Spencer Spit Preserve

Stewardship and Management Plan

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

SAN JUAN COUNTY
CONSERVATION
LAND BANK

SAN JUAN COUNTY
WASHINGTON

Spencer Spit Preserve, Lopez Island
Stewardship and Management Plan

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A. Introduction

Spencer Spit Preserve is located on the northeastern shore of Lopez Island and is highly visible from the main ferry route between Anacortes and the San Juan Islands. Encompassing 18.4 acres and more than 1,500 feet of shoreline, the Preserve includes a mature conifer forest and steep, erosive sandy bluffs. Conservation of this forest and shoreline area sustains important nutrient cycling and other nearshore ecological processes. It also protects the aesthetic appeal of the islands for residents and visitors alike, as well as provides future opportunities for low-impact public access.

The protection of undeveloped natural areas is a central tenet of the Conservation Land Bank's mandate[1]. Establishing interconnected natural areas is one approach to mitigating the global crises of biodiversity loss and climate change. Although the Preserve is relatively small in acreage, its ecological, scenic and recreational values are enhanced by its location. The Preserve connects to the 140-acre Spencer Spit State Park along the southern boundary.

After acquiring a property, the Conservation Land Bank (Land Bank) creates a Stewardship and Management Plan (SMP) to guide decision-making and work planning and to promote transparency. SMPs identify future management priorities and summarize annual, five-year and 10-year expenses. SMPs 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 SMP provides information related to the Preserve's acquisition and history (Section B) and outlines ecological resources and conservation objectives (Section C). Stewardship activities will seek to protect the high-quality feeder bluffs, promote healthy, resilient forests, and maintain, if not enhance, the Preserve's wildlife habitat. This plan also proposes developing a pedestrian trail within the Land Bank preserve (Section D).

The proposed trail will connect to the State Park's current trail system through the shared boundary, and given this proximity, one unique proposal for future management of the Preserve is to partner with State Parks for routine maintenance. The Land Bank and Washington State Parks are discussing an agreement to outline details of this arrangement.

A summary of activities for the next ten years and their associated cost estimates can be found in Section E. Details on the Land Bank's ongoing public process are provided in

[1] The 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."

Section F. Management planning is an iterative process and all the activities outlined are subject to public input, final approval, and available funding.

In a broad sense, the Land Bank's stewardship goals for the Spencer Spit Preserve are:

- **To protect and enhance the property's ecological values;**
- **To promote habitat resiliency in the face of climate change;**
- **To provide low-intensity pedestrian access; and**
- **To partner with Washington State Parks for routine management**

B. Preserve Overview

Spencer Spit Preserve resides within Swift Bay watershed,[2] and is located approximately three miles from the Lopez ferry landing. The Preserve overlooks Swift Bay, Flower Island and Lopez Sound, and it shares boundaries with two residential properties as well as Spencer Spit State Park (Fig. 1).

The Preserve is primarily forested. Most of the upland area possesses a gentle topography and ranges in elevation from 150 to 100 feet above sea level. The terrain changes dramatically near the shoreline, and the coastal bluffs steeply descend down to the beach. All underlying geology is of glacial origin, and several soil types were identified within the Preserve.[3] The erosive bluffs consist of permeable glacial outwash sediments, and are comprised of gravel, sand and silt.

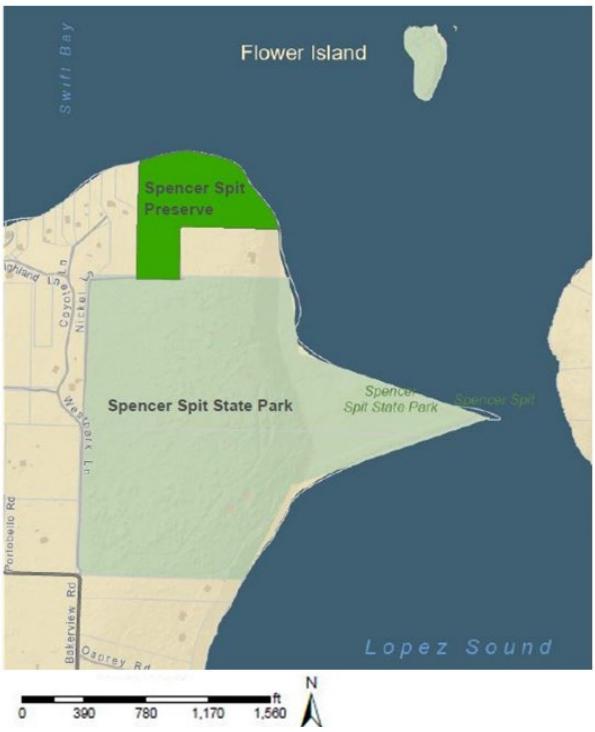

Figure 1. Preserve Context

Direct land use history of the Preserve is unknown, though colonial settlement of the nearby area began in the late 1800s. Though not the original homesteaders, the Spencer family lived on the Parks property for 50 years and built a cabin on the barrier beach, or "spit," sometime

[2] San Juan County GIS: https://data2017-01-09t190539232z-sjcgis.opendata.arcgis.com/datasets/SJCGIS::san-juan-county-watersheds/explore?location=48.544953%2C-122.891653%2C11.00

[3] As mapped by NRCS, soils on the property include Mitchellbay-Sholander-Bazal, Hoypus sandy loam, and Xerothents-Endoquents

between 1913 and 1920. Washington State Parks purchased the property from the Spencer family in 1967. The cabin was later removed from the spit because of extensive rot. In 2009, State Parks rebuilt the structure, and it now serves as a picnic shelter.

Spencer Spit Preserve resides within the traditional territory of the Coast Salish peoples. Native American tribes and First Nations of Canada have cared for the San Juan Islands as part of their ancestral territory since time immemorial. Coast Salish people inhabited and gathered in the Islands to harvest shellfish and salmon from the sea, berries from the forests, cedar for clothing, shelter and canoes, 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.

Acquisition History

The San Juan County Conservation Land Bank acquired two parcels north of Spencer Spit State Park in 2019 and 2020.[4] The total purchase price paid by the Land Bank was $200,000, well below market value. Funding for the acquisition came from the voter-approved conservation area Real Estate Excise Tax (REET). Proceeds from the sale were then donated by the generous seller, Rick Strachan, to the Lopez Community Land Trust (LCLT) to create affordable housing at a location nearer to Lopez Village.

Acquisition of the Preserve occurred in two separate transactions, and the original intent of purchase changed over time. In 2018, the seller approached LCLT with an idea of making a "bargain sale" to a conservation organization and then donating the proceeds to LCLT. LCLT initiated negotiations with the Land Bank to purchase both lots for $500,000. In turn, Land Bank staff contacted Washington State Parks to determine their interest in partnering on the purchase. Both organizations proceeded with the idea that State Parks would hold the underlying fee interest in the property and the Land Bank would hold a conservation easement.

In 2019, the Land Bank purchased the first parcel for $200,000. The intent was to convey it in the future to Washington State Parks with a conservation easement. The seller held the second parcel while State Parks awaited grant funding for the purchase. Ultimately, the grant funds did not harmonize with the desired conservation easement and passive recreational uses, and the seller decided to donate the second parcel to the Land Bank in 2020.

It is the Land Bank's intention to retain ownership of both parcels and to partner with Washington State Parks for ongoing routine monitoring and management of the property.

[4] Tax parcel numbers 150732001000 and 150732003000

While the acquisition strategy transformed over two years of effort, the major goals of acquisition were accomplished: approximately 18 acres of high-quality forest and feeder bluffs are protected from development, there is the potential for a primitive trail to connect to Spencer Spit State Park and proceeds from the sale were gifted to support LCLT.

Infrastructure

The Preserve has limited infrastructure. Prior to Land Bank ownership, the property was partially cleared for development. A gravel road currently leads to an old building site. Remnant wood piles and a few dilapidated sheds exist and may require cleanup or be signed as hazardous.

Structures: Several outbuildings were constructed on the property. One shed was recently deconstructed. The other outbuilding may be demolished or signed as dangerous.

Well: The property contains two drilled wells. These will remain unused.

Access Easement: Entrance to the property for maintenance purposes is through an access easement over a private road, Nickel Lane. A gate was installed on Nickel Lane in 2021 to restrict unauthorized vehicle access.

C. Ecological Resources and Conservation Objectives

The Land Bank holds protection of environmental resources as a key goal of its stewardship program. Maintaining or restoring an area's ecological health also typically preserves, and even enhances, its scenic and open-space attributes. The nearshore and upland forest areas of Spencer Spit Preserve are currently deemed in good ecological condition. Proposed stewardship activities are limited in scope, and largely aim to retain existing function and character.

The Preserve's nearshore environment contains approximately 1,583 feet of waterfront beach and high-bank coastal bluffs. Nearshore ecosystems are critical to food webs for salmon and shorebirds and valued for buffering the impacts of storms. The sandy bluffs at Spencer Spit Preserve are actively eroding and their sediments are being distributed into areas of lower energy. The Preserve's bluffs "feed" the nearby beaches of Spencer Spit and Swift Bay.[5] The fine-grain sediments on the beach also present suitable habitat for forage

[5] Current and Historic Coastal Geomorphic (Feeder Bluff) Mapping of San Juan County, Washington. Prepared for The Friends by Coastal Geologic Services, 2010.

fish to spawn. The Preserve's feeder bluffs and beach are unaltered by infrastructure such as armoring, and their natural, erosive processes remain intact.

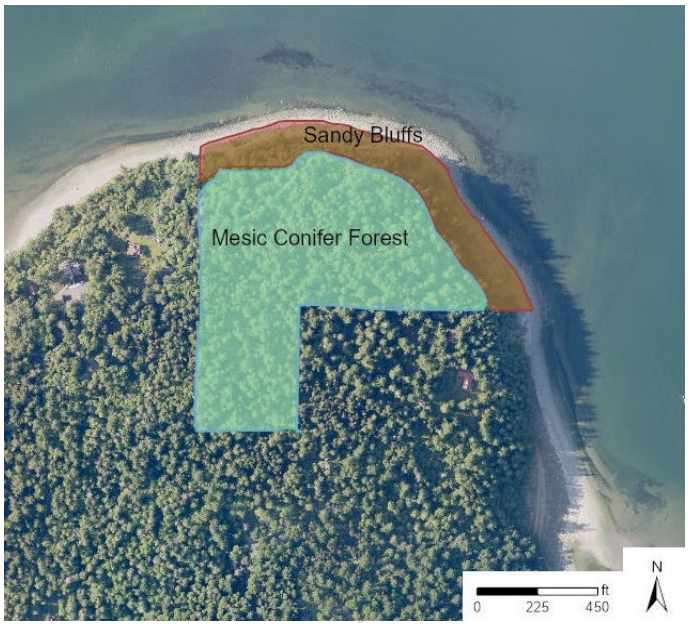

Figure 2. Preserve Habitat Areas

The quality and function of the nearshore is supported by the Preserve's mature upland forest. Forests contribute to marine and terrestrial food webs, slow and filter surface runoff, sequester and store carbon and sustain biodiversity. The 18-acre forest at Spencer Spit Preserve possesses a diversity of tree species that range in size and age from old growth to sapling. Abundant standing and downed dead wood provides important features for wildlife.

Classifying preserves into habitat types helps to inventory resources, and to organize and prioritize management activities. The Preserve's areas with notable and distinct ecological values were mapped (Fig. 2). Collectively, these areas provide a diversity of habitats for resident and migrating birds, mammals, amphibians and invertebrates.

Specifically, two large Douglas-fir trees on the Preserve host Bald eagle nests, and the eagles routinely perch and forage nearby. Other avian species observed include the pileated woodpecker, red-breasted nuthatch and chestnut-backed chickadee. The sandy bluffs provide nesting habitat for burrowing bird species such as the Belted kingfisher and northern rough-winged swallow, and one such nest hole was observed on site.

After mapping a preserve, Land Bank staff assign ratings (e.g., Poor, Fair, Good) to each habitat area to reflect its current condition. Future stewardship activities are then identified by determining a reasonable, desired future conditions for each type. A summary of current and desired future conditions for Spencer Spit Preserve is provided in Table 1.

The ratings used by Land Bank staff consider multiple aspects of biology or ecology that, if missing or altered, could lead to future declines or losses. The ecological attributes and

ratings system represents an iterative, adaptive process informed by research, field observations and peer review.[6]

Table 1. Generalized current and desired future condition[7]

AREA	CURRENT CONDITION	DESIRED FUTURE CONDITION
Sandy Bluffs	VERY GOOD– Natural processes intact. Non-native plant cover limited to select species such as orchard grass and hairy cat's ear and mixed with natives like dune grass and field chickweed.	VERY GOOD–Natural processes intact. Native plant layer stable and non-native plants limited. No detectable impacts from public access to upland area.
Mesic Conifer Forest	GOOD – Diverse, mixed-age trees. Adequate snags and large downed wood. Non-native plants uncommon and limited to small amounts of thistle and tansy within the cleared/ disturbed areas.	GOOD to VERY GOOD – Diverse, mixed-age trees. Adequate snags and downed wood. Tansy and thistle eradicated, and diverse native shrubs present within previously disturbed areas.

Noxious weeds are uncommon on the Spencer Spit Preserve. They are limited to select species (thistle and tansy) and are primarily located in disturbed areas associated with previous clearing. The spread of invasive species ranks second only to habitat loss as a threat to global biodiversity. Therefore, the Land Bank puts a high priority on invasive weed control and stewardship activities on site will entail weed removal. 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.[8]

Annual monitoring of Land Bank preserves is critical to tracking changes over time and protecting conservation values. While maintenance of Spencer Spit Preserve is expected to be accomplished by Washington State Parks, the Land Bank will remain responsible for priority weed removal and will conduct annual monitoring visits with the specific task of

[6] 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.
[7] Key Ecological Attributes and indicator rating definitions available upon request
[8] For further details see the Land Bank's *Guidance for Integrated Pest Management Plan*

inspecting key features such as noxious weed presence, hazard analysis, and public use trends and impacts.

Future stewardship of Spencer Spit Preserve will focus on enabling the continued function of the forest and feeder bluffs. No specific habitat enhancement projects are designed at this time. However, some forest activities, such as select thinning to increase forest resilience or planting shrubs to improve native diversity may occur after further assessments. Regular monitoring may reveal other future actions or needs. Even with careful management, the Preserve's conservation values face threats from stressors related to invasives species and climate change. It is predicted that climate change will continue to increase summer temperatures, produce winter storm events with higher precipitation, and raise sea level. Already present, toe erosion and landslides are expected to accelerate within the nearshore zone.

Shoreline Sandy Bluffs

The coastal bluffs on the Preserve span upwards of 70 feet from the beach, are active with erosion, and unstable. As feeder bluffs, they play a significant role in sediment transport, and they are a crucial resource for forage fish spawning habitat. Species like surf smelt and Pacific sand lance utilize fine-grain sand and small-to-coarse sediment, along beaches for spawning. Eggs are attached to the small sediments during high tide, often within the upper-third of the tidal range. Forage fish are vital components within marine food webs, and serve as prey species to marine birds, mammals, and salmon.

One short segment of the feeder bluffs, located within the eastern parcel, is further classified as "exceptional." This shore type classification is applied to feeder bluff segments that experience relatively rapid erosion and mass wasting. This category is relatively uncommon in the San Juan Islands and characterized by recent large landslides and undercutting at the toe of the bluff.

Recent slide areas lack vegetation. Other bluff segments within the Preserve, where slumping has been less recent, are vegetated with a mix of native and non-native species. Native species included licorice fern, yarrow, field chickweed, pearly everlasting, and dune grass. In a few spots, small stands of weathered Douglas fir have become established on the bluff face. Non-native species identified were orchard grass, hairy cat's ear, and Canada thistle.

Shoreline modification by bulkheads and armoring is a primary threat to feeder bluffs and forage fish spawning. The conservation objectives for the Spencer Spit Preserve are to allow natural sediment transport to continue unimpeded, providing an important nearshore ecological function.

Mesic Conifer Forest

Within the context of San Juan County, the forested uplands on Spencer Spit Preserve exhibit high species diversity. Evergreen tree species include Douglas fir, grand fir, and Western red cedar, Western hemlock, Pacific madrone, and shore pine. The less common Pacific yew is also found on the Preserve. Scattered deciduous species include bigleaf maple, red alder, Scouler's willow and bitter cherry. Salal dominates the understory. Other understory trees and shrubs consist of Douglas maple, Pacific crabapple, oceanspray and Nootka rose.

There is some variance between the two parcels in terms of forest structure and composition. Logging activity on the Preserve's western parcel is evidenced through numerous stumps. Douglas fir and Western red cedar are co-dominant, and shore pine, alder and maple are present. The eastern parcel has old-growth and fire-scarred Douglas firs and numerous large diameter snags. Mature Western red cedars are also common, continue to regenerate, and do not display signs of stress like other stands in the region.

Although the San Juan Islands, in general are predicted to become increasingly subject to seasonal drought conditions and heightened wildfire risks, the threat on this preserve is relatively low. [9] The north end of Lopez Island receives roughly ten more inches of rain than the south end, and the Preserve's relatively flat topography has a northern aspect. Still, forest management activities may be identified in effort to retain and potentially enhance stand composition, vigor, and structure. Additional assessments of the forest and the Preserve's herbaceous ground cover are proposed in the future.

Summary of Ecological Resource Objectives:

- Control noxious weeds
- Naturalize disturbed/cleared areas with native plants
- Perform annual monitoring
- Further assessment of forest and herbaceous species

D. Public Access Overview and Objectives

Providing access to the natural beauty and diversity of the San Juan Islands is another important part of the Land Bank's mandate. One component of the conservation mandate specifies preserving areas for "low-intensity" recreation. This stipulation reduces the likelihood that human use will degrade a preserve's ecology and protects the organization from increased management costs that tend to result from high intensity uses. Limited,

[9] San Juan County Community Wildfire Protection Plan, Figure 4.7

low-intensity recreation also helps to assure quietude for visitors and to retain the rural character of neighboring communities. For these reasons, public access to Land Bank properties is primarily designed for pedestrians.

The adjacent Spencer Spit State Park provides numerous recreational activities such as hiking, camping, and extensive beach access. The Park also offers several amenities and facilities including parking, moorage, restrooms, and picnic shelters. The replica of the Spencer family's guest cabin features two interpretive panels, and State Park staff members maintain these facilities and manage visitor use year-round.

The Preserve's proximity to Spencer Spit State Park, its recreational opportunities and facilities were considered during the Land Bank's planning process. The Land Bank proposes opening a portion of the adjoining preserve for public access by creating a .75-mile hiking trail within the forested upland that will connect to and extend the State Park's existing trail system (Fig. 3). Parking access to the trail will rely on facilities that are already available at the State Park. The Land Bank's current public access management strategy is to establish an agreement with Washington State Parks for regular monitoring and maintenance.

Proposed Trail Access

Recreational use of the Preserve will be limited to a hiking-only trail within the forested uplands. No other facilities are planned for the area, as trail users would hike-in from access points existing within the State Park. The loop trail envisioned would highlight natural features within the site such as a glacial erratic and large trees as well as safeguard sensitive wildlife habitat areas.

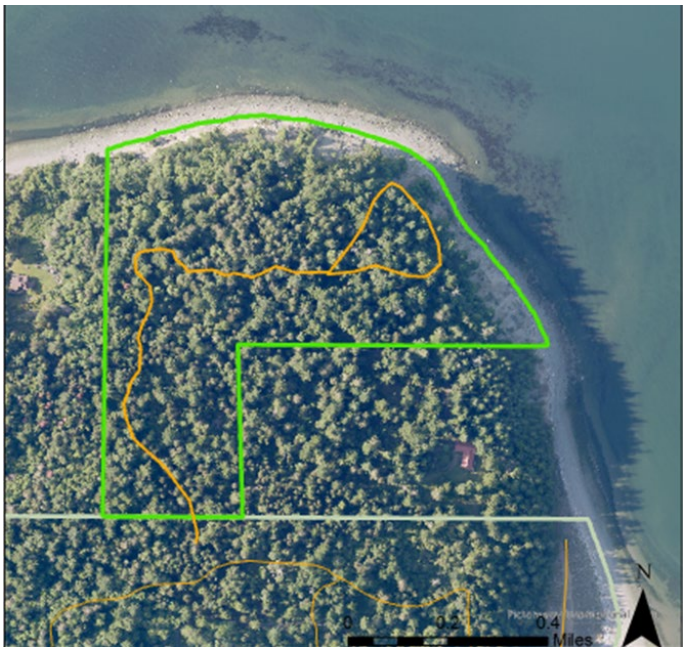

Figure 3. Proposed Trail

The beach is inaccessible from the uplands due to the steep and erosive bluffs, and no beach access will be provided from the Preserve's forest trail. Substantial beach access is offered at Spencer Spit State Park. State-owned tidelands (Department of Natural Resources) extend from the State Park to the north and could, during lower tides, permit walkers to access the Preserve's beach.

Maintaining a moderate level of use will be essential to the protection of the Preserve's ecological values. The Land Bank will employ multiple strategies to keep use within an acceptable range. All standard Land Bank rules will apply. This includes day-use only, no camping, and no fires. A complete list of restrictions is provided in Appendix A. Further uses and restrictions may be agreed upon with State Parks.

Dogs are proposed to be allowed on-leash. Bicycles, which are allowed within the State Park will be prohibited and discreet signage will notify visitors of these rules. The Land Bank always reserves the option of restricting or discontinuing any aspect of public use if it proves unmanageable or detrimental to the Preserve's conservation values.

Signage

Signs are installed on preserves to inform visitors of rules and restrictions and to protect neighbor privacy and natural resources. As a general rule, the Land Bank aims to minimize signage. The Land Bank may install signs to inform trails users. Given the partnership and proximity, the Land Bank will review with State Parks any proposed signage.

The following approaches will be used to manage levels of use:

- No commercial tours
- No bicycles
- Limited signage
- Land Bank permission required for groups of 15 people or more

Outreach, Education and Research

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

<u>Volunteers</u>

Volunteers contribute countless hours of service and perform meaningful stewardship activities across Land Bank preserves. Some serve for a single day to help maintain trails while others engage in recurring activities like monitoring. The Land Bank will continue to work with community volunteers, and host work parties, to meet some of its stewardship objectives, such as constructing the proposed trail.

Summary of proposed public access objectives:

- Design and build pedestrian trail
- Develop and install signage
- Collaborate with Washington State Parks for public access management and trail maintenance

E. Budget Projection

This budget projection is intended as a financial planning tool and considers annual property maintenance costs, infrastructure enhancement or "one-time" costs, and multi-year ecological enhancement costs. Staff time is included. All numbers are approximate and will be reconsidered annually or biannually as part of the Land Bank's regular budgeting process.

Table 2. Ten-Year budget projection

Year	General Operations		One-time Costs		Annual Subtotal
2022	$1,500	General stewardship, maintenance, monitoring	$500	Site Cleanup	$2,350
	$350	Road maintenance			
2023	$1,850	General stewardship, maintenance, monitoring	$1,500	Public Access Improvements	$3,350
2024	$1,850				$1,850
2025	$1,850				$1,850
2026	$1,850				$1,850
2027	$1,850				$1,850
2028	$1,850				$1,850
2029	$1,850				$1,850
2030	$1,850				$1,850
2031	$1,850				$1,850

Total 5-yr costs (2022-2027)	$11,250
Total 10-yr costs (2022-2031)	$20,500

F. Planning Process Overview

Timeline	Completed (Planned)
Land Bank Commission (LBC) and Staff review draft Plan	December 2022
Draft Plan Public Comment Period	February 2023
Draft Plan Public Meeting	February 2023
Public Hearing on revised draft Plan by LBC	(March 2023)
Approval by Land Bank Commission	(3/2023)
Public Hearing and Approval by San Juan County Council	(4/2023)
SMP Adoption	(4/2023)

G. References

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

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H. Appendices

Appendix A. Rules and Use Restrictions

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

The Conservation Land Bank generally relies on signage and periodic contact from staff or volunteers to educate visitors about use restrictions. An enforcement ordinance to govern 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 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