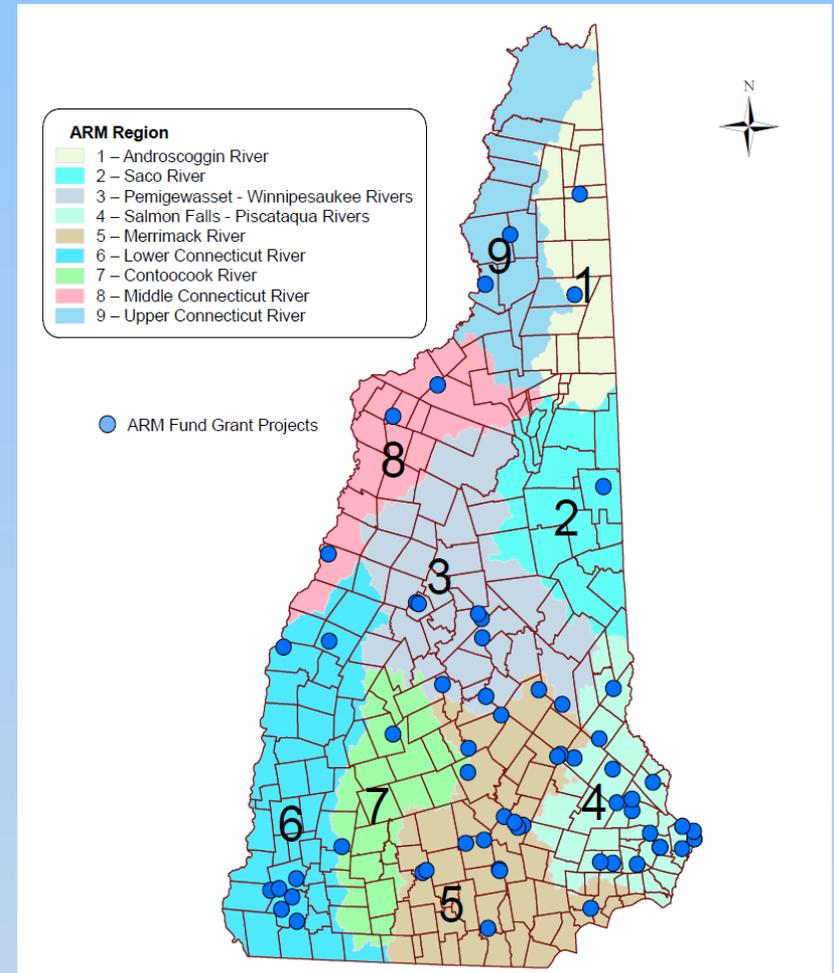


Aquatic Resource Mitigation Fund

RSA 482-A:28 - 33

- Additional wetland mitigation option available to applicants.
- Option for projects that have difficulty in finding good mitigation.
- Process of providing a payment into a fund that pools money together to be spent in the “watershed” where impacts occurred.
- Funds go toward wetland restoration, preservation of land adjacent to aquatic resources, wetland creation or **aquatic resource improvements**.



**ARM FUND PROJECT
AWARD SITES 2009-2015**

Culvert Assessments and ARM

Assist and provide funds for improving a crossing that is deemed eligible for the stream mitigation program



Utilize information for mitigation option to replace deficient crossings for aquatic passage and address infrastructure needs

Evaluation Criteria for Stream Passage Improvement Projects

- Aquatic resource of concern?
 - Species present/potential?
- Overall Mitigation Potential/Protection.
 - AOP and Geomorphic scores
- How much of the aquatic resource will be protected.
- Buffers.
- Connections.
- Likelihood of project success.
 - Project Partners
 - Concept Design
- Flood hazard.
- Critical infrastructure



Fall Brook Culvert Replacement, Swanzey, NH



Funding: =\$165,000

Total Project Cost:
\$250,572

Project Objective:
Increase access to
cold water
headwaters habitat

Project Partners:
Trout Unlimited,
Cheshire County
Conservation District,
Town of Swanzey,
NRCS, Fish & Game,
Harris Center for
Conservation



- Upstream (Inlet) side of culvert

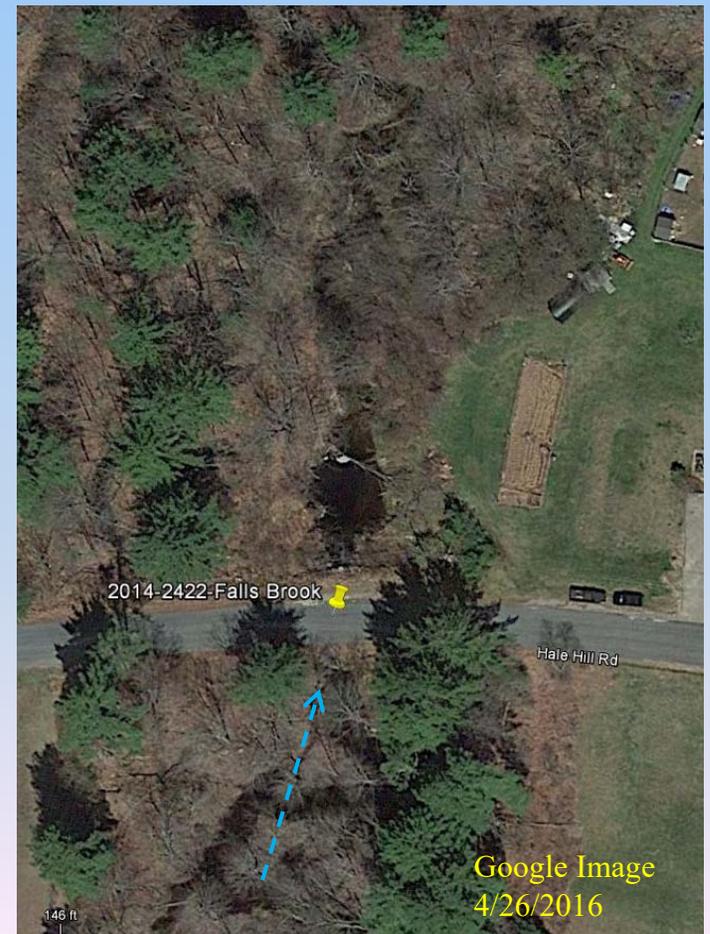
May 10, 2011





Downstream/Outlet side of
structure
May 10, 2011

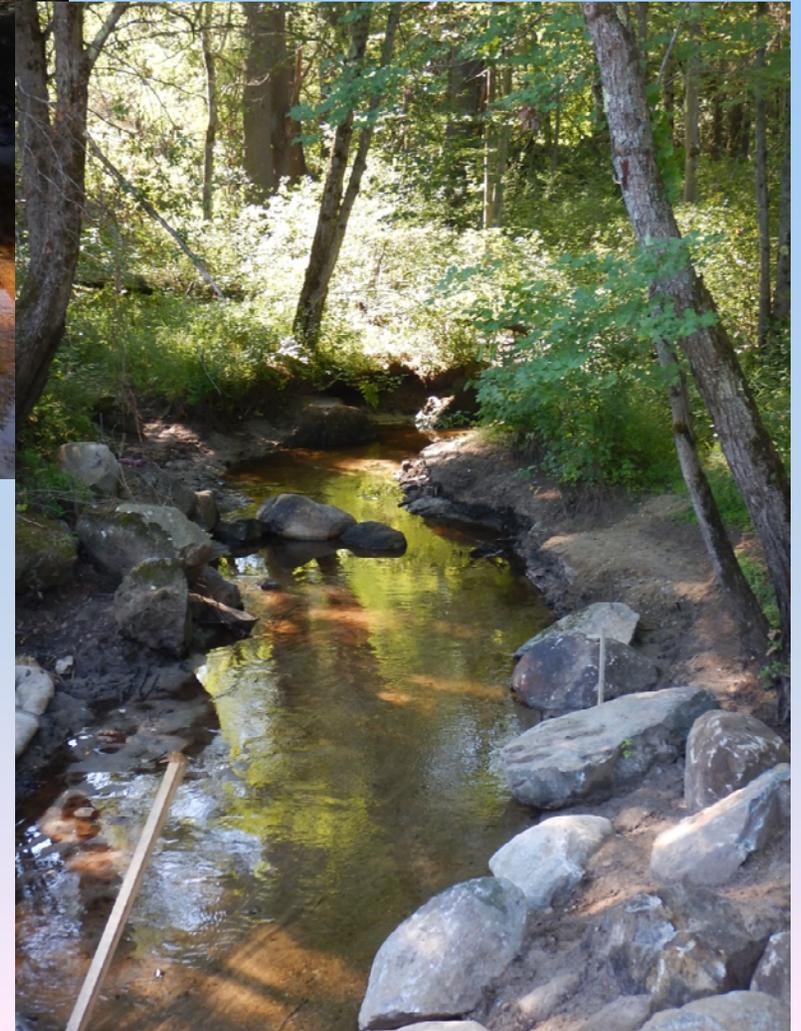
6-foot diameter, 50-foot long
corrugated metal pipe





Upstream (inlet)
side of culvert
August 19, 2016

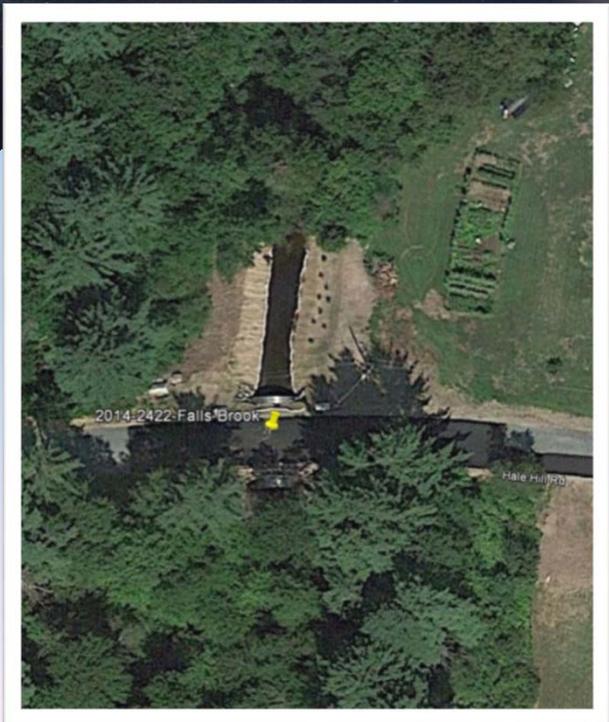
- Connection to approximately ten miles of upstream, barrier free, spawning and rearing aquatic habitat.
- Access to spawning habitat on approximately 6 smaller tributaries.



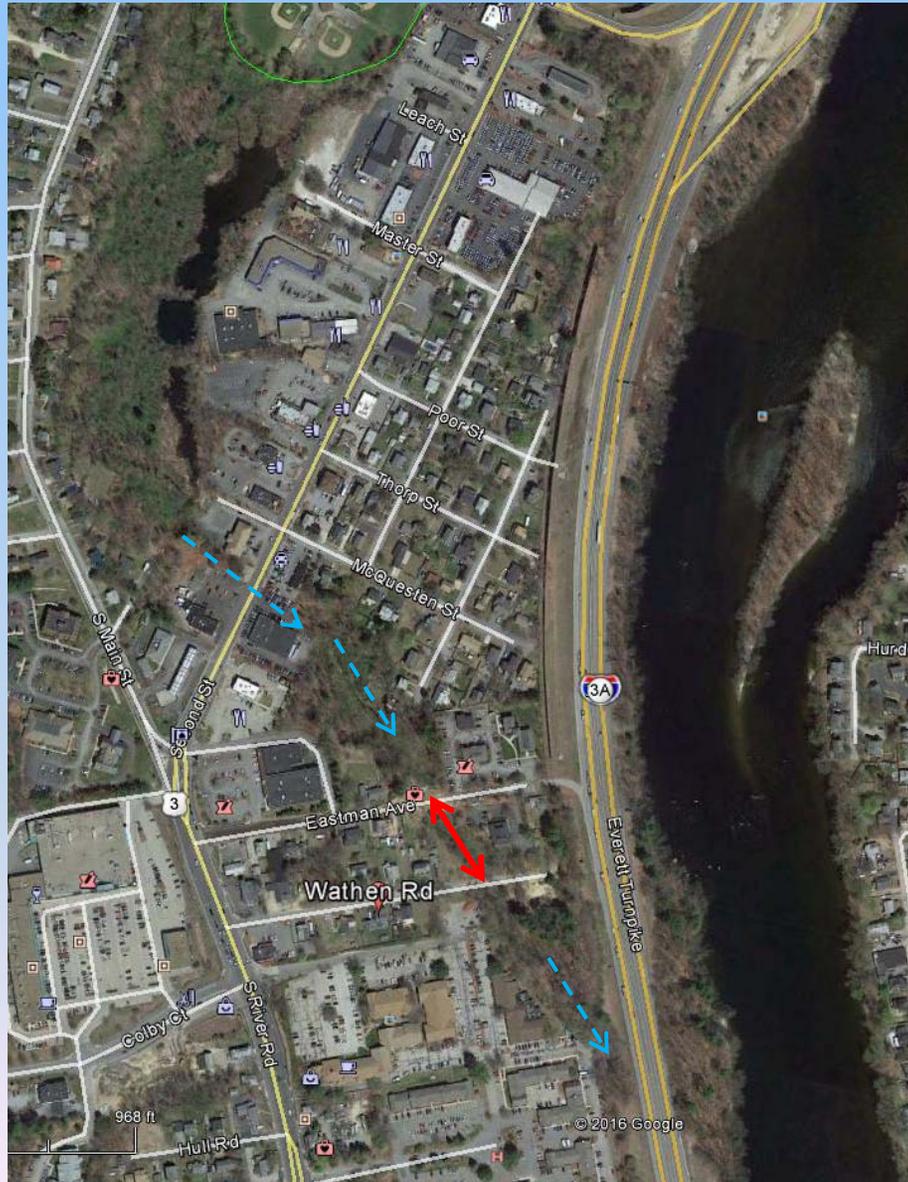


Downstream/Outlet side of structure

August 19/23, 2016



McQuesten Brook Culvert Replacement/Removal



Funding: = 354,000

Total Project Cost:
Approx. \$800,000

Project Objective:

- Increase access to 1,950 feet of brook,
- Reconnect 2.57 acres of wetland habitat
- Stormwater treatment

Project Partners:

New Hampshire Rivers Council, NHDES Watershed Assistance Program, Town of Bedford, McFarland Johnson, and John Fields.



Left: Eastman Upstream 2014

Right: Eastman Downstream 2014



Left: Wathen Upstream
2014



Right: Wathen
Downstream 2014



Aquatic Organism Screen = Reduced AOP

The screenshot shows the top portion of the NH Coastal Viewer web application. The browser address bar displays the URL: <http://nhcoastalviewer.unh.edu/Html5Viewer/index.html?viewer=NH>. The page title is "NH COASTAL VIEWER". Below the title, there are navigation tabs: "Home", "Data Sources", "Layer Info", "Drawings and Measurements", and "Projects". A toolbar contains icons for "Initial View", "Zoom In", "Zoom out", "Back", "Next Extent", "Pan", "Bookmarks", and "Identify". The "Layers" panel is partially visible, showing a search bar with "I want to..." and a list of layers including "Environment and Conservation", "Fluvial Geomorphology", and "Stream Crossings".

This screenshot shows the "Layers" panel with the "Aquatic Organism Passage" layer selected. The "Scoring" section is expanded, showing the following options:

- Geomorphic Compatibility
- Aquatic Organism Passage

The "Scores" section is also expanded, showing the following legend items:

- Full AOP
- Reduced AOP
- No AOP except adult salmonids
- No AOP including adult salmonids
- No AOP score for bridges/arches
- Unable to Score

Red circles on the map highlight two locations: Eastman Ave and Wathen Rd. A red arrow points from the "Reduced AOP" legend item to the Eastman Ave location.

This screenshot shows the "Layers" panel with the "Geomorphic Compatibility" layer selected. The "Scoring" section is expanded, showing the following legend items:

- Fully Compatible
- Mostly Compatible
- Partially Compatible
- Mostly Incompatible
- Fully Incompatible
- Unable to Score
- No GC Screen for bridges/arches

Red circles on the map highlight two locations: Eastman Ave and Wathen Rd. Red arrows point from the "Mostly Incompatible" and "Partially Compatible" legend items to the Eastman Ave and Wathen Rd locations, respectively.

Geomorphic Compatibility Screen:
Eastman = Mostly Incompatible
Wathen = Partially Incompatible

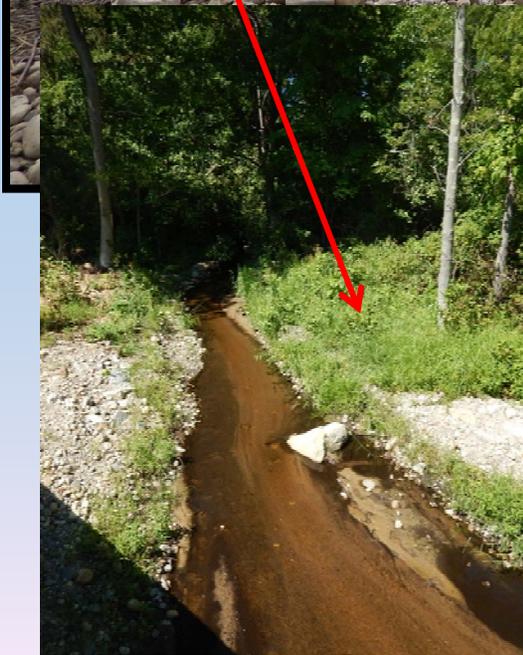


Below Eastman Upstream

Left: Eastman Downstream
April 29, 2016

Below Left: Eastman Upstream

August 16, 2016

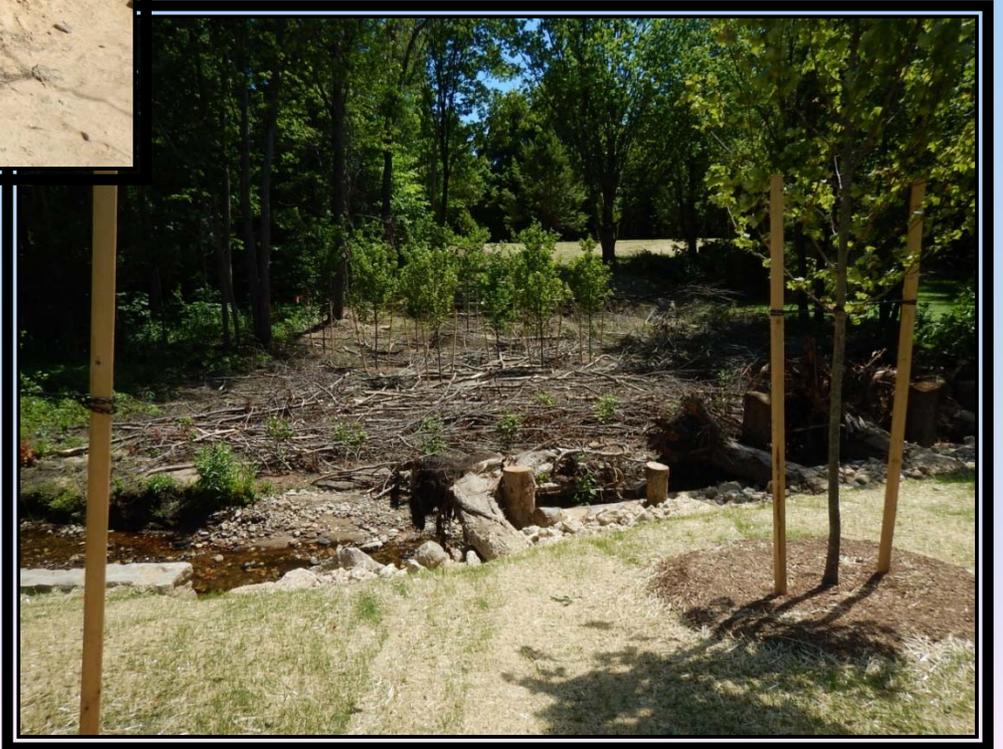




- Wathen “Inlet” July 2016
- Work overseen by John Fields



Wathen Floodplain Restoration



2018 ARM Fund Grant Round Deadlines



Majority of watersheds with available funding

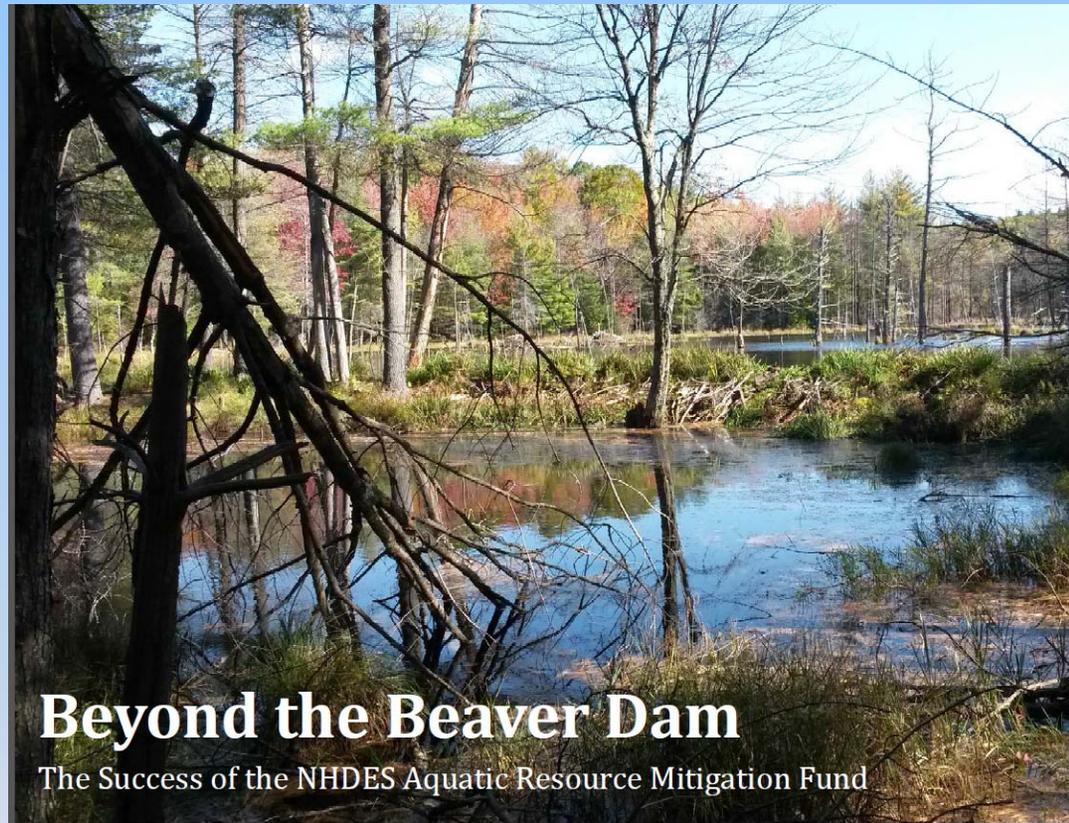
2 Page Pre-proposal deadline:	April 30, 2018
Final application materials deadline:	August 31, 2018
Site Selection Committee review:	Sept. – Oct., 2018
Army Corps and Wetland Council Review:	November, 2018
Awards Announced	December, 2018

Restoration Project Requirements



- Restoration Plan
 - Plan must be submitted and approved prior to commencing work. The restoration plan can often be part of the wetland permit.
 - Coordination with wetlands permitting staff and ARM staff
- Monitoring Plan
 - Must include measurable performance objectives and metrics to establish project success.
 - Must be developed in coordination with ARM Staff and approved by the ACOE.
- Post-Construction Report
- Five Years of Monitoring and Monitoring Reports

QUESTIONS? / IDEAS?



<http://www.des.nh.gov/organization/divisions/water/wetlands/wmp/documents/arm-fund-web.pdf>