Tashmoo Preserve
Tisbury,
Massachusetts

Management Plan

March 5, 2024

Approved by the Tisbury Town Advisory Board (03/5/2019)
Approved by the Martha's Vineyard Land Bank Commission (03/08/2019)
Approved by the Secretary of the Executive Office of Energy and Environmental Affairs (May 22, 2019)
Amended by Tisbury TAB and MVLBC (09/12/2019)
Amended to include additional acreage by MVLBC and Tisbury TAB (02/26/2024 and 03/4/2024)

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Executive Summary

Tashmoo Preserve is 6.8 acres of dynamic barrier beach situated east of the Herring Creek channel in Tisbury. It is part of a delicate strip of sand and sparse maritime vegetation that separates the Atlantic Ocean from Lake Tashmoo [a.k.a Tashmoo Pond (1892 Eldridge map), Chappaquonsettt Pond (1860 Whiting map, 1891 Walker map) and Mink Meadows Pond (1775 Blaskowitz map, 1781 Des Barres map) Appendix A]. Tashmoo Preserve comprises two parcels, one adjacent to the town/county beach, owned by the town of Tisbury and Dukes County that comprises the east side of the channel, and a second parcel located 463 feet to the northeast of the first with three developed lots between.

The name Tashmoo is a shortening of the Wampanoag word Keht-ashim-ut meaning “at the great spring”. Keht-ashim-ut initially referred to the spring but as early as 1682 applied to the pond as well (Banks 1966). As described in an article in the *Vineyard Gazette,* the word Tashmoo rolling off one’s tongue, “has euphony and dignity and is like no other usual word” (*Vineyard Gazette*, May 9, 1952). The artificial channel to the west of Tashmoo Preserve is known as Herring Creek. Earlier in the 19th century this location and various others along the barrier beach where the sand was narrowest were known as Chappaquonsett, a word presumably derived from Ashappaquon-es-et meaning “where the nets are spread” (Banks 1966). Herring Creek, described as an artificial creek in the 1807 “Description of Dukes County” and a meandering intermittent creek through the marsh and meadows of Lake Tashmoo in the 1921 state report, became a navigable channel, dredged and fortified with jetties during the winter of 1942 (Baer 2017, Freeman 1807).

From Wampanoag to European settlers, the openings, regardless of stature and structure, provided a fine fisheries source of herring, an anadromous fish that swims from the salty ocean water into the back reaches of the coastal ponds to find freshwater for spawning in each year. Later, once a channel was dredged and fortified, the area became a popular location for sportfish species such as striped bass that are lured into the ponds by tides and baitfish.

Tashmoo Preserve has 746’ of sound shoreline studded with various revetments and groins attempting to trap sand and prevent erosion of the shore. The Preserve comprises 836’ of pond shoreline. The beach more than doubles the town/county water frontage at the channel.

The Martha’s Vineyard land bank commission purchased, in fee simple, 4.70 acres from the Michael Ursin family in 2018 for $1,900,000; 0.67 acres from the Bruce and Gayle Kissell family in 2020 for $1,680,000; and 0.80 acres from Ann Tonetti in 2021 for $1,890,000. The land bank has additional nearby acreage at the Wilfrid’s Pond Preserve, two-tenths of a mile northeast from Tashmoo that provides access to 670 additional feet

of sound beach.

Four commonwealth-listed shorebird species were recorded for the property and no commonwealth-listed plants were observed on the property.

This management plan proposes restoring 0.31 acres of dune system where three buildings once stood; using fencing or temporary gates to protect the restoration area and prohibit parking in the restoration area; installing a 2- to 3-vehicle trailhead with a bicycle rack in the existing driveway area of the northern parcel; consider the coastal engineers recommendations regarding the removal of all coastal engineering structures on the property, and if so desired by the land bank commission and Tisbury town advisory board, remove them; controlling invasive species; creating 100' of new trail over coastal dune that utilizes a dune mat and adjustable stairs to access the sound beach from the trailhead; maintaining existing trails that access sound and pond beaches; managing nesting shorebird populations; permitting waterfowl hunting on parcels greater than 1 acre; and collecting and utilizing summer use data to improve the cooperative management of the beach area between the town of Tisbury and the land bank. In addition, the plan proposes to permit fishing, swimming, boating, hiking, and similar passive recreational uses.

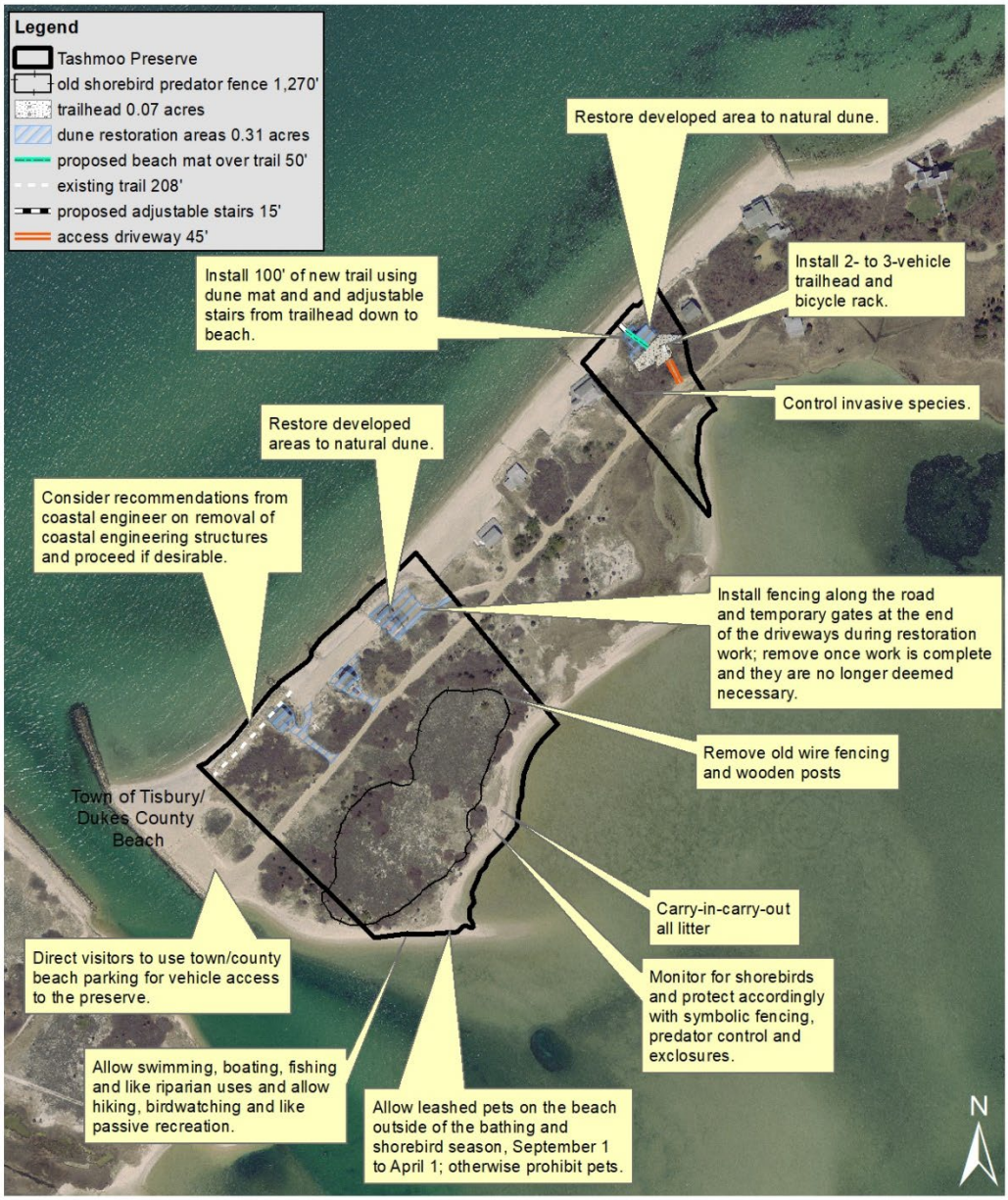
All planning goals, objectives and strategies are outlined in detail in the final section of this management plan. To be implemented, this plan must be presented at a public hearing and approved by the land bank's Tisbury town advisory board, the Martha's Vineyard land bank commission and the secretary of the commonwealth executive office of energy and environmental affairs (EOEEA).

About the authors

Julie Russell is the primary author and has been the land bank ecologist since August 1999. She is certified as a Wildlife Biologist by the Wildlife Society and holds a Master of Science in zoology from the Cooperative Wildlife Research Lab at Southern Illinois University, Carbondale, and a Bachelor of Science in wildlife biology from the School of Natural Resources at the University of Vermont. Bryn Willingham is the coauthor of this management plan. She is the 2022-2024 recipient of the land bank's annual ecology assistantship. Ms. Willingham holds a Bachelor of Science in Natural Resources Conservation from the College of Natural Science at the University of Massachusetts Amherst.

This plan is executed under the supervision of the Martha's Vineyard land bank land superintendent, Harrison Kisiel.

Project Planning Map
Tashmoo Preserve
Tisbury, MA



Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_ProjectPlanning_2024.jpg Date: January 5th, 2024

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Map Legend

Figure Legend

I. Natural Resource Inventory

A. Physical Characteristics

1. Locus

Tashmoo Preserve is located at roughly 41°28' 3" N latitude and 70° 37' 50" W longitude. The property consists of 6.8 acres straddled between the Vineyard Sound and Lake Tashmoo. Herring Creek Road bisects the property. The Preserve parcels are shown on Tisbury tax map 32 as parcels 2, 2.1, 3, 3.1, 8, and 8.1. A Locus Map (USGS Topo 1973 1:24,000) follows as Appendix A (Page 36).

2. Survey Maps, Deeds and Preliminary Management Plan Goals

Larger copies of all surveys are on file at the land bank office and are available for inspection by appointment. Deeds, preliminary management plan goals and reduced copies of surveys are included in Appendix B, page 56.

3. Geology and Soils

The **General Soils Map** (Appendix C, page 91) depicts general classes of soils across Martha's Vineyard. Although much of Martha's Vineyard was created approximately 25,000 years ago when the Wisconsinian ice sheet reached a terminus and sand, silt and clay were deposited by glacial outwash, Tashmoo Preserve was created more recently and is comprised of "Beach" geologic deposits from the Holocene (Soil Conservation Service (SCS) 1986).

The general soil type for this area is Udipsamments-Beaches-Pawcatuck. It is typically identified as, "rolling, very deep, excessively drained, sandy soils composed of windblown deposits, nearly level beaches; and nearly level, very deep, very poorly drained mucky peat formed in organic deposits; along coastal shoreline" (SCS 1986). This broad soil type covers approximately 6% of Dukes County and is frequently observed on beaches, sand dunes and tidal marshes. Udipsamments are sand dunes and are dominated by beach grass. Beaches occur on the coastal shoreline; have no vegetation; and consist of fine sand to stones and boulders. Pawcatuck soils are in tidal areas that border salt or brackish water and are protected from direct ocean wave impacts (SCS 1986).

The SCS (1986) mapped the ultra-permeable and well drained Udipsamments (UaC) soils as the dominant series on the property. A small area, one quarter of an acre, along Lake Tashmoo shoreline comprises the mucky peat Pawcatuck and Matunuck soils that are deep and poorly drained soils of tidal areas. The permeability features of both soils render the area unsuitable to farming or woodland production. Additionally, vegetation is precarious and susceptible to destruction from vehicle and foot traffic. Common plants in these soils are beach grass, poison ivy, beach plum and bayberry in the well drained

areas and saltmarsh hay species, sea lavender and glasswort in the tidal areas (SCS 1986). A detailed soil map is included in Appendix C, page 92.

4. Topography

The influence of wind and wave action on the property causes constant shifting of sediments resulting in a fluctuating topography. The natural shifting of sand, coupled with erosion mitigation structures along the shore, contribute to an erratic shoreline. The locations of former houses on the beach are the highest points of the dune at 10-13' above sea level. The beach access road is 4-5 feet above sea level. The slope to the sound varies between 17% on the northern parcel to 20% on the southern parcel. The beach itself has a slope between 8 and 14% between the water and the toe of the dune. The contours of the property are illustrated in a portion of the USGS Vineyard Haven quadrangle labeled USGS Topographic Maps and in more detail on a map of one-foot contours derived from LiDAR shaded relief (*Fig. 1*) (MassGIS 2023) labeled One-Foot Contour Map in Appendix A, page 38.

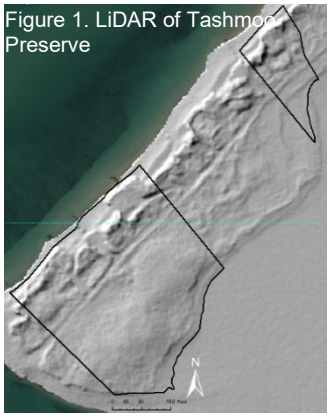

Figure 1. LiDAR of Tashmoo Preserve

5. Hydrology

The entire property is in the Tashmoo Pond major watershed which comprises 2,902 acres (Hydrology Map, Appendix A, page 39).

Tashmoo Preserve is categorized as a barrier beach and is a compilation of hills and ridges of sand moved by wind that protects a landward body of water. The barrier beach comprises 14% coastal beach and 85% coastal dune.

6. Ecological Processes

Ecological processes are the "dynamic biogeochemical interactions that occur among and between biotic and abiotic components of the biosphere" as described by the USGS (2012). There are seven major ecological processes – disturbance, structural complexity, hydrological patterns, nutrient cycling, biotic interactions, population dynamics and genetic diversity – occurring on the preserve.

Disturbance – The natural disturbance regime for barrier beaches is wind, waves, and tides. Barrier beaches are a dynamic environment that result from long-term sand deposits by wind, wave, current and tidal action alongshore, forming spits that move into tidal inlets and ultimately transform into lagoons and marshes (*Fig. 2*). Barrier beaches consist of coastal beaches and dunes, the latter being vegetated.

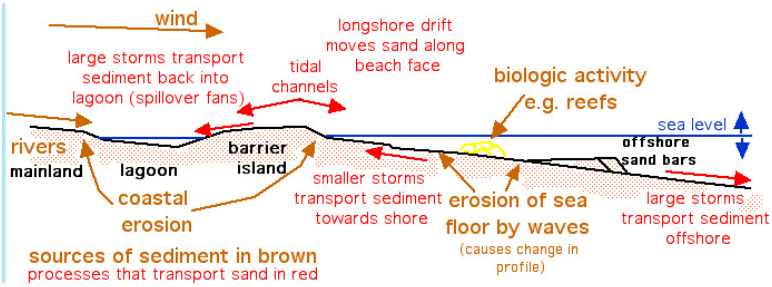

Figure 2. Sand movement on barrier beach (https://maps.unomaha.community/Maher/GEOL1010/lecture14/shorelines2.html)

Coastal beaches are created by the movement of sediment; are shaped by waves; and are influenced daily by tides. A beach begins in the nearshore zone where waves shoal and extends into the upper limit of wave wash (Short 2012).

Dunes are the result of waves pulling sand from one stretch of beach and depositing it elsewhere in the intertidal zone. The sand in the intertidal zone dries and moves through suspension, saltation and creep into the backshore area and is trapped by vegetation, forming a shifting network of hummocks and valleys of variable size. In suspension sand moves through the air by wind and in saltation wind causes sand particles to bounce along the surface. The term creep refers to sand coming together and pushing on each other. Dune formation requires strong offshore winds, ample supply of sand, and stabilizing vegetation. When a barrier beach is low or has intermittent dunes, storm surges can over wash the beach and cut the dune perpendicular to the beach, resulting in a fanning of sand deposits landward. Dense shrub thicket-dominated dunes suggest erosion from overwash is minimal and that beaches are accreting. Conversely, shorelines dominated by salt-tolerant vegetation suggest greater erosion forces at play (Roman and Nordstrom 1988).

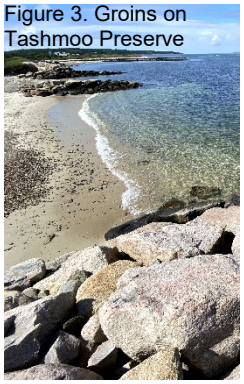

Figure 3. Groins on Tashmoo Preserve

Human-induced disturbance in the form of jetties and groins alters the natural process of dune and beach formation by interfering with the natural movement of sand (Fig. 3). They can have dramatic effects on the shoreline. Groins interrupt longshore drift, and seawalls increase offshore transport of sand often resulting in a narrowing of the beach (Fig. 4).

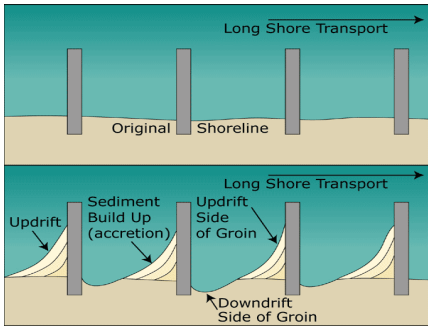

Figure 4. Long shore transport (*http://coastal.er.usgs.gov/development/jolene/kb/coastal-erosion/hard-engineering.html*)

In addition to natural disturbance regimes and human-induced disturbance,

sea-level rise may cause a landward retreat of beaches and dunes or depending on the rate of rise and movement of the beach, may eliminate the barrier beach and convert the lagoon or pond into a cove.

Structural complexity – The preserve has a simple structure of plant species, ranging from low-growing herbaceous plants in the heathland to taller shrubs in the maritime shrubland dune. This allows the preserve to accommodate more species by providing a more diverse array of habitats for species to survive in. The dynamic nature of the barrier beach contributes to its spatial complexity (USGS 2012).

Hydrological patterns – It is important to consider the impact of vegetation communities on the water cycle in an ecosystem. Precipitation moves quickly through the sandy soils of barrier beaches leaving the near-surface sand with a moisture content of 0-4%. The amount of water available in the soil in a well vegetated dune is less than in a sparsely vegetated dune because of the rapid removal of water from the soil by plants (Willis et al 1959). Protecting vegetation on dunes and maintaining a diverse structural ecosystem helps protect the hydrological patterns of the ecosystem (USGS 2012).

High-tide flooding and sea-level rise are predicted to impact the Lake Tashmoo shoreline of the Preserve most significantly. According to high tide data from the National Oceanic and Atmospheric Administration (NOAA), a portion of Daggett Ave is predicted to be flooded, creating vehicle access issues for the proposed trailhead on the Preserve (Figure 5).

Sea-level rise is predicted at 10-14 inches over the next three decades along the east coast. According to NOAA, a local scenario of sea level rise for Woods Hole developed by the U.S. Sea Level Rise and Coastal Flood Hazard Scenarios and Tools Interagency Task Force predicts a 1.5 foot sea level rise by 2050 (Figure 6), 2.6 foot rise by 2070 (Figure 7), and 5.1 foot rise by 2100 (Figure 8) (NOAA 2024). According to this scenario, by 2100 Lake Tashmoo will merge with Wilfrid's Pond and form a cove with small islands scattered where the highest points of the dune are. The road to the Preserve would be underwater sometime between 2050 and 2075.

Figure 6: NOAA One-foot Sea-Level Rise Prediction (Year 2040)

Figure 7: NOAA Two-foot Sea-level Rise Prediction (Year 2060)

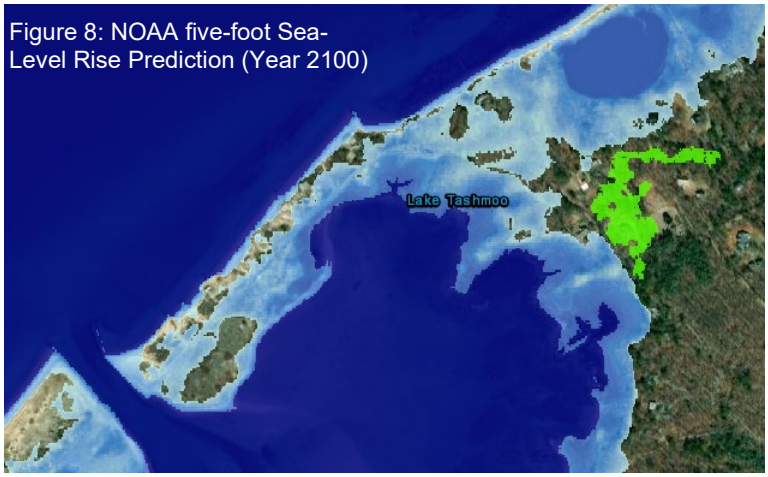

Figure 8: NOAA five-foot Sea-Level Rise Prediction (Year 2100)

Nutrient cycling – Important elements such as nitrogen, phosphorus, and carbon naturally travel through ecosystems, and when combined with water and sunlight determine the productivity of an ecosystem (USGS 2012). Typically, dunes and beaches have very minimal concentrations of nutrients resulting in the sparse growth of plants in the barrier beach system. Nitrogen concentrations in soils are greater in older dunes compared to younger dunes and is influenced by the rate of salt deposits leached from the soils (Willis and Yemm 1961). Natural and anthropogenic nutrient inputs in dune systems do not linger but are quickly transferred into nearby waterbodies through groundwater. Removing septic systems from the dune system and prohibiting pets from the beach will minimize the human-induced contributions of nutrients into surrounding water bodies.

Biotic interactions – The distribution and abundance of species is heavily dependent on the interactions among organisms such as competition for resources, predation, parasitism, and mutualism (USGS 2012). Limited habitat may increase disturbance of nesting shorebirds by predators such as skunks that are attracted to the debris left by beach users. Prohibiting trash receptacles on public beaches and enforcing strict carry-in-carry-out regulations, in addition to predator removal, can greatly increase the success rate of nesting shorebirds. Managing exotic invasive species that have advantages over native species will help maintain diversity on the property and increase habitat stability.

Population dynamics – The loss of a species can have many unseen effects on a community depending on the interactions that the species had in its environment. Species dispersion, recruitment, fertility, and mortality compose

a species' population dynamics and, along with genetic diversity, play an important role in the success of a species (USGS 2012). Small populations isolated by reduced habitat or habitat fragmentation are vulnerable to extinction, locally and globally. Other species are more widespread but occur in fewer numbers and are vulnerable due to low genetic diversity. Ecosystems are not static, and species require genetic diversity to adapt to their ever-changing world or risk extinction. Special care must be taken to consider the effects management actions may have on the rare wildlife species known to occur on the beach.

B. Biological Characteristics

1. Vegetation

Tashmoo Preserve is a barrier beach that comprises three general dune communities – American beach grass dune, maritime shrubland dune and heathland dune – as well as a small portion of marsh along the shore of Lake Tashmoo. They are described in detail and shown on the Ecological Communities Maps in Appendix D (Map 14, page 98).

The barrier beach is a harsh environment and only plants that tolerate salt, drought and wind can survive there. As a result, the species diversity of the property is relatively limited. A total of 73 vascular plant species, three bryophyte species, and one fungus is known to occur on Tashmoo Preserve (Appendix D, Table 1, page 93). The disturbed area where four houses were undeveloped contributes the greatest to species richness on the property. Species richness is the number of species present in a community (Begon et al. 1990). This area is colonized by pioneer species, including many non-native species, that over time will be replaced by a native plant community.

Four exotic invasive plants occur on the property – oriental bittersweet, Chinese wisteria, garlic mustard, and spotted knapweed. The oriental bittersweet occurs in the maritime shrubland and is not pervasive. Unfortunately, the spotted knapweed is ubiquitous throughout the heathland dune. The wisteria and garlic mustard grows along the edge of the disturbed area of the northern parcel of the Preserve. The entirety of the Preserve is subject to disturbance from wind and waves, resulting in habitats in constant flux that are susceptible to invasion by aggressive non-native plants. Diligent monitoring and prompt removal of invasives on the Preserve will ensure they do not spread and dominate disturbed areas.

2. Wildlife Habitat

Formal and informal avian survey data, direct observations of wildlife occurrences, and signs throughout the year contribute to the understanding of the habitat value of the beach. Four commonwealth-listed avian species were recorded on the property.

a. Birds

Seventy-one bird species were observed during formal bird surveys conducted at Tashmoo Preserve during spring and summer of 2023 and at Wilfrid's Pond Preserve located 4/10 of a mile north along the coast between 1995 and 2018. The avian list was supplemented by reports of birds at Tashmoo Beach submitted by island birders to the island bird alert network, as well as shorebird surveys conducted by Massachusetts Audubon staff. A table summarizing the avian fauna on the beach is included in Appendix E (Table 2, page 99).

b. Mammals

Figure 10: Deer tracks at Tashmoo Preserve

Evidence of three mammal species – white-tailed deer, racoon, and striped skunk – were observed on Tashmoo Preserve (Figure 10 and Figure 9) (Appendix F). Signs, such as tracks, scat and den use were used as evidence of species' presence on the property.

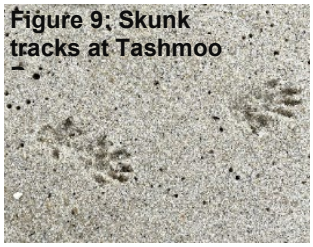

Figure 9: Skunk tracks at Tashmoo

c. Rare and Endangered Species

The Massachusetts Natural Heritage and Endangered Species Program (MA NHESP) designate Tashmoo Preserve as priority and estimated habitat for rare species. The commonwealth-listed species are shorebirds that may utilize the beach and dunes for nesting and the pond flats at low-tide for feeding. During the 1970s and 1980s the heathland dune was dominated by sand from dredge deposits that attracted nesting shorebird colonies. Dredge materials have not been deposited in the heathland in recent years. Details about the various listed species observed on the property and a copy of the Endangered Species Maps are located in Appendix G (Map 16, page 110).

d. Other Wildlife

The proximity of marine environs to the Preserve shoreline brings wildlife species that can migrate between the two habitats or are deposited on the shoreline resulting from tidal action. Evidence of species such as ghost crabs and horseshoe crabs are observed along the Lake Tashmoo (Figure 11) shoreline and occasionally jellyfish are washed up on shore (Figure 12).

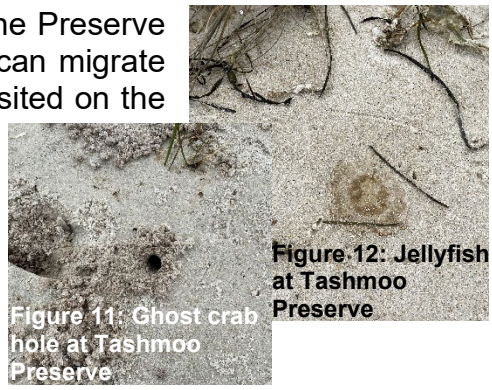

Figure 12: Jellyfish at Tashmoo Preserve

Figure 11: Ghost crab hole at Tashmoo Preserve

C. Cultural Characteristics

1. Land History

Archaeological evidence suggests the large coastal ponds in the moraine of Martha's Vineyard were of great importance to the aboriginal people. These ponds differ from the south shore ponds by routinely being open to the ocean and not closed off by a barrier bar of sand deposited by shore currents. The frequent pond openings expanded fish diversity of the ponds. Shell midden evidence suggests the aboriginal occupants of the island were semi-sedentary in small family groups. Dwelling sites were periodically abandoned possibly in response to over-gathering of a dominant food, climatic impacts, and pond closures (Richie 1969). Archaeological evidence and Wampanoag cultural history place the dominant Wampanoag dwelling site on Lake Tashmoo at the head where the spring is. The Wampanoag named the spring Kuttashimmoo meaning "great spring" (Banks 1966).

The Wampanoag tribe sustained ownership of the neck of Holmes Hole that encompassed land from the Stepping Stones of the Lagoon to the spring of Tashmoo until 1664. After this time the land passed through several prominent farming families and was utilized primarily for fisheries but also for salt production. Small fishing shacks first occupied the land and were later replaced by summer cottages in the mid 1900's until the land bank purchased several lots and began undeveloping the barrier beach to restore it to its former natural landscape.

Additional details pertaining to the land use history of the Preserve are located in Appendix G.

2. Planning Concerns

(a) Massachusetts Endangered Species Act

All the activities proposed in this management plan are within the boundaries of priority habitat for rare species (Map 16, page 110, Appendix H). The creation of a new trail and 3-vehicle trailhead, restoration of the dune, and installation of fencing and temporary gates will be included in a Massachusetts Endangered Species Act filing with the Natural Heritage and Endangered Species Program. The total proposed project area in priority habitat is 0.28 acres comprising 0.20 acres of dune restoration and 0.08 acres of trail and trailhead development.

(b) Wetland Protection Act
The entire property is a barrier beach and characterized as a coastal resource area protected by the Massachusetts Wetlands Protection Act and Tisbury Wetlands Town Bylaw. The property is situated entirely in land subject to coastal storm flowage and within the 100- and 500-year flood zones mapped by FEMA (Map 6, page 41). All proposed activities are within the resource area and will be addressed in an NOI with the Tisbury Conservation Commission.

(c) District of Critical Planning Concern
The Martha's Vineyard Commission (MVC) has the power to designate Districts of Critical Planning Concern that govern and protect areas such as inland pond zones, hilltop zones, and historic/cultural zones. The MVC Coastal District includes all of the island's coastline, coastal ponds greater than 10 acres, harbors, and tributary streams and wetlands that feed the coastal ponds. The Coastal District is divided between the shore zone (mean low water to 100' inland) and the inland zone (the balance of the Coastal District). Various uses within the different zones require special permits. In the shoreline zone dredging, filling, or alteration of any wetland or beach is prohibited, except for such activities necessary for a use or structure permitted by special permit. The land bank is not proposing any unpermitted uses or any uses that would require a special permit in this management plan.

3. Abutters

A list of those owning land abutting or within 200 feet of Tashmoo Preserve appears in Appendix H (Table 3, page 111), as does the Tisbury Assessors Map as it appears in the AXISGIS program (Map 17**: Abutters within 200' of Tashmoo Preserve, Tisbury, MA** page 112).

4. Existing Use and Infrastructure

The Existing Use map (Map 9, page 44, Appendix A) identifies five significant locations or features on the property. An explanation for each is as follows:

1. Driveways: One driveway leading to the former Tonetti house site occurs on the property and is proposed to be incorporated in the dune restoration project underway for the Ursin former house sites. A fourth driveway exists on the former Kissell property and will serve as the access driveway for the proposed trailhead.

2. Shorebird fencing: Obsolete wire shorebird fencing and wooden posts occur in the heathland dune of the property. Of the 1,270' of fencing 897' occurs on the property.

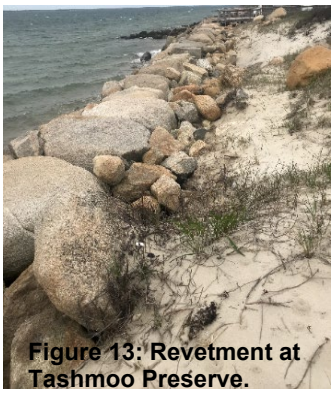

Figure 13: Revetment at Tashmoo Preserve.

3. Revetments: Stone revetments along the coastal shore were installed to protect the once-standing houses from erosion. The revetments range in length from approximately 117' to 210' and comprise large boulders. Much of the northernmost revetment is buried under sand. Groins are located at ends or in the middle of the revetments (Figure 13).

4. Groins: There are five groins on the property and boundary. They are made of large boulders and vary in length (Figure 14).

Figure 14: Groins at Tashmoo Preserve

5. Herring Creek Road: The narrow dirt road that is Herring Creek Road bisects the property. It is periodically maintained by the town for public use.

II. Inventory Analysis

In this section, problems and opportunities that may arise in the management of Tashmoo Preserve are analyzed.

A. Constraints & Issues

1. Ecological Context

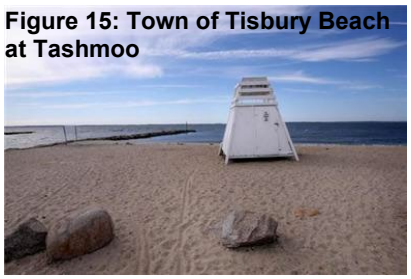

Figure 15: Town of Tisbury Beach at Tashmoo

The property abuts the Town of Tisbury and Dukes County public beach and is in close proximity to the land bank's Wilfrid's Pond Preserve.

The property is part of a barrier beach complex that protects the waters of Lake Tashmoo and the sensitive wetlands and land surrounding the lake.

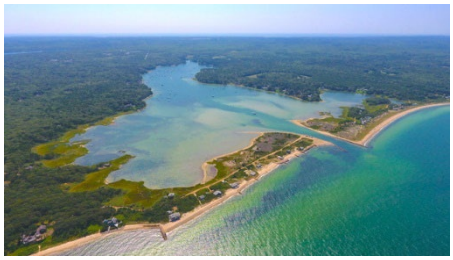

Figure 16: Lake Tashmoo aerial photograph (https://oceanparkmv.com/vineyard-haven-homes-for-sale/?r=31-40)

2. Natural and Cultural Resource Concerns

There are four main areas of concern at Tashmoo Preserve, each briefly addressed below and then addressed in more detail in the land management section of the plan:

(a) Commonwealth-listed rare species

Four commonwealth-listed wildlife species – all shorebirds – were recorded during surveys on the property in the past. The property has undergone much change over the years and will continue to do so. Shorebirds have been observed nesting in the road as well as the heathland dune when the habitat had sparse vegetation coverage. Currently the shorebirds use the property for feeding more than nesting. As this can change with the natural alterations of habitat on a barrier beach, monitoring for shorebirds is necessary.

(b) Erosion

The jetties along the channel and the revetments and groins on the property interfere with the natural flow of sand from currents along the shoreline. A study by Vineyard Land Surveying and Engineering, Inc. was conducted in 2019 to investigate how the shoreline would respond to the removal of the coastal engineering structures on the property (Appendix B). According to the study, the removal of the structures will allow the beach and dune system to expand while simultaneously migrate naturally at an approximate rate of 1.0 ft per year. However, significant erosion is to be expected immediately upon removal of the structures. Therefore, the engineers

recommend a two-phase removal approach with the revetments being targeted first followed by a period of study prior to removal of the groins. The dunes on the property are susceptible to erosion from human disturbance.

The dunes on the property are important for storm attenuation. Impacts such as repeated human traffic can cause accelerated changes to dune topography and vegetation. These changes can reduce the ability of the dunes to protect inland areas from high stormwater surges. Human impacts can diminish the quality of the habitat for a variety of plants, birds, and invertebrates that currently use the expanse.

(c) Invasive Species

Invasive species are a concern on any property. Exotic, invasive species outcompete and displace native species, altering the composition of natural vegetation communities (Somers 1996). Often without natural enemies, exotic, invasive plant seedlings compete for nutrients, water, and light with neighboring plants. Annual monitoring and quick control and removal of invasive species are important to maintain ecological balance and the integrity of habitats on the Preserve.

(d) Wetland Resource Areas

The entirety of the property is a wetland resource area. The barrier beach habitat comprises beach and vegetated dune. Protecting the barrier beach from disturbance from unauthorized walking paths and vehicles parking and driving is vital to maintaining the structural integrity of the habitat. Care must be taken to ensure erosion of dunes from proposed trails is minimal.

3. Sociological Context

Tashmoo Preserve is located near the end of the long and narrow Herring Creek Road in Tisbury. The property abuts a popular town/county beach destination and is in close proximity to a frequented land bank beach destination, Wilfrid's Pond Preserve (Map 11, page 46). Both beaches have limited vehicle parking and there is no public transportation down the Herring Creek Road. People access the beach by vehicle, bicycle, boat, and foot.

4. Neighborhood Concerns

The land bank considers the concerns of neighbors as part of the planning process. All abutting property owners and the local conservation commission

are sent written notice of a public hearing on the draft plan. All neighbors -- and all members of the public -- are invited to review the draft plan, attend the public hearing, and make written or oral comments. The land bank's Tisbury town advisory board and the Martha's Vineyard land bank commission review all comments and can change the draft plan if desired. Anyone may also express concerns at any public meeting of the Martha's Vineyard land bank commission and Tisbury town advisory board or may simply contact land bank staff.

The town has expressed concerns that include:

-inadequate parking in the town/county lot
-lack of surveillance to monitor bonfires and other unauthorized uses
-illegal parking along the Herring Creek Road
-maintenance of the Herring Creek Road
-response of town lifeguards on land bank property
-provision of public restrooms
-access to electricity and potable water

B. Addressing Problems and Opportunities

1. Land Bank Mandate

In 1986, the voters of Martha's Vineyard created the land bank to acquire, hold, and manage land in a predominantly natural, scenic, or open condition. The land bank keeps open space open and allows modest public use. Its "shared-use" policy strives to provide a range of public benefits, from low-impact recreation and aesthetics to wildlife conservation and watershed protection. Protection of natural resources is the land bank's highest priority, yet "shared-use" demands balancing the public use of natural resources with protection of the same.

2. Goals at Purchase

The purchase of Tashmoo Preserve meets six of the land bank's nine criteria for property acquisition: wildlife habitat preservation; protection of future well fields, aquifers, and recharge areas; protection of fresh and saltwater wetlands; protection of natural and scenic ocean and pond frontage, beaches, dunes, and adjoining backland resources; scenic vistas; and sites for passive recreation. Preliminary management plans were adopted by the land bank commission and Tisbury advisory board and are attached as Appendix B.

3. Opportunities

Tashmoo Preserve offers several opportunities for use of the property (Map 10, page 45). They are as follows:

a.) *Access*: The primary access for vehicles to Tashmoo Preserve exists in the town/county lot and by walking, bicycle, or boat. A 3-vehicle trailhead with a bicycle rack is proposed for the northern parcel of the property.

b.) *Trails*: Approximately 200 feet of trail along the dune connects the town beach with the coastal beach on the property. An additional 100 feet of trail will connect the trailhead to the beach on the northern parcel.

c.) *Views*: Without the houses, the Preserve offers unhindered views of both the pond and sound.

d.) *Dune restoration*: The former house/driveway footprints are excellent sites for dune restoration. The area will need to be built up with sand and vegetated with a combination of American beach grass and shrubs such as beach plum, bayberry and Virginia rose.

e.) *Hunting*: Waterfowl hunting is possible but extremely limited on the Preserve to areas that are 150 feet from the public road and 500 feet from a dwelling in use without prior written permission from the owner. The land bank hunting subcommittee has not recommended hunting on the Preserve.

f.) *Birdwatching*: The Preserve offers excellent opportunities to observe various sea ducks during the winter and various songbirds and shorebirds during the spring and summer.

g.) *Swimming:* There are two stretches of sound beach on the property separated by private properties. The northern stretch is 175 feet long and the southern stretch is 470 feet long. Additionally, there are 450 feet of pond shore on the property. The surface is sandy, and the ocean and pond are relatively calm.

4. Universal Access (UA)

Tashmoo Preserve does not present reasonable opportunities for universal access due to the soft sand at the town/county vehicle lot and the additional

constraint of slope at the proposed trailhead. The preserve's ROS ('Recreation Opportunities Spectrum') classification is "less-developed." Alternative universal access is located at the nearby Wilfrid's Pond Preserve. Further details are included in Appendix I.

III. Land Management Planning

This final section of the management plan states goals for Tashmoo Preserve and outlines strategies for achieving them. These goals and strategies are designed to fit within the social and ecological constraints defined previously. The plan addresses five areas of planning concern: nature conservation; recreation and aesthetics; natural products; community interaction; and land administration.

A. Nature Conservation

Provide long-term protection for plants, animals, and natural processes occurring at Tashmoo Preserve.

Objective 1: Protect and encourage rare and endangered species on the property.

Strategies:

a. Monitor the property for additional rare plants and animals during regular property checks.

b. Develop and implement a strategy to protect any additional rare species observed on the property.

c. Monitor the property for commonwealth-listed shorebirds and protect accordingly by following the Massachusetts Division of Fisheries and Wildlife NHESP "Guidelines for managing recreational use of beaches to protect piping plovers, terns, and their habitats in Massachusetts":
   i. install symbolic fencing as necessary to protect breeding and feeding habitat; expand fencing to accomplish a minimum 50-yard radius around nests where feasible;
   ii. prohibit all motorized vehicles from the trails and beaches of the Preserve;
   iii. prohibit pets on the property from April-September;
   iv. conduct predator control measures including but not limited to fencing and trapping with appropriate permits from the commonwealth fisheries and wildlife division;
   v. prohibit boats from pulling up along the sound and pond shore if nests are discovered within 10' of the mean high-water line and if area is being used as nursery for unfledged chicks;
   vi. prohibit kite-flying on the property between April and September;
   vii. erect piping plover exclosures around nests if deemed prudent

and with appropriate permits from NHESP;
viii. monitor active nests of listed shorebirds regularly and
ix. prohibit the launching of unmanned aerial vehicles (UAV) on the property and discourage fly-overs of UAV originating elsewhere during shorebird nesting season between April and September.

d. Report new and existing observations of rare and endangered species to the proper commonwealth authority.

e. Close beaches and reroute or close trails if recreational use interferes with a rare species.

f. Protect dune habitat:
   i. site trail on the edge of the habitat along the revetment and if revetment is removed discontinue trail if deemed unnecessary;
   ii. install educational signs and close any unauthorized trails as they are discovered;
   iii. instruct the public to access the beach only via the designated trails;
   iv. install fencing or boulders along Herring Creek Road to prohibit the unauthorized use of the property by vehicles and foot traffic;
   v. prohibit vehicles on the Preserve;
   vi. remove invasive species in the dune habitat;
   vii. remove the old wire shorebird fencing and posts;
   viii. and restore 0.31 acres of dune habitat at the former house sites.

Objective 2: Reduce and control erosion.

Strategies:

a. Allow dredge spoils to be deposited on the property as beach nourishment subject to final approval from the land bank superintendent prior to commencement as to deposit, location, and equipment access.

b. Use beach fencing or other such structures to help mitigate dune erosion, as necessary.

c. Investigate the feasibility of removing beach-stabilizing structures to allow a natural movement of sand along the beach, see A. Objective 6.

Objective 3: Protect the value of the property as migratory and breeding habitat for avian and other wildlife species.

Strategies:

a. Retain scattered trees where these trees do not block scenic vistas and pose unacceptable safety hazards.

b. Promote shrubland species as well as American beach grass in the dune restoration area.

c. Monitor changes in vegetation cover during regular property checks and by updating ecological inventory in 2034.

Objective 4: Monitor for and control the spread of invasive species.

Strategies:

a. Cut or uproot invasive species as they are observed.

b. Monitor for re-growth and continue to manage invasive plants.

c. Explore other control methods and implement with permission of the MVLBC, Tisbury Conservation Commission, and NHESP if physical control methods fail.

Objective 5: Restore 0.2 acres of disturbed dune in addition to the 0.14 acres of dune restoration underway where the driveways and houses once stood to promote a more stable barrier beach at Tashmoo Preserve.

Strategies:

a. Add sand from dredge spoils, as supply allows, to build the dune to an elevation consistent with the surrounding dune.

b. Use temporary fencing and gates to protect the restoration area from foot and vehicle traffic while the project is underway.

c. Maintain fences as necessary to prevent intrusion into the restoration area.

d. Remove gates upon completion of the project.

e. Install split-rail to define trailhead area to protect restoration areas from unauthorized vehicle use.

f. Use plants from the list described by the Massachusetts Office of Coastal Zone Management that are habitat-appropriate for coastal revegetation on the property and include but are not limited to American beach grass, beach heather, black grass, cordgrass, sea lavender, switch grass, beach plum, bayberry and Virginia rose.

g. Use native plants from the island seed stock when available.

Objective 6: Remove coastal engineering structures following recommendations in the *Tashmoo Shoreline Protection Removal Evaluation* (Appendix B), if doing so is deemed sensible by the Tisbury town advisory board and the land bank commissioners and approval is granted through an NOI filed with the Tisbury conservation commission and a MESA review is filed with NHESP.

Strategies:

a. Divide the project into two phases.

b. Contract a firm to carry out the removal and disposal of structures.

c. Remove revetments in phase one.

d. Consult with an engineer to study dune accretion and erosion for two years following revetment removal.

e. Remove groins in phase two.

f. Restore dune vegetation with native species, as needed.

B. Recreation and Aesthetics

Allow limited, low-impact recreational use of the area for hiking, bicycling, swimming, boating, and picnicking; and maintain attractive views and landscapes provided that these uses do not preclude attainment of nature conservation objectives.

Objective 1: Maintain the property open for low-impact recreation.

Strategies:

a. Open the property for hiking, non-motorized biking, swimming, and other passive uses.

b. Coordinate with the town of Tisbury to test the water for enterococcus bacteria during the beach bathing season and close beaches according to the commonwealth regulations for bacteria CFU levels.

c. Maintain trail that joins the Preserve coastal beach to the town/county beach.

d. Allow picnicking and maintain a “carry in-carry out” policy for litter; monitor the property regularly to ensure the beach and surrounding area are free of litter.

e. Monitor impact of passive recreational use on the property annually and manage accordingly.

Objective 2: Work with the town to improve the existing vehicle access at the town/county beach access lot by following the intergovernmental agreement dated April 13, 2020 (Appendix B).

Strategies:

a. Encourage visitors to walk or bicycle to the property by posting mileage, on the land bank website, from Stonegate Lane to the property.

b. Install and maintain a bike rack on the town lot and at the trailhead for beach access.

c. Install a small sign station at the start of the trail on town land and at the trailhead, designating the appropriate uses and rules of the beach.

d. Instruct visitors on the land bank map and website that vehicle access is available via the town/county beach and the land bank trailhead.

e. Monitor for vandalism and address as needed with surveillance equipment and working with local authorities.

Objective 3: Create a 3-vehicle trailhead on the northern parcel of the Preserve.

Strategies:

a. Define vehicle spaces with split-rail fencing in the 0.07 acres of existing disturbed area of the former house site.

b. Add surface-stabilizing product to trailhead surface if deemed necessary.

c. Use the existing 45’ driveway to access trailhead.

d. Install land bank logo marker and sign station.

Objective 4: Create a new trail as shown on the Project Planning Map (Map 10, page 45).

Strategies:

a. Create new trails as shown on the Project Planning Map:

i. create ±65 linear feet of new trail at a width of 5’ overlain by a beach-mat.

ii. utilize beach-mat between June and September to minimize erosion of the trail during peak use.

iii. maintain mat surface free of sand and other obstacles where practical.

iv. install adjustable beach stairs to access the beach from the trail on the northern portion of the property, remove during off-season, if necessary.

v. site trails so that they are as unobtrusive as possible to sensitive wildlife habitat; and

vi. site trails so that they connect, as well as possible, to other conservation land, ancient ways, and trail easements.

b. Screen views of houses as necessary from trails and viewpoints using native vegetation.

c. Minimize need for signs by siting trails appropriately.

d. Allow land bank staff discretion to close or relocate trails or add new trails, such as spur trails for off-property trail connections.

e. Prohibit bicycles and horses from the Preserve.

f. Use signs or temporary fences to close unauthorized or relocated trails if necessary.

g. Prohibit visitors' use of motorized vehicles, such as but not limited to dirt bikes and all-terrain vehicles, on trails and beaches.

h. Check and maintain trails monthly.

i. Maintain existing trail system in good condition.

Objective 5: Entertain possibilities for other trail links.

Strategies:

a. Create new trails as necessary to connect the preserve to future conservation land and trail easements.

b. Maintain existing links to other conserved properties.

c. Create links to other conserved land and easements.

Objective 6: Adhere to the town of Tisbury dog regulation and MA-NHESP shorebird protection guidelines.

Strategies:

a. Prohibit all pets from the property from April – September and require all dogs to be leashed at all other times on the property.

b. Post the dog policy at the various sign stations, land bank website, property entrances and in the land bank map.

c. Encourage visitors to clean up after their pets.

Objective 7: Allow limited boating on the preserve.

Strategies:

a. Allow access to the beach by boat provided it does not interfere with shorebird nesting or attaining other natural conservation objectives.

b. Prohibit all overnight storage of boats, including outhaul anchors.

c. Prohibit boat landings on vegetated shorelines; allow short-term boat storage during the day on unvegetated beach shorelines.

d. Monitor boat usage at the beach and coordinate with the harbormaster to prevent conflicts with swimmers.

C. Natural Products

Allow fishing, hunting, and gathering provided that these uses do not preclude attainment of nature conservation objectives; prohibit camping and open fires on the property.

Objective 1: Provide access to the waters off the property for saltwater- and shell-fishing including after dark hours.

Strategies:

a. Encourage the removal of all fishing-related debris including but not limited to fishing lines, hooks, carcasses, and bait buckets.

b. Prohibit open fires on the preserve.

Objective 2: Permit hunting on the preserve for waterfowl only, after consulting with the land bank hunting subcommittee.

Strategies:

a. Post the hunting policy on the property and land bank website.

b. Prohibit the storage of wildlife blinds on the property, instead requiring that all blinds be removed daily.

c. Follow the hunting policy regarding types or hunting and numbers of hunters on the property; revise policy for the property as recommended by the land bank hunting subcommittee.

d. Patrol the property on a regular basis during hunting season if the need arises.

Objective 3: Prohibit camping.

Strategies:

a. Prohibit camping on the preserve unless special permission is granted by the land bank commission for scouting and like groups and complies with appropriate Tisbury town bylaws.

b. Monitor the property for squatters and remove unauthorized campers promptly.

c. Prohibit open fires.

Objective 4: Allow gathering of natural products according to the land bank's public use policy.

Strategies:

a. Prohibit collecting of locally rare plants and wildlife on the property.

b. Require that gathering occur within the immediate environs of the trail system; prohibit intrusion into the dune system for the purpose of gathering.

D. Community Interaction

Provide helpful and interesting information about the property for visitors; promote cultural resource conservation; and allow educational use of the property.

Objective 1: Help people find the property and avoid trespassing.

Strategies

a. Mark the property on land bank website (www.mvlandbank.com) and map and provide directions.

b. Install "end of land bank property" signs where appropriate.

c. Install land bank logo markers on property.

d. Limit trespassing by closing existing trails not intended for use.

e. Install gates or fencing as needed.

f. Inform visitors, in the land bank map, how to access the property and its intended use.

g. Post map of property and trails as well as an aerial overview of the connecting conservation land and trails on sign station and website as they are updated.

Objective 2: Present useful and interesting information about Tashmoo Preserve to the public.

Strategies:

a. Provide the Tisbury conservation commission with copies of this management plan if so desired.

b. Make a copy of this plan available at the land bank office and, when file size is not restrictive, on the land bank website.

c. Post information about the cultural and natural history of the property on the land bank website.

E. Land Administration

Oversee and police Tashmoo Preserve on a regular basis and develop good neighborhood relations.

Objective 1: Maintain good relations with abutters and neighbors.

Strategies:

a. Establish contact and working relations with neighbors.

b. Maintain contact and working relations with the Tisbury conservation commission.

c. Follow the intergovernmental agreement between the land bank and the Town of Tisbury dated April 13, 2020 (Appendix B).

d. Post the activities allowed and prohibited on the property.

Objective 2: Keep property well-maintained.

Strategies:

a. Inspect property at least monthly.

b. Clean up any litter and junk which may occur.

c. Promptly respond to problems.

d. Employ adequate staff to effectively implement land management goals.

Objective 3: Maintain set hours for use.

Strategies:

a. Open property every day of the year from sunrise to sunset.

b. Prohibit nighttime use unless fishing or special permission is granted by the land bank commission.

c. Post “closed at dark” signs on the sign station.

Objective 4: Keep well-maintained boundaries.

Strategies:

a. Locate and GPS corners.

b. Walk boundaries annually.

c. Post boundary flags where appropriate.

d. Correct encroachments as they occur.

Objective 5: Keep good records of all land management activities and natural events.

Strategies:

a. Record all significant events, natural or otherwise.
b. Continue to update plant and wildlife inventories.
c. Maintain photographic record of landscape appearance.

Objective 6: Comply with all applicable regulations and agreements.

Strategies:

a. Comply with Massachusetts endangered species act.
b. Comply with wetlands protection act and Tisbury town wetland by-laws.
c. Comply with the Martha's Vineyard Commission Coastal District DCPC
d. Request recommendations from the Massachusetts historical commission regarding the proposed activities in the plan.

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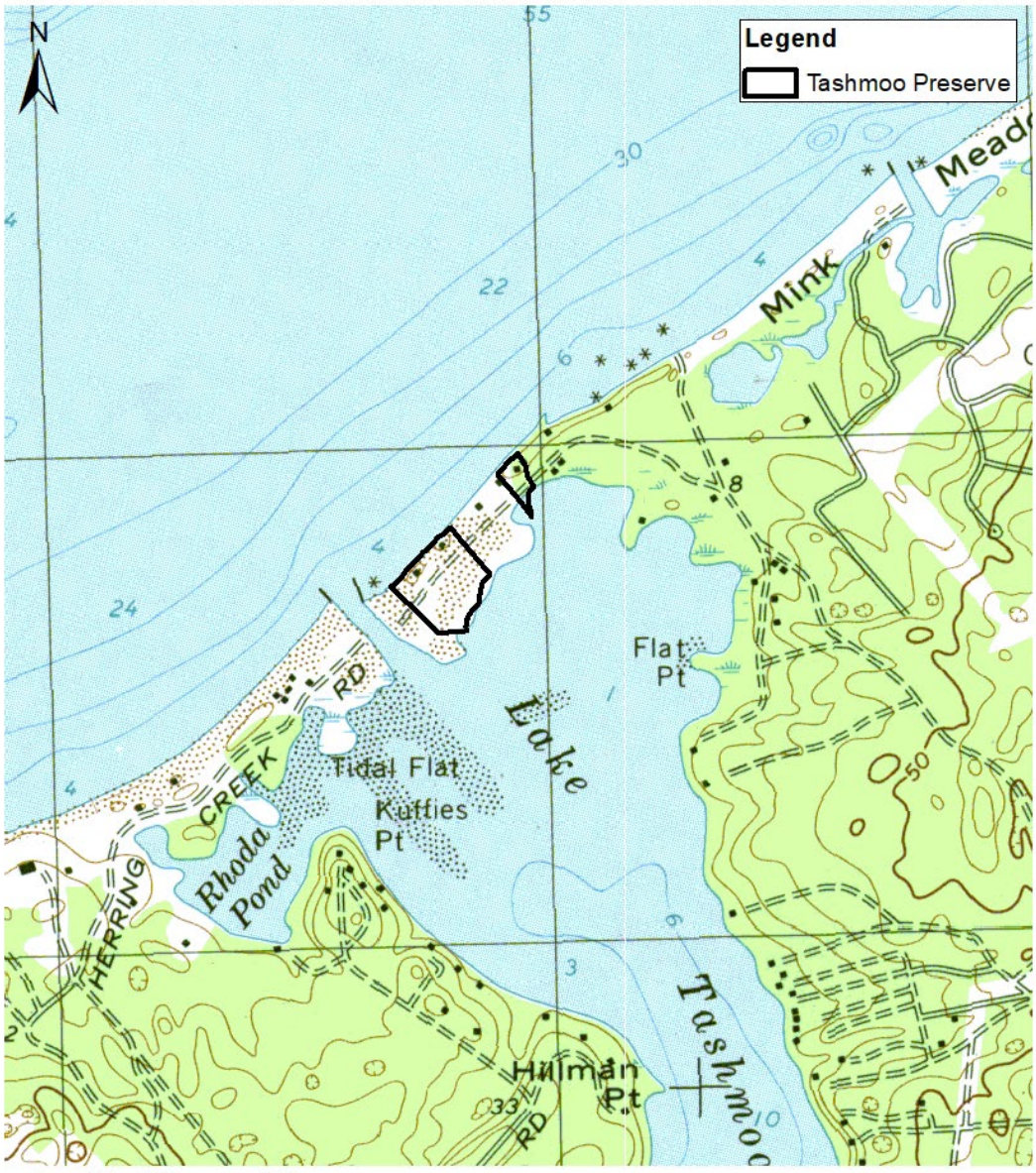
Appendix A. Locus, Topography and Site Management Maps

Map 1: Locus Map for Tashmoo Preserve, Tisbury, MA

Source: Parcel Data from MassGIS, Notes: Map for planning purposes only. Projection: NAD 1983 State Plane Massachusetts Mainland FIPS 2001

Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_Locus_2024.jpg Date: January 4th, 2024.

Map 2: Topography of Tashmoo Preserve, Tisbury, MA

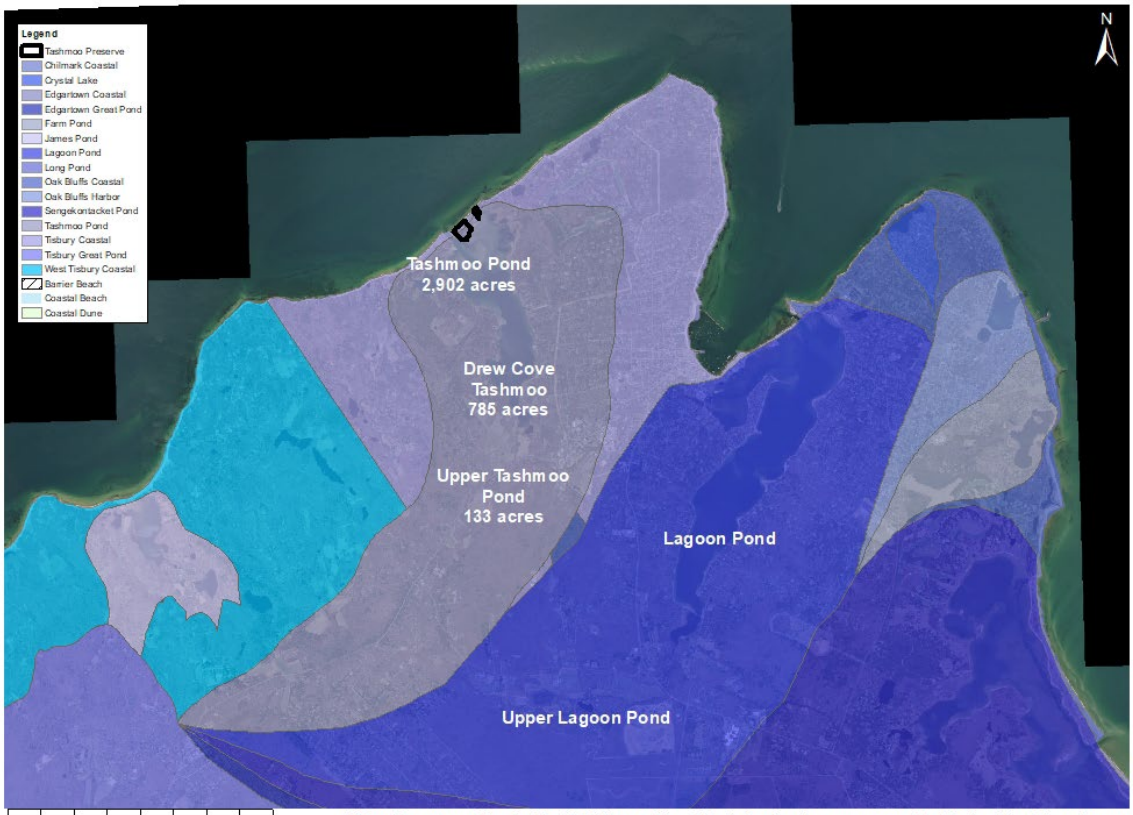


Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_topographic_map_2024.jpg Date: January 4th, 2024

Map 3: 1-ft Contours of Tashmoo Preserve, Tisbury, MA

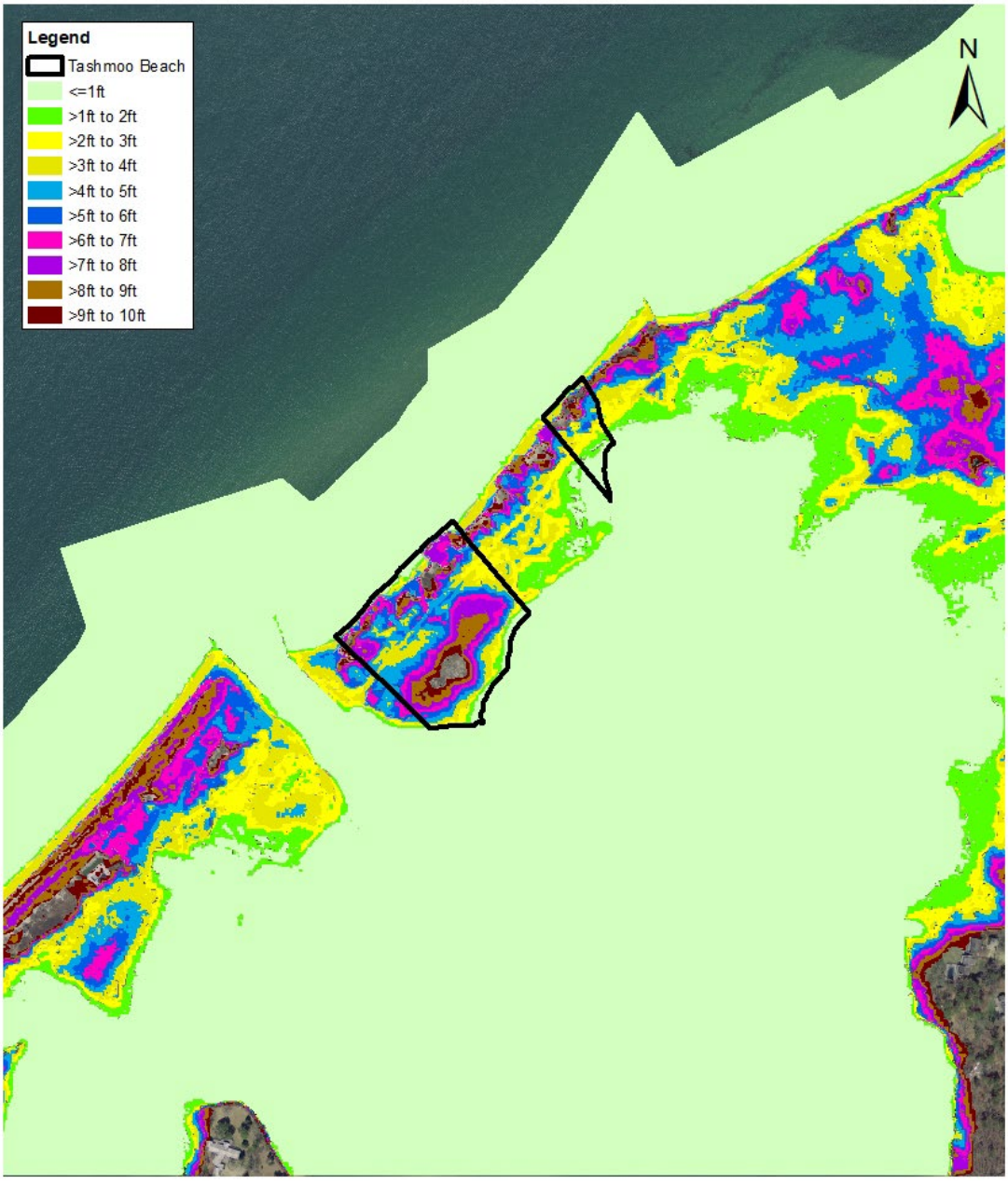
Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_1-ftcontours_2024.jpg Date: January 4th, 2024

Map 4: Hydrology and Watersheds of Tashmoo Preserve, Tisbury, MA



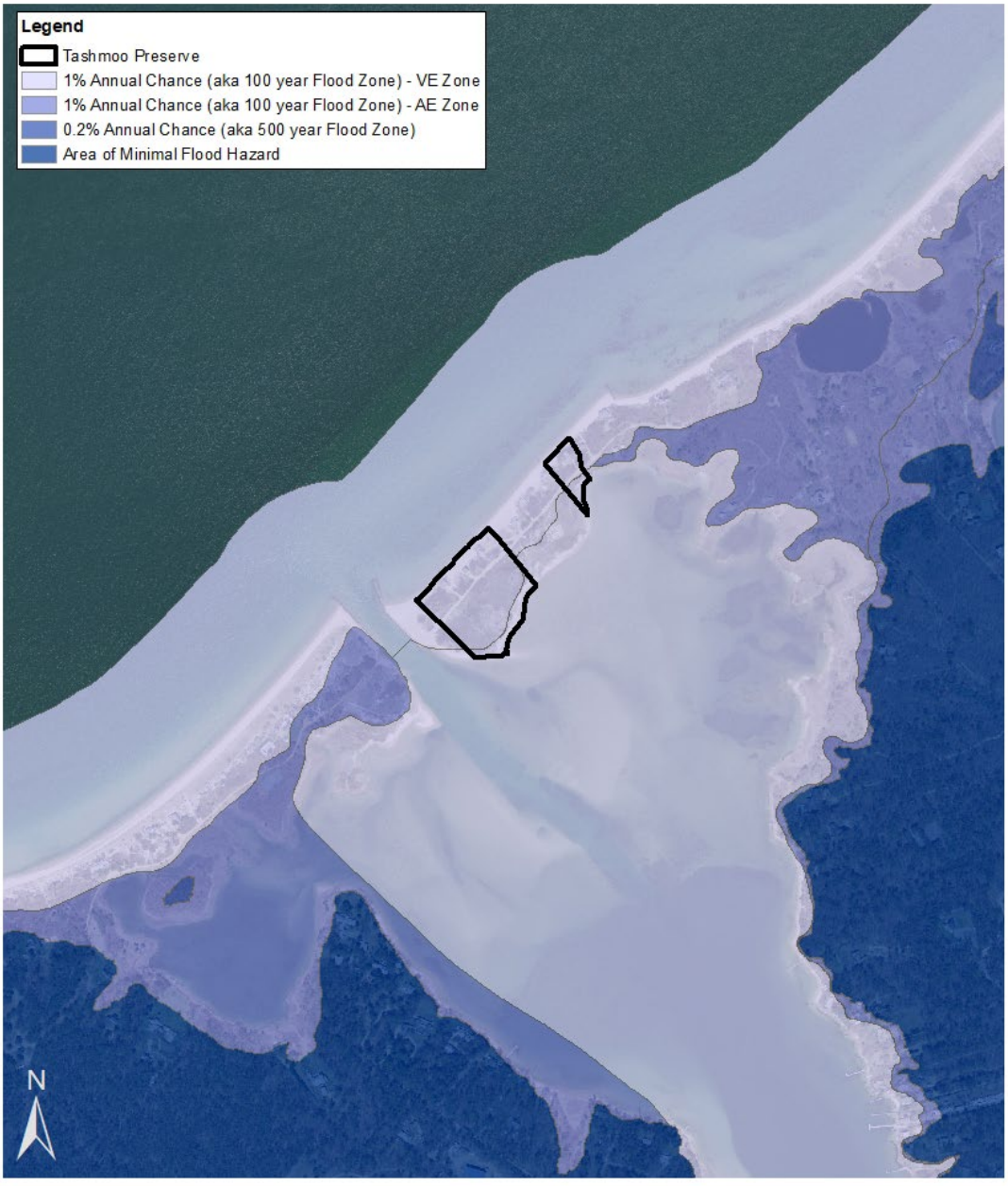
Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_hydrology_map_2024.jpg Date: January 4th, 2024

Map 5: Projected Sea Level Rise for Tashmoo Preserve, Tisbury, MA



Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_SeaLeavelRise_2024.jpg Date: January 8th, 2024

Map 6: FEMA Flood Zones at Tashmoo Preserve, Tisbury, MA



Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_FEMAFlood_2024.jpg Date: January 9th, 2024

Map 7: Jurisdiction pursuant to Chapter 91 regulations at 310 CMR 9.04 at Tashmoo Preserve, Tisbury, MA

Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_Chpt19_2024.jpg Date: January 8th, 2024

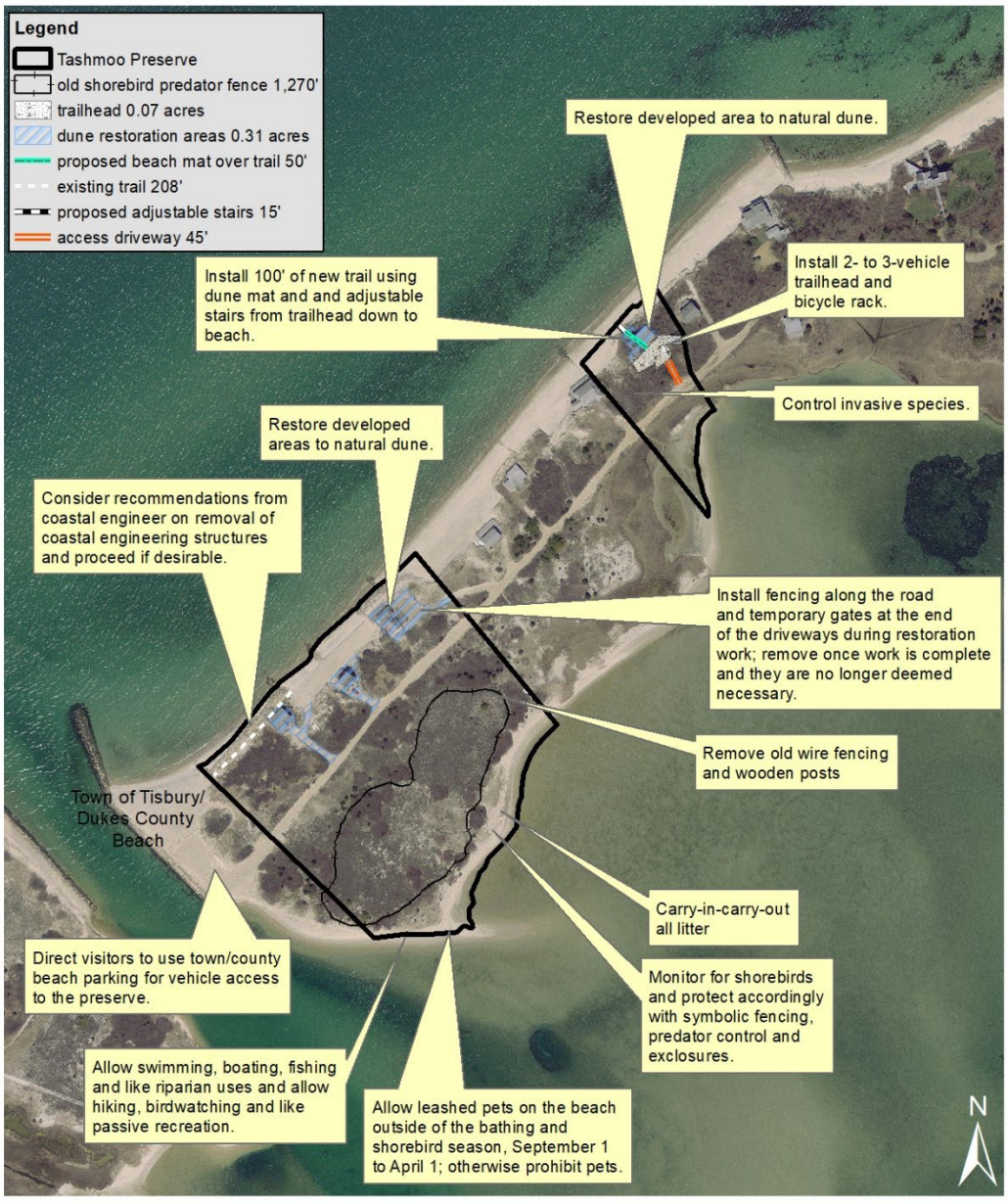
Map 8: Hunting at Tashmoo Preserve, Tisbury, MA

Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_Hunting_2024.jpg Date: January 9th, 2024

Map 9: Existing Use at Tashmoo Preserve, Tisbury, MA

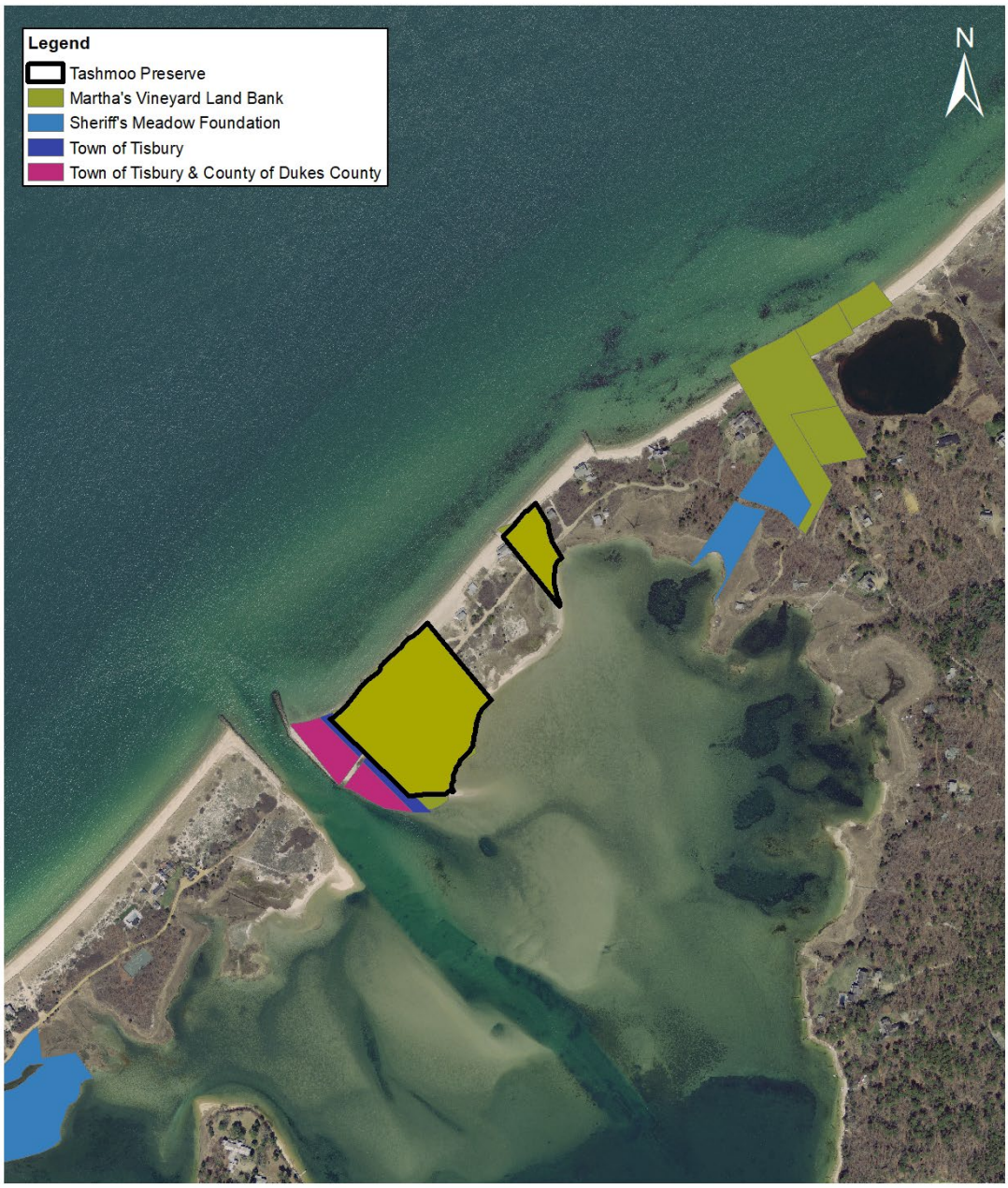
Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_existinguse_2024.jpg Date: January 4th, 2024

Map 10: Project Planning at Tashmoo Preserve, Tisbury, MA



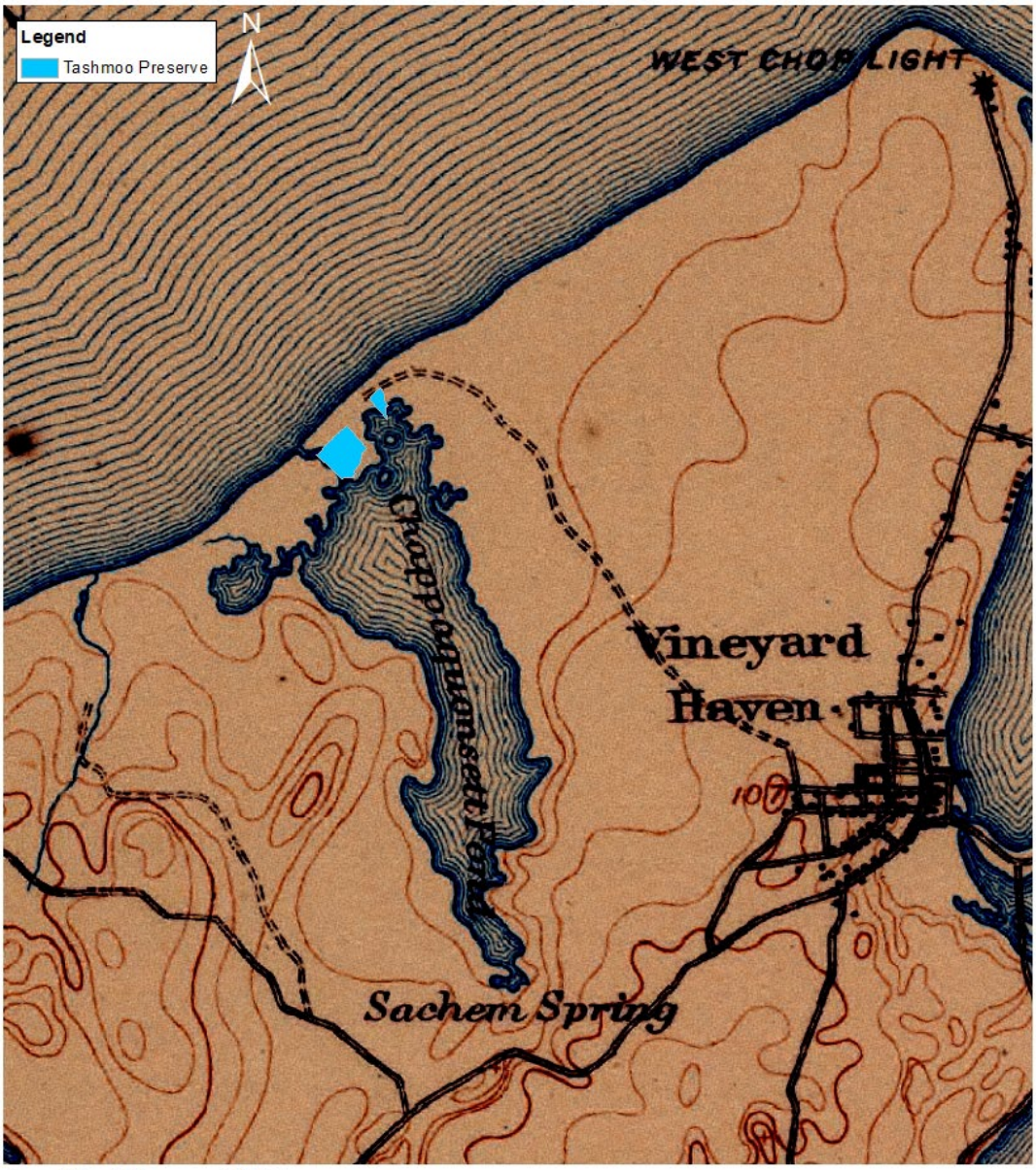
Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_ProjectPlanning_2024.jpg Date: January 5th, 2024

Map 11: Conservation Land Adjacent to Tashmoo Preserve, Tisbury, MA

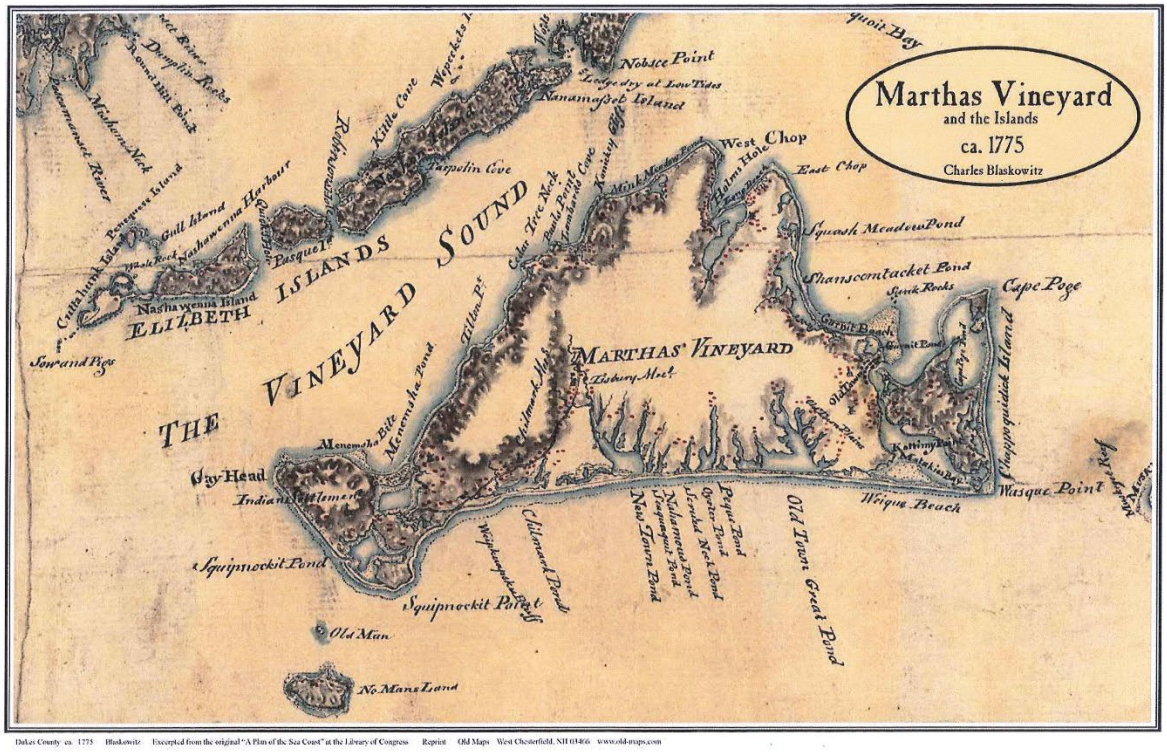


Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_ConsvLand_2024.jpg Date: January 9th, 2024

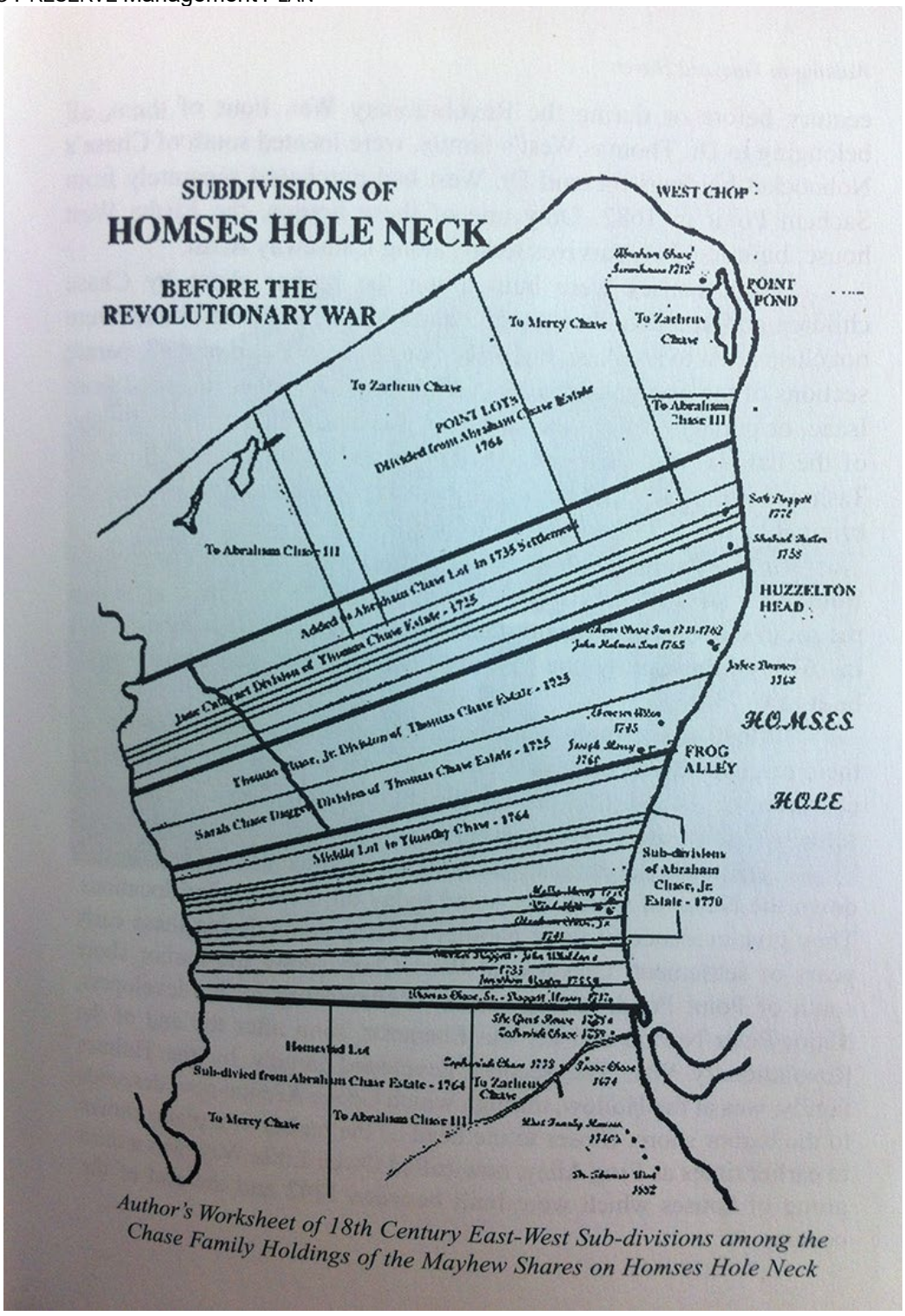
Map 12: Historical Map of Tashmoo Preserve, Tisbury, MA



Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_historical_map_2024.jpg Date: January 4th, 2024



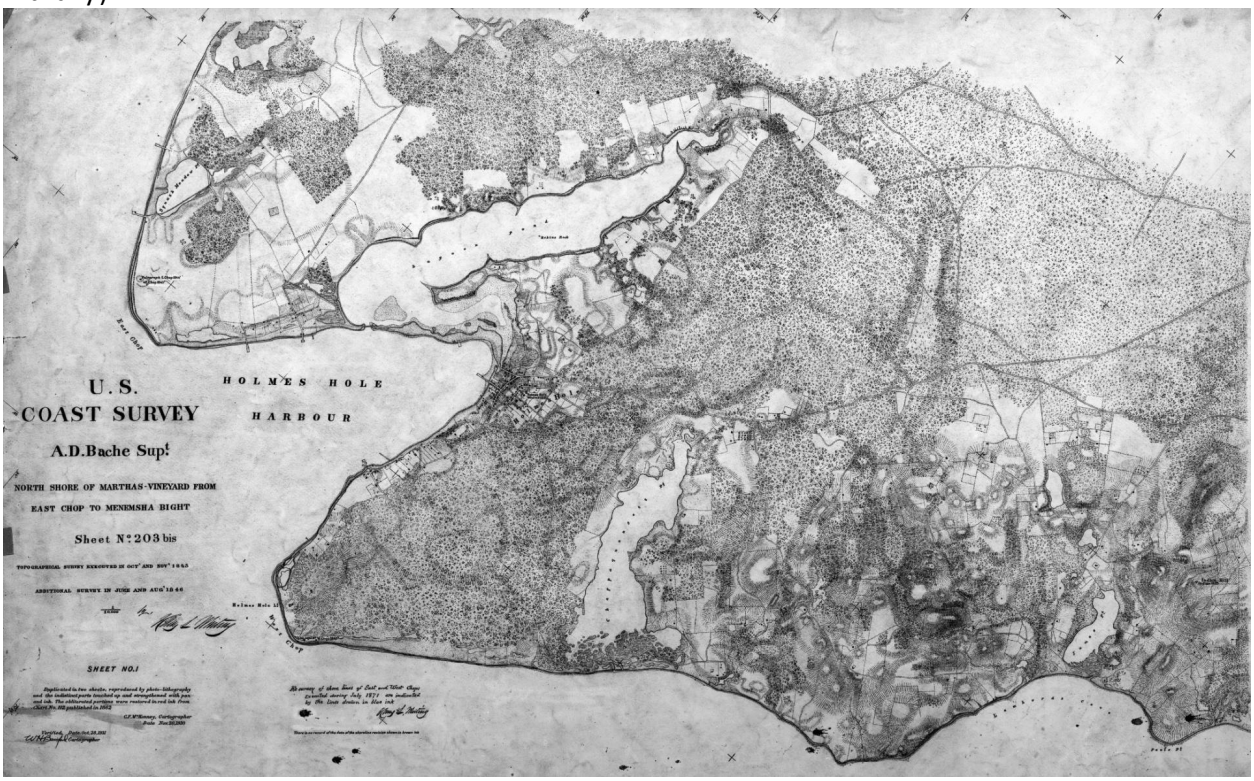
Dukes County ca. 1775 Blaskowitz Excerpted from the original "A Plan of the Sea Coast" at the Library of Congress Reprint Old Maps West Chesterfield, NH 03466 www.old-maps.com



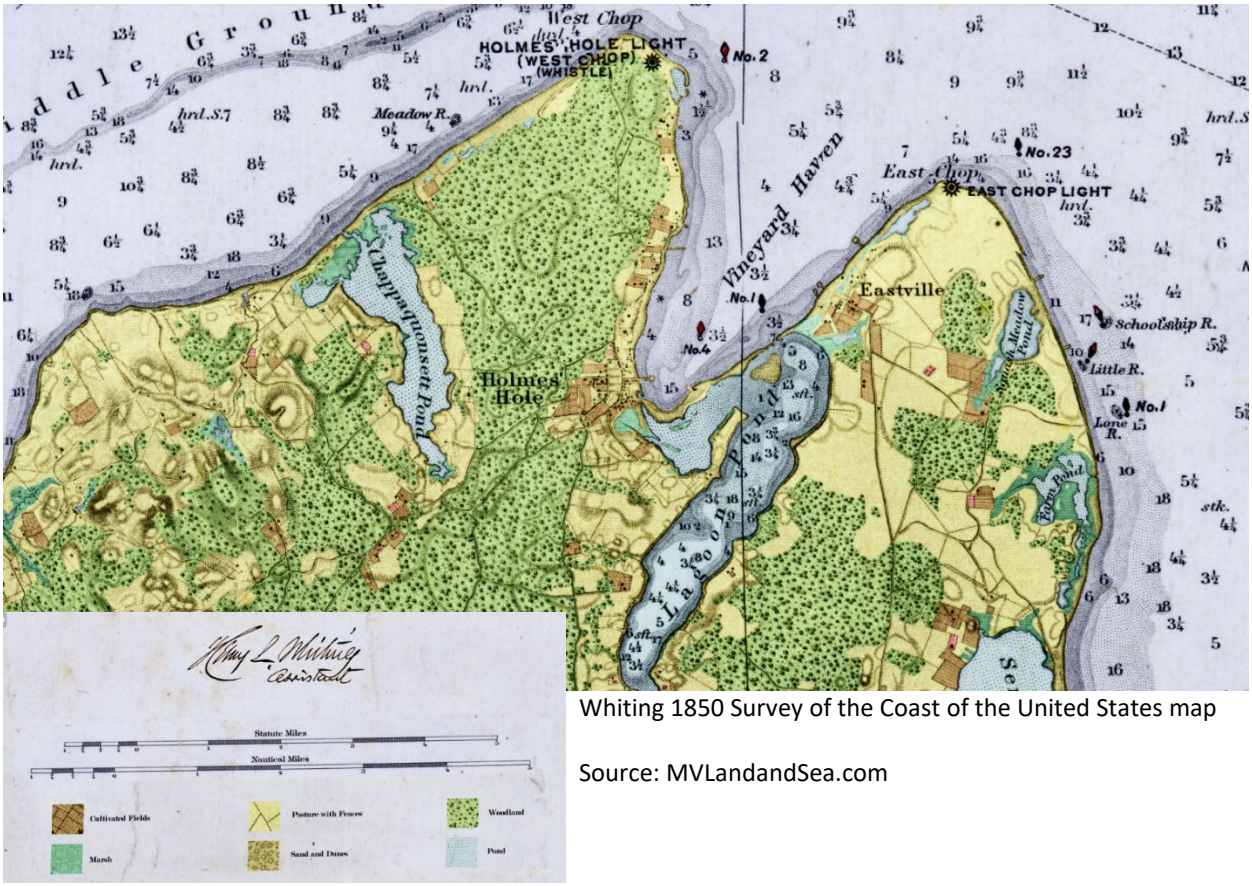
Author's Worksheet of 18th Century East-West Sub-divisions among the Chase Family Holdings of the Mayhew Shares on Homses Hole Neck

Norton 1985

Des Barres 1781(MVLandandSea.com, Norman B. Leventhal Map Center at the Boston Public Library)



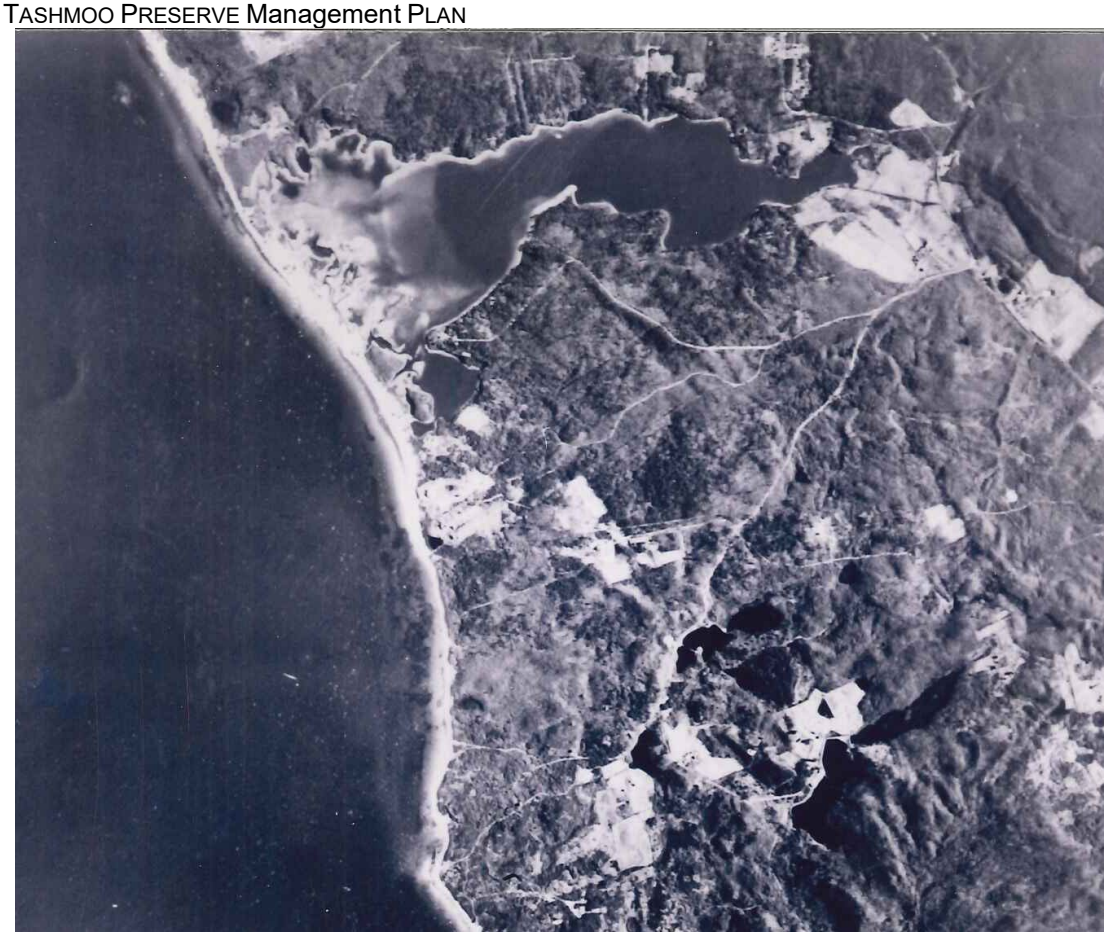
1845-1855 Whiting U.S. Coast Guard Survey (MVLandandsea.com)



Whiting 1850 Survey of the Coast of the United States map

Source: MVLandandSea.com

Eldredge's Map 1913 (source: Norman B. Leventhal Map Center Collection)



1938


STATE OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS
HERMAN A. MAC DONALD, COMMISSIONER
(DUKES COUNTY)
VINEYARD HAVEN QUADRANGLE
7½-MINUTE SERIES
37'30"
70'35'
41'30'
(Falmouth)
FALMOUTH
BARNSTABLE CO.
DUKES CO.
SOUND
WEST CHOP LIGHTHOUSE
West Chop
Mink Meadows
MINK MEADOWS GOLF CLUB
Husselton Head
VINEYARD HAVEN HARBOR
Lake Tashmoo
Vineyard Haven
B.M. 24
Pilot Hill
TISBURY
TASHMOO GOLF COURSE
LAGOON POND
COAST NECK
OAK BLUFFS
(Edgartown)


STATE OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS
WILLIAM F. CALLAHAN, COMMISSIONER
MASSACHUSETTS
(DUKES COUNTY)
VINEYARD HAVEN QUADRANGLE
7½-MINUTE SERIES
(Falmouth)
37'30"
70°35'
41°30'
FALMOUTH
BARNSTABLE CO
DUKES CO
SOUND
West Chop
WEST CHOP LIGHTHOUSE
Mink Meadows
MINK MEADOWS GOLF CLUB
Husselton Head
Lake Tashmoo
Vineyard Haven
(B.M. 24)
VINEYARD HAVEN HARBOR
Pilot Hill
TISBURY
WATER TANK
LAGOON POND
OAK BLUFFS
(Edgartown)
OAK BLUFFS 1.6 MI.
OAK BLUFFS 1.7 MI.
27'30"

1944
1951

1996

Appendix B. Surveys, Deeds, Agreements, Preliminary Management Plan Goals, and Assessments

Document 1: Preliminary Management Plan 2018

Tashmoo Beach
preliminary management plan

acreage	4.7 acres	
tax parcel nos.	32-C-2 and 32-C-2.1	
nature conservation goals	(1)	conduct biological survey of property to serve as base for formulation of management objectives
	(2)	identify rare and endangered species, if any, and create plan to protect and encourage their populations; acknowledge, and designate, lake-environs portion of property as a tern colony requiring special attention, including seasonal oversight of any nesting birds
wetland management goals	(1)	hire consultant coastal engineer to assess wisdom and prudence of removing all riprap and groins; remove same, using contracted firm, if so advised and if desirable
natural products goals	(1)	allow fishing
	(2)	seek recommendation of hunting subcommittee as to fitting hunting policy, with predisposition to allow waterfowl hunting but not other hunting, given property's size and configuration
recreational goals	(1)	allow swimming and boating and like riparian uses
	(2)	allow hiking and like passive uses on

beach; site a north-south crossover trail connecting the sound and lake, so as to allow a loop around the public lands

(3) decline to install trailhead and instead *[a]* install bicycle rack and *[b]* direct visitors to use the abutting parking area on the town/ county beach; likewise decline to post beach attendant

(4) if riprap is removed, replace it with a universal access viewing platform with entry ramp served by an adjacent universal access trailhead — but do so only if considered both sensible and consistent with conservation goals, including the goal of restoring the dune system

scenic goals

(1) undevelop all buildings and return dune to natural, revegetated state

administrative goals

(1) oversee and police land on regular basis in order to maintain property as an attractive conservation area

(2) complete management plan within twelve months of acquisition

approved by vote of the Tisbury town advisory board: June 19, 2018

approved by vote of the land bank commission: May 22, 2018

Document 2: Preliminary Management Plan 2020

November 30, 2020

Martha's Vineyard Land Bank Commission

Tashmoo Preserve [expansion]
preliminary management plan

acreage	0.8 acres	
tax parcel nos.	32-C-8 and 32-D-8	
nature conservation goals	(1)	conduct biological survey of property to serve as base for formulation of management objectives
	(2)	identify rare and endangered species, if any, and create plan to protect and encourage their populations
wetland management goals	(1)	consider removal of riprap, if part of a larger peninsula-wide effort
scenic goals	(1)	undevelop all buildings and return dune to natural, revegetated state
natural products goals	(1)	allow fishing
	(2)	seek recommendation of hunting subcommittee as to fitting hunting policy, with predisposition against such use given proximity of nearby dwellings
recreational goals	(1)	allow swimming and boating and like riparian uses
	(2)	allow hiking and like passive uses on beach; examine possibility of a installing a trail to the lake
	(3)	consider alternatives of either *[a]* directing

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visitors to use the Wilfrid's Pond Preserve trailhead (located 0.2 miles to the east) — and examine the possibility of adding to it, up to the prescribed 15-space limit; or *[b]* designating as a trailhead the existing parking area on the locus, accommodating 3 - 4 vehicles

(4) install bicycle rack

(5) post summer ranger, if trailhead is created on-premises and on as-needed basis

(6) examine whether profile of dune would allow any sort of universal access amenity

(7) mark beach boundaries so as to indicate limit of public ownership

administrative goals

(1) oversee and police land on regular basis in order to maintain property as an attractive conservation area

(2) complete management plan within twelve months of acquisition

approved by vote of the Tisbury town advisory board: November 30, 2020

approved by vote of the land bank commission: November 30, 2020

April 13, 2020

INTERGOVERNMENTAL AGREEMENT

AGREEMENT made this 13th day of ~~March~~ April, 2020 by and between the TOWN OF TISBURY (the "Town") and the MARTHA'S VINEYARD LAND BANK, acting through its Land Bank Commission (the "Land Bank");

WHEREAS the Town owns, partly in common with Dukes County, land known as the Lake Tashmoo Town Beach that is more particularly described in deeds recorded in the Dukes County registry of deeds at book 317 page 379 and book 329 page 568 (the "Town Property"), such land's currently being used as a recreational public beach; and

WHEREAS the Land Bank owns land known as Tashmoo Preserve that is more particularly described in a deed recorded in the Dukes County registry of deeds at book 1479 page 1022 ("the Land Bank Property") and intends to use such land for conservation and passive recreational purposes, all in accordance with an adopted management plan dated May 22, 2019; and

WHEREAS the parties wish to cooperate in their respective management of their properties and wish to summarize each party's responsibilities in such cooperative management; and

WHEREAS it is understood that, to the extent that this agreement (the "Agreement") is silent on any particular matter, it means that such matter is not a subject of cooperative management and will be handled by the particular party owning the property where the matter is to be undertaken;

NOW THEREFORE IT IS HEREBY AGREED that:

(1.) The Town hereby *(i)* designates the site-management plan (the "Site-Management Plan") attached hereto as Exhibit A, as the management protocol for the Town Property and *(ii)* authorizes the Land Bank to

implement and enforce it, as specified below.

(2.) The Land Bank will twice-yearly grade the surface of *(i)* the parking area on the Town Property and *(ii)* the Herring Creek Road, to the extent that it is located on either the Town Property or the Land Bank Property. The Town will twice-yearly grade the Herring Creek Road, from the Land Bank Property as far back as Daggett Avenue, to the extent feasible and appropriate in the Town's estimation.

All costs and expenses associated with such grading shall be absorbed by the party undertaking the grading. Should grading prove insufficient for purposes of maintaining said parking area and road, the parties shall consult on the necessity of installing hardener and devise a division of responsibilities and expenses at that time.

Each party shall trim back encroaching vegetation as needed, to provide adequate passage for vehicles.

(3.) The Land Bank will position parking bumpers as appearing on the Site-Management Plan, and install additional bumpers as fitting, all at its cost and expense.

(4.) The Land Bank will install dune protection fencing as appearing on the Site-Management Plan, at its cost and expense.

(5.) The Land Bank will install a bicycle rack as appearing on the Site-Management Plan, at its cost and expense.

(6.) The Land Bank will contract for the seasonal installation of two (2) portable

toilets on the Town Property and the costs of such toilets will be divided by the Town and Land Bank on a 50-50 basis.

The Land Bank will, at its cost and expense, install a wooden platform, plus, if determined by the Land Bank to be appropriate and opportune, wooden lattice screening, to serve the toilets.

(7.) The Town will supply a lifeguard(s) at its cost and expense and at such times and for such period of time as is satisfactory to the Town. The Land Bank will *(i)* post a sign on the beach at the entrance to the Land Bank Property that indicates that the Land Bank Property is not a guarded beach and *(ii)* provide, in keeping with its practice elsewhere, a life-ring on the Land Bank Property.

(8.) The Land Bank will supply a property attendant(s) to oversee the Town Property and the Land Bank Property, at the Land Bank's cost and expense and at such times as deemed appropriate by the Land Bank in consultation with the Town. The property attendant will be generally situated on the Town property and will be charged with *[a]* overseeing the parking area on the Town Property; *[b]* keeping public use orderly on both properties; *[c]* enforcing the Tashmoo Preserve management plan on the Land Bank Property; *[d]* recording use data; and the like. The property attendant will be in communication with the Land Bank's property attendant at its Wilfrid's Pond Preserve in order to exchange information about parking conditions, so as to be able to inform visitors. Decisions about the extent of such staffing will be made annually by the Land Bank, in consultation with the Town and taking into consideration whether the streaming camera described in Paragraph No. 12, below, has affected the need for oversight.

(9.) As the Land Bank has yet to make any decisions regarding the possible removal of the revetment on the Land Bank Property, the Land Bank will, in the interim, create a trail as depicted on Exhibit B in order to link the parking area on the Town Property with the beach on the Land Bank Property.

(10.) No trash removal service will be supplied; a carry in - carry out policy shall prevail.

(11.) The Land Bank will seasonally install, at its cost and expense and on the Town Property, a "mobi-mat" in order to allow universal access to the surfline, in lieu of doing so at the Land Bank's Wilfrid's Pond Preserve where site conditions preclude such access.

(12.) The Town will install and maintain, at its cost and expense, electricity and electrical intelligence transmission lines to service the Town Property and may choose to do likewise with water service. All utility lines will be installed underground on the Land Bank Property in a location mutually satisfactory to the parties.

The Land Bank will install and maintain a streaming camera on the Town Property for the purpose of providing *[a]* oversight against vandalism and mischief; and *[b]* real-time images of the parking area, so that prospective visitors can assess the availability of space before commencing to travel down the Herring Creek Road. Expenses associated with installation and maintenance of the camera will absorbed by the Land Bank; expenses associated with upgrading the Town's website, including hosting the stream and paying for all services charges, will be absorbed by the Town.

(13.) The Land Bank will install, at its cost and expense and in its discretion, all

signage necessary to inform visitors of the management protocols in place on the Town Property and Land Bank Property. Such signage will include a notice at the intersection of Daggett Avenue and the Herring Creek Road recommending that prospective visitors consult the Town's website to assess, via the streaming camera, the availability of parking on the Town Property.

(14.) Both the Town and Land Bank websites will advise prospective visitors that the Herring Creek Road is challenging to travel along, so that they may consider seeking out other recreational and conservation properties in town and elsewhere.

(15.) The Town, as part of its regular maintenance of the Lake Tashmoo channel and its environs, will deposit dredge spoils on either the Town Property or the Land Bank Property, or both. The Town will give the Land Bank advance notice if the spoils are to be deposited on the Land Bank Property, so that details and logistics can be coordinated.

(16.) Any and each of the provisions of this Agreement that triggers review under the town wetlands protection bylaw and/or the commonwealth wetlands protection act shall be submitted for review to the Tisbury conservation commission, in an omnibus application submitted jointly by the Town and Land Bank (or in follow-up joint applications), prior to any work's being undertaken by either party.

(17.) The Town and Land Bank commit to conferring, prior to December 1 of each year, for the purpose of assessing each's party's performance under this Agreement during the previous twelve months.

(18.) This Agreement represents the full understanding of the parties with regard to the cooperative management of the Town Property and the Land Bank Property. Any amendments to the Agreement shall be made in writing and signed by each party.

IN WITNESS WHEREOF the parties hereto have set their hands and seals this 13th day of ~~March~~ April, 2020.

by: TOWN OF TISBURY

James Rogers, Vice-Chairman
duly authorized

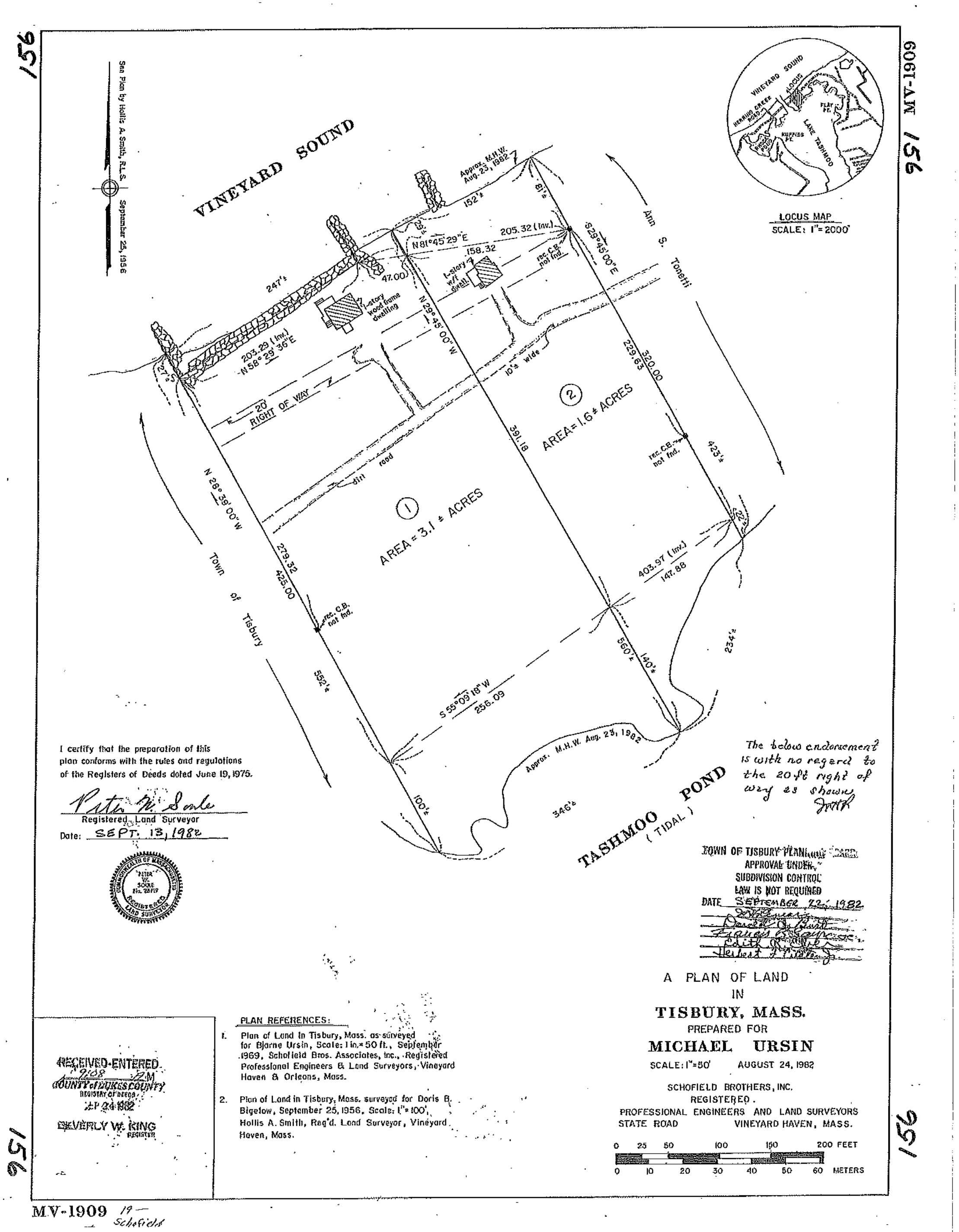
Jeff Kristal, duly authorized

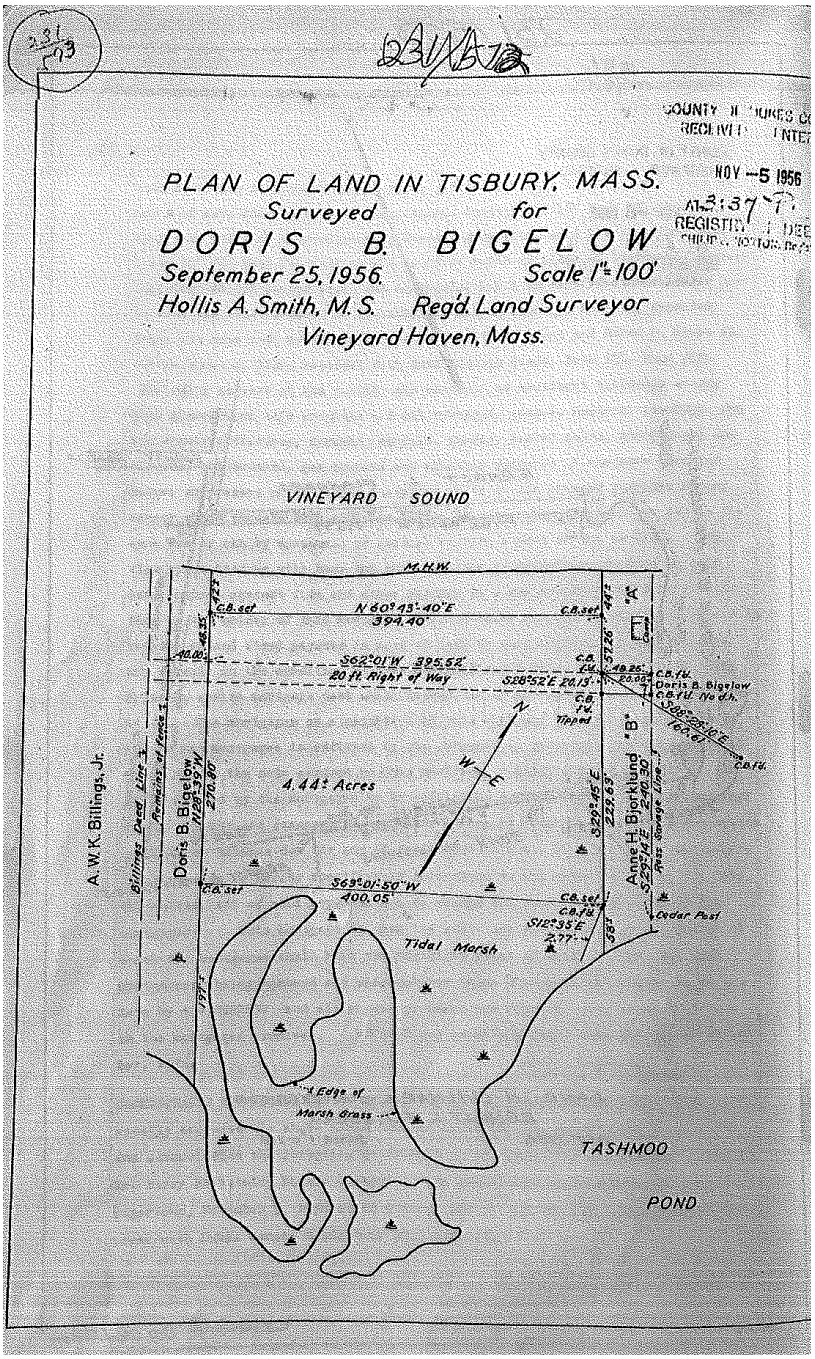
MARTHA'S VINEYARD LAND BANK COMMISSION

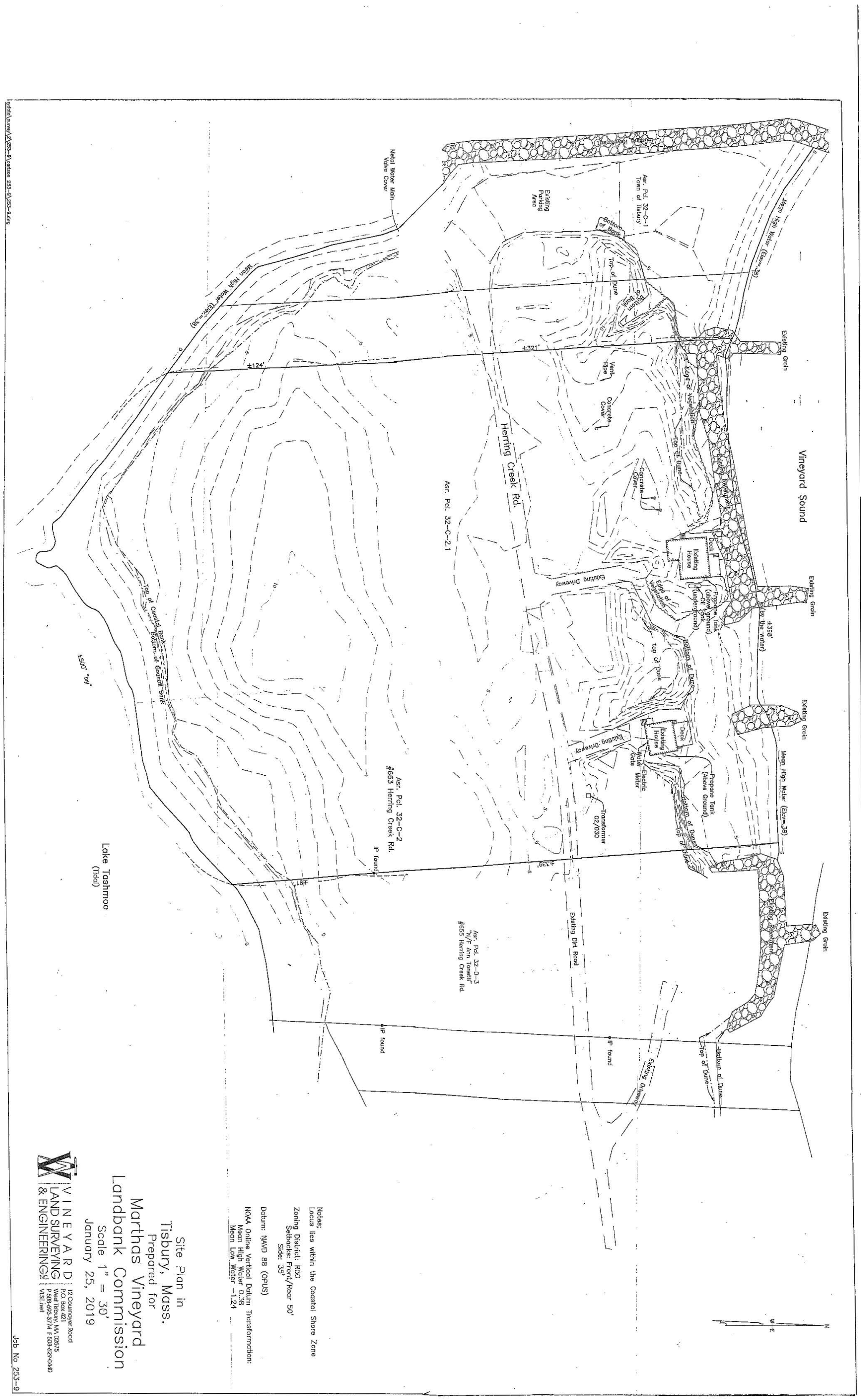
Sarah Thulin, Chairman
duly authorized

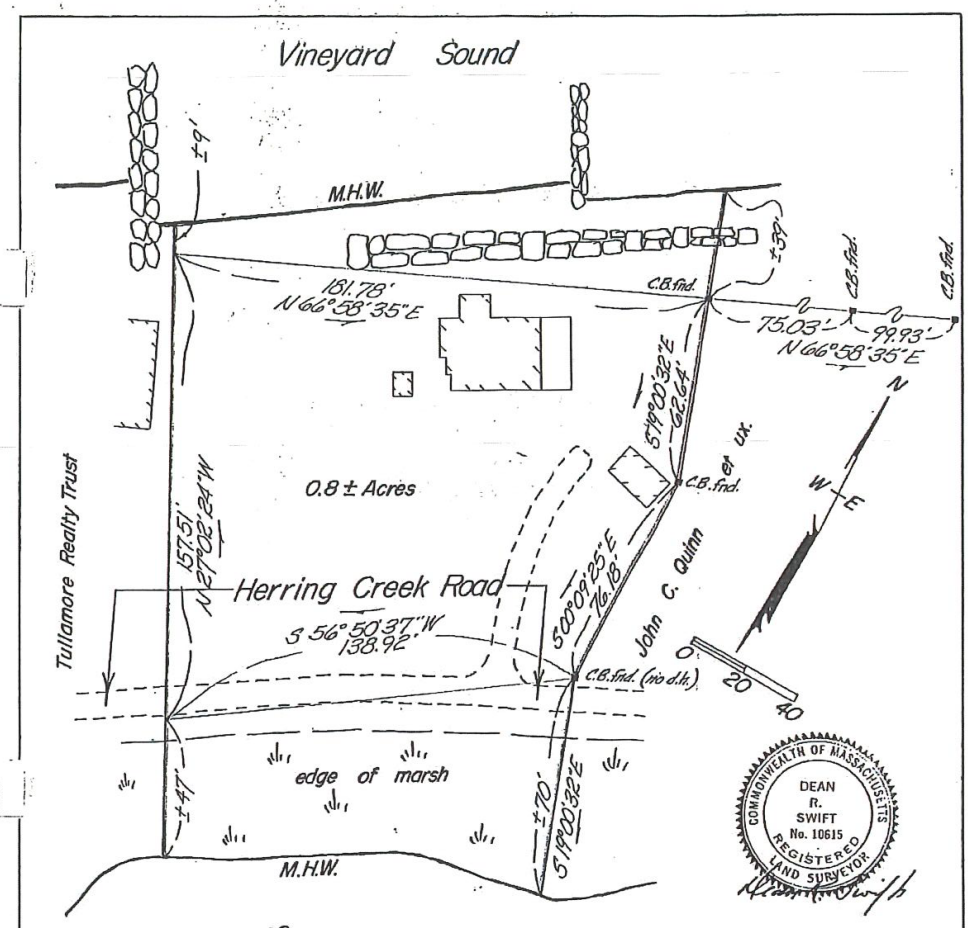

EXHIBIT A
MOBI-MAT, INSTALLED SEASONALLY FOR UNIVERSAL ACCESS TO BEACH
INSTALL CAMERA TO EXISTING POLE TO SHOW LIVE PARKING SITUATION ON TOWN WEBSITE AND FORESTALL ILLEGAL BONFIRES
BEACH
PORTABLE TOILET ANCHORED TO PLATFORM
DESIGNATED STAFF AND UNIVERSAL ACCESS PARKING
EXISTING LIFEGUARD STAND
5 PERPENDICULAR SPACES OR PARALLEL TO DUNE SPACES
HERRING CREEK ROAD
MAINTAIN NO-PARKING PULL OFF FOR PASSING VEHICLES
INSTALL DUNE PROTECTION FENCE
INSTALL BIKE RACK
RESET ALL PARKING BUMPERS (ADD MORE IF NEEDED)
GRADE AND HARDEN SURFACE
MAXIMIZE PARKING ALONG JETTY SIDE
15 PARKING SPACES
130'
60'
MAINTAIN AREA AS NO PARKING - DROP OFF ONLY
SITE MANAGEMENT PLAN
12/11/2019 SCALE: 1" = 25'
BEACH


SITE MANAGEMENT PLAN
12/11/2019 N.T.S
MAP IS FOR PLANNING PURPOSES ONLY AND DOES NOT REFLECT ANY POTENTIAL PERMITTING OR THE END USERS INTERPRETATION
EXHIBIT B
DWELLING REMOVED DUNE RESTORATION AREA
DWELLING REMOVED DUNE RESTORATION AREA
Pipeline Creek Rd
UTILIZE EXISTING DISTURBED DRIVEWAY AREA TO LIMIT DUNE DISTURBANCE
TRAIL WIDTH DEFINED BY DUNE FENCING
PROPOSED BEACH ACCESS TRAIL FOLLOWS ROAD EDGE FOR 240'
31 AC


VINEYARD SOUND
TASHMOO POND (TIDAL)
AREA = 3.1 ± ACRES
AREA = 1.6 ± ACRES
20' RIGHT OF WAY
Town of Tisbury
Ann S. Tonetti
LOCUS MAP
SCALE: 1"= 2000'
I certify that the preparation of this plan conforms with the rules and regulations of the Registers of Deeds dated June 19, 1975.
Registered Land Surveyor
Date: SEPT. 13, 1982
The below endorsement is with no regard to the 20 ft right of way as shown
TOWN OF TISBURY PLANNING BOARD
APPROVAL UNDER SUBDIVISION CONTROL LAW IS NOT REQUIRED
DATE SEPTEMBER 22, 1982
A PLAN OF LAND IN TISBURY, MASS.
PREPARED FOR
MICHAEL URSIN
SCALE: 1"=50' AUGUST 24, 1982
SCHOFIELD BROTHERS, INC.
REGISTERED
PROFESSIONAL ENGINEERS AND LAND SURVEYORS
STATE ROAD VINEYARD HAVEN, MASS.
PLAN REFERENCES:
1. Plan of Land in Tisbury, Mass. as surveyed for Bjarne Ursin, Scale: 1 in.= 50 ft., September 1969, Schofield Bros. Associates, Inc., Registered Professional Engineers & Land Surveyors, Vineyard Haven & Orleans, Mass.
2. Plan of Land in Tisbury, Mass. surveyed for Doris B. Bigelow, September 25, 1956. Scale: 1"= 100', Hollis A. Smith, Reg'd. Land Surveyor, Vineyard Haven, Mass.
RECEIVED-ENTERED
COUNTY of DUKES COUNTY
BEVERLY W. KING REGISTER
MV-1909
156


PLAN OF LAND IN TISBURY, MASS.
Surveyed for
DORIS B. BIGELOW
September 25, 1956. Scale 1"= 100'
Hollis A. Smith, M. S. Reg'd. Land Surveyor
Vineyard Haven, Mass.
NOV -5 1956
VINEYARD SOUND
N 60° 43' 40" E
394.40'
S 62° 01' W 395.52'
20 ft. Right of Way
S 28° 52' E 20.13'
4.44± Acres
Doris B. Bigelow
N 29° 13' 39" W
270.00'
A. W. K. Billings, Jr.
Billings Deed Liber 3
Premises of Lot 1
S 69° 01' 50" W
400.05'
S 29° 14' E
270.30'
Anne H. Bjorklund
S 12° 35' E
277'±
Cedar Post
Tidal Marsh
Edge of Marsh Grass
TASHMOO
POND


Vineyard Sound
Herring Creek Rd.
Lake Tashmoo (tidal)
Existing Groin
Existing House
Existing Driveway
Existing Dirt Road
Site Plan in
Tisbury, Mass.
Prepared for
Marthas Vineyard
Landbank Commission
Scale 1" = 30'
January 25, 2019
VINEYARD
LAND SURVEYING
& ENGINEERING



I certify that this plan has been prepared in conformity with the rules and regulations of the Registers of Deeds of the Commonwealth of Mass.

Dean R. Swift 11-23-76

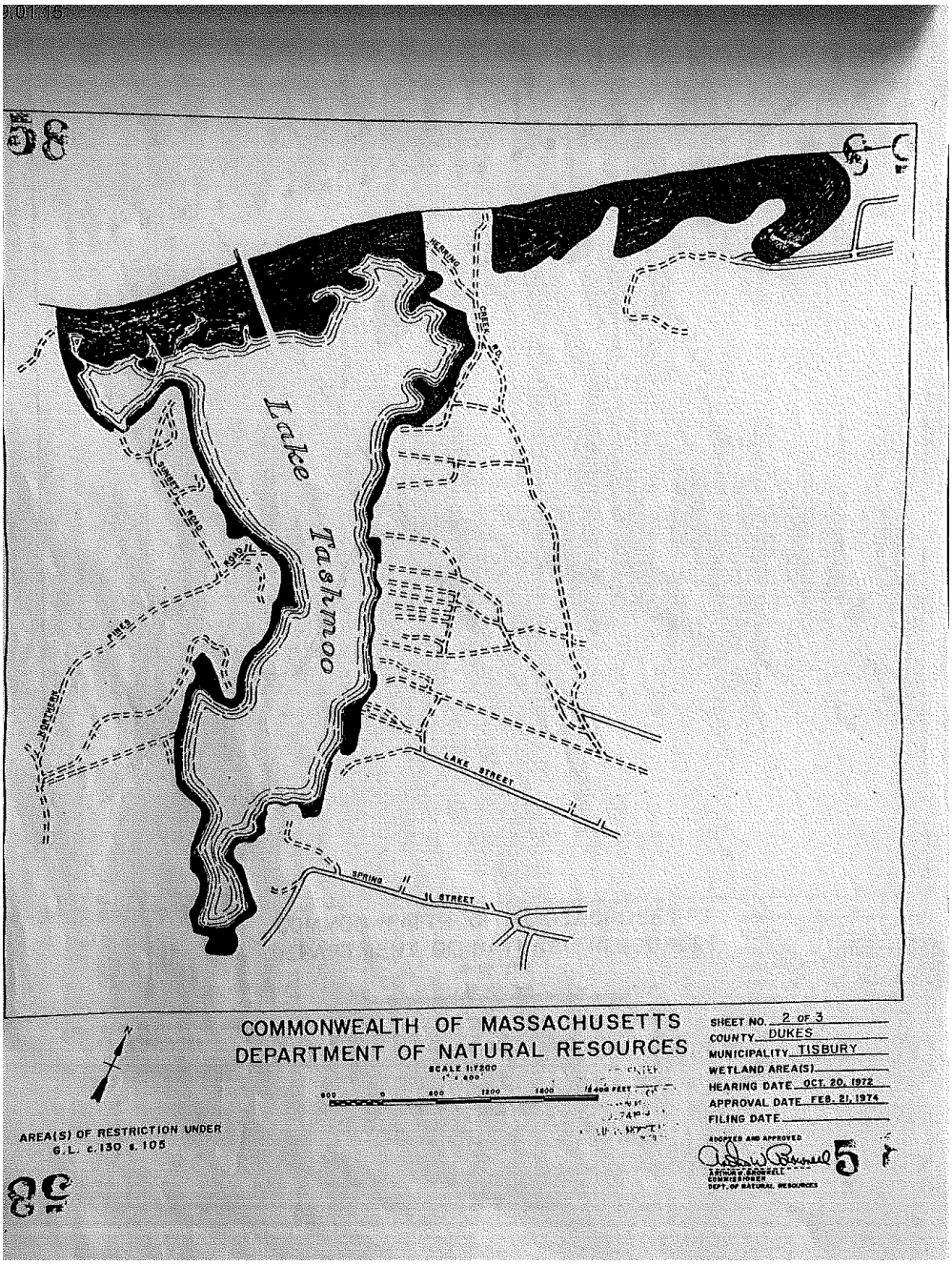
Pursuant to Chapter 380 Acts of 1936, I hereby certify that the property lines shown on this plan are the lines dividing existing ownerships, and the lines of the streets and ways shown are those of public or private streets or ways already established, and that no new lines for division of existing ownership or for new ways are shown. Dean R. Swift 11-23-76

RECEIVED FOR RECORD
12:01 P.M.
COUNTY of DUKES COUNTY
REGISTRY OF DEEDS
DEC 20 1976
PHILIP J. NORTON,
REGISTER

PLAN OF LAND IN TISBURY, MASS.
Surveyed for BRUCE J. KISSELL
November 24, 1976 scale 1"=40'
Dean R. Swift Reg'd. Land Surveyor
Vineyard Haven, Mass.

23R

BOOK 341 PAGE 34


Lake Tashmoo
LAKE STREET
SPRING STREET
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF NATURAL RESOURCES
SCALE 1:7200
SHEET NO. 2 OF 3
COUNTY DUKES
MUNICIPALITY TISBURY
WETLAND AREA(S)
HEARING DATE OCT. 20, 1972
APPROVAL DATE FEB. 21, 1974
FILING DATE
ADOPTED AND APPROVED
AREA(S) OF RESTRICTION UNDER
G.L. c.130 s.105

Bk: 01479 Pg: 1022

2018 00008107
Bk: 1479 Pg: 1022 Doc: DEED
Page: 1 of 3 10/26/2018 03:04 PM

MARTHA'S VINEYARD LAND BANK FEE
☐ PAID $ A
☒ EXEMPT $
59432 10/26/18 MLH
NO. DATE CERTIFICATION

663 and 681 Herring Creek Road, Tisbury, MA

QUITCLAIM DEED

Virginia Ursin and George L. Dresser, trustees of the Michael J. Ursin Revocable Trust, established by unrecorded trust agreement dated June 19, 2003 and referred to in a Trustees' Certificate to be recorded herewith (Book 1479, Page 1020), and Virginia Ursin, executrix under the will of Michael J. Ursin (Worcester County Probate docket number 11P1041EA), by power conferred by said will and by every other power, for consideration of one million nine hundred thousand ($1,900,000.00) dollars, grant to the Martha's Vineyard Land Bank Commission, a corporate body politic, with a principal place of business at 167 Main Street, PO Box 2057, Edgartown, MA 02539, with quitclaim covenants,

Parcel 1:

A certain parcel of land in Tisbury, Dukes County, Massachusetts, located at a place called Chappaquonset and bounded as follows:

Northwesterly by Vineyard Sound 152 ± feet;

Southwesterly by land of the grantors 560 ± feet;

Southerly and southeasterly by Tashmoo Pond including within the granted premises all the land to the mean low water line of Tashmoo Pond and its islands, between an extension southeasterly of the southwesterly boundary and an extension southeasterly of the northeasterly boundary of the granted premises; and

Northwesterly by land now or formerly of Ann S. Tonetti 423 ± fee;

Consisting of 1.6 ± acres;

Being the premises shown as lot 2 on "A plan of land in Tisbury. Mass. prepared for Michael Ursin, August 24, 1982" recorded with Dukes County Registry of Deeds, Tisbury Case File No. 156, and also being the same premises conveyed to Michael Ursin by deed of Bjarne and Esther Ursin dated December 27, 1982 and recorded in said Registry, Book 398, Page 618.

Parcel 2:

A certain parcel of land in Tisbury, Dukes County, Massachusetts, located at a place called Chappaquonset and bounded as follows:

Northwesterly by Vineyard Sound 247 ± feet;

Southwesterly by land of the Town of Tisbury 552 ± feet;

Southerly by Tashmoo Pond including within the granted premises all the land to the mean low water line of Tashmoo Pond and its islands, between an extension southeasterly of the southwesterly boundary and an extension southeasterly of the northeasterly boundary of the granted premises; and

Northeasterly by land now or formerly of Michael Ursin 560 ± fee;

Consisting of 3.1 ± acres;

Being the premises shown as lot 1 on "A plan of land in Tisbury. Mass. prepared for Michael Ursin, August 24, 1982" recorded with Dukes County Registry of Deeds, Tisbury Case File No. 156, and also being the same premises conveyed to Michael Ursin by deed of Bjarne E. Ursin dated January 29, 1993 and recorded in said Registry, Book 605, Page 111, and by deed of Joan Ursin Ryer dated January 29, 1993 and recorded in said Registry, Book 605, Page 110. See also the estate of Bjarne Ursin, late of Weston, Massachusetts, who died on July 12, 1988, Middlesex County Probate Court Docket No. 88P4060E.

The property conveyed hereby was not the principal residence of either grantor or of any other person.

Bk: 01479 Pg: 1024

Witness our hands and seals this 24th day of October, 2018.

Virginia Ursin, Trustee and Executrix

George L. Dresser, Trustee

COMMONWEALTH OF MASSACHUSETTS

Worcester, ss.

On this 24th day of October, 2018, before me, the undersigned notary public, personally appeared Virginia Ursin, Trustee and Executrix, personally known to me to be the person whose name is signed on this document, and acknowledged to me that she signed it voluntarily in said capacities for its stated purpose.

KATHLEEN M. BUDZINSKI MY COMMISSION EXPIRES FEBRUARY 18, 2023 NOTARY PUBLIC COMMONWEALTH OF MASSACHUSETTS

Kathleen M. Budzinski
Notary Public

COMMONWEALTH OF MASSACHUSETTS

Worcester, ss.

On this 24th day of October, 2018, before me, the undersigned notary public, personally appeared George L. Dresser, Trustee , proved personally known to me to be the person whose name is signed on this document, and acknowledged to me that he signed it voluntarily in said capacity for its stated purpose.

KATHLEEN M. BUDZINSKI MY COMMISSION EXPIRES FEBRUARY 18, 2023 NOTARY PUBLIC COMMONWEALTH OF MASSACHUSETTS

Kathleen M. Budzinski
Notary Public

ATTEST: Paulo C. DeOliveira, Register
Dukes County Registry of Deeds

Bk: 01602 Pg: 290

MARTHA'S VINEYARD LAND BANK FEE
PAID $0.00
EXEMPT A
64068 11/04/2021
NO. DATE CERTIFICATION

QUITCLAIM DEED

I, ANN S. TONETTI, of West Palm Beach, Florida

in consideration of ONE MILLION EIGHT HUNDRED NINETY THOUSAND and 00/100 DOLLARS($1,890,000.00)

grant to MARTHA'S VINEYARD LAND BANK COMMISSION, a corporate body politic with a principal place of business at 167 Main Street, P.O. Box 2057, Edgartown, Massachusetts 02539

with ***quitclaim covenants***

The land, with the buildings and improvements thereon, situated in Tisbury, County of Dukes County, Commonwealth of Massachusetts being more particularly bounded and described as follows:

Beginning on the Vineyard Sound at the northeast corner of this parcel and at the northwest corner of land now or formerly of Clara Herrick Havemeyer; and running thence S 22° 03' 40" E. 370.22 feet, more or less, along the line of property of said Havemeyer to the mean high water line of Tashmoo Pond; thence Southwesterly along the mean high water line of said Tashmoo Pond to the easterly line of property now or formerly of Doris B. Bigelow; thence N 32° 10' W, 429.63 feet, more or less (crossing a 20 foot right of way known as "Herring Creek Road") along the line of property of said Bigelow to the mean high water line of Vineyard Sound; thence N 65° 30' E along the mean high water line of Vineyard Sound to the point or place of beginning.

Property Address: 655 Herring Creek Road, Tisbury, Dukes County, Massachusetts

By signing below, the Grantor hereby certifies under the pains and penalties of perjury that the premises conveyed herein are not her principal residence, nor that of any spouse, former spouse, partner or former partner in a civil union, nor of any other persons, and are therefore not homestead property pursuant to M.G.L. c. 188.

Said premises are conveyed subject to and with the benefit of, as the case may be, all rights, easements and restrictions of record insofar as the same are in force and applicable, including but not limited to the easement which is the subject of Superior Court Department Civil Action No. DUCV2004-0001; see Judgment recorded in Dukes County Registry of Deeds in Book 1099, Page 356.

For title, see: (i) deed dated May 23, 1980, and recorded with the Dukes County Registry of Deeds in Book 374, Page 531; and (ii) deed dated February 19, 1980, and recorded with the Dukes County Registry of Deeds in Book 373, Page 806.

Bk: 01602 Pg: 291

Executed as a sealed instrument under pains and penalties of perjury on this 28 day of October, 2021.

Ann S. Tonetti

Ann S. Tonetti

STATE / COMMONWEALTH OF Florida

Palm Beach County, ss

On this 28th day of October, 2021, before me, the undersigned notary public, personally appeared **Ann S. Tonetti**, proved to me through satisfactory evidence of identification which was personal knowledge / driver's license / passport / other: _____ (circle one), to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she signed it voluntarily as her free act and deed for its stated purpose, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of her knowledge and belief.

SAMUEL BIRNAHER
Notary Public - State of Florida
Commission # HH 12082
My Comm. Expires Jun 18, 2024

Samuel Birnaher

Notary Public:
My Commission Expires: June 18th, 2024

ATTEST: Paulo C. DeOliveira, Register

Bk: 01656 Pg: 416

MARTHA'S VINEYARD LAND BANK FEE
PAID $0.00
EXEMPT A
62544 12/16/2020
NO. DATE CERTIFICATION

Quitclaim Deed

B & G Kissell Limited Partnership, a limited partnership established under the laws of the Massachusetts, having its principal place of business at 106 Godfrey Drive, Norton, Massachusetts 02766,

in consideration of **One Million Six Hundred Eighty Thousand Dollars ($1,680,000.00)**

grants to **Martha's Vineyard Land Bank Commission**, a corporate body politic with a principal place of business at 167 Main Street, P.O. Box 2057, Edgartown, Massachusetts 02539,

with **quitclaim covenants,**

Property Address: 593 Herring Creek Road
Tisbury, MA 02568

the land, with any buildings thereon situated on Herring Creek Road, at Chappaquonsett, in the Town of Tisbury, Dukes County, Commonwealth of Massachusetts, being shown as 0.8± Acres on a "Plan of Land in Tisbury, Massachusetts, Surveyed for Bruce J. Kissell dated November 24, 1976, Scale: 1" = 40', Dean R. Swift Reg'd. Land Surveyor, Vineyard Haven, Mass.", recorded with the Dukes County Registry of Deeds, in Book 341, Page 34, bounded and described as follows:

NORTHWESTERLY	by	the mean high water mark of Vineyard Sound;
EASTERLY	by	land now or formerly of John C. Quinn a total distance of Two Hundred Forty-Seven and 82/100 (247.82) feet, more or less;
SOUTHERLY	by	the mean high water mark of Lake Tashmoo;
SOUTHWESTERLY	by	land now or formerly of Tullamore Realty Trust, a total distance of Two Hundred Thirteen and 51/100 (213.51) feet more or less.

CONTAINING according to said plan 0.8 acres of land more or less.

The premises are conveyed subject to and with the benefit of easements of record insofar as they may be now in force and applicable.

By signing below, the General Partners of the Limited Partnership hereby certify, under the pains and penalties of perjury, that the premises conveyed herein is not a principal residence of the said General Partners, of any of the limited partners of the Limited Partnership, or of any spouses, former spouses, partners or former partners in a civil union of such limited partners, or of any other persons, and is therefore not homestead property pursuant to M.G.L. c. 188.

For Title, see deed dated November 3, 2010, recorded in said Registry of Deeds, in Book 1226, Page 535.

Bk: 01656 Pg: 417

In Witness Whereof, the said **B & G Kissell Limited Partnership** has caused its seal to be hereto affixed and these presents to be signed, acknowledged and delivered in its name and behalf by Bruce J. Kissell and Gayle M. Kissell, as General Partners, hereto duly authorized, this 10th day of December, 2020.

Executed in the presence of

Witness

Witness

B & G Kissell Limited Partnership

By: Bruce J. Kissell, General Partner

By: Gayle M. Kissell, General Partner

Commonwealth of Massachusetts

Bristol County, ss.

On this 10th day of December, 2020, before me, the undersigned Notary Public, personally appeared **Bruce J. Kissell** and **Gayle M. Kissell**, as General Partners of B & G Kissell Limited Partnership, proved to me through satisfactory evidence of identification, which was ☒ photographic identification with signature issued by a federal or state governmental agency, ☐ oath or affirmation of a credible witness, ☐ personal knowledge of the undersigned, to be the persons whose names are signed above, and acknowledged to me that they signed it voluntarily for its stated purpose; and acknowledged the foregoing instrument to be the free act and deed of B & G Kissell Limited Partnership, before me.

Notary Public

My Commission Expires: August 15, 2025

SUZANNE M. GARCIA
NOTARY PUBLIC
COMMONWEALTH OF MASSACHUSETTS
My Comm. Expires August 15, 2025

ATTEST: Paulo C. DeOliveira, Register

June 13, 2019

VINEYARD LAND SURVEYING & ENGINEERING

TASHMOO SHORELINE PROTECTION REMOVAL EVALUATION

Prepared for

The Martha's Vineyard Land Bank Commission

June 13, 2019

Google Earth image 2/27/2018

Location: 663 & 668 Herring Creek Rd, AP 32-C-2 & 2.1
Job No. 253-9

12 Cournoyer Road P.O. Box 421 West Tisbury, MA 02575 508-693-3774 VLSE.net

PURPOSE

This report evaluates the potential effects of removing the existing stone groins and revetment on land now owned by the Martha's Vineyard Land Bank on the Barrier Beach of Tashmoo Pond at the above referenced addresses.

EXISTING CONDITIONS:

The Shoreline is currently armored with a stone revetment and three (3) stone groins. The revetment protects land previously occupied by two houses while the groins trap sediment as it is transported laterally along the shoreline.

HISTORICAL PLANS and INFORMATION

In February of 1935 the town of Tisbury appointed a committee to explore the advisability of opening Lake Tashmoo to the sound. The town decided to move forward with opening the pond and created the opening and adjacent Jetties sometime after the 1938 Hurricane probably around 1940. The presence of the jetties has dramatically affected the erosion/accretion of the shoreline on the adjacent properties. There is little information available on the natural erosion or accretion rate of this section of beach prior to the construction of these shoreline protection structures.

SAND and SEDIMENT MOVEMENT

Sand and sediment is transported by waves and ocean current in a general direction of west to east along this shoreline. The western jetty that helps protect Tashmoo opening, traps this moving sediment. Material not captured by the jetty is deposited primarily in shoals offshore of the adjacent beaches. The effect of these jetties is the stabilization of the western shoreline leading up to the opening and the "robbing" of sediment that would naturally be deposited on the shoreline to the east of the opening. The Land Bank properties to the east of the opening, although in the "shadow" of the jetties has been relatively stable through the installation of groins, revetments and beach nourishment.

Most if not all of the sand movement is from longshore current. Longshore current is generated by wave action coming into the beach at an angle. Our prevailing wind in the summer is from the Southwest and the waves generated by this wind approach the beach at an angle and generate longshore current from west to east. The Tashmoo channel jetty to the west of this property causes these waves to refract around the end of the jetty and hit the beach perpendicular to the shoreline. During the winter the prevailing wind is from the North West, also causing waves that approach the shoreline at a perpendicular angle. As a result of these factors, there is very little longshore current and little supply of sediment to this area of the beach. There is still however, some erosion due to wave action moving sediment directly out from the beach. (see Army Corps Shore Protection Manual for 1973 and 1984)

When the longshore current is interrupted with a groin or jetty, we see a buildup of sand on the up-current side of the structure and some scouring on the down-current side due to the way the current slows when it hits the jetty and drops sediment on the up-current side. On the down-current side the current will usually make a "swirl" or "back eddy" on the down-current side. This will often pick up sediment causing a scouring effect on the down current side.

RECENT ACTIVITIES

In October of 2018 the Tashmoo channel was dredged and the spoils (sand) were placed on the town beach and the MVLB properties. Sand was placed in front of the revetment just to the east of the channel jetties. The sand was placed to expand the beach in front of the revetment. The beach was expanded out from the revetment over SO feet. Within a short time (less than 2 months) this new sand has washed away and the shoreline is back to the revetment.

ANALYSIS

In effort to determine the short and long-term implications of removing the shoreline protection structures on these lots, we have reviewed:

- Historic Aerial photographs
- Survey plans of the area dating back to 1960's
- Massachusetts Coastal Zone Management information on shoreline erosion and historic shoreline locations.
- Previous survey plans and an existing conditions plan prepared by this office.

The data reviewed indicates that the shoreline to the west of the jetties is stable and varies slightly from season to season. Likewise; for the shoreline east of the east jetty, the groins and revetments that show up on plans and photos dating into the 1960's have maintained a relatively stable shoreline (see Fig. 1). As noted earlier, both types of protection, revetment/groin, act differently in protecting the shore. Groins trap sediment from lateral movement building up or stabilizing the beach while revetments act as a barrier or wall protecting the material behind it. As the functions of each are different, we have reviewed the effects of removal separately.

Revetment Wall: The high-water line is currently at the base of the revetment resulting in effectively no beach during high tide. Removal of the revetment wall would result in immediate scour and erosion of the material behind the wall and in vicinity of the existing house. The eroded material will be transported to the east and result in very little to no accretion on the adjacent shoreline as the relative volume of material will be minor. It is our opinion that the beach would widen and the dune would migrate inland to the south.

Groins: Reviewing historic photos of the site and adjacent shoreline it is evident that the groins along this stretch of beach have effectively trapped sediment and maintained the shoreline even in locations where there is no revetment on the landward side. If the groins were to be removed, there would be immediate erosion of the sediment that has been "trapped". The eroded material would be transported to deeper water and result again with very little nourishment on adjacent shorelines.

The groins and revetments on these properties have been effective in stabilizing the shoreline and minimizing the amount of erosion since installation. Comparing the shoreline

location from a 1969 aerial photograph and the current location, it is clear that the shoreline has effectively not changed. Removal of either the groins or revetment or both will result in accelerated erosion of the material these structures have been protecting. The removal would result in a more natural beach and dune system for these properties but would most likely have adverse impacts on the neighboring property to the east {#655 Herring Creek Road). Impacts to that property would include increased erosion and exposure to higher wave energy on the western border. It is my opinion that removal of all of the shoreline protection measures on the MVLB properties would result in significant loss of land and a likelihood of significant adverse impacts to the immediate neighbor to the east. It is also my opinion that removal of the revetment alone would have a significantly lesser negative impact on the stability of the beach and impacts to the neighboring property.

ADDITIONAL FACTORS

The Tashmoo Channel is continually "filling-in" with sediment deposited naturally from strong water currents and storm activity. In order to maintain a navigable channel, the town dredges the channel and has historically "nourished" this section of beach with the sediment spoils. This system of channel maintenance is mutually beneficial and ideally would be a scheduled maintenance event occurring every other year. The town beach and adjacent properties is the ideal location to deposit the dredge spoils if the funding and organizing of this dredging project continues.

CONCLUSIONS/RECOMMENDATIONS

The stone revetment and groins have been effective in protecting the shoreline of this property and adjacent properties for at least 50 years. Without these structures, the barrier beach would migrate naturally due to erosion and accretion at approximately 1.0 ft. per year {per CZM published shoreline change data). Removal of these protective structures will create a more natural landscape and beach system with a larger beach and dune, however removal of these structures will result in significant immediate erosion. It is our recommendation that only the revetment structure be removed as a first phase and allow the groins to remain. This would provide a period of time to evaluate the resulting beach and dune stability and if further removal work would be desirable.

REVETMENT REMOVAL PROJECT (groins to remain)

Removal of the revetment and restoration of the dune would be considered an Environmental Restoration Project by the Massachusetts Department of Environmental Protection {DEP). This type of project is generally encouraged and viewed as an improvement to the resources protected by DEP, therefor there is quite a bit of flexibility with aspects of the project. To mitigate impacts to neighbors, a component of the project might be adding stone to the neighboring revetment to continue its protection landward. Also with rising sea levels it may be advisable to include "modification" of the existing groins where stone would be added to raise the groins as necessary to help keep the shoreline stable for the coming years. As part of the project design phase, the project engineer would evaluate whether these measures might be necessary or desirable. Included in this report {Figure 6) is our photo rendering of an

estimated shoreline and dune system established within 12 months after a revetment removal project.

NATURALIZATION COSTS AND POTENTIAL TIME-LINE:

Removal of the revetment alone would **limit** the project to impacts landward of the highwater line. This would simplify the permitting substantially compared with removal of the groins as well. The following table lists the agencies and permits necessary for revetment removal and dune restoration:

Agency name	**Permit required**
Tisbury Conservation Commission	Order of Conditions
Mass. DEP - wetlands/waterways	Order of Conditions
Mass. DEP -water quality	Water Quality Certificate - necessary if
NHESP	Determination
Army Corps of Eng. (Federal)	Self Verification

Time-line: I would estimate 4 to 12 months to complete the design and permitting portion of the project depending on the engineering consultant used (assuming there are no significant appeals or opposition). It is difficult to estimate the costs of such a restoration project without schematic plans, however a generalized estimate follows:

SOFT COSTS		
Surveying & design		10,000
DEP wetlands permitting		6,000
		16,000
CONSTRUCTION COSTS	unit cost	
Revetment stone removal	excavator/truck crew - 3 weeks	45,000
Place and grade dune restoration sand	excavator/truck crew - 2 weeks	30,000
Material cost dune sand	350 yds sand @ 100 $/yd	35,000
Planting of beach grass and dune vegetation	approx 4,000 SF	20,000
Installation of sand fencing	approx 250 ft.	3,000
		133,000
	TOTAL:	149,000

Figure 1: 1969 Aerial Photograph - revetments and groins in place.

Figure 2: December 30, 2016 Google Earth

This picture shows where the shoreline stabilized between being nourished with dredge spoils. It shows the shoreline back to the groins and revetment. The revetment is holding the shoreline from migrating further inland.

Figure 3: January 24, 2019 High tide

Sand seen in this photo is sand that has been placed recently from the channel dredging. Sand was placed seaware of the groins.

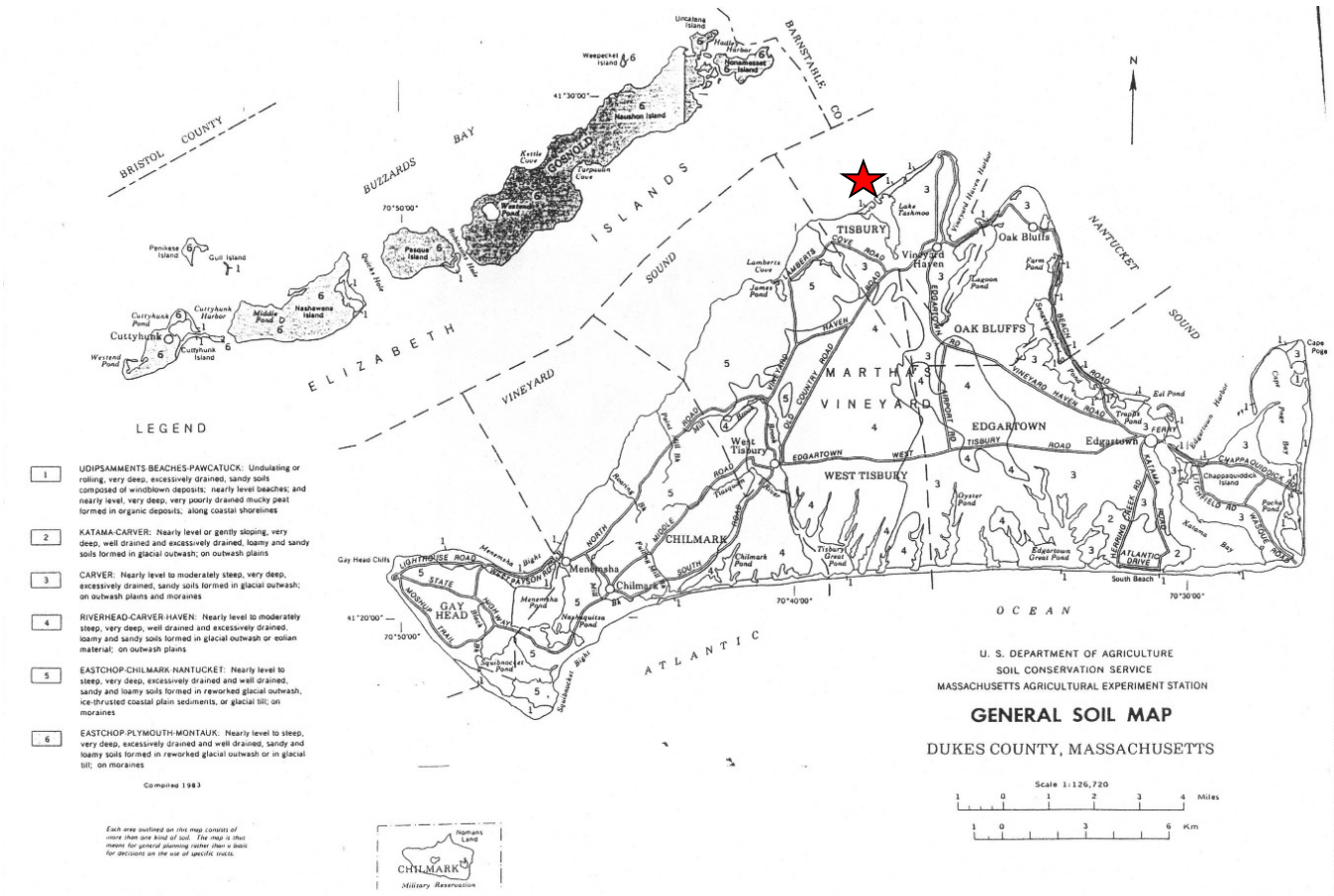
Figure 4: January 24, 2019 High tide

Figure 5: October 5, 2018 Google Earth

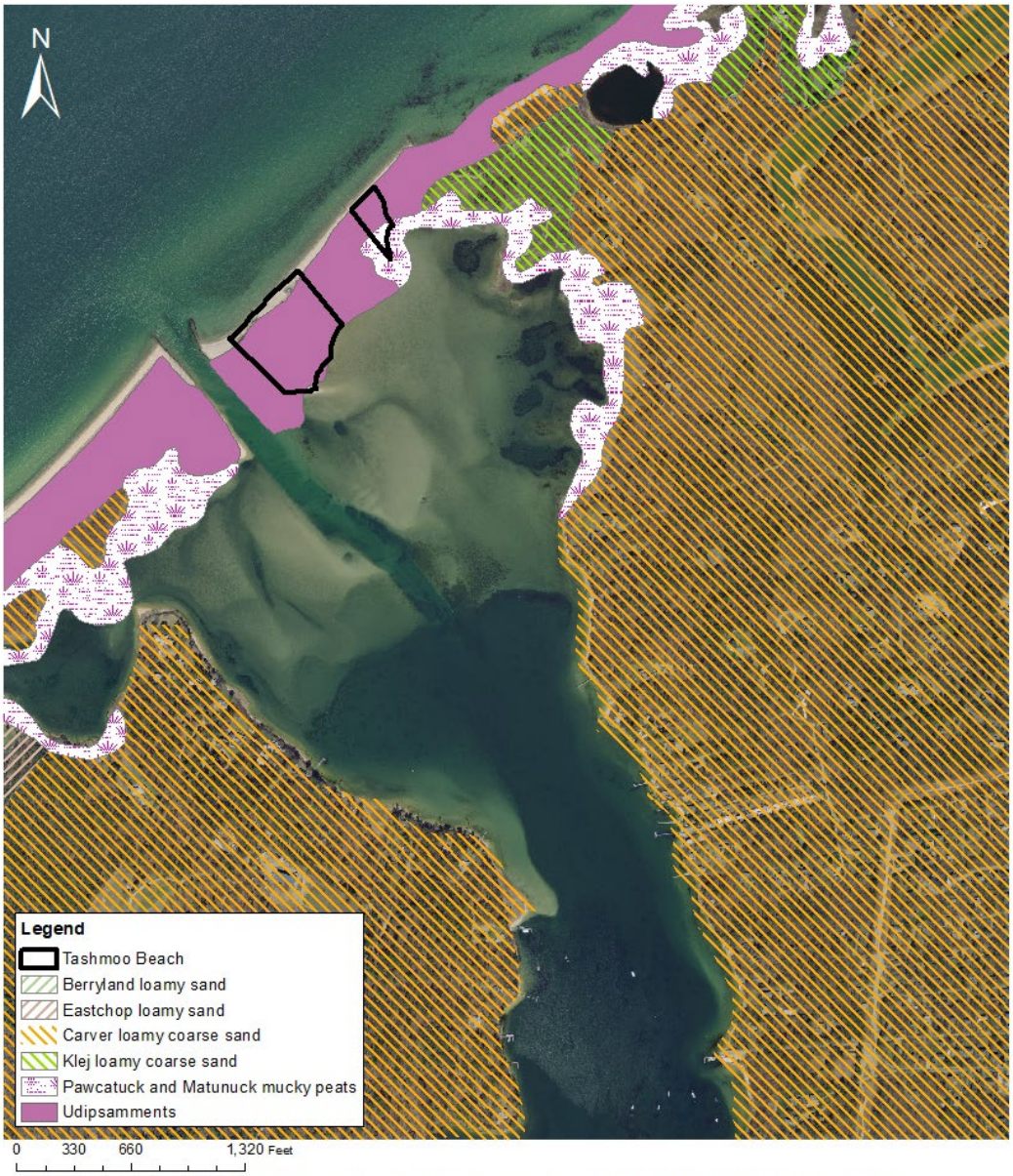
This Photo shows the beach during the dredging of the channel. This sand, 50 to 60 feet out from the revetment eroded in less than 2 months after the dredging was completed.

Figure 6: Photo rendering of property with revetment removed

Appendix C. General Soils



Map 13: Soils of Tashmoo Preserve, Tisbury, MA



Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_soils_map_2024.jpg Date: January 4th, 2024

The Udipsamments-Beaches-Pawcatuck general soils series comprise the soils on the Preserve. The deep and well drained Udipsamment soil associated with coastal sand dunes dominates the property. However, Udipsamments soils comprise only 3% of Dukes County. Available water capacity of this soil is extremely low with a depth to seasonal high-water table of more than 6'. Slope on the Preserve ranges from 3-15%. Grasses

and shrubs are the dominant vegetation cover of this soils. The term *psamments* refers to unconsolidated sand deposits and *udic* represents the hydric qualities of the soil.

A small portion, 3%, of the Preserve comprises Pawcatuck and Matumuck mucky peat soils and is located in the salt marsh along the shore of Lake Tashmoo. The tidal action in Lake Tashmoo submerges the shoreline plants for periods of time resulting in increased plant decomposition and low oxygen concentration (Map 13, page 92).

Appendix D: Vegetation

Quantitative vegetation surveys of Tashmoo Preserve were conducted in 2018. A series of randomly located circular plots were surveyed to characterize the plant species in the dunes. The 1.3-acre maritime shrubland dune was surveyed using ten $2m^2$ circular plots and the 1.7-acre heathland dune was surveyed using twenty $1m^2$ circular plots along three north-south transects. Plant species, and corresponding stem counts and percent cover, were recorded for each circular plot. A complete inventory of plants on the property was completed during visits to the property between April and October of 2018 and 2023. Flora at Tashmoo Preserve is listed in Table 1 with proper nomenclature according to Haines (2011). A description of each cover type and quantitative summary of surveys follows:

Table 1: Table 1. Flora of Tashmoo Preserve, Tisbury, MA 2018-2023

			Vegetation Community				
			Dune				
#	scientific name	common name	Beach grass	Maritime Shrubland	Heathland	Marsh	Disturbed areas
	Fungi						
1	*Geastrum saccatum*	earthstar			x		
	Bryophytes						
1	*Cladina sp.*	Reindeer lichen		U	A		
2	*Cladonia cristatella*	British soldier lichen			U		
3	*Polytrichum sp.*	Haircap moss			U		
	Vascular Plants						
	Graminoid						
1	*Ammophila breviligulata*	american beach grass	x	U	U		
2	*Carex species*	sedge species			U		
3	*Cyperus esculentus*	nut flatsedge					x

4	*Danthonia spicata*	poverty grass					x
5	*Digitaria sanguinalis*	Crabgrass					x
6	*Panicum virgatum*	switchgrass		x			
7	*Schizachyrium scoparium*	little bluestem			x		
8	*Setaria pumila*	yellow foxtail					x
9	*Spartina alterniflora*	Saltwater cord-grass				x	
10	*Spartina patens*	saltmarsh hay				x	
11	*Spartina pectinata*	prairie cordgrass				x	
	Herbaceous						
12	*Amaranthus retroflexus*	redroot pigweed					x
13	*Ambriosia artemisiifolia*	common ragweed					x
14	*Atriplex patula*	orach	x				
15	*Cakile edentula*	sea rocket	x				
16	*Centaurea maculosa*	spotted knapweed			U		x
17	*Datura stramonium*	thorn-apple					x
18	*Daucus carota*	Queen Anne's Lace					x
19	*Erigion canadensis*	horseweed	x				x
20	*Erigion strigosus*	rough fleabane	x				x
21	*Euphorbia maculata*	Spotted spurge	x				x
22	*Euthamia graminifolia*	lance-leaved goldenrod		U	x		
23	*Gnaphalium obtusifolium*	sweet everlasting		U			
24	*Hudsonia tomentosa*	beach heather			A		
25	*Lactuca canadensis*	tall lettuce					x
26	*Lathyrus japonicus*	beach pea			x		
27	*Lechea maratima*	beach pinweed			C		
28	*Lechea tenuifolia*	narrow-leaved pinweed			U		
29	*Limonium carolinaianum*	Carolina sea-lavender				x	
30	*Lysimachia arvensis*	scarlet pimpernel				x	
31	*Mollugo verticillata*	green carpetweed					x
32	*Oenothera biennis*	common evening-primrose					x
33	*Oxalis stricta*	wood sorrel					x
34	*Phytolacca americana*	american pokeweed					x
35	*Polygonella articulata*	sand jointweed			A		
36	*Polygonum glaucum*	seabeach knotweed	x				
37	*Portulaca oleracae*	common purslane					x
38	*Rumex acetosella*	field sorrel	x		x		
39	*Rumex crispus*	curly dock					x
40	*Salicornia ambigua*	perennial glasswort				x	

41	*Salicornia maritima*	sea glasswort				x	
42	*Salsola tragus*	prickly saltwort				x	
43	*Silene latifolia*	white campion					x
44	*Solidago sempervirens*	seaside goldenrod		U	U		
45	*Suaeda maritima*	herbaceous sea-blite				x	
46	*Taraxacum officinale*	common dandelion					x
47	*Verbascum thapsus*	common mullein			x		
48	*Xanthium strumarium*	beach clotbur	x				
	Shrub						
49	*Baccharis halimifolia*	groundsel tree		x			
50	*Iva frutescens*	marsh elder		U			
51	*Myrica gale*	sweetgale		x			
52	*Myrica pensylvanica*	bayberry		A	U		
53	*Prunus maritima*	beach plum		x	x		
54	*Prunus serotina*	black cherry		x			
55	*Rhus glabra*	smooth sumac		x			
56	*Rosa rugosa*	beach rose		U	U		
57	*Rosa virginiana*	virginia rose		C	U		
58	*Rubus allegheniensis*	common blackberry					x
	Tree						
59	*Amalanchier sp.*	shadbush		x			
60	*Juniperus virginiana*	eastern red cedar		x	x		
61	*Pinus rigida*	pitch pine			x		
62	*Quercus alba*	white oak		x			
63	*Quercus stellata*	post oak			x		
64	*Quercus velutina*	black oak		x			
	Vine						
65	*Celastrus orbiculatus*	oriental bittersweet	x	C	U		
66	*Parthenocissus quinquefolia*	Virginia creeper					x
67	*Rubus flagellaris*	prickly dewberry	x	U			
68	*Smilax glauca*	greenbriar					x
69	*Solanum americanum*	American black nightshade					x
70	*Strophostyles helvola*	trailing wild bean	x				
71	*Toxicodendron radicans*	poison ivy	x	A			
72	*Vitis sp.*	grape					x
73	*Wisteria sinensis*	Chinese wisteria			x		
	Total Species		13	22	26	9	26

[a] Survey results: A = abundant (percent occurrence ≥ 50%), C = common (percent occurrence >21% and <50%), U = uncommon (percent occurrence ≤20%), X = present on the preserve but not detected during survey;
Sources: Haines 2011.

Habitat Description

Dune:

a. American beach grass dune (1.1 acres)

The American beach grass dune, as the name implies, is dominated by American beach grass. This community occurs in the shifting dune area between the beach and the stable dune dominated by shrubs and heathland species. American beach grass is salt-tolerant, grows in well-drained, nutrient poor soils, can withstand fluctuating temperatures and is fast growing. It sends up shoots from underground rhizomes often in long straight lines. After storm surges render the foredune void of vegetation, lines of American beach grass are quickly visible crisscrossing the virgin sand through underground root sprouts.


Figure 17: American beach grass dune at Tashmoo Preserve

Along the upland edge of the pond shore beach are a variety of species tolerant of the fluctuating water levels of the pond. They include saltwater cordgrass, orach, sea rocket, seabeach knotweed, beach clotbur and seaside goldenrod (Figure 17).

Former house sites in the beachgrass dune system are being colonized by opportunistic species that can tolerate drought and the highly permeable sand soils (Figure 18). Many of the species have “weed” as a portion of the common name such as horseweed, pigweed, ragweed. The radial vegetative form of dandelion species is spread out over the bare ground and invasive species such as spotted knapweed are abundantly present.


Figure 18: Former house site at Tashmoo Preserve

b. Heathland dune (2.0 acres)


Figure 19: Heathland dune at Tashmoo Preserve

The heathland dune is located in the fixed dune area that is protected by the slight rise in topography of the foredune (Figure 19). During the summer months the golden flowers of the beach heather tint the dune with deep yellow hues in contrast to the meandering trails of white sand visible throughout 26% of the dune. The golden hues of heather are complimented by the delicate pink flowers atop red and green jointed

stems of the coastal jointed knotweed. Along with tufts of yellow-green lichen, golden heather and coastal beach knotweed dominated the heathland dune with 70%, 85% and 50% frequencies of occurrence, respectively.

c. Maritime shrubland dune (2.2 acres)
The dominant presence of poison ivy and bayberry marks the boundaries of 2.2 acres of open canopy maritime shrubland dune that occurs in the fixed dune on either side of the Herring Creek Road and along the edges of the heathland dune (Figure 20). There are pockets of trees scattered throughout the shrubland that include oaks, red cedar and pitch pines, with pines dominating the wooded component of the dune. Beach rose and Virginia rose create dense thickets of thorns. In contrast to the harsh thorns of roses and sting of poison ivy there are small openings in the shrubland dominated by goldenrod. Sand is visible in approximately 14% of the maritime shrubland dune.


Figure 20: Maritime shrubland dune at Tashmoo Preserve

Marsh

a. Tidal marsh (0.1 acres)


Figure 21: Tidal marsh at Tashmoo Preserve

A small portion of tidal marsh is located on the Preserve along the shore of Lake Tashmoo (Figure 21). The marsh is dominated by low salt-tolerant grasses mixed with glasswort and sea lavender, carpeting the edge of a mudflat where shorebirds are often observed searching for food.

Map 14: Ecological Communities of Tashmoo Preserve, Tisbury, MA

Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_EcoComm_2024.jpg Date: January 9th, 2024

Appendix E. Avian Checklist and Seasonal Tables

Land bank staff conducted seasonal 5-minute point-count surveys of birds at Tashmoo Preserve in spring and summer of 2023. Surveys were also conducted at nearby Wilfrid's Pond Preserve. Bird observations for Tashmoo Preserve reported in the bird news column of the *Vineyard Gazette* were also used along with shorebird surveys to evaluate the avian use of the property. Data are presented as a summary of birds that have been present on or near the preserve in the water or overhead.

Spring and summer seasons boast the most diverse assemblage of birds compared to winter and fall on the Preserve. Of the total birds observed on the property 20% were waterfowl species, with the majority being seabirds.

Table 2: Bird species observed at Tashmoo Preserve during spring and summer surveys in 2023 marked as U= Uncommon, O=Occasional, C=Common, or P=Present. Presence of avian species on Tashmoo Preserve, Wilfrid's Pond Preserve and Lake Tashmoo, Tisbury, MA during 1995, 2005, 2008, 2012, 2014, 2017, 2018 and various reports in the bird news column in the Vineyard Gazette archives marked with X.

		Seasons[a,b]			
	Year-round[c]	Summer	Fall	Spring	Winter
1	American black duck*		X		
2	American crow	C	X	C	X
3	American goldfinch	O	X	O	X
4	American robin	O	X	C	
5	Black-capped chickadee	U	X	U	X
6	Blue jay	U	X	X	
7	Brown-headed cowbird			U	
8	Canada goose			U	
9	Carolina wren	U		O	X
10	Cedar waxwing				X
11	Chipping sparrow			U	
12	Cooper's hawk		X		
13	Common grackle	X		X	
14	Eastern towhee	O		O	
15	European starling			X	
16	Gray catbird	C	X	U	
17	Great black-backed gull	O	X	O	
18	Great egret	U		O	
19	Green-winged teal*			X	
20	Hermit thrush		X		
21	Herring gull	O	X	O	X
22	House finch	O		X	
23	Laughing gull	X		X	
24	Mallard	U	X	O	
25	Mourning dove	O		U	

26	Mallard			O	
27	Northern bobwhite	X			
28	Northern cardinal	U		O	
29	Northern flicker	X	X	X	X
30	Northern harrier			X	
31	Northern mockingbird	X			
32	Red-tailed hawk		X	X	
33	Red-winged blackbird	U		X	
34	Song sparrow	C	X	O	X
35	Tree swallow	O		X	
36	Tufted titmouse			U	
37	White-breasted nuthatch		X		
38	Yellow-rumped warbler		X	X	X
	Winter migrants				
39	Black scoter*				X
40	Bufflehead*		X		X
41	Common eider*				X
42	Common goldeneye*			X	X
43	Common loon*			U	X
44	Double-crested cormorant*	O	X	U	
45	Hooded merganser*				X
46	Long-tailed duck*				X
47	Red-throated loon*	X			
48	Red-breasted merganser*		X	X	X
49	Ring-billed gull		X		X
50	Ruddy turnstone				X
51	Sanderling	X			
52	White-throated sparrow		X		X
53	White-winged scoter*				X
	Summer Breeding				
54	American oystercatcher	P		U	
55	Bank swallow			U	
56	Barn swallow			X	
57	Common tern	C		O	
58	Common yellowthroat	X	X		
59	Great-crested flycatcher	X			
60	Green heron	U			
61	Least tern	O		O	
62	Osprey	C		C	
63	Piping plover	O		O	
64	Prairie warbler	O		O	
65	Roseate tern	X			
66	Snowy egret	U		U	
67	Willet			O	
68	Yellow warbler	U		O	
	Spring/fall migrants				
69	Blue-winged teal*				X
70	Greater yellowlegs		X	X	

71	Razorbill*	X			
	Total birds present	11	24	16	22
	Total birds Common	5	0	3	0
	Total birds Occasional	12	0	16	0
	Total Birds Uncommon	10	0	12	0
	Total Birds	38	24	47	22

[a] Seasonal grouping organized according to Cornell Ornithology breeding maps.
[b] Data compiled from Tashmoo Preserve 5-minute point count surveys conducted in 2024 (n=9), Wilfrid's Pond Preserve 5-minute point count surveys conducted in 1995 (n=6) and 2005 (n=4), shorebird surveys by Massachusetts Audubon, informal bird observations by land bank staff in 2018, and bird siting reported in the bird news column in the *Vineyard Gazette* between 2008 and 2018.
[c] Species with an * were observed in the waters surrounding the Preserve.

Appendix F. Wildlife

Tashmoo Preserve provides opportunities for nesting, roosting, and foraging wildlife species; fruiting shrubs and vines (i.e., beach plum, poison ivy and bayberry) provide for summer and fall foraging; low dense groundcover provides cover for nesting birds; the shoreline and mud flats at low tide provide foraging ground for shorebirds in the summer; and the dune provides habitat for songbirds, birds of prey, ground beetles and other invertebrates.

Wildlife species were observed on the preserve through general property surveys and shorebird surveys. A skunk den was discovered in an area of dense shrubs and scat and prints from deer were observed in the heathland and along the shoreline.

Map 15: Ecological Survey Locations at Tashmoo Preserve, Tisbury, MA

Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_Survey_2024.jpg Date: January 9th, 2024

Appendix G. Land Use History

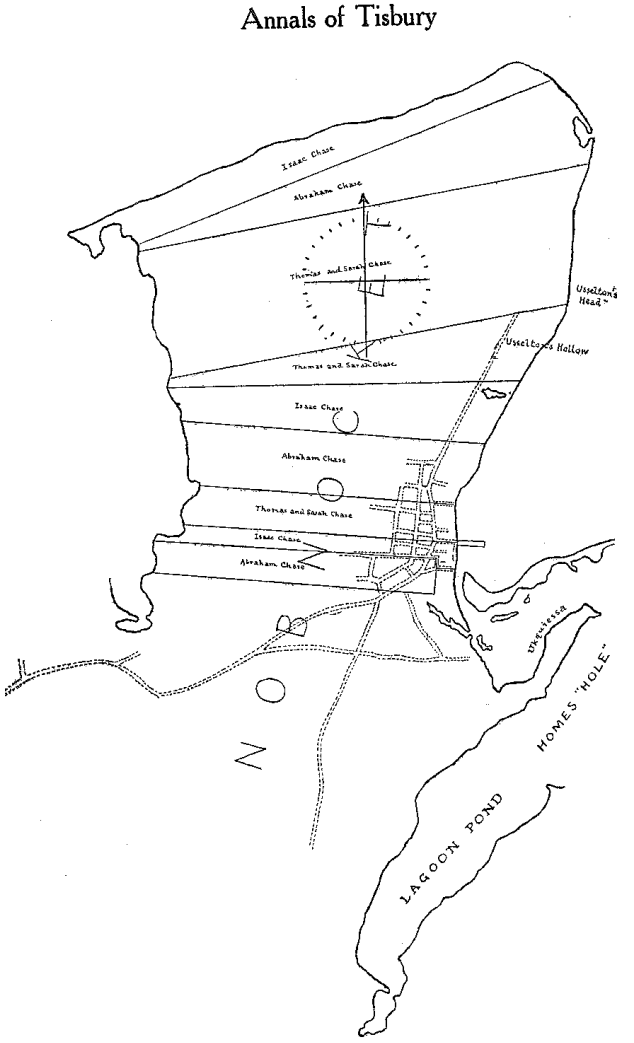
Archaeological evidence gathered by William Ritchie in the late 1960s indicates the large coastal ponds in the moraine were of great importance to the aboriginal people of Martha's Vineyard. These ponds differ from the south shore ponds by routinely being open to the ocean and not closed off by a barrier bar of sand deposited by shore currents. A pond open to the ocean expanded the aboriginal dietary protein to include different fish species in addition to the steady intake of shellfish and white-tailed deer (Richie 1969). Fish came to inhabit Martha's Vineyard some 12-14,000 years ago via glacier meltwater into freshwater streams of the island. Fish species continued to expand their ranges northward until 3,500-5,000 years ago when ice melt caused rising saltwater that cut off the migration routes to Martha's Vineyard. Native to the island are eight freshwater species – chain pickerel, brown bluehead, yellow perch, brook trout, golden shiner, banded killifish, tessellated darter, and swarm darter – and three brackish-water fish – white perch, striped killifish, and mummichog (MacKenzie and Andrews 1997). Shell midden evidence suggests the aboriginal occupants of the island were semi-sedentary in small family groups. Dwelling sites were periodically abandoned possibly in response to over-gathering of a dominant food, climatic impacts, and pond closures (Richie 1969).

Archaeological evidence and Wampanoag cultural history place the dominant Wampanoag dwelling site on Lake Tashmoo at the head where the spring is. The Wampanoag named the spring Kuttashimmoo meaning "great spring" (Banks 1966). According to the story the tribal elder, Quampechi, had a son, Tashmoo, who was a fast runner. His mother had a dream that she believed was sent from Manitou, the Great Spirit, in which Tashmoo discovered a wonderful clear spring. Tashmoo searched for the spring and after a long while found himself on a hill that sloped down to the waters of a clear blue lake. He gave thanks and ran back to Aquinnah to tell his mother that he had found the water in his mother's dream (http://www.wampanoagtribe.net/pages/wampanoag_way/nobnocket). The land above the spring is well known as a place to find archaeological artifacts. In 2010, during the removal of large trees near the spring, William Moody found a large muller or grinding stone measuring 9" tall and 23" in circumference. The stone would have been used for grinding nuts or corn (Moody 2010). Archaeological discoveries near the creek also indicate use as a dwelling place by Wampanoags. However, the exposed nature of the creek to the gale winds and storm surges suggests the area was used as a seasonal camp during harvest periods. Extensive midden piles filled with scallop and oyster shells have been located near the outlet to Lake Tashmoo. Additionally, a cache of rough stone prehistoric weapon implements was uncovered near the creek (*Vineyard Gazette* 1/16/1942).

The Wampanoag tribe sustained ownership of the neck of Holmes Hole that encompassed land from the Stepping Stones of the Lagoon to the spring of Tashmoo until 1664 when a mishap occurred with an unauthorized sale of land made by Poketapace and Pesoonquan to Thomas Layton and Peter Tallman. As

a result, Thomas Mayhew and the key tribal elders of Taakemmy agreed that no sale could be made without the consent of the two sachems, Wanamanhut and Keteanum. Francis Uselton took up settlement using the claim of Tallman and Layton. Uselton was later evicted by Richard Sarsen, John Eddy, John Gee and James and John Pease, all residents of Edgartown. As recompence, Mayhew granted each man one sixth of the neck. None settled and each sold his share, with the exception of Mayhew who passed his sixth onto his son Matthew. The neck was incorporated into the town of Tisbury in 1673. Isaac Chase, a man from Hampton, N.H. and of the Quaker religion, came to the island and attempted to purchase land in Tisbury in 1674 but was denied. Mr. Chase was able to overcome the town's refusal and between the years of 1676 and 1699 he purchased all the shares save those held by John Gee and a portion owned by William Rogers. He went on to purchase land elsewhere on the Vineyard and was one of the largest landholders prior to 1700 (Banks 1966).

Figure 22: Division of Chase Property Map, 1725

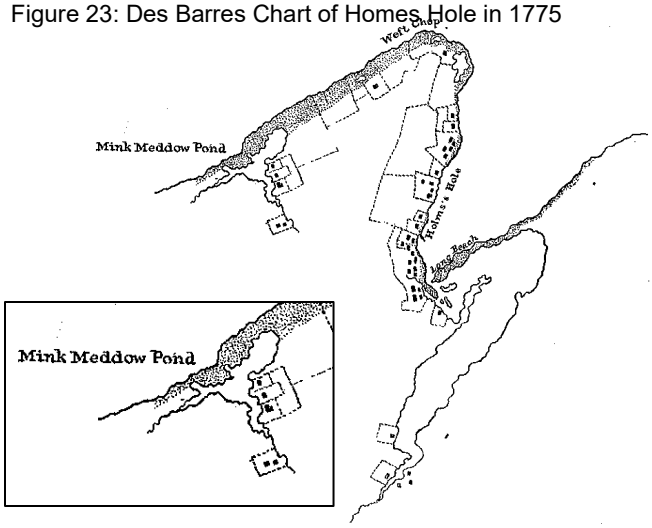


Three families settled in Tisbury in the late 1600's – Isaac Chase, Thomas West and Edward Cottle – and for thirty years they were the only families. Isaac Chase was the landholder of the Holmes Hole Neck and Thomas West and Edward Cottle both settled on the west side of the lagoon, West in the location of the U.S. Marine Hospital and Cottle in "chunk's swamp" (Banks 1966).

The 1725 division of Chase land is depicted in the map to the left (Figure 22) and in Appendix A. Isaac Chase is the current landowner of the east side of the creek and the location of Tashmoo Preserve.

The Des Barres Chart of Homes Hole in 1775 (Figure 23) shows dense settlement in the location of Holmes Hole Harbor, two dwellings and farmland on West Chop, three dwellings and fields to the west of Lake Tashmoo (Mink Meddow Pond), and two dwellings and farm land at the spring (Banks 1966). The farm that overlooks the spring was purchased by Samuel Look in 1769 (*Vineyard Gazette* 5/9/1952).

Figure 23: Des Barres Chart of Homes Hole in 1775

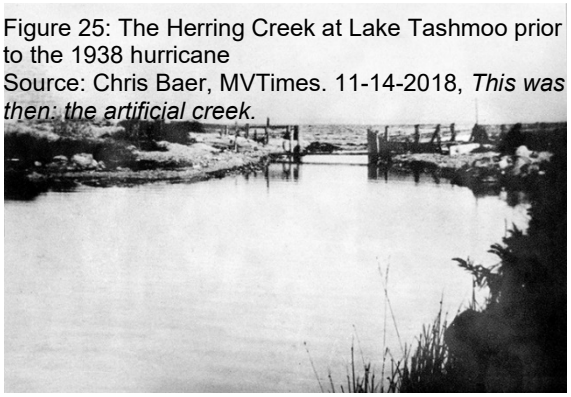


MAP OF HOMES HOLE, 1775.
FROM THE DES BARRES CHART.

The herring fisheries at Tashmoo or Chappaquonsettt creek was a great draw to Wampanoag and European settlers alike. The Wampanoag word Chappaquonsettt is translated to "where the nets are spread" (Banks 1966). Herring, or alewife, an anadromous species, were fished using dip nets with a curved wooden bow-shaped handle from Wampanoag design as they swam through the creek into Lake Tashmoo to spawn (*Vineyard Gazette* 1/16/1942). The pond appears in one location or another open to the sound in nearly all the historic maps and photographs (Figure 24) (Appendix A) from 1775 to 1996 suggesting a sustained use of herring fisheries at the creek.

Figure 24: Herring fishermen at Lake Tashmoo
Source: Vineyard Gazette 1928

Figure 25: The Herring Creek at Lake Tashmoo prior to the 1938 hurricane
Source: Chris Baer, MVTimes. 11-14-2018, *This was then: the artificial creek*.



During the heyday of herring fisheries in the late 1800's, the creek was by far the most popular fishing location on island due to its unique rules and being open to the public after 1847 when the town purchased the land (Figure 25). Herring were mainly fished in April and at night. Dip nets, dam nets, and seines were used along the lantern-lit creek to catch anywhere from 10,000 to 70,000 herring a night. Any resident who was present when the fish were hauled in was entitled to a share of the catch. For this reason, and because of the intensity of the season, fishing shanties were built alongside the creek on private property. These tiny shacks,

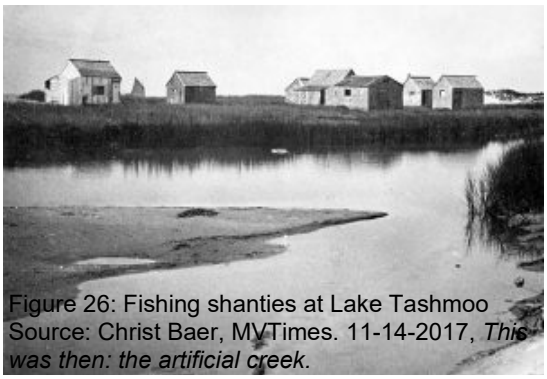


Figure 26: Fishing shanties at Lake Tashmoo
Source: Christ Baer, MVTimes. 11-14-2017, *This was then: the artificial creek*.

complete with chimneys and horse stalls, dotted the shore of the creek and were used to store equipment and fishermen (Figure 26). Asleep or awake, men would receive a share in the catch if they were present, with those awake and working receiving a double share. The bulk of the fish were sold to big schooners for bait. The herring fisheries began to wane and by the 1920s there were only 5 of the 15 shacks at the creek (*Vineyard Gazette* 3/9/1928).

In 1942, The town of Tisbury fortified the creek with jetties and dredged the channel to create a navigable channel (*Vineyard Gazette* 2/27/1942) (Figure 27).

Figure 27: Jetties along Lake Tashmoo channel
Source: Ray Ewing, Vineyard Gazette 9-5-2018

In addition to herring fisheries, the creek was also known for its salt works and maritime pilots. Isaac Luce owned the salt works that was set up near the Tashmoo creek in the early 1800s. Seawater was evaporated to manufacture salt (Banks 1966). Salt was primarily imported from England until the Revolutionary War. Salt was necessary for curing fish and meat and meant the difference between food waste and a profitable catch. The salt industry on Cape Cod and the Islands was in its glory in the mid-1800s (Figure 28) (New England Historical Society, 2018).

Figure 28: West Yarmouth Salt Works
Source: https://newenglandhistoricalsociety.com/the-rise-and-fall-of-cape-cod-salt/

Many of the once farmer-fisherman of Lake Tashmoo took to the profession of pilot. A pilot would watch for large ships to come into view then set sail or row out to assist in the navigation of the ship into the harbor (*Vineyard Gazette* 5/6/1960). This would have been especially useful during the herring run when 15 or so large schooners a day would enter the harbor to purchase bait (*Vineyard Gazette* 3/9/1928).

During the early-1900s Lake Tashmoo was home to a large population of white perch. The white perch is among seven species of fish – yellow perch, pickerel, pike perch, smelt, horned pout and black bass – that are regulated by the commonwealth fisheries and game division. Wardens seined 135,000 white perch from Lake Tashmoo in 1925 to use in stocking ponds throughout the state

(*Vineyard Gazette* 1925).

Tashmoo Preserve was once a piece of much larger landholdings on the shore of Lake Tashmoo. During the late 19th century, the land surrounding the Preserve was owned by the Look and Luce families (Dukes County Registry of Deeds: bk31:pg490, bk75:pg64, bk75:pg63, bk34:pg688, bk31:pg289, bk22:pg173). During the early 1900s Robert L. Bigelow of New York City made several land purchases in the area (Dukes County Registry of Deeds: bk170:pg366, bk166:pg370, bk166:pg24, bk157:pg409, bk159:pg356, bk159:pg156, bk152:pg464). Robert Bigelow was a finance guru with a penchant for waterfowl hunting and fishing. To pursue his outdoor interests, Mr. Bigelow purchased shoreline acres at locations on Martha's Vineyard such as Crab Creek, Lake Tashmoo, and Quansoo (Mink Meadows 2023).

Doris Bigelow, Robert's wife, sold land to various families during the early to mid-20th century. The Ursin and Hyde families were two such families that owned land at Tashmoo alongside the more famous Cornell family that also bought land on Lake Tashmoo from Mrs. Bigelow (Fig. 29).

Figure 29: Property ownership prior to land bank purchase

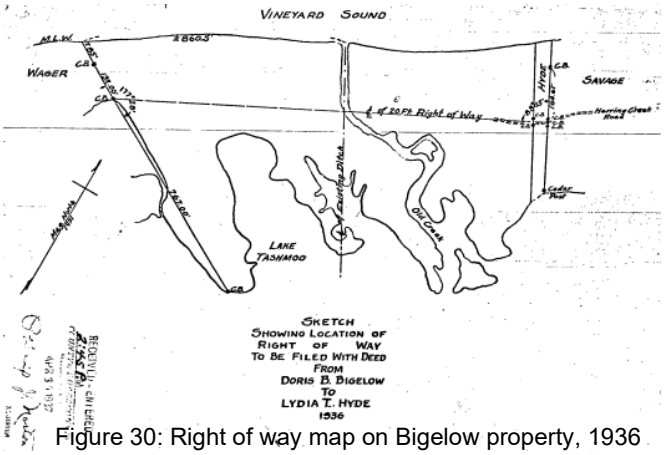


Figure 30: Right of way map on Bigelow property, 1936

A considerable portion of the Bigelow beach holdings at Lake Tashmoo was sold to Robert and Lydia Hyde in 1931 (Dukes County Registry of Deeds: bk193:pg497, bk184:pg20, Fig. 30).

The Hydes of Snedens Landing, New York, a recherché hamlet built for the artistic minds of the 19th century, conveyed a large track of land that became known as Chip Chop to Katherine and Peter Cornell in 1932 (Dukes County Registry of Deeds Bk193:pg588). Lydia Tonetti Hyde was the daughter of Mary Lawrence and Francois Tonetti. Lydia's grandfather, Henry Effingham Lawrence built the "Cliffside" home on the Hudson that began the bold architectural and landscape sensation of Snedens Landing. Mary Lawrence Tonetti bought many of the

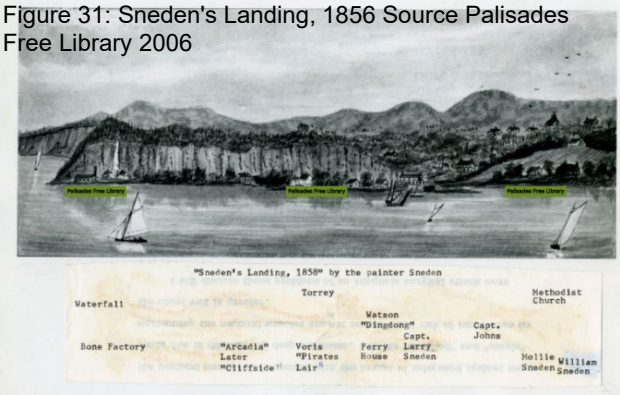


Figure 31: Sneden's Landing, 1856 Source Palisades Free Library 2006

farmhouses surrounding “Cliffside”, restored and embellished them, and rented them to fellow artist friends and socialites. Katherine Cornell and her husband, Guthrie McClintic, were among those artists that stayed in one of Mary’s homes (Peck 1977). The painter, Robert K. Sneden depicts the houses and natural beauty of Sneden Landings circa 1858 in art to the left (Figure 31) (Palisades Free Library 2006). The eastern sliver of land bounding the southern parcel was passed from Lydia and Robert Hyde to their son Joseph Hyde who kept it in the family and sold it to Ann S Tonetti (Fig. 32, Dukes County Registry of Deeds bk374, pg531, bk373, pg806).

In 1956, the land abutting Robert and Lydia Hyde to the west was sold by Doris Bigelow to Bjarne Ursin (Dukes County Registry of Deeds: bk231:pg572). At this time, the only structures depicted on the plan of land surveyed for Doris Bigelow in 1956 was a small shack drawn off- premises along the eastern border on the Hyde property (Figure 32). The first house built on the Ursin property was a 904 ft^2 ranch built as a kit house in 1952. Bjarne and Esther Ursin granted their property to their son Michael in 1982 (Dukes County Registry of Deeds: bk398:pg618). The Ursin property was subdivided, and a second house was built in 1994 by the Ursin family.

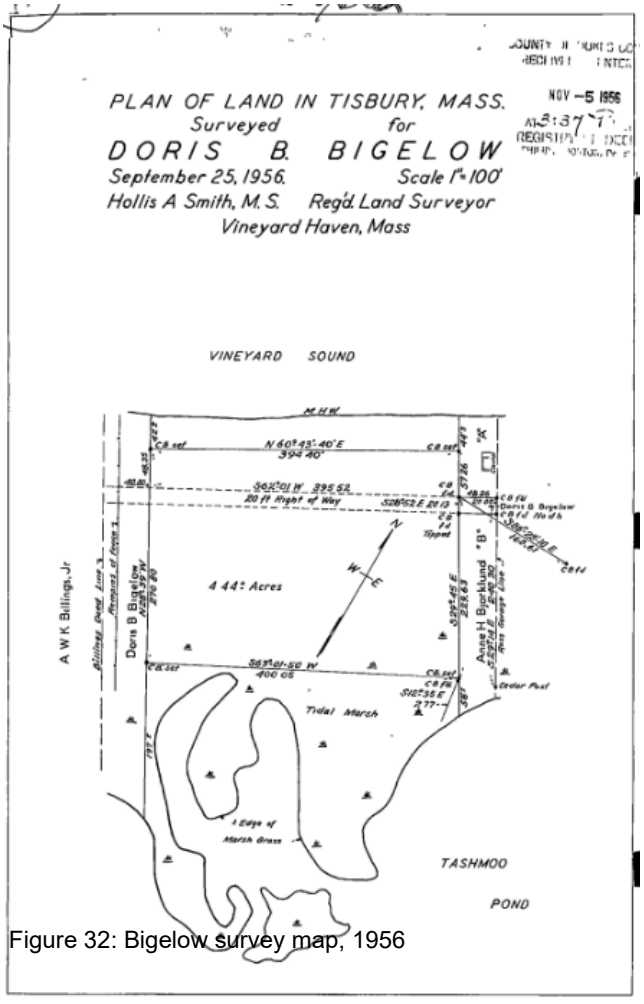


Figure 32: Bigelow survey map, 1956

The last parcel to comprise the Preserve was not part of the Bigelow tract. This northern piece of the Preserve passed through the Luce, Bodfish and Allen families throughout the early 20th century until the mid-20th century, when Grace Allen sold the parcel to Elizabeth Lee in 1956 (Dukes County Registry of Deeds bk231, pg577, Fig 33). No houses are

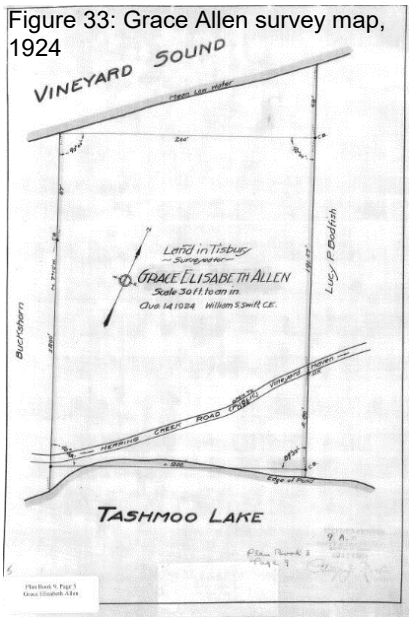


Figure 33: Grace Allen survey map, 1924

depicted in the Grace Allen survey in 1924 (Figure 33). The parcel was sold in 1976 to Bruce and Gayle Kissell who built a summer camp on the property as depicted in a 1976 survey of their land (Figure 34) (Dukes County Registry of Deeds bk1226, pg535; bk341, pg34). The revetments and groins were added to the various parcels as houses were built and are depicted on various surveys located in Appendix A.

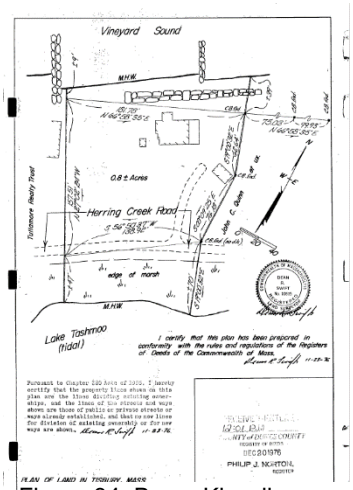


Figure 34: Bruce Kissell survey map, 1976

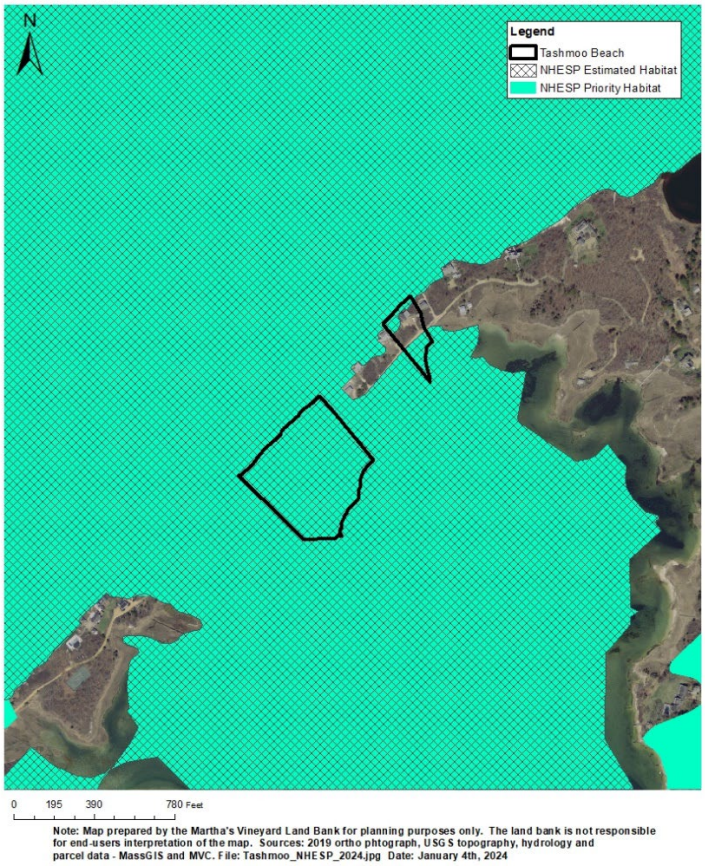
The land bank purchased the parcels of the Preserve from the trustees of the Michael J. Ursin revocable trust in 2018 (Dukes County Registry of Deeds: bk1479:pg1022, Appendix B); Ann S Tonetti in 2020 (Dukes County Registry of Deeds bk1602, pg289) and from B and G Kissell Limited Partnership in 2020 (Dukes County Registry of Deeds bk1556, pg415).

Appendix H. Endangered Species

Tashmoo Preserve is within priority and estimated habitat for commonwealth-listed species. There are four shorebird species that are listed by the commonwealth as protected species and are known to occur on the property. The property was monitored for shorebirds by the Massachusetts Audubon Society prior to the land bank's purchase.

Shorebirds are impacted by land and aerial predators, human disturbance, and diminished habitat. This plan includes management goals that balance the needs of rare species and ensures protection of listed species and their habitats that are known to occur on the preserve. The dune restoration at the former house sites and protection of the dune habitat from human encroachment; will help protect their habitat. Installation of symbolic fencing during breeding season; prohibiting pets; and instituting a carry-in-carry-out policy for refuse will also help protect these rare shorebirds.

Map 16: NHESP Priority Habitat and Estimated Habitat at Tashmoo Preserve, Tisbury, MA



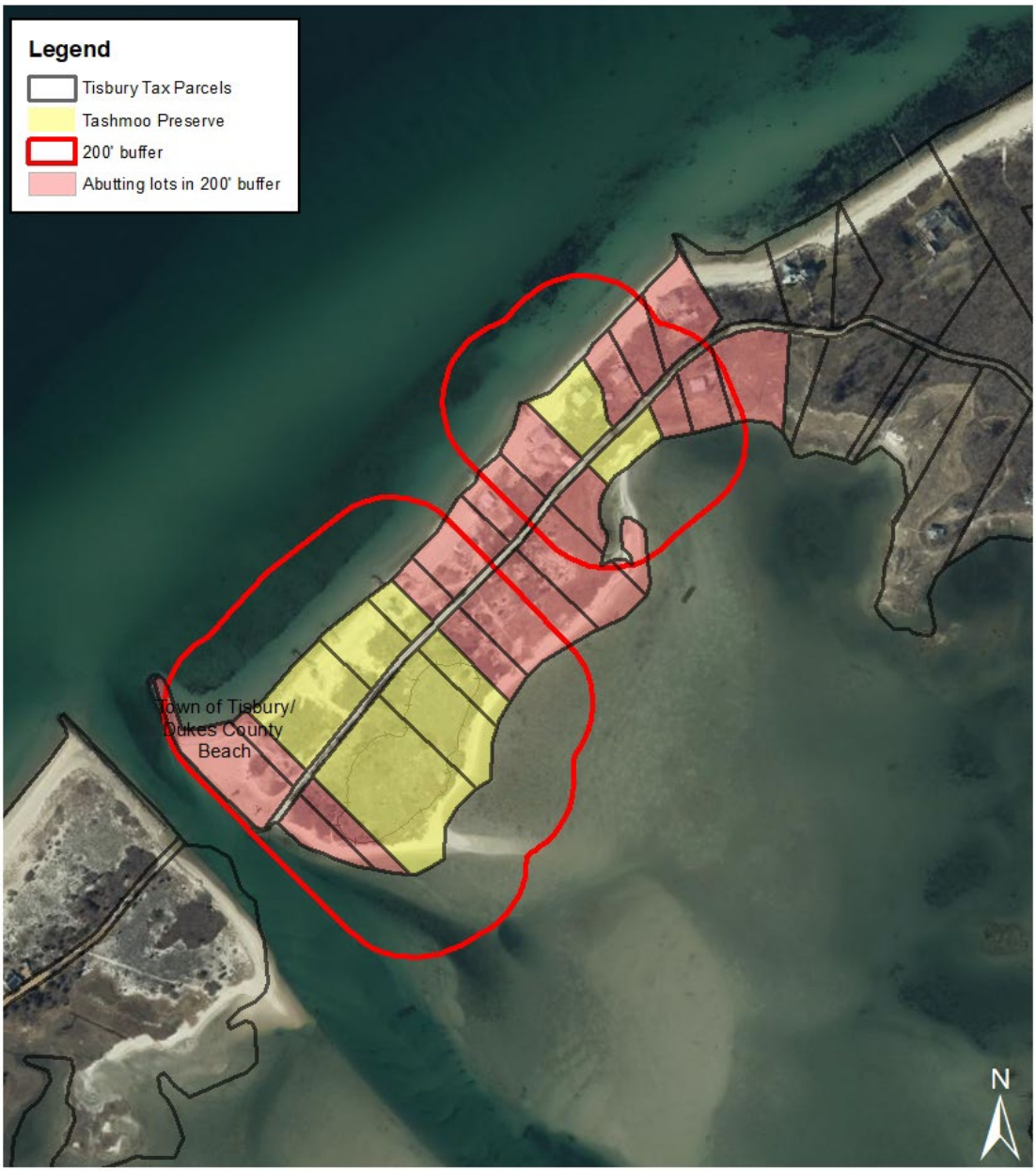
Appendix I. Abutters

Table 3: Abutters within 200 feet of Tashmoo Preserve as recorded by the town of Tisbury assessor's online database, www.axisgis.com.

Parcel Number	Property Address	Owner Name	Co-Owner Name	Owner Address	Owner Address 2	Owner State	Owner City	Owner Zip
31A-2	564 Herring Creek Road	Viola Babcock		PO Box 763		VA	Lexington	24450
31A-3	Herring Creek Road	Daniel and Jeffrey Dretler	Thomas Dretler	3 Fairbanks Place		MA	Natick	01760
31B-1	Herring Creek Road	Peter A Grunwald	Madeleine Grunwald & Lisa Adler Grunwald	48 West 86th Street, #5		NY	New York	10024
31B-2	561 Herring Creek Road	Peter & Madeleine Grunwald	Lisa Adler Grunwald	48 West 86th Street, #5	C/O Peter Grunwald	NY	New York	10024
32C-8.1, 32D-8.1	585 Herring Creek Road	Craig Elkind	Christine Lai	58 Close Road		CT	Greenwich	06831
32C-7, 32D-7	607 Herring Creek Road	Penny R Parrot		620 San Marco Drive		FL	Fort Lauderdale	33301
32C-6, 32D-6	629 Herring Creek Road	Joy Dille Macy and Ann Dille Bushe	Jane Dille Parkinson	690 Western Highway		NY	Blauvelt	10913
32C-3, 32D-3	655 Herring Creek Road	Ann Tonetti		201 Russlyn Drive		FL	West Palm Beach	33405
32C-4, 32D-4	Herring Creek Road	Earle A Ray		P.O. Box 1967		MA	Vineyard Haven	02568
32C-5, 32D-5	637 Herring Creek Road	Melissa and Robert Cross, Melinda and Michael Loberg		P.O. Box 2557		MA	Vineyard Haven	02568
32C-1, 1.1, 32D-1, 1.1	Herring Creek Road	Town of Tisbury/County of Dukes County		51 Spring Street		MA	Vineyard Haven	02568

The map below depicts the 200' buffer around the property as generated by the town of Tisbury assessor's online database, www.axisgis.com

Map 17: Abutters within 200’ of Tashmoo Preserve, Tisbury, MA



Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Tashmoo_abutters_2024.jpg Date: January 4th, 2024

Appendix J. Universal Access

The Recreational Opportunities Spectrum (ROS) classification for Tashmoo Preserve is "Semi-Primitive Non-motorized". The ROS is a model designed and used by the U.S.D.A. Forest Service to categorize conservation areas or universal access planning. The land bank framework for describing the accessibility of its properties is applied to Tashmoo Preserve as follows.

Property Name: Tashmoo Preserve
Size: 6.8 acres
Primary Activities: birding, hiking, picnicking, bicycling
Primary Elements: one sign station indicating the rules of the property
Primary Spaces: beach and view of the sound and Tashmoo Lake
Obstacles that Limit Accessibility: soft sand
Existing or Potential Alternatives: Wilfrid's Pond Preserve
Proposed ROS Classification: semi-primitive non-motorized
Proposed Expectation of Accessibility: not possible

For all less-developed land bank conservation areas, the Universal Access Plan states the following (Potter 1997):

> Use outdoor recreation access routes to link primary elements and primary spaces within one-quarter mile of a trailhead or drop-off and use accessible recreation trails to connect other primary elements and primary spaces on all less-developed land bank conservation areas, but only if modifications are minimal, will provide continuous barrier-free access, do not require a fundamental alteration of the setting, and are not in conflict with natural and scenic resource protection goals.

Universal access exists at the Wilfrid's Pond Preserve that is located 4/10th of a mile from the Tashmoo Preserve. A set of stairs is required to access the beach from the proposed trailhead on the Preserve. Otherwise, vehicle access for the preserve is located on the town/county beach property.