Herring River Restoration Project

Restoration Overview

Herring River Stakeholders Group
November 6, 2019

The Restoration Project

Objective:

- Restore the 1000+ acre Herring River Estuary
- Largest coastal wetlands restoration in Northeast

How:

- Remove existing restrictions in the river
- Return natural tidal flow

Why?

- Prevent ongoing degradation of the estuary
- Achieve ecological and social benefits
- Current tide gates are in poor condition

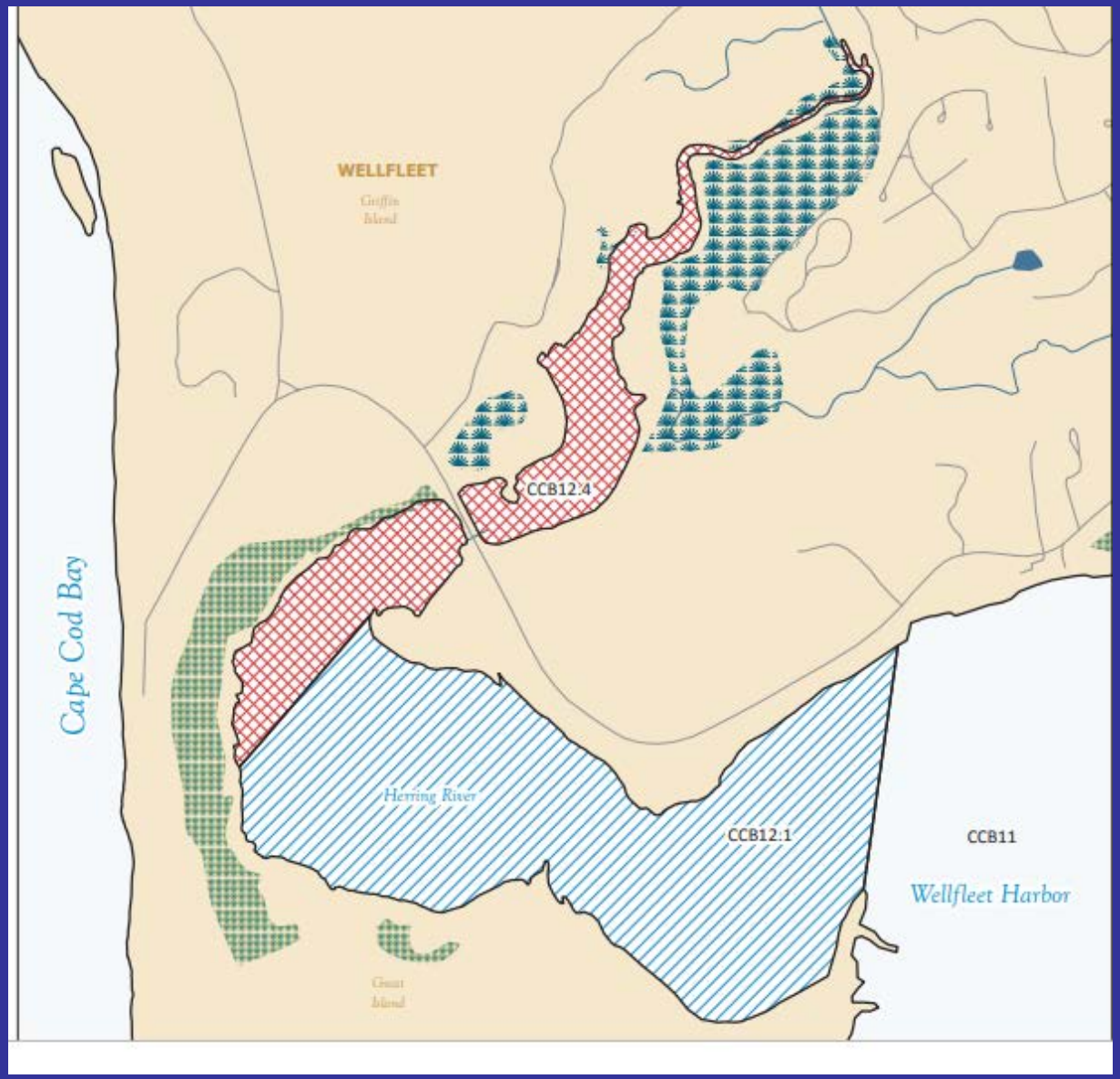

Chequessett Neck Road Dike, Constructed in 1909, 1973

Original vs. current opening

What's wrong with Herring River Today

- **Classified as "Impaired Water", in violation with the Clean Water Act: 303 d list : EPA/DEP (fecal coliform, low pH, aluminum)**
- **CNR dike is a point source for bacterial contamination – shellfish closures (DMF)**
- **Marsh subsidence & acid sulfate soils;**
- **Sustained low dissolved oxygen**
- **Degraded river herring habitat**
- **Salt marsh lost – replaced by invasive species – carbon storage lost; huge methane emissions**

Dike is Point-Source of Pollution-DMF



Dike Breach in 1960s-1970s

- Herring River temporarily partially restored
- What happened then?
  - Oysters and soft-shell clams re-settled above the dike
  - “Fishing had never been better”
  - Mosquito production dropped
  - Salt marsh vegetation began to re-establish
  - Shellfish community and CC Mosquito Control Project petitioned for a bridge

Dike Re-built

- **Shellfish upstream of dike died**
- **Sediment collected downstream of dike**
- **Invasion of Phragmites**
- **Eventual fish and eel kills due to acidity and aluminum**
- **Eventual downstream shellfish bed closures**

Herring River Tomorrow

- Improve water quality
- Recover salt marsh and other estuarine wetlands – 570 ac. Ph. 1
- Enhance/re-open shellfish beds
- Recover river herring habitat
- Reclaim Habitat for Marine Species: Striped Bass, Winter Flounder, Diamond-back Terrapin
- Reconnect Gulf of Maine - Engine of Productivity for Near- and Off-Shore Marine Habitats

Herring River Tomorrow

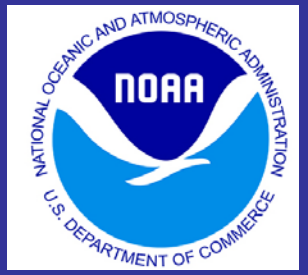
- Blue carbon & reduced methane emissions
- Habitats & Infrastructure Resilient to Sea Level Rise & Coastal Flooding
- Natural Mosquito Control
- Enhanced recreation, tourism
- Economic spending, blue economy

Project Outreach

- Property Owners
- Stakeholder Groups
- Shellfish Advisory Board
- SPAT
- Wellfleet Shellfish Department
- Others

Outreach is always on-going

Project Partners



Friends of Herring River

Thank You

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