



Annual Report 2020



Mission

To promote the understanding, appreciation, and conservation of the Nisqually estuary through education, interpretation, and community science

About Us

For almost forty years, visitors to Nisqually Reach Nature Center (NRNC) have gazed out across one of the Pacific Northwest's most remarkable ecosystems. The Nisqually Reach is a tidal world filled with richness, diversity, and mystery. While more than 80% of Puget Sound's estuarine habitat has been severely degraded, songbirds, shorebirds, waterfowl, raptors, otter, beaver, frogs, shellfish, salmon, and many other species continue to inhabit the tidelands, islands, marshes and forests of the Nisqually Reach. This tidal world, where glacier-fed waters from Mount Rainier meet the saltwater inlets of Puget Sound, is home to NRNC.

NRNC's educational programs and activities inspire students and community members of all ages to care about the natural world. NRNC programs stimulate discussion and help all of us appreciate the majesty and importance of the earth's natural systems and the actions we can take to sustain them.

Values

As NRNC grows and evolves, a commitment to core values becomes increasingly important. As new generations of volunteers, staff, board members and students become involved in NRNC operations and programs, that set of core values will provide guidance and ensure the organization remains true to the ideals for which it was founded.

- Conducts its operations and programs with integrity and transparency;
- Collaborates with partners and stakeholders to maximize efficiency and support opportunities that best achieve mutual goals;
- Recognizes that all contributions (financial, expertise and time) are conveyed with implicit trust and an expectation that all gifts will be used efficiently and in a manner consistent with the organization's mission and vision;
- Provides innovative, educational programs delivered by competent, dedicated educators;
- Encourages enjoyment of the natural world through exploration, discovery and fun;
- Encourages conservation of the natural world through stewardship, restoration, and protection of southern Puget Sound habitats.



NRNC Staff & Board of Directors



Daniel Hull
Executive Director



April Roe
Education Director



Terence Lee
Science Director



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President, Board



Brian Scott
Vice President, Board



Jessica York
Treasurer, Board



Suzie Scott
Secretary, Board



Daniel Krenz
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Board Member



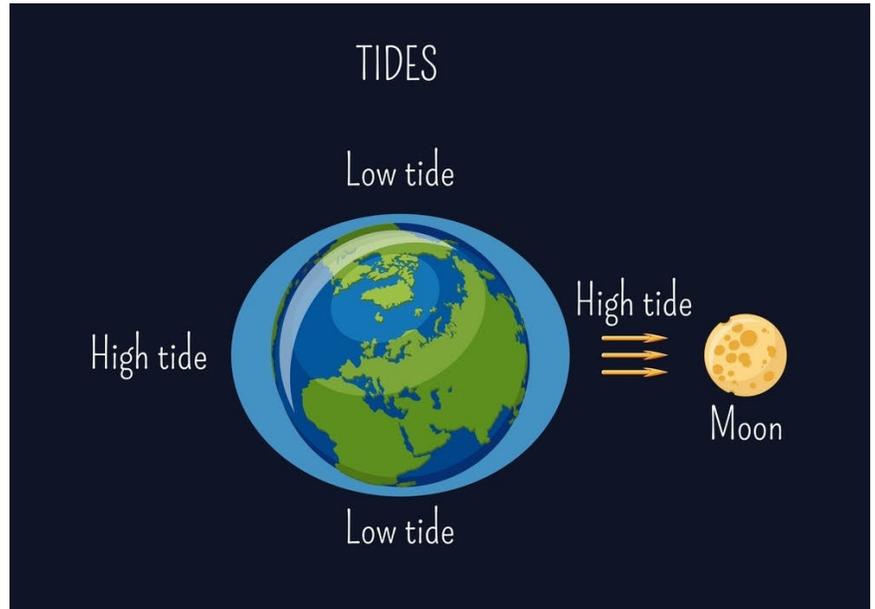
Derek Faust
Board Member

Education Programs

CLAMSS Curriculum

In partnership with Nisqually River Education Project, South Sound GREEN, Pacific Shellfish Institute, and National Fish & Oyster Company, we typically host hundreds of students on nearshore field trips each spring. These Climate Literacy Action and Monitoring in South Sound (CLAMSS) field trips serve to educate youth about how climate change and ocean acidification are impacting the Nisqually Watershed and Puget Sound while empowering them to make positive changes. Due to the emerging COVID-19 pandemic, we worked with partners to create an online course for students to virtually complete the field trip.

NRNC created two modules which led students through a fish seine and crab survey. We worked with a skilled volunteer to create videos showing how each activity is completed. In lieu of in-person trips, we took photos of the organisms we captured and created an online ID guide to help students determine what organisms were found during the surveys.



Family Field Trips

The Family Field Trips was created by our Education Director, April Roe, to get families outside and experiencing meaningful moments on the beach while working with our core science programs.

We launched Family Field Trips in June after state restrictions were lifted, which prohibited an earlier launch of this program. NRNC staff created six kits which were free for individual family use on Luhr Beach during low tides. These kits walked families through shore crab and benthic surveys. After each kit was returned, NRNC staff cleaned and disinfected each kit before lending it out to the next family.

This program had an overwhelmingly positive community reception. NRNC extended the time this program was running from one month to three months because of high public participation. These field trips introduced many new families to NRNC and many indicated they would like to stay involved and learn about our other educational offerings. This program reached 91 families and the kits are still in action today.



Education Programs

Treasure the Adventure Hunt

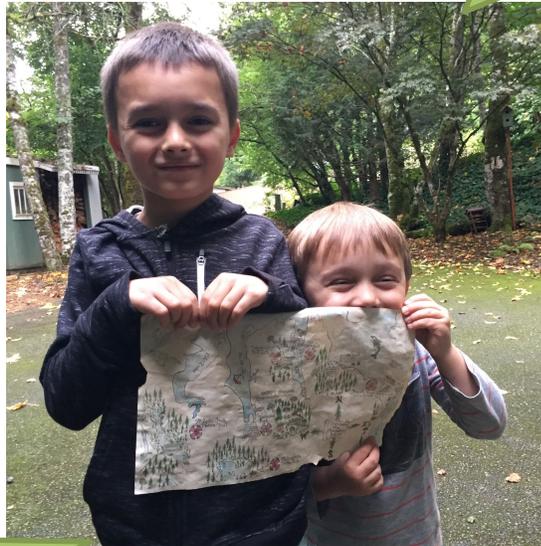
Many families who participated in our Family Field Trip program and those scheduled to attend our cancelled summer camps expressed frustration at finding appropriate activities to do with their stir-crazy children during the pandemic. Our Education Director created Treasure the Adventure Hunt to help families explore their public lands and learn unique facts about each park, while uncovering clues and following a treasure map.

This new program took the 52 families who participated to six different public land locations throughout Thurston County. Each youth participant received an activity book with a different environmentally focused activity for each location. Staff provided all information and directions, and highlighted other activities offered at each location (i.e. swimming, fishing, bird watching, etc.). The program ran from mid-August through early October, and after receiving high public interest, it is now being expanded in partnership with Thurston County Stream Team – The new program, *Nature Sleuths*, will launch April 1, 2021.



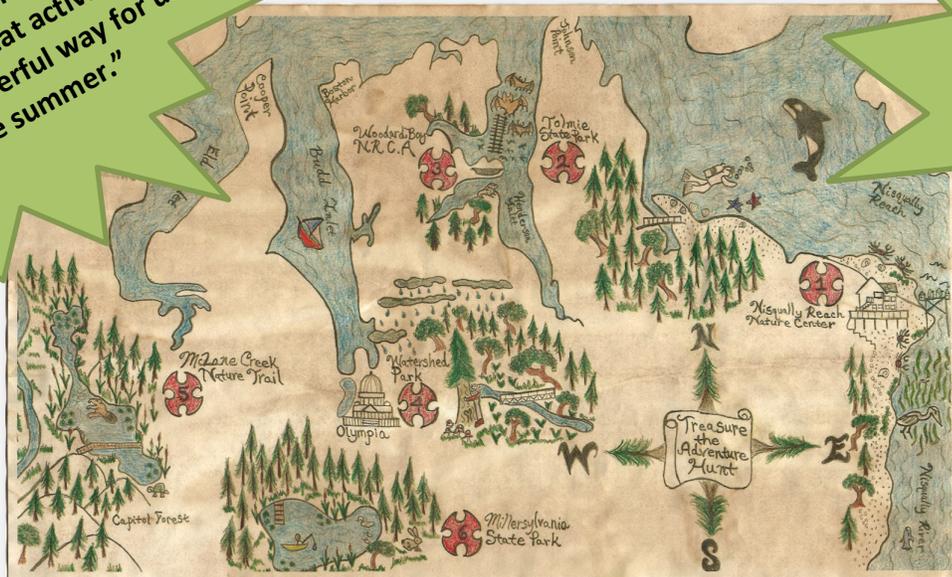
Looking for a fun FREE family adventure? Go to nisquallyreach.org to register and for more information! Complete the hunt and be entered to win a \$100 gift certificate to kayak or paddleboard on Harbor Marine.

“Thank you for the fun adventure. My son and I enjoyed the hikes through the parks and figuring out the clues and code. He is a big nature lover and getting out in nature is just what we needed!”



“Thank you so much for organizing this great activity! This was a wonderful way for us to close out the summer.”

“Thank you for putting on this fun adventure. We all enjoyed it.”



Community Monitoring Programs

Pigeon Guillemot

Prior to the start of the summer, we organized with five other groups to form the Salish Sea Guillemot Network. A regional coordinator was hired to assist in maintaining cohesiveness amongst the member groups.

We were fortunate that only minor adjustments were needed to conduct surveys safely while abiding by COVID-19 guidelines. We held a virtual training that was attended by more volunteers than our previous in-person training events. The virtual training gave volunteers who live farther away an opportunity to attend. The lack of our summer intern required extra time and effort from a few key team coordinators to keep the program moving forward.

In spite of the challenges of the pandemic, the 2020 summer survey season was our most successful ever in terms of data completeness, quality, and timely submission. Over 200 hours of volunteer time was completed by 100 volunteers at 30 survey sites. We successfully undertook the monumental task of validating our entire 8-year dataset in preparation for the transition to a new data system (Survey123).

After years of discussion with Washington Department of Fish and Wildlife (WDFW) and our Whidbey Island partners, we finally signed a contract with WDFW to move forward with the development of a GIS-based system for data entry, management, and visualization. This will provide much needed consolidation of various processes and functions in a centralized location, and is more widely accessible to users and external collaborators or researchers.

We also held a virtual training for the non-breeding surveys that was relatively well attended.

Read the 2019 Report on our website:
www.nisquallyestuary.org.



Community Monitoring Programs

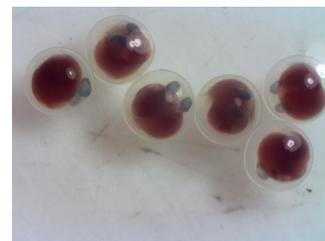
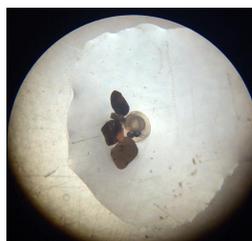
Forage Fish

NRNC celebrated eight years of forage fish surveys! Our Science Director successfully received a grant to purchase new equipment for our forage fish labs.

We found some rare early developmental stage surf smelt eggs for our demo collection during our October survey at DuPont Wharf. We also conducted an exploratory survey of the Devil's Head area, which is a new site in the proposed Nisqually Reach Aquatic Reserve boundary expansion. This area is one that we had previously identified as an area of interest for establishing regular surveys. We documented surf smelt spawning at one of the three sampling locations. This is especially encouraging and validates previous findings by WDFW. It also provides a good reason to conduct additional research in order to more accurately and comprehensively document forage fish spawning in the area.

We brought on an intern from Clover Park Technical College (a new college partnership for us) for a limited term. With the additional help, we were able to work through a few of our older, preserved samples that were saved for additional research to evaluate the x-factor protocol. The x-factor protocol is a method we use to determine the number of eggs in a sample when that sample has a very large number of eggs. Using an x-factor allows us to approximate the total number of eggs contained in a sample while only actually counting the eggs in a fraction of the sample.

Looking ahead, we hope to conduct at least one additional survey of all our sites before March, when sand lance spawning season ends, and surf smelt spawning wanes.



Larval Crab Light Trapping

NRNC partnered with the Nisqually Indian Tribe, Pacific Shellfish Institute, and DNR to assist in juvenile larval light trap monitoring at Zittel's Marina for our second year. During the season, team members survey 3-4 times a week, for a total of 70 samples, starting mid May and finishing in September. NRNC volunteers go out to collect a sample once a week, usually taking the weekend shift.

This season we found more larval Dungeness crab than last season, although the numbers were still small compared to sites surveyed by others in Northern Puget Sound. This is encouraging news, and while it doesn't necessarily signify a rebound in the overall regional population, it is a good sign. More research is needed to detect any meaningful changes that might indicate whether the population is on the rebound. Longer-term research is needed to determine what trends, if any, are evident.



Nisqually Aquatic Reserve Expansion

NRNC worked with the Washington Department of Natural Resources (DNR) to propose an expansion of the Nisqually Reach Aquatic Reserve by approximately 5,000 acres (see map). This is currently in arbitration with local tribes, and we are hopeful this will move forward in 2021. Once all parties are in agreement, the Public Lands Commissioner will need to sign the final document.

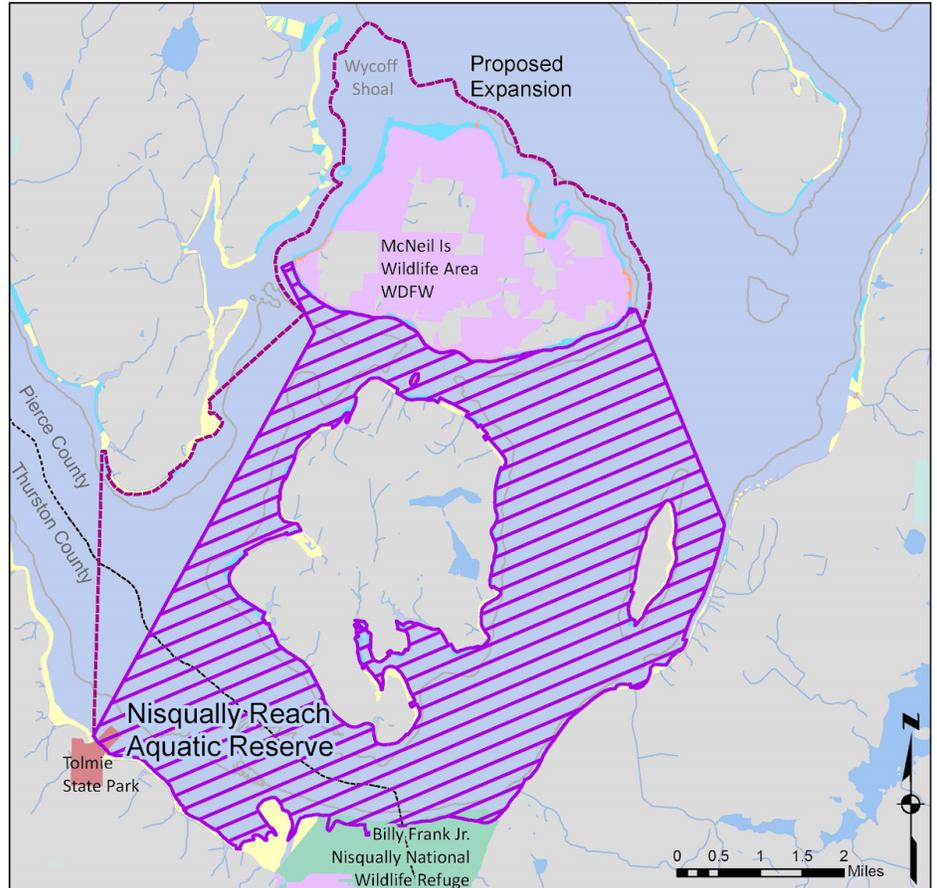
An Aquatic Reserve is a DNR designated conservation area that has a site proponent, such as NRNC, or a community organization. The Nisqually Reach Aquatic Reserve (NRAR) is part of the Washington State Department of Natural Resources (DNR) Aquatic Reserves Program. DNR establishes aquatic reserves throughout the state to protect important native aquatic ecosystems. An aquatic reserve can be designated for any of the following purposes, singly or in combination: educational, environmental, or scientific. NRAR was designated as an educational, environmental, and scientific reserve. DNR's Aquatic Reserve Program brings together local and state governments, non-governmental organizations, tribes, and citizens to develop and carry out site-specific management plans to protect the aforementioned values.

Conservation is critical now as human populations grow in the Pacific Northwest, decreasing wilderness, and placing strains on water quality. Functional marine habitats that are currently supporting biodiversity need to be protected, and the aquatic reserve program gives community members the ability to do this by constraining their own ambitions, and protecting the rural character that is part of their way of life.

DNR, Washington Department of Fish and Wildlife, and Department of Ecology partnered to complete some large-scale restoration projects on McNeil Island.

Nisqually Reach Aquatic Reserve

DRAFT Expansion Proposal



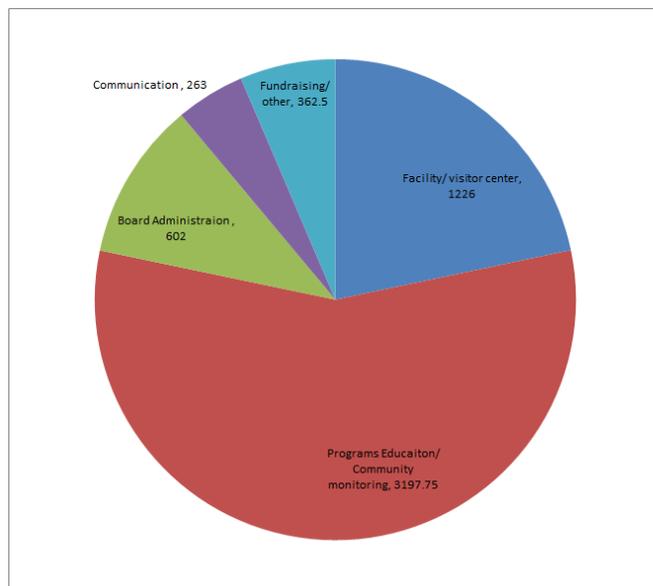
The Nisqually Reach Aquatic Reserve is having its intended effect. Our Science and Education programs focus on connecting people to these values and making long lasting impacts that will help sustain the environs that supports us all. Conservation movements are expanding. Simultaneously during this time, the Nisqually Land Trust started working with partners on Long Branch Peninsula to potentially create an approximately 80 acre conservation easement with beach access within the expansion area.

Volunteers

Volunteers are the backbone of our nonprofit organization. Even in the challenging times of a pandemic, volunteers continued to dedicate their time to the mission of NRNC. In 2020, our volunteers completed a total of 5,651 hours, which is valued at \$186,483 by Independent Sector.

<https://independentsector.org/wp-content/uploads/2018/04/value-of-volunteer-time-state-historical-2001-2019.pdf>

Volunteers helped with every aspect of our organization, from our community monitoring programs, education programs, fundraisers, data management, administrative and communication tasks, aquarium maintenance, and updates to the facility. Three volunteers put in over 500 hours each. Our accomplishments in 2020 could not be possible without such support from our amazing volunteers.



"It's a wonderful place to volunteer and has an amazing staff."
— Jozi Tolle

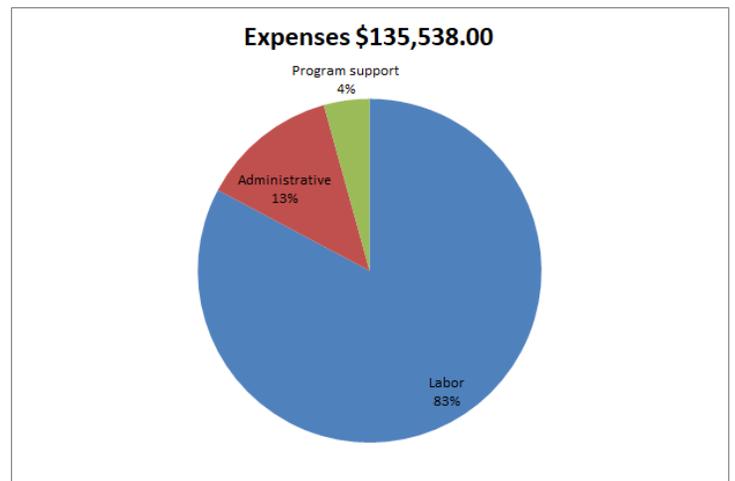
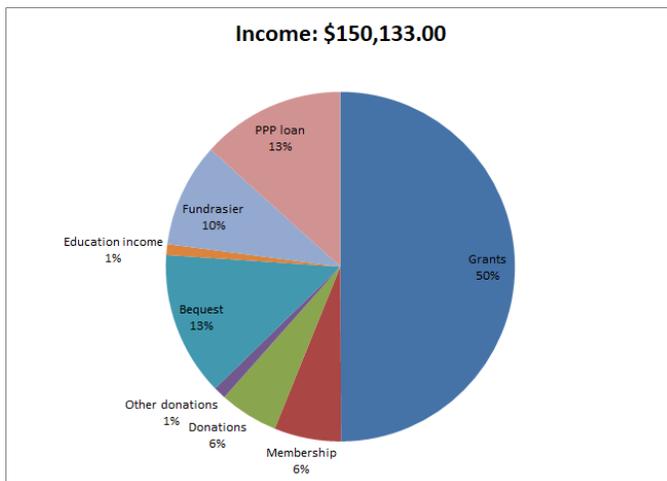


"I volunteer for NRNC because I am a self-proclaimed science geek, and they let me 'do science'! I connected with the Stream Steward program, and found a home at NRNC. I love being at the center, I feel connected to the center, its people and volunteers, and the work that is being done there. I look forward to more fish labs, and performing data analysis for PIGU for years to come."
— Jenipher Grant

By The Numbers

As NRNC continues to grow, we work to find new ways to fund the very important work of accomplishing our mission. Our income in 2020 was supported mostly by grants, comprising of 50 percent of our overall income. However, we are starting to see growth in donations and our fundraising efforts to balance our budget. Our creative fundraising efforts generated 10 percent of our income. The vast majority of that was received during our first ever virtual Feast at the Reach where we brought in \$13,474.00. For our End of Year fundraising campaign, staff created a spoof of “The Office” which you can watch at <https://www.youtube.com/watch?v=A6uc74dNWFY&t=62s>.

NRNC, like many other organizations, was greatly impacted by the COVID-19 pandemic. It was a true gift this year to receive a \$20,000 bequest on the behalf of Jack Bunch. Jack was a very talented musician and nature enthusiast whose memory will live on in the good deeds of NRNC. Generous donations like this help NRNC and its mission, especially when times are tough. NRNC was thankful to receive financial support from the Paycheck Protection Program, grantors, and our members and donors. This financial support was instrumental in us being able to accomplish our mission.



FEAST @ the REACH
VIRTUAL FUNDRAISER
YOU'RE INVITED!

SATURDAY, SEPTEMBER 12, 2020
5:00PM - 6:30PM

JOIN US ON **zoom**
FOR AN EVENING OF FAMILY FUN!

ALL PROCEEDS GO TO FUND
ENVIRONMENTAL EDUCATION AND RESEARCH!

\$15 SUGGESTED DONATION

REGISTER ONLINE AT
WWW.NISQUALLYESTUARY.ORG
BEGINNING
AUGUST 17TH



Looking to the Future



Education Programming

We are launching a virtual field trip through Nisqually Watershed for 3rd and 4th graders! This interactive online exploration allows students to have an up-close look at notable places within the watershed and discover Washington's stunning wildlife.

NRNC is continuing to support outdoor education for families by partnering with the Thurston County Stream Team to produce Nature Sleuths. This family adventure leads explorers to over 15 parks in Thurston County.

Community Monitoring Programs

NRNC is excited to launch the next installment of data management for our Pigeon Guillemot monitoring program. The new ESRI survey 123 application will allow our volunteers to enter data on their phone, computer, or tablet in the field or when they get home and get it instantly entered in the database housed at WDFW.

We will be working with DNR and WDFW again in light trap monitoring to survey for Dungeness crab. We hope to see an increase in numbers from the year before.

We are looking forward to restarting our Forage Fish program in the fall. We will continue to expand surveying at new sites on Key Peninsula within the Proposed Nisqually Aquatic Reserve Expansion area.

Aquatic Reserve Expansion

NRNC will continue to work with our partners and stakeholders to move the process forward and are hopeful the Commissioner of Public Lands will approve the expansion.

Operations

We are looking forward to safely reopening our doors to the general public. WDFW will be upgrading the Luhr boat launch this summer, and we will be working closely with them to mitigate any impacts to our visitors and education and research programs.

Stay tuned for updates on social media and our website at:

- Facebook: <https://www.facebook.com/nisquallyreachnaturecenter>
- Instagram: @Nisquallyreachnaturecenter
- NRNC website: www.nisquallyestuary.org

Our Partners & Supporters

A big thanks goes out to the many organizations that help NRNC accomplish our mission in 2020. This list includes but is not limited to:

Dawkins Charitable Trust

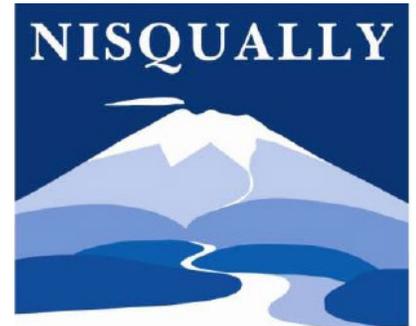


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**NISQUALLY
R I V E R
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P R O J E C T**



*Washington
Department of*
**FISH and
WILDLIFE**



Nisqually Indian Tribe
Squally-Absch

People of the river, people of the grass



**South Sound
GREEN**

Global Rivers Environmental Education Network



In Loving Memory of



Jack Bunch
1940-2020