# Cape Cod Canal Self Guided Bike Hike

The U.S. Army Corps of Engineers welcomes you to the Cape Cod Canal. You are invited to exercise your body and mind as you journey along the waterway.

This guide is designed to serve as an informative companion aiding your discovery of the Canal's rich history and fascinating features while you bike, skate, run, or walk along the service roads.

### **Using the Guide**

#### Where do I start?

This guide may be used no matter where you start your journey along the Canal. The service roads can be accessed from multiple recreation areas along both sides of the Canal. Where are they? Click <u>here</u> for the Canal Recreation Map.

#### Which way is which?

Mainland side = north side Cape side = south side Traveling towards Cape Cod Bay = eastbound Traveling towards Buzzards Bay = westbound

#### Where do I stop?

Just match the points of interest on the following pages with the pole numbers along the service roads. Then, stop in a safe place off to the side of the service road near that pole number.

#### What are pole numbers?

These are numbers that are posted on the navigation light poles that line the entire length of the service roads. Numbered poles are about 500 feet apart. The numbers start on the east end near Cape Cod Bay, and increase as you travel west toward Buzzards Bay.

### Have fun, play it safe!

Make sure you follow the safety tips on the next page.



### Safety First!

In order to ensure your safety and the safety of other visitors here are a few tips to keep in mind...

#### Wear the recommended safety equipment, and make sure everything fits properly

Massachusetts state law requires helmets for cyclists age 16 and under. They are recommended for everyone.

#### Be respectful of other users

The Canal's service roads are mixed use and can be very busy at times. And, remember, they are service roads. This means you may encounter work vehicles. Please yield to all official vehicles.

#### Adhere to basic rules of the road

Keep to the right when traveling. Pass on the left, and give an audible signal while passing.

#### Be predictable

Travel in a consistent manner. Mind the movements of children. Keep pets leashed and under control.

#### Be aware

Be aware of others around you, including behind you, before changing positions and stopping. Avoid wearing headphones so you can hear others approach and signal.

#### Move to the side

When stopping, move to the side of the road. Avoid obstructing the road with a bicycle.

#### Travel at a safe speed

Avoid excessive speed. Reduce your speed in congested areas or when obstructions exist.

### Check the weather

Winds along the Canal can be strong at times. Be aware of wind speed and direction when starting a bike ride. You'll be riding against it at some point. Drink plenty of water and take rests as necessary.



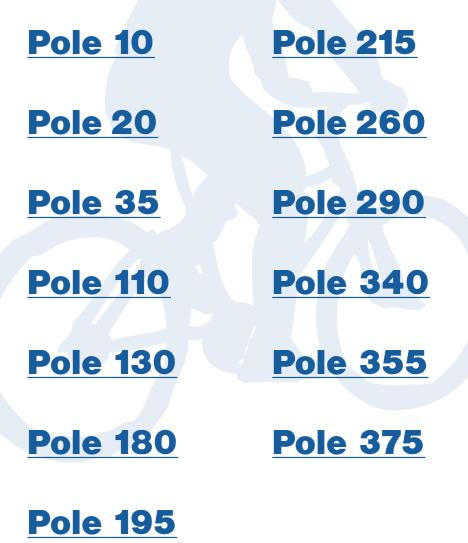


The **Points of Interest** are detailed on the pages that follow.

You can scroll through the pages to find the location nearest you. They are numbered low to high (east to west).

Click on any of the Pole Numbers below to jump to the Pole Number nearest you.

-Or-





## Pole 10 North Scusset Beach Breakwater

The job of the breakwater is to protect vessels from crashing waves as they travel between the Cape Cod Bay and the Canal,, and to help maintain the Canal's eastern entrance. Extending 3,000 feet from shore, it is comprised of approximately 325,000 tons of boulders. The first one-ton chunk of this granite was brought in from Maine and placed here on June 19, 1909. This job marked the first phase of the Cape Cod Canal's construction. The Canal was first constructed by the Boston, Cape Cod & New York Canal Company, owned by August Belmont Jr., engineered by William Barclay Parsons, and labored by approximately 1,500 men. The Canal was a privately owned toll waterway until 1928 when the US Government purchased it.







### Pole 20 South Cape Cod Canal Visitor Center

Open May - October, the Cape Cod Canal Visitor Center invites visitors of all ages to explore the rich history, vigilant operation, and unique features of the Canal. Offerings include films, interactive exhibits, children's activities, programs, and more. Free admission.

If you look at the building, you may question why it has so many garage doors. That's because, when it was constructed in the 1930s, the building served a different purpose. It was a US Coast Guard boathouse. Used as a maintenance garage, boats could be hauled from or launched directly into the Canal using marine railings.



### **Points of Interest**

# **Pole 35** East Mooring Basin (North) East Boat Basin (South) Electric Plant (South)

The wooden pilings in the water by pole 35 south are called dolphins. They sit within a mooring basin where large vessels can tie up in an emergency or to wait out unfavorable weather conditions.

The East Boat Basin, now known as the Sandwich Marina, provides a variety of services for both commercial and recreational boaters. It was built in the 1930s as a harbor of refuge for smaller vessels. It was enlarged in the 1960s. It is managed by the Town of Sandwich.

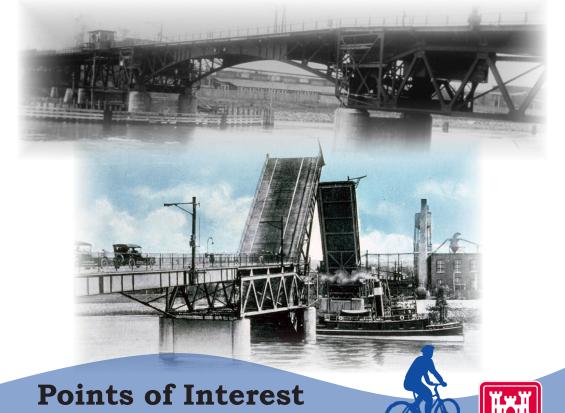
Curious about the big industrial buildings with the tall smoke stacks? This facility, operated by NRG, generates electricty for the Northeast Grid during peak times. It is duel-fueled, primarily burning natural gas. But also has the ability to burn ultra-low sulfur diesel if needed.



### **Pole 110 South** Old Sagamore Bridge Abutment Keith Car Works

The concrete wall with an A-frame house on top of it is an old bridge abutment. This was the location of the Canal's original Sagamore Bridge. It was a twin leaf rolling lift bridge with oak planking for the roadway. In use from 1913 to 1935, it was removed when the current Sagamore Bridge opened in 1935.

If you were crossing over the old Sagamore lift bridge back in the day, you would have seen a mile-long stretch of factory buildings lining the Canal. They belonged to the Keith Car Works Manufacturing Corporation. Once the largest employer on Cape Cod, the company employed 1,400 people at its peak. They manufactured carriages, stage coaches, and prairie schooners, and later patented and produced the 40-8 boxcar used by trains. The company operated at its Sagamore location from the mid 1800s until 1928. The last building was removed in the 1930s when the Canal was widened.



# Pole 130 Sagamore Bridge

The Sagamore Bridge and Bourne Bridge opened to vehicle traffic on June 22, 1935. Funded by the National Industrial Recovery Act (the New Deal), construction began in 1933. Construction of these bridges provided much needed work for approximately 700 local men. Skilled laborers made as much as \$1.20 an hour.



Today's highway bridges are continous through-arch bridges. They both have a vertical clearance of 135 feet and a horizontal clearance of 550 feet for vessels traveling under them. The difference is the length of their approach spans. Sagamore Bridge, built into the surrounding hils, is the shorter of the two, with a total length of 1,408 ft.

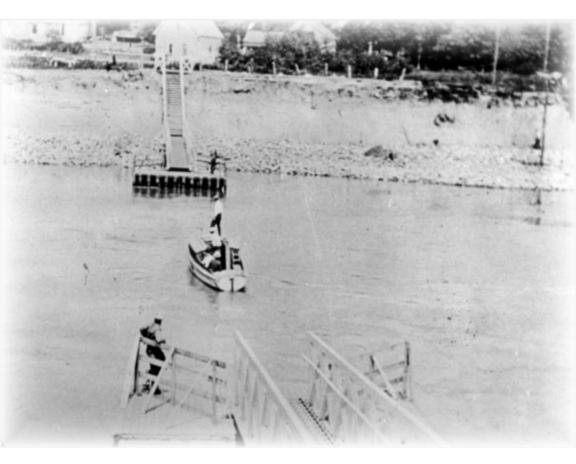
Fun Fact: In 1935 there were two Sagamore Bridges!

**Points of Interest** 



### Pole 180 The Bournedale Ferry

In addition to the bridges, people used to be able to take a ferry across the Canal. The ferry service was offered for free by the Boston, Cape Cod and New York Canal Company. They were the company that originally owned and operated the Cape Cod Canal. This was an important service for residents that had their community divided by the newly constructed Canal. The ferry provided transportation for Bournedale residents to their local train station, relocated to the opposite side of the waterway! Operated from 1914 to the 1930s, the ferry was a small boat with a gasoline engine. It was tied up on the south side between trips. A large bell on the north side was used to summon the boatman.







# Pole 195 North Herring Run

River Herring are fish that spend most of their lives in the open ocean but travel to fresh water to spawn. Here, adults make their annual spring migration from the ocean, through the Canal and this fish ladder to get to the Herring River and Great Herring Pond to lay their eggs. Juveniles migrate down to the ocean at the end of the summer. These fish are an essential food source for many fish, birds and mammal species. Unfortunately, due to multiple factors, river herring populations throughout their range have become unstable. Various conservation measures, including harvest restrictions, are starting to help.

The US Army Corps of Engineers built this herring run in 1936. It replaced an earlier man-made structure. Both fish ladders were constructed to enable river herring to continue their ancient journey despite their natural river systems being disturbed by the Canal and surrounding infrastructure.









## Pole 215 Digging in the Dry

Construction of the Cape Cod Canal was challenging. Originally engineers hoped to just use dredgers to dig from either bay towards the middle. Progress slowed as they encountered huge 100-ton boulders throughout this valley. In order to make up for lost time, the chief engineer, William Parsons, recommended utilizing steam shovels to dig out this dry section, while tip-cars on rails hauled the material away.

Just to the east of Pole #235 is the location where the last earthen dike separating the waters of Cape Cod Bay and Buzzards Bay was located. On April 29, 1914, August Belmont (the owner of the original Cape Cod Canal) ceremoniously mixed the waters of the two bays. On July 4, 1914, the dike was removed officially making Cape Cod a man-made island.





### Pole 260 South Radar Tower

The primary mission of the U.S. Army Corps of Engineers at the Cape Cod Canal is to ensure safe movement of vessels through the waterway. The Corps utilizes a Centralized Marine Traffic Control (MTC) System to help accomplish this task. The radar tower here is part of the fully integrated system. Components of the system are radar and camera surveillance; VHF radio communications; and sensors of air and water temperature, wind speed and direction, and tidal currents. The conical shaped disks that you see are microwave dishes used to transmit the information.

An alert team of marine traffic controllers monitors the MTC twenty-four hours, 365 days a year. They direct all vessel traffic 65 feet in length or longer through the Canal and its approaches.







### Pole 290 North The Stephen R. Jones

On June 28, 1942 while en route from Virginia to Boston, the 354-foot collier (coal carrying ship) Stephen R. Jones struck the northern bank of the Canal and sank. This occured during the time of World War II, when the Canal served as an important navigational route for military and merchant ships that wanted to avoid enemy fire along the outer shores of Cape Cod. The sinking of the Jones made the Canal impassable.

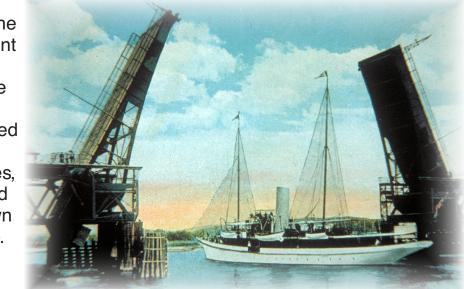
Work to remove the sunken ship began with a bang! It was determined that dynamite was the best solution. On July 4th, people gathered along the Canal to witness an unusual type of fireworks. The first charges of dynamite were detonated. After twenty-eight days of explosions, the Canal was once again open to maritime traffic.



### Pole 340 North Old Bourne Bridge Abutment

Now decorated with a painting depicting the "old" and "new" Bourne Bridges, this tall concrete wall is an abutment from the original Bourne Bridge across the Cape Cod Canal. Completed in 1911, this bridge was a drawbridge that accommodated cars, pedestrians and trolleys. The trolleys ran from New Bedford to Monument Beach (a village of Bourne). By the end of the 1920s many more people had cars, leading to more conflicts between vehicular and vessel traffic. The drawbridges were removed in 1935 with the completion of the elevated highway bridges we have today.

On top of the old abutment is Three Mile Look, a landscaped park with picnic tables, maintained by the Town of Bourne.







### Pole 355 South Aptucxet Trading Post

Before the Canal was constructed, two tidal rivers flowed through this valley, separated by a narrow strip of land. On the east end was the Scusset River. The Manomet River (later called the Monument River) was here on the west end. Aptucxet Trading Post was established at this location along the riverbank by the Plymouth Colony. The Trading Post provided a location for the Pilgrims to trade with the local Wampanoag tribes and the Dutch sailing up from New Amsterdam (New York). Miles Standish of the Plymouth Colony recognized the importance of this valley as a trade route, (something learned from the Wampanoags) and is often credited with being the first to propose a canal along this valley. The Bourne Historical Society manages the Aptucxet Trading Post and other museums on this property.







## Pole 375 Railroad Bridge

Like the other bridges along the Canal, this bridge was completed in 1935 as part of a New Deal project. It replaced the first railroad bridge spanning the Canal. The old bridge was a

bascule lift bridge, using a single counterweight to lift the span to one side (northside). It supported two tracks.

When constructed, today's railroad bridge was the largest vertical lift bridge in the world. It's 544-foot center span rests 135 feet above the Canal allowing large vessel to pass underneath. When a train needs to cross, the 2,200-ton span lowers in 2.5 minutes with the help of two 1,100ton counterweights, eight sheaves (pulleys), a couple of engines to get it moving & lots of cables.

Usage of the bridge has varied over the years. Now-a-days, it's used year-round by trains transporting trash to a waste-to-energy plant off-Cape. Seasonally, passenger trains traveling between Boston and Hyannis will use it on the weekends and holidays.



