# Broad Cove Reserve Management Plan

# **Table of Contents**

Introduction	2
Purpose and Objective of Management Plan Town Council Charge Broad Cove Reserve Mission Statement Broad Cove Reserve Stewardship Principles	3
Location of Broad Cove Reserve	5
Description of Land and Natural Resources	6
Historic Uses of the Land	8
Current and Prohibited Uses	10
Management Matrix	11
Appendix	

#### Introduction

The Broad Cove Reserve Management Plan (the "Plan") is intended to provide guidance in the oversight and maintenance of Broad Cove Reserve according to the Broad Cove Reserve Mission Statement and Stewardship Principles. As with sound management practices, this is a living document, which should be reviewed periodically to ensure that it is achieving the goals of the Mission Statement and Stewardship Principles. The Plan acknowledges the balancing act required between changes in ecological practices and needs as outside pressures impact the community while encouraging passive recreation by members of the community.

Broad Cove Reserve is part of a 104 acre parcel owned for many years by the Payson family. This parcel has been described as one of the last remaining significant parcels of open space in Cumberland, as well as one of the last remaining underdeveloped waterfront properties in the Portland area. The parcel has a very high natural resource value, which includes 3,039 feet of marine intertidal shoreline on Casco Bay at Broad Cove, intertidal wetlands which support a broad range of shellfish species and marine worms, breeding habitat for horseshoe crabs, extensive eelgrass beds offshore, and 35 acres of Significant Wildlife Habitat designated by the Maine Department of Inland Fisheries as Tidal Waterfowl/Wading Bird Habitat. From a scenic perspective, the parcel provides excellent views from both land and water. The parcel's upland forests, and freshwater streams and wetlands provide habitat for a variety of birds, mammals and other species.

In 1997 the Payson family granted a conservation easement (the "Conservation Easement") to the Chebeague and Cumberland Land Trust ("CCLT"). The purpose of the easement is stated: "To assure that the Property will be retained forever predominantly in its scenic, natural and open space condition for conservation purposes and to prevent any use of the Property that will significantly impair or interfere with the conservation values of the Property and the Property's natural resources and associated ecosystems."

In 2014, pursuant to a public referendum, the Town of Cumberland purchased Broad Cove Reserve from 179 Foreside LLC, which in turn had purchased the entire property from the Payson family to subdivide and develop the property. Broad Cove Reserve consists of 11 acres along Casco Bay with 2,200 feet of shorefront; 9 acres adjacent to Route 88 and an existing gravel roadway connecting these two parcels.

The following document sets out the Broad Cove Reserve Mission Statement and Stewardship Principles and provides an overview of the history of the property, an inventory of its natural resources and management recommendations relative to recreational and educational activities, resource management and maintenance.

### Purpose and Objective of Management Plan

Through the direction of the Cumberland Town Council (the "Town Council"), the Ocean Access Citizens Advisory Committee (the "Committee") was established. The Committee's primary focus is to provide guidance to the Town Council regarding matters related to the management of this community resource by developing a Management Plan for the Broad Cove Reserve property.

The purpose and objective of the Management Plan is to incorporate the mission statement and stewardship principles that will be used as a guide by the citizens of the Town of Cumberland pertaining to the use, improvement and preservation of the Broad Cove Reserve.

#### Town Council Charge

The Town Council hereby establishes the Committee for the purpose of making recommendations and providing guidance to the Town Council pertaining to the use, improvement and preservation of the Broad Cove Reserve. Such recommendations shall include, but shall not be limited to, the following:

- Exploration of opportunities for passive recreation
- Preservation of the conservation values of the property
- Maintenance of the property to facilitate approved uses

The members of the Committee shall be appointed for three-year terms, although initial members shall be appointed for staggered terms of 1, 2 and 3 years. The Committee may report and make recommendations to the Town Council on an interim basis at its discretion or at the Town Council's request, but must submit an annual report to be received and considered by the Town Council at its first regular business meeting each December.

#### Broad Cove Reserve Mission Statement

The Town Council holds that the Broad Cove Reserve property has many natural attributes of high conservation value, including scenic vistas from land and sea, upland open space and woods, extensive tidal mudflats, a long fringing beach and diverse natural communities. In acquiring Broad Cove Reserve for public use, the Town Council recognizes the obligation to conserve these natural attributes consistent with the Conservation Easement. Accordingly the following Mission Statement has been adopted for Broad Cove Reserve:

Broad Cove Reserve will be managed for the citizens of Cumberland to provide for their access to and appreciation and enjoyment of this special seaside environment, consistent with the conservation of its scenic value, diverse habitats and natural communities.

#### Broad Cove Reserve Stewardship Principles

- 1. The Town Council endorses the maintenance of Broad Cove Reserve to assure the protection of its conservation values and will, *within limits established by any Town Council*, provide the human and financial resources necessary to do so.
- 2. The Committee will:
  - Monitor use and condition of Broad Cove Reserve by available means, such as data/photos and communications from law enforcement, Town staff, Council members, Committee members, abutting neighbors and the public.
  - b. Solicit feedback from users and other members of the public with respect to their experiences, concerns, and suggestions for improved management
  - c. Report to the Town Council, with a copy to CCLT, as needed and provide an Annual Report of usage, condition, changes in condition (both positive and negative in the context of mission statement), evolving concerns, and recommendations.
- 3. The Town Council will adopt and update a Management Plan.
- 4. The Management Plan will provide specific guidance for areas determined to be environmentally sensitive and vulnerable.
- 5. Citizens are encouraged to recreate passively within the boundaries of Broad Cove Reserve.
- 6. Vehicular and bicycle use will be limited to Beach Road and its turnaround, with on-site parking available near the Route 88 entrance. Handicapped parking will be available at the turnaround.
- 7. For calendar year 2015, on-site parking will be restricted to Cumberland residents only.
- 8. The Use Policy of the Management Plan will list acceptable uses of Broad Cove Reserve. Such uses will be enforced by the appropriate agents of Town and State Government.
- 9. The Committee will cooperate and meet annually with the CCLT, or more frequently as needed, to ensure ongoing compliance with the Conservation Easement.
- 10. The Committee will cooperate with the Cumberland Coastal Waters Commission ("CWC") on policies affecting use of the beach and intertidal areas, permitting and usage of the pier and float, and the prevention of erosion at the riparian boundary.

## Location of Broad Cove Reserve



## **Description of Land and Natural Resources**<sup>1</sup>

The parcel including Broad Cove Reserve encompasses approximately 104 acres at the easternmost end of the mainland portion of Cumberland, ME. The topography of the area generally slopes towards Broad Cove. Elevations range from 90 feet above sea level to sea level near the easternmost end of the property. The steep slope to the coast is forested, which prevents soil erosion.

Glacial sediments comprise the parent material for the soils. Paxton fine sandy loam, Hollis very rocky fine sandy loam, and Hollis fine sandy loam are the most prominent soil types. Most of the soils are described as having moderate to severe limitations for community development and recreation due to shallowness to bedrock, steep slopes and a seasonal high water table.

Much of the land has been cleared in the past for farming or timber. The presence of stone walls, an old foundation and old cut stumps attest to the historic use across the landscape. Much of the land has reverted back to forest which is now comprised of mature trees.

Oak-Pine Forest is the most abundant natural community. Large, mature red oak and white pine dominate the canopy. Red maple and red spruce are present to a lesser extent. The understory is slightly more varied and includes American beech, green ash and beaked hazelnut. The herb layers include wild sarsaparilla, low bush blueberry and partridge berry. Oak-Pine Forest provides nesting habitat for a variety of bird species including the wood thrush, scarlet tanager, ovenbird and pine warbler. Deer browsing is evident.

Broad Cove Reserve is located along the shores of Broad Cove, which has been documented to have water quality issues. Broad Cove is generally closed to the harvest of clams, quahogs, oysters and mussels from June 1 to October 31. It is critical that future development of Broad Cove Reserve limit the impacts of freshwater streams and groundwater on site and the receiving waters of Broad Cove.



The shoreline consists mostly of a low-energy tidal zone as indicated by several stands of low marsh grass. A sand spit is also present, as indicated by a stand of American beach grass and also high marsh grass. Such marsh wetlands provide a first line of defense from coastal storms, helping prevent shoreline erosion and damage to adjacent uplands.

The shoreline includes a 200' wharf and float that was fully rebuilt after the 2007 Patriot's Day Storm.

A clam flat is present at the north end of the beach and eel grass beds are present southeast of the sand spit. The entire shoreline is mapped as marine worm habitat.

<sup>&</sup>lt;sup>1</sup> Adapted from 2104 Natural Resources Inventory prepared for CCLT by FB Environmental Associates

Clamming is an important part of Maine's culture and economy. Due to the size, productivity and increased access of the clam flat, clamming for soft shell clams will undoubtedly be an attraction of Broad Cove Reserve.

Eelgrass beds are an important part of a healthy marine ecosystem. They oxygenate the water column, cycle nutrients by providing a source of detritus, provide food for waterfowl, provide habitat for numerous species of invertebrates and provide nursery areas for juvenile fish. Broad Cove Reserve's eelgrass beds extend seaward for approximately 1,250 feet and encompass an area of approximately 80 acres.

Horseshoe crabs utilize the shoreline to spawn on the high tide of the new and full moon in mid-May to mid-June. Hatching out of eggs occurs 14 days after being deposited and occurs at night during high tide. These animals prefer beaches that are protected from high water and require gently sloping beaches to lay their eggs. It is unlawful to take, kill or possess horseshoe crabs or eggs in Maine between May 1 and October 30. CCLT provides public events at the time of spawning to educate the public about these crabs.

Wildlife species present along the shoreline including wading birds, songbirds, waterfowl, mammals and insects. The sand beach will not support nesting birds due to the height of tide in this location. Birds of conservation concern such as the American oystercatcher, purple sandpiper, snowy egret, bald eagle, great cormorant and least tern may feed or rest at some time of the year on the beach or just offshore.

### Historic Uses of the Land

The historic uses of the land bear the imprint of Cumberland's legacy of agriculture and seafaring.

When Cumberland became a separate town from North Yarmouth in 1821, Broad Cove Reserve was owned by the Scales family. The record of this family extends well back into the 18<sup>th</sup> century and the settling of North Yarmouth. For example, in the original 1727 survey and plot division of that town, a William Scales is listed as proprietor of Lot 59. This lot was one of several 10 acre lots set out on Broad Cove.<sup>2</sup>

In 1837, the Scales family sold the former Payson property to the Town of Cumberland. The brief legal description sets out the property as "bounded on the Northwest by the lower County Road in said town and by one forth part of an acre of land owned by David Spear on the Northeast by landing road so called easterly and southeasterly by the sea shore and southwesterly by land owned by Ephraim Sturdivant."<sup>3</sup>

This purchase was at the recommendation of the Town's Overseers of the Poor board. Pursuant to Maine Law, the Overseers were responsible for supporting all poor and indigent persons residing in the Town. To this end, the Overseers decided to establish a Town Farm where the poor could live, work the land and contribute to their own upkeep. Broad Cove Reserve thus for the next several decades was the location of the Town Farm. The Map of 1857 shows this use and sets out the location of the farm building itself. The foundation of this building is clearly visible today.<sup>4</sup>

David Spear's shipyard just to the east was one of the most famous and active on Casco Bay. He and his son built approximately 50 ships, the largest of which was the *Dakotah* of 1054 tons burthen. The coming of the age of steam and the Panic of 1857 brought the era of shipbuilding along the Maine Coast to an end. In 1869 David Spear Jr. was forced to turn over the business and its properties to satisfy creditors. Inhabitants of the Town Farm apparently found occasional employment with the Spears.



Shipbuilders made active use of the Town Landing itself. A newspaper account of the 1870's recounts the launching of a vessel of about 70 tons built in Cumberland Center prior to the War of 1812. In mid-January, when Tuttle Road was sufficiently snow packed, 80 yoke of oxen took three days to haul the vessel down to Town Landing for her launching.<sup>5</sup>

Captain Ephraim Sturdivant (1782-1868), the property's abuttor to the south, was a notable ship captain of that era. He went to sea at age 12 and by 21 was in command of his own vessel. At his age 30

<sup>&</sup>lt;sup>2</sup> Rowe, WH (1937) Ancient North Yarmouth and Yarmouth, Maine A History: 1636-1936 p.68

<sup>&</sup>lt;sup>3</sup> Cumberland County Registry of Deeds Book 151 Page 238

<sup>&</sup>lt;sup>4</sup> Taken from Internet http://cny.mainememory.net/page/2019/display.html

<sup>&</sup>lt;sup>5</sup> Sweetser, PS (1976) Cumberland, Maine in Four Centuries p.35

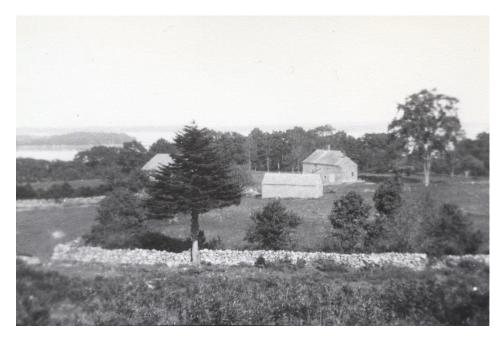
President James Madison issued him a Letter of Marque, permitting him to operate the ship *Reaper* as a privateer with 6 guns and 75 men during the War of 1812. He later became the first Treasurer of the Town of Cumberland on its incorporation in 1821.<sup>6</sup>

By 1866, methods of poor relief had sufficiently changed that the Overseers of the Poor board decided to sell the Town Farm pursuant to the vote of a special Town Meeting called for the purpose. Although Ephraim Sturdivant and others argued against the sale, he ultimately purchased the property, described in the deed as "beginning on the lower County road at the Northerly corner of said Ephraim Sturdivant's land; thence by said road to the Town Landing road; thence Southeasterly to the sea shore; thence Southwesterly by the sea shore to said Sturdivant's land; thence Northwesterly by said Sturdivant's land to the first bound containing about 100 hundred acres more or less."<sup>7</sup> The sale price was \$1,900 or approximately \$18,000 in 2014 dollars.

The property changed hands several times, staying in agricultural use. Below is a picture of the farmhouse and buildings, believed to have been taken in the early 1900's.

In 1936 Marion Payson purchased the property. She built the mansion, so-called, which is still in use as a private residence. She sold off several small parcels to family members and others, primarily along Town Landing Road.

In 2014, pursuant to a public referendum, the Town of Cumberland purchased Broad Cove Reserve from 179 Foreside LLC, which in turn had purchased the entire property from the heirs of Marion Payson to subdivide and develop the property. The purchase price was \$3,000,000.



<sup>&</sup>lt;sup>6</sup> Ibid., p. 73

<sup>&</sup>lt;sup>7</sup> Cumberland County Registry of Deeds Book 341 Page 316

### **Current Uses**

Broad Cove Reserve provides an ideal site for low-impact passive recreation. Passive recreation means non-motorized, non-consumptive activity that 1) offers restorative and pleasurable human benefits, 2) fosters understanding of open space and its purpose, 3) does not adversely affect conservation values and 4) requires minimal visitor facilities and services.

In an effort to preserve the conservation values of the property, uses may be subject to change or suspension when overuse or negative impact to the property is identified. The list of current and prohibited uses is below. Please also refer to the Management Matrix for specific information regarding user responsibility and/or limitations for each activity.

- Walking and hiking
- Boating
- Swimming
- Shell fishing
- Fishing
- Picknicking
- Cross-country skiing and snowshoeing
- Educational activities

#### **Prohibited Uses**

- Discharge of firearms
- Dog walking
- Open fires
- Fireworks
- Except on Beach Road or in designated parking, use of unauthorized motor vehicles, motorbikes, bicycles, snowmobiles or ATVs
- Use of any motor vehicle, boat, trailer or combination thereof which exceeds at least two of the following criteria: twenty three feet in length, eight feet in height and seven feet in width.
- Littering or trash disposal; all activities and users to carry out all refuse carried in
- Except for maintenance of approved trails, cutting/removal of trees, brush, vegetation or application of herbicides, pesticides, fungicides without Committee approval
- Construction or improvements without Committee approval
- Defacement, injury, removal or destruction of fences, signs, gates or any other structure

## Management Matrix

### A. Current Uses

Current Use	Potential Natural Conflict	Potential Neighbor Conflict	Management Activities
Walking and hiking	Habitat disturbance Tree carving Erosion Soil compaction	Disturbance of solitude- seekers Littering Trespassing beyond reserve boundaries	Evaluation of trails on a yearly basis and rerouting as needed Repair of natural and human damage on a timely basis Development of limited number of trails with some loops Closure of trails periodically to give land time to recover Carry-in/carry-out policy for litter management Pick up after pets
Boating	Wildlife disturbance Damage to submerged aquatic vegetation and beach grass	Engine noise Swimmer safety	As directed by CWC: Motorboats not allowed on beach or pier except in emergency Motorboats strictly discouraged from surrounding water area to ensure swimmer safety, quiet and eelgrass protection Human and sail powered craft carry in/carry out Boats cannot be left unattended at float
Swimming	Wildlife disturbance Damage to submerged aquatic vegetation and beach grass	Noise	Swimming allowed from all beach areas; prohibited from pier and floats as directed by CWC At own risk only; no lifeguard on duty
Shell fishing	Overfishing		Compliance with Town Ordinance and State regulations
Fishing	Accidental hooking or disturbance of water fowl	Injury or nuisance from casting rods Failure to clean up after fishing	Permitted on beach and pier as directed by CWC Compliance with state regulations
Picknicking	Littering Habitat disturbance	Noise	Restricted to designated picnic sites Carry in/carry out for litter management

Cross country skiing and snowshoeing	Wildlife disturbance Habitat disturbance	Trespassing beyond reserve boundaries	Encourage use of marked trails
Educational Activities	Over collecting Minor habitat disturbance	Noise	Discourage active collection of live materials Group over 25 and/or arriving by bus require prior approval from Town Office

## **B.** Prohibited Uses

Prohibited Use	Potential Natural Conflict	Potential Neighbor Conflict	Management Activities
Discharge of firearms	Accidental loss of rare or endangered species Disturbance of wildlife migration or feeding patterns	Neighboring homes within close range of firearms	Prohibition of use
Dog walking	Pollution of Broad Cove waters Wildlife disturbance	Trespassing on private land that abuts property Disturbance to visitors fearful of dogs	Prohibition of use, subject to specific rights of CCLT to manage uses of Stone Wall Trail as set out in Conservation Easement
Open fires; fireworks	Runaway fires Disturbance of wildlife	Unwanted noise and odor Accidental injury and property damage	Prohibition of use
Driving unauthorized vehicles, motorbikes, bicycles, snowmobiles, ATVs	Disturbance of wildlife and habitat	Unwanted noise Accidental injury and property damage	Prohibited except on Beach Road or in designated parking areas No driving on trails