that met both of these seemingly competing goals: protection of farmland and protection of fish. We had innumerable staff meetings with County and outside counsel, including every Friday morning which we took to calling "The Breakfast Club." Even in internal meetings there was sometimes tension as we wrestled with the twin obligations to protect farms and fish.

It was at this time that I became aware of the Skagit Fisheries Enhancement Group. SFEG staff and directors stayed out of the GMA fray and went about their business of seeking cooperative solutions to fish habitat issues. While the County and advocates for fish and/or farms worked through the seemingly endless political and legal processes, SFEG just got things done on the ground. SFEG's status as a non-regulatory organization opened doors that might have been closed to government programs.

The County eventually enacted Critical Areas regulations that required agricultural landowners to "do no harm," to protect existing riparian habitat, and to follow a set of "watercourse protection measures" that had to do with keeping pollutants out of the streams among other goals. Since these were seen by the state as "less than fully protective" measures, the County committed to monitoring fish habitat and water quality on an ongoing basis. The water quality monitoring became my focus, but the issue didn't die there as no one was happy with that result, for the same reasons as before: these regulations were seen as either not protective enough for the salmon habitat or too much of an

Riparian and instream habitat restoration along farmland in the Samish watershed

imposition on the landowners. The inevitable continuing litigation put the County in legal limbo, and it was at this point that the State tasked the Ruckelshaus Center (a joint venture of the University of Washington and Washington State University) to find statewide solutions to the farms and fish issues. The result of that process was the Voluntary Stewardship Program, which asked counties to achieve compliance with Growth Management Act goals through incentivized voluntary activities and habitat restoration programs. This approach is still in progress and it remains to be seen if this will result in meaningful fish restoration and protection of agricultural lands. One positive result of the Ruckelshaus Center/VSP process has been the lowering of the temperature of the debate in the Skagit Valley. Fish and farm advocates still have differing views on the issues but the level of vitriol is seemingly reduced.

the Skagit Valley.



In the meantime, Skagit Fisheries continues its own voluntary stewardship. SFEG programs demonstrate that it doesn't have to be "fish or farms." Purely voluntary restoration activities may not restore all the habitat that's needed to recover salmon populations, but SFEG programs are playing a leading role in fish restoration in

# **PRESSENTIN PARK** Salmon Sightings

**SATURDAY DECEMBER 3 NOON-3PM** 

# GI₩ING TUESDAY **NOVEMBER 29**

(See page 7 for details)

Americorps member Olivia Hubert catching salmon from tank at **Childrens Museum** 

Connor, Charlotte, Erica, and Meredith on their last day at the nursery all together

# A Few Mosquito Bites Later: Looking Back on a Summer Internship with SFEG

Hi everyone! My name is Connor and this summer I had the most amazing opportunity to be an intern with Skagit Fisheries. I am currently a senior at Western Washington University in the College of the Environment studying freshwater

and terrestrial ecology. Being from Arizona, I was not the person to ask about native Washington plants before I was an intern at SFEG. I was only familiar with one type of tree: ponderosa pine. Now I am familiar with most of the conifers and deciduous trees and some shrubs native in the Pacific Northwest. I was exposed to these plants the second I started on my first day at the nursery. My fellow intern and I were put to work inventorying the entire nursery. We counted thousands of plants that day! I spent countless hours at the SFEG native plant nursery this summer watering plants, moving plants into beds, discarding dead plants, weeding, making willow

**By CONNOR GARROD - Former Intern** 

stakes, and sitting in the cool shade of the alder trees as a break from the 90-degree weather that accompanied it all. Monitoring was one of the

most fun parts of the internship (depending on the site we were sent to that day). If you asked me how I liked monitoring after a day spent monitoring at Granstrom, Hamilton, or Lower Day

Slough, I would tell you it was my

favorite part of the internship. We got to spend 8 hours

outside surrounded by the most beautiful scenery of the Skagit Valley identifying trees such as Douglas fir, Grand fir, Sitka spruce (ouch), Bigleaf maple, and Western hemlock. Sometimes we spent as much as 30 minutes trying to identify one plant that wasn't very common at the sites. Normally that plant came out to be Douglas Hawthorn. If you asked me how I liked monitoring after a day spent monitoring at Gilligan or Anderson, I would say I would have rather gone to the nursery. I'm glad I'm learning early in my days as a scientist that field work isn't

Sincerely. **CONNOR GARROD** 

insight.

always partly cloudy skies or a walk in

the park. Sometimes those days include a field work person's greatest enemies:

mosquitoes, blackberry, stinging nettle,

mosquitoes? No amount of bug spray could

have prepared me for those days. As much

as those days were hard, I wouldn't trade

Three times this summer I had the

in fish seining projects at Cedar Grove

and South Fork. I would consider myself

more of a "plant gal", but my first project

with fish was a blast. We saved thousands

even caught some amphibians, both native

upon thousands of sticklebacks, as well

as some coho and chinook salmon. We

and invasive. I knew before moving to

of the ecological history, so getting to

Washington that salmon are a huge part

work with them firsthand was such a great

I am so grateful to the SFEG staff for

environmental science field. I received valuable advice for life after college that I

the opportunity to learn and grow in the

will hold near and dear as I finish my last

year and venture out into the "real world".

interns and thank you for all the amazing

Thank you for letting me be one of your

work you all continue to do, SFEG!

pleasure of working alongside SFEG staff

thunderstorms, and did I mention

the experience for anything.



## **NOVEMBER 29, 2022**

Scan the QR code above to explore options, visit www.skagitfisheries.org/ways-to-give or call the office at 360-336-0172



#### **BECOME A MEMBER**

Members make salmon recovery possible. Help ensure successful salmon restoration efforts continue by becoming a member today.

DONATE Show your commitment to the future stewardship of our local watersheds by making a donation today. Consider a recurring donation!



#### **STOCK / IRA GIFTS** Make your gift an investment in the future of Salmon.



#### **DONATE A USED CAR** Vehicle pickup and transportation are free. Fill out the form and we do the rest.



# Interns and AmeriCorps are vital to Skagit Fisheries

These young adults are passionate about serving their communities and making a difference for the future of salmon. Funds are needed to increase the number of opportunities and the diversity of individuals who participate. Unpaid internships can only attract those who can afford unpaid positions. With your help, we can create more opportunities for ALL those interested.

### Donate now to support future conservation leaders. GIWING TUESDAY



www.skagitfisheries.org/ways-to-give





We recruit and train volunteers to achieve our goal of increased public awareness for salmon habitat restoration. All volunteer projects are based on learning through hands-on activities.



#### LEGACY GIVING Make a lasting impact on

the future of Salmon.



#### **AMAZON SMILE /** FREDMEYER

Shop through Amazon Smiles and FredMeyer Community Rewards.



#### **PLAN A FACEBOOK FUNDRAISER**

Organize a Facebook Birthday Fundraiser in support of Skagit Fisheries.

*Skagit Fisheries Enhancement Group* is a 501(c)3 nonprofit organization. All contributions are tax deductible to the extent that the law allows. Tax ID#: 94-3165939





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## **Events and Volunteer Opportunities**

#### Salmon Sightings

#### **December 3** Pressentin Park All events Noon-3pm

Join us at various locations around the Skagit and Samish Watersheds in hopes of seeing spawning salmon! Experts will be on hand to talk about salmon habitat and local restoration efforts. More info at www. skagitfisheries.org. **Parking at some of these sites is ex-stream-ly limited, so please carpool!** 

## Fall Planting Party

#### November 12 (Saturdays) 10am-1pm

Help restore native riparian plants in the Skagit Watershed! **Registration is helpful!** More info and sign up at www.skagitfisheries.org. Limited parking will be available, so please carpool!

