

**Site 6:** At this site stormwater flows from Old Shore Road, onto the boat ramp and beach and into the bay. Heavy summer activity at the boat landing leaves materials on the pavement like automotive fluids, litter, and bacteria from pet waste that are washed into the bay during storms. We are working to install treatment systems at locations like this to help clean up the bays.



**Site 6: Old Shore Road Boat Landing**

**Leg 5:** Continue walking along Old Shore Road heading north along the bay toward Rope's Beach. Site 7 is at the edge of the pavement between the boat landing and the Rope's Beach parking area.

**Site 7:** The lack of curbs along this section of Old Shore Road allows stormwater to flow or run off the pavement surface. The channels you see through the sand from this *surface runoff* are clues that help us identify locations that may need treatment. However, roads this close to sea level present challenges for managing stormwater due to frequent flooding and because groundwater is close to the soil surface.



**Site 7: Old Shore Road Surface Runoff**

**Leg 6:** Continue walking along Old Shore Road past the Rope's Beach parking area. Just as the road begins going uphill Site 8 will be on your left behind a wooden fence. Here you will see a concrete-lined *wetland pocket biofiltration system*.

**Site 8:** This system works much like the one at Site 3 at Town Dock using wetland plants to remove pollution. Stormwater is carried from storm drains further up the hill through pipes to be treated here. This system, installed many years ago, was allowed to naturalize as a way to reduce maintenance. This project will assess function and maintenance needs of older systems such as this to improve their performance when possible.

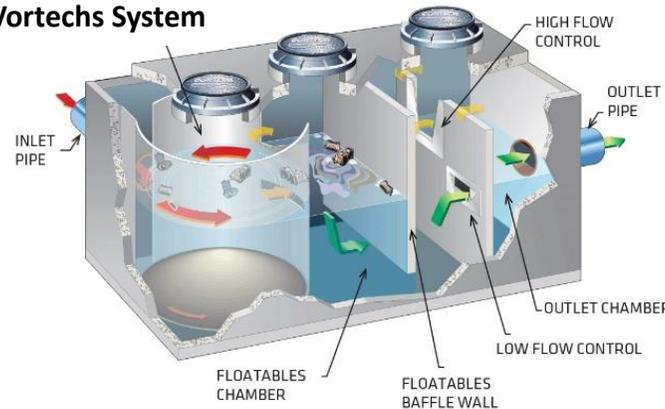


**Site 8: Wetland Pockets Bio-filter**

**Leg 7:** Continue walking uphill to the intersection with Putnam Avenue. Looking across Putnam Ave. toward the open field there are three metal manhole covers near each other on the road. This is Site 9.

**Site 9:** Beneath these manhole covers is a proprietary stormwater treatment system called Vortechs. This system guides stormwater into a swirling motion to remove solids, oil, bacteria, and nutrients. Captured materials are vacuumed from the system and disposed of by municipal staff as needed.

**Vortechs System**



**Leg 8:** The Home Stretch. It's time to start the journey home. Thanks for taking the tour. We hope it was informative and inspiring! Complete the loop by heading west on Putnam Ave to the intersection with Main Street. Turn left again and follow Main Street back to Site 1.

# Cotuit Village Stormwater Walking Tour



Take this self-guided tour to learn how stormwater management can help clean up the bays.

This tour was developed as part of the Three Bays Stormwater project funded by the U.S. Environmental Protection Agency's Southeast New England Program. The project aims to improve water quality in the bays by reducing pollution (like nitrogen and bacteria) from stormwater runoff through installation of treatment systems like those on this tour.

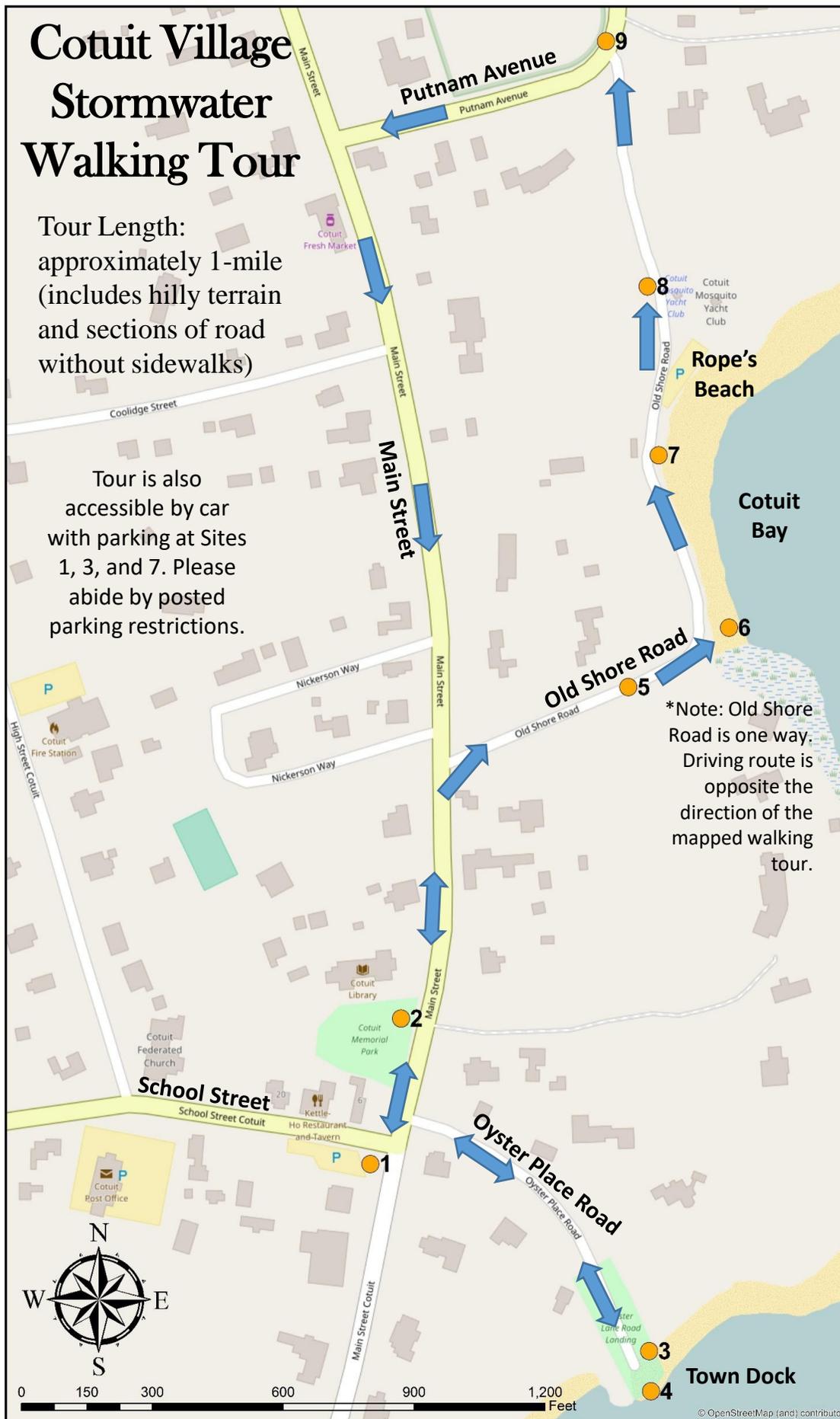
**Project Partners**



# Cotuit Village Stormwater Walking Tour

Tour Length: approximately 1-mile (includes hilly terrain and sections of road without sidewalks)

Tour is also accessible by car with parking at Sites 1, 3, and 7. Please abide by posted parking restrictions.



\*Note: Old Shore Road is one way. Driving route is opposite the direction of the mapped walking tour.



Site 1: Rain Garden/ Phytoremediation



Site 2: Memorial Park Leaching System



Site 3: Town Dock Bio-filtration System



Site 4: Town Dock Stormwater Pipe



Site 5: Old Shore Road Manhole Covers

**Site 1:** At the corner of School Street and Main Street the shell parking area and surrounding landscape cover the site of an old gas station. Polluted soil from the gas station is being cleaned using *phytoremediation*: removing pollution with specifically selected plants put in around the site. And next to the parking area is a rain garden designed to remove additional pollution from stormwater runoff.

**Leg 1:** Cross School Street and walk north along Main Street for about 30-feet. On the west side of Main Street is the Memorial Park garden by the Cotuit Library.

**Site 2:** Under the flower bed is a stormwater *leaching system*, which directs water from storm drains on School and Main Streets to soak into the ground. Excess rain from large storms is directed to a pipe under Town Dock (Site 4).

**Leg 2:** Walk back toward School Street, cross Main Street, and walk downhill on Oyster Place Road to the end of the pavement where you will see the Cotuit Town Dock.

**Site 3:** At the edge of pavement nearest the beach there's a gravel filled basin with plants surrounded by concrete curb. This *bio-filtration system* treats stormwater from the parking area by physically filtering out sand, dirt, and oils. The plants remove nutrients and bacteria, and then the treated water soaks into the soil where it flows toward the bay. A solar pump recirculates water for further treatment and to water the plants. Check out the sign for more detailed information and a diagram of the system.

**Site 4:** The 24-inch pipe under Town Dock carries excess water, *stormwater overflow*, from Site 2 and upper Oyster Place Road to the bay. The treatment system at Site 2 removes most of the pollution from the stormwater, assuring the overflow water is reasonably clean before it reaches the bay. Note: The pipe is submerged at high tides.

**Leg 3:** Head back up to Main Street, turn right, and walk about 600-feet. Turn right on Old Shore Road and walk downhill toward the bay.

**Site 5:** Part way down the hill you will see three manhole covers between two storm drains on the sides of the road. The drains are connected to a lava rock filled tank that treats the water before it is absorbed into the ground.

**Leg 4:** Continue downhill toward the bay. Site 6 is located at the boat ramp at the bottom of the hill.