

Ellisville Marsh Backgrounder

Ellisville Marsh, situated on the Massachusetts coast five miles north of the Cape Cod Canal, is a fisheries and wildlife habitat restoration opportunity of incomparable value. Historical documents and maps attest to the fact that the salt marsh, former Ellisville harbor, and channel have been a center of fishing, shellfishing and farming for over 250 years. Thoreau in his Journal (1857) noted seeing "...menhaden skipping in the pond as I came along, it being connected to the sea." In fact, fish were so abundant that a fishing weir with nets was operated at the mouth of the tidal inlet channel from the early 1890's until the 1920's. Eels were also harvested from the marsh during winter by cutting holes through the ice.

While several tributaries feed the Ellisville Marsh estuary with fresh water, the channel providing salt water from Cape Cod Bay is crucial to the marsh's survival. Major coastal storms, particularly nor'easters, have periodically blocked the channel through a process known as 'avulsion,' filling the channel with sand and diverting it in a southwesterly direction as shown in the figure. Channel avulsion at Ellisville Marsh is known from historical accounts to have occurred as far back as 1791. For several hundred years, local residents and fishermen dredged and maintained the channel after coastal storms to protect and preserve this rich ecosystem. Dredging was also done periodically throughout the 20th century by the Commonwealth of Massachusetts or Town of Plymouth. However, channel dredging was effectively halted in 1987.



Events in the Life of the Salt Marsh and Channel

A complex series of natural, legal and regulatory events over the past fifty years has impacted the vitality of Ellisville Marsh, as measured by its level of water quality and capacity to support wildlife and fish:

- A number of protective structures were built at various times at the mouth of the channel – in 1910 a wooden jetty was installed on the north side; this was replaced with stones in 1935.
- In 1961, Ellisville Harbor was designated a “Harbor of Safe Refuge” by the Commonwealth of Massachusetts. The Massachusetts Department of Public Works (MA DPW) then removed the 1935 jetty and reused the stones to build the current rock groin about 100 feet to the north of the channel, at the same time reshaping the channel mouth and ocean floor in the immediate vicinity. According to informed local sources, the Commonwealth had stated its intention to armor the channel with rock but failed to complete the project when funds ran out.

- The Ellisville Harbor area was designated an Area of Critical Environmental Concern (ACEC) by the Massachusetts Secretary of Environmental Affairs in 1980. Recognizing the rights of local fisherman, the area at the mouth of the channel was excluded from the ACEC specifically to permit maintenance dredging. However, dredging was halted in 1987 after legal action was taken against a local lobsterman by the Commonwealth.
- The “No Name” storm in 1991 closed the channel by avulsion. Subsequent migration of the inlet 1,500 feet to the south over the following years significantly impeded salt water flows into and especially out of the marsh. This caused massive changes in salinity and deteriorating water quality, growth of algal mats and mud areas, extensive die-off of salt marsh vegetation, migration of *Spartina alterniflora* into previously high marsh areas, and virtual disappearance of certain fish and wildlife species. Moreover, the channel migration caused severe and irreversible erosion damage to the bluff at the north end of Lookout Point.
- Assessments of Ellisville Marsh by federal and state agencies in 2001 led to the conclusion that the “...wetlands are drowning and are experiencing a drastic salinity change due to tidal restrictions.” (Comment by Army Corps of Engineers staff person).
- A private property owner whose bluff was severely damaged by the migrating channel shouldered the financial burden of obtaining the necessary permits and covering the construction cost associated with reopening the channel inlet in its historical location in late 2003.
- The Blizzard of 2005 again closed the channel inlet and the channel again began migrating in a southwesterly direction. Permits currently in effect do not allow reopening of the channel inlet.
- A state report released in April 2007 indicates that Ellisville Marsh is among the most severely affected by tidal restriction of twenty-five coastal sites surveyed during 2006.

Other Relevant Facts

- The channel location is contained in a 45-acre parcel that was donated in 2003 to the Wildlands Trust of Southeastern Massachusetts, a non-profit land trust and environmental steward that is supportive of efforts to restore and protect the Salt Marsh.
- The Wildlands Trust in 2003 implemented a Beach Management Plan that is in effect year round and eliminates vehicular access to the salt marsh, beach and federally protected bird nesting areas. The Friends provides volunteer support to Mass Audubon’s threatened shore birds protection program.
- The University of Massachusetts at Dartmouth has undertaken a multi-year water quality monitoring and assessment study under the Massachusetts Estuaries Study, aided by Friends volunteers.
- Anecdotal evidence indicates that water quality, wildlife and fish populations began to rebound shortly after the 2003 channel re-dredging. Fishermen reported the taking of striped bass as large as 40” in length in the back part of the marsh during the summer of 2004, as well as numerous fish over 28” in length. Ospreys and other returning bird species have been sighted in the marsh.
- The Friends of Ellisville Marsh, Inc. was incorporated in July of 2007 and has been granted Section 501(c)(3) status by the Internal Revenue Service. Donations are fully tax exempt.
- The Ellisville Marsh Restoration Project has passed several key hurdles, receiving its MEPA determination and a favorable Order of Conditions from the Plymouth Conservation Commission. Permit filings are anticipated in 2009 with the Mass DEP and US Army Corps of Engineers.

The Mission of the Friends of Ellisville Marsh, Inc. is to work with property owners, state and federal agencies to restore, preserve and maintain the Ellisville Marsh ecosystem.