

PUBLIC INFORMATIONAL MEETING

MONATIQUOT RIVER RESTORATION

Ames Pond Dam and Armstrong Dam Removal,
Fishway, Multiuse Trail, and Bridge Construction
Braintree, Massachusetts



November 9, 2020

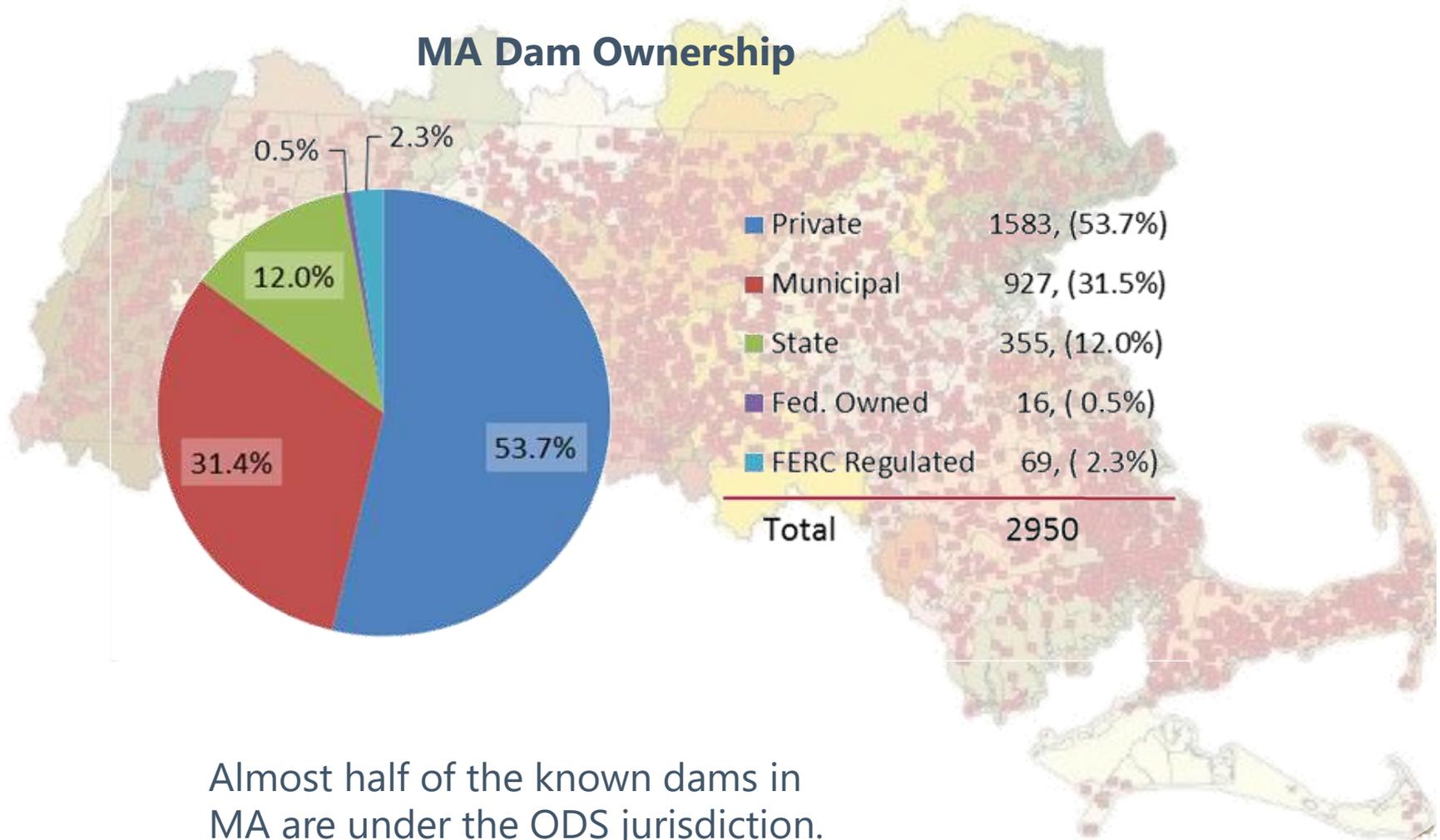


AGENDA

Monatiquot River Restoration Armstrong and Ames Pond Dam Removal November 9, 2020 Public Meeting (7PM)

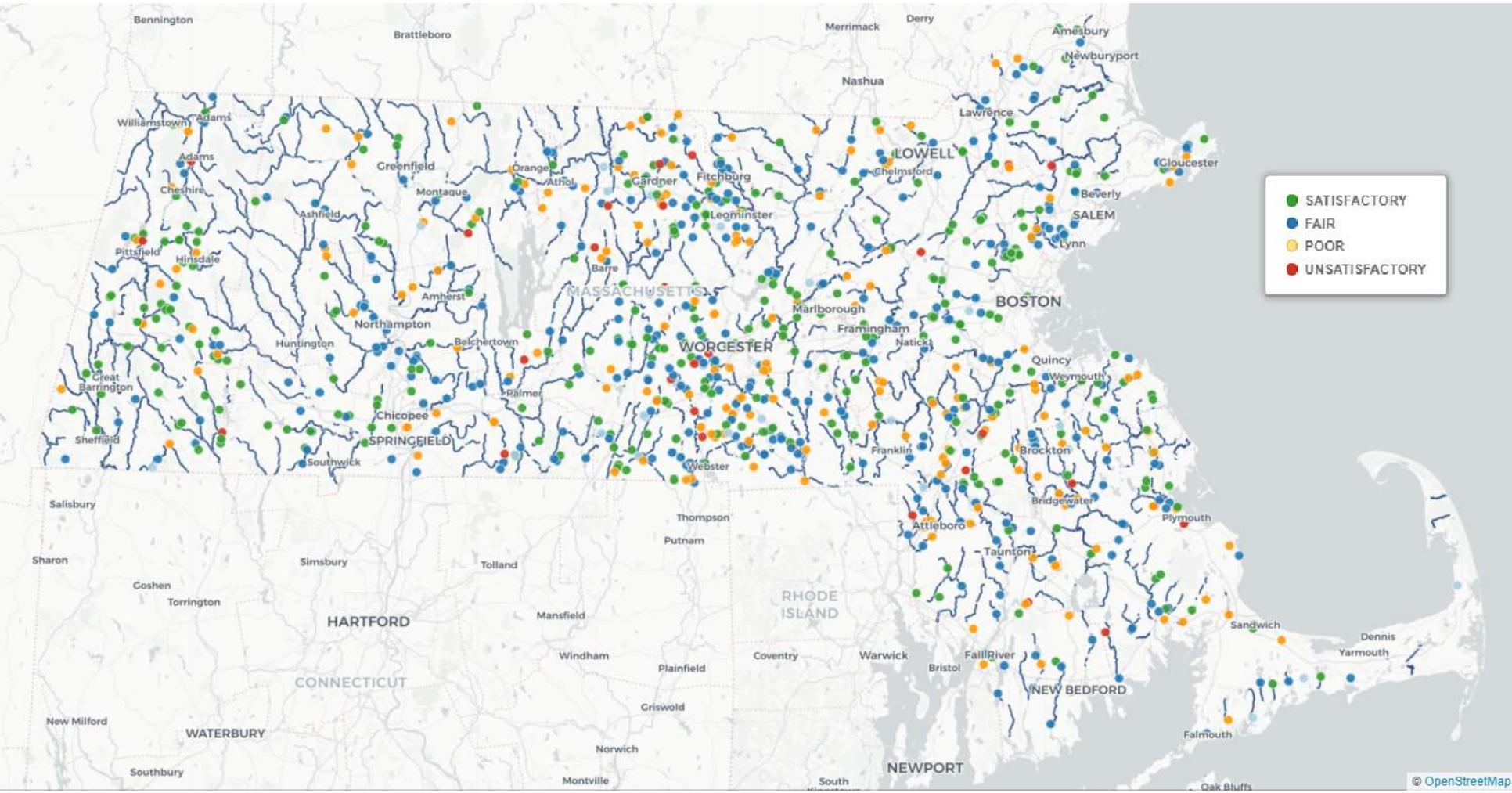
- Introduction: Mayor Charles C. Kokoros
- Project Background and Partners: Kelly Phelan, Conservation Planner
- Technical Presentation: Andie Greene, PE & James Murac, PE Milone and MacBroom, Inc.
- Next Steps: Kristopher Houle, MA Division of Ecological Restoration
- Opportunity for Public Involvement: Brad Chase, MA Division of Marine Fisheries
- Questions and Comments

DAM REMOVALS – GENERAL INFO



Almost half of the known dams in MA are under the ODS jurisdiction.

DAM REMOVALS – GENERAL INFO



Sources: isaiahthompson.carto.com 2020
MA ODS Dam Safety 2015

PROJECT GOALS AND OBJECTIVES

- Restore natural river processes and riparian corridor
- Restore aquatic organism passage, specifically River Herring spawning runs, and access to 180 acres of spawning habitat
- Increase resilience to climate change
- Reduce flood hazards associated with high-hazard dam
- Reduce localized flooding
- Remove need for maintenance of dam
- Enhance recreational opportunities and public access to the waterfront
- Catalyze future economic growth in Braintree

PROJECT LOCATION



© 2020 Google

PROJECT LOCATION

Hollingsworth Pond

Existing Pedestrian Bridge

Armstrong Dam,
Armstrong Cork
Building and
Covered Bridge

Flow

Ames Pond Dam

MBTA Railroad

Existing Rock Falls



ARMSTRONG DAM IMPOUNDMENT



RMV

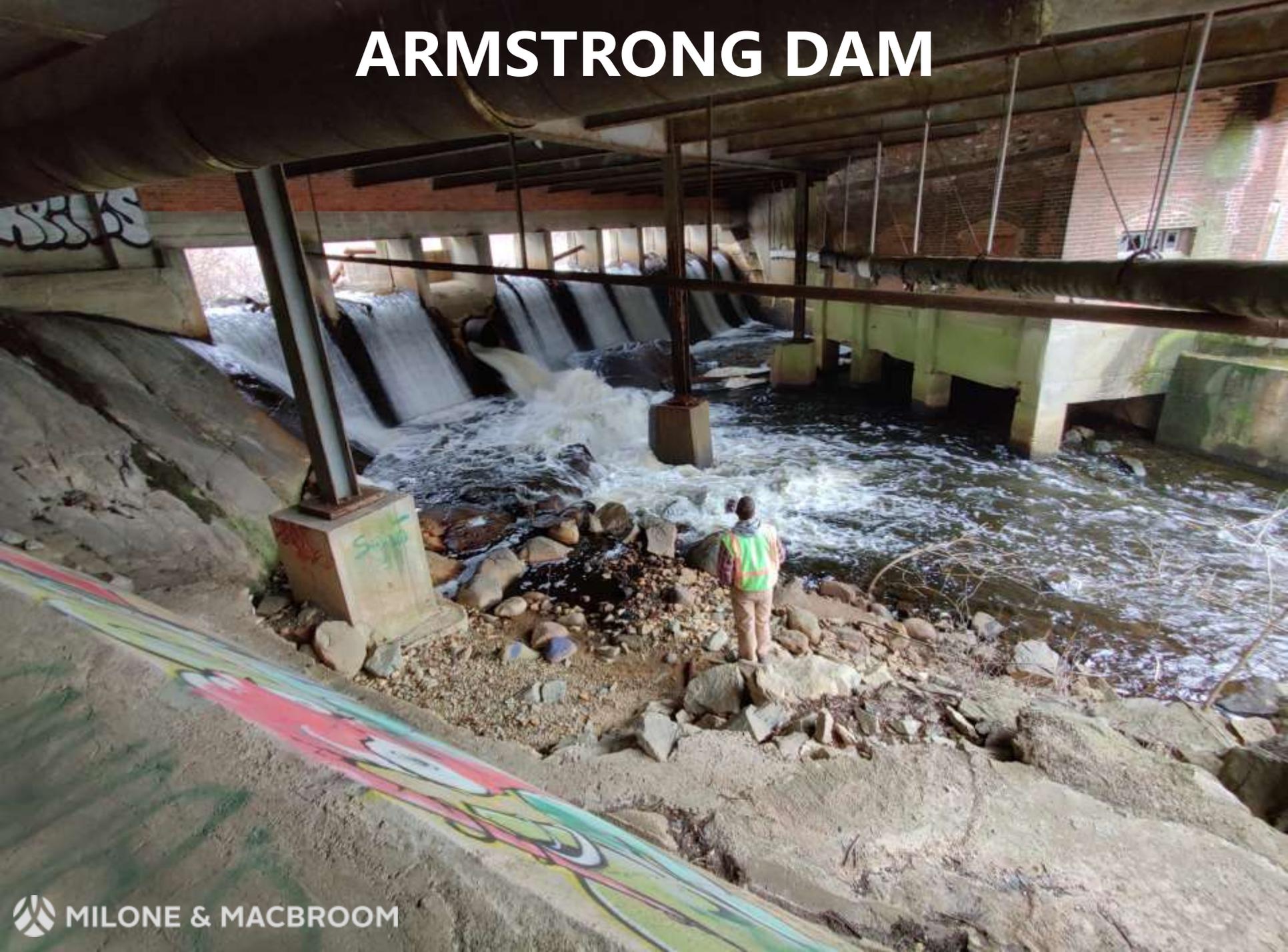
Hollingsworth Pond

37

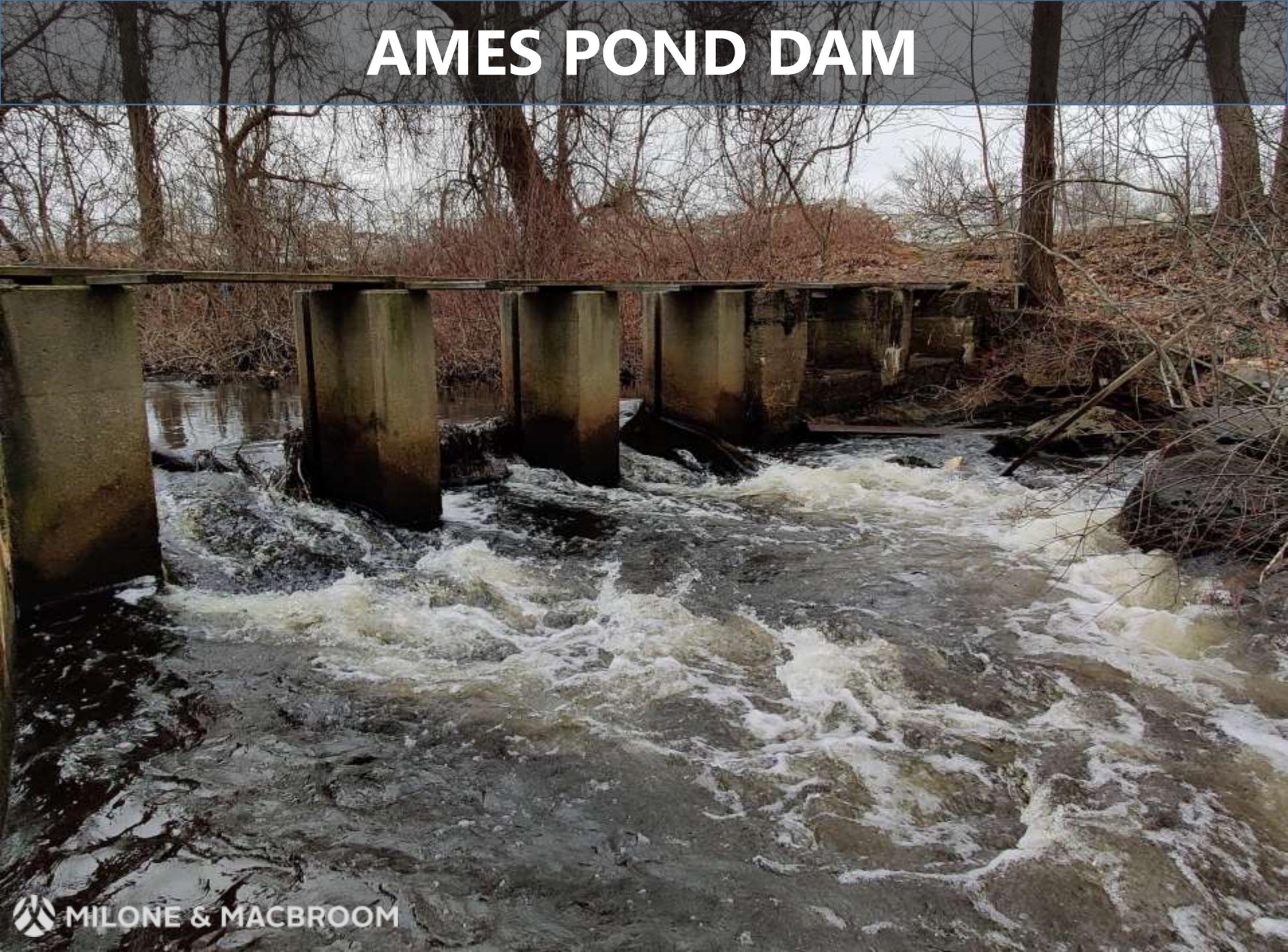
ARMSTRONG DAM



ARMSTRONG DAM



AMES POND DAM



ROCK FALLS



NOV 4 2015

PROJECT ELEMENTS

- 1) Removal of Armstrong Pond dam, MA#03102, and elimination of Hollingsworth Pond
- 2) Management of contaminated sediment within Hollingsworth Pond
- 3) Reconstruction of the Monaquot River channel upstream of the Armstrong dam
- 4) Construction of a multiuse trail and boardwalk along the Monaquot River
- 5) Construction of a new bridge over the Monaquot River
- 6) Removal of the Ames Pond Dam MA#03101 and completion of associated channel modifications for fish passage
- 7) Construction of a concrete fishway to facilitate fish passage around the Rock Falls



3

2

1

5

4

6

7

DAM REMOVALS AND TRAIL



MULTIUSE TRAIL / BOARDWALK



njHiking.com

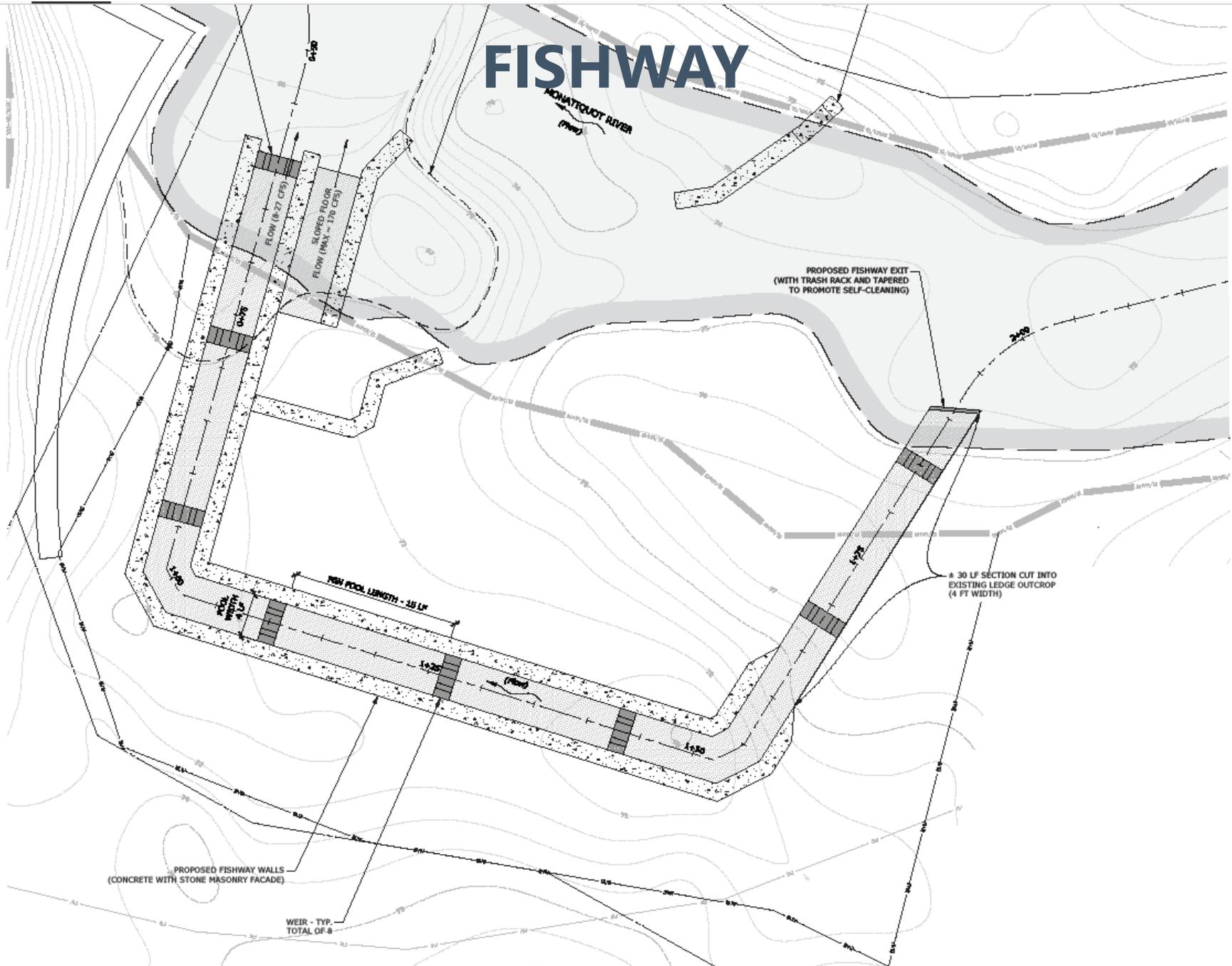
PROPOSED BRIDGE



FISHWAY

Concrete Wier Fishway

FISHWAY



PROPOSED FISHWAY WALLS
(CONCRETE WITH STONE MASONRY FACADE)

WEIR - TYP.
TOTAL OF 8

PROPOSED FISHWAY EXIT
(WITH TRASH RACK AND TAPERED
TO PROMOTE SELF-CLEANING)

30 LF SECTION CUT INTO
EXISTING LEDGE OUTCROP
(4 FT WIDTH)

FISH POOL LENGTH - 38 LF

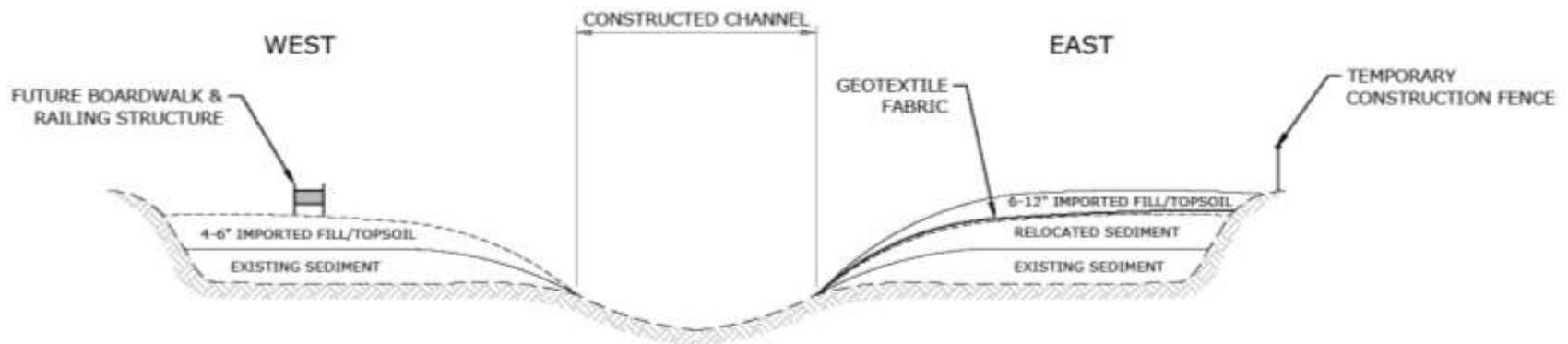
FLOW (8-27 CFS)

SLOPED FLOOR
FLOW (170-170 CFS)

MONATTQUOT RIVER
(7000)

SEDIMENT MANAGEMENT PLAN

- Gradual dewatering of impoundment and consolidation of sediment and installation/maintenance of turbidity controls
- Excavation of new channel through the impoundment
- Off-site disposal at a lined landfill of sediment that has been removed from the newly constructed channel that cannot be incorporated into the floodplain area
- In the area of greatest PAH concentrations, eastern portion of impoundment, placement of a geotextile fabric over the exposed sediment, an additional 6 to 12 inches of high organic content soil above the geotextile fabric and revegetation.
- In western portion of impoundment, placement of approximately 6 inches of high organic content soil in the area of exposed sediment and revegetation



TYPICAL IMPOUNDMENT CROSS SECTION

NOT TO SCALE

ANTICIPATED REGULATORY PERMITS AND CONSULTATION

Summary of Anticipated Environmental Reviews and Permits

Entity	Permit or Review Process	Comments
MEPA	Secretary's Certificate/ Record of Decision	<ul style="list-style-type: none"> Several thresholds triggered. EENF submitted requesting a waiver from a mandatory EIR and request to be processed under the Special Review Procedure.
DCR/Office of Dam Safety	Chapter 253 Permit	<ul style="list-style-type: none"> For alterations to one jurisdictional dam structure
DEP	Combined 401 Water Quality Certificate / Chapter 91 Dredge Permit	<ul style="list-style-type: none"> Required due to in-water dredging activities for dam removal/channel reconstruction
DEP	Chapter 91 License	<ul style="list-style-type: none"> Required for installation of new vehicular bridge over the river
Braintree Conservation Commission	Restoration Order of Conditions under Wetlands Protection Act and Braintree Wetland Bylaw	<ul style="list-style-type: none"> Required for alterations to various state jurisdictional wetland resource areas necessary for dam removal, fish passage structure, bridge construction, trail construction, bank stabilization, and stream habitat features
USACE	Clean Water Act Section 404	<ul style="list-style-type: none"> General Permit #23 (Aquatic Habitat Restoration, Establishment & Enhancement Activities) General Permit #10 (Linear Transportation Projects and Stream Crossings) for bridge and trail construction
MHC	Section 106 Review	<ul style="list-style-type: none"> Concurrent with Section 404 review process
DMF	Fishway Construction Permit	<ul style="list-style-type: none"> Allows for review of channel design to ensure velocities and water depth will be adequate for fish passage
MassDOT	Access Permit	<ul style="list-style-type: none"> Placement of scour countermeasures at the Plain Street bridge

NEXT STEPS

- Complete permitting
- Continue fundraising
- Construction bidding (Spring 2021)
- Construction (Summer 2021 - Spring 2022)
- Opportunities for Public Involvement

QUESTIONS?



PROJECT ELEMENTS

- 1) Removal of Armstrong Pond dam, MA#03102, and elimination of Hollingsworth Pond
- 2) Management of contaminated sediment within Hollingsworth Pond,
- 3) Reconstruction of the Monatiquot River channel upstream of the Armstrong dam,
- 4) Removal of the Ames Pond Dam MA#03101 and completion of associated channel modifications for fish passage,
- 5) Construction of a fishway bypass channel or an Alaskan Steep Pass (ASP) to facilitate fish passage around the Rock Falls
- 6) Construction of a multiuse trail and boardwalk along the west side of the Monatiquot River, and
- 7) Construction of a new bridge over the Monatiquot River.