

At the Water's Edge

Photo by Mark Gardner



SMP Planners Meeting April 26, 2012
Stephanie Buffum, MURP/MPA, Friends of the San Juans



Outline

- About the Stewardship Network of the San Juans / ECO Net Partners
- San Juan County Background
- 2012/2013 Program
- Questions

Stewardship Network Partners



Agricultural Resources Committee , Friends of Lime Kiln Society, Friends of the San Juans, Keepers of the Patos Light, Kwiáht, Lime Kiln Point State Park, The Madrona Institute, The Nature Conservancy, Port of Friday Harbor, San Juan County Land Bank, San Juan County Lead Entity Program for Salmon Recovery, San Juan County Marine Resources Committee, San Juan County Noxious Weed Control Board, San Juan Islands Conservation District, San Juan Island National Historic Park, San Juan Islands Visitors Bureau, San Juan Nature Institute, San Juan Preservation Trust, The SeaDoc Society, Spencer Spit State Park, The Whale Museum, Wolf Hollow, WSU Beach Watchers



Stewardship Network was created in 1994 / EcoNet 2010

Short Run to the Sea public awareness campaign (2011)

Series of ads and articles about water quality in the San Juan Islands. Shared at Farmers Markets and events.

Where our fresh water comes from, how it travels across and through our land, how it's purified, how it becomes contaminated, and what problems that contamination can cause.

o Sidney Island

#3 on the New York Times' list: "

#3 on National Geographic Traveler's
list: "10 Best Trips of Summer 2011"

#4 on Travel + Leisure's "World's Best
Awards 2011" for Islands of
Continental U.S. & Canada

San Juan Island

San Juan County

410 miles of shoreline

428 islands & reefs (high tide)

110,080 acres or 172 sq. miles

16,000 Residents (people)

750,000 visitors

\$51 million from visitors



Tourism in Washington State

Active outdoor recreation:

\$8.5 billion in retail sales and services (3.5% of gross state product) \$650 million in sales tax revenue.

115,000 jobs

Outdoor Industry Foundation study, 2006

Tourism in the San Juan Islands

Active outdoor recreation:

\$51 million dollar in spending

669 jobs

National Park Visitation and Payroll Study, 2010.

Diverse Expectations



Ecological Diversity



Coastal Marsh



Rocky shoreline



Bays



Beaches

Feederbluff

Eelgrass

Why We Proposed Project



Our islands have many diverse expectations placed on from a variety of stakeholders.

SJ County is a rural residential county. Shoreline development stressors similar to Hood Canal and Jefferson County.

SJ County lacks staff to provide sufficient public outreach and technical assistance to stakeholders.

We can't protect shoreline resources if people don't know about the functions that they provide.



Forage fish



Chad with an 18 pound salmon



Orca



Eelgrass

How to meet this challenge



“Feet on the Beach” - interactive technical assistance workshops for property owners

Contractor workshop

“Sense of Place” lectures on all islands

Distribute buildout maps and background primer to all island to all residents.





Forage fish need beaches, salmon eat forage fish, orca and people eat salmon. 700,000 visitors love the San Juans

Forage fish



Pacific Herring eggs.

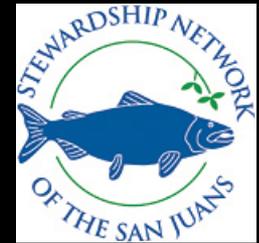


Surf Smelt eggs.



- **Surf Smelt, Pacific Herring and Sand Lance are native forage fish species in Puget Sound.**
- **Forage fish rely on intertidal sand/gravel beaches and eelgrass beds to spawn & incubate their eggs.**
- **Juvenile salmon, 12 species of marine mammals and 40 species of birds depend on forage fish as food.**

Forage Fish Habitat



Forage Fish (surf smelt & sand lance) rely on intertidal sand/gravel beaches to spawn & incubate their eggs

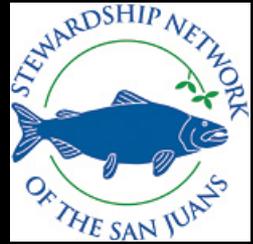


Sand lance "aka candlefish"



Surf Smelt

Surf Smelt



- Spawn year-round in SJC, seasonally in Puget Sound
- Taxonomically related to salmon and can be distinguished from other forage fish by an adipose fin.
- Deposit eggs in the upper third of mixed sand and small gravel beaches, around the time of high water slack.

Pacific sand lance



- Spawn in the mid-to upper beach (Nov-April).
- Fresh sand lance spawn deposits are found in shallow pits.
- Have a diurnal behavior -feeding in the day, and burrow into the sand at night to avoid predation.

Pacific Herring



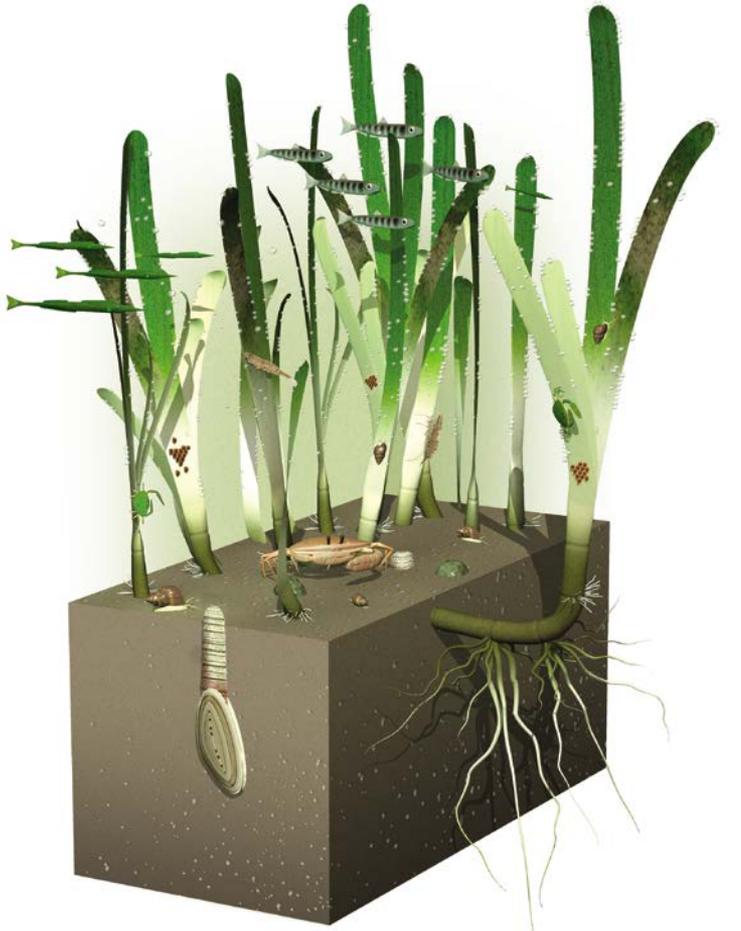
- Pacific herring spawn at 5 sites in SJC, from Jan-April.
- Herring stocks are determined by spawning grounds and spawn timing.
- Spawning may occur anywhere between high tide and a depth of -40, but the vast majority takes place between 0 and -10 feet in tidal elevation.

Benefits of Eelgrass

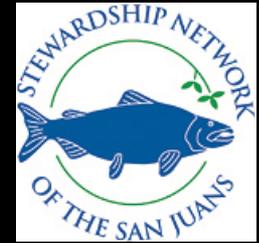


Underwater plants serve as a nursery ground

- Herring spawn
- Fish and shellfish feed, and hide clams
- Stabilizes the sea bottom



Protection of feeder bluffs



- **The primary source of beach sediment in the PNW.**
- **Natural erosive processes move sandy sediment from the bluffs to the beach.**
- **The sediment is critical beach and near shore habitat:**
 - **Spawning beaches for forage fish (surf smelt, sand lance); salt marshes; and eelgrass beds.**



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Goals:

To inform and support participation in the San Juan County Shoreline Master Program

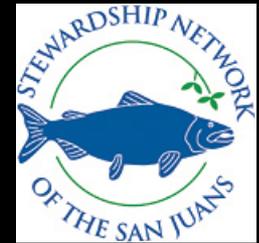
Guide future development to preserve the next generation's chance to see pastoral and forest shorelines, eat local oysters, clams, crabs, smelt, catch salmon and see orca in the wild.

Message: Puget Sound is in trouble and how to change our behavior and our shoreline management decisions to improve the health of Puget Sound.



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Deliverables



- 1. *Evaluation plan - May 30, 2012***
- 2. *Audiences Research - May 30, 2012***
- 3. *Develop SMP Primer - July 31, 2012***
- 4. *Develop basic build out maps - June 30, 2012***
- 5. *Contactors Training - May 31, 2013***
- 6. *8 "Sense of Place" Lectures - July 31, 2013***
- 7. *"Feet on the Beach" Technical experts talks with shoreline property owners July 31, 2013***



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Status

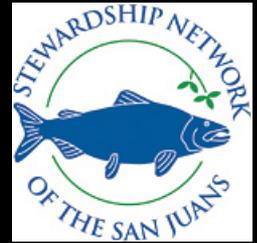


- 1. Evaluation plan – in prep***
- 2. Audiences Research – in prep***
- 3. Develop SMP Primer – in prep***
- 4. Develop basic build out maps – in prep***
- 5. Kick off first 2 lecture series (April & May)***
- 6. Kick off “Feet on the beach”***
- 7. Contractor workshops – in prep***



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8 "Sense of Place" Lectures



Target: Year round residents. 75% 65 or older, living off retirement. Highly literate, like lectures by local/PNW authors and local geology, culture, natural history plants and wildlife.

Goal: Engage through entertaining and informative topics, increase interest to participate, awareness of SMP, appreciation of the economic & ecological value of the shoreline.

Evening lectures, Nov-May at Orca, Lopez, SJI Community Centers

1. The Invisible Shoreline, A diver's perspective by John Williams

2. Ocean Currents and Tsunami Debris in the San Juans, by Jan Newton.



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Contactor Training



Target:

Contractors, builders, architects, septic designers, septic installers, dock builders, surveyors, engineers.

Topics: BMP's and technical assistance on slope stabilization, erosion control techniques, Soft shore alternatives/Green shores, vegetation management stormwater management





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Feet on the Beach



Target:

Property owners living in priority habitats with high shoreline species diversity (Chinook and forage fish) and high frequency of human alterations to the shoreline (from roads, bulkheads, docks, etc.).

Topics:

Slope stabilization, erosion control techniques, soft shore alternatives to bulkheads, vegetation management, and stormwater management.



Thank you!

For More information contact:

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