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Salish Sea Ecosystem Conference

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#### Community forage fish habitat restoration in the San Juans

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# Community Forage Fish Habitat Restoration in the San Juan Islands



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Protecting and restoring the San Juan Islands and the Salish Sea for people and nature

# Community Forage Fish Habitat Restoration in the San Juan Islands



Blind Bay forage fish habitat restoration project



**Community engagement** 



Waterfront property owner engagement



Sea Level Rise Adaptation



**Lessons Learned** 

### **Blind Bay Project Site**

#### **Project Partners:**

Friends of the San Juans
Coastal Geologic Services
WA Conservation Corps
Shaw Island School
Private landowners
Private contractors

#### **Funders:**

WA State Salmon Recovery
Funding Board,
U.S. Fish & Wildlife Service,
WDFW ALEA,
Friends members





### Blind Bay forage fish habitat project

Year-round surf smelt site

Highly visible location

Private ownership

Public road

1 mechanical & 1 hand removal site separated by reference site

Extensive pre project data



#### **Blind Bay Project Methods - mechanical site**

400 linear feet of shoreline treated

> 160 cubic yards of quarry spall removed from the intertidal beach/spawn zone (+4 to +9 MLLW)

200 cubic yards of 'fish mix' nourishment added

Site access via barge

Private contractors





### Blind Bay Project Methods- hand removal

200 linear ft. of shoreline

Surficial quarry spalls

Hand removal of 7 cy into large bags

Excavator removal of filled bags from the road

No nourishment

WA Conservation Corps, youth & community labor

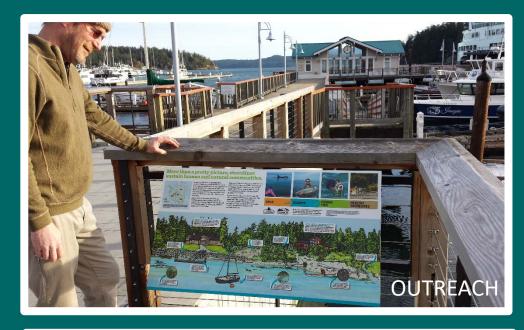
Kids monitoring pre/post





## **Community Engagement**

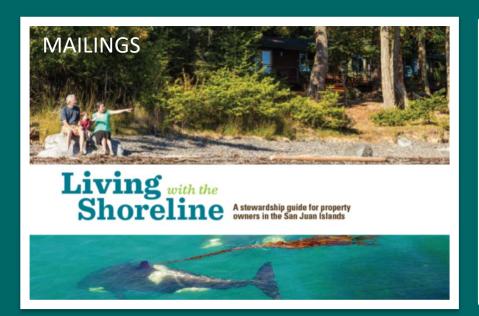








### **Landowner Engagement**

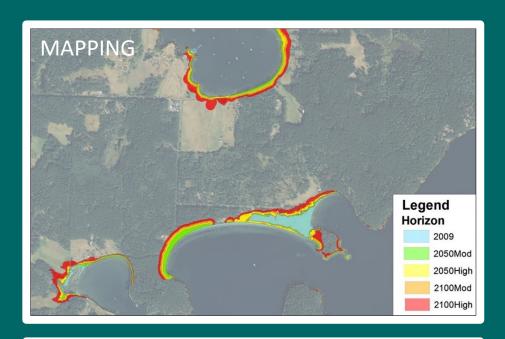




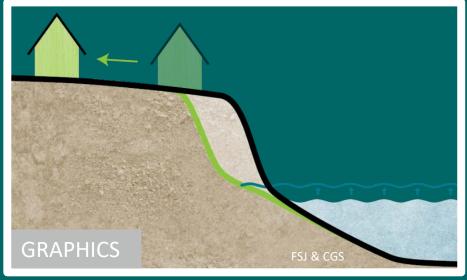


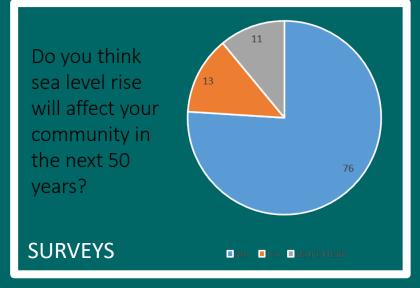


## **Sea Level Rise Adaptation**









## Blind Bay Project Preliminary Results

10,000 square feet of surf smelt spawning habitat unburied.

Incubating eggs documented at the nourished site for the first time in over 10 years within 2 months of project completion.

New landowner interest.

Extensive pre monitoring data, post monitoring continues....





#### **Lessons Learned**

It's all about relationships, not science

Programs need to be consistent and long lasting

Neighborhood scale

Youth get adults involved

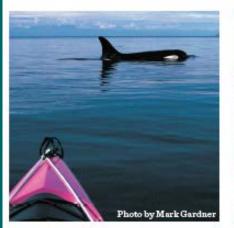
Small projects can = large impacts

Working with landowners takes a lot of time

It helps if you have 'something' for everyone-protection, restoration, education, research,....



#### **Thanks! Questions?**









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HEALTHY SHORELINES

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