Walk Bridge Project

Norwalk Shellfish Commission

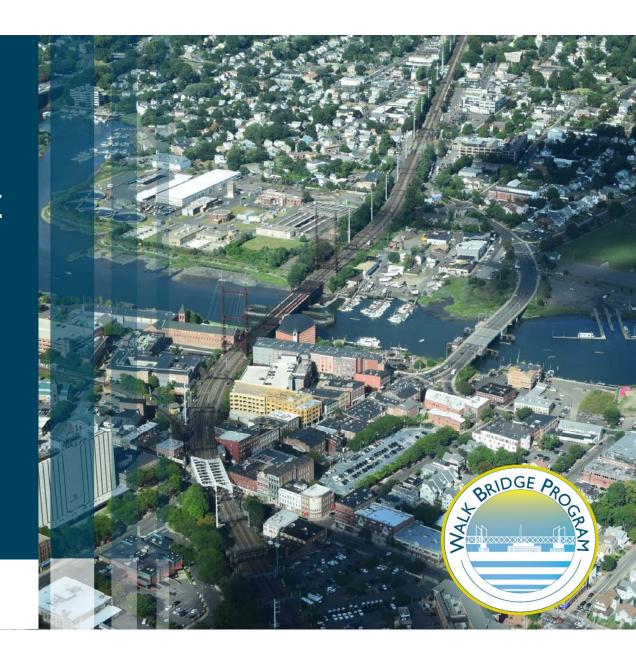
Permit Pre-application Coordination

June 6, 2019





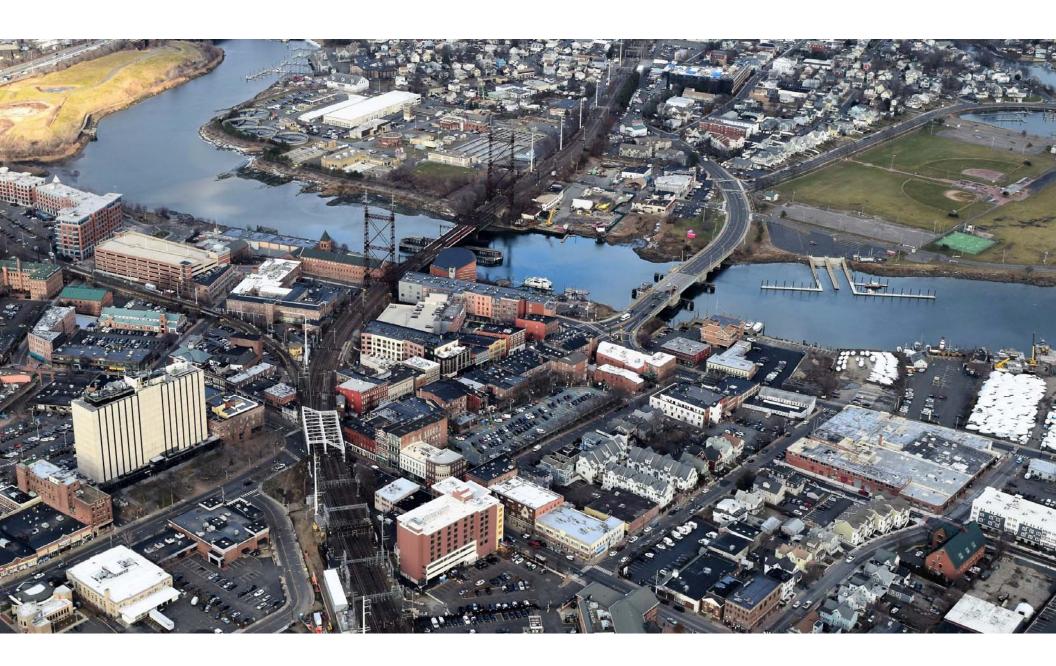




Meeting Agenda

- 1. Introductions & Meeting Purpose
- 2. Project Overview and Update
- 3. Turbidity Monitoring
 - 1. Allowable NTUs and/or % over turbidity background
 - 2. Written post-turbidity exceedance investigation and action plans
 - 3. Discussion of initial/pre-construction sentinel stations data
 - 4. Telemetry and/or data reporting format and timing from sentinel stations
- 4. Final dredging spoils haul-out locations
- 5. Work barge stationing
- 6. Possible Eversource river crossing alignments
- 7. Low salt marsh remediation plans
- 8. Next steps and questions





Project Update

- Advancing project design
- Advancing preparation of permit applications including plates, impact quantities, narratives and mitigation
- Ongoing coordination with U.S. Army Corps of Engineers, U.S. Coast Guard, CT DEEP and National Marine Fisheries
- Ongoing coordination with Norwalk Shellfish Commission and Harbor Management Commission
- Ongoing coordination with City

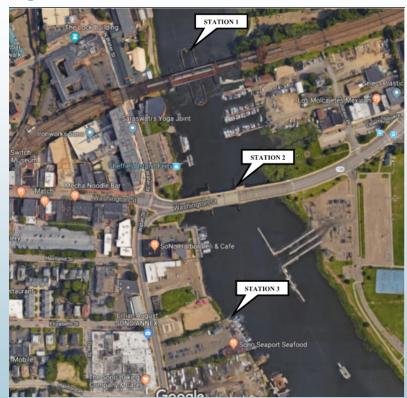


Water Quality Monitoring Program

- Pre-Construction Baseline monitoring
 - Monitoring stations were operational April 6th
 - Woods Hole Group
 - ~ 3 locations in vicinity of Walk Bridge
 - Monitoring Parameters (Turbidity, Dissolved Oxygen, Conductivity, pH)
 - Camera monitoring on Stroffolino Bridge

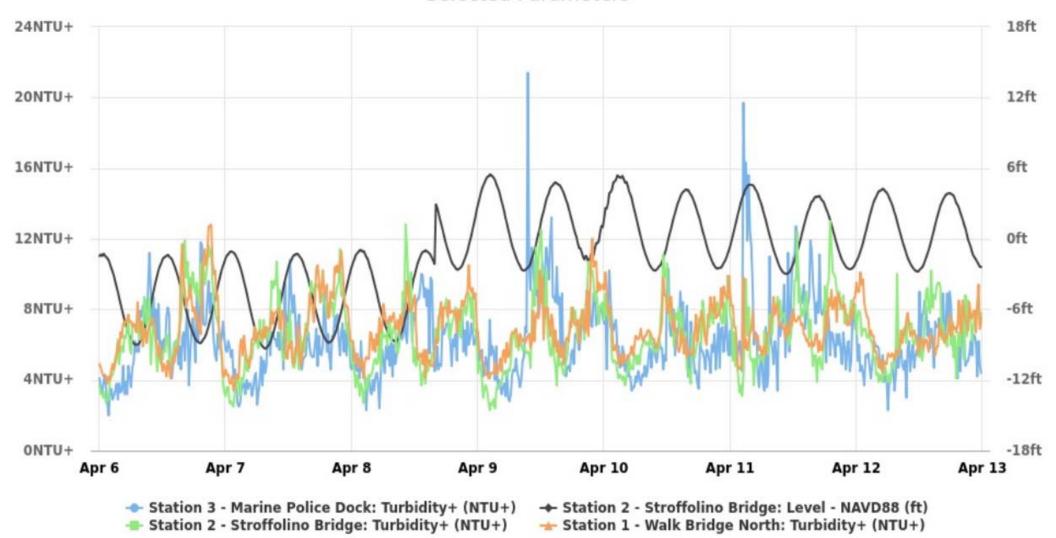
Station	Min (NTU)	Max (NTU)
1	0.4	46.6
2	-10.2	42.7
3	-5.6	42.7

April 6, 2019 - May 3, 2019

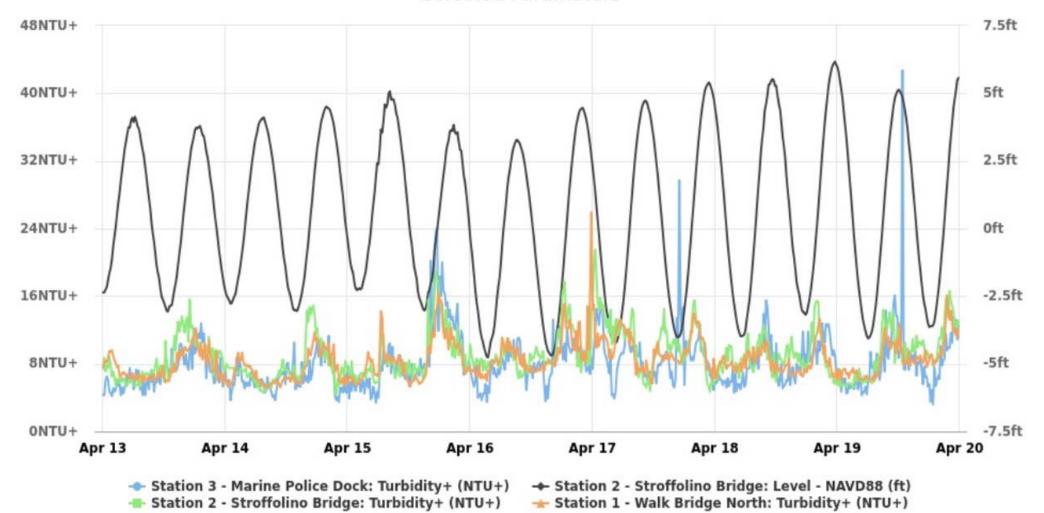




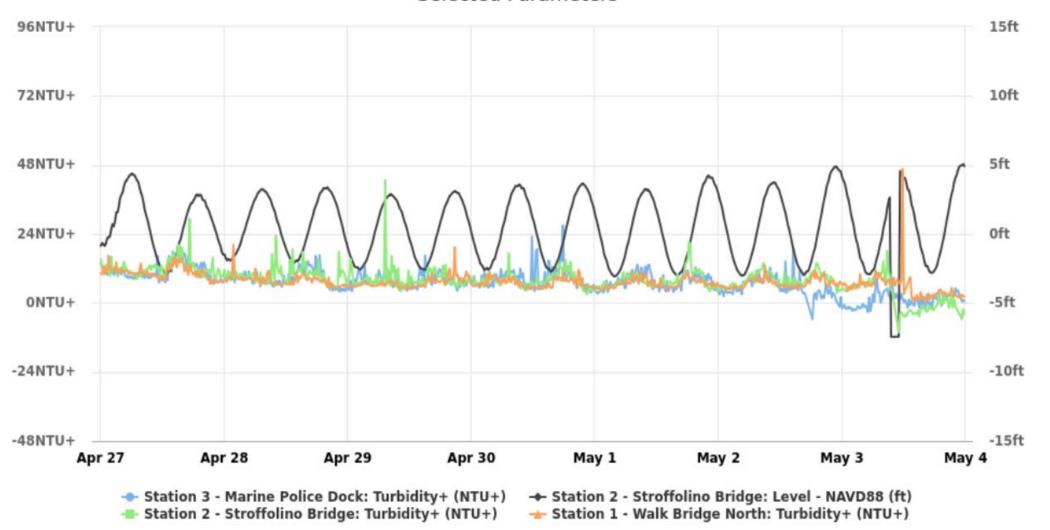
Selected Parameters



Selected Parameters



Selected Parameters



Water Quality Monitoring Program

- Construction Monitoring
 - Upstream Locations (North & South of Bridge) to serve as Background
 - Two Mobile Devices mounted to a buoy In the vicinity of the work activity
- Contract Documents
 - Section 1.10 of Form 817
 - Water Quality Monitoring Special Provision
 - Permit from ACOE/DEEP
- Construction Monitoring
 - Consultant Inspection Team
 - Real time monitoring



Water Quality Monitoring Program

- Action Levels
 - Five (5) NTUs when background turbidity is 0 15 NTUs
 - 35% increase when background turbidity is greater than 15 NTUs
- Corrective Actions
 - Inspect
 - Identify Source
 - Adjust Construction Activities
 - Document Adjustment
 - Report during weekly construction meetings
- Recordkeeping & Reporting
 - Monthly report of Readings and Corrective Actions Undertaken
 - Instantaneous Notice of a Fish kill

Background (NTU)	Example Action Level (NTU)
10	15
15	20
20	27
50	68
100	135



Sediment Haul-out Locations



Sediment Haul-out Locations



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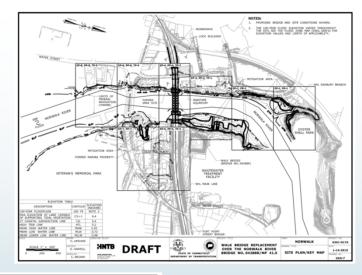
Sediment Dewatering Program

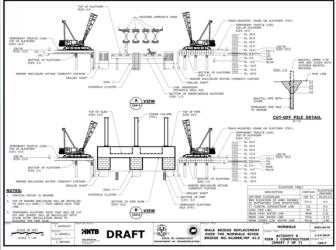
- CTDEEP General Permit for the Discharge of Groundwater Remediation Wastewater
 - Applies to all similar discharges in the State
 - Screening Initial Sampling
 - DOT Performance Specification -> Treatment system must meet effluent limitations
 - Effluent Limitations
 - Monitoring Frequency
 - < 5,000 gallons per day Quarterly
 - > 5,000 gallons per day Monthly



Permit Plates

- Overview Plates
 - Existing & Proposed Conditions
 - Temporary Conditions
 - Tidal Wetland Mitigation
- Construction Activity Plates
 - Representation of construction activity within resource areas
 - Step by step details for 18 Major Activities
 - Plan views
 - Elevation/Section Views







Construction Activity Overview



NUMBER	CONSTRUCTION ACTIVITY
1	IMAX REMOVAL
2	DUCT BANK INSTALLATION
3	VESSEL DOCK RELOCATION
4	MARINE STAGING YARD
5	NORTHWEST TRESTLE
6	SOUTHWEST TRESTLE
7	NORTHEAST TRESTLE
8	SOUTHEAST TRESTLE
9	PIER 2
10	PIER 3
11	SUBMARINE CABLE INSTALLATION
12	SUBMARINE CABLE REMOVAL
13	SWING SPAN REMOVAL
14	EXISTING PIER REMOVAL
15	FENDER INSTALLATION
16	WETLAND MITIGATION
17	DREDGING
18	LIFT SPAN INSTALLATION

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Eversource Alignment Opportunities

- Current Alignment
- North of Stroffolino Bridge
- MNR duct bank overview











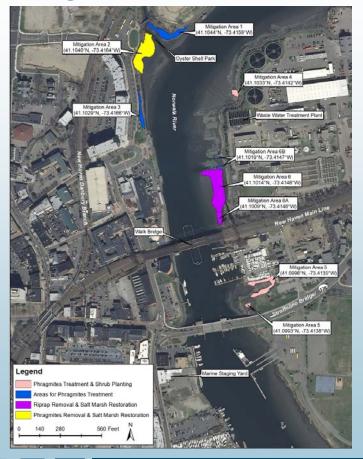


Summary of In-water Protective Measures

- Turbidity Curtains
- Turbidity Monitoring
- Time of Year Restrictions
 - Dredging will occur between Dec. 1 Jan. 31
 - No unconfined in-water silt producing activities from Feb. 1 Sept. 30
- Use of soft starts at the beginning of each shift from Mar. 15 to Oct. 31
- Maintain one navigation channel, except for limited closures
- All temporary construction access restored to pre-construction conditions
- Bubble curtains eliminated due to soil conditions



Wetland Mitigation Sites



- Phragmites Treatment and Shrub Planting
- Phragmites Treatment
- Intertidal Habitat/Tidal Marsh Remediation
- Spartina alterniflora Marsh Restoration



Wetland Mitigation Site #2



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Wetland Mitigation Site #6



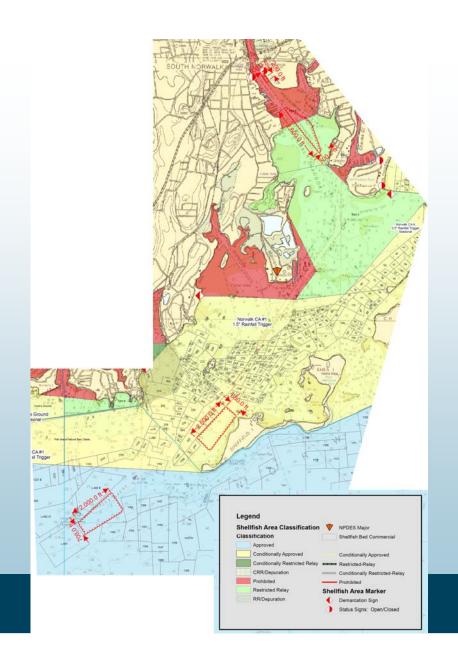
Wetland Mitigation Protective Measures

- Turbidity curtains around sites requiring grading or excavation
- Turbidity Monitoring
- Work only above tide cycle
- All temporary construction access restored to pre-construction conditions



Barge Mooring Locations

- "MNO"
- South Anchorage Basin
- Sheffield Island Bay
- Green Ledge Lighthouse



Next Steps, Questions & Comments

