Natural landscape features like waterways, forests, and meadows create connections for animals, birds, and fish living in our shared world.

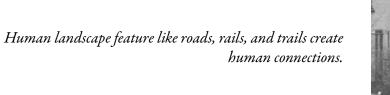
INTRODUCTION



A corridor is any part of a landscape linking patches of landscape and facilitating species movement among patches. Corridors can be wet or dry. Corridors provide avenues for animals to travel, migrate, and meet to mate; as well as for plants to propagate.

A corridor can be a natural or human landscape. The South Shore Greenway attempts to integrate the two by designing a greenway that supports a bikeway, establishing a route for alternative transportation while serving the ecological function of preserving open space and promoting environmentally responsibility.







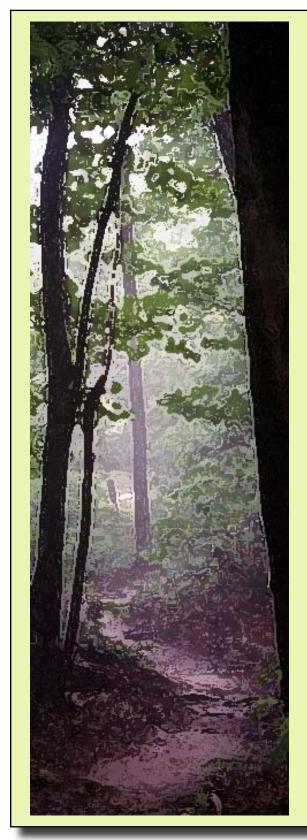
Greenways, while varying widely in type and name, serve a common function whether they are in rural or urban communities: they make connections in the landscape. Whether composed of woodlands, waterways, trails, or a combination of all these, they encourage the movement of wildlife, people, or both and simultaneously provide ecosystem services that protect and enhance water quality and wildlife habitat.

Greenways provide other connections. They tie communities together. They strengthen links between town centers and other cultural resources. They reduce the impact of urban congestion, traffic and open space fragmentation. They give people a stronger sense of place.

The South Shore community of five towns (Hull, Hingham, Cohasset, Scituate, and Norwell) have come together to ask the question of what makes a city more humane. Local citizens want to foster physical and psychological connections through a linked network of greenways and greener, more sustainable, communities that serve as a model for others.

This document is a first step in the complex process of creating a greenway network on the South Shore in five towns South of Boston: Hull, Hingham, Scituate, Cohasset, and Norwell. It examines the development of a greenway that supports an alternative transportation network of paths for pedestrians and bicyclists, primarily along existing roads and streets. It analyzes how, in addition to enhancing human connections, a greenway can also improve connections on an ecological level through linking open space and by protecting natural resources. The document also suggests the next steps in identifying green buffer zones that protect waterways and provide off-street hiking and biking trails. It begins the design process by analyzing existing connections and conditions, developing criteria from a site analysis, and then proposing a route for an ecologically sound bikeway along the South Shore.

The proposed first-phase of the greenway is a bicycle trail and green corridor through five towns south of Boston: Hull, Hingham, Scituate, Cohassset and Norwell. It links city parks, provides alternative transportation, and connects existing trail systems within the five towns.



A Vision Of The South Shore Greenway

You've been cycling for several hours now, through parks and historic town centers, along the coast, past beaches and harbors, As you coast down a quiet paved trail in Wompatuck State Park—the green heart of the greenway and the region—you see what a refuge this is, what a breathing green emerald set in the center of the built environment.

You think back on how this all began.

It started with a group of people who believed in the idea of a sustainable South Shore, an alliance that believed that they could make a difference, that they could do better, that they could build something new. They wanted to foster stronger connections between neighboring towns to create a more humane, ecologically stronger whole. They wanted to reduce their carbon footprint. They wanted people to experience the natural beauty of their region. Their leadership has made them a model for other communities to follow.

It started with Hull's first windmill, built in 1998, followed by a second in 2003. They provide energy for fifty-percent of Hull's needs. Now there is the promise of two future turbines and even more independence from oil.

It started with the Greenbush Commuter Rail, to bring the residents of the south shore into and out of Boston and further, without automobiles. Now traffic is lighter and the air cleaner.

This is where a dream became reality, where an idea to move away from modern energy use and transportation grew to a realized vision of a carbon free community.





A river is a greenway, offering a corridor for people and animals

What is a Greenway?

An underlying idea of a greenway is motion. As water flows and forests grow and as trails meander and bend, they create corridors of connection for people and wildlife.

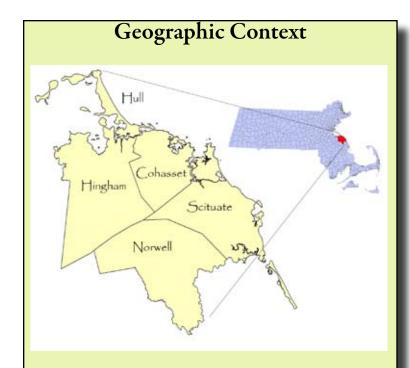
A river is a route of travel, from headwaters to estuary, for fish and for people. Wooded areas provide safe movement for animals. Roads and highways are routes for people. The latter but are seemingly one-sided, safe for driver and not for wildlife. A greenway can reducee human impact, making roads safer for people and wildlife, open space and wooded areas more accessible and connected, and waterways cleaner.

A greenway also makes other connections. It links sidewalks in communities to strengthen the connection residents have to town centers, neighborhoods, outdoor recreation, and other places of interest and value. These improved human connections contribute to an expanding network, on both human and natural scales, encouraging ecologically sensitive building through setting guidelines on how to minimize the impact of construction on the environment.

These links are some of the connections that drive the planning of a greenway. A desire to reconnect fragmented open spaces and disconnected communities, to reevaluate the impact that we have, as human beings, on the natural world is the starting point in planning a greenway.

When we build a parking lot or a road or shopping center, what sort of connections have been built and what sort of connections have been broken? Can the miles of roads serve a function other than a for vehicular traffic? Where do land and water connections exist and where have they been broken? Can they be repaired?

Members of the South Shore community of the towns of Hull, Hingham, Norwell, Scituate, and Cohasset have come together to begin to ask these questions. They want to reestablish connections and open corridors for people and wildlife.



The South Shore region is located 14 miles south of Boston and about forty miles north of Cape Cod. A recently opened commuter rail (the Greenbush line) connects Scituate, Cohasset, and Hingham to Boston. There are commuter ferries from Hingham and Hull to Boston throughout the day.

Land Use in Context

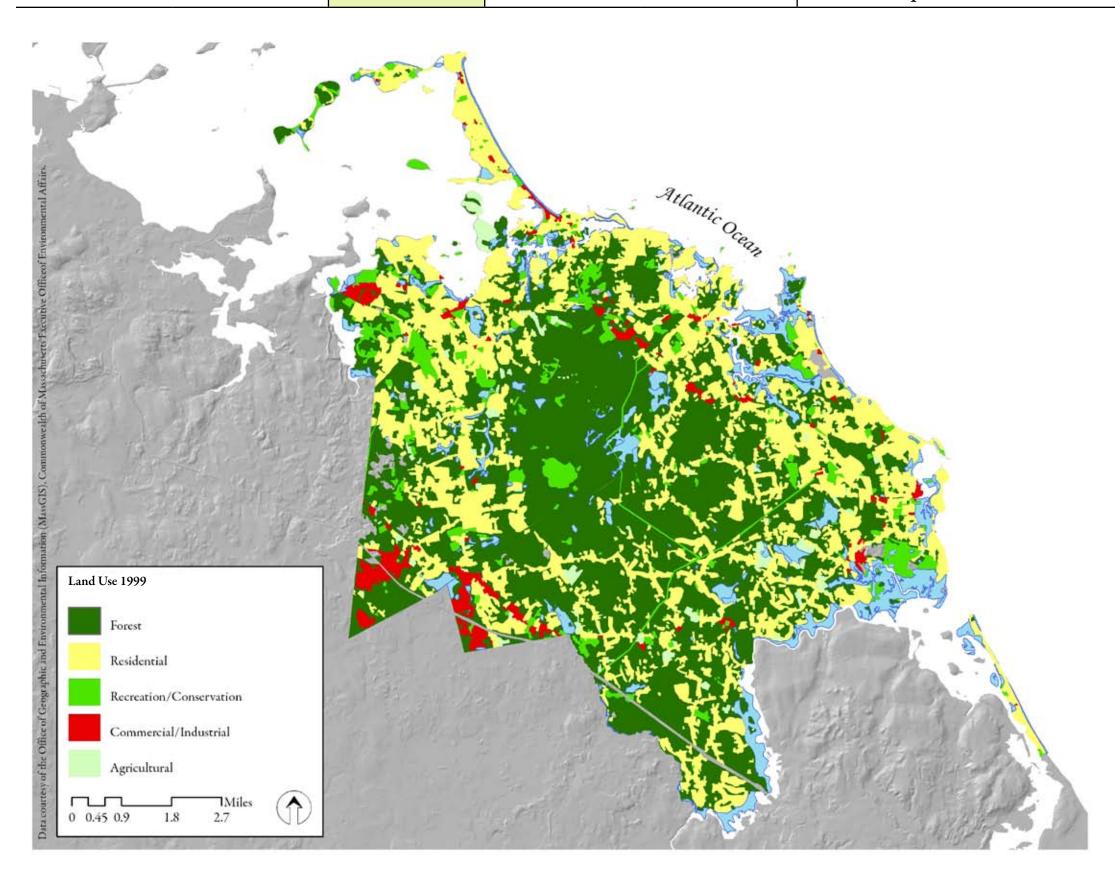
As the twentieth century approached, fewer and fewer South Shore citizens relied directly on the land for their survival. In 1900, about a third of the region's land was farmed (150,175 of 432,000 total acres—United States Census data). This level remained relatively constant until after World War II when the demand for housing increased. By 1971, less than 10 percent (36,080 acres) of land was devoted to agriculture.

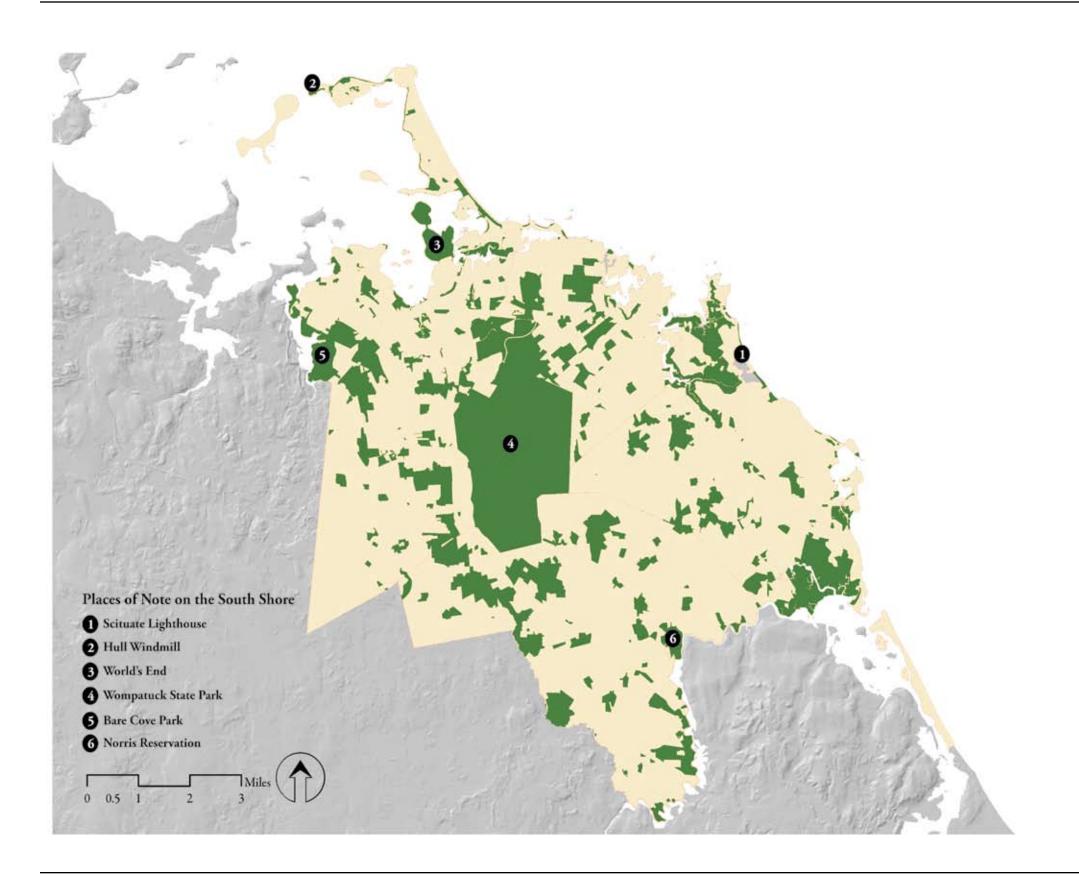
Within the five towns, most of the farmland reverted to forest or was used for residential development. Currently, slightly less than half of the land within the five towns (24,214 of 49,820 total acres) is forested and about a third (15,760 acres) is residential development. Most of the remainder is devoted to recreation and parks (3,080 acres, 6.2 percent), or to industry and commerce (1,749 acres, 3.5 percent). Less than 1000 acres (1.9 percent) of agricultural land remains.

Pressure to use remaining forested and agricultural land for housing is expected to grow with job growth in adjacent towns and an increase in mass transit service to Boston. The Metropolitan Area Planning Council (MAPC) predicts that a cluster of towns (Avon, Braintree, Canton, Norwood, Quincy, Randolph, Stoughton, Westwood, and Weymouth) just north and west of the South Shore will become a major job center over the next twenty years (MetroFuture Draft Summary, October 2007). MAPC predicts that Hingham, the town closest to the new job center, will lose more than 1000 acres of natural open space in the next twenty years if current growth trends continue.

The South Shore is at risk of losing forested and farmed lands which add much to the beauty and character of the area. This loss can be mitigated by placing valued landscapes under permanent protection as part of an area-wide greenway network.

CONTEXT





An Overview of South Shore Historic Places

A greenway with an integrated bikeway can connect important destinations and places of value in the community. In developing this document, information about places of value were gathered at public forums attended by residents and representatives from each of the five towns. Participants identified many sites of historic and cultural significance. (see appendix C: public meetings)

Each town has a historic town center that is highly valued by residents. The histories of these town centers are linked and date back hundreds of years. Most were established as trading posts for European settlers and Wampanoag Indians. By the late 1600s and early 1700s, the towns had each raised town halls, churches, and meeting houses, the oldest being the Old Ship Church built in 1681. From the early years the residents were linked to the ocean, in part through the fishing and shipbuilding industries.

At the public meetings, townspeople also identified lighthouses as significant destinations for residents and visitors to the South Shore. The distinctive lighthouses in Scituate include the second oldest lighthouse in Massachusetts.

The first Scituate lighthouse (1 on opposite page), The Light was built in 1810, and was the setting for "The American Army of Two", a moment during the war of 1812 when the two daughters of the lighthouse keeper sat behind cedar trees and played fife and drum so as to mislead an approaching battalion of British soldiers into thinking that an army awaited them onshore.

The beaches of Hull were also identified by many at the public meetings. Hull is a narrow peninsula that has a long history as a popular destination. In the late 1800s the small beach town drew tourists to the boardwalks and hotels of the area. In the early to mid-1900s, Hull saw the birth and rise of Paragon Park, a famed amusement park. In 1984, after a slow decline, the park was purchased by developers and erased from the

landscape, replaced by condominiums.

In addition to the town centers, historic buildings, and lighthouses, community members also acknowledged a number of parks and reservations as places representative of the South Shore. Perhaps the most popular is the World's End (3), a Frederick Law Olmsted designed residential subdivision that was only partially built. The project was abandoned after the plants and roads were installed and in the 1960s it was acquired by The Trustees of Reservations and opened to the public as a park.

Wompatuck State Park (4) and Bare Cove Park (5), decommissioned military annexes, were both identified as important recreation areas.

Wompatuck State Park served as Hingham Naval Ammunition Depot Annex from 1941 to 1965, a 4,000-acre munitions center with 100 active military bunkers, one of which housed parts of the first atomic bomb. The annex sat in four towns: Hingham, Cohasset, Scituate, and Norwell. It was decommissioned in 1965 and is now Wompatuck State Park, managed by the Department of Conservation and Recreation. It represents roughly 30 percent of the open space of this report's five-town study area.

Bare Cove Park, another former United States military annex, served as base from 1903-1961. Most of the munitions used in the European front in World War II were created at the depot. At peak capacity in 1945, over 2,400 civilians and military personnel worked there. In the mid-1950s, the site contained over ninety buildings, its own telephone exchange, and fifteen cranes. The base was decommissioned in 1961, though the Navy held on to the property until 1971, when it was turned over to the town of Hingham. Today much of the 990-acre site is occupied by the town's Bare Cove Park.

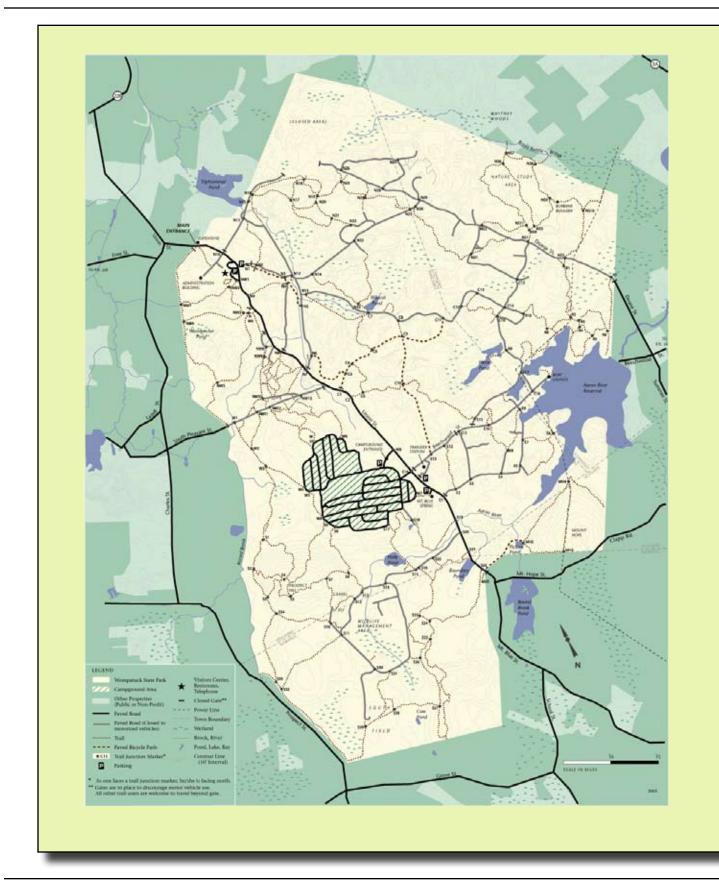


Paragon Park

Another series of significant land acquisitions started in the 1920s when Albert and Eleanor Norris began purchasing land along the North River, now a National Natural Landmark and a Commonwealth of Massachusetts Scenic River. According to The Trustees of Reservations, which acquired the 190-acre Norris Reservation in 1970, much of the landscape was shaped by the early millers, farmers, and shipbuilders who used the land.

Participants at the public meeting also recognized Hull's windmills (2), built in 1985 and 2006, and commuter rails and ferries, as important destinations to be included in the greenway. These destinations indicates the residents interest in alternative energy production and transportation.

A bikeway supported by a greenway will serve as a way to connect the places of the past with the places of today and tomorrow.



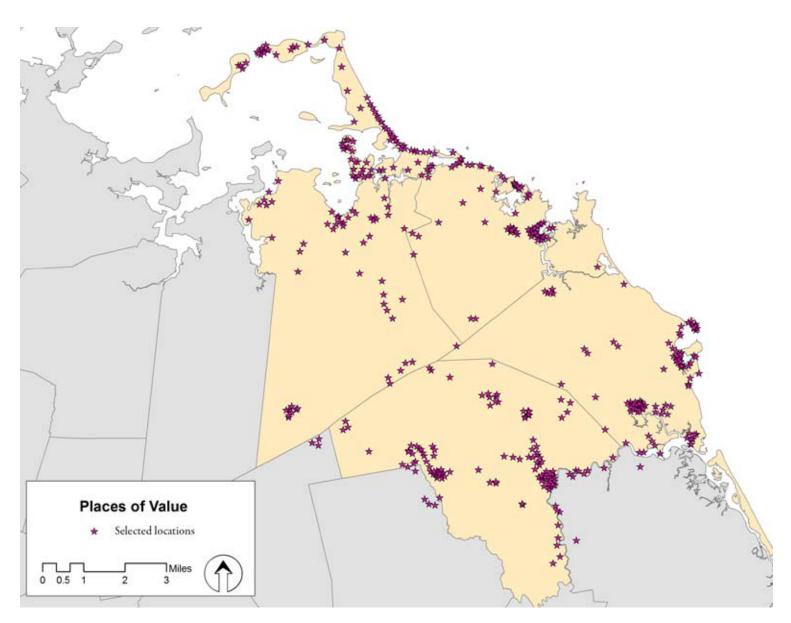
South Shore's Green Heart: Wompatuck State Park

Preserving and linking open spaces such as state parks, conservation and recreation areas, and waterways is a central strategy for designing a greenway. Acquiring open space to reconnect broken links and build green corridors will create a network that improves ecological condition of the area, a key community goal.

The 4,000-acre Wompatuck State Park lies predominantly in Hingham, but also stretches into Cohasset, Scituate, and Norwell, and is the largest and most central open space area of the five-town region. The park, a former military annex, offers 262 wooded campsites (140 of them with electricity), twelve miles of paved bicycle trails, and many miles of wooded bridle paths and hiking trails.

The park is named for an Indian chief the local colonists knew as Josiah Wompatuck. In 1665, Chief Wompatuck deeded the land and its surroundings to the English settlers.

In this report Wompatuck Park is referred to as the Green Heart, the central hub for trails with accessibility into the four towns it touches. It's 4,000 acres of open space is an essential part of the greenway plan because of the variety of corridors it already contains. The map to the left, available on the park's web site, shows the trail, roads, open space, and waterways that all provide existing connections to the towns outside the park.



Places of Value & Interest

The community identified specific places that they wanted to be considered when the route of the greenway was planned. These places were identified in public meetings and are represented on this map.

Many places, such as train stations and schools, were marked because they are part of residents daily routine: train stations and schools. Other places were identified because residents felt they represent their community: Wompatuck State Park, the coastline, beaches, as well as historic village centers and lighthouses. This map shows the wide spread of valued places.

Community Goals for a Greenway

Through a series of public meetings held in February and March 2008, community members and town representatives defined what a greenway meant to them. They brainstormed, discussed, and set goals and criteria. The goals were based on a broad understanding of what a greenway should do: essentially reconnect open space and people with as little impact of the earth as possible. The goals were to:

- Connect town centers, harbors, and beaches, and improve social connections.
- Build links between existing open space.
- Make community-based transportation, such as trains and ferries, widely accessible to other forms of transportation by linking existing trails, bike paths, waterways, and roads.
- Improve ecological conditions along roadsides and waterways, and educate the public about how to be more environmentally conscious.

These goals discussions began a dialogue among the townspeople. Many residents of different towns had similar interests and projects within their own towns, but they were not aware of each other because of a lack of social connection. For example, all the participants were interested in linking towns with trails or bikeways, and all of them were at the meetings because of the greenway.