## FRIENDS

## of the San Juans

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2011 Annual Report

#### **FRIENDS 2011... A Year in Review**

by Stephanie Buffum Field - Executive Director

For FRIENDS of the San Juans, 2011 was a year for reaching new milestones in shoreline restoration, policy reform, and citizen action. Staff, board and members testified at public meetings and hearings for critical areas, for fair Open Space standards, for improved code enforcement, for a progressive vesting ordinance, for the use of best available science in the Critical Areas Ordinance and Shoreline Master Program updates, and for eelgrass protection.

FRIENDS improved water quality for juvenile salmon and beach habitat for spawning surf smelt and sand lance; we restored eelgrass by removing, relocating and retrofitting mooring buoys; we restored two forage fish spawning beaches, and one salt marsh; and hosted Tribal Canoes during their journey through the islands.

Now more than ever, our islands are at risk as decision makers feel pressured to relax environmental protections. We need to mobilize our friends and neighbors to be a voice for clean water, forests, farmland, fish, wildlife and the livability of our islands. Thank you for helping hold the line for environmental protection in 2011 with your generous gifts of time and funding.

Help start off 2012 with a year end gift. All donations will be matched 1:1 if received by December 31.

#### **FRIENDS of the San Juans**

**MISSION:** To protect the land, water, sea, and livability of the San Juan Islands through science, education and advocacy.

P.O. Box 1344, Friday Harbor, WA 98250 360-378-2319 www.sanjuans.org

#### **BOARD OF DIRECTORS:**

Orcas Island - Janet Alderton & Marta Nielson San Juan Island - Mike Kaill, Bill Watson & Vivien Burnett Lopez Island - San Olson & George Lawson STAFF: Executive Director - Stephanie Buffum Field Science Director - Tina Whitman Staff Attorney - Kyle Loring Office Manager - Jana Marks Grants Manager - Shannon Davis Cover: South Beach, Shaw Island.

Newsletter design by Tif & Gif Creative.

Printed with Soy Ink on Paper that is 100% PCW, 100% Recycled, Processed Chlorine Free, Ancient Forest Friendly, FSC, Green-e and is manufactured with wind power. No seriously, it is!

## My Vision for the San Juans

by George Lawson - President, Board of Directors

San Juan County recently requested that people share their vision for the future of the islands. My vision was born 65 years ago from my childhood trips through the San Juans on the mail boat "Osage" followed by my own commercial fishing.

My vision has decision-makers using best available science to restore large portions of what was: a healthy shoreline that captures the imagination of nearly everyone who lives here or visits. My vision includes a healthy food web, where feeder bluffs and eelgrass prairies are preserved, sand lance and surf smelt spawning beaches are protected, and salmon and orca are no longer endangered.

The board of FRIENDS is dedicated to making sure the County protects the environment, addresses cumulative impacts and climate change, and does not regard mitigation as a quick fix over protecting critical areas in their Critical Areas Ordinance (CAO) and Shoreline Master Program updates.

To help you get involved and have a strong foundation of the facts, FRIENDS has formed CAO study groups on all islands. Please join me in giving voice to protecting what called you to the islands, join a study group on your island, testify at hearings, volunteer and continue to support FRIENDS in 2012.

#### Thank you!



#### Canoe Journey – Supporting Cultural Revitalization

Over 230 tribal members and 12 oceangoing canoes visited Waldron, San Juan, Shaw and Lopez Islands during the 2011 Inter-Tribal Canoe Journey this July. FRIENDS coordinated the four island stop-overs for the paddlers and their support crews as they traveled to their final destination at the Swinomish Indian Tribal Community in La Conner. FRIENDS has been hosting Canoe Journey stops in the San Juans since 2003. We believe that the exchanges made between islanders and Coast Salish tribes increase our collective understanding of culture, conservation and stewardship in the Salish Sea. To get involved in future Canoe Journeys, contact Stephanie at 378-2319.









This event could not have occurred without support from many volunteers and donors. We would like to give special recognition to the coordinators, escort boats and partners:

Island coordinators - Waldron: Lori Glenn, David Loyd, and Janik Rosenvingue (in loving memory). San Juan: Vivien Burnett, Marty Ahart, Michelle Lyons, Joann and Steve Ashlock, Liz Illg, Helen Venata, Bill and Laura Jo Severson. Lopez: Rhea Miller, Dixie Budke, George Lawson, and Pamela Maresten.

Escort boats/crew: Ken Burtness, Zack Blomberg, Lark Dalton, David Loyd, Chad Lyons, Arvid Lindstrum, Vessel Assist, Jeff Iverson and Jana Marks M/V Standard II, Marshall Davis and Gary Gero S/V Spike Africa, Rocco and Linda Cappeto M/V Study Girl, Jeff and Diane Dyer S/V Bluebird, Cynthia and Gunnar Stark-Wickman M/V Liz B, Jamie Stephens M/V Ledger, and Colin Hermans and Mike Lemming S/V Alciope.

Partners: Columbia Sportswear, Roche Harbor Resort, Port of Friday Harbor, San Juan County Fair, Soroptimist International, Lion's Club, Leo's Club, Arctic Raven Gallery, Cynthia's Of Course, Griffin Bay Bookstore, Heritage Farm, Kings Market, Otak, Outdoor Odyssey, Rising Tide Graphics, San Juan Coffee Roasting Company, San Juan Islands Visitors Bureau, San Juan Prevention Coalition, San Juan Propane, San Juan Transit, Spring Street International School, Thrift House, Tif & Gif Creative, Town of Friday Harbor, San Juan County, Lopez Community Land Trust, Blossoms, Cloud Community, Unitarian Fellowship, and the Lutheran Fellowship.

## **Bluffs and Beaches Workshops**

To have orca, salmon, and seabirds, we need forage fish. The primary forage fish species in the San Juans are Pacific herring, surf smelt and Pacific sand lance. Surf smelt and sand lance spawn on beaches, while herring lay their eggs on eelgrass and algae. In order to have forage fish, we need healthy shorelines. Preserving the eroding bluffs that "feed" sand to beaches for people and forage fish was a central theme in FRIENDS education and policy work in 2011.

FRIENDS provided free technical assistance about shoreline property protection, habitat and the coastal processes that maintain beaches over time. Licensed coastal geologist Jim Johannessen and vegetation experts from the Conservation District and WA Sea Grant met with over 70 people on San Juan, Lopez, and Orcas islands. Participants learned about local coastal geology, stormwater management, techniques for pruning trees, use of native plants in stabilizing soil, and the use of soft shore protection as an alternative to hard armored bulkheads.

FRIENDS' shoreline research and maps, such as the countywide bluffs and beaches mapping results, are included as best available science in the Critical Areas Ordinance and the Shoreline Master Program update. Thanks to the WA State Salmon Recovery Funding Board, the Russell Family Foundation, the Northwest Fund for the Environment, and FRIENDS members for supporting this work.

Jim Johannessen of Coastal Geologic Services explains how to best protect property, critical habitat and coastal processes that maintain beaches over time.



## Understanding Armoring Impacts

Armoring can directly bury spawning habitat and disrupts the processes that form and maintain beaches. While each individual development action may seem small, the combined effects can hinder the recovery of important marine species, such as salmon.

Forage fish play a key role in marine food webs. As beach spawners, surf smelt and Pacific sand lance are especially vulnerable to shoreline modifications like bulkheads. Armoring can directly bury spawning habitat and disrupts the processes that form and maintain beaches. While each individual development action may seem small, the combined effects can hinder salmon and orca recovery.

The cumulative and incremental effects of armoring on forage fish spawning and marine food webs are not being adequately researched or managed. In 2011, FRIENDS conducted a pilot study to investigate the cumulative effects of shoreline armoring on spawning beaches. Results show that 15% of the eleven miles of known spawning beaches in San Juan County are already armored by bulkheads or roads. More than 99% of these existing structures along known spawning beaches are located low enough on the beach to be directly burying spawning habitat. In addition, nearly five miles of countywide feeder bluffs (17%) have already been armored, impacting the supply of sediment that maintains spawning beaches county-wide.

Project results will be used to help better understand the effects of current shoreline armoring and improve protection policies. Funding was provided by the Bullitt Foundation and FRIENDS members. FRIENDS is seeking additional funds to expand and refine this research.

### Smelt Spawning Beach Restored



Before: The bulkhead along the road has made thi: beach unsuitable for smelt to spawn.



After: The addition of sand and gravel has created a healthy forage fish spawning beach.



In 2006, FRIENDS identified restoration of the public beach along Smugglers Cove Road on Shaw Island as a priority salmon recovery project. This project is located in Blind Bay where surf smelt spawn year round on beaches and herring lay their eggs on eelgrass just offshore. Over time, impacts from the armored road had made this beach unsuitable for forage fish spawning. As relocation of the road was not an option, beach nourishment was identified as the best method to reestablish spawning habitat at this protected pocket beach.

FRIENDS, in partnership with County Public Works, Coastal Geologic Services and Lopez Sand and Gravel, brought in 1,500 tons of beach gravel and 80 cubic yards of cobble to recreate appropriate beach conditions for spawning. Next steps include replanting shoreline vegetation, ongoing monitoring and spawning surveys. Special thanks to the neighbors for their support and patience during construction. Funding for this project was provided by the WA State Salmon Recovery Funding Board, the WA Dept. of Ecology Coastal Protection Fund and FRIENDS members.



Before: Rock from failing bulkheads along Barlow Bay roads are burying spawning habitat.



After: Forage fish spawning habitat zone (roughly the shell hash line) is now free of large rock.

#### Sand Lance Beach Improved

MacKaye Harbor and Barlow Bay are high priority areas for salmon recovery actions. Both surf smelt and Pacific sand lance spawn on the region's sandy upper beaches and juvenile salmon are known to frequent the waters. These important shorelines are vulnerable to impacts from development, especially armoring, that bury, degrade or narrow forage fish spawning beaches.

Rock from the armored road had fallen onto the beach, degrading one of only nine known Pacific sand lance spawning sites in San Juan County. FRIENDS

hired local contractor Michael Budnick of Northwest Concepts to restack rock along Barlow Bay roads to improve the amount of sand lance spawning habitat.

Financial and in kind assistance was provided from FRIENDS members, the WA State Salmon Recovery Fund, and San Juan County Public Works. FRIENDS appreciates the support of Barlow Bay shoreline property owners and the Salmon Point Community. "While the primary objective was to enhance critical spawning habitat and support marine food webs, we were also able to improve protection along the road for people and fish." - FRIENDS board member and Salmon Point resident, San Olson

## Shaw Island Salt Marsh Restored

This summer, FRIENDS reversed 60 years of impacts to a vibrant marsh altered in the 1950's. FRIENDS reshaped ditches and restored tidal channels to reconnect saltwater flow between the marsh and marine waters. The results are fully draining channels and increased vegetative cover throughout the intertidal marsh, which is among the most critical and rare habitats in the region. The restoration will improve water quality, tidal flushing, access for small fish, and habitat for the insects eaten by juvenile salmon.

Neighbors have waited 60 years to see these tidal waters move freely again. This project was a win for fish, local jobs, and our community. FRIENDS worked with some exceptional local contractors and community volunteers. Partners included: Dr. Tina Echeverria (project manager), the Conservation District, Coastal Geological Services, Rain Shadow Consulting, Greening & Greening, K2 Surveying, WSU Beachwatchers and Northwest Marine Technologies. Funding provided from a WA State Salmon Recovery grant and FRIENDS members.



Before: Blocked channels trapped water and fish between high tide events.



During: New channels were created to open the salt marsh to marine waters.



After: The marsh now improves water quality, vegetation and fish passage.

#### **Eelgrass Restoration & Protection**

Eelgrass is critical habitat for marine critters such as Dungeness crab, juvenile salmon, and forage fish. Over the past year, FRIENDS has protected eelgrass by informing boaters about where eelgrass grows in San Juan County and why it is important to "Anchor Out" of eelgrass. Eelgrass is directly destroyed by anchors and buoy chains when they drag around and uproot plants, disturb sediment and create a patchwork of bare spots. FRIENDS has also restored eelgrass through a program to remove or relocate mooring buoys.

#### **Mooring Buoy Pilot Project**

In 2011, FRIENDS worked with mooring buoy owners to remove outdated buoys and floats from sensitive eelgrass and Pacific herring spawning areas on Orcas and Lopez Islands. Some buoys were replaced with screw anchor designs and moved outside of eelgrass; other buoys and floats were considered unnecessary by their owners and removed. All participation was 100% voluntary. Thanks to participating buoy owners, R&R Moorings, Baja Boat Works and the WA State Salmon Recovery Funding Board. Additional Funds are available for buoy relocation/ removal in 2012. Contact FRIENDS for details.

#### **Anchor Out to Protect Eelgrass!**

To help boaters avoid impacting eelgrass when anchoring, informational signs and maps of eelgrass depth were provided at marinas and marine parks, in countywide mailings, advertisements in regional boating magazines, and in presentations with boating groups and boaters. To view, download or print a copy of the county-wide eelgrass depth map for San Juan County, please visit the FRIENDS website at: www.sanjuans.org/ Eelgrass\_Protection\_Program.html. Thanks FRIENDS members and the WA Dept. of Fish & Wildlife for funding.

## **FRIENDS Leads Local Salmon Recovery Prioritization Project**

FRIENDS and project partners, Anchor QEA and Coastal Geologic Services, are spearheading an integration of science (on coastal species, habitats and processes) with local field research to identify the most important salmon recovery actions in San Juan County. A technical team of over 25 local, regional and tribal experts are helping to guide this strategic planning process.

In 2011, the team analyzed data on juvenile salmon and juvenile forage fish presence in the San Juans to identify geographic priority areas. To identify where protection or restoration actions are needed, they also conducted a countywide assessment of shoreline conditions and an analysis of stressors such as armoring, docks, tidal barriers and impervious surfaces. To help fill remaining data gaps, two new county-wide assessments including an inventory of riparian (shoreline) vegetation and updated pocket beach mapping were completed. The project mapped over 200 sand and gravel pocket beaches that were previously identified as rocky shoreline on statewide maps. The team also developed sea level rise inundation maps as part of a climate change screening tool to help evaluate the long term likelihood of success of potential salmon recovery projects.

Next steps for 2012 include identifying and ranking specific project actions within the priority areas. Project results will support more efficient and effective restoration and protection efforts by both governmental and private organizations. The project is funded by the WA State Salmon Recovery Funding Board, ESRI and FRIENDS members.

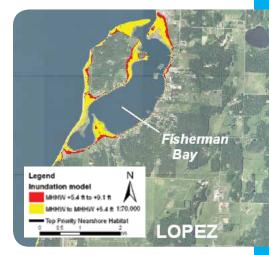
### Sea Level Rise Predictions Mapped for San Juan County

Do you ever wonder what areas are going to flood when sea level rises? To help answer this question, FRIENDS and Coastal Geologic Services mapped sea level rise predictions for San Juan County. The new sea level rise maps can be viewed on the FRIENDS website.

The county-wide sea level rise inundation maps are based on the best available science on sea level rise adopted by the County Council in 2011 and the LiDAR digital elevation data for major islands. A few different projected increases in the rise of sea level were used in the models. Inundation mapping results will help decision-makers, scientists and planners understand potential changes to shoreline habitats.

FRIENDS mapped the beaches most at risk and those most resilient, or protected from sea level rise impacts.

"Property owners, planners, surveyors, realtors and contractors now have a new tool to evaluate risk from potential sea level rise." - Executive Director, Stephanie Buffum Field



FRIENDS and Coastal Geologic Services mapped sea level rise predictions for San Juan County.

Overall the majority of the shores of San Juan County appear to be relatively resilient, or adaptable, to the projected impacts of sea level rise. Many of the areas identified as at risk can be reduced through restoration or protection actions such as: preserving feeder bluffs, which provide sediment to shorelines; using soft shore armoring in place of bulkheads; and, avoiding building in inundation hazard areas. These activities can make shorelines more resilient as sea levels rise. The Bullitt Foundation and FRIENDS members funded this research.



Conservationists and developers agree that San Juan County's code enforcement ordinance needs to be revised. After 10 years of waiting, a new ordinance is lingering with the planning commission.

#### Wanted: Local Code Enforcement

Concerns over ineffective and inconsistent enforcement of existing regulations has been a key finding of nearly every planning or resource management process conducted in San Juan County over the past decade. This lack of adequate enforcement is a frustration shared across all segments of the community, from conservationists to developers. Completion of a new code enforcement ordinance has been a priority since January 2010.

In 2011, we nearly adopted an improved Code Enforcement Ordinance. The Prosecuting Attorney and Planning Department collaborated to create an effective enforcement ordinance that they submitted to the Planning Commission for public hearing in May. Unfortunately, the ordinance lost inertia at the Planning Commission level. Four months later, the Planning Commission finished its first review and sent it back to staff to revise and return back to the Planning Commission for a new public hearing and deliberations in 2012.

As the ordinance moves forward, FRIENDS will continue our efforts to ensure that the County has the tools it needs to promptly enforce land use violations. In the meantime, if you believe that the County's code enforcement officer needs effective enforcement authority, contact your Councilor and request that the proposed ordinance be adopted now. Support for FRIENDS' work on this was provided from the Horizons Foundation and FRIENDS members.

## Working Toward an Effective Critical Areas Ordinance

This year, San Juan County moved closer to meeting its long overdue obligation to update our Critical Areas Ordinance (CAO) by adopting the Best Available Science and holding work sessions and hearings on multiple portions of the CAO.

To date, FRIENDS has commented on CAO provisions for the general section, frequently flooded and geologically hazardous areas, and wetlands. FRIENDS has several concerns as the ordinance has taken shape, including: (1) its failure to fully apply the best available science, such as the failure to acknowledge or address sea level rise and climate change impacts; (2) the failure to encourage development first in areas where it would most protect habitat, people, and property and avoid impacts to critical areas; (3) the willingness to risk public resources and safety by allowing public facilities in geologically unstable areas and flood zones; (4) its overly broad exemptions from the rules; and (5) its overly broad reasonable use provisions. Support for FRIENDS, CAO work has come from the Horizons Foundation and Members.

Hearings for all of the CAO elements are scheduled to continue into early 2012. FRIENDS will continue to hold the County accountable for considering the science and adopting strong environmental protections in the CAO update. We encourage you to participate as well!

> FRIENDS is convening CAO study groups as a forum for community members to discuss the CAO with each other and FRIENDS staff. This is your opportunity to get up to speed on the CAO and to organize your thoughts to share at Council meetings and hearings. If you are on Lopez or Orcas, you can now testify live at your library. Contact FRIENDS for more information.



#### Protecting Shorelines with the Master Program Update

In 2011, San Juan County began its Shoreline Master Program (SMP) update by taking inventory of the natural features and development levels on our shorelines. To assist, FRIENDS provided a decade of data and survey results that included countywide maps of eelgrass and bull kelp habitat, forage fish spawning beaches, feeder bluffs, and shoreline modifications. When we read the completed inventory, though, we noticed that it either did not include or did not fully represent all of this local expertise. So, FRIENDS submitted comments that identified those omissions and also noted the absence of analyses of other natural conditions, like sea level rise estimates, beachforming processes, Pacific herring spawning areas, salmon habitat, and restoration opportunities.

In 2012, FRIENDS will work toward a final inventory that supports effective shoreline protections, and allows us to monitor changes to our shoreline over time. FRIENDS received generous support for our SMP work from Patagonia, the Northwest Fund for the Environment, the Russell Family Foundation, the Burning Foundation, the Bullitt Foundation and our wonderful members.

> Member Visions: When the County sought our community's vision for our shorelines, many of you responded with passionate support for scientificallybased shoreline protections, healthy populations of fish and wildlife, public access and preservation of natural geological processes. Thank you for adding your voice!

## FRIENDS' 32nd Annual Meeting

On August 28th, members, staff and board gathered at Shaw Island County Park to celebrate the work of FRIENDS' 32nd year and to enjoy the bounty of the land and sea that define our community. This year's theme for the Annual Meeting was "The Taste of Restoration" and it was celebrated with a buffet of local food and wine, including goat cheese from Quail Croft Farm, smoked salmon from Orcas Island, smelt ceviche from Nick and Sarah Jones, crab from Friday Harbor Seafood, prawns from Dan Penttila, salad greens from Heritage Farms, grilled vegetables from the Shaw Store, blueberries from Mary Jane Anderson, bread from Bakery San Juan, brownies from Cafe Demeter, and wine from San Juan Vineyards. Special thanks to those who donated their products.

Dan Penttila, regional forage fish expert, led interactive beach walks that included forage fish egg sampling and a look under the microscope. Dan and Science Director, Tina Whitman, led a discussion about why spawning surf smelt and sand lance are important to the food web. Staff shared information on the role that bluffs play in "feeding" our beaches. FRIENDS' Board and staff also shared reflections on the past year's work. Stay with us in 2012 for more exciting projects protecting and restoring the San Juans and preserving our quality of life. Thank you for your support.

Forage fish expert Dan Penttila spoke about the importance of forage fish in the marine food web and belped members survey the beach for forage fish eggs.



#### **FRIENDS' Strategic Vision for 2012**

Looking forward to 2012, the FRIENDS Board has focused it's strategic planning in three broad areas.

1. Increase avenues for citizen involvement and collaboration with other groups. It is important to give the public detailed, factual information about the Critical Areas Ordinance update process. Informed individual voices enhance the community's ability to understand the benefits of a healthy environment.

## 2. Be a voice for the environment as a defender of the public's interest. It is

important to inform the public about the "myth of mitigation." Avoidance of harm is the top priority as mitigation is rarely effective and always expensive. Mitigation seeks to recreate that which has been destroyed – a nearly impossible task when dealing with complex ecosystems.

**3. Be an effective advocate for critical environmental issues.** It is important to continue to build our connections with citizens, scientists, engineers,

economists, other advocacy groups, to remain a serious player in defending the environment and ensure that our message reaches the public through a broader use of the media.

#### 2012 Priorities

**Policy:** Adopt strong Critical Areas and Code Enforcement Ordinances; create a local voluntary conservation easement tool; reform state Hydraulic Permit Approval process; participate in the Shoreline Master Program update.

**Restoration:** Continue eelgrass restoration through buoy relocation; restore nearshore habitat at Barlow Bay and Blakely Island; provide technical assistance for shoreline landowners; and identify new restoration projects and partners.

**Research:** Complete salmon recovery prioritization and share results; monitor forage fish spawning sites and restoration projects; study impacts of grated docks on eelgrass; create county build out analysis; and expand sea level rise and cumulative impacts modeling.

photo: Mark Gardner



#### **2011 Financial Highlights**

FRIENDS of the San Juans is a 501(C)(3) non profit organization. FRIENDS receives its income primarily from membership contributions and grants. Expenditures pay for science and education programs costs, publications, legal and policy expenses, publications and administrative support. This is a summary of our 2010 Fiscal Year (October 1, 2010 to September 30, 2011).

## Summary of Financial Position

#### Current and Fixed Assets

Total Assets
Other Assets0
Marilyn Ellis Endowment 76,358
Unrestricted 294,176
Cash and Other

#### Liabilities and

#### Accumulated Surplus

Current Liabilities	5,302
Accumulated Surplus	365,232
Total Liabilities &	
Accumulated Surplus	370,534

#### Statement of Activities

#### Income

Membership	
Contributions (39%)	190,941
Grants (60%)	299,616
Investments, Events	
and Other Income (1%)	3,751
Total Income	495,308
Expenses	
Programs (87%)	484,696
Fundraising (5%)	. 30,516
Administration (8%)	. 43,450
Total Expenses	558,662
Net	-63,354

# Leave a conservation legacy...

By including FRIENDS of the San Juans in your will, IRA, or trust, you can support our vital conservation programs while also achieving your financial objectives. Contact FRIENDS to find out more about protecting the San Juan Islands for future generations. Our Federal Tax Identification No. is 91-1087153

Thank you Members for your continued support. Please send in your year end donation before donation before and it will be matched dollar for dollar.



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