

Town of Wellfleet



Cape Cod National Seashore

Phase 1 Project Update
Wellfleet Community Forum
April 13, 2023

Restoration Objectives

Restore Herring River estuary—once one of the most productive salt marsh systems in the Northeast.

Address severe degradation caused by prolonged tidal restriction

- Water quality (Clean Water Act non-compliance, bacterial point source)
- Marsh subsidence
- Acid sulfate soils, water surface acidification, metals mobilization
- Loss of resilience, climate adaptability
- Loss of habitat, obstructed fish passage, loss of shellfish areas
- Loss of estuarine function



Water Control Features Restore Tidal Flow

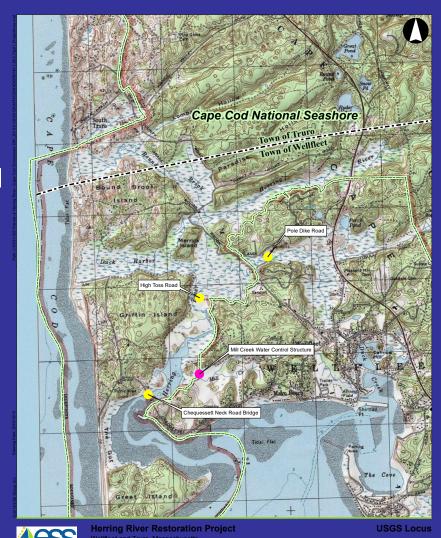
On Town Property:

- Chequessett Neck bridge & sluice gates
- Upper Pole Dike Creek Water Control Structure
- Removal of High Toss Rd causeway

On CCNS Property:

Mill Creek Water Control Structure

Phase 1 (570 acres) includes all water control infrastructure needed for full restoration (890 acres)



Protect the Built Environment

On Town Property:

- Elevate ≈2 non-contiguous miles of Old County, Bound Brook Island, Pole Dike, High Toss Roads, Way #672
- Replace 5 culverts in Wellfleet
- ≈671 linear ft of road work & 2 culverts in Truro (Inter-municipal Agreement)

Elevated roads increase embankment slopes

On Private Property:

- Elevate portions of CYCC golf course
- Measures on 3 private properties
- Relocate 2 wells in Mill Creek sub-basin



Project Funding

- \$49,870,000 grant agreements executed by Town:
 - US Dept. Agriculture Natural Resource Conservation Service
 \$27,200,000
 - MA Division of Ecological Restoration \$22,670,000
- Grants pending:
 - National Oceanic and Atmospheric Administration \$14,690,000 to Town
 - US Dept. Agriculture Natural Resource Conservation Service -\$8,000,000 to NPS/Cape Cod National Seashore (\$1,425,000 match committed by National Park Foundation)
- Funding for marsh/vegetation management
 - National Park Foundation: \$230,000
 - US Fish & Wildlife North American Wetland Conservation Act -\$2,000,000 – Ducks Unlimited

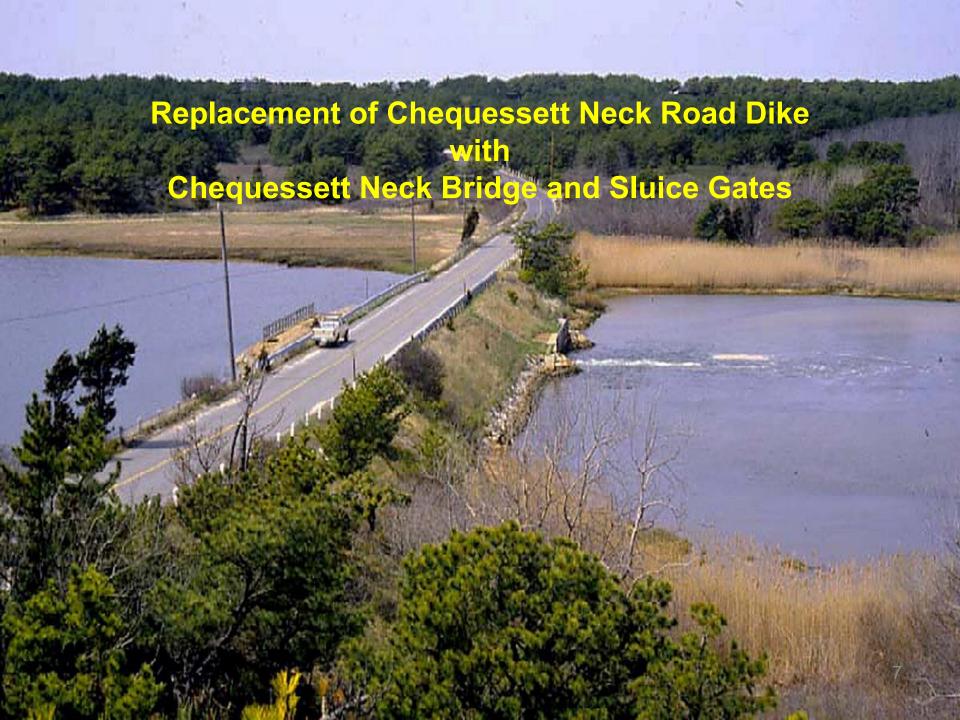
Construction Management and Oversight

- Grant-funded support for project oversight and grants management:
 - Owners Project Representative for bridge construction— Environmental Partners
 - Design Engineer for bridge construction—Fuss & O'Neill
 - Grants Management Support Clifton Larson Allen

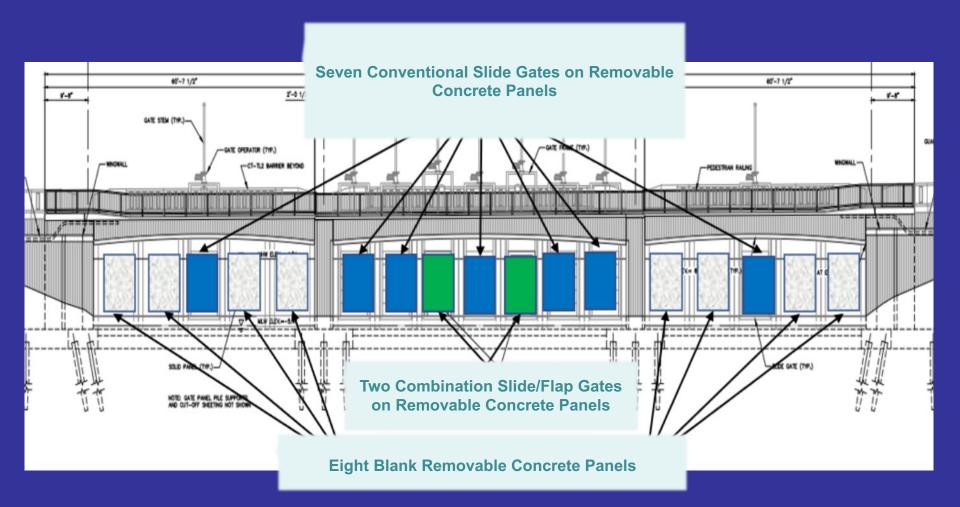




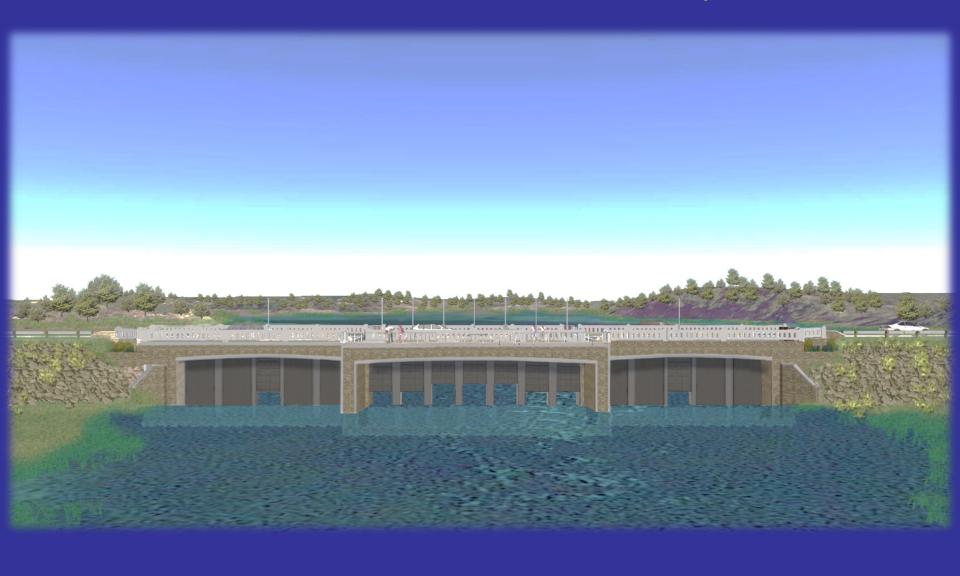




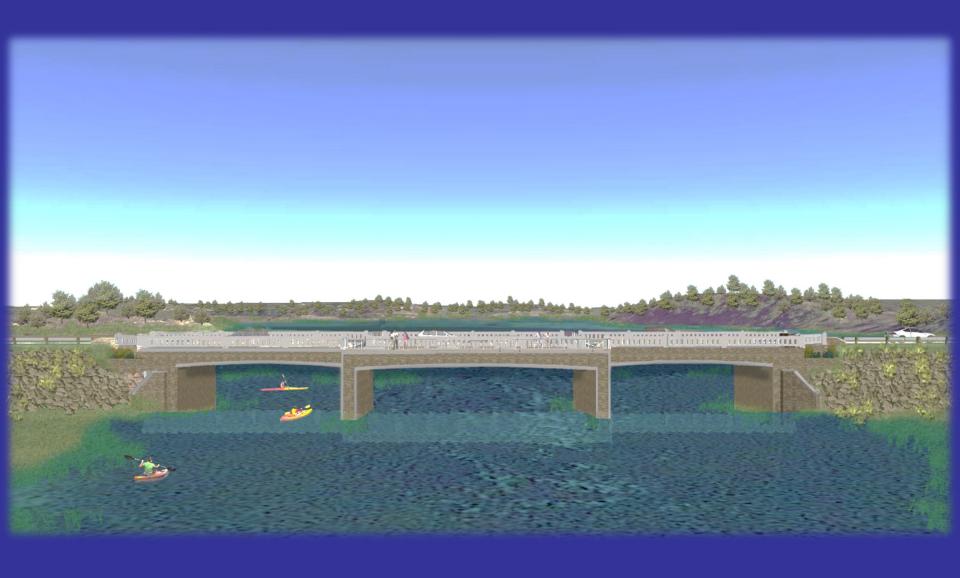
Bridge Structure Overview



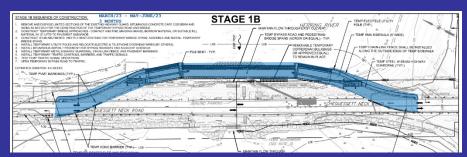
Post-Construction – Gates Partially Open

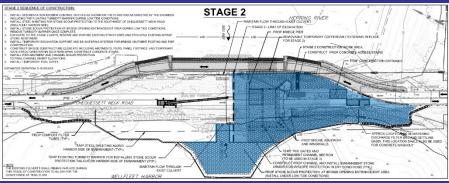


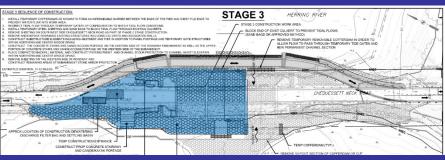
Full Restoration - Gates/Panels Removed

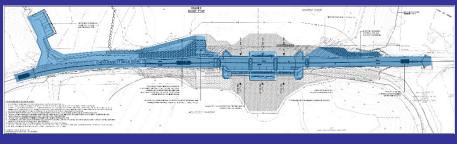


- Fall 2022 Summer 2023
 Construct Temporary
 Bypass Bridge
- Summer/Fall Winter 2023
 Construct Southern Bridge
 Pier and Abutment Area
- Winter 2023 Summer 2024
 Construct Northern Bridge
 Pier and Abutment Area
- Summer 2024 Spring 2025
 Construct Bridge
 Superstructure, Roadway
 and Duck Harbor Road
 Water Access Facility





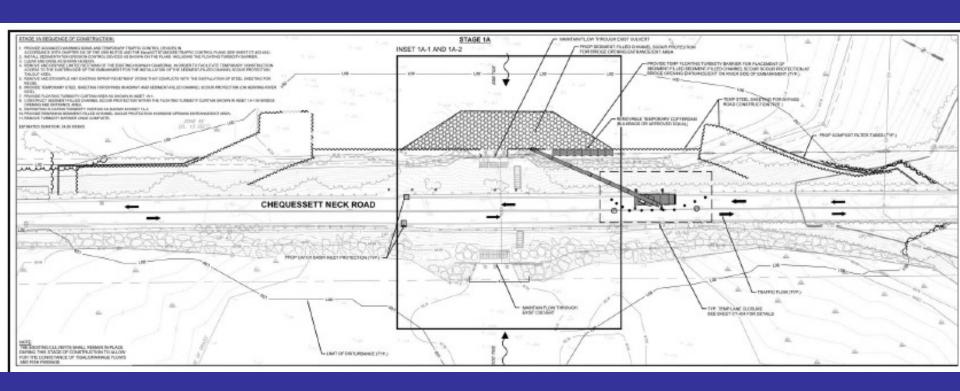




• Fall 2022 – Summer 2023

Preparation of staging area and construction access

Installation of upstream stone armor for permanent bridge



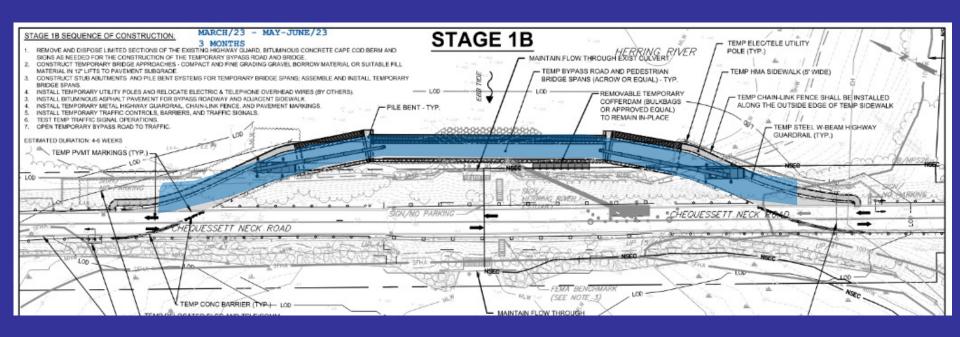




Photos by Wes Stinson, Environmental Partners

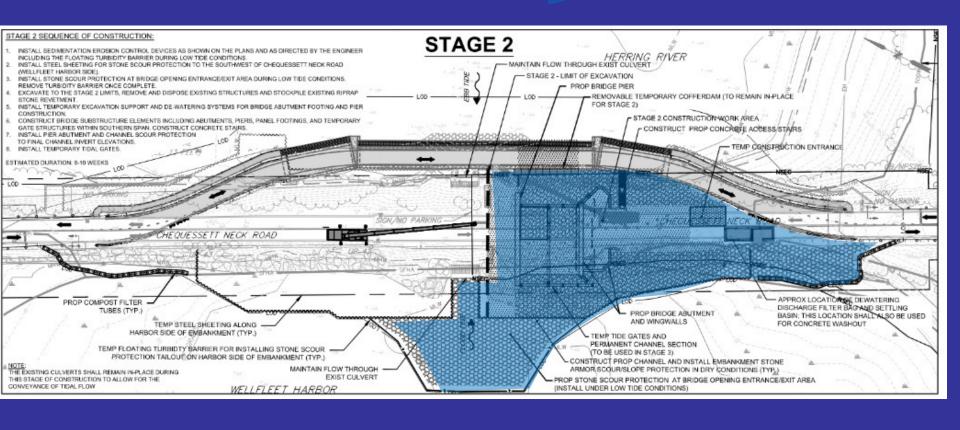
Summer 2023

Construct Temporary Bypass Bridge



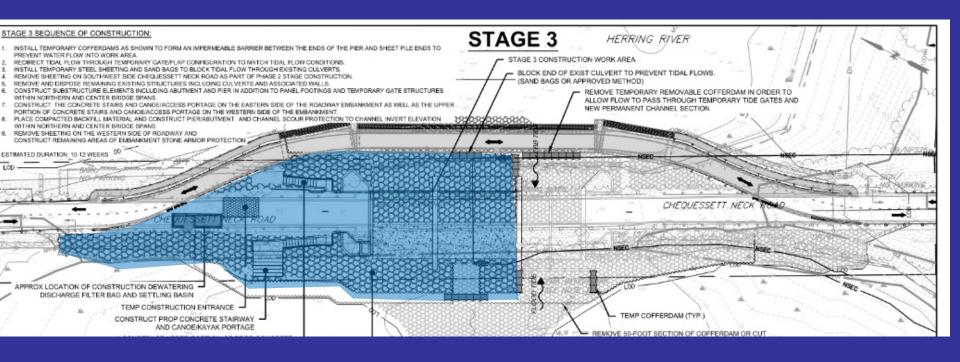
Summer/Fall – Winter 2023

Construct Southern Bridge Pier and Abutment Area



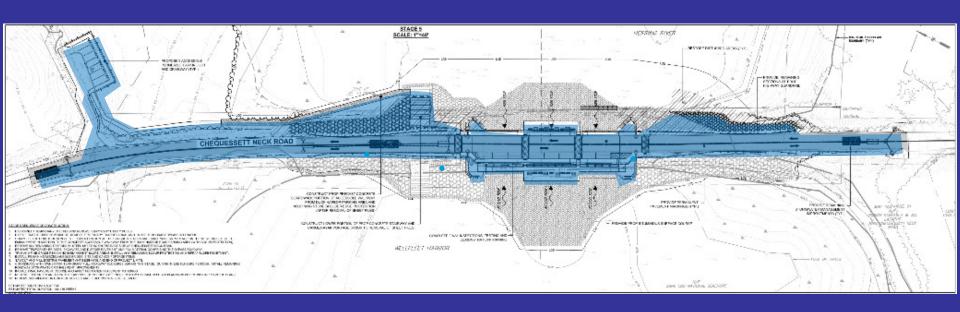
Winter 2023 – Summer 2024

Construct Northern Bridge Pier and Abutment Area

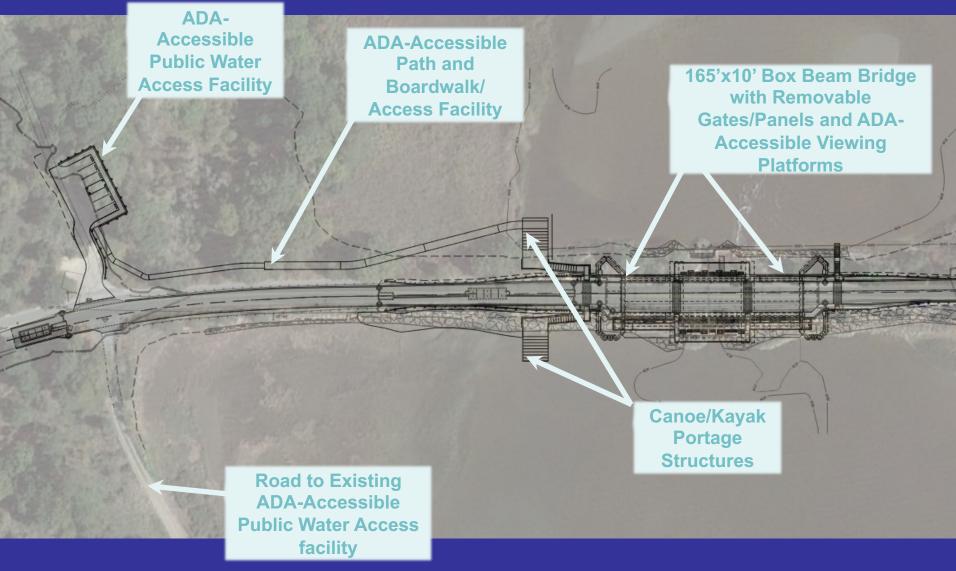


Summer 2024 – Spring 2025

Construct Bridge Superstructure, Roadway and Duck Harbor Road Water Access Facility



Chequessett Neck Road Bridge and Water Access Improvements



Post-Construction – View Looking South



Transportation Management

- Vehicular & pedestrian access maintained throughout bridge construction via signalized bypass bridge
- Road closures not anticipated, police details utilized as needed to maintain traffic flow
- Truck traffic through summer avg of 15 hauls per day depending on construction activity
 - To/From Rt 6 E Commercial along Harbor most likely route
 - To/From Town Pit West Main Howland Chequessett Neck most likely route

Construction-related Questions

- Construction activity and traffic management updates posted regularly:
 - Town website
 - Friends of Herring River website
 - Wellfleet DPW Facebook page
- Construction-related questions:
 - email: herringriver@envpartners.com

Other Ph 1 Projects -Estimated Timeline

- Final design underway, bid advertisements late 2023:
 - Mill Creek Water Control Structure
 - Pole Dike, Old County, Bound Book Island Rd elevation/culverts
 - Way 672 road elevation
 - High Toss Road causeway removal/road elevation
 - Property impact prevention on private property
- Estimated construction start
 - Mill Creek Water Control Structure late 2023
 - Low road elevation/culvert replacements— early 2024
- 2023 Annual Town Meeting Warrant article easement from Wellfleet Conservation Trust

Duck Harbor Vegetation Clearing

- Removal of woody vegetation saltkilled by persistent Duck Harbor over-wash
- Funded by National Park
 Foundation and US Fish & Wildlife
 Service through Ducks Unlimited
- Clearing suspended April 14; will resume next fall
- Monitoring will inform future vegetation clearing in the floodplain



Herring River Restoration Project Questions and Discussion