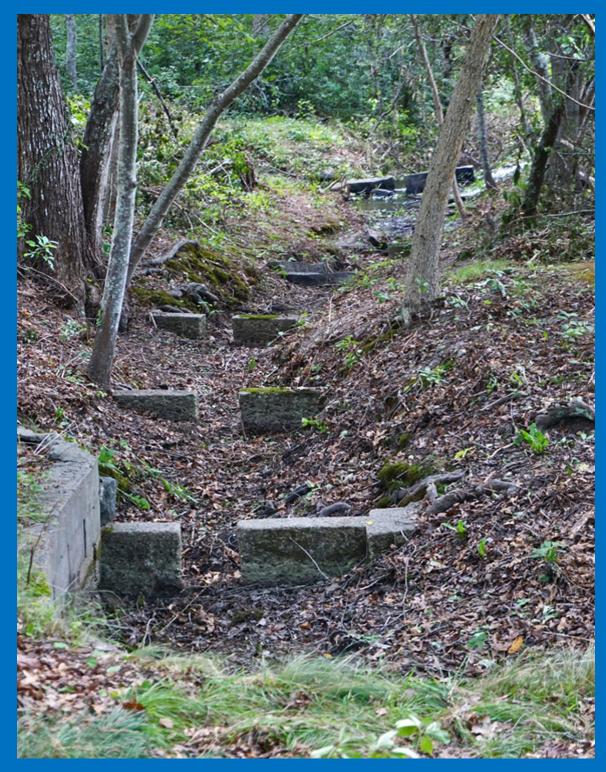
## **Upper Childs River Restoration Project** (Characterization Before Restoration, Project Objectives)



November 2018 - Southern Pond

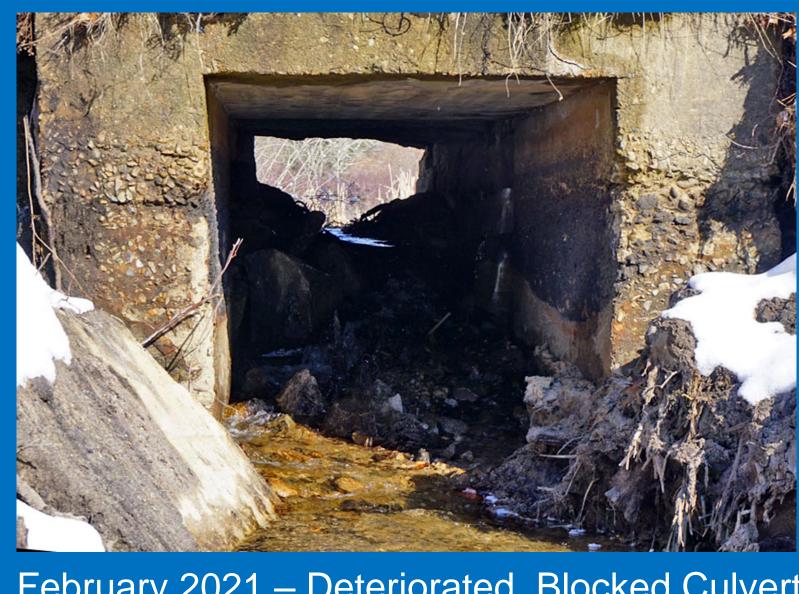


August 2020 Non-functional Fish Ladder



### **Objectives of the project:**

- 0
- >



December 2018 – Old Spillway

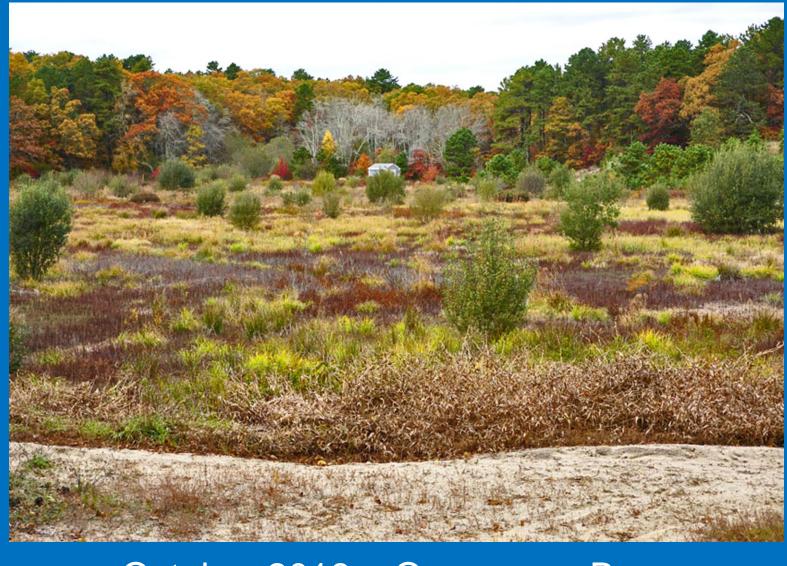


September 2018 – Bog Water Control **Device Blocking Fish Passage** 

**Restore a major portion of the Upper Childs River** 

Remove the physical and environmental barriers to fish passage Re-establish a coldwater fishery to foster the return of brook trout and other aquatic wildlife Convert established cranberry bogs into wetlands to create habitat for migratory birds, and other wildlife Improve water quality as the wetlands will act as a filtration system for water resources **Protect the land through conservation restrictions to ensure proposed area will remain undeveloped** Improve access for the public to enjoy nature and its preservation

February 2021 – Deteriorated, Blocked Culvert



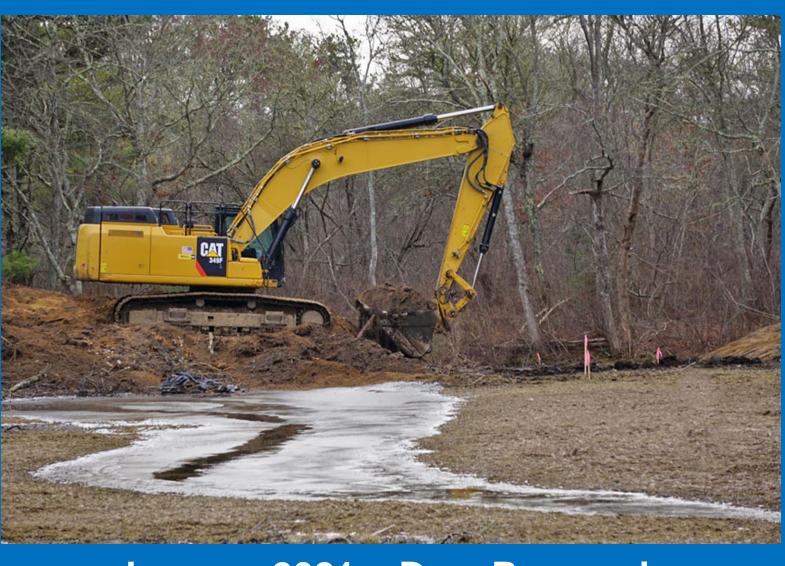


October 2018 – Overgrown Bogs

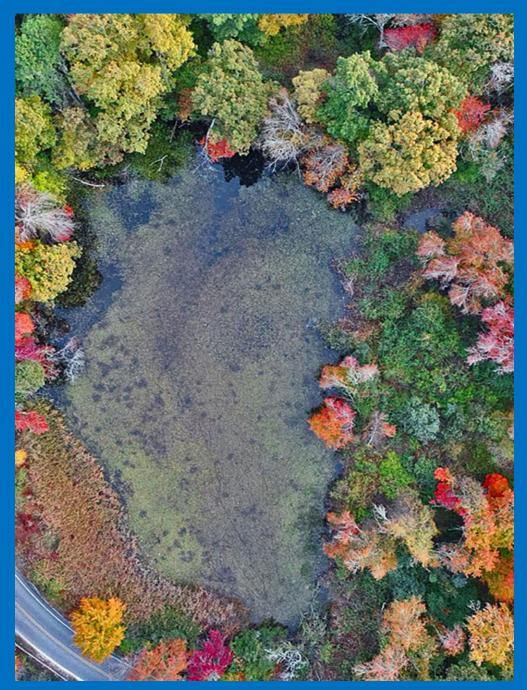
## Southern Pond Area (Site of Earthen Dam, Spillway, Fish Ladder, Warm Shallowing Pond)



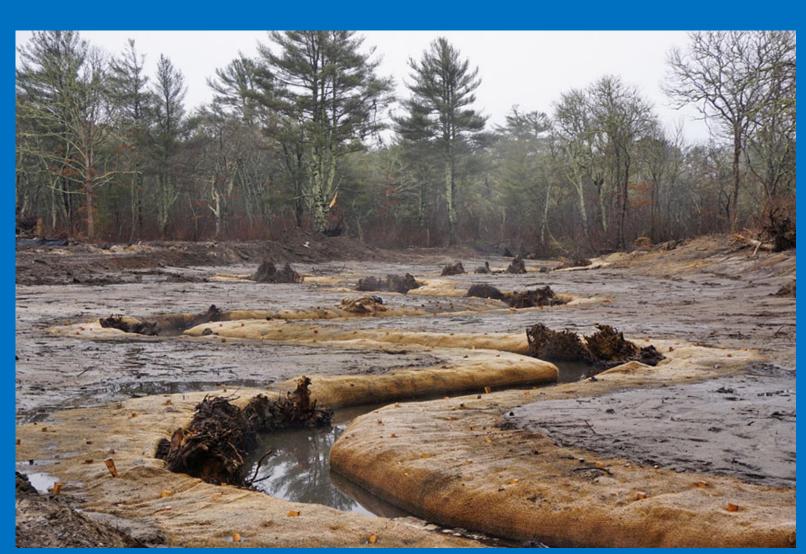
Google Map



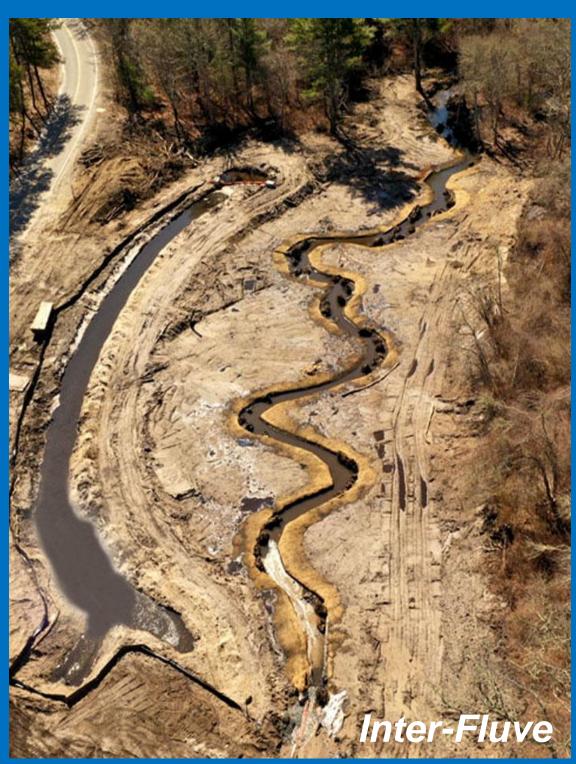
January 2021 – Dam Removal



November 2018



March 2021 – New River Channel Created



**April 2021** 

With an earthen dam at the south end of the pond, water was blocked from freely exiting the Upper Childs. This inhibited fish passage and created an unhealthy environment for aquatic life. The pond area water was temporarily diverted to enable sediment removal and channel construction. The dam and old spillway were removed, the fish ladder buried, and the winding river was channeled along the western tree line to mitigate late afternoon heat and to provide a coldwater habitat for brook trout.



**July 2021** 

## Northern Pond Area (Large Deposits of Sediment, Warm Shallowing Pond)



**Google Map** 



November 2018



**April 2021 – New River Channel & Floodplain** 



June 2021 – Culvert in Place

A diversionary channel was dug to drain the impounded water and direct water away from where the new river channel was to go. In addition to the diversion, water had to be pumped to a distant drainage basin so that sediment could be removed and the new river constructed.





July 2021 – River Turned On

Early April 2021 – Things are Drying Out

Like the south pond area, the river was positioned along the tree line on the western side to protect the water from the summer afternoon sun as much as possible. Aided by plantings, it did not take long for the vegetation to take hold and the area to green up.

## Culvert, Carriage Shop Road (Deteriorated and Undersized Culvert Removed / Replaced)





**November 2018 – Carriage Shop Road** 

**Google Map** 

### With the former ponds north and south of Carriage Shop Road eliminated, construction complete and the river now free-flowing, average water temperatures in July have dropped from 70 degrees to 58 degrees. This dramatic change will create a thriving habitat for the return of brook trout and other aquatic life.







Early February 2021 – Deteriorated Culvert



June 2021 – Construction of New Road



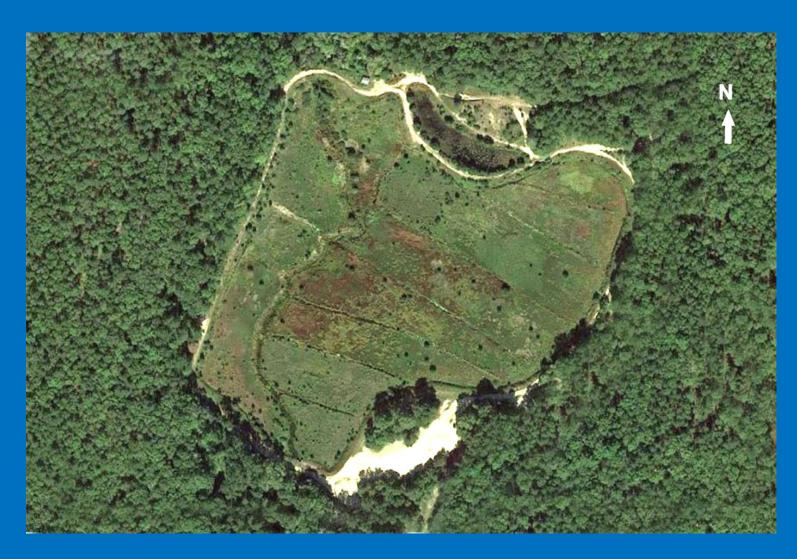




Late February 2021

August 2021 – Road Paved

### Farley Bog (12.5 Acre Abandoned Cranberry Bog Converted to Wetlands and Wildlife Habitat)





**Google Map** 

With abandonment of the bogs in 2014, invasive plants, shrubs and small trees began to overgrow the area where cranberries once thrived. At the beginning of the restoration, a diversion channel was dug to direct water away from targeted construction areas.





January 2021 – Logs & Root Wads **Protect the River and Aquatic Life** 

Excess sand from farming was removed. The bog holding pond was expanded to provide diving and dabbling duck habitat. Microtopography work was done to turn over the bog surface allowing dormant wetland seedlings to sprout. Ditches were filled and a new river channel created.









June 2021 – Microtopography – Plant Life



**September 2020 – Diversion Channel** 

June 2021 – With Enlarged Duck Pond

### (24.7 Acres of Bogs Converted Wetlands, Ponds and Wildlife Habitat)



**Google Map** 

It is difficult to imagine how two cranberry bogs and a holding pond could be transformed into a coldwater fishery and wetland area for wildlife habitat. The groundwater-fed river will bring brook trout upstream once again. The three discrete ponds will attract waterfowl and other aquatic wildlife to this haven. Restoration efforts have benefited the environment.

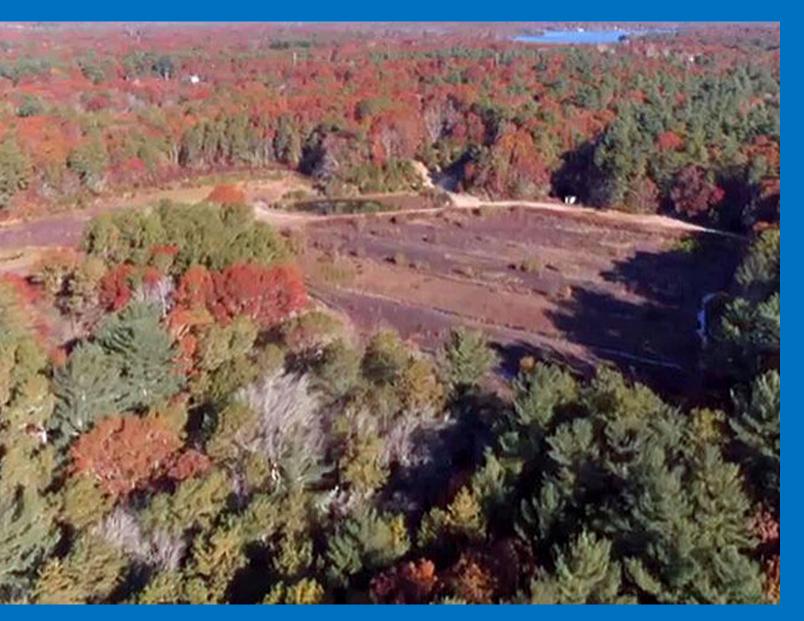


**October 2020 – Diving Duck Pond** 



It takes many years of dedication, planning and execution to complete such a project. The Falmouth Rod & Gun Club wishes to congratulate and thank all of the partners who made this total effort possible.

# Garner Bogs





**November 2018 – Garner Bogs, Holding Pond** 

**November 2020 – 3 Ponds Completed** 



**October 2020 – Eastern Bog, River Channel** 

June 2021 – Forever Wetlands