

**Honda Marine Science Foundation  
Sunlight Shores Living Shoreline Restoration Project  
Final Report**

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**Reporting Period: April 1, 2018 – November 30, 2020**

**Project Goals and Objectives:**

The goal of the project is to restore natural shoreline processes and habitats in the Northwest Straits region of Puget Sound. The project has two components: 1) a shovel-ready shoreline restoration site, and 2) shoreline landowner outreach and education activities that will lead to additional shoreline sites for future restoration.

**Objectives:**

1. Restore natural shoreline processes and over 350 linear feet of living shoreline habitat through the removal of shoreline armor and installation of native vegetation and large woody debris.
2. Engage shoreline landowners to increase their understanding of and support for living shorelines, natural approaches to shoreline protection, and the process for removal of shoreline armor.
3. Develop new shoreline restoration and armor removal projects.

**Progress and Learning: Living Shorelines/Sato-umi**

Our work to restore natural shoreline processes directly connects the productivity of marine and nearshore habitats to the people who live near them. Our *Shore Friendly* program aims to find solutions for shoreline landowners, restoring and protecting geologic processes such as erosion and sediment movement, while also protecting homes and properties.

Shoreline erosion is a natural and necessary process that creates and maintains the beautiful beaches around the Salish Sea. However, many landowners and historic land management practices made bulkheading and other attempts at stopping erosion commonplace over the past century, altering the landscape and cutting off the backshore and uplands from nearshore and marine systems. These actions have simplified and straightened the shoreline, eliminating the ability of beaches and nearshore habitats to migrate or expand landward as sea level rises due to

climate change. Our outreach and restoration efforts have demonstrated that, in many cases, landowners are able to access and enjoy the shoreline and its riches more easily once hard structures and barriers are removed.

The Sunlight Shores restoration project was identified when a local resident attended a workshop to learn about coastal processes and living shorelines. Through the combined efforts of Northwest Straits Foundation and Island County Shore Friendly programs, the Sunlight Shores community received grant funding and assistance to design this project and move it towards implementation. Residents, some of whom were initially resistant to the proposed changes on their beach, now enjoy easier access to the water and understand the dynamics of processes which are returning to their shore. The community response has been terrific.

## Scientific Rigor

### *Sunlight Shores Design*

Engineering design for the Sunlight Shores project was completed by Coastal Geologic Services, a coastal engineering firm that specializes in armor removal and conversion to living shorelines. Their experts are leaders in the field, with a strong track record of designing similar projects throughout Puget Sound using data collected over the past two decades to analyze drift cells and bluffs. These data help us to determine project feasibility, as well as prioritization of desired outcomes for habitat and species of concern.

### *Restoration Monitoring*

Our monitoring plan was designed to determine the effectiveness of restoration at this site, and to contribute new data about the effects of shoreline armoring. Our monitoring plans follow standardized protocols developed by scientists at the University of Washington, to ensure consistency in data collection across armor removal and living shoreline projects around Puget Sound.

## Broader Impacts

### *Living Shorelines Outreach*

Despite the Covid-19 restrictions that forced us to cancel scheduled in-person workshops in 2020, we produced and distributed the first two episodes of our new “*Shore Friendly Living*” video series. This is already proving to be an effective approach to introducing topics covered in our traditional workshops, providing landowners (and anyone who’s interested) an engaging virtual walking tour of beaches, bluffs, and restoration project sites. The [first video](#) highlights how our beaches and bluffs are formed, while the [second](#), featuring the Sunlight Shores site,

focuses on the impacts of hardened shorelines and benefits of armor removal to restore coastal processes. The third video, currently in production, expands on the benefits of armor removal at the ecological and biological level.

We aim to hold workshops for shoreline landowners in 2021, in compliance with the Governor's reopening plan, and have organized a virtual forum in January featuring experts on coastal processes and living shoreline concepts. Once in-person events are permitted again, we will use Sunlight Shores in field trips to demonstrate the benefits of living shorelines.

Sunlight Shores continues to be featured in tours with government and elected officials. We have hosted Island County commissioners, state representatives, multi-agency review teams working to streamline permitting for living shorelines, and most recently in October, with Congressman Rick Larsen. These and other great demonstration sites of living shorelines are critical in ongoing efforts to secure legislative and other public support for future funding, as well as changes in regulations.

### ***Community Involvement and Outreach***

Community members have taken the lead in maintaining the newly planted vegetation and weeding out invasive species on the shoreline. This volunteer enthusiasm has expanded to other areas within the neighborhood and throughout the Sunlight Shores community. Involvement in the project also encouraged at least one community member to participate in training to become a [Sound Water Steward](#). This Island County program follows the model of several other citizen-science oriented organizations, providing training and resources for individuals to support research and stewardship efforts around the marine shorelines of the Salish Sea.

### ***Development of New Living Shoreline Projects***

Thanks to funding from Honda, the Northwest Straits Foundation secured grants through Washington State salmon recovery funds to advance two new restoration projects through the design and permitting phases. These projects, also in Island County, will remove a total of 1,700 linear feet of shoreline armor. An additional project in Whatcom County has been identified for potential armor removal and living shoreline restoration.

## Budget

Grant Budget \$65,000	Expenditures through Nov 30, 2020	Details
Personnel	\$ 20,996.48	Project management, construction project development and oversight, outreach and communications, monitoring plan development
Travel	\$ 1,188.34	Mileage, lodging, per diem during construction
Contracts	\$ 33,699.71	Construction contract; engineering for final design; financial management
Supplies	\$ 1,591.70	Plants, fencing materials, gloves, buckets
Other Expenses	\$ 548.76	Printing, advertising, workshop expense
Indirect	\$ 5,909.09	
<b>TOTAL</b>	<b>\$ 63,943.08</b>	
Matching Funds	\$ 67,578.41	National Fish and Wildlife Foundation; Washington State Salmon Recovery Funding Board; Washington State Estuary & Salmon Restoration Program

## Timeline to Completion

### *Sunlight Shores Restoration and Monitoring*

Permitting challenges initially resulted in delays to the start of construction, and living shoreline restoration was completed in late Fall 2018. We were able to host two of three planned planting/vegetation management events, one in March 2019, and another in concert with Orca Recovery Day in October 2019. Both events attracted many volunteers and provided outreach opportunities in addition to the planting activities. Our third event was planned for Spring 2020 but was cancelled due to Covid-19 restrictions. We had hoped to reschedule for Fall 2020 but



*partners in marine conservation*

were still not able to do so. Vegetation on site has thrived despite our not being able to fully complete this task. Funding through our Washington State Salmon Recovery grant will support a final event in Spring 2021, assuming we are able to safely convene staff and volunteers.

### ***Outreach and Education***

A total of four workshops were held in Fall 2018, to train area real estate agents about living shorelines and coastal properties. Agents are often the first contact that prospective buyers have when considering shoreline property, by providing them with useful resources and information about the Salish Sea, we hope to instill a sense of stewardship when they make their purchase. The aforementioned *Shore Friendly Living* videos are our most effective new outreach tool in the absence of in-person workshops, and we are reaching a much broader audience than anticipated.