

Cohasset Master Plan: Open Space & Recreation

Introduction

The Town of Cohasset is a unique coastal community with lush forests, quiet coves, scenic vistas, open spaces and a variety of recreational amenities. Located approximately 23 miles south of Boston, this strikingly beautiful community is an attractive place to live. Due to the preponderance of both wetlands and rock ledge, development in Cohasset has historically been limited. However, since land is a finite resource, competing needs for housing, recreation, wildlife habitat and open space preservation exist. This has been further exacerbated as Cohasset is experiencing growth in areas that were previously undevelopable.

At the time of writing this Plan, the Town of Cohasset had just completed updating its Open Space and Recreation Plan (OSRP), which expired in 2017¹. The following information is taken primarily from the now complete 2018-2024 OSRP, which was prepared with the assistance of Beals and Thomas, Inc. and should be consulted for further detail. The OSRP provides a comprehensive overview of the Town's natural history, a detailed inventory of all open space and recreational resources in Cohasset, and recommendations for protecting and improving these resources. A Seven-Year Action Plan provides detailed steps for achieving the plan's goals and objectives, timeframe for achieving the action, and potential funding sources. This chapter of the Master Plan provides a summary of the recently completed OSRP and highlights its key recommendations, particularly those that pertain to other Master Plan elements such as transportation, housing, economic development, and land use.

The purpose of the OSRP is to:

- The OSRP update is also meant to detail local open spaces, natural resources, and recreational amenities to help guide the Town during the next seven years regarding how to best enhance and protect those resources.
- Recommend additional opportunities for acquisition, additional protection, or enhancement through the addition of specific facilities/amenities.
- Inform and educate local residents about their community and existing open space, natural resources and recreational amenities and why they are important.
- Create the momentum needed for the Open Space & Recreation Committee to begin implementation of the action items detailed in Section 9 of the OSRP.
- Make the Town eligible to receive grant funding that can cover some of the cost for open space acquisition and park renovations, once the plan has been approved by the Division of Conservation Services.

¹ The Division of Conservation Services conditionally approved the OSRP in April 2019.

Key Findings

- Cohasset has approximately 2,935 acres of open space and recreational lands (including public and private conservation land), which comprises approximately 46% of the Town's total land area (excluding coastal waters such as Cohasset Harbor). 1,965 of those 2,935 acres of open space is permanently protected.
- The number of children and elders in Cohasset grew from 2000 to 2010. To meet the needs of its population, the Town's recreation and open space resources must serve both an older adult population of comfortable means and a growing number of families with children.
- Cohasset's Department of Public Works (DPW) has the primary responsibility for maintaining the Town's parks and open space. More resources are needed to effectively manage these properties.

Existing Conditions

Geology, Soils, and Topography²

Geology

The majority of Cohasset's bedrock is comprised of Dedham granite. The prevalent bedrock within Cohasset has historically represented a development constraint, although more recent blasting capabilities, Town sewer capacity and advances in septic technology have made previously undevelopable areas available.

Glacial action is responsible for the town's surficial geology; glacial retreat approximately 12,000 years ago carried soils, rocks and boulders, and, as the glaciers melted, deposited glacial till on the ground surface. Cohasset contains many boulders transported by glacial action and then perched atop one another, or "glacial erratics". Rooster Rock, Bigelow Boulder, and Ode's Den, all in Whitney and Thayer Woods, and Big Tipling in Wheelwright Park are among the most well-known glacial erratics. Cohasset's present swamps and marshes were formed from small water bodies created during the extended process of glacial retreat that became vegetated.

Topography

The rocky topography prevalent in Cohasset produces many small changes in elevation, while more significant changes in elevation due to the town's glacial past create a ranging topography that includes features from coastal estuaries to inland hills. "A number of the oval, rounded hills known as drumlins, which were also created during the retreat of the glaciers, can be found in the vicinity of Route 3A. These include Turkey Hill, Scituate Hill, Deer Hill, Bear Hill, James Hill, and

² Cohasset Open Space and Recreation Plan 2018-2024

Walnut Hill. Turkey Hill, on the border with Hingham, is the highest point in Cohasset at 187 feet above sea level.”

Soils

The majority of soils within Cohasset represent a constraint for development as they generally either contain prevalent stones and boulders or are poorly drained.

MassGIS indicates that approximately 40 different soil types occur in Cohasset. Prime soils constitute those exhibiting the most advantageous combination of physical and chemical characteristics for farming use and that are also available for farming uses. Important farmland soils include soils that nearly qualify for prime status, and that “economically produce high yields of crops when treated or managed according to acceptable farming methods.”

Of the soils occurring in Cohasset, the two most prevalent (by acre) soil types are Hollis-Rock outcrop-Charlton complex (HrC) and Rock outcrop-Hollis complex (RoD). Although neither of these soil types are considered prime farmland soils, there are other important farmland soils present throughout the Town.

The most dominant soil type in Cohasset is HrC, which is described as “gently sloping and strongly sloping soils and areas of exposed bedrock on hills and ridges where the relief is affected by the underlying bedrock...The shallow, somewhat excessively drained Hollis soil is on the tops of ridges or is near rock outcrops. The very deep, well drained Charlton soil is in low pockets and saddles. Stones and boulders 10 inches to 10 feet in diameter cover 0 to 15% of the surface.” Additionally, depth to the seasonal high water table occurs at greater than 6 feet with HrC soils. Slope and shallow bedrock depth are the main development limitations associated with HrC soils.

RoD soils are generally unsuitable for development, mainly due to prevalent bedrock exposures. Seasonal high water and wetland characteristics associated with the mucky soils (Sw, Fm and Fp) also represent significant development constraints. Seasonal high water and slow to very slow permeability represent the main limitations of RgB soils, especially with regard to installation of septic systems, although development can be accommodated with consideration of mechanisms to avoid water damage. Seasonal high water and slow permeability are also constraints for NpC and NpD soils.

Water Resources

Watersheds

Cohasset has a number of fresh and salt water resources and a varied natural landscape that includes harbors, rivers, estuaries, marshes, ponds, and wildlife habitats. According to the 2018 OSRP, the Town is located within two major watersheds: South Coastal and Boston Harbor. The majority of Cohasset lies within the South Coastal watershed, however, the northern portion of the Town and those areas draining to Great Swamp, Turkey Hill Run, and Rattlesnake Run, are located within the Boston Harbor watershed.

Surface Waters

Cohasset contains both salt and freshwater resources. In addition to the Atlantic Ocean, saltwater bodies include Cohasset Harbor, Little Harbor, the Gulf River estuary, and Straits Pond.³ Straits Pond lies within the northernmost portion of Cohasset, within the Weir River Area of Critical Environmental Concern (ACEC) and is located in both the Towns of Cohasset and Hull.⁴ Straits Pond is an Outstanding Resource Water⁵ due to its location within an ACEC.⁶

The Gulf River estuary is located in both the Towns of Cohasset and Scituate. This unique water feature lies in the southeastern portion of Cohasset and includes salt marshes, tidal flats and other lands subject to tidal action.

The major freshwater bodies within Cohasset are the Aaron River Reservoir, Lily Pond, Sanctuary Pond, Treat's Pond, Aaron River, Bound Brook, Peppermint Brook, Herring Brook, Brass Kettle Brook, James Brook, Turkey Hill Run, Richardson's Brook, and Rattlesnake Run.⁷ Smaller ponds, streams, and seasonal wet places are also present throughout the Town. Note that Lily Pond and the Aaron River Reservoir are surface drinking water supplies. Therefore, Lily Pond and the Aaron River Reservoir, as well as the streams and wetlands tributary to these surface waters, are Outstanding Resource Waters. James Brook runs through Cohasset center, the most densely developed portion of Town, where it passes through a culvert under the village center and emerges south of Elm Street and drains into Cohasset Harbor.⁸

Cohasset maintains significant surface water supplies in the Aaron River Reservoir and Lily Pond, as well as groundwater supplies through its wells. The Town of Cohasset Water Department has achieved significant protection for these resources by protecting associated watershed lands, and the Town maintains an awareness of developments in adjacent towns that may impact Cohasset's water supply. Cohasset also recently completed installing multiple rain gardens throughout town to address stormwater runoff. The Town has recently also completed a sewer expansion project around Little Harbor. Smaller steps that could be investigated to further protect Cohasset's water supplies include addressing failing septic systems as quickly as possible and continuing education of the public with regard to sources of nonpoint pollution. Additionally, although the majority of Cohasset's surface water supplies are surrounded by protected lands, King Street lies adjacent to Lily Pond to the northeast, and the potential for spills from accidents exists.⁹

Wetlands

Cohasset contains many wetland types from coastal (including beaches, dunes, salt marshes, tidal flats and rocky intertidal shores) to inland (deciduous, coniferous and mixed forested swamps,

³ Open Space & Recreation Committee, Cohasset Open Space and Recreation Plan 2010-2017.

⁴ Massachusetts Department of Conservation and Recreation. "Weir River." ACEC Designations.

⁵ Outstanding Resource Waters include Class A Public Water Supplies and their tributaries, certain wetlands and other waters as determined by the Department based on their outstanding socio-economic, recreational, ecological and/or aesthetic values. [310 CMR 4.04(3)].

⁶ Massachusetts Surface Water Quality Standards [314 CMR 4.00].

⁷ Cohasset Open Space and Recreation Plan 2018-2024

⁸ Cohasset Open Space and Recreation Plan 2018-2024

⁹ Cohasset Open Space and Recreation Plan 2018-2024

scrub-shrub swamps, freshwater marshes, and wet meadows) as well as mixed saltwater/fresh water resources such as estuaries and brackish areas.

These crucial wetland landscapes provide a variety of functions, including the protection of public and private water supply; the protection of groundwater supply; flood control and storm damage prevention; the prevention of pollution; the protection of fisheries and shellfish; and wildlife habitat.¹⁰

Saltwater wetlands are located in the northern and eastern portions of Cohasset bordering on the Gulf River estuary, parts of Cohasset Harbor, Straits Pond, and portions of Little Harbor. Major freshwater wetland areas include:

- The Great Swamp,
- The area between Lily Pond and the Aaron River Reservoir,
- Brass Kettle Brook and Bound Brook,
- Breadencheese Swamp (near the town transfer station and former landfill, north of Cedar Street),
- Jacob's Meadow (adjacent to James Brook between South Main Street and Elm Street),
- Eighteen certified vernal pools, and
- Ellms Meadow (adjacent to James Brook between Cushing Road, James Lane and the MBTA Railroad).¹¹

Flood Hazard Areas

The Federal Emergency Management Agency (FEMA) has identified areas in Cohasset that are predicted to be most prone to flooding, these are detailed in Flood Insurance Rate Maps (FIRM). Because of Cohasset's extensive river and tributary system, many flood hazard areas are spread throughout the town. The areas subject to flooding depicted on the FEMA maps generally include the basins of James Brook, Brass Kettle Brook, Bound Brook, Turkey Hill Run, Rattlesnake Run, Aaron River, the Gulf River, Lily Pond, Straits Pond, Aaron River Reservoir, and portions of tributaries thereto.¹²

The following is excerpted from the Town's Flood Insurance Study dated September 29, 1986:

"Due to its coastal New England location, Cohasset is highly susceptible to northeasters...northeasters often last long enough to be accompanied by at least one high tide, which results in the most severe flooding conditions..."

In addition to flooding, damaging waves may result in areas with sufficient fetch length, water depth, and exposure to winds. The outer coastline from the Cohasset-Hull town boundary to the White Head section of Cohasset Harbor is susceptible to damaging waves.

¹⁰ Cohasset Open Space and Recreation Plan 2018-2024

¹¹ Open Space & Recreation Committee, Cohasset Open Space and Recreation Plan 2010-2017.

¹² Cohasset Open Space and Recreation Plan 2018-2024

Seaward of the western side of Pleasant Beach is an ancient river channel which extends from the beach to approximately 1,500 feet offshore. The depth of water at this channel is significantly deeper than at other parts of the beach. These greater depths are a pathway for higher wave energy to reach the shore. The result is more overtopping and seepage at this part of the dune than at other sites in the system.

Inland riverine flooding is also a major concern in Cohasset. During peak runoff seasons and high intensity storms, inland flooding occurs along Turkey Hill Run and in the downtown Pleasant Street area where James Brook passes through a long culvert...”¹³

In addition, Cohasset Harbor and the lowland shores of Little Harbor are subject to flooding and velocity hazards (wave action). In 2018, the Town of Cohasset was awarded a Municipal Vulnerability Program (MVP) Grant through the Commonwealth of Massachusetts to become a proactive planning community. Cohasset has partnered with the Metropolitan Area Planning Council (MAPC) and the Cohasset Center for Student Coastal Research (CSCR) to bring together community members and citizens to comprehensively identify and prioritize steps to reduce risk and improve resilience throughout Cohasset. The plans will analyze future climate projections, including heat, drought, inland flooding, and sea level rise. Potential impacts will be considered to public and private infrastructure, vulnerable populations, natural resources, public health, and the local economy. This work will tie into the revised Harbor Plan currently being worked on by the Harbor Committee.

Vegetation

Cohasset is vegetated with a variety of plant species commonly found on well-drained upland soils throughout southeastern Massachusetts. White oak and pine forests dominate the upland forest other common species include American holly and Eastern hemlock.

Cohasset has over three thousand acres of forested land. Remaining sizable tracts of forested land within Cohasset include:

- Wompatuck State Park
- Whitney and Thayer Woods
- Turkey Hill
- Wheelwright Park
- Great Brewster Woods
- Barnes Wildlife Sanctuary
- Cornelia and Richardson White Woods
- Wooded portions of Cohasset Country Club
- Turtle Island and vicinity
- Reeds Corner and vicinity
- Walnut Hill and vicinity

¹³ Flood Insurance Study Town of Cohasset, Massachusetts Norfolk County, dated September 29, 1986. Federal Emergency Management Agency.

- Adjacent to Deer Hill
- Water Department parcels around Lily Pond
- Brass Kettle Brook area off King Street

Rare Species

Below are the four rare plant species found in Cohasset that are listed as threatened under the Massachusetts Endangered Species Act (MESA):

- Swamp dock (*Rumex verticillatus*)
- Seabeach Dock (*Rumex pallidus*)
- Green Adder's Mouth (*Malaxis unifolia*)
- Adder's-tongue Fern (*Ophioglossum pusillum*)

Wildlife

Vernal Pools

Vernal pools serve as an important breeding ground and are home to a number of amphibians and invertebrate animals. Also known as ephemeral pools, autumnal pools, and temporary woodland ponds, these natural sites fill with water in the fall or winter due to rain and rising groundwater. They stay ponded through the spring and into summer, but tend to dry completely by the middle or end of the summer. This occasional drying prevents fish from permanently populating the pools, allowing amphibians and invertebrate species to reproduce without being targeted by fish predators.¹⁴

The Massachusetts Natural Heritage and Endangered Species Program (NHESP) has certified 18 vernal pools in Cohasset as of 2017. This is twice the number of certified vernal pools reported in the 2002 Cohasset Open Space and Recreation Plan. Certified vernal pools can usually be protected from development and are afforded protection under a number of state regulations. There are another 86 potential vernal pools in Cohasset that have been identified, but not certified by NHESP.

Rare Species

Four wildlife species of special concern listed by Massachusetts Endangered Species Act (MESA) have been found in Cohasset. These animal species include the least tern (*Sternula antillarum*), umber shadowdragon (*Neurocordulia obsoleta*), mocha emerald (*Somatochlora linearis*), and attenuated bluet (*Enallagma daeckii*). Another rare animal species of special concern is the Eastern Box Turtle (*Terrapene carolina*).¹⁵ Threats to the species include habitat destruction, road mortality, and collection for pets. Protecting their habitat, including ensuring that it does not become fragmented, is important for continuation of the species.

¹⁴ "Vernal Pools," MA EOEEA, www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/vernal-pools

¹⁵ Open Space & Recreation Committee, Cohasset Open Space and Recreation Plan 2002-2006, June 2001, Section 4.

Wildlife Migration Corridors

Wildlife corridors become increasingly important as natural areas are inevitably divided by development. In the resulting isolated open spaces, the long-term survival of various wildlife populations depends upon patch size, the number of patches, and how isolated each patch is from the next. In order to conserve biodiversity, it is imperative to maximize both the number and size of protected individual natural areas, while maintaining bands of undisturbed lands to connect them.¹⁶

“Broad forested areas parallel to streams and rivers form natural wildlife corridors. The Aaron River/Brass Kettle Brook/Bound Brook system forms the core of Cohasset’s most important wildlife corridor” that links the Aaron Reservoir and Wompatuck State Park with Lily Pond, Bailey Conservation Land in Scituate, and the Gulf River estuary system. Additional significant riparian wildlife corridors include the Gulf River estuary and adjacent woodlands, a tributary stream to the Gulf River, Rattlesnake Run and associated wetlands, and the stream corridor flowing to Little Harbor within the Cabot & White Conservation Land. The opening of Weir River Farm, which lies adjacent to Turkey Hill, to the public by the Trustees of Reservations in 2000 created contiguous open space connecting Turkey Hill, Whitney and Thayer Woods, and Wompatuck State Park.¹⁷

In general, the significant areas of contiguous “natural” areas within Cohasset and adjacent communities are also likely to contain wildlife corridors. Conversely, the recent reestablishment of the MBTA rail line through Cohasset may have bisected and thus eliminated former wildlife corridors. Development also has the potential to fragment corridors.¹⁸

Although the above-discussion focuses on local wildlife corridors, parts of Cohasset also play important roles in broader migratory corridors. Specifically, coastal areas on the South Shore are renowned for their importance to migrating birds. Essentially, any open space with cover and food is important to migrating birds, while the waters of Massachusetts Bay proximate to Cohasset provide important feeding habitat for terns during the summer. The air space above Cohasset is full of migrating birds, although they may not touch down in Cohasset, since many of the birds passing through Massachusetts during migration do not follow narrow routes.¹⁹

Environmental Challenges

Hazardous Waste Sites

Wompatuck State Park originated as the Hingham Naval Ammunition Depot that served the North Atlantic fleet during World War II. Some of the oldest farms in Cohasset were taken by the federal government to create the depot. When the land was declared surplus by the federal government, it was given to the Commonwealth of Massachusetts. The current site contains contamination associated with the historic federal defense facility. Although the contamination lies within the portion of Wompatuck in Hingham, it is within the watershed of Brass Kettle Brook and

¹⁶ Cohasset Open Space and Recreation Plan 2018-2024

¹⁷ Open Space & Recreation Committee, Cohasset Open Space and Recreation Plan 2010-2017.

¹⁸ Cohasset Open Space and Recreation Plan 2018-2024

¹⁹ Cohasset Open Space and Recreation Plan 2018-2024

Lily Pond. Water quality testing led the Army Corps of Engineers to conclude that the remaining contamination is unlikely to migrate toward Lily Pond.²⁰

Water Pollution

Cohasset maintains spill control equipment to address potential oil releases with potential to affect the water supply, and activities proximate to wetlands and water bodies are subject to the jurisdiction of the Conservation Commission. Several water bodies in Cohasset are presently polluted, including Straits Pond, where fishing is not allowed due to coliform bacteria, and Little Harbor, which no longer contains productive shellfish beds. Stormwater runoff pollutes all water bodies in Cohasset to some degree. The major contributing factor to the Harbor's pollution problem that causes an inability to sustain shellfish beds is the outflow from the Gulf River. The properties bordering the Gulf River on all sides in North Scituate and South Cohasset do not have sewer access and have older septic systems that drain into the river. Until the two communities can execute a sewer plan to reduce septic pollution into the Gulf River this condition will continue.

One particular area of pollution is the outfall from Jacob's Meadow into the harbor. Although proposed, the boat pump-out station noted in the prior OSRP as being installed at the town pier at Government Island was never constructed. Cohasset does maintain a pump-out boat. However, Cohasset's coastal waters have been designated as a "No Discharge Area" for boat sewage. The recent expansion of sewer services will also decrease water pollution, as failing septic systems can result in significant impacts, including bacterial and nutrient contamination, to ground and surface water bodies. Additionally, the Stormwater Management Bylaw will also enhance ground and surface water protection. The Town of Cohasset has installed over 50 rain gardens to address stormwater runoff and to educate the public regarding Low Impact Stormwater Management techniques.²¹

Scenic Resources and Unique Features

The Town of Cohasset has a wealth of scenic resources and views. In an effort to protect the Town's scenic drives and vistas, a Scenic Roads bylaw was adopted through Town Meeting in 2017. This confers protection to the trees and historic stone walls lining the streets that receive the designation, which is assigned via a straightforward petition process. The following places have been identified by residents as treasured scenic resources:

- Little Harbor
The Atlantic shore contrasts with the intimacy of Little Harbor, with its granite islands, and the twists and turns of the Gulf River, fringed by salt marshes
- The Town Common

²⁰ Open Space & Recreation Committee, Cohasset Open Space and Recreation Plan 2010-2017.

²¹ Cohasset Open Space and Recreation Plan 2018-2024

“The Town Common, set off by dignified historic buildings, communicates a classic image of New England calm and simplicity. The Cohasset Town Common is often considered to be among the finest surviving examples of an original New England town common.”²²

- Turkey Hill

Turkey Hill, which is nearly entirely surrounded by open space, lies on the Cohasset-Hingham town boundary and offers broad views of Boston Harbor and the Atlantic Ocean. Cohasset’s highest point occurs within the 20 acres of the Turkey Hill parcel that lie within the town. Turkey Hill was acquired with cooperation between the Towns of Cohasset and Hingham, The Trustees of Reservations, the Cohasset Conservation Trust, and the Hingham Land Conservation Trust.²³

Being on the coast, Cohasset has unique marine and estuarine systems including salt marshes, tidal flats, and barrier beaches. Cohasset has approximately 160 acres of salt marsh, 287 acres of tidal flats, and three segments of barrier beach for a total of 20 acres²⁴. These dynamic systems are valuable for recreation, shellfish, storm damage prevention, pollution prevention, flood control and wildlife.

- Reverse Rapids

Perhaps Cohasset’s most unusual feature is the reversing rapids under the Border Street Bridge and Cunningham Bridge on Atlantic Avenue. These rapids change direction with the tide between the harbor and the Gulf River estuary at Border Street and Atlantic Ocean and Little Harbor at Atlantic Avenue.²⁵

Open Space and Recreation Land

Open Space

Cohasset has approximately 2,935 acres of public and private open space and recreational lands in the community. This represents approximately 46% of Cohasset’s total land area (excluding coastal waters such as Cohasset Harbor). Roughly 2/3 of these sites (1,965 acres) are permanently protected from future development and are under the care and control of the Town’s Conservation Commission, the Department of Conservation and Recreation or private land trusts. Having been deeded to the Conservation Commission, the Town owned and managed sites are mainly protected via Article 97 of the Massachusetts Constitution. These include, but are not limited to: Wheelwright Park, Brass Kettle Brook, and part of Whitney/Thayer Woods. The largest contiguous area of open space occurs in the southwestern to south-central portion of Town, which includes Wompatuck State Park. According to the inventory in the OSRP, the three largest open space parcels in Cohasset are Wompatuck State Park (1,051 acres), Whitney/Thayer

²² Open Space & Recreation Committee, Cohasset Open Space and Recreation Plan 2002-2006, June 2001, Section 4.

²³ Cohasset Open Space and Recreation Plan 2018-2024

²⁴ January 1985 Inventory by Lloyd Center for Environmental Studies & the Mass. Coastal Zone Management Program – Cohasset consists of 6,438.4 acres.

²⁵ Cohasset Open Space and Recreation Plan 2018-2024

Woods owned by The Trustees of Reservations (527 acres, and town-owned Wheelwright Park (80 acres).

Other protected open spaces, particularly those that are owned by private groups or nonprofit organizations, are exempt from future development due to the presence of conservation restrictions. A conservation restriction is an agreement that is bound legally between a landowner and a grantee where the landowner agrees to limit the amount and/or use of a specific property in order to protect its unique or specific conservation values. A specified amount of time for the conservation restriction can be noted, or the conservation restriction can be in perpetuity. There are 12 Conservation Restrictions in Cohasset, which have been signed by the state and recorded at the Registry of Deeds covering over 200 acres. Any site financed with Community Preservation Act (CPA) funds is required to have a conservation restriction.

The Town Common was Cohasset's first public open space area, designated as open land when the first settlers from Hingham distributed lots in 1670. Privately owned open space remained abundant throughout the 19th century, but in the early decades of the 20th century, several important public and semi-public parks and reserves were created. The Trustees of Reservations acquired Whitney and Thayer Woods in 1933 and 1943 respectively and the Bancroft Bird Sanctuary in 1935. Wheelwright Park was bequest to the Town in 1916, and the Sandy Beach Association acquired the beach for use by residents in 1917.

Holly Hill Farm is approximately 140 acres in area and contains an organic farm, woods, fields, brooks, ponds and salt marshes, as well as an extensive trail system, which was recently improved by physically improving the paths and trails, adding informational signage, adding trail markers, and making available a published trail map and trail guide. Although privately owned, the property is available to the community for recreational purposes.

The Cohasset Conservation Trust (CCT), a nonprofit land conservation trust, has protected over 212 acres in Cohasset, Scituate, and Hull. The Trust has acquired 23 properties (approximately 164 acres) and three (3) conservation restrictions (48 acres). The conservation restrictions held by CCT are on Supper Island, Barnes Wildlife Sanctuary, and a portion of Ingram Park. The properties are Adams Property, Andrus Island, Bassing Beach, Blake Holmes Property, Breadencheese Conservation Area, Campbell Meadow, Churchill Conservation Area, Great Brewster and Dean's Meadow, Dormitzer Salt Marsh, Francis Shore, Giuggio Overlook, Golden Reservation, Ingram Park, James Island, Pegram Preserve, Pelletier Conservation Area, Remick Salt Marsh, Scott's Shore, Sumner Smith Overlook, Wheelwright Highlands, Williams Salt Marsh, and Winsor Shores. These sites provide wildlife habitat and passive recreation.

Bassing Beach, owned by CCT, is a $\frac{3}{4}$ mile long barrier beach that includes salt marsh and upland forest. Although located in Scituate, Bassing Beach defines the northwest side of Cohasset Harbor. The property is sited from the westernmost point to a north-south line about 1,000 feet east of the breakwater and bounded on the south by Bailey's Creek and a tidal creek called Four Score Ditch. Bassing Beach including surrounding tidal flats provides habitat for a diversity of shellfish such as oysters and clams, birds such as osprey and plovers, and wildlife such as deer and rabbits. Bassing Beach provides nesting and resting sites for many species of shore and migratory

birds. In an effort to promote native wildlife by restoring native vegetation, CCT has held work parties for two years to remove invasive pepperweed and planted dozens of edible natives such as beach plums and fireweed. Bassing Beach is a significant recreation resource popular with beach goers and only accessible by water. There are two cottages on Bassing Beach owned by the CCT.

Straits Pond (located on the Cohasset/Hull town boundary) forms part of the Weir River Estuary Area of Critical Environmental Concern (ACEC). The Weir River ACEC was designated as such not only for its ecosystem, but also due to development pressure facing the area.²⁶

The approximately 950 acres of the Weir River ACEC (which include areas in Cohasset, Hingham, and Hull) support over 100 migratory and resident bird species, numerous small mammals, and shellfish, which were historically harvested and which continue to provide a food source for avian populations. A diverse finfish population, including alewives, smelt, flounder, bluefish, and striped bass, utilize the marshes and flats within this ACEC as nursery and feeding areas. The Weir River estuary floodplain also protects adjacent areas from flood damage.^{27, 28, 29}

“Straits Pond is the innermost element of the estuary and the salinity of the water is increasingly precarious. The pond suffers contamination from runoff and leaching septic systems, resulting in sedimentation and eutrophication. It is also subject to increasing residential development pressures in both Hull and Cohasset. A municipal sewer system was installed in North Cohasset and will improve the environmental health of Straits Pond, but may further contribute to increasing development pressure.”³⁰ Straits Pond is currently closed to fishing due to coliform bacteria. The Straits Pond Watershed Association mission is “to provide community input to governmental committees and agencies, and to facilitate efforts to maintain and improve the environmental quality and the beauty of Straits Pond.”³¹

Straits Pond tide gates were completed before 2013. The intention was to increase tidal flushing and control of water flow to from Straits Pond. The structure resides on the West Corner Bridge that is 25% owned by Cohasset, 25% owned by Hingham, and 50% owned by Hull. Due to the Hull majority and the proximity of Hull DPW just across the street, Hull DPW controls 100% of the operation and maintenance of the gates and structure.

A restoration project through Coastal Zone Management’s Wetland Restoration Program (in cooperation with others) for Straits Pond began in 2009 and has used a tidal gate and flushing protocol since 2010 which successfully eliminated the midge larvae in the sediment by raising the salinity levels. Thus the seasonal midge infestations have been eliminated. The SPWA is working with the Hull Conservation Agent to understand the algae phenomenon and has learned that widgeon grass is now well established in the shallow pond. The grasses grow up to the pond

²⁶ Massachusetts Department of Conservation and Recreation. “Weir River.” ACEC Designations. <<https://www.mass.gov/service-details/weir-river-acec>>.

²⁷ “Straits Pond Watershed Association,” The Weir River Watershed Association, Inc. <<http://www.weirriver.org/>>.

²⁸ Massachusetts Department of Conservation and Recreation. “Weir River.” ACEC Designations. <<https://www.mass.gov/service-details/weir-river-acec>>.

²⁹ Weir River Estuary Park Committee, “Weir River Estuary Land Protection Plan,” Dec. 2004,

³⁰ Weir River Estuary Park Committee, “Weir River Estuary Land Protection Plan,” Dec. 2004,

³¹ “Straits Pond Watershed Association,” The Weir River Watershed Association, Inc. <<http://www.weirriver.org/>>.

surface and then continue to grow along the surface. The algae attaches to these grasses to create the noisome mats that decay and smell.³²

Recreation

Cohasset is fortunate to have a variety of high-quality, Town-owned recreation facilities. The Town has a rich history of recreational opportunities for residents due to its location on the Atlantic Ocean and proximity to other inland recreational amenities. Boating, kayaking, canoeing, fishing, rowing, and sailing are some of the major water-based recreational activities within the Town. Baseball, softball, lacrosse, tennis, golf, horseback riding, walking and organized running have been some of the major inland recreational activities. Additionally, Cohasset offers an abundance of outdoor recreational opportunities using its natural resources such as bird-watching, hiking, geocaching, scouting, and questing.

To meet the needs of its population, Cohasset's recreation and open space resources must serve both an older adult population of comfortable means and a growing number of families with children. The number of children and elders in Cohasset grew from 2000 to 2010. Households with children under the age of 18 and households with individuals over the age of 65 increased by one percent each.

In 2015, the Town completed its Senior Center and it is used extensively for Elder Affairs programming, social activities, and town meetings. A private indoor swim center has been opened in Scituate on the border with Cohasset as part of the Scituate Racquet and Fitness Club. The Club offers a swimming pool with lap lanes, tennis, squash, and outdoor platform tennis. The Town also has many successful private for-profit fitness and wellbeing facilities.

In 2010, the Cohasset Sports Complex opened and offers multi-purpose space that caters to sporting events, corporate events, non-profit events, birthday parties, functions, and more. This is a private facility that charges rental fees. The complex features 22,500 square feet of indoor playing surfaces that can accommodate two (2) full soccer fields, as well as lighted outdoor fields.

Youth Sports in Cohasset has remained strong with children participating in the youth basketball, soccer, field hockey, lacrosse, baseball, softball, football, and cheerleading programs. In 2009, the Recreation Department along with the public health nurse started a Health and Recreation Fair that brings all of these organizations under one roof along with countless free medical health screenings. The Massachusetts Recreation and Park Association in 2009 honored the Cohasset Recreation Department with a Community Outreach Award for a "program over and above regular programming that demonstrates a benefit to the community." This fair has become more and more popular each year with close to 1,000 attendees. In 2015, the Recreation Department moved from the Town Hall to the former Our World Museum Space at the Paul Pratt Library and has expanded numerous programs with the additional space. The Department still manages the Rec Center that was formerly the DPW Office, for additional programs. Currently, demand still exists for more walking trails, bicycle paths and sidewalks, as well as playing fields. There has also been requests for a dog park, a skate park, and outdoor fitness amenities.

³² Dick Avery, email correspondence with Katie Holden, 15, May 2018.

Management and Resource Priorities

Town of Cohasset Departments and Boards

The Town of Cohasset has several active departments and boards that are working towards improving open space and recreation opportunities in the community. However, due to a lack of resources and unclear lines of responsibility there has historically and presently been a lack of coordination and communication among the actors involved. In order to set the stage for good communication moving forward, a specific entity in the Town of Cohasset should be assigned to oversee the implementation of open space and recreation goals. The best-suited committees would be the Open Space & Recreation Committee (OSRC), and the Recreation Commission which would work together on a regular basis.

Open Space & Recreation Committee

The mission of the Cohasset Open Space and Recreation Committee is to preserve, maintain and enhance the quality of life for residents by developing and updating the Town's open space plan. The committee is made up of seven (7) members appointed by the Board of Selectmen. The first meeting of the 2018 OSRP Committee was held on March 29, 2017.

Recreation Commission

The Cohasset Recreation Commission consists of seven (7) members who are elected and serve for a five-year term. The Commission promotes, encourages, and coordinates recreational activities for all citizens of the Town. The Commission is responsible for making recommendations to the Board of Selectmen regarding the maintenance and improvement of recreational areas owned by the Town.

Department of Public Works (DPW)

Cohasset's Department of Public Works (DPW) maintains and preserves the Town's property, parks, and open space, along with the public infrastructure which includes streets, sidewalks, signs, and catch basins. The DPW works together with various departments of the Town Government to accomplish these maintenance goals.

Cohasset Conservation Trust (CCT)

The Cohasset Conservation Trust (CCT), a nonprofit land conservation trust, was established in 1967. CCT's first property protected was Bassing Beach in 1968. Bassing Beach is the Trust's best-known property, and has been a popular place for swimming, picnicking, fishing, and beach walking for generations. Since that time, the Trust has acquired 23 properties (approximately 164 acres) and three (3) conservation restrictions (48 acres) on three (3) additional properties for a total of 212 acres in permanent conservation. Properties include beaches, freshwater and saltwater wetlands, upland areas, and watershed land.

Conservation Commission

The Cohasset Conservation Commission is responsible for administration of the Cohasset Wetlands Regulations and Bylaws, Stormwater Regulations and Bylaws, and the Massachusetts Wetlands Protection Act. Through the administration and enforcement of these regulations and bylaws, the Mission of the Conservation Commission is to promote proactive administration of environmental laws and policies, open space protection, wetland and water management and protection, promote environmental education, and to preservation of Cohasset's natural resources. The Commission works together with various departments in Town to ensure the regulations and bylaws are upheld. The Commission looks to improve the environmental integrity of the community while maintaining and improving the Town's current conservation areas.

Open Space Resource Needs

Cohasset needs to develop a list of Land of Conservation Interest and develop a list of criteria or a ranking system to assist in identifying priority parcels. This criteria or factors that enhance Land of Conservation Interest should be vetted by the Open Space Committee and the community. They will serve as a guide for reviewing a property's suitability for protection, but neither ensure nor limit the decision to conserve a property. Boards, organizations, and individuals should retain discretion over the acquisition process and may choose to deviate from these guidelines on careful review of a specific proposal.

Cohasset could develop a general guide, which includes the following factors that enhance Land of Conservation Interest:

- Enhances existing or proposed public and private holdings
- Links significant public or private open space/natural areas
- Preserves or buffers natural areas containing:
 - species of unusual merit or special concern
 - representative local plant and animal communities
 - wildlife habitat, wetlands, streams, or water supply or migration corridors
 - screening to adjacent development
- Contains historical, geological, or archeological features
- Protects scenic vistas or view corridors
- Permits existing agricultural practices to continue on land that would otherwise succumb to development pressures
- Provides access to, or is a contiguous area for recreation
- Offers educational opportunities to the public
- Provides access or opportunities to people with disabilities
- Does not adversely affect the organization's financial and land management capabilities

For Town-owned parcels without a conservation or other deed restrictions, including those under the custody of the Conservation Commission, the Town could change the designation and use of the property. Therefore, working to change the temporary level of protection on Town-owned

open space to permanently protect it represents an opportunity to ensure that these open space areas remain in the future. However, the Town is also reserving its options on land for future needs, such as police and fire stations or schools.

Conservation of remaining unprotected land should focus on areas that are adjacent to or connect larger areas of contiguous open space in order to maximize the benefit to wildlife. Connections to neighborhoods and the ability to walk to open space areas would also be beneficial for residents. Existing connections and paths should be researched and established so that they are not lost in the future. In addition to acquiring additional lands, Cohasset should focus on preventing fragmentation of significant habitats by proposed development.

The land that is permanently protected will continue to provide a wide range of functions, including preservation of environmentally and culturally sensitive resources, buffering developed areas, and providing recreational opportunities, indefinitely. However, other lands are at risk and these functions may be lost. Overuse at the Town's most popular areas may occur and may lead to their degradation without implementation of management strategies and regular maintenance.

Public Input

To facilitate development of the OSRP, a public forum was conducted along with a community-wide survey to solicit public opinion regarding the status of open space and recreation resources for the Town. The public forum was held in July of 2017. The residents of Cohasset expressed concern about encroachment of new development on the scenic vistas and character of the Town and its quality of life during the public outreach for this plan and identified the same issues in previous plans.

The following is a list of goals that emerged from the forum to help guide strategic action for Open Space and Recreation over the next seven years. These goals are also summarized in Section 6 of the OSRP.

1. Make protection of open space and the character of the Town a priority in all town-wide land use decisions, in keeping with citizens' wishes, to preserve access and scenic beauty.
2. Protect and maintain the natural environment:
Residents of the Town over the last two OSRPs and during this opinion survey have consistently voiced their support for all aspects of environmental protection.
3. Improve Recreational opportunity and access:
The survey results and interactive sessions with the public continue to emphasize continuing to work to provide access, develop walking trails and biking paths and communicate how all of the recreational resources can best be enjoyed and maintained.
4. Organizational changes and collaboration:
Due to a lack of resources and unclear lines of responsibility, it has proven to be very difficult to monitor past plan goals and implement specific objectives. Residents want town

officials to collaborate with town departments to share planning resources, coordinate information used and to ensure that the desired citizens' goals are monitored and attained.

In addition to the public outreach meetings conducted by the committee specific to the OSRP update, a survey of public opinion was conducted between May 24 and July 25, 2017. Approximately 189 residents completed the survey and offered their thoughts about open space and recreation in Cohasset.

Almost everybody (97.2%) who completed the survey support the idea of the Town purchasing additional recreation lands. Additionally, a large number of respondents (96.6%) also support the idea of the Town purchasing additional conservation lands. Approximately 84.4% of respondents would support strengthening current zoning laws in order to better protect open space in Cohasset. The greatest concern expressed by survey participants was the perceived overdevelopment and the loss of the small-town feel. According to the survey results, the harbor (100%), water-based recreational activities (98.9%) and scenic views (98.4%) were considered of the highest importance to respondents.

In terms of programing and recreational activities, only 40.1% of respondents were satisfied or very satisfied with current activities available for teenagers. Respondents also expressed the need for more bike paths, with 76.9% indicating that current paths are not adequate. Participants also wanted to see more boat moorings (57.9%) and conservation lands (50.3%)

The majority of respondents felt that the following resources were adequate, although a minority felt that the town needed more: Picnic areas (38.1%), Canoe/kayak launches (36.0%) , Tennis courts (29.1%), Athletic fields (26.7%), Places for birdwatching (24.0%), Neighborhood playgrounds (23.1%), and Beach recreation (20.1%).

OSRP Goals and Objectives

The following is the list of goals and objectives from Section 8 the 2018 OSRP:

Goal 1. Make protection of open space and the character of the Town a priority in all Town land use decisions, in keeping with citizen's wishes, to preserve access, Town character and scenic beauty.

Objectives

- Foster complete buy-in of all Town boards and staff into the objectives of this Plan and its sister Master Plan and Harbor Plan.
- Require an impact and/or Plan-consistency opinion from the OSRP on:
 - Subdivision, ANR, and Scenic Road Applications before the Planning Board;
 - Variance requests before the Board of Appeals seeking increased lot coverage;
 - All applications before the Conservation Commission seeking removal or replication of resource areas or pursuant to the Storm water Management Bylaw;

- Any other matter or application before the above boards involving clearing or reduction of pre-existing undeveloped land; and
- Any acquisition or disposition of land by the Town.

Goal 2. Protect and maintain the natural environment, including:

Objectives

- Protection of wildlife habitats and migration paths.
- Protection of wetlands and biodiversity.
- Improvement of water quality in the harbor.
- Control of invasive species.
- Adopt non-toxic landscaping practices.
- Make recognition of Earth Day an annual Town-sponsored event, and institute regular civic cleanup efforts.

Goal 3. Improve recreational opportunity and access.

Objectives

- Allow disabled residents access to all recreational venues.
- Create more biking paths and safety signage.
- Create more mooring space and harbor access.
- Increase maintenance and signage for walking paths and create awareness of usage through a regular town-wide communication program.

Goal 4. Organizational changes and collaboration to monitor and achieve these goals.

Objectives

- Improve communication and coordination across Town boards and departments and have boards and staff take the lead on insuring that the desired citizens' goals are monitored and attained.
- Develop sufficient staff and budgetary resources for the OSRC to fund programs to achieve specific objectives, and to assure active monitoring of plan progress.

Recommendations

The following is a list of strategies from the Action Plan (Section 9) of the 2018 OSRP, along with some new recommendations added as part of the master planning process. This list highlights some of the key strategies from that plan. Please refer to the OSRP for the full range of recommended actions.

Goal 1: Make protection of open space and the character of the town a priority in all town-wide land use decisions, in keeping with citizens' wishes, to preserve access and scenic beauty

Strategy 1.1: Develop and maintain a list and priorities of properties suitable for potential acquisition on conservation by the Town and make recommendations

Goal 2: Protect and maintain the natural environment

Strategy 2.1: Create a town database of significant natural resources, wildlife habitats and corridors, rare species habitat, vernal pools, endangered plant habitat

Include same within the GIS system.

Strategy 2.2: Develop and maintain a list of properties suitable for potential acquisition or conservation restriction by the Town and make recommendations

Strategy 2.3: Revive or expand implementation of Water Dept.'s Rain Garden Program

Strategy 2.4: Support the restoration of shellfish beds, including developing an Inter-Municipal Agreement with the Town of Scituate to reduce phosphate pollution into the Gulf River

Strategy 2.5: Consider bylaw and regulatory changes to prohibit phosphate and nitrate-generating uses along Gulf River and other tributaries to the Harbor, Straits Pond, and along other sensitive bodies of water or wetlands areas and their tributaries

Strategy 2.6: Consider reviving plan for ocean outfall for sewer system to reduce fresh water incursion into the Harbor

Strategy 2.7: Organize selective non-toxic eradication programs of invasive species where appropriate

Strategy 2.8: Work to protect Town water supplies

- This can be done through a combination of efforts including resource identification; review the geographic extent and the provisions of the Water Resource Protection District to determine whether it adequately protects sensitive water supply areas; and determine where the Town could strategically purchase additional open space as a buffer between land uses incompatible with water supply protection.

Goal 3: Improve recreational opportunity and access

Strategy 3.1: Study the feasibility of "shared road" bikeways, walkways and sidewalks with proper signage for vehicular traffic

Strategy 3.2: Study creation of additional walking trails on public and publicly-accessible private conservation properties

- Add all walking trails into the GIS system. Identify historical paths and explore feasibility of use.

Strategy 3.3: Continue to monitor the need for development of new ball fields and play areas throughout town, and act upon opportunities as they present themselves

Strategy 3.4: Improve access to our waterways, including our harbors, ponds, ocean front, launching ramps and mooring areas

Strategy 3.5: Increase town recreational operated programs for all ages.

- Ensure sufficient funding and staffing, and appropriate user fee structure.

Strategy 3.6: Work cooperatively with the Department of Conservation and Recreation, The Trustees of Reservations, Cohasset Conservation Trust and any other non-town owner of publicly-accessible open space.

- Ensure citizen access to these properties, and to integrate their trail systems into the Town's publicity materials and GIS system.

DRAFT