



SAN JUAN COUNTY  
LAND BANK

# Channel Preserve

## Stewardship and Management Plan



**February 2020**

**San Juan County Conservation Land Bank**

**350 Court Street No. 6**

**Friday Harbor, WA 98250**

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# Channel Preserve, Lopez Island Stewardship and Management Plan

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## A. Introduction

The Channel Preserve is located on the west side of Lopez Island. In nine acres it ranges in environments from a forest to a coarse, cobble beach at the base of high-banked bluffs. From the shoreline, views extend past Shark Reef in the San Juan Channel to landmarks within the archipelago like Turtleback Mountain, and farther still to the Olympic Range. The waterfront Preserve also offers chance sightings of marine wildlife ranging from limpets to cetaceans, and from seals to loons. The Land Bank's stewardship goals for the Channel Preserve are:

- To protect and enhance the ecological values of the property; and
- To provide the San Juan Islands community with access to sweeping vistas and the sea.

Regulating and restricting land use and development along shorelines is a goal of federal, state and local governments across the nation. The Land Bank's purchase of the Channel Preserve eliminated the threat of residential development to this sensitive area -- with its erosive headland and seasonal flows -- and supported San Juan County residents in their desire for increased access to shorelines. A 2019 survey revealed that over 60 percent of county residents and businesses wanted more access to public beaches.<sup>1</sup> Locals were the first to approach the Land Bank about buying the Channel Preserve and over 100 citizens contributed and raised \$50,000 for a down payment on one of the available lots. More information related to the acquisition of the Channel Preserve, its easements and infrastructure, is detailed in Section B, the Property Overview.

The Preserve's ecological resources and the Land Bank's conservation objectives are reviewed in Section C. In summary, professional assessment has determined that the beach is in near pristine condition and that wave action and sediment combine to create an intertidal zone that is defined by frequent movement. This research has provided a baseline of resource knowledge and produced a repeatable survey to use for monitoring. The Preserve's forested uplands and few, small and scattered wetlands have been influenced and altered by human activities. Conservation objectives will focus on protecting the intertidal zone and improving the integrity, or the ecological function and resilience to disturbance, of the uplands. Restoration activities will aim to remove noxious

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<sup>1</sup> Whitaker, D., Shelby, B. & Shelby, D. 2019. *Tourism and Visitor Management in the San Juan Islands*. Report 1: A Survey of Businesses and Residents. Confluence Research and Consulting.

weeds, enhance the wetlands and promote diversity within the forest. Stormwater flows across the Preserve will be a focus of further study.

The Channel Preserve has been an anomaly in the Lopez community in that unlike other Land Bank Preserves on the island, where there has been almost unanimous community support for the preservation of open space, this acquisition has been contested. Opposition was rooted in the property's transition from private ownership into public, and in the concern that public access would lead to the degradation of the Preserve as well as adjacent properties. The Land Bank has considered these concerns carefully. This plan describes strategies for managing public access (Section D); summarizes the Land Bank's ongoing public process (Section E); and it provides a ten-year budget estimate (Section F).

Establishment of the Channel Preserve provides opportunities to protect an unspoiled beach and its assemblage of native species, enhance the upland vegetation, increase biofiltration, and provide community members and their families with access to the wonderment and relaxation found at the edge of the sea. The primary purposes of this plan are to establish guidelines for environmental protection; to identify a timeline for conservation objectives; and to outline ways in which the Land Bank intends to open the Preserve to the public without compromising its natural resources. Management planning is an adaptive process and the objectives and activities outlined are subject to available funding and final approval.

## **B. Preserve Overview**

The Channel Preserve encompasses 9.67 acres within the San Juan Channel watershed. It is located near the Lopez airport and the junction of Shark Reef Road and Meadow Lane (Figure 1). Long and narrow in shape, the Preserve extends for approximately 1,500 feet from east to west and about 250 feet north to south. An unimproved road provides access to the Preserve's immediate 467 feet of shoreline. The Preserve's beachfront adjoins public tidelands below the Mean High Water (MHW) mark, also referred to as the Ordinary High Water (OHW) mark. To the north, these tidelands extend 1.3 miles and terminate south of the large boulder known as Rock Point. This boulder, also called Big Rock, and the tidelands and beach to the north are private property. To the south of the Preserve, public tidelands extend for .7 miles but use of this area will be strongly discouraged due to the highly unstable bluffs and proximity to the Shark Reef federal wildlife sanctuary. See Section D for more details related to managing public use.

The Preserve's glacially derived substrates are differentiated into two notable zones. The eastern portion is characterized by poorly drained soils, whereas the western portion is comprised of more permeable, even excessively drained, loam. The Preserve's eastern

boundary is flanked by moderate development -- paved roads, residences, the Lopez airport and a golf course – and this, combined with the sub-basin’s slope and poorly drained soils, create conditions of high runoff and ground saturation.

### Acquisition History

The Land Bank acquired the Channel Preserve on June 6, 2017. It encompasses two parcels that are commonly referred to as “Lot A”<sup>2</sup> and “Lot B”<sup>3</sup>; both parcels were previously owned by the Clure family. The Land Bank purchased Lot A, at 590 Eagle’s Roost Lane, for \$410,000 and Lot B, located at 0 Meadow Lane, for \$360,000.

Community donations comprised Lot B’s \$50,000 non-refundable down payment, with the intent to seek grant funding from the Washington State Recreation and Conservation Office (RCO) for the remaining balance. The RCO grant was awarded in summer of 2019 and the Land Bank anticipates paying off the remaining balance early in 2020. The Land Bank also shares ownership of a shoreline common area with the Clure family through their continued ownership of “Lot C”<sup>4</sup>. The Land Bank’s 50 percent interest in the common area, which is in the County’s unbuildable shoreline zone, is designed to secure a trail easement and provide the public with access to a longer stretch of beach.

### Easements

The Channel Preserve is accessed via a road easement along Meadow Lane. The property has several encumbrances. First, the Port of Lopez is allowed unfettered access to the drainage swale that bisects the Preserve and to use the rudimentary road that parallels the swale for any related maintenance activities. The swale and the road are discussed further under Infrastructure. The second easement allows a number of neighbors to access the shoreline from Meadow Lane. Their entrance is west of the proposed parking lot. The Port also holds an easement over the easternmost portion of the Preserve for aeronautical safety. All of these easements will continue unabated.

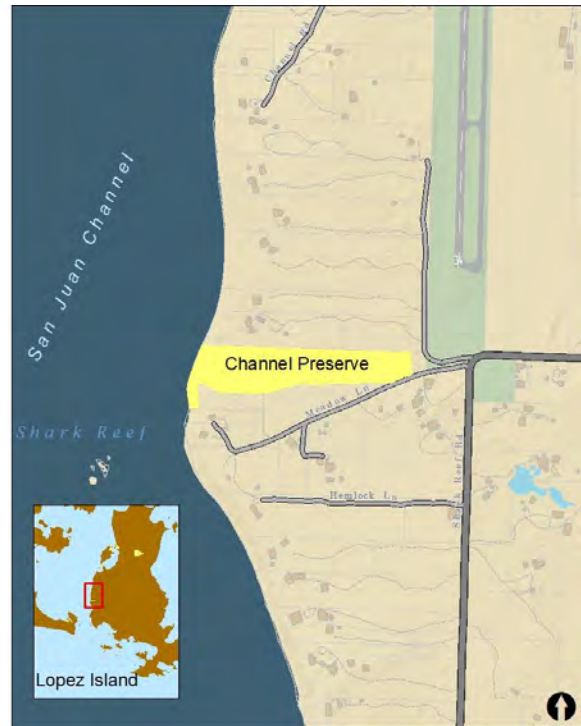


Figure 1. Preserve context

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<sup>2</sup> Parcel # 240421005

<sup>3</sup> Parcel # 240421006

<sup>4</sup> Parcel # 240421007

## **Infrastructure**

The Channel Preserve has limited existing infrastructure. The road, drainage ditches, utilities and the well were all in place prior to the Land Bank's ownership.

### Roads

An unimproved dirt road extends the length of the Preserve and closely follows the boundary between its two parcels. As the road nears the shoreline it veers to the north and begins to parallel the beach. Here, near its terminus, some undercutting and erosion is evident. Much of the road is dominated by non-native vegetation -- orchard grass, bentgrass, hairy cat's ear -- and it has the potential to serve as a future corridor for other invasive species. The road is now used by the Port to maintain the stormwater swale.

### Stormwater Swale

An artificial swale parallels the road and passes under it via several culverts as it courses towards its outfall on the shore. It was constructed in 2000 by the Port of Lopez after several winter stormwater runoff events caused bluff failures. Sized for the 100-year storm peak, at 12.9 cfs, the swale channelizes runoff from the surrounding developed areas and directs it into the sea. At its outfall, there is a steep, sizeable washout. A wetlands technical report also identified two other man-made ditchlines on the Preserve. One drains a small wetland that is within the Preserve boundary and the other drains the overflow of a neighbor's pond onto the Preserve.

### Well

In 2001, the previous owner dug a 111-foot well on the northern parcel. A sanitary setback limits certain activities and development within 100 feet of the well. Use of the well is not anticipated. Lot C, which is not under Land Bank ownership, also has a well near the property line with a similar setback covering portions of the Preserve.

## **C. Ecological Overview and Objectives**

Nearshore environments span from where sunlight reaches the seafloor up into the terrestrial areas that influence the shoreline. These zones are shaped by waves, tides and floods; are critical to food webs that support salmon and shorebirds; and are valued for buffering the impacts of storms as well as for beachcombing. The Channel Preserve's nearshore environment also plays a significant role in the transport of sediments. Natural wave action, sometimes amplified by boat traffic, erodes coastal bluffs and carries the sediments to areas of lower energy where it is then deposited. Here, the drift cell -- a general term for shorelines where sand and gravel naturally move to create beaches -- transports sediment from the Preserve's bluffs and deposits it as far north as the Land Bank's Tombolo and Spit Preserves on Fisherman Bay.



Although the shoreline was the primary motivation for the Land Bank to purchase the Channel Preserve, most of the property is forested. The terrestrial vegetation east of the bluffs act as a filter for surface runoff. By slowing and spreading stormwater flows, vegetation helps to retain soils. And, by limiting the amount of sediment that is picked up by stormwater, vegetation also helps to enhance water quality because nutrients, pollutants and pathogens can all hitch a ride on soil particles. Currently, the upland forest is overstocked and trees are generally of low vigor. Riparian plant species are present but minimal. Aside from maintaining the near pristine character of the intertidal zone, the focus of stewardship for the Preserve will be to improve the ecological integrity of the forest and to enhance the interspersed wetland areas. Overall, the greatest potential threats are believed to stem from invasive species and future development in the area that may increase the amount of runoff and its potential pollutants.

In an effort to link these broad objectives to site-specific goals, the Channel Preserve was first mapped to delineate main habitat areas with notable and distinct ecological values. These are displayed in Figure 2, the Channel Preserve Habitat Map.



**Figure 2. The Channel Preserve Habitat Map**

Staff then assigned ratings (e.g., Poor, Fair, Good) to represent the current condition of each habitat area. These ratings reflect multiple ecological criteria with an emphasis on aspects of biology, ecology or ecological processes that, if missing or altered, could lead to future

declines or losses to either species or habitats.<sup>5</sup> Future ecological enhancement and stewardship activities were then identified after determining a reasonable, desired future condition for each area. A summary of the current and the desired future conditions is provided in Table 1. A similar process is used by other conservation organizations to help prioritize stewardship goals, actions and monitoring. The ecological attributes and ratings in use by the Land Bank represent an iterative, adaptive process informed by research, field observations and peer review.<sup>6</sup>

**Table 1: Generalized current and desired future conditions**

<b>HABITAT AREAS</b>	<b>CURRENT CONDITION</b>	<b>DESIRED FUTURE CONDITION</b>
Intertidal Zone and Shoreline	VERY GOOD – Natural processes intact with diverse and abundant native species.	VERY GOOD – Natural processes intact with diverse and abundant native species.
Upland Forest	FAIR – Even-aged, overstocked stand of conifers with limited species distribution and understory. Few invasive species present.	GOOD – Diverse, mixed age conifer forest with dead and downed wood and a varied understory. Invasive species removed.
Wetlands (emergent, forested and scrub)	FAIR – Inundation and drawdown deviates from natural conditions due to ditchlines.	GOOD – Increase cover and diversity of native plants and reduce invasive species.

Future restoration actions designed to improve ecological function have been outlined at the end of this section in Table 2. All proposals are focused on maintaining existing biodiversity while simultaneously enhancing select areas that have been impacted by man-made disturbances such as altered drainage, clearing for development and the presence of invasive species. In general, weed management efforts will focus on areas of greatest priority and vulnerability, and where actions have the greatest chance of success. Methods

<sup>5</sup> These values are also referred to as Key Ecological Attributes (KEAs) and this methodology for determining conservation action was developed by The Nature Conservancy in 2007.

<sup>6</sup> The rating criteria used for this Preserve was adapted from existing criteria that was developed in Oregon’s Willamette Valley.



will follow Integrated Pest Management<sup>7</sup> approaches, with the preferred methods being manual and mechanical control.

### **Intertidal Zone and Shoreline**

The value of shorelines is widely recognized and numerous state programs have developed materials to assist in their restoration and management. The Department of Natural Resources (DNR) has an Aquatic Assessment Monitoring Team that provides [research materials and references](#). The Puget Sound Nearshore Ecosystem Restoration Project supplies numerous [technical reports](#). In addition to these resources, which will be revisited for monitoring and management protocols, the Land Bank commissioned a site-specific [Channel Shoreline Survey](#). It was performed in 2018 by a University of Washington marine biologist, follows standardized peer-reviewed methodology and it provided an inventory of marine organisms at several intertidal levels. The transects established are repeatable and will be used to monitor shoreline conditions within the Preserve.

The assessment noted eelgrass and kelp beds at the southern extent of the shallow, subtidal zone. However, the highest species diversity was found in the northern stretch of the study area. The report also concluded that the primary drivers of the Preserve's current intertidal community are 1) wave energy from San Juan Channel and 2) unstable beach substrates that roll frequently. The regular movement of beach cobbles has limited the presence of sessile creatures. Therefore, the survey concluded that the shoreline is unlikely to suffer noticeably from an increase in pedestrian traffic. However, the report also stated that one concern for the site was the potential for human activity to disturb wildlife. In order to minimize this disturbance, the Land Bank will monitor for seal pups and restrict dogs.

The upper shore is characterized by driftwood, sand, dune grass and other native plants. The upper driftwood zone is also well vegetated with dune grass, yarrow, sheep sorrel and beach bursage. The coastal bluffs on the Preserve have some patches of Scot's broom but are otherwise dominated by shrubs such as Nootka rose, snowberry and bitter cherry. These native species provide slope stability, wildlife habitat for insects and birds, and help to protect the marine organisms from pollutants and excessive turbidity related to surface runoff. Short-term stewardship efforts will focus primarily on protecting the native flora in the nearshore zone, removing invasive species as well as any marine litter debris that washes up from San Juan Channel.

Summary of proposed protection activities:

- Protection of shoreline habitat through regular monitoring

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<sup>7</sup> For further details see the Land Bank's *Guidance for Integrated Pest Management Plan*

- Increased monitoring during seal pupping season
- Removal of derelict boats
- Shoreline survey repeated after five years

## **Wetlands**

Although the San Juan County wetland inventory does not show any mapped wetlands on the Channel Preserve, field reconnaissance revealed five wetland areas totaling 5,820 square feet. One of these, referred to as wetland “B” in the [technical report](#) would require a buffer of 25-feet if, in the future, a trail was developed in its vicinity. Some of the wet areas identified were thought to be naturally occurring. Others may have been created by disturbances such as road excavation. Many serve as catchment areas for the Preserve’s significant seasonal runoff. These wetlands are shallow and ephemeral and therefore unlikely to support breeding amphibians. However, their existing flora of red alder, crabapple, soft rush and slough sedge creates pockets of diversity in an otherwise conifer-and-salal dominated stand.

Native riparian and wetland vegetation protects water quality and provides valuable wildlife habitat. Enhancement of the Preserve’s wetter areas could potentially help mitigate excessive waterfront bluff erosion by intercepting and slowing upslope surface water runoff. The Land Bank may work to improve the Channel Preserve’s stormwater flows in ways that maximize water quality and minimize silt carried to the shoreline.

Staff will focus initial stewardship efforts in wetland areas on: reducing the density of priority weeds, promoting native vegetation and monitoring the seasonal extent of wetlands. Future opportunities to slow runoff and increase filtration will be considered. A partnership with the Port of Lopez to enhance biodiversity along the open ditch may also be sought as it currently harbors noxious weeds such as reed canary grass and scot’s broom.

Summary of proposed enhancement activities:

- Weed management
- Identify Best Management Practices to improve water quality
- Native plantings in wetland areas and other man-made clearings
- Look for partnerships to enhance biodiversity and minimize disturbance along the drainage ditch and surrounding the outflow area

## **Upland Forest**

The Preserve’s forestland is dominated by Douglas fir, with some trees reaching sizes of approximately 30 inches in diameter. Shorepine is co-dominant and ranges in diameter from about 10-18 inches. Mature grand fir and red alder are also on the Preserve. Historic

1874 records from the Government Land Office are vague but they do describe the eastern acres as “a hemlock and fir thicket.” Currently, western hemlock occurs infrequently. Regeneration of all species is poor. The understory is primarily dominated by salal and oceanspray though trailing blackberry and sword fern also occur throughout. Canopy openings are populated with bedstraw, Pacific sanicle and Miner’s lettuce.

Species composition transitions from east to west, possibly in conjunction with the change in soils and disturbance history. The eastern third of the Preserve has the lowest species diversity and the highest stem density. In the wetter, western areas the conifers are festooned with fishnet lichen. Bitter cherry and salmonberry occur at the cusp of the coastal bluff. Overall, the forested upland is of variable quality due to previous land use activities including logging and clearing, extensive browsing of understory species by deer, and the presence of invasive species. More information can be found in the [Uplands Habitat Assessment](#).

Short-term stewardship efforts will focus primarily on understory enhancement by controlling invasive species such as tansy ragwort, English holly and Scot’s broom. Native plantings in the wetter, western regions are also under consideration. Mid-term conservation objectives will include preparing and implementing a forest health plan that: promotes diversity in structure and species, reduces stand density, opens the canopy to increase the abundance and diversity of understory flora and reduces the risk and intensity of wildfire by breaking up the continuity of vegetation or “fuels.” Mitigating the threat of wildfire will be discussed further in the following section on public access as it also involves community education and collaboration. Overall, conservation objectives for the uplands will be to promote biodiversity, increase tree vigor and resilience to disturbance.

Summary of proposed enhancement activities:

- Weed management
- Understory thinning and removal of ladder fuels
- Assessment of planting natives to improve structure and species diversity
- Recruitment of snags and coarse downed wood

**Table 2. Channel Preserve prioritized habitat enhancement actions and associated costs**

<b>Habitat Areas</b>	<b>KEAs</b>	<b>SOURCE OF STRESS</b>	<b>MANAGEMENT ACTIONS</b>	<b>PRIORITY</b>	<b>SEQUENCING</b>	<b>EST. COST</b>	<b>MONITORING</b>
All areas	Native vegetation composition	<i>Invasive species, legacy and neighboring land uses</i>	<i>Control invasive species with manual and spot treatments using an IPM approach</i>	<i>High</i>	<i>Near-term</i>	<i>\$5,000 (\$500/year over 10 years)</i>	<i>Periodic site walks, photo points</i>
Shoreline	Species composition and diversity	<i>Invasive species, human use, dogs, climate change, sea level rise</i>	<i>Restrict certain activities such as dog walking. Plant shoreline vegetation in disturbed sites</i>	<i>High</i>	<i>Near-term</i>	<i>\$6,500</i>	<i>Periodic site walks, photo points, species surveys</i>
Upland Forest	Native species cover and diversity	<i>Logging, land conversion, invasive species, deer browse</i>	<i>Plant and protect native understory and overstory plants</i>	<i>High</i>	<i>Near-term</i>	<i>\$1,500</i>	<i>Periodic site walks, photo points</i>
	Forest structure; standing and downed dead wood; mature trees	<i>Logging, deer browse, climate change</i>	<i>Complete and implement forest health management plan: thin dense stands, create snags, plant understory vegetation</i>	<i>Medium</i>	<i>Medium-term</i>	<i>\$10,000</i>	<i>Periodic site walks, photo points</i>
Wetlands	Habitat area; Native species richness	<i>Land conversion</i>	<i>Enhance wetland vegetation</i>	<i>Medium</i>	<i>Medium-term</i>	<i>\$500</i>	<i>Periodic site walks, photo points</i>

## **D. Public Access Overview and Objectives**

The Channel Preserve has been the Land Bank's most controversial acquisition on Lopez. In general, advocates for the establishment of a Preserve were islanders seeking access to the western shore. Opponents – mostly neighboring property owners -- voiced concerns that the quiet beach would become overrun with activity and that this would threaten both the natural resources and the neighborhood's sense of peace. Both of these sentiments were reflected in the 2019 survey conducted by Confluence Research and Consulting. Over 60 percent of county residents responded that they wanted more public lands as well as access to public beaches. And, roughly 90 percent of locals also reported feeling that the area's level of tourism is at or over capacity.

One component of the Land Bank's mandate is to provide opportunities for low impact recreation. The Channel Preserve holds great potential to provide for this, but recreation must be designed so that it minimizes any effects on the Preserve's scenic and ecological values. The Land Bank's goal for the Channel Preserve includes providing shoreline access to local residents without degrading the ecological resources. Low-impact activities deemed suitable for the Preserve include walking, wildlife viewing and picnicking.

At this time, short-term objectives for providing public access to the Channel Preserve include developing a small parking area, installing signage and establishing a strong presence in order to influence visitor culture. The existing road will be mowed and maintained as a trail. Trail counters and volunteers will be used to monitor visitation rates. Mid-term objectives will be to review the level of use and determine if any other recreational infrastructure or regulations are needed.

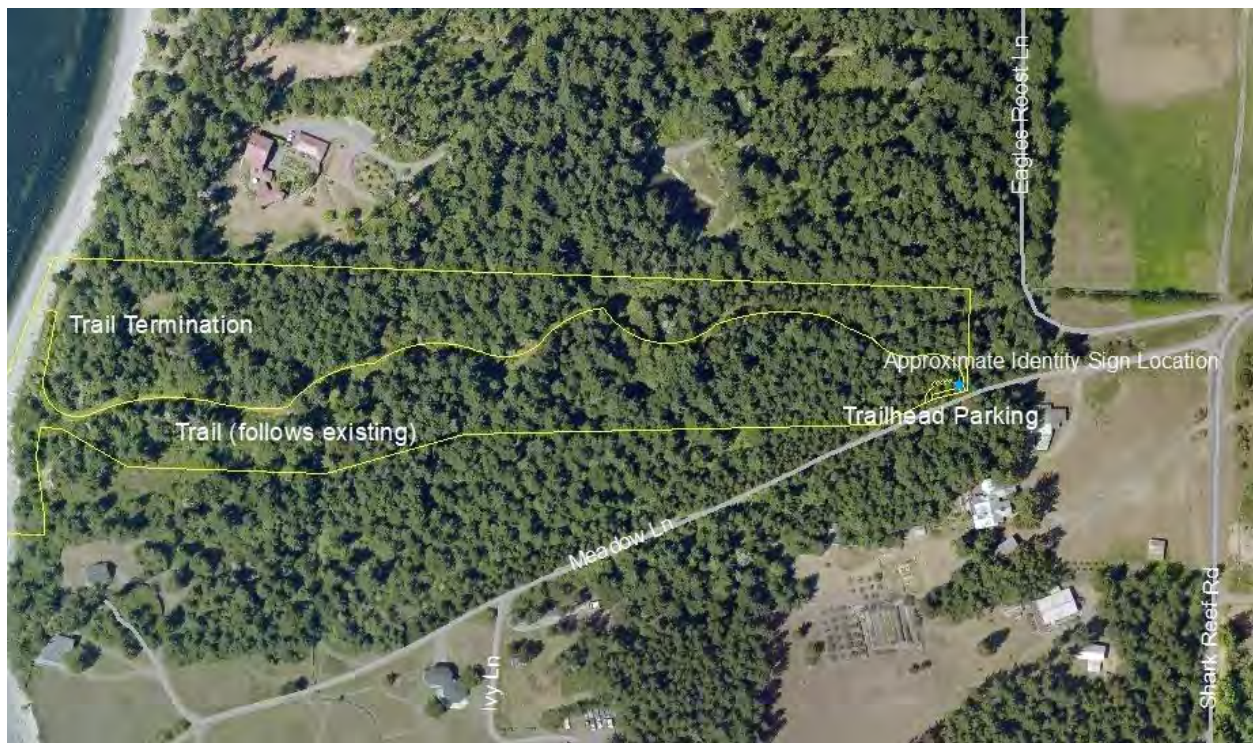
### **Level of Use**

Maintaining a moderate level of use will be essential to the protection of the Preserve's special qualities. The Land Bank will employ multiple strategies to keep use within an acceptable range. These include limiting site development such as parking and facilities, installing discreet signage and working with the San Juan Islands Visitors Bureau and the Lopez Chamber of Commerce to limit publicity of the Preserve. Access will be allowed only during daylight hours and there will be no commercial uses permitted.

### **Recreation**

A trailhead is planned at the parking area on the east side of the property, and the existing access road that curves through the forest to the beach will serve as the main trail. (Figure 3). Access will be for pedestrian use only. Due to the narrow boundaries of the Preserve and the steep bluff no additional trails are planned at this time. On the shoreline, the Land Bank will allow recreational activities such as wildlife viewing, picnicking, and walking on

the public tidelands. Non-motorized watercraft such as kayaks and paddleboards will be permissible but they will need to be carried down from the parking area.



**Figure 3. Proposed Public Access Overview Map**

Routine maintenance for public access will include mowing the road in order to retain it as a walking path, picking up litter and marine-debris, reviewing posted signage, and other tasks as needed. Land Bank staff, volunteers and contractors will perform this work.

### **Dogs**

The Land Bank recognizes that recreating with dogs is a popular activity. Still, research has shown that dogs displace wildlife and reduce the functionality of habitat. For example, in general shorebirds perceive dogs as predators even if they are not actively chased by them. This can have negative consequences on their reproductive success and survivorship.<sup>8,9</sup> In order to protect the nearshore habitat for species such as shorebirds and seals as well as the recreational asset of wildlife viewing, the Land Bank will prohibit dogs on the Channel Preserve. However, there are numerous private access points along this shoreline and

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<sup>8</sup> Senner, S.E., Andres, B.A., & Gates, H. R. (2016). Pacific Americas shorebird conservation strategy. National Audubon Society, New York, New York, USA

<sup>9</sup> Hennings, L. (2016). *The Impacts of Dogs on Wildlife and Water Quality: A literature review*. Metro Parks and Nature.



visitors to the Channel Preserve may encounter dogs when they walk the public tidelands to the north.

### **Other Restrictions**

Signage and in-person contact from Land Bank staff and volunteers will be the primary method of educating visitors about regulations. When necessary, enforcement may be carried out through the San Juan County Sheriff's Office. Standard restrictions for Land Bank Preserves are provided in Appendix B. These range from Leave No Trace to no campfires. However, additional restrictions will be in effect for the Channel Preserve.

Summary of proposed use and restrictions:

- Pedestrian trail only
- Access during daylight hours
- No dogs
- No special events
- No commercial use

### **Infrastructure**

A gravel parking area for five cars is proposed near the southeast corner of the property. Trees and other natural vegetation will be retained and established in order to screen the parking area from the county-owned Shark Reef Road. No overnight parking will be allowed. No overflow parking will be available. Signage may be posted informing visitors to go elsewhere if the parking area is full. A bicycle rack will also be installed. No toilets or other facilities are currently planned for the site. Patterns of use will be recorded and assessed to determine future needs.

### **Signage**

Signs are installed on Preserves to inform visitors about the Land Bank's rules and restrictions and to protect neighbor privacy and natural resources. As a general guideline, the Land Bank aims to keep signage to a minimum. Discreet signage planned for the Channel Preserve will educate visitors about regulations and private property and tideland boundaries. Interpretive signage will be designed to notify visitors that public tidelands are below the Mean High Water (MHW) mark, also referred to as the Ordinary High Water (OHW) mark, and that they extend north for over a mile and terminate prior to Rock Point. Southern tidelands will be marked as dangerous due to their proximity to highly unstable bluffs as well as a sensitive wildlife area for their proximity to the federal sanctuary, Shark Reef. No directional signage will be posted on Shark Reef Road. Additional signage for property adjacent to the Preserve and along the tidelands may be designed and installed in consultation with neighbors.

### Summary of proposed infrastructure

- Gravel parking area for five cars
- Bike rack
- Permanent signage related to restricted uses and Preserve boundaries
- Seasonal signage related to wildfires and seal pups
- Interpretive signage for identifying MHW

### **Outreach, Education and Research**

Interpretive programs may be organized by Land Bank staff or in collaboration with outside groups or experts. Where appropriate, the Land Bank may collaborate with local organizations, schools, universities and scientists to increase or disseminate knowledge of the Preserve's ecological resources. Activities related to education and research will be subject to review, conducted on a permission-only basis, and limited in size or duration.

### Volunteers

The Land Bank will continue to work with volunteer monitors to meet its stewardship objectives. A monitoring plan will be developed and additional volunteers will be recruited before the Preserve opens to the public. Currently, monitors visit the Preserve regularly, observe its condition and note level of use. They may also engage in routine maintenance activities, invasive species control and visitor education.

### Fire

The San Juan Islands are subject to seasonal drought conditions with the risk of wildfire in the summer. This coincides with the peaks in tourism and outdoor recreation. The Land Bank does not allow fires on its Preserves and it will increase outreach related to wildfire. The Land Bank will combine wildfire risk reduction and forest health objectives in the management of its uplands and will work to promote community preparedness.

### Summary of proposed outreach:

- Continue volunteer monitor program
- Post seasonal signage highlighting fire danger
- Increase staff and volunteer presence during high fire danger
- Maintain the trail for emergency vehicle access and as a fuel break
- Coordinate activities with Lopez Fire and EMS

## E. Public Process Overview

To gather and incorporate input from the public regarding the use and management of Channel Preserve, the Land Bank provided and sought information in a variety of ways. These are summarized in Table 3.

**Table 3. Channel Preserve Planning and Public Involvement Process**

<b>Action</b>	<b>Date</b>
Community hearings regarding acquisition	5/2016-4/2017
Comment period	5/2016-4/2017
Commission approval of purchase	4/2017
Interim Plan Public Hearing and approval (as part of Amended Budget) by Land Bank Commission	3/16/2018
Interim Plan Hearing and approval by County Council	3/26/2018
Assessment period	2017-2019
Scoping Meeting	10/9/2019
Draft Stewardship and Management Plan Presentation, Land Bank Commission Meeting	11/15/2019
Draft Stewardship and Management Plan Public Comment Period	11/6-12/6/2019
Public Hearing on Revised Draft Plan (as part of Amended Budget) by Land Bank Commission	5/22/2020
Approval by Land Bank Commission	5/22/2020
Public Hearing on Revised Draft Plan (as part of Amended Budget) by San Juan County Council	6/9/2020
Approval by San Juan County Council	6/9/2020
Stewardship and Management Plan Adoption	6/9/2020

## F. Budget Projection

This budget projection is intended as a financial planning tool and considers annual property management costs, infrastructure enhancement or “one-time” costs, and multi-year ecological enhancement costs. Costs are adjusted for average inflation of 2.5 percent. All numbers are approximate and expenses will be reconsidered annually as part of the Land Bank’s regular budgeting process.

**Table 4. Ten-Year budget projection**

Year	General Operations <sup>10</sup>		Capital Projects <sup>11</sup>		Yearly Subtotal
2020	13,916	Mowing, Weed control, Installing signs, Monitoring (weekly and annual)	\$12,700	Parking Area, Signage, Gates and Fencing	\$26,616
2021	14,264	General stewardship, maintenance and monitoring	\$800	Habitat Enhancements (Native plantings & Fencing)	\$15,064
2022	14,620		\$5,500	Forest Health Implementation Plan	\$20,120
2023	14,986		\$5,000	Forest Health Implementation Plan	\$19,986
2024	15,361		\$600	Photo Monitoring	\$15,961
2025	15,745		\$6,600	Shoreline Survey Assessment	\$22,345
2026	16,138		\$0		\$16,138
2027	16,542		\$0		\$16,542
2028	16,955		\$0		\$16,955
2029	17,379		\$0		\$17,379
<b>Total</b>					<b>\$187,106</b>

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<sup>10</sup> Recurring, non-capital improvement operating expenses such as monitoring and maintenance.

<sup>11</sup> One-time capital expenses

## G. References

Additional information about the Channel Preserve will be made available upon request. Supporting digital documents are hyperlinked when possible.

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## **H. Appendices**

### **Appendix A. WDFW Priority Habitats and Species**

The species and habitats identified below are excerpted from Washington Department of Fish and Wildlife's Priority Habitats and Species list for San Juan County. This list of species and habitats was developed using the distribution maps found in the Priority Habitat and Species (PHS) List (see <http://wdfw.wa.gov/conservation/phs/>). Some listings are made based on ecological significance, others because of their importance as game animals. One priority habitat and two priority species were identified within Channel



Preserve: Estuarine and marine wetlands, Pileated woodpecker and Columbian black-tailed deer.

#### Habitats

Estuarine and Marine wetland

#### Mammals

Columbian black-tailed deer

#### Birds

Pileated woodpecker                      Candidate for State Listing

### **Appendix B. Rules and Use Restrictions**

The following use restrictions will be in effect. Restrictions are intended to protect the ecology of the Preserve, the safety and peace of neighbors, and to minimize management costs. They will be posted on site and mentioned in literature as appropriate.

The Land Bank generally relies on signage and periodic contact from staff or volunteers to educate visitors about use restrictions. An enforcement ordinance governing activities on Land Bank Preserves was adopted by the San Juan County Council on August 25, 2009. When necessary, enforcement actions may be carried out through the San Juan County Sheriff's office.

- Daytime use only
- Pedestrian access only
- No camping
- No fires
- No dogs
- No vehicles
- No hunting
- No bicycles
- No horses
- Launching or landing of UAV (drones and similar devices) is allowed only for research purposes solely with written permission of Land Bank Director
- No commercial use
- No collection of botanical, zoological, geologic or other specimens except on a permission-only basis for scientific or educational purposes