

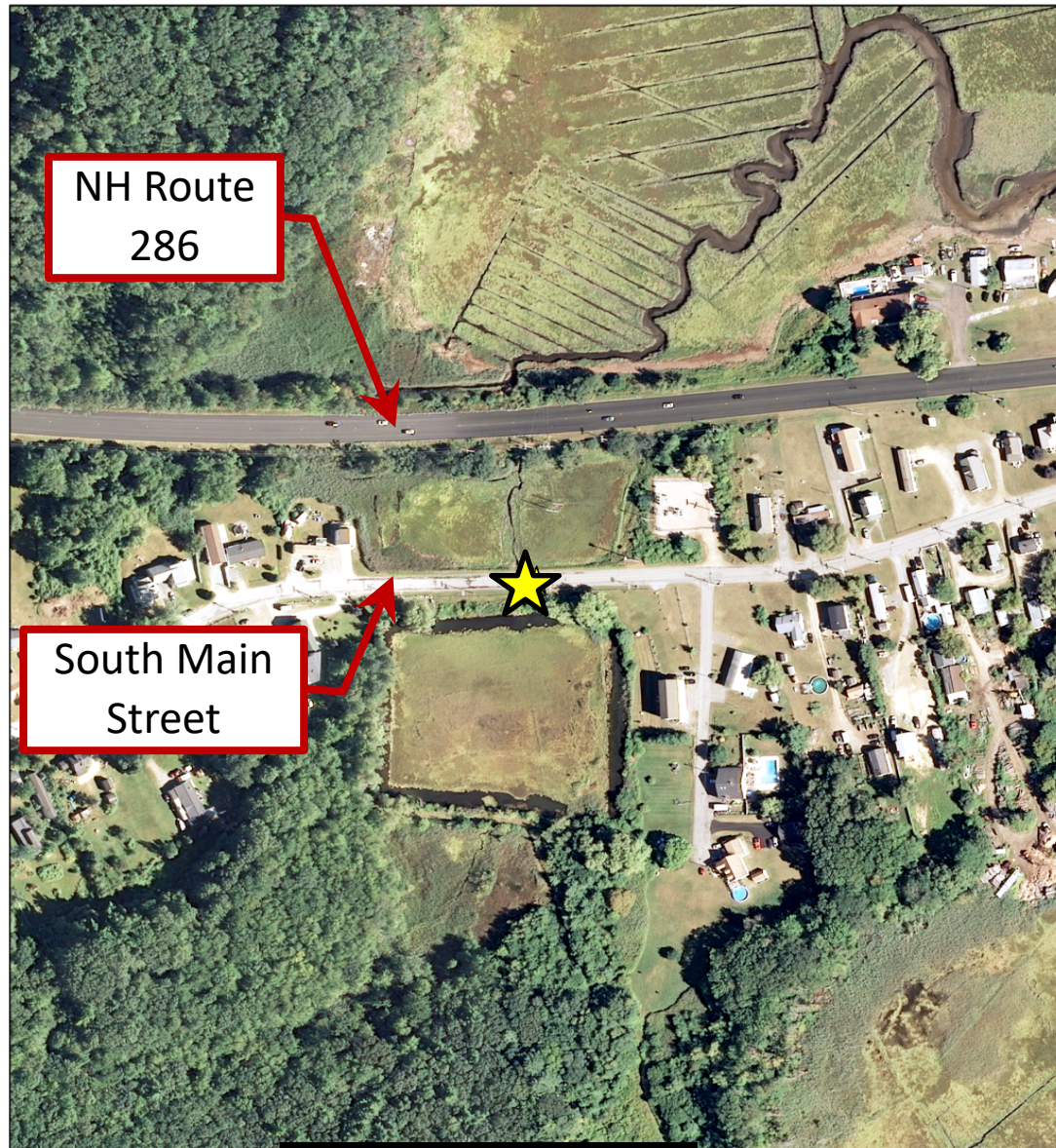
South Main Street Tidal Crossing Project Update

Pete Steckler

*GIS & Conservation Project Manager
The Nature Conservancy*

Neal Price

*Project Engineer and Manager,
The Horsley Witten Group*



★ South Main Street Tidal Cro



Project Location Map

*South Main Street Tidal Crossing
Seabrook, NH*

Feet

Overview

- Re-introduce the project
- Project Activities To-date
- Next Steps and Questions









Overview: Why This Crossing?



Existing Flood Hazard

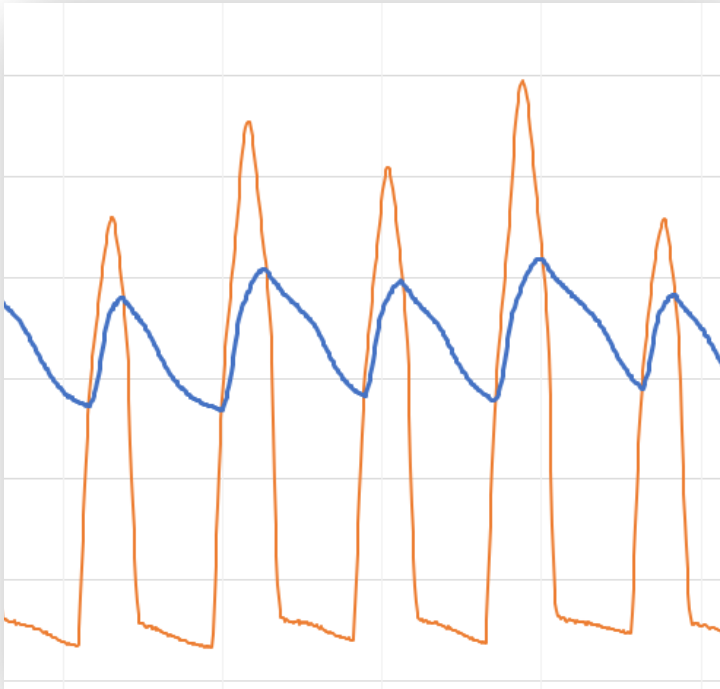
Projected to flood more regularly with sea level rise and storms



Photo by Selectman About Khan on January 4, 2018. Map from the NH Coastal Viewer.

Overview: Why This Crossing?

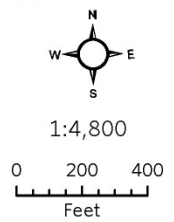
Existing Upstream and Downstream Water Elevations



- **Severe Tidal Restriction**
- **Barrier to Fish Passage**
- **Salt Marsh Migration Potential**

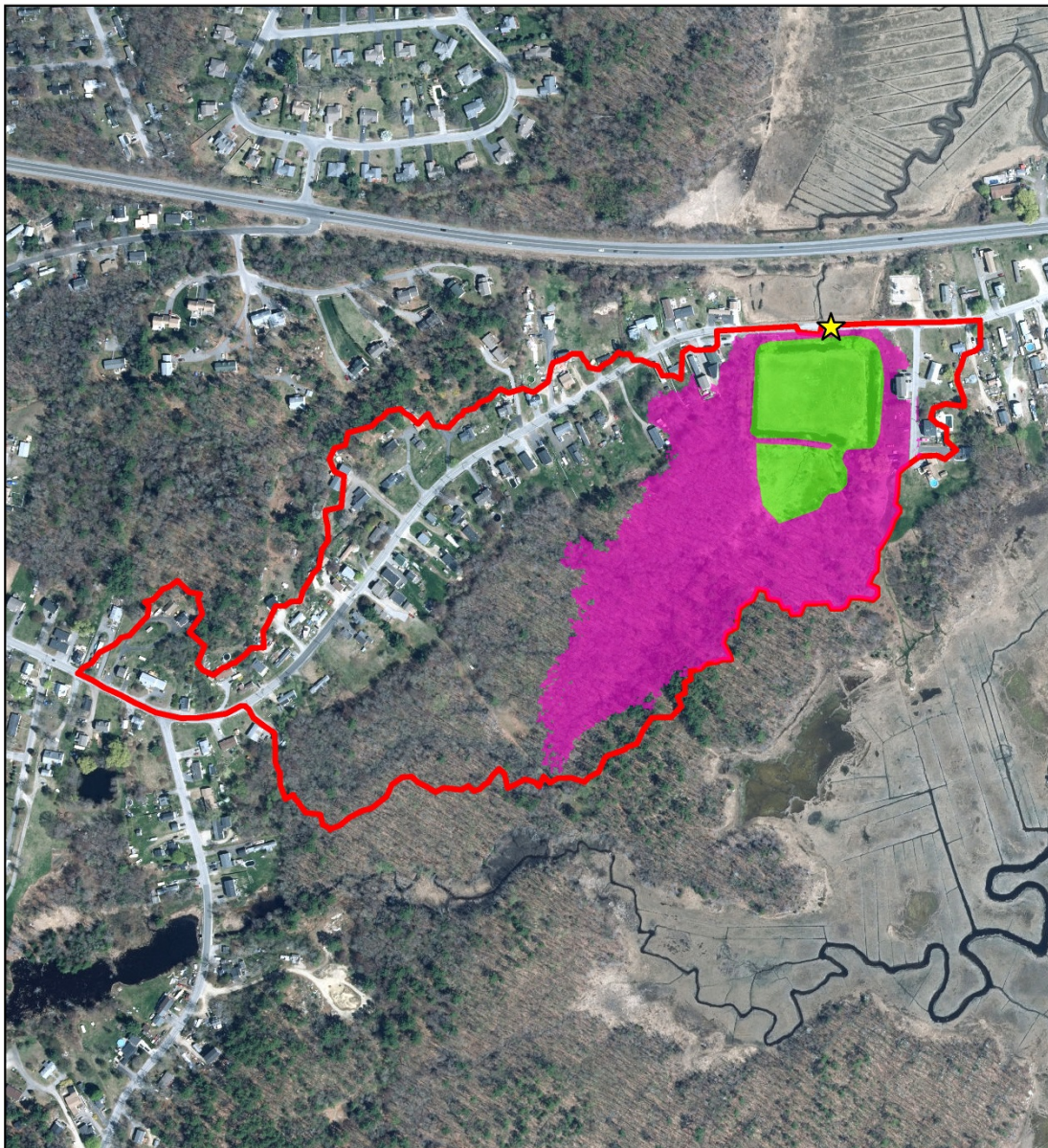


- ★ South Main Street Tidal Crossing
- Existing Upstream Salt Marsh
- Tidal Crossing Modeled Watershed

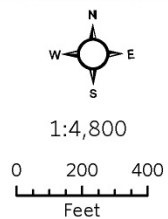


Project Location Map

*South Main Street Tidal Crossing
Seabrook, NH*



- ★ South Main Street Tidal Crossing
- Existing Upstream Salt Marsh
- Salt Marsh Migration Potential (1.7' SLR)
- Tidal Crossing Modeled Watershed



Project Location Map

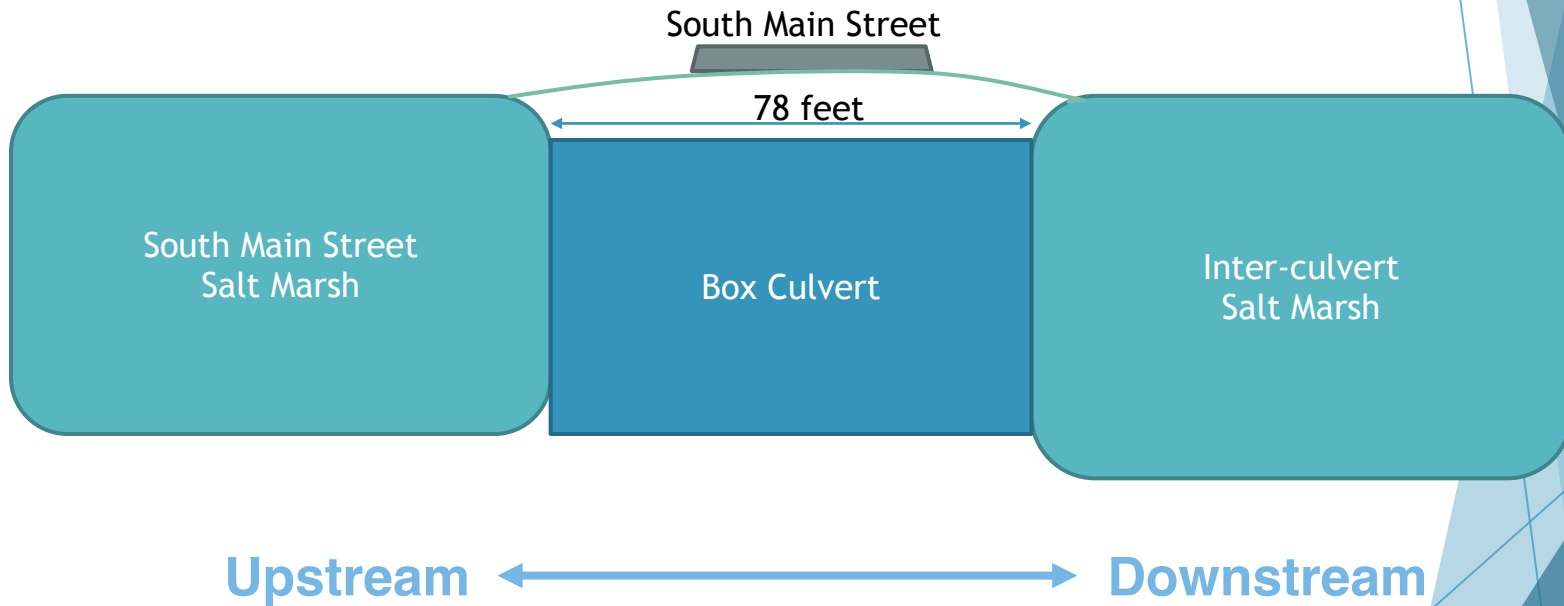
South Main Street Tidal Crossing
Seabrook, NH

Activities To-date

- Released an Engineering RFP in November 2019
- Horsley Witten Group Selected and under contract, Winter 2020
- Baseline Conditions (survey, water elevation monitoring, borings), Spring/Summer 2020
- Hydrology and Hydraulics Analysis, Summer 2020
- Evaluate Performance of Replacement Structure Alternatives, Summer/Fall 2020
- Select a Preferred Alternative

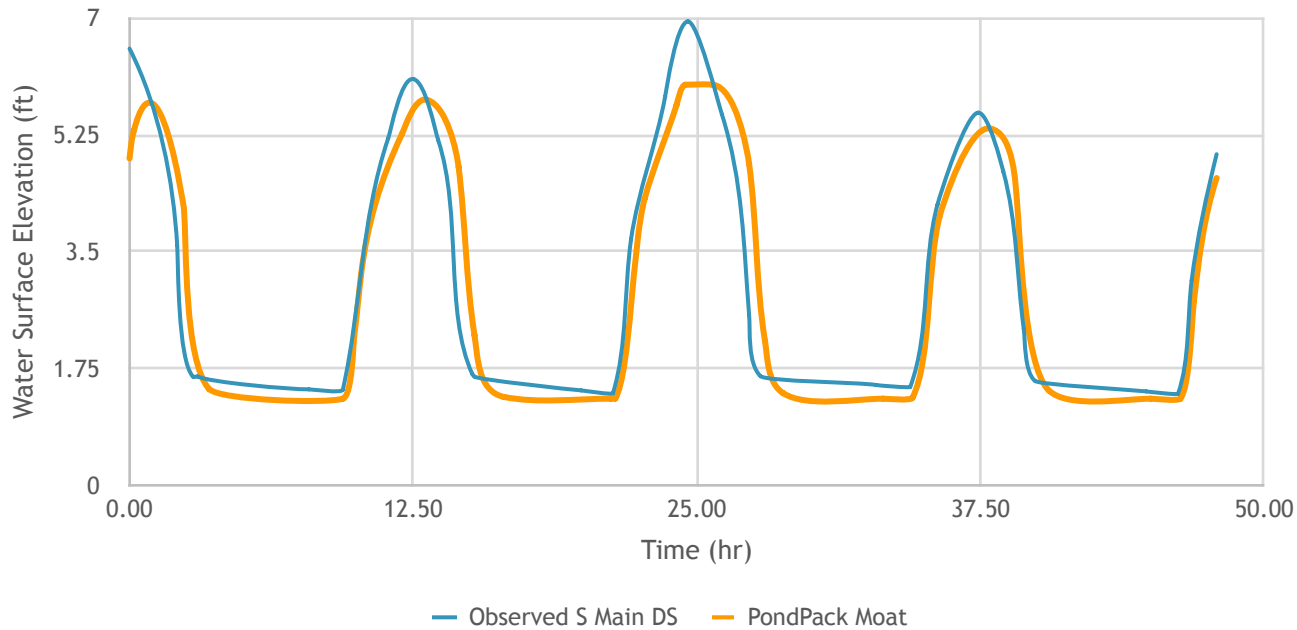
Proposed Conditions: Alternative 1

5Hx6W Box Culvert



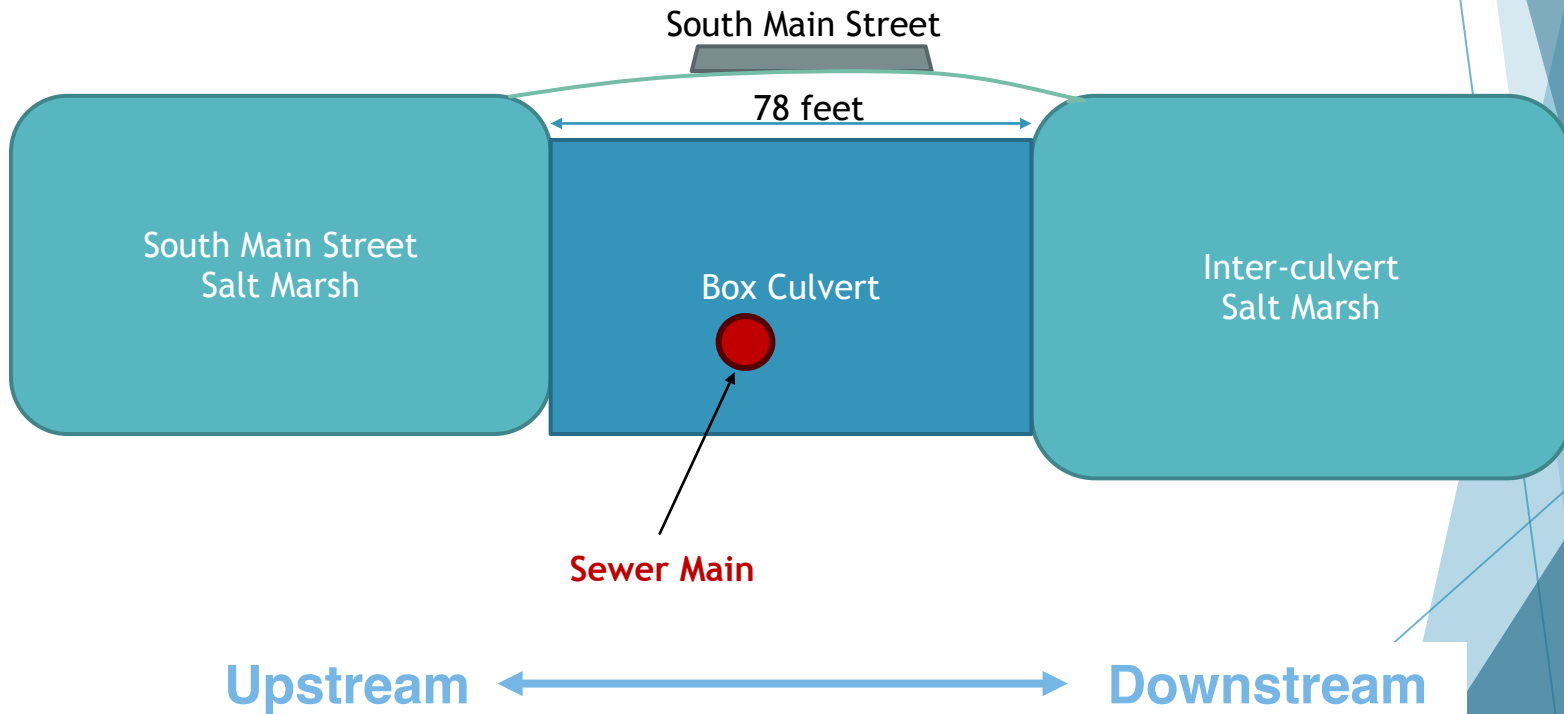
Alternative 1 (5' High X 6' Wide) Results

Proposed Conditions: S Main Culvert (5Hx6W)



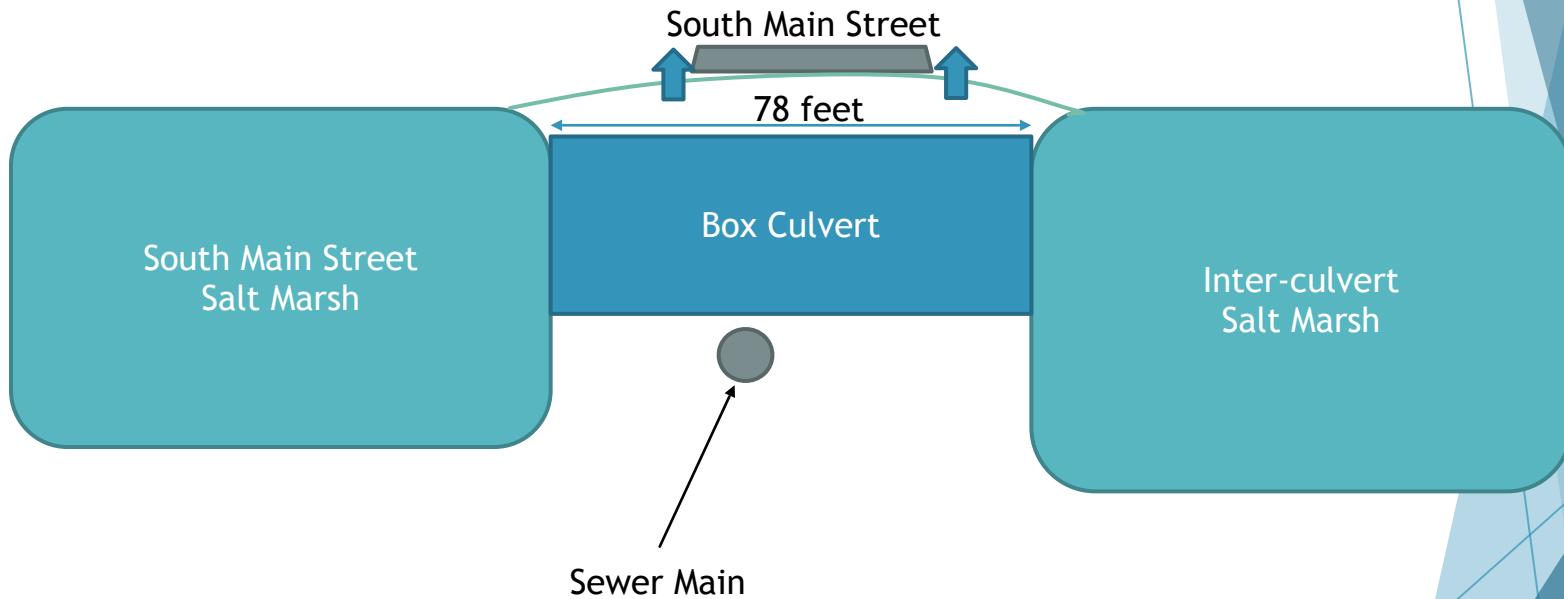
Proposed Conditions: Alternative 1

5Hx6W Box Culvert

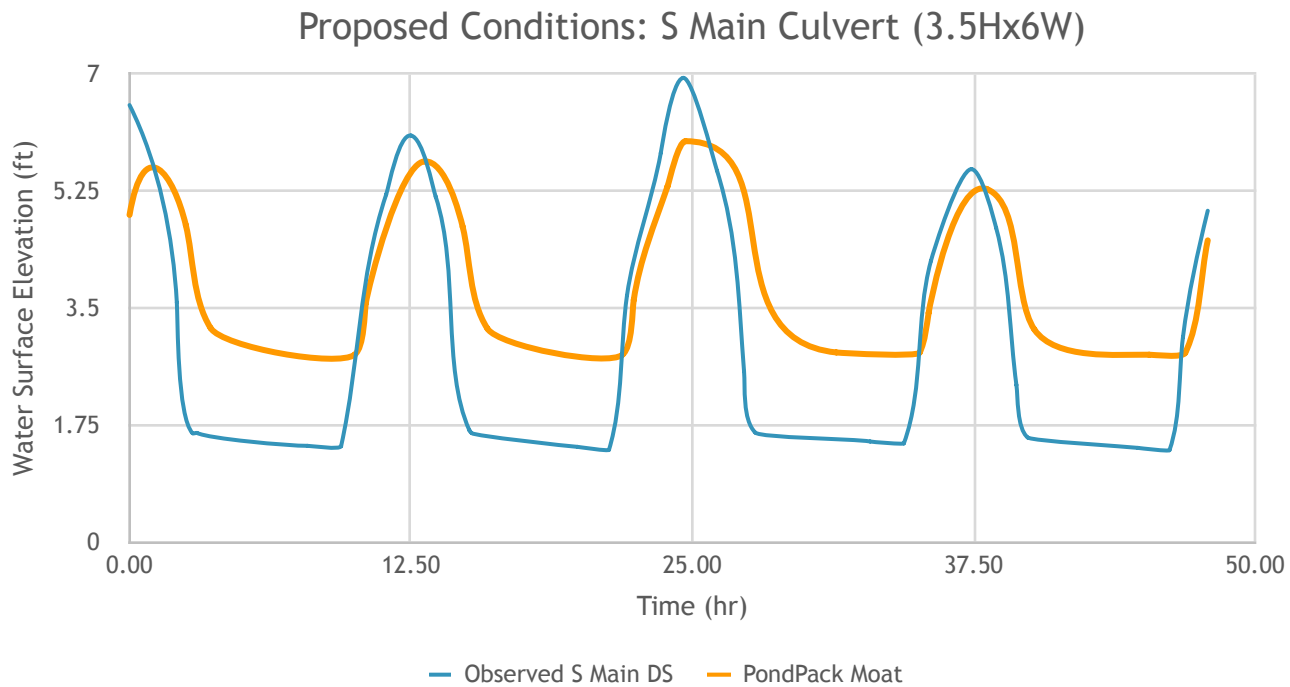


Proposed Conditions: Alternative 2

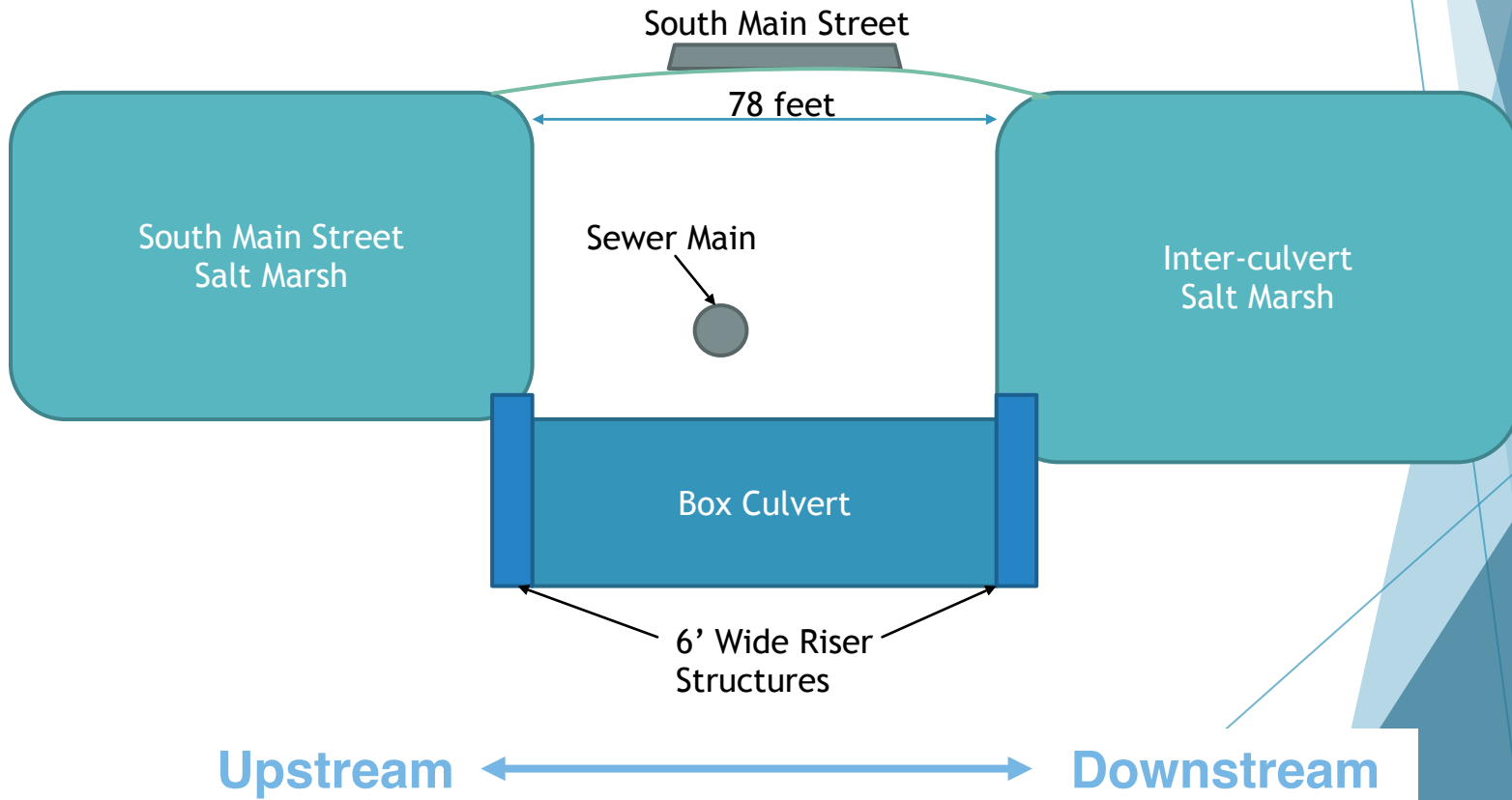
3.5Hx6W Box Culvert



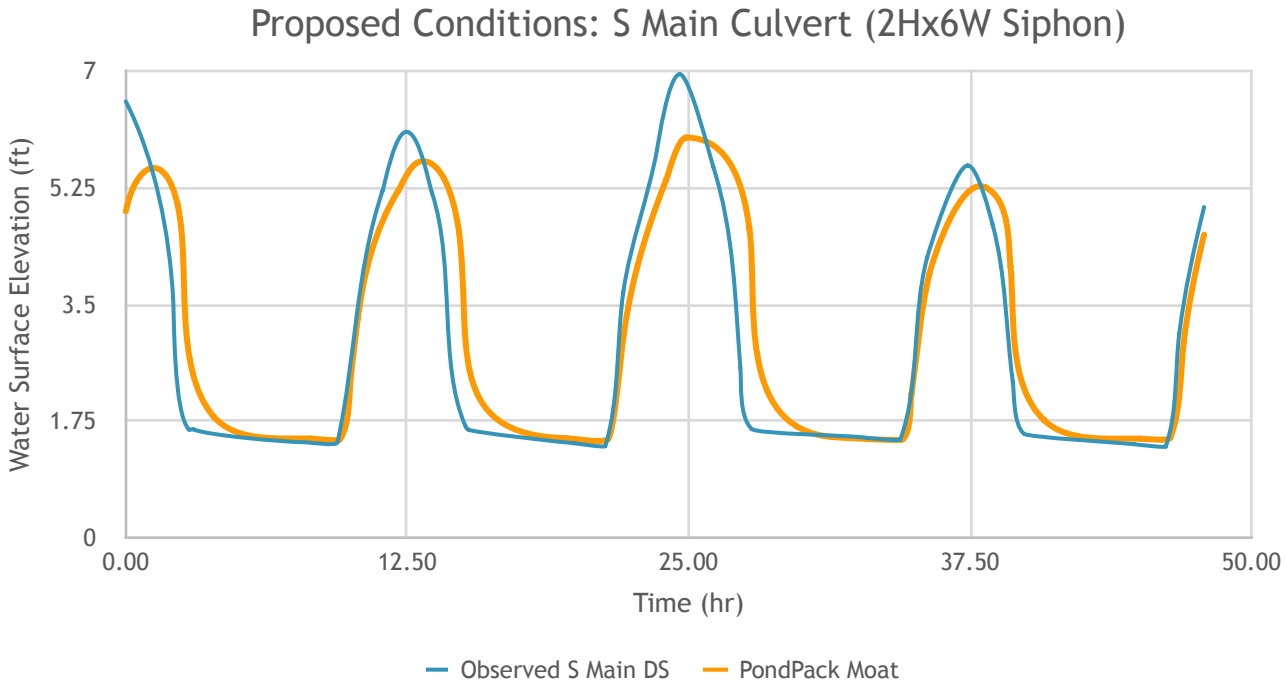
Alternative 2 (3.5' High X 6' Wide) Results



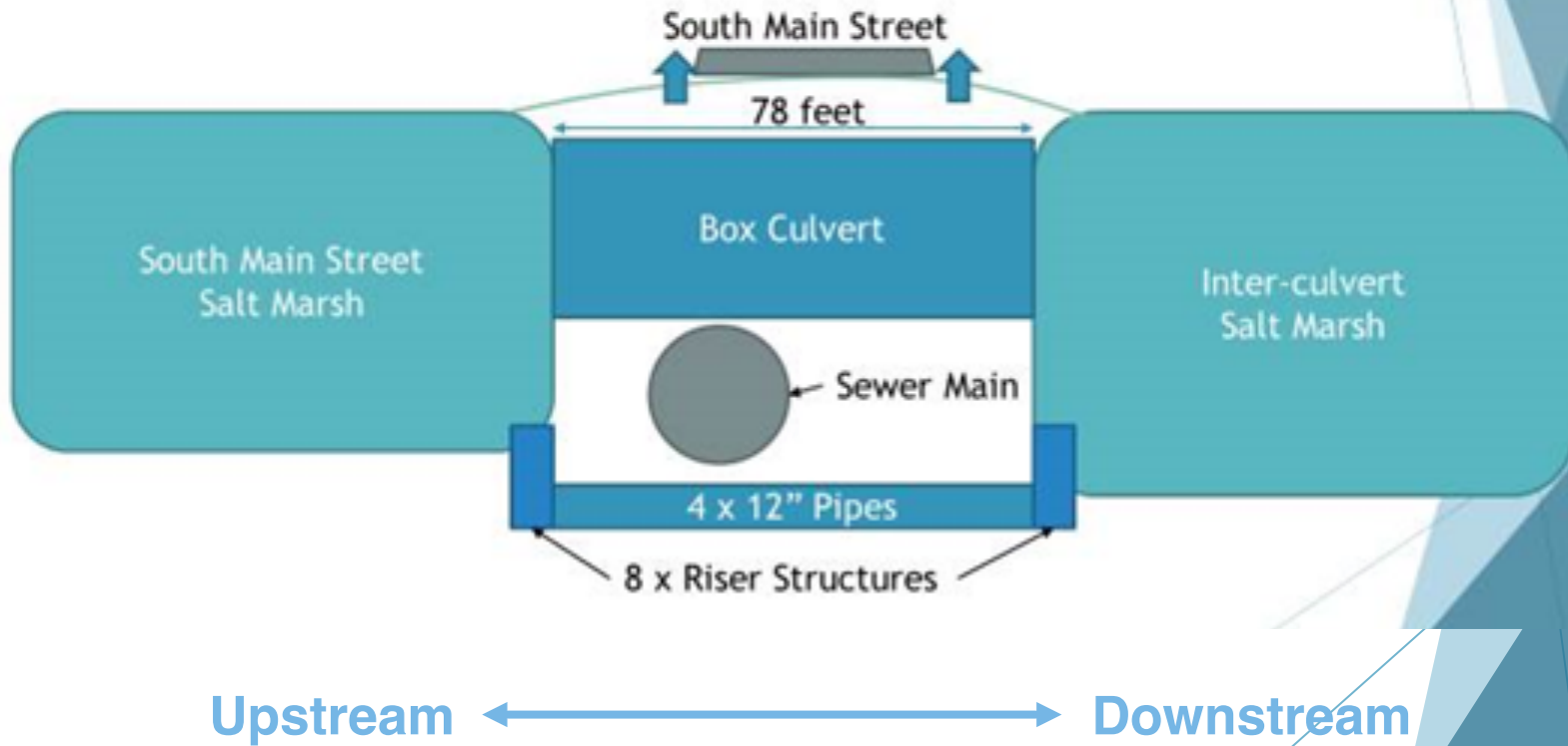
Proposed Conditions: Alternative 3 2Hx6W “Siphon”



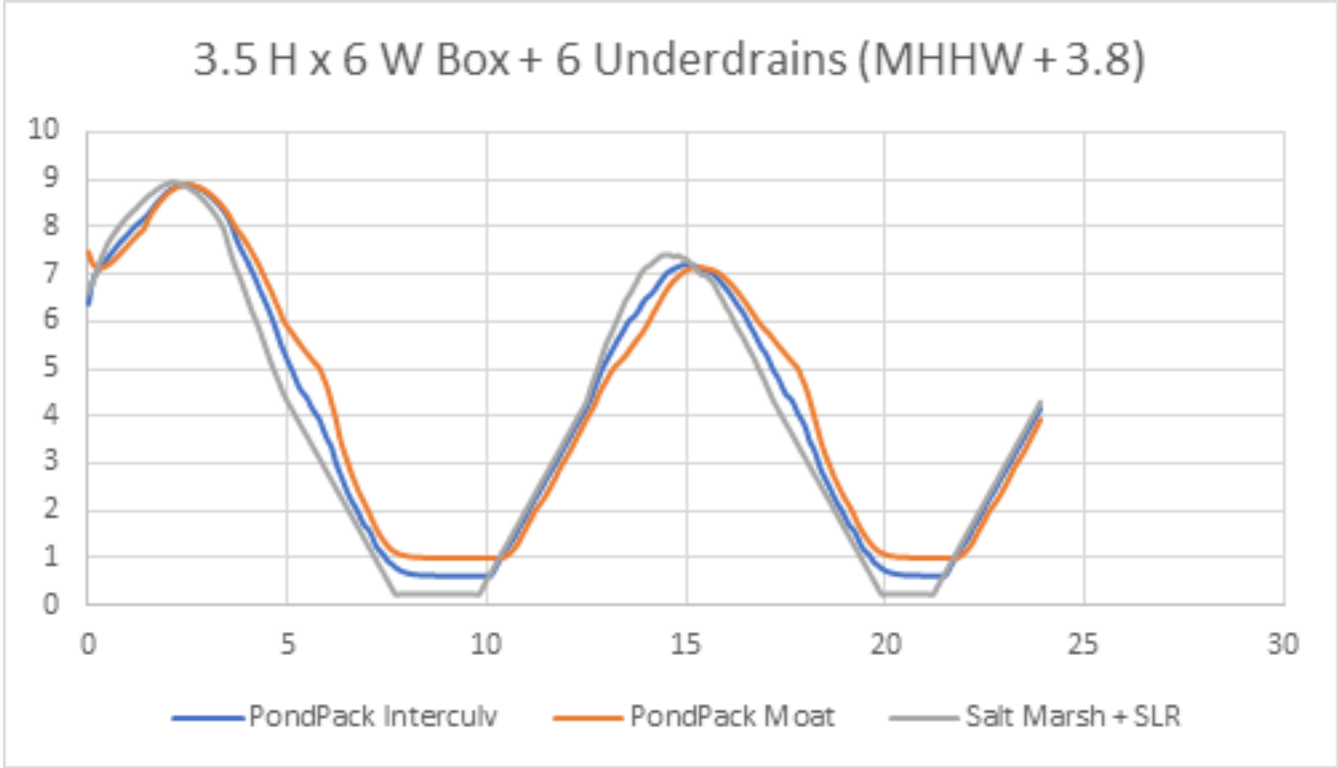
Alternative 3 (2' High X 6' Wide Siphon) Results



Preferred Alternative: 4Hx6W Box Culvert with 4 x 12" Underdrain Pipes



Preferred Alternative: 4Hx6W Box Culvert with 4 x 12” Underdrain Pipes Results:



Next Steps & Questions?

1. Preliminary Design
2. Environmental Permitting
3. Final Design
4. Seek grant funding for construction

Questions?