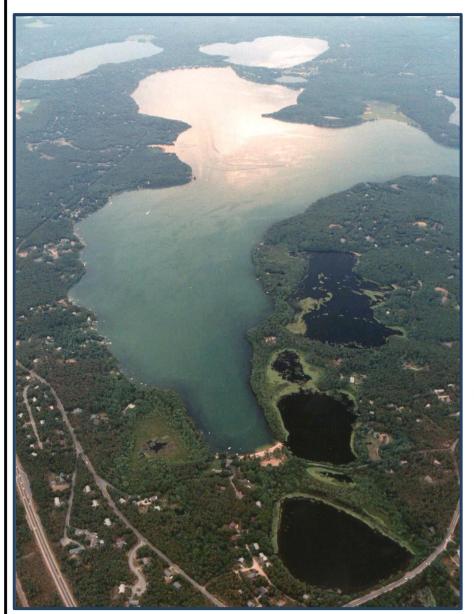
# BREWSTER OPEN SPACE COMMITTEE

# SPRING 2018

# COMMUNITY PRESERVATION APPLICATION:

# LONG POND WOODLANDS CONSERVATION AREA



AERIAL VIEW OF LONG POND: FROM THE EASTERN END LOOKING WEST



Town of Brewster Community Preservation Committee 2198 Main Street Brewster, Massachusetts 02631-1898 (508) 896-3701 x 133 Fax (508) 896-8089



# APPLICATION FOR COMMUNITY PRESERVATION ACT FUNDING

Date Application Submitted:	March 14, 2018	
Name of Project Applicant:	The Brewster Open Space Committee	
Name of Contact Person:	Elizabeth Taylor	
<b>Contact Person's Mailing Address:</b>	Town Hall 2198 Main Street Brewster, MA 02631	
Contact Person's Daytime Phone Number:	508-896-3701 x 1149	
Contact Person's email Address:	etaylor@brewster-ma.gov	
Proposed Project Name and	Long Pond Woodlands Conservation Area	
Project Address/Assessor's Parcel:	0 Long Pond Road: Map 84 Lots 22, a portion of lot 54	

#### **Project Synopsis:**

The Long Pond Woodlands acquisition involves the preservation of a large lot consisting of 42.01 acres extending from Route 137 to Long Pond. This lot has been a high priority for the Open Space Committee for well over 30 years. The parcel lies within the Town's Eastern Zone II, its drinking water wellfield protection area. ZONE II preservation has always been at the top of Brewster's land acquisition list and this property specifically benefits protection for Wells #1, #2 and #3. Additionally, preservation of this property precludes additional nitrogen loads which would result from development of this ZONE II parcel. This heavily forested pine-oak-beech woodland is also within the State Priority Habitat for Rare and Endangered Species.

This parcel sits on Long Pond, an impaired great pond, putting it high on the Priority Pond Parcel acquisition list for protection of Brewster ponds. This property falls within the Herring River Watershed and has been reviewed as part of the Massachusetts Estuaries Project (MEP). Preservation of this property will help the Town comply with the state's suggested Total Maximum Daily Load (TMDL) nitrogen limit for the Herring River Watershed, by preventing development and associated on-site septic systems that might otherwise occupy this site in the future.

The Open Space Committee is requesting \$1,750,000 for this acquisition, plus \$35,000 to cover all project related costs. The Town could be eligible to apply for three separate grants towards funding this acquisition. The Brewster Conservation Trust has agreed to contribute \$230,000 and will hold the Conservation Restriction.

Category: X Open Space	□ Historic Preservation	X 🗆 Recreation	□ Affordable Housing
<b>CPA funding requested </b> \$ <u>1,7</u>	50,000	<b>Total Cost of Propos</b>	sed Project <u>\$1,750,000</u>

# 1. PROJECT DESCRIPTION:

The Long Pond Woodlands acquisition project involves the preservation of a large lot consisting of 42.01 acres extending from Route 137 to Long Pond. This lot has been a high priority for the Open Space Committee for well over 30 years. The parcel lies within the Town's Eastern Zone II, its drinking water wellfield protection area. Drinking water recharge areas/wellfields have long been on Brewster's land acquisition/preservation list and this property specifically benefits wellfield protection for Wells, #1, #2 and #3. (ATTs. 2.1, 2.2a&b) Preservation of this parcel also precludes additional nitrogen loads, resulting from development of this ZONE II parcel.

Over half of this parcel is within the Town's District of Critical Planning Concern which encompasses all Zone IIs in Brewster. The parcel also sits on Long Pond and as such has long been high on the Priority Pond Parcel acquisition list for protection of Brewster ponds. (ATTs. 2.6a&b)

Long Pond, is an impaired great pond, based on the 2012 study done by Massachusetts Estuaries Project (MEP). This parcel is within the watershed to Long Pond, as well as the Herring River Watershed. Preservation of this property will help the Town comply with the state's suggested Total Maximum Daily Load (TMDL) nitrogen limits for the Herring River Watershed, by preventing development and associated on-site septic systems that might otherwise occupy this site in the future. **(ATT. 2.8)** As of 2013, the Town was not required to reduce nitrogen loading in the Herring River Watershed. However, as Brewster becomes more built out, it will have to take steps to hold TMDLs to the 2013 loads. Ongoing open space acquisition such as preservation of this parcel reduces Brewster's future nitrogen load for this watershed.

This heavily forested pine-oak-beech woodlands is within the State Priority Habitat for Rare and Endangered Species (MESA) and is a Core Habitat area on the State's BioMap2. The State considers these areas to be of the highest significance for wildlife habitat, not only in Brewster, but also in Massachusetts.

The Open Space Committee is requesting \$1,750,000 for this acquisition, plus \$35,000 to cover all project related costs. The Town could be eligible to apply for three (3) separate grants towards funding this acquisition. The Brewster Conservation Trust (BCT) has agreed to contribute \$230,000, and will hold the Conservation Restriction on the property.

# 2. CPA GOALS/CRITERIA:

The goals of this project encompass many of the Community Preservation general criteria areas for community preservation and enhancement serving the purposes of Open Space, and Recreation; saving resources that would otherwise be threatened; leveraging public funds and enhancing existing Town resources; all contributing to the preservation of Brewster's unique character.

**General Criteria:** The Town's 2013 updated Open Space and Recreation Plan (OSRP) reiterates and confirms the Town's long-standing objective of preserving open space as an important means of protecting wellhead recharge areas. Acquiring this parcel supports this objective. As described in more detail below, under <u>Open Space Criteria</u>, the Town's expenditure for preservation of this land, relative to the critical natural resources that will be preserved and protected, demonstrates a very positive cost/benefit relationship.

# **OPEN SPACE CRITERIA**:

# Wildlife Habitat, Biodiversity, Protection of Wildlife Corridors:

The dominant forest community found here is typical of maritime forests found on Cape Cod, consisting of dense pitch-pine, oak and beech, with an understory of black huckleberry, blueberry, viburnum, bracken fern and a groundcover of mayflower and checkerberry. (PHOTOS 3.1)

This area has been a woodland for over 70 years and represents a high quality undisturbed forest with trees of significant age. It is considered Prime Forest Habitat by the State. These acquisitions will preserve intact a large unfragmented forest ecosystem identified by the Cape Cod Commission as within a Significant Natural Resource Area. Undisturbed, unfragmented forest interiors on Cape Cod are crucial locations for declining populations of breeding Neotropical migrant bird species, such as Scarlet Tanagers, Wood Thrushes and warblers, according to State Ornithologist Brad Blodget.

# Loss of Forested Lands

**From MASS Audubon's Losing Ground: 2005-2013:** "The rate of development is down from the rate of 20 acres/day reported in the fourth edition of Losing Ground (1999-2005), and 40 acres/day reported in the third edition (1985-1999). However the current period of analysis includes the years of the Great Recession when development slowed dramatically. New housing permit data suggests that development will be trending back up towards previous rates.

The fourth edition of Losing Ground concluded that for every visible acre lost to development, an additional three acres loses its ecological function; in more rural locales, the less visible impact increases up to eight times that of direct construction impacts."

Preventing the Long Pond parcel from being developed would not only preclude fragmentation of the habitat, but also prevent additional residential intrusions, such as dogs, noise, light and traffic, from penetrating deeper into these important wildlife habitats. There is also a psychological footprint from development that far exceeds its physical footprint. The State specifically promotes growth away from undeveloped, "frontier" areas so that existing public infrastructure can be concentrated in growth centers and public investment is maximized efficiently. This parcel is located in one of the few frontier areas left in Brewster where there are no paved roads, no public water supply distribution system, no gas pipelines, etc.

With large tracts of unbroken forest still intact in this area, it is not surprising that it is a strategic place to preserve remaining lands that serve as the base for so much natural resource protection. These parcels are within Brewster's eastern wellfields recharge area. The parcel abuts a 20 acre Conservation Restricted parcel and the 70 acre heavily forested Camp Wono property. **(ATT. 2.3)** 

# **Statewide Land Conservation Plan Priority Parcels**

This property is within Massachusetts Endangered Species Act (MESA) Habitat for Rare Species, the State BioMap2 Core Habitats Area, Natural Heritage Endangered Species Program Estimated & Priority Habitat Areas, BioMap2 Living Waters Supporting Watershed and part of Statewide Land Conservation Plan Priorities. The parcel is within the MA Natural Heritage and Endangered Species Program (MNHESP) Rare Species Habitat, one of the highest-ranked designations for wildlife habitat diversity, quality and persistence. **(ATT 2.5a-c)** 

Preserving these parcels will permanently protect important wildlife habitat, including areas that are of significance for biodiversity and rare species protection such as the Eastern Box Turtle (*Terrapene carolina*), of Special Concern (SC). There is only one travelled road within the Long Pond Woodlands, so wildlife disturbance and conflicts are rare.

This represents an extraordinary opportunity for the Town of Brewster to preserve and protect high priority parcels identified using a composite value ranking in the Town's Open Space Plan, as well as being on the Priority Pond Parcel Acquisition list. In 2003, The Compact of Cape Cod Conservation Trusts, Inc. conducted a parcel-level GIS analysis of habitat significance for Barnstable County. Criteria included habitat value, parcel size, and development context among other scores. The 42.01-acre locus property was ranked among the highest in priority, relative to all other parcels Cape-wide.

In 2015, MassAudubon designed an interactive GIS analysis tool called MAPPR to identify high value habitat parcels, and ranking them for local, regional and statewide importance. The 42.01 acres ranked highly both in Brewster and on Cape Cod. (ATT 2.4)

# Serving to enhance and protect existing wildlife corridors:

By promoting connectivity of habitat and preventing the fragmentation of such habitats, protection of these parcels will allow the existing wildlife corridors to remain within forested, undeveloped land. Lynn C. Harper, Habitat Protection Specialist, Massachusetts Natural Heritage & Endangered Species Program (NHESP), indicated that *"habitat fragmentation, particularly on Cape Cod, is a major threat to many wildlife, bird and plant species and the protection of contiguous, undisturbed tracts of habitat is vital to ensuring their long term viability"*.

This property abuts conservation restricted land, forming contiguous forested uplands, which provide prime habitat for numerous migratory and native species, many of which require large unfragmented woodlands in order to establish territories, find food and successfully reproduce.

Long Pond Woodlands provides an unfragmented corridor from Route 137 to Long Pond. Protection of this habitat will maintain corridors wide enough for the movement of many species of mammals, amphibians and birds.

## **Drinking Water/Wellfield Protection:**

Protection of water quality and drinking water supplies are some of the most important issues facing the Cape. It is critical that Brewster permanently preserve land to protect current and future water supplies for the residents of Brewster, Orleans, Harwich and Dennis by protecting all Zone IIs within Brewster's border as well as lands that make up critical pond recharge areas and marine watersheds.

In 1994, Brewster's Ground Water Protection District was established for more than 4,000 acres in the southeastern and southwestern sections of Town owing to the location of wellfields and the overall sensitivity of the area's groundwater resources as substantiated by the EPA's Sole Source Aquifer designation in 1982. Under DEP regulations, towns are expected to protect one another's Zone IIs; this acquisition would advance that objective.

The Long Pond Woodlands property is located more than 50% within Brewster's wellfield recharge area and therefore a part of Brewster's eastern District of Critical Planning Concern (DCPC). It is 100% within the Marine Watershed of the Herring River. (ATT. 2.6a&b)

The United States Department of Agriculture (USDA) has determined that Carver coarse sand is the dominant soil type existing throughout Brewster's wellfields and surrounding Zone II privately owned lands, including this property. Carver soils are characterized as excessively well-drained with rapid permeability. This soil type provides a poor medium for filtering out nitrates associated with on-site residential septic systems. Any prevention/reduction in development and associated on-site septic systems in Brewster's Zone IIs supports Drinking Water Wellfield Protection, as well as the health of Long Pond and the Herring River Watershed. Preserving this land intact as pine-oak-beech forest will help to filter out contaminants before they reach the pond.

# **Groundwater/Pond Resource Protection Goals:**

All of Brewster's larger ponds were assessed as part of Phase 1 of the Comprehensive Water Management Committee's "Water Resource Management Plan". This property is within the recharge area of Long Pond which has been found to have impaired health. (ATT 2.7)

The <u>Town of Brewster Integrated Water Resource Management Plan (IWRMP) Phase II- Final Report, January</u> 28, 2013 Horsley Witten Group, Inc. stated the following (in part):

"In Brewster, there are about 80 diverse ponds and these are connected to the regional groundwater table, the Monomoy Lens, which supplies Brewster's Drinking water. Many of these ponds have compromised water quality due to excessive loading of phosphorus, the nutrient of concern that controls the level of excess plant and algae growth, a process known as eutrophication. This depletes oxygen levels, causes fish kills, noxious odors and reduces water clarity. Common sources of phosphorus include phosphate-containing cleaners or detergents, human and animal waste, vehicle exhaust deposits and fertilizers from lawns, golf courses and agriculture. Out of the 80 ponds, 29 are regularly monitored by the Pond and Lakes Stewards (PALS) with samples taken to provide information on a number of parameters". (Page G-88) "Long Pond is one of the 22 known impaired ponds. In an effort to protect pond health, the Board of Health now has a regulation that specifies that septic leaching fields must be setback at least a 300 feet from ponds." (Page G-89)

In, 2007 Long Pond was treated for excess nutrients, by inactivation of the phosphorus using alum. The <u>Treatment</u> <u>Summary for Phosphorus Inactivation</u> prepared by AECOM for the Towns of Brewster & Harwich in 2009 states (in part):

"Long Pond covers 740 acres. Precipitation and groundwater are the dominant sources of water, as well as runoff from the very sandy watershed. It is a popular swimming, boating and fishing destination. Erratic summer algal blooms and small fishkills raised concern and prompted further study. Investigation revealed a lack of oxygen (anoxia), with hydrogen sulfide production and release of phosphorus from bottom sediments. Anoxia has been a feature of deep water in Long Pond for at least half a century. It has taken decades for the internal load to reach the threshold where it could supply sufficient phosphorus to cause the observed algae blooms, many times favoring the growth of cyanobacteria, many of which produce cyanotoxins, which are known to be toxic to wildlife and people.

A combination of aluminum sulfate and sodium aluminate (Alum) was sprayed into Long Pond. The alum bound with the phosphorus forming an inert chemical; removing the nutrient from the system, allowing it to remain in the bottom sediments. However, as phosphorus continues to enter Long Pond through the groundwater, levels will again build up over time. Regulations and/or education of residents along the banks of the pond is a necessity to reduce phosphorus loading. Phosphorus has been banned from dishwashing detergents, but more needs to be done, e.g. use of phosphorus-free cleaning products, maintenance of septic systems and the use of less or no fertilizer on lawns, fewer paved driveways to stem run off. Educational brochures were printed up and distributed by the Long Pond Watershed Association."

Continued monitoring has shown the effectiveness of the treatment program with increases in oxygen levels at varying depths and increased water clarity. Preserving this parcel will prevent the potential for additional new homes, lawns and storm drains to introduce pollutants into this pond's ecosystem. (PHOTO 3.2)

# **Protection of Coastal Embayment: The Herring River Watershed:**

This parcel is located 100% within the recently delineated Herring River Watershed, which has been reviewed by the state relative to Total Minimum Daily Loads (TMDLs) of nitrogen for this system. Horsley Witten Group, Inc. provided an analysis of the Massachusetts Estuaries Program (MEP) report for the Herring River (University of Massachusetts, School of Marine Science Technology (SMAST), Massachusetts Department of Environmental Protection (MEP 2013). In part, this analysis stated:

"The Massachusetts Environmental Protection Agency (MEPA) working with UMASS Amherst (SMAST) produced an MEP report on the state of Massachusetts Estuaries. Their studies estimated the amount of nitrogen entering estuaries and what would be expected at full buildout. Under 2013 conditions, Brewster had no obligation to reduce nitrogen loading in the Herring River watershed. However, as Brewster becomes more built out, it will have to take steps to hold nitrogen loads to the 2013 current loads. Based on the buildout analysis in

the MEP report, the increased nitrogen load from additional development in the watershed is expected to be approximately 4,200 lbs. Nitrogen/year and Brewster would be responsible for a portion of that additional load. Ongoing open space preservation in Brewster has already reduced Brewster's component of the buildout nitrogen load. Since septic systems and residential lawns are usually the predominant source of nitrogen, minimizing future buildout in the Herring River watershed will go a long way towards precluding any additional nitrogen load."

Preservation of any undeveloped parcels as open space is the best and least costly avenue to protect the watershed and prevent additional nitrogen and phosphorus loading to ponds. (ATT 2.8)

## Stormwater Issues:

"Stormwater runoff is the excess precipitation that's runs off over land and discharges to nearby receiving waters such as streams, ponds, wetlands and estuaries. Stormwater can impact all of Brewster's water resources in different ways. As land development occurs, impervious surfaces block the natural infiltration of rainwater, thereby reducing the recharge rate and lowering the water table (affecting the pumping of drinking water). Water temperature is also increased in waters near impervious areas. New land uses can introduce pollutants and nutrients that are carried by stormwater to receiving waters. As indicated above, ponds are susceptible to phosphorus loads which can exacerbate algae and aquatic plant levels. Coastal waters fed by estuaries/ marine watersheds are sensitive to stormwater impacts that alter salinity levels and to nitrogen loads that promote algae growth and impact eel grass health." (IWRMP, Page F-67)

The Long Pond Woodlands parcel has steep slopes leading to the pond, which allow stormwater to flow directly into the pond, likely contributing to its impairment. Preventing any further development in this area, will prevent any increase in stormwater pollution from this property.

# **HISTORIC PRESERVATION CRITERIA:**

The Massachusetts Historical Commission identifies Route 137 in Brewster, in its Town inventory map files, as part of the original Native American Regional Trail System on the Cape, connecting the Trail along Cape Cod Bay to the Trail along Nantucket and Vineyard Sounds. Many native trails ran off of this major route, connecting to lands to the east and west.

The Long Pond Woodlands parcel fronts on Route 137 and therefore falls within the Old King's Highway Regional Historic District established by the State legislature in 1973, acknowledged as one of the largest Historic Districts in the nation. (ATT. 2.9)

Preservation of these properties will help to protect a scenic wooded area along this section of Route 137, enhancing the rural integrity of the Historic District. This portion of Brewster has been developed at a very high density. Protecting this area from further development will help to retain some of that rural character.

These parcels also fall within the Town of Brewster Archaeological Resources mapped areas of Primary and Secondary Sensitivity. This generally includes all areas within 1,000 feet of marine ecosystems and particularly those areas within close proximity to fresh water. These areas have a high probability of containing prehistoric archaeological sites. One of the four most important areas for management consideration is the ponds of the Herring River Drainage system, of which Long Pond is one. The high bank overlooking the pond to the west would have been a particularly useful encampment site for pre-colonial inhabitants. (ATT. 2.10a&b)

# **PASSIVE RECREATION:**

While no public trails currently exist on the property, there are a number of hiking trails and wildlife pathways traversing the parcels and leading to the pond. Every Town survey that has been done indicates that residents

and visitors alike want more walking trails. This is an opportunity to provide public access to unfragmented woodlands via footpath for walking, nature observation and other passive activities.

# **<u>3. COMMUNITY BENEFITS</u>:**

Responses to the Town's Open Space and Recreation surveys, including the most recent one conducted in conjunction with the Town's 2013 update to its Open Space & Recreation Plan consistently have shown that preserving land for drinking water/pond protection and wildlife habitat preservation ranks high with the community.

The Brewster Vision Advisory Group Sessions have also reinforced the Open Space Committee's land preservation goals. This land acquisition responds directly to Community Goals listed in the Summary Papers for Community Character, Open Space and Water Resources.

• <u>Community Character</u>: (in part)

Support more land acquisition to maintain rural character. \*<u>Vision Goal</u>: Sustain and foster Brewster's historic setting, rural nature, small town feel.

• Open Space: (in part)

Figured prominently in the first Vision Workshop as a "Treasure". Participants valued open space because of its contribution to Brewster's rural character, low population density, tranquility, protection for the Town's drinking water supply, recreation and preservation of natural habitat.

Acquiring land for recreation and habitat protection was noted as a "Significant Opportunity". Survey responses were consistent with results from the 2013 Open Space & Recreation Plan survey.

\*<u>Vision Goal</u>:

Maintain and expand open space assets to provide public recreation, protect fragile natural habitat and protect water resources.

• <u>Water Resources:</u> (in part)

Freshwater ponds are important assets to the Town for their aesthetic and recreational values. They are pertinent to clean drinking water and there is a direct relationship between protecting open space and preserving water quality throughout the Town.

Approximately 40% of the land area that contributes water to the Town's drinking water wells is protected open space.

Key issues: Implementation of stormwater management regulations to minimize water quality impacts to groundwater, ponds and coastal waters.

\*Vision Goal:

Protect Brewster's freshwater system to preserve high quality drinking water and maintain or improve the health of our ponds and marine watersheds. Expand open space protection around Town wellfields. Protect water quality of the Town's marine watersheds

# **<u>4. COMMUNITY SUPPORT</u>:**

There are a number of partners in this project. The Compact of Cape Cod Conservation Trusts, Inc. (COMPACT) and The Brewster Conservation Trust (BCT) have facilitated a number of Town purchases and Conservation

Restrictions over the last few years. Mark Robinson, Director of the COMPACT provided negotiation and technical assistance towards this acquisition, drafted the Purchase and Sale (P&S) Agreement, and will draft the Conservation Restriction, on behalf of the Town. Letters of support and comment are attached. (ATTs 4-5)

# 5. TIMELINE:

As described above, the Long Pond Woodlands Conservation Project came about as a direct result of the Open Space Committee's targeted outreach. It is expected that this parcel will close by January 2019.

# 6. CREDENTIALS:

The Open Space Committee has a long track record of bringing important conservation, watershed protection and open space parcels to the attention of the Community Preservation Committee and the Town. The Open Space Committee has the assistance of several partners in this project; the COMPACT and the BCT.

# 7. BUDGET:

Long Pond Woodlands Conservation Project Appraisal: Estimation of Value- December 1, 2017: \$1, 900,000 Linda Coneen, MRA, SRA, Real Estate Appraiser Cape Cod & Islands Appraisal Group LLP 95 Rayber Road Orleans, MA 02653

## Long Pond Woodlands Conservation Project Funding:

Town of Brewster -CPC Funds - \$1,750,000(gross, net will be smaller with BCT and any grant funds)Brewster Conservation Trust\$ 230,000Any Project related costs: up to\$ 35,000

The Town could be eligible to apply for three grants: the State L.A.N.D. Grant, State Drinking Water Grant and Federal Land and Water Conservation Fund Grant.

# **8. MAINTENANCE**:

This parcel will be under the custody and control of the Brewster Conservation Commission and will be maintained by them. The Brewster Conservation Trust will hold and monitor the Conservation Restriction.

# The Brewster Open Space Committee March 14, 2018

# **LIST OF ATTACHMENTS:**

1. Draft Town Meeting Article

# 2. MAPS:

- 2.1 Assessor's Locus Town Map of Proposed Acquisition Showing Surrounding Parcels
- **2.2a** USGS Topographic Locus Map (1977)
- 2.2b Aerial View of Proposed Acquisition
- **2.3** Protected Open Space Map (with surrounding land uses)
- 2.4 MassAudubon MAPPR Habitat Analysis Local
- 2.5a State Priority Habitat: BioMap2 Living Waters Supporting Watershed
- 2.5b Statewide Land Conservation Plan
- 2.5c MA Natural Heritage Endangered Species Program (NHESP) Priority Habitat of Rare Species
- 2.6a Water Protection District of Critical Planning Concern
- 2.6b ZONE II of Contribution to Public Water Supply
- 2.7 Map of Brewster's Ponds by Category: Long Pong is Tan which is Impaired
- 2.8 Herring River Watershed
- 2.9 Old King's Highway Regional Historic District
- 2.10 Town of Brewster Archaeological Resourcesa) Archaeological Resources Mapb) Map Notes for Archaeological Resources Map

# **3. PHOTOS:**

- 3.1. Long Pond Woodlands Property: Six photos from Cape Cod & Islands Appraisal of property
- 3.2 Aerial view of Long Pond

# 4. Local Letters of Support:

- a. Brewster Water Department, Board of Water Commissioners/ Paul Anderson, Superintendent
- **b.** Brewster Conservation Commission, Michael Tobin, Chair
- c. Thomas C. Cambareri, Technical Services Director for Water Resources, Cape Cod Commission

# 5. Letter of Support from Conservation Restriction Holder – Brewster Conservation Trust

The Brewster Open Space Committee March 14, 2018

# **CATEGORY SPECIFIC CRITERIA**

## (Identify which of the following criteria apply to your project.)

#### **Open Space Proposals**

- ☑ Permanently protect important wildlife habitat, including areas of significance for biodiversity, diversity of geological features and types of vegetation, contain a habitat type that is in danger of vanishing from Brewster or preserve habitat for threatened or endangered species of plants or animals.
- Improvide opportunities for passive recreation and environmental education.
- Enhance or protect wildlife corridors, promote connectivity of habitat and prevent fragmentation of habitats.
- In Provide connections with existing trails or potential trail linkages.
- Preserve scenic views or border a scenic road.
- ☑ Protect drinking water quantity and quality.
- □ Provide flood control/storage.
- I Preserve important surface water bodies, including wetlands, vernal pools or riparian zones.
- Preserve priority parcels in the Town's Open Space Plan/maximize the amount of open land owned by the Town of Brewster.

# **Historical Preservation Proposals**

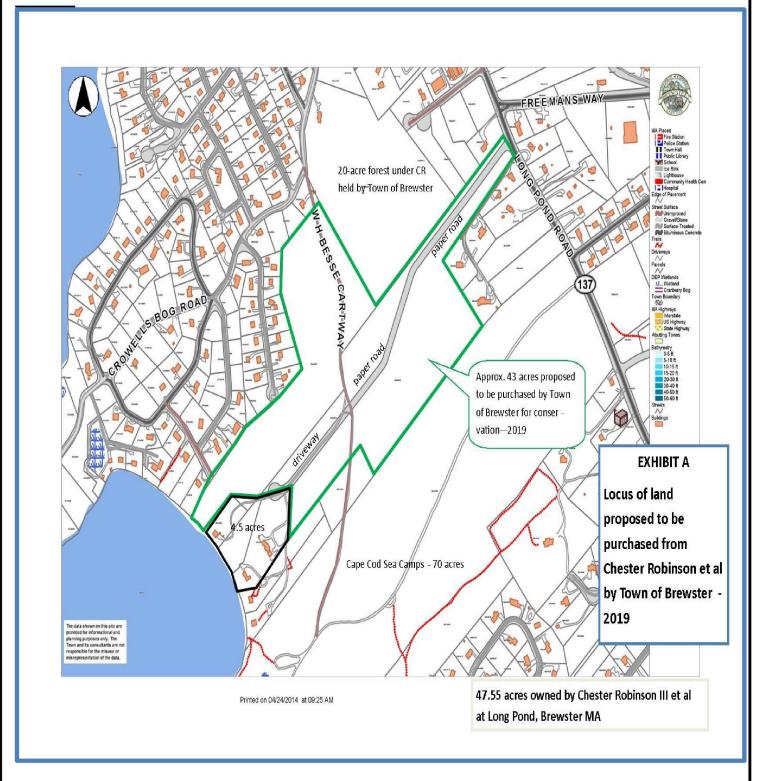
- MANDATORY: Must be on the State Register of Historic Places <u>or</u> have a letter from the Brewster Historic Commission indicating that the resource has been determined to be significant in the history, archaeology, architecture, or culture of Brewster.
- MANDATORY: Project must meet Secretary of the Interior Standards for rehabilitation and/or
- X Protect, preserve, enhance, restore and/or rehabilitate historic, cultural, architectural or archaeological resources of significance, especially those that are threatened;
- □ Protect, preserve, enhance, restore and/or rehabilitate town-owned properties, features or resources of historical significance;
- □ Protect, preserve, enhance, restore and/or rehabilitate the historical function of a property or site;
- Be within the local historic district, listed on a state or national historic register, or listed in the Brewster cultural resources inventory;
- Demonstrate a public benefit and/or public access, or
- □ Otherwise provide permanent protection for maintaining the historic resource.

# **Community Housing Proposals**

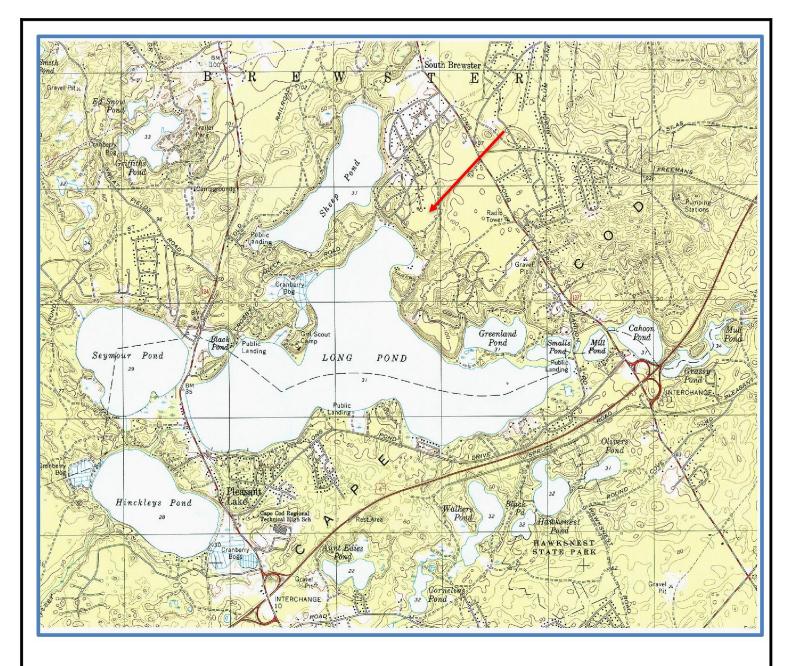
- □ Contribute to the goal of achieving 10 percent affordable housing;
- □ Promote a socioeconomic environment that encourages diversity;
- □ Provide housing that is harmonious in design and scale with the surrounding neighborhood;
- □ Ensure long-term affordability;
- □ Promote use of existing buildings or construction on previously-developed or Town-owned sites;
- □ Convert market rate to public subsidized units;
- □ Provide an appropriate mix of rental and ownership housing;
- Give priority to local residents, town employees, employees of local businesses as allowed by law.

# **Recreation Proposals**

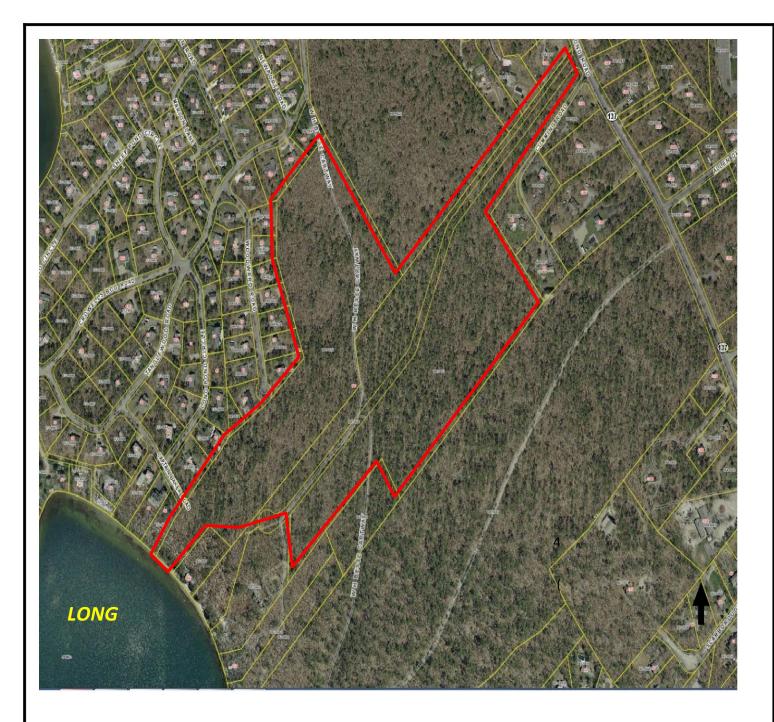
- □ Support multiple active and passive recreation uses;
- X Serve a significant number of residents and visitors;
- X Expand the range of recreational opportunities available to all ages of Brewster residents and visitors;
- □ Benefit other Brewster committees providing recreational resources to residents;
- □ Promote the use of alternative corridors that provide safe and healthy non-motorized transportation :



# ATT. 2.1: ASSESSOR'S LOCUS MAP OF PROPOSED ACQUISITION SHOWING SURROUNDING PARCELS:

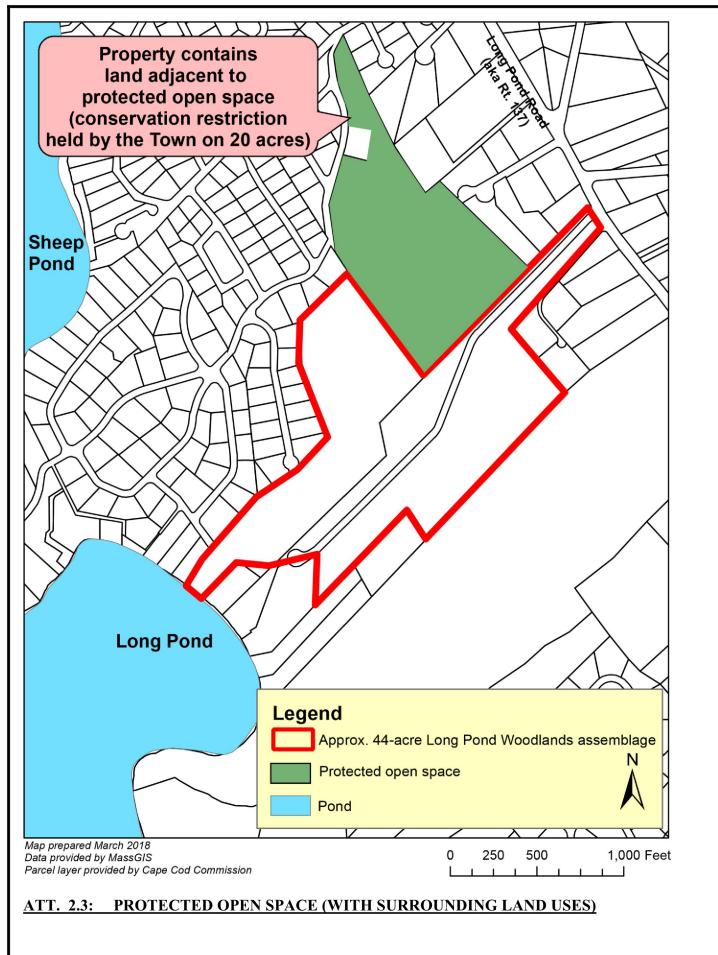


#### ATT. 2.2a: USGS TOPOGRAPHIC LOCUS MAP (1977)



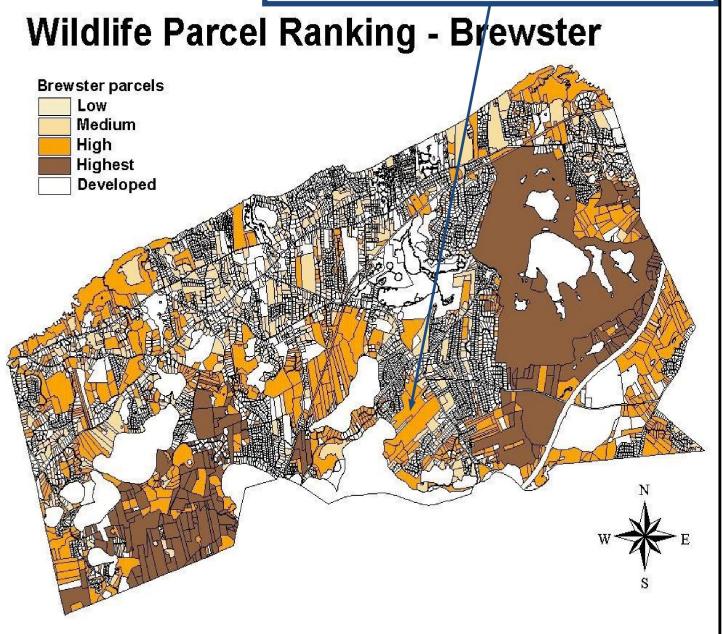
## <u>ATT. 2.2b : AERIAL VIEW OF LONG POND WOODLANDS PROPOSED ACQUISITION:</u> <u>42.01 ACRES</u>

Source: 2014 aerial orthophoto Brewster GIS

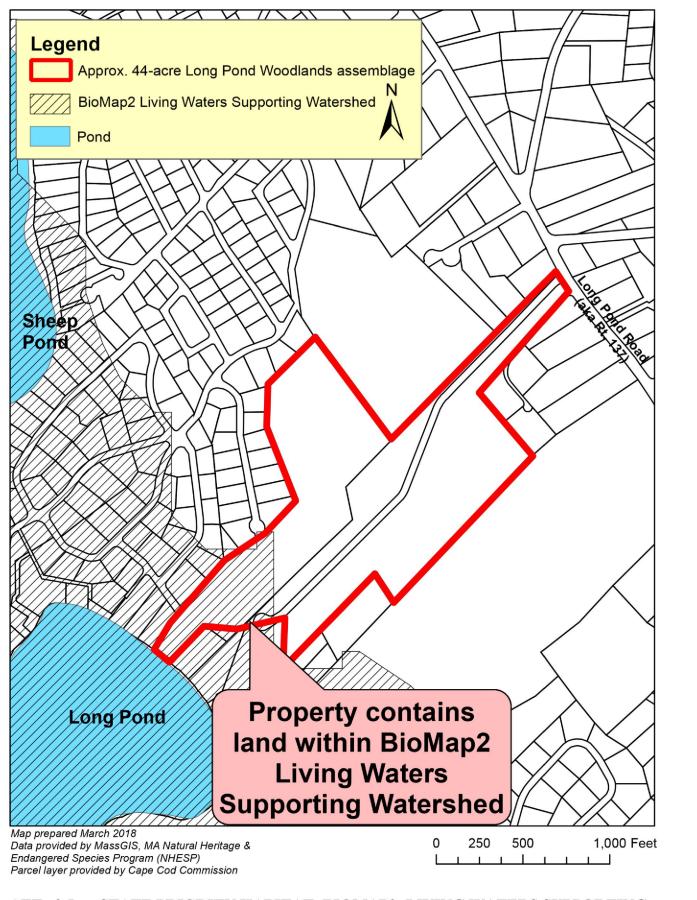


Regarding Wildlife Habitat Value compared to parcels within each of Barnstable County's 15 towns, the 42.01-acre proposed acquisition is ranked as a "High Priority" to protect regionally Capewide.

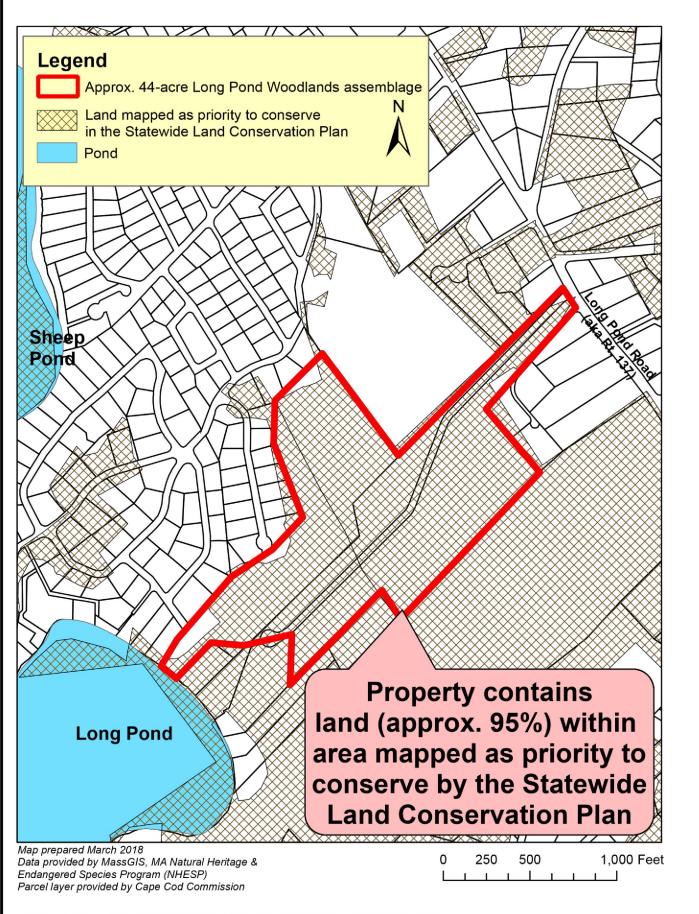
Source: The Compact of Cape Cod Conservation Trusts, 2004



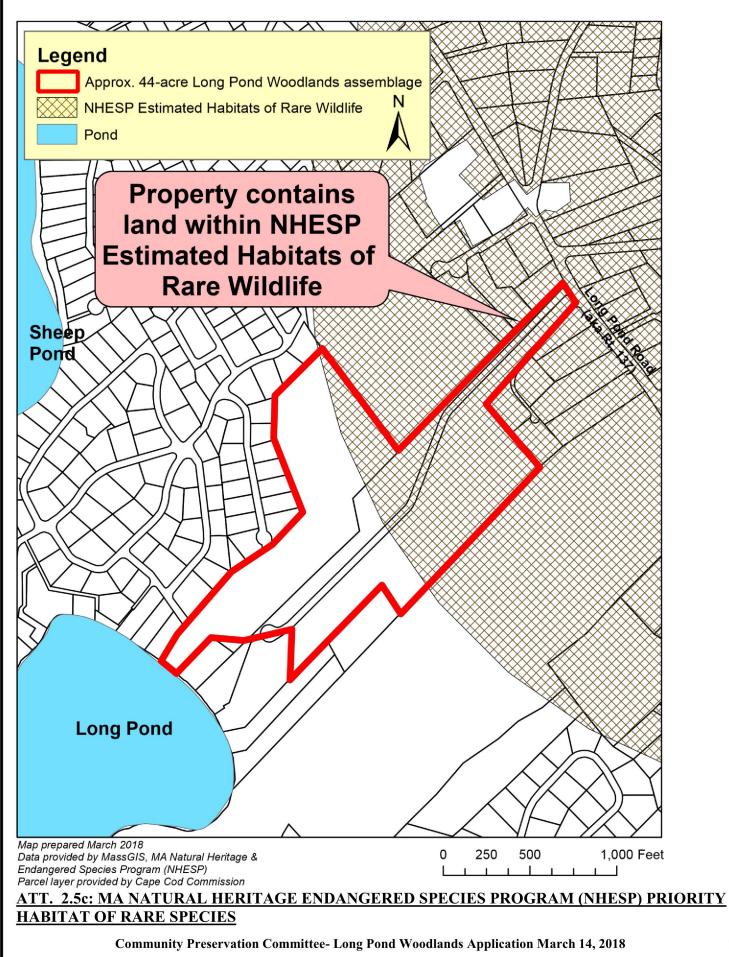
#### ATT. 2.4: MASS AUDUBON MAPPR HABITAT ANALYSIS

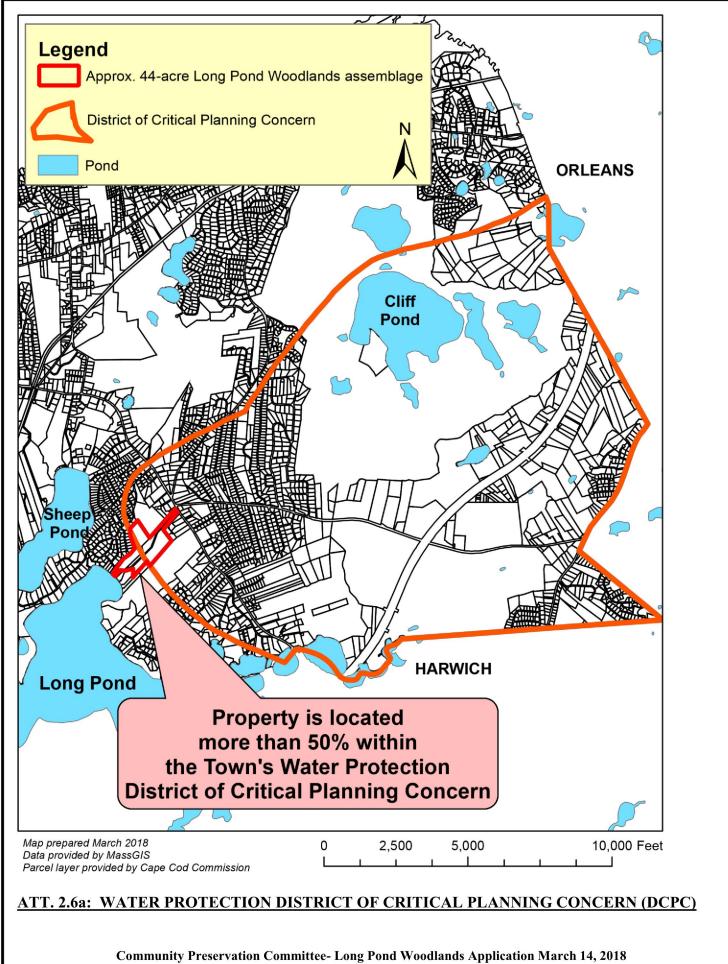


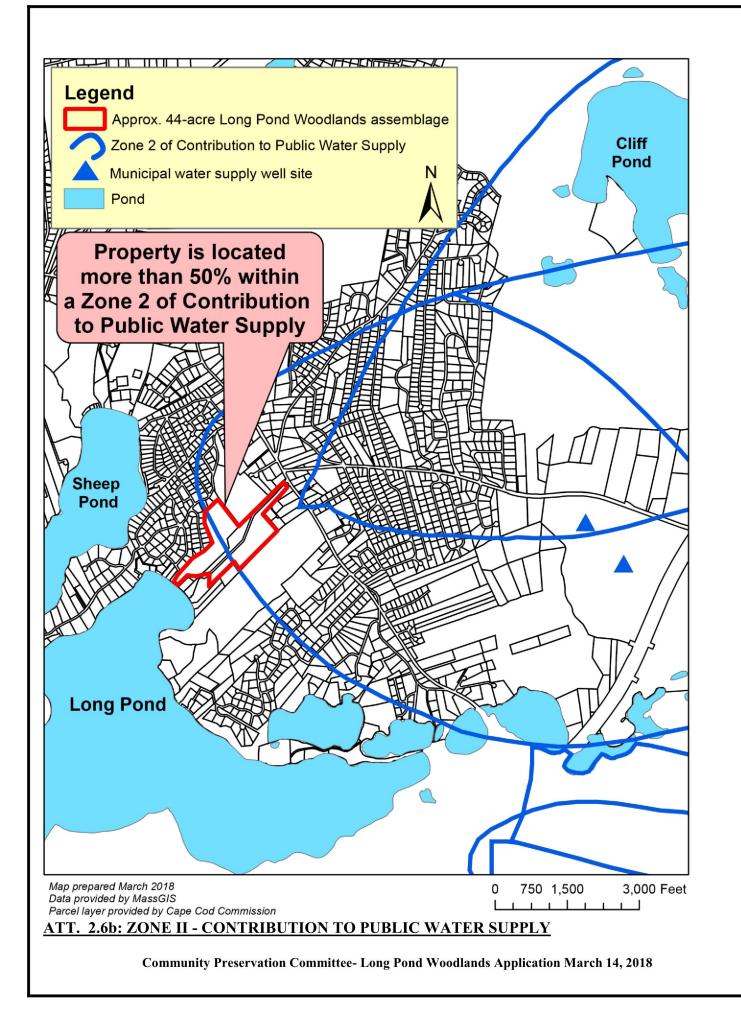
#### ATT. 2.5a: STATE PRIORITY HABITAT: BIOMAP2- LIVING WATERS SUPPORTING WATERSHED

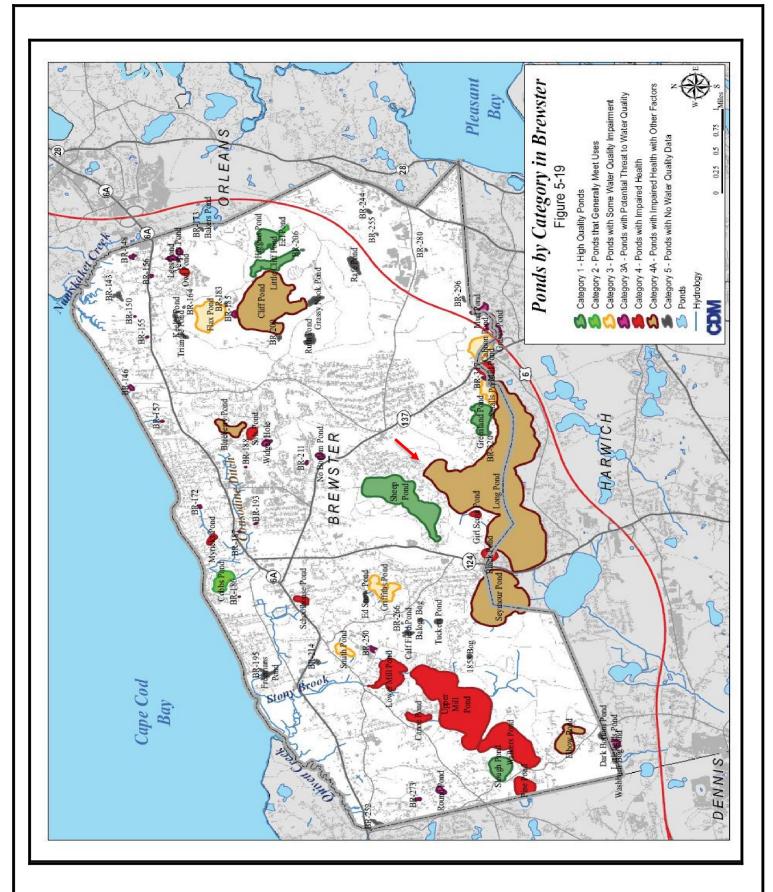


# ATT. 2.5b: STATEWIDE LAND CONSERVATION PLAN

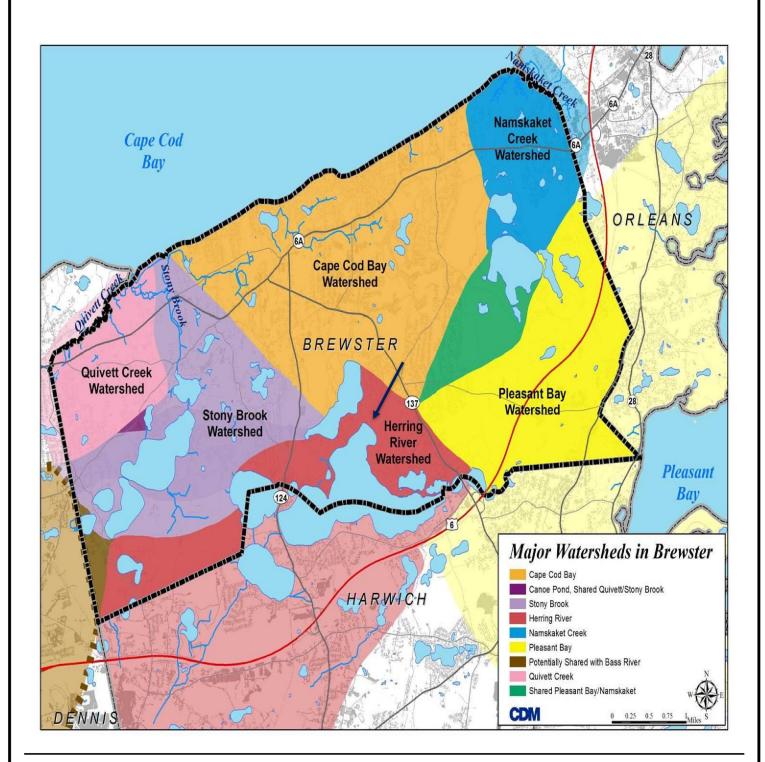




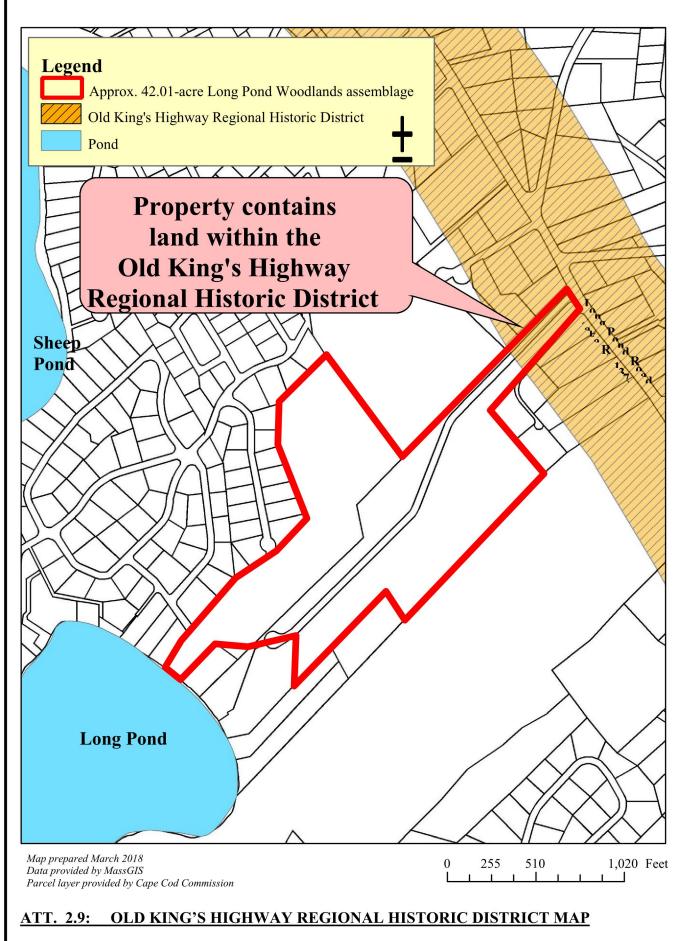


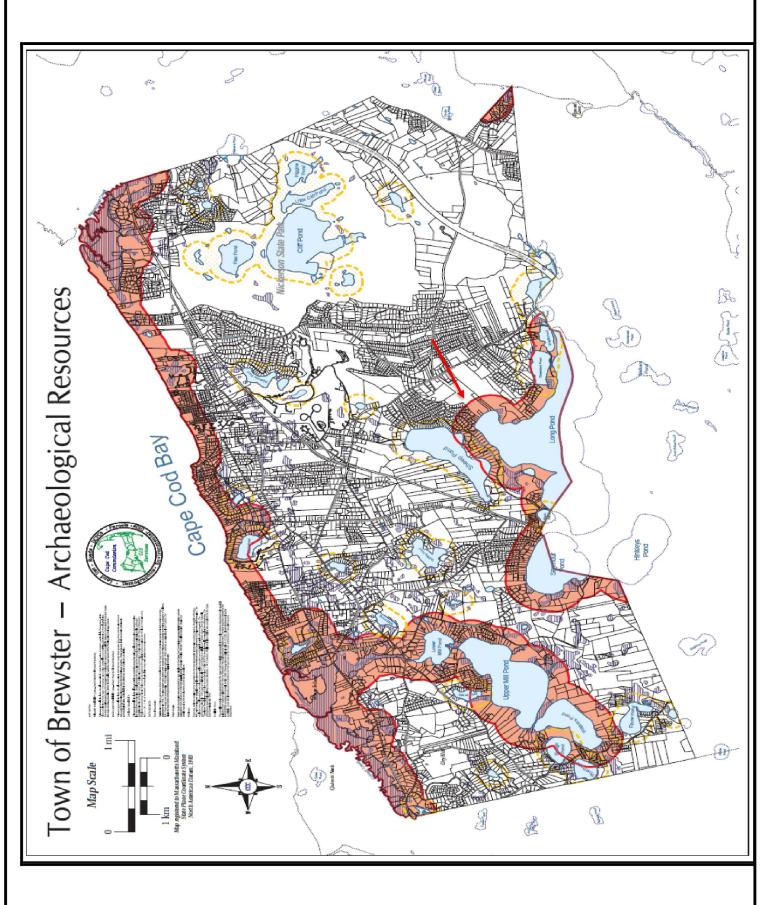


#### ATT. 2.7: PONDS BY CATEGORY – LONG POND IS CATEGORY 4A - IMPAIRED



# ATT.2.8: HERRING RIVER WATERSHED DELINEATION (red)





# ATT. 3.10a: BREWSTER ARCHAEOLOGICAL RESOURCES MAP

Community Preservation Committee- Long Pond Woodlands Application March 14, 2018

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# BREWSTER ARCHAEOLOGICAL RESOURCES MAP LEGEND/NOTES:

# PRIMARY SENSITIVITY (1,000-FOOT PROTECTIVE BUFFER ZONE-Pink area):

This area generally includes all areas within 1,000 feet of a marine ecosystem, particularly those areas within close proximity to fresh water. These areas have a high probability of containing prehistoric archaeological sites. The four most important areas for management consideration based upon available data are: Namskaket Creek and marsh, the Cape Cod Bay shoreline, Stony Brook Valley, and the major ponds of the Herring River Drainage System.

## SECONDARY SENSITIVITY (500-FOOT PROTECTIVE BUFFER ZONE-Yellow dashed line)

This area generally includes all areas within 500 feet of a water body greater than 3 acres in size that are not a part of the Herring River or Stony Brook drainage systems. These areas are likely to contain prehistoric archaeological sites, particularly is they intersect areas of primary sensitivity.

## **TERTIARY SENSITIVITY:**

This area generally includes all areas within a protective zone that skirts wetlands of any size and water bodies less than three acres in size. Developments that may disrupt the natural character or inhibit public safety are prohibited in this protective zone. *The delineation of the protection zone is defined in the Town of Brewster's Wetlands Conservancy District Bylaw* and are subject to the regulations that constitute the Wetlands Protection act, MGL.c.131, --40, as amended. Archaeological sites may exist within these environments.

Maps originally produced in 1993, with revision/updates in 1996 and 1998, by the Cape Cod Commission.

#### ATT. 2.10b: BREWSTER ARCHAEOLOGICAL RESOURCES MAP LEGEND/NOTES



Lot Interior: Access Road

Lot Interior



Lot Interior



Lot Interior: Access Road

# ATT. 3.1: INTERIOR VIEW OF PROPOSED ACQUISITION, INCLUDING VIEWS OF W.H.BESSE CARTWAY



### ATT. 3.2: AERIAL VIEW OF LONG POND – FROM THE EASTERN END LOOKING WEST

# ATT. 4a: BREWSTER WATER DEPARTMENT,

# ATT. 4b: BREWSTER CONSERVATION COMMISSION, MICHAEL TOBIN, CHAIR

#### 3225 MAIN STREET • P.O. BOX 226 BARNSTABLE, MASSACHUSETTS 02630

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

March 19, 2018

Paul Ruchinskas, Chair Community Preservation Committee 2198 Main Street Brewster, MA 02631

Dear Mr. Ruchinskas,

I am writing to express my support to the Town and its Open Space Committee for identifying the 43-acre Robinson parcel as a priority for acquisition. The property serves several important water resource issues.

CAPE COD

COMMISSION

The northern portion of the property is located in a Zone II or Wellhead Protection Area to Brewster's Drinking water supply wells. Given the numerous threats to drinking water quality, the primary protection strategy is to preserve such parcels as open space. Second, the parcel is located in a recharge area to Long Pond. It's acquisition, will serve to protect pond shore buffer area and prevent further phosphorous loading from potential development. Third, the parcel is an identified Priority Land Acquisition Parcel as suitable for potential water supply through our PLAPP program.

I wish you success in pursuing the protection of this important water resources parcel for Brewster.

Sincerely,

Tom Cambareri Technical Services Director for Water Resources Cape Cod Commission

Cc: Elizabeth Taylor, Chair Open Space Committee





#### **BREWSTER CONSERVATION TRUST**

Box 268 Brewster, Massachusetts 02631 www.brewsterconservationtrust.org

Elizabeth Taylor, Chairperson Brewster Open Space Committee

March 20, 2018

Dear Ms. Taylor,

On behalf of the Board of Trustees of the Brewster Conservation Trust, I am pleased to write in support of the Open Space Committee's request for Community Preservation Act funds for the purchase of a 43acre tract of land off Long Pond Road. This is one of the largest undeveloped parcels of land in Brewster and has several significant conservation-related attributes. A major portion of the parcel is in the southeast Brewster Zone II, therefore the purchase will contribute to the protection of our drinking water supply. As a pond-front lot, the purchase will help protect the water quality of Long Pond and provide public recreational access. And finally as a large tract, the purchase will help protect significant wildlife habitat. The protection of our drinking water supply, pond water quality, and wildlife habitat, and the expansion of passive recreation opportunities are all goals that are core to BCT's land preservation program and, indeed, to the entire Brewster community.

Because BCT strongly supports the protection of this parcel, the Board of Trustees has pledged \$230,000 toward the Town's purchase of the Long Pond parcel. Many times in the recent past, BCT and the Town have formed a partnership to fund to acquisition of critical open space parcels, and this is certainly one of the most critical that we could support.

We urge the CPC to support this project.

Best regards, # m/in

Hal Minis President

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#### ATT. 5: CONSERVATION RESTRICTION HOLDER- THE BREWSTER CONSERVATION TRUST, HAL MINIS, PRESIDENT