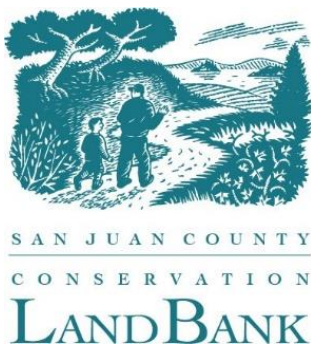


North Shore Preserve Interim Stewardship and Management Plan



April 2023

**San Juan County Conservation Land Bank
350 Court Street No. 6
Friday Harbor, WA 98250**



North Shore Preserve, Orcas Island Interim Stewardship and Management Plan

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A. Introduction

North Shore Preserve is a new natural area on Orcas Island that protects critical habitats for salmon and provides the local community with access to shoreline, wetlands and forest. The establishment of the Preserve, on the former site of Glenwood Inn, also presents the San Juan County Conservation Land Bank (Land Bank) with a significant restoration opportunity. Abandoned for years, the property includes extensive dilapidated infrastructure that must be removed to ensure public safety and ecological health.

The Land Bank's acquisition of this 58-acre property, and its ongoing transition into a public preserve, was made possible by partnership support of the nonprofit San Juan Preservation Trust (SJPT) and their many donors. Following the placement of a SJPT conservation easement on the property, the removal of derelict buildings and the replanting of disturbed areas, North Shore Preserve will feature restored wetlands, expansive sea views and beach access.

The protection of undeveloped natural areas is a central tenet of the Land Bank's mandate.¹ Establishing interconnected natural areas is one approach to mitigating the global crises of biodiversity loss and climate change, and the Land Bank often seeks to protect lands that extend existing conservation areas; North Shore Preserve protects important ecological linkages, particularly within the tidelands and nearshore zone where eelgrass meadows extend for approximately two contiguous miles.²

After acquiring a property, the Land Bank creates a Stewardship and Management Plan (SMP) to guide decision-making and work planning, and to promote transparency. These plans identify future management priorities and summarize planned site activities. They are adopted by the Land Bank Commission following a public hearing and then ratified by the San Juan County Council, typically as part of the County's budgetary process.

This Interim SMP for North Shore Preserve will temporarily satisfy the above requirements. It identifies priorities for the next two years and provides a summary of proposed activities and their estimated costs (Tables 2 and 3). These priorities were informed by experts in ecology, cultural resources, historic preservation, geotechnical engineering, and landscape architecture. They take into consideration the site's various conservation values and terrain, desired public uses, anticipated implementation costs and maintenance

¹The Land Bank's mandate is to "preserve in perpetuity areas in the county that have environmental, agricultural, aesthetic, cultural, scientific, historic, scenic or low-intensity recreational value and to protect existing and future sources of potable water."

² Friends of the San Juans, [SJC Eelgrass Survey](#). 2004

requirements. Interim activities will focus primarily on ecological restoration (Section B) and preparing for public access to the shoreline (Section D). More specifically, projects will be oriented towards alleviating risks by removing derelict buildings and other debris, restoring habitat in heavily disturbed areas, stabilizing an erosive road segment which descends the bluff to the shoreline and modifying it into a trail, and developing a parking lot. Ultimately, implementation of these projects will depend on receipt of regulatory permits, where applicable, and the availability of funding.

North Shore Preserve will remain closed to the public during this interim period. This closure is expected to last up to two years due to the extensive permitting required. However, staff will provide opportunities to visit the Preserve during guided tours, volunteer work parties and public meetings.

Summary of Interim Plan Objectives:

- Assess and protect natural, cultural and historic resources;
- Remove and/or modify infrastructure to provide safe future access;
- Enhance the ecology within disturbed areas;
- Engage Tribes and the community in long-term stewardship plans; and
- Support SJPT in fundraising for their conservation easement.

B. Preserve Overview

North Shore Preserve encompasses 58.4 acres in the northwestern corner of Orcas Island.³ It is located approximately 10 miles from the Orcas ferry terminal and two miles from Eastsound. It lies within the near vicinity of a Natural Area Preserve owned by DNR and the open space of Camp Orkila. It shares immediate boundaries with six different residential properties (Fig 1).

The highest point on the Preserve is found on a forested, rocky ridge, at an elevation of 260 feet.

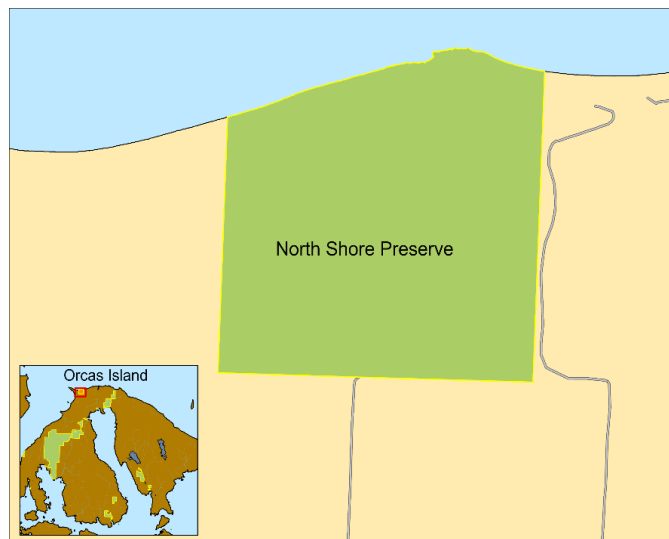


Figure 1. Preserve Context, NW Orcas

³ TPN 271031001000

The high-bank upland topography is moderately sloped except for a rocky knoll in the southwest corner. The terrain changes dramatically at the coastal bluffs with portions dropping 70-feet to the beach. Mature Douglas fir and Western red cedar forests slow and filter runoff, which flows through heavily altered remanent seeps and wetlands to the shoreline.

The northern boundary spans 1,800 feet of shoreline and encompasses a half-acre of tidelands. Former shorelines and wave-cut terraces are evident, and modern formations range in composition and function from bedrock cliffs to feeder bluffs; the erosive nature of the latter helps to maintain beaches, and important shoreline and intertidal habitats.⁴ The Preserve is within a high priority region for salmon recovery in the San Juans.⁵ Conservation of the forest and shoreline help to sustain nutrient cycling and other nearshore ecological processes, protect vital habitats such as the offshore eelgrass meadows that provide critical cover for juvenile Chinook, and supply salmonid food webs with a suite of terrestrial and aquatic invertebrates.

North Shore Preserve supports many native terrestrial and marine species. Bald eagles utilize the mature Douglas-fir trees along the bluff; river otters forage along the beach; and in an informal bird survey conducted by staff five warbler species were observed foraging on decadent alder trees.⁶ Initial efforts to identify, protect and restore habitat areas are outlined further in Section C.

The San Juan Islands have been home to Coast Salish people for millennia. Ethnographic accounts, historic record and oral histories all indicate a significant Coast Salish presence on or around the North Shore property.⁷ A review of cultural resource objectives is provided in Section D. Euro-American use of the Preserve began approximately in the 1890s. In more recent history, the property operated as a private inn from the 1930's to the early 2000's.

Acquisition History

The Conservation Land Bank acquired the 58.42-acre property in 2022, following more than a year of negotiations. The \$6.35 million dollar purchase was made possible by a 1 percent Real Estate Excise Tax, which is paid by those purchasing property in San Juan County, state salmon recovery grants, and by private funds currently being raised by SJPT.

⁴ Friends of the San Juans - Coastal Geologic Services, 2022.

⁵ The Waldron-President's Channel High Priority Fish Use Region, [PIAT II 2017](#).

⁶ Black-throated gray, orange-crowned, yellow, Townsend's and Wilson's warblers.

⁷ Wessen, 2007.

Conservation Easement

The San Juan Preservation Trust intends to purchase a Conservation Easement (CE) from the Land Bank by 2025. The CE will prevent subdivision and restrict development of the property and ensure that the Preserve's conservation values are protected in perpetuity.

Infrastructure

As the former site of Glenwood Inn for many decades, there is a substantial amount of infrastructure on the Preserve including, buildings, septic tanks, fencing, powerlines and solar panels. Maintenance, replacement and repair of infrastructure can be a significant expense, and a diversion of resources from the Land Bank's primary mission to protect open space. Since purchasing the property, Land Bank staff and consultants have evaluated all of the existing structures and utilities.

Structures: The property features nine buildings over 50 years old. These include the main house, four rental cottages dating to the 1930s, three beachfront rental cottages dating to the 1950s and 1960s, and a pump house and spring box dating to the 1930s.⁸ All of these structures and their associated underground utilities including five septic tanks are in severe disrepair and slated for removal. These activities and their projected costs are provided in Table 2. Removing this infrastructure will improve the safety of the property, reduce the likelihood of groundwater contamination and enable site restoration.

The existing 4,800 square foot garage, built circa 2005, is in sound condition. Pending successful permitting and other approvals, the building may be renovated to serve as a publicly accessible facility that provides services for conservation practitioners such as flexible meeting and workspaces, overnight conservation crew quarters, and storage for tools and equipment. To retain this building for future use, essential improvements will include re-routing and upgrading the electrical and water systems as well as improving parking in the vicinity.

Roads: A county-maintained gravel road provides entrance to the Preserve. At the property boundary a single lane gravel driveway leads northward to the main house before turning eastward and down a steep slope to the beach. This lower segment was reviewed by a geotechnical engineer and deemed unstable and prone to landslides and slumping.⁹ Based on this finding, the Land Bank proposes to perform slope stabilization activities once demolition of the beachfront cabins is complete, and to convert this segment of road into a pedestrian trail. More information about public access is provided in Section E.

⁸ Equinox Research and Consulting International Inc. (ERCI).

⁹ ZipperGeo, Inc. 2022.

Several secondary roads and/or driveways fork off the main entrance road. One driveway provides access to a private, adjacent residence and the others provide access to the garage. The Land Bank will install an automated dawn-to-dusk gate at the property boundary and a manual gate at the entrance to the garage to reserve the limited parking associated with the building. If seasonal overflow parking is needed, the gate to the garage could then be opened to accommodate more preserve users.

Access and Utility Easements: The adjacent neighbors to the west are afforded entrance to their property via a pre-existing access easement. An underground OPALCO powerline enters from the eastern boundary and runs in a northwesterly direction towards the main residence.

Well: A 25-foot deep well serves the property.¹⁰ The existing well infrastructure is non-functional. New water and electrical lines and filtration equipment will need to be installed prior to use.

C. Ecological Overview and Conservation Objectives

Habitat and resource protection is a guiding principle of the Land Bank's stewardship program. Maintaining or restoring a preserve's ecological health protects native species, contributes to scenic character and can provide diverse ways for humans to connect with nature. For example, wildlife activity on a preserve affords memorable, outdoor experiences.

North Shore Preserve was identified in 2017 as a priority parcel for protection.¹¹ It is part of a significant area in the San Juan Islands for out-migrating juvenile salmon and juvenile Chinook are more abundant in this northern region than any other in the County. Nearshore habitats provide juvenile salmon with refuge from predators, as well as a place in-between their natal river and the ocean to feed and achieve high-growth rates. During late spring and summer months, juvenile Chinook remain in relatively high numbers along shoreline areas.¹²

The Preserve's nearshore environment includes 1,800 feet of shoreline and a half-acre of tidelands. Eelgrass meadows, which provide critical rearing habitat for juvenile Chinook and other salmonids, as well as for species of forage fish such as Pacific herring, Pacific sand

¹⁰ Well report ID 64802.

¹¹ Whitman, T., A. MacLennan, B. Rot, and P. Schlenger. 2017. [PIAT II 2017](#)

¹² [Beamer, E and K Fresh. 2012.](#)

lance and surf smelt, exist within the Preserve's boundaries. Goals for the interim period focus on protecting and enhancing ecological functions within the nearshore zone. The Land Bank will commission a shoreline assessment during the interim period to identify sensitive species or features and provide future, long-term management recommendations.

The Preserve's terrestrial habitats include several heavily altered wetland areas, and three broad forest types (Fig 2). The first forest type extends along the beach, up the slopes and above the crest of the coastal bluff, and then continues further inland to surround the central area that was cleared for development. It is comprised of: Douglas fir, Western red cedar, Douglas maple, red alder and Scouler's willow. Also in this area, at the toe of the slope, is a small and unique stand that includes Sitka spruce. Native shrubs such as oceanspray, snowberry, elderberry, and Nootka rose, dwarf Oregon-grape and salal are found within the understory.

The southeastern portion of the property is categorized as a moist forest type. The overstory is predominantly composed of Douglas fir and Western red cedar, though Western hemlock and red alder are also found here. In areas with close-growing cedars and firs, the understory is very sparse, while in other areas it is dense with salal and salmonberry. Associated with the gentle topography, and proximity to the main road, several garbage dump sites are located in this area and will be removed.

The third forest type is found in the southwestern portion of the property. It is somewhat drier here and several outcrops of exposed bedrock are visible. Douglas fir is the dominant species, although pine, cedar and madrona are scattered within. A well-developed understory composed of oceanspray, rose, salal and other shrubs persists.

Numerous noxious weeds exist on the Preserve: Himalayan blackberry, non-native roses, English hawthorn, English ivy, Canada thistle, reed canary grass and tansy ragwort. English holly is widespread. Efforts to control these invasive species, in collaboration with the County Noxious Weed Board, will be an emphasis of the interim period. In general, the Land Bank's weed management efforts are focused in areas of greatest priority and vulnerability, and where actions have the greatest chance of success. Staff follow Integrated Pest Management approaches, with the preferred methods being manual and mechanical control, and with cut stem and spot herbicide treatment used on a case-by-case basis for species that are especially difficult to control.¹³

¹³For further details see the Land Bank's *Guidance for Integrated Pest Management Plan*

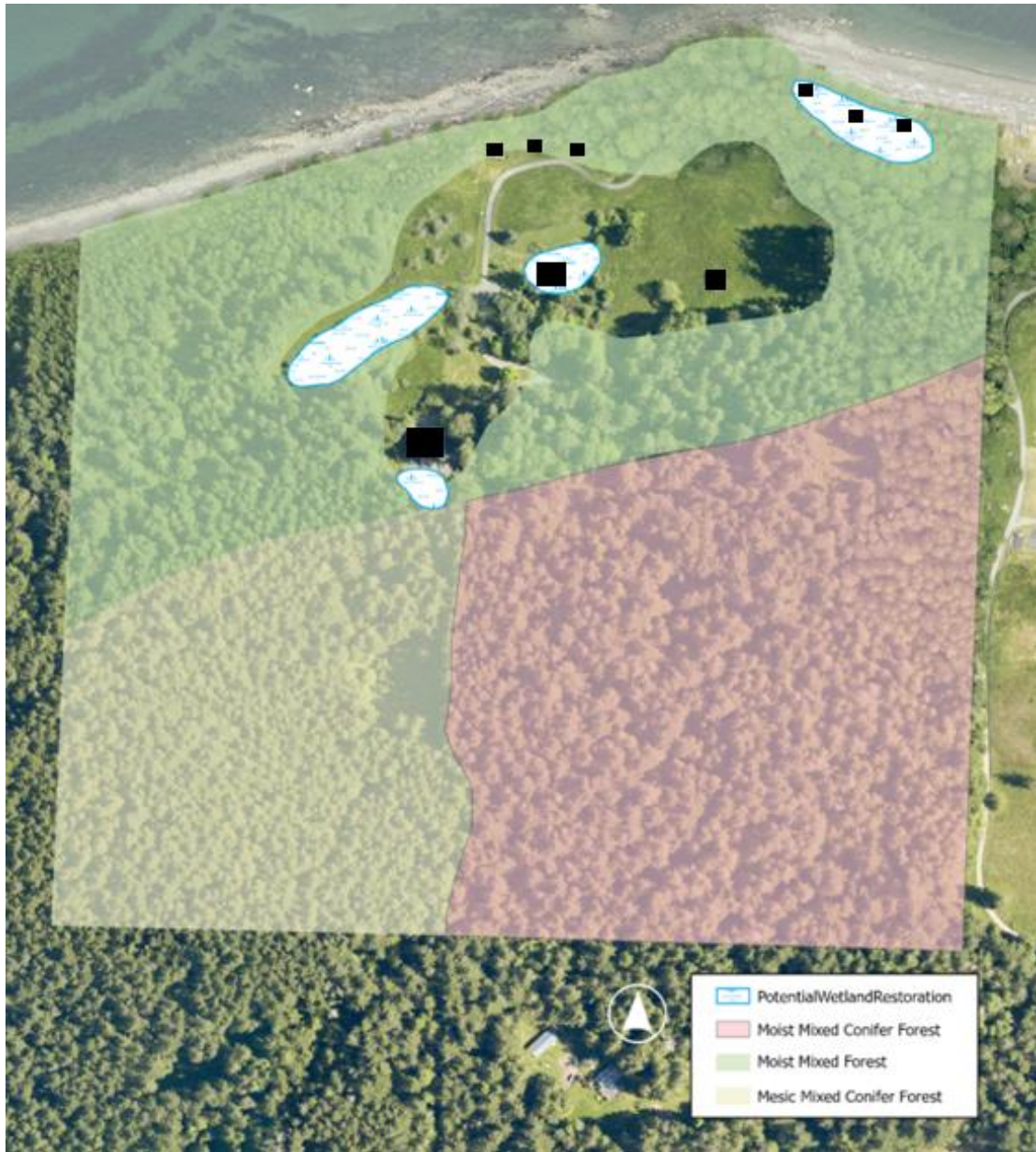


Figure 2. Generalized Land Cover of North Shore Preserve

Proposed Stewardship Activities

Interim conservation objectives for North Shore Preserve include general site clean-up, wetland restoration and reforestation of some cleared areas. Proposed restoration activities seek to eliminate hazards, stabilize eroding slopes, enhance biodiversity in key areas and protect water resources. These activities are described below in greater detail and outlined by sequence and estimated cost in Table 2. Such work will be supported by Land Bank stewardship funds and grants if available. Priorities for specific habitat areas may be revised or refined in response to feasibility studies, funding and changing site conditions.

General Site Cleanup: The property has extensive infrastructure associated with previous land uses, as well as several informal dump sites that contain both construction debris and household garbage. With the exception of the two-story garage, all buildings are slated for removal. Surface items will be removed from dump sites where possible¹⁴, and remaining depressions will be filled with clean material that is generated on-site during other work. Decrepit strands of interior fencing will be removed. Accessible rock piles will be collected and staged for use in planned improvements.

Wetlands Restoration: Three wetland enhancement projects are proposed during the interim management period. The first project would occur in the area currently occupied by the lower beach cabins, at the toe of the slope. Following cabin and septic system removal, the road to the shoreline will be converted into a pedestrian trail. Drainage improvements will include the addition of several culverts to convey runoff from roadside ditch down slope to former wetlands in the location of beach cabins. This will help stabilize the slope and support wetland species.

Aerial imagery indicates that the large pond on the property was excavated in the late 1970's, likely replacing natural wetlands. The pond is currently maintained by an extensive earthen berm along the northern edge. The second restoration project proposes to grade a portion of the berm material back into the pond and to outplant the restored wetland area with native species. East of the pond, the foundation of the main house holds standing water throughout the year and surface flow is visible nearby for many months. Following the removal of the house and foundation, this restoration project would establish a large, shallow wetland to intercept groundwater and surface runoff.

Reforestation: A large area surrounding the main house was cleared of forest many years ago and now supports Canada thistle and nonnative grasses. Proposed interim activities include installing temporary deer fencing and replanting the eastern half of the field. Other areas to be revegetated with native trees, shrubs and seed include forest gaps associated with materials dumping, the slope below the beach trail and building demolition areas.

Summary of Interim Ecological Resource Objectives:

- Site clean-up, including demolition of buildings and removal of trash
- Manage priority weeds
- Restore shoreline wetland hydrology
- Restore excavated pond to wetland
- Convert main house foundation into wetland
- Re-establish native species in cleared and disturbed areas

¹⁴ A surface scatter site found during the cultural resources assessment will be left in place.

Table 2. Proposed interim stewardship activities and preliminary cost estimates

ACTIVITY	DETAILS	SCHEDULE	COST EST.
Invasive species management	Control holly, blackberry, ivy, hawthorn, tansy, white poplar and other invasive species.	Ongoing	\$5,000
Ecological Assessments	Conduct a shoreline assessment.	Summer 2023	\$8,000
General site cleanup	Remove fencing and scattered debris piles. Fill holes in upland (non-wetland) areas with on-site materials. Move rock piles and stage for parking lot project.	Summer-Fall 2023	\$20,000
Swallow nesting structure	Install a swallow nesting structure to replace nesting habitat lost due to building removal.	Fall 2023	\$5,000
Building demolition and septic removal	Remove derelict buildings (six shoreline cabins, main house, and three accessory structures) and their associated utilities to provide for health and safety, and site restoration.	Fall 2023	\$100,000
Wetlands restoration	Restore pond into wetlands and re-establish wetlands in the vicinity of the former main house and beachfront cabins. Plant native, herbaceous wetland seed and plugs.	Summer 2024	\$50,000
Reforestation	Replant beach slope, building footprints and the cleared area east of main house with native trees, shrubs and seed. Install temporary deer fencing to assure success.	Summer 2024- Winter 2025	\$30,000
Total			\$218,000

D. Cultural Resource Overview and Objectives

One component of the Land Bank's mandate is to protect cultural resources. Native American tribes and First Nations of Canada have lived in and stewarded the San Juan Islands as part of their ancestral territory since time immemorial. Coast Salish people in the islands tended and harvested shellfish and salmon from the sea, camas in the prairies, berries along streams and in forests, and other flora and fauna for food and traditional uses. These ancestral lands and waters are still utilized today, and are protected under inherent, ancestral, and tribal treaty rights.

The Land Bank contracted with a professional consultant to complete a cultural resource assessment on the Preserve with the goal being to identify and protect any significant features.¹⁵ Twenty reports of previous cultural resource surveys within one mile of the property are on file with the Washington State Department of Archaeology and Historic Preservation (DAHP). Although the 2022 pedestrian and subsurface archaeological survey did not identify precontact cultural resources on the property, findings from earlier reports indicate six precontact archaeological sites within one mile.

Tribal outreach and engagement are also a high priority during the interim period. Upon acquisition, the Land Bank initiated correspondence with the Lummi Tribe as their Tribal Council had previously visited the site and considered acquiring it themselves. Communication with other associated Tribes will be initiated and include notification of the North Shore Preserve acquisition, acknowledgement of the importance of this area to Tribes, and an open invitation to participate in future management.

The SJPT anticipates developing specific provisions in their conservation easement that will aim to acknowledge and support requests for cultural use by indigenous peoples.

Summary of Interim Cultural Resource Objectives:

- Disseminate Cultural Resource assessment
- Invite associated Tribes to participate in long-term planning and management
- Collaborate with SJPT to ensure that CE accommodates Coast Salish cultural uses
- Begin development of education and interpretation materials

¹⁵ Equinox Research and Consulting International Inc. (ERCI)

E. Public Access Overview and Objectives

Another component of the Land Bank's conservation mandate is to provide access to the natural beauty and diversity of the San Juan Islands by preserving areas with "low-intensity" recreational value. This stipulation for low-intensity reduces the likelihood that human use will degrade a preserve's ecology and disturb neighboring communities. It also helps to assure quietude for those that visit and protect the organization from increased management costs that tend to result from high-intensity uses.

During the interim period, North Shore Preserve is closed to the public. This closure affords staff the necessary time to meet with Tribes, neighbors and other interested parties; to assess and establish an ecological baseline of conditions; and to work uninterruptedly to prepare the property for safe, future access. Signs are currently posted to inform the public of this temporary closure.

The Land Bank is eager to share the Preserve and to provide in-person updates about the project throughout the interim period. To date, staff have already provided 15 guided walks. The Land Bank also anticipates arranging volunteer work parties. Volunteer efforts help extend the abilities of the Land Bank's small staff, engage the community in stewardship of the property, and provide additional opportunities to access the Preserve during its closure.

Once all major work identified for the interim period is complete, the portion(s) of the property deemed appropriate for public access will be opened. Again, this may take two years due to various regulations related to permitting, contracting and resource protection. To minimize the length of closure and still perform a thorough review of resources, the Land Bank commissioned a full-service natural resources firm to assist with creation of a site plan to accommodate public access. The resulting conceptual design identifies a main parking area as well as up to two satellite lots, and several areas to provide for low-impact recreational access. A broad overview is described below and detailed further in Table 3.

Proposed Access Plan

All potential recreational activities and site development will be evaluated by SJPT for concurrence with their conservation easement and vetted through a public process. In recognition of concerns expressed by preserve neighbors about increased traffic on Glenwood Inn Road, the Land Bank proposes the following approaches to manage use levels: no promotion, private events, or commercial use of the Preserve, limited signage and facilities, and Land Bank permission required for groups of 15 or more.

Parking: A central parking lot is proposed for a heavily disturbed area, slightly upslope from the largest structure that is slated for demolition. This area will accommodate

approximately 12 vehicles in standard spaces and one accessible van in an ADA space. Up to two secondary parking areas may be designed and developed along the access road, in between the entry gate and the main lot.

Public Restroom: An ADA - accessible restroom will be located near the main parking area. The onsite septic, related to the garage, may lead to a site-built rather than a prefabricated unit.

Overlook Meadow: A large recreational area, between the main house and the bluff, will be maintained as a quasi-natural meadow through limited mowing. This central area possesses relatively flat topography and provides an expansive sea view.

Beach Road to Trail Conversion: A trail that descends from the main parking area to the shoreline is the primary access objective. A steep and erosive roadway currently carves a route down to the beach, and rehabilitation into a trail will provide both pedestrian access and greater slope stability. This project will involve excavating unconsolidated material in order to narrow the surface and installing multiple culverts. Ongoing maintenance will be necessary in light of general slope instability.

Summary of Interim Public Access Objectives:

- Stabilize slope to the shoreline
- Design and develop a main parking area
- Design and develop a trail to the shoreline
- Install an accessible public restroom
- Continue to provide periodic, guided tours and volunteer events

Table 3. Proposed interim access improvements and preliminary cost estimates

ACTIVITY	DETAILS	SCHEDULE	COST EST.
Water system improvements	Trench and install a water line to garage and install all associated equipment, such as pump and filtration, in lower floor of garage.	Summer 2023	\$25,000
Electrical improvements	Trench and install electrical lines from transformer to garage, and from garage to location of the entry gate.	Summer 2023	\$50,000
Automated gate	Purchase and install an automated entry gate.	Summer 2023	\$25,000
Slope stabilization and drainage	Grade steep road to shoreline to provide temporary vehicle access for removal of beachfront buildings. Following removal, convert road into a trail by excavating unconsolidated material from the out-slope and installing approximately six culverts to convey runoff.	Summer - Fall 2023	\$60,000
Vehicle access improvements	Improve drainage and surface of the entry road. Refine access to the garage by removing eastern portion and creating a north-to-south connection. Cut, fill and grade a main parking area (12 spaces) and one satellite lot (4 spaces).	Summer 2024	\$70,000
Public restroom	Install either a prefabricated or a site-built ADA toilet with water and septic.	Summer 2024	\$150,000
Trail system	Develop access trail to shoreline and assess future, potential trail locations including access for visitors with diverse mobilities.	Summer 2024	\$10,000
			Total \$390,000

F. Cost Projection

This cost projection is intended as a financial planning tool. It is not a commitment of resources. Cost estimates are provided for general operations¹⁶ and for one-time capital expenditures¹⁷ and do not include staff time. Staff and Commissioners will review and revise actual planned expenditures during the Land Bank’s budgeting process. Potential funding sources include Land Bank stewardship funds and both state and federal grants.

Table 5. Expenditures to date and two-year cost projection (for planning purposes, only)

Status	Cost	Type	Activity
Complete	\$100,000	General Operations	Cultural resources assessment, historical buildings assessment, geotechnical assessment; site design and master plan.
2023 planned	\$165,000	Capital Projects	Water system improvements, electrical improvements, automated entry gate, slope stabilization and drainage.
	\$133,000	General Operations	Invasive species management, general site cleanup, building demolition and septic removal.
2024 planned	\$230,000	Capital Projects	Parking lot construction and improvements, trail construction, public restroom.
	\$80,000	General Operations	Wetlands restoration and reforestation.

Total \$708,000

¹⁶Recurring, non-capital improvement operating expenses such as monitoring and maintenance

¹⁷One-time capital expenses

G. Planning Process and Public Engagement

The Land Bank will share information gathered during the interim period and seek public input on future management. To date, approximately 15 public tours of the property have been provided, and numerous more are scheduled throughout 2023.

<u>Action</u>	<u>Completed (Planned)</u>
Conceptual design presentation	April 2023
Commission and SJPT review of Interim SMP	April 2023

Public comments and questions are always welcome. The Conservation Land Bank can be contacted at:

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Website: <http://www.sjclandbank.org/>

H. References

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

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Appendix A. 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 that governs 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, except when posted for other uses
- No camping
- No fires
- No vehicles
- No hunting
- Launching or landing of UAV (drones and similar devices) is allowed only for research purposes and requires written permission of Land Bank Director
- No commercial use
- No collection of botanical, zoological, geological or other specimens except on a permission-only basis for scientific or educational purposes