

FRIENDS BY THE NUMBERS: 2021

5 RESTORATION PROJECTS

are being designed with the goal of restoring natural beaches for forage fish, juvenile salmon, and orca.

324 STUDENTS

experienced and learned about the marine food web through Friends' Immersive Salish Sea Education Program.

20 COMMENT LETTERS

were submitted to reduce shipping impacts and oil spill risk, and improve oil spill response requirements in the Salish Sea.

40 CUBIC YARDS

of large rock were removed from a 430 foot long pocket beach along Lopez Island's Salmon Point to restore forage fish spawning habitat.

36 HOMEOWNERS

received free technical site visits to explore opportunities to keep their beaches healthy and in their natural state.

RESEARCH FINDING

Over 90% of new shoreline armor installed in San Juan County between 2009-2019 did not have the required state or local permits before construction began. Friends is using this research to support homeowners and advocate for improved shoreline management.

I will always look back on 2021 as a year of profound change at Friends of the San Juans. It was my first full year as executive director, and fresh eyes can always bring new perspectives and ideas.

We reviewed and improved many of the organization's internal processes and procedures—not the most alluring task, perhaps, but it was much-needed and incredibly valuable.



The organization launched a comprehensive strategic planning process. We also brought in advisors to coach us through incorporating equity and inclusion into our work. Fundraising and outreach efforts were strengthened, resulting in deeper ties to our members and donors, a shift in how the community perceives our work, and strong financial performance. The Friends Board of Directors brought in new kinds of skills and experience with additional members. Thoughtful planning efforts were especially meaningful in 2021—subtle as they may be to the outside eye, their impacts are profound and will bolster Friends' mission-driven work for many years to come.

After reaching out to the community, our members, and our partners for ideas and input, the board and staff of Friends worked together (despite the logistical challenges of Covid-19) to develop seven Key Organizational Priorities that will guide our programming and work over the next five years. We're now putting these priorities into action, and we're already seeing the benefits: This April, we hired the organization's first-ever communications and outreach director, a position that will be critical in the coming years as Friends helps lead our community's response to the climate crisis.

If you're reading this, you're probably one of our partners, supporters, or members, so I want to take this opportunity to thank you: Our work is possible because of you, and I hope you are as proud as I am of our impact. Though the challenges in our community, our region, and our world are great, few organizations give me so much hope as Friends of the San Juans. At Friends, we approach our mission-driven and science-based work with passion, kindness, humility, and a sense of community—and nothing is stronger than that.

With appreciation and respect,

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R. Brent Lyles
Executive Director



Friends recently completed detailed research of trends in shoreline armoring (bulkheads, sea walls, and rip rap) in San Juan County and the results are shocking. Research began in 2009, with Friends surveying over 400 miles of hard shoreline armor, and then repeated the effort in 2019 for comparison. We identified that, in just 10 years, new armor was installed at over 100 locations, adding almost two miles to the previously mapped 25 miles. Much of this armor was installed at critical habitats such as sediment supply bluffs (a.k.a., feeder bluffs) and forage fish spawning beaches. Armor was removed from 17 sites (just 0.3 miles).

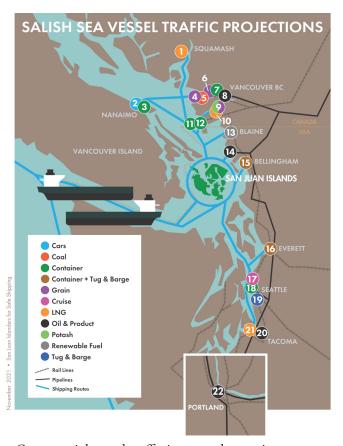
Why is this such a concern? Orca need salmon, salmon need forage fish, and juvenile salmon and forage fish need healthy beach habitat. Armor directly buries and alters habitats essential to juvenile salmon and their prey, and it disrupts the processes that form and maintain the beaches we all love. Even today, when we understand how harmful armoring is, the installation of new armor is greatly outpacing armor removal.

You might be asking, "Don't we have rules discouraging new armor, except when it's the very last option?" Well, yes—the permitting process is how environmental regulations are implemented, and that is why we also included an analysis of permit records along with the armor mapping research.

After an extensive review of County and State permits, we found that more than 90% of new shoreline armor installed in San Juan County between 2009-2019 did not have the required state and/or local permits before being constructed. We also identified deficiencies in the regulatory systems, and a need for improved tracking and more robust enforcement. This is vital not just for our critical habitats but also to ensure rules are applied fairly to all private property owners. Friends is now sharing these findings with land managers and decision-makers, working constructively with state and local staff on solutions, and exploring opportunities to improve the effectiveness of regulatory and voluntary programs to protect our beaches into the future.

INCREASING VESSEL TRAFFIC

Documenting terminal & refinery expansions in the Salish Sea



PROJECTED NEW ANNUAL VESSEL TRANSITS

Woodfibre LNG	80
2 Vehicle Processing Centre	171
3 DP World	TBD
4 Fibreco Export increase in vessel size +	18
5 Neptune Terminals	31
6 G3 Terminal	224
7 Centerm Container	130
Trans Mountain Pipeline Expansion	696
9 Fraser Surrey Docks	160
Fraser Surrey Docks	364
Tilbury Marine Jetty Project	136
Roberts Bank Terminal 2	520
GCT Deltaport increase in vessel size +	104
BP Refinery	TBD
Phillips 66 Refinery	TBD
15 M-5 Coastal Connector	TBD
Everett Terminals increase in vessel size +	TBD
Seattle Pier 46	TBD
B Seattle Terminal 5 increase in v	vessel size
SeaTac Marine Services	TBD
20 Seaport Sound	TBD
2 Puget Sound Energy LNG	TBD
Zenith Energy	TBD
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TOTAL PROJECTED NEW TRANSITS	2,634 + TBD
TOTAL 2020 TRANSITS	10,480
TOTAL 2020 + NEW TRANSITS	13,114 + TBD

Commercial vessel traffic impacts the marine ecosystem, and the risk of oil spills threatens our shoreline communities and all who call the Salish Sea home. Friends diligently monitors vessel traffic increases, and in November 2021 we produced the latest Salish Sea Vessel Traffic Projections. The findings from our research show that the Canadian projects alone would increase vessel traffic by 25%. Another significant finding is that none of the projects in Washington State identified any potential increase in vessel traffic, including those projects whose explicit purpose is to increase vessel traffic. Friends uses this report and infographic to inform the public and decision-makers about potential increases in vessel traffic and the impacts they may have on our bioregion.

Friends continues to advocate for Washington State's Environmental Policy Act to require permit applications that could increase vessel traffic to specifically address potential



impacts on the endangered Southern Resident orcas. Additionally, Friends advocates for compliance with, and improvement of, federal regulations that protect Southern Residents.



In 2021, we launched our innovative Immersive Salish Sea Education Program where youth explore underwater ecosystems via virtual reality.

Using underwater, 360-degree video filmed by Friends' staff, students are transported from their classrooms. Underwater, students find themselves alongside scientists restoring eelgrass, swimming through nearshore habitat with forage fish, and submerged into the Skagit river with spawning salmon. This virtual reality experience is part of a five-day program that includes land-based field experiences as well as hands-on, student-led action projects with high school science classes on San Juan, Orcas, and Lopez Islands. Our program focuses on connecting students with the local marine food web, and highlighting the importance of eelgrass, kelp, and forage fish for salmon and Southern Resident orcas. Students are provided with tools and resources to take action in the community, and introduce them to careers in marine science, communications, and technology.

"What I love most about the Immersive Salish Sea Education Program is that it engages many different learning styles. Virtual reality technology is a great experiential education tool for the classroom—it's even better when you can do that AND take kids outside to the beach for hands-on learning."

Jess Newley, Community Science & Education Manager,
 & founder of the Immersive Salish Sea Education Program

GRANT FUNDING PROVIDED BY

The Burning Foundation The Campbell Foundation **ESRI** The Harder Foundation The Horizons Foundation Keta Legacy Foundation Lummi Nation Community Contribution Funds National Fish & Wildlife Foundation Northwest Fund for the Environment Northwest Straits Foundation Orcas Island Community Foundation Puget Sound Partnership Stand Up to Oil The Stewardship Network Tulalip Tribes Charitable Fund U.S. Environmental Protection Agency U.S. Fish & Wildlife Service WA State Salmon Recovery Funding Board WA State Estuary & Salmon Restoration Program WDFW Aquatic Lands Enhancement Program The Wheeler Foundation



FINANCIALS

data reflective of calendar fiscal year 2021

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Membership + Donor Contributions (43%)	\$530,049
Grant Income (40%)	\$485,293

TOTAL \$1,220,997

\$205,654

Investments, Events,

& Other (17%)

expenses

Programs (83%)	\$857,007
Administration (14%)	\$139,030
Fundraising (3%)	\$32,999

TOTAL \$1,029,036

financial summary

current + fixed	assets
Operating Fund	\$442,915
Reserve Fund	\$499,692
Endowment	\$686,365
TOTAL	\$1,628,972

liabilities & equity

Liabilities	\$135,919*
Equity	\$1,493,053

TOTAL \$1,628,972

^{*} Payroll Protection Plan loan = \$97,500

OUR TEAM



R. Brent Lyles *Executive Director*



Elise CopeCommunications & Outreach
Director



Shannon DavisDeputy Director



Katherine DietzmanScience & Education Coordinator



D. James McCubbinLegal Director &
Staff Attorney



Jess NewleyCommunity Science &
Education Manager



Lovel Pratt *Marine Protection & Policy Director*



Jan SanburgOperations Manager



Michel VekvedDirector of Philanthropy



Tina Whitman Science Director

BOARD OF DIRECTORS

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On behalf of Friends' staff and board of directors, thank you! Together, we improve & strengthen our environment and community.