

Project Information Sheet

Applicant: Capitol Land Trust

Strategic Initiative: Habitat Protection and Restoration

AHSS Sub-strategies of Interest met:

B2.1. Permanently protect priority nearshore physical and ecological processes and habitat, including shorelines, migratory corridors, and vegetation particularly in sensitive areas such as eelgrass beds and bluff backed beaches.

B2.2. Implement prioritized nearshore and estuary restoration projects and accelerate projects on public lands.

Additional Sub-strategies met:

A5.3. Protect and maintain intact and functional floodplains

A6.1. Implement high priority projects identified in each salmon recovery watershed's 3 year work plan

Priority Near-Term Action: Henderson Inlet Habitat Acquisition and Restoration: Budd to Henderson Initiative

Ecosystem threat summary

The project site is on the shoreline of Henderson Inlet—an inlet that contains 17.8 miles of salmon-bearing streams, including 11 miles of chum stream habitat, 17 miles of coho stream habitat and 3 miles of Chinook stream habitat (SalmonScape, WDFW, 2015). In addition, Henderson Inlet is known to host winter steelhead and sockeye salmon. (Habitat Limiting Factors for WRIA 13, Haring and Konovsky, 1999).

Henderson Inlet and its associated tributaries currently do not meet state water quality standards for fecal coliform, dissolved oxygen, temperature, and pH, and several of its sub-watersheds have been placed on the list of impaired water bodies specified in the Clean Water Act, Section 303(d). One of the causes of the water-quality issues is the conversion of 20% of the watershed to urban land uses such as asphalt, roofs, and bare or compacted earth—and that percentage is projected to increase to 24% by the year 2030 (Thurston County Geodata Center and Water and Waste Management, Henderson Inlet Watershed Characterization Report, 2007). Of the major watersheds in the Olympia urban area, the Henderson Inlet watershed has the highest human population density; the largest projected growth in human population; the lowest percent forest cover; and the highest projected rate of forest cover loss. On the positive side, only moderate amounts of Henderson Inlet shoreline are armored (South Puget Sound Forum Indicators Report, Thurston Regional Planning Commission, 2006). These issues make protecting functional habitat and increasing healthy shoreline buffers a critical factor in improving Henderson Inlet water quality.

Riparian loss has been identified as a primary stressor in Henderson Inlet, and residential and agricultural uses have been identified as the main causes of this loss in south Henderson Inlet. The loss of shoreline and riparian buffers reduces shade and increases water temperatures; increases erosion; changes inputs of organic materials; reduces ecosystem functions performed by attached organisms on downed wood; reduces LWD function; reduces terrestrial prey species; and reduces substrate for crustaceans (e.g. barnacles) & other organisms. These effects lead to reduced prey and increased predation for salmon (South Puget Sound Salmon Recovery Group, Chinook & Bull Trout Recovery Approach for the South Puget Sound Nearshore).

Project Description

This project is situated on the eastern shore of Henderson Inlet between two major salmon-spawning creeks: Woodland and Woodard Creeks, and consists of two adjacent properties, the 56-acre Harmony Farms, and the 49-acre Stillman Tree Farms. The owners of both properties are seeking to sell their land as soon as possible, preferably to a conservation buyer.

The goals of this project are to:

- 1) Acquire in fee title 105 acres of biologically-sensitive estuary, nearshore and riparian habitat along the shoreline of Henderson Inlet in Thurston County, Washington.
- 2) Restore the marine shoreline areas of the Harmony Farms property.

The Harmony Farms site consists of 4,400 feet of shoreline on Henderson Inlet, including two pocket estuaries; marine, estuarine, and freshwater wetlands; two unnamed perennial streams that drain to the northern pocket estuary; mature upland conifer forest; and a large agricultural field with an unmaintained orchard. Much of the natural shoreline habitat has been highly degraded due to historical property use. When the property was homesteaded, native marine forest adjacent to the shoreline was cleared and replaced with agricultural fields and multiple (now-derelict) buildings and associated infrastructure. Numerous nonnative plant species have established, and are now spreading along the property's shoreline and riparian areas.

The Stillman Tree Farm site consists of 1,200 feet of shoreline on Henderson Inlet, including the southern half a pocket estuary that spans the border with the Harmony Farms property; marine, estuarine, and freshwater wetlands; two unnamed streams that drain to the pocket estuary; mature native forest along the shoreline; and third-growth forest in the uplands. Invasive plant species have established in the property, and following acquisition, Capitol Land Trust would restore ecological function on the property (not included in this Near Term Action).

The objectives of this project are to permanently protect and restore priority nearshore physical and ecological processes and habitat on Henderson Inlet. Goal 1, "Acquisition", will stop future development and degradation on this ecologically significant site, preventing further decline of Puget Sound water quality and wildlife habitat. The acquisition of these sites will protect and provide access to priority habitat for threatened and endangered species, including Chinook, steehead and summer chum, while Goal 2 "Restoration" will improve the quality of these priority habitats; restoring self-sustaining ecological processes and site resiliency in the face of climate change and other ecological stressors.

This project is a key component of a larger protection and restoration initiative, called the Budd to Henderson Inlets Coastal Conservation Initiative, and builds upon a partnership between conservation, industry, tribal, agency and community stakeholders; a collaboration that has successfully acquired over 150 acres of important habitat and completed two fish barrier projects since its inception in 2010. The goal of this initiative is to create viable habitat corridors between Puget Sound and undeveloped wetland, riparian and upland habitat on the peninsula between Budd and Henderson Inlets.

Major Tasks

- Acquire Harmony Farms property (56 acres), in fee title
- Acquire Stillman Tree Farm property (49 acres), in fee title
- Restore Harmony Farms property shoreline (20 acres)
 - Remove derelict structures
 - Remove invasive plants and noxious weeds, establish native plant shoreline buffers

Budget

Project total budget: \$1,362,000. Broken out by major tasks:

Acquire Harmony Farms property

Item	Expense
Land	\$450,000
Due Diligence (<i>appraisal, review appraisal, phase 1, survey</i>)	\$29,500
Title, closing and taxes	\$1,000
Fencing and signs	\$3,500
Stewardship Plan	\$4,000
Admin	\$24,400
Total	\$512,400

Acquire Stillman Tree Farm property

Item	Expense
Land	\$650,000
Due Diligence (<i>appraisal, review appraisal, phase 1, survey</i>)	\$29,500
Title, closing, taxes	\$1,000
Fencing, signs, demolition and invasive plant removal	\$9,500
Stewardship Plan	\$4,000
Admin	\$34,700
Total	\$728,700

Restore Harmony Farms property shoreline (*see RCO design grant #14-1429 for an initial design of this restoration work and in-depth budget information*)

Item	Expense
Site preparation/Invasive plant removal	\$6,000
Derelict structure removal	\$30,000
Native Plantings (<i>plants, supplies & contractual services</i>)	\$56,500
Equipment rentals	\$1,600
Site maintenance/Planting follow up	\$4,000
Admin & Engineering	\$22,800
Total	\$120,900

Project Schedule

Due diligence, both sites: October 2016 – September 2017

Property acquisition, both sites: October 2017 – March 2018

Habitat restoration, Harmony Farms: October 2016 – September 2018

Project Partnerships and Roles

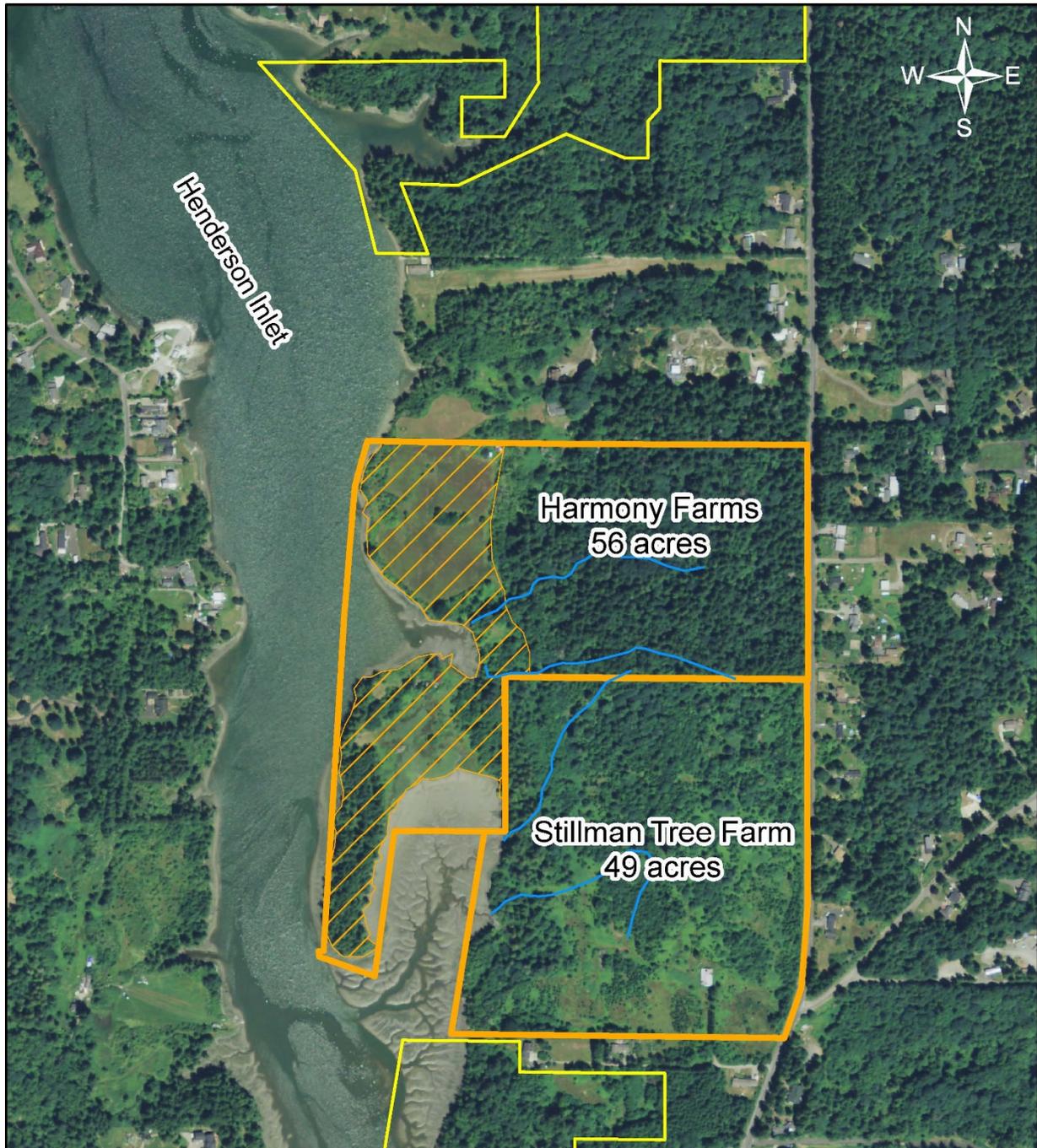
- Sobel Family
 - Landowners/sellers of the Harmony Farms property. Members of the family have been Capitol Land Trust conservation partner since the early 1990s. The family asked Capitol Land Trust to prepare a restoration design plan in advance of undertaking restoration actions (*in*

progress as part of Recreation and Conservation Office grant #14-1429), and are in full support of the project. The family needs to sell the property and would like to see the property be fully conserved by Capitol Land Trust.

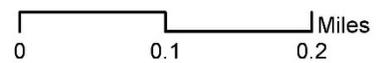
- Stillman Tree Farm
 - Landowner/seller of the Stillman Tree Farm property. Capitol Land Trust has provided the landowners with a letter of intent expressing our desire to obtain an option on the property while we work on a funding strategy.
- Salmon Recovery Funding Board (SRFB)
 - Funding agency for Harmony Farms Restoration Design Plan.
- WRIA 13 Lead Entity Technical & Citizens' Committees
 - Offered technical advice for Harmony Farms Restoration Design, and fully supports project. *(Recommended design phase of project for SRFB funding this prior year, and has included acquisition phase in its 3-year work plan for several years.)*
- Thurston County
 - The County has prioritized remedying problems in Henderson Inlet by creating the Henderson-Nisqually Shellfish Protection District and the Henderson Watershed Protection Area. As a result, it is expected that Thurston County will be willing to donate its expertise in assessing the sites and finalizing restoration plans.



Henderson Inlet Acquisitions Budd to Henderson Initiative



- Acquisition Properties
- Shoreline Restoration Area
- Capitol Land Trust Conserved
- Streams



Map created by Capitol Land Trust with data from Thurston County.
Aerial image from 2013.