



Status of Dam Removal in Massachusetts

**Beth Lambert, River Restoration
Program Coordinator**

Division of Ecological Restoration

February 10, 2011

Water Resources Commission



Mission:

To promote the restoration, protection & ecological integrity of the Commonwealth's rivers, streams and adjacent lands

Over the last 30 years

- Extreme rain / snow events ↑
- Extreme floods ↑
- Old dams ↓
- **Public safety threats** ↑



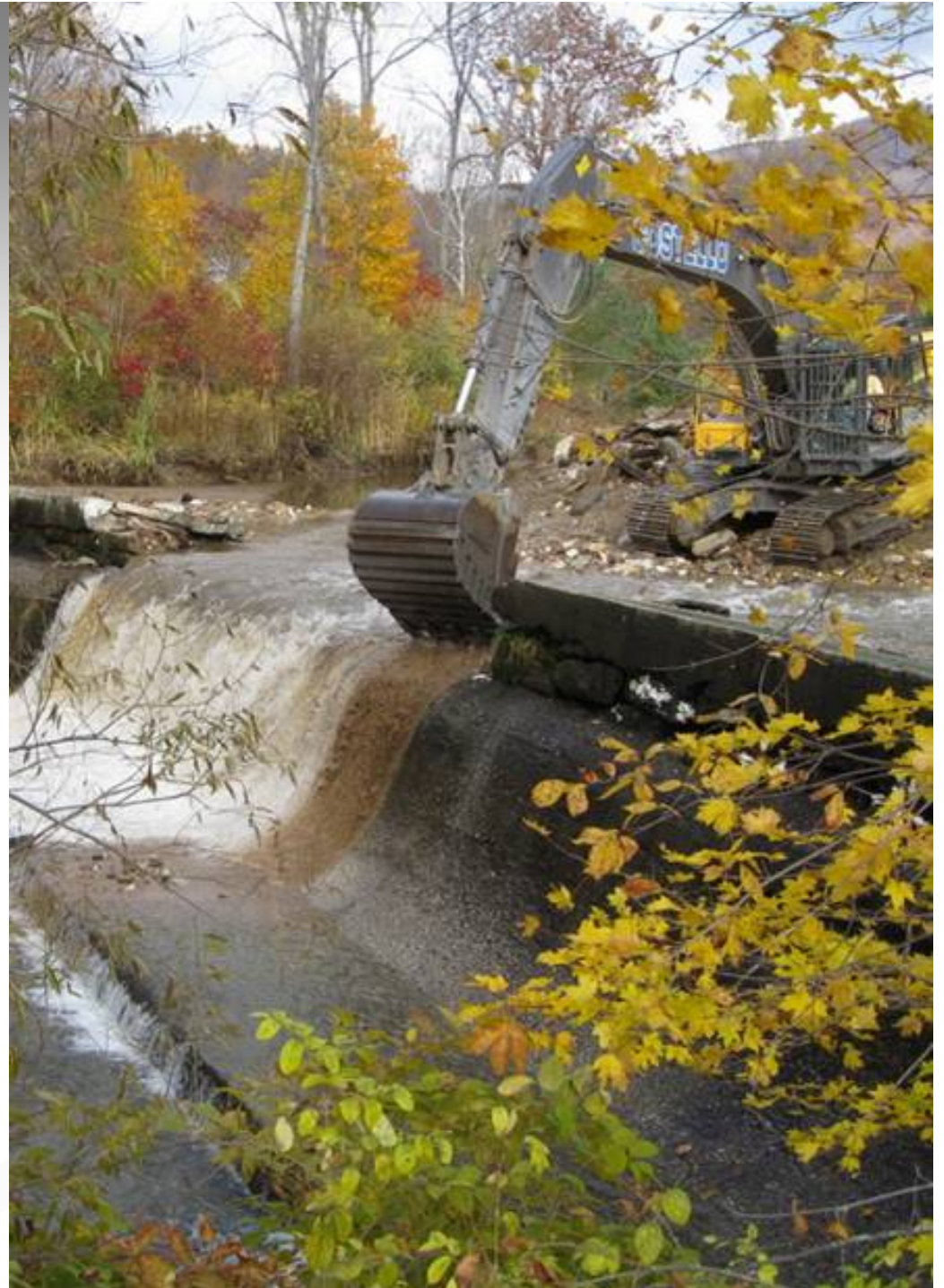


un dam it!

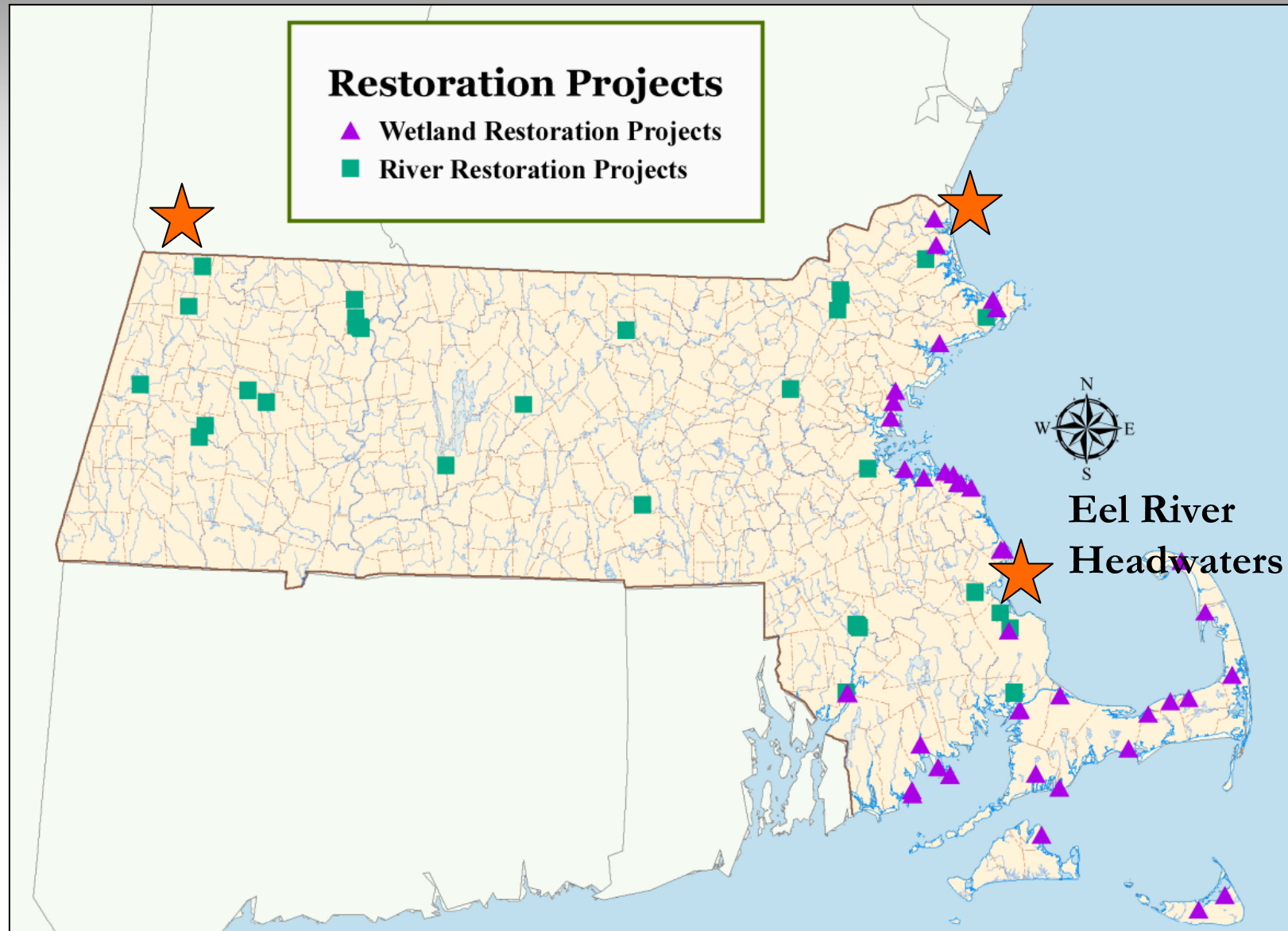
www.pinesriver.org

In the next few minutes:

- Overview of 2010 dam removal projects
- Preview of future projects
- Barriers to dam removal



2010 Dam Removal Projects



Eel River Headwaters Restoration Project

- Dam, culverts, wetlands
- ~ \$2 million
- 40 acres wetland restored
- ~ 1.7 miles of stream
- Town of Plymouth, DER, USFWS, USDA NRCS, Mass DEP / US EPA, TNC, American Rivers, CWRP (Horsley Witten)
- Non-jurisdictional dam





April, 2010



Photo by A. Hackman

August, 2010



Photo by A. Hackman

April, 2010



Photo by A. Hackman

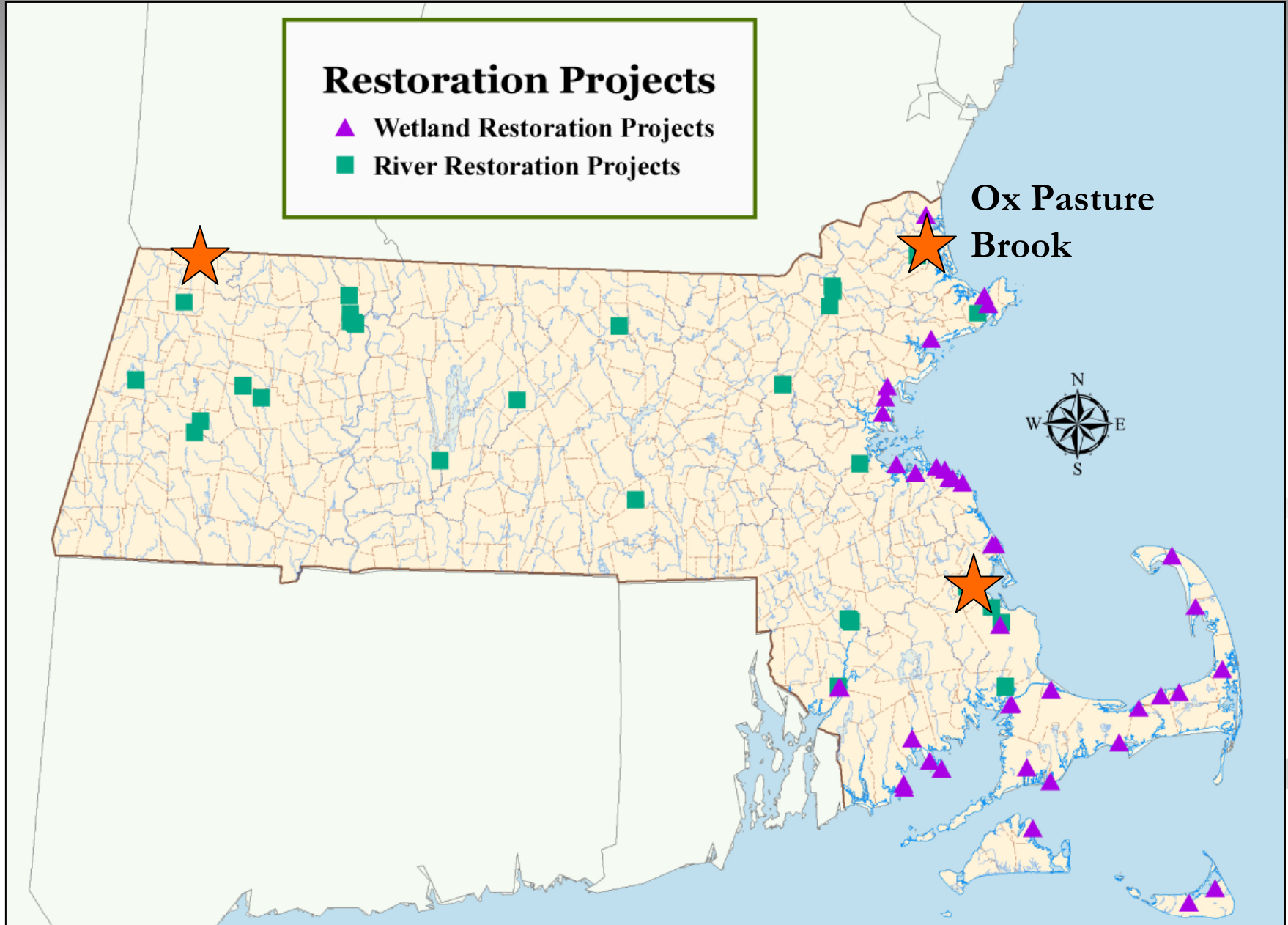
August, 2010



Photo by A. Hackman

Monitoring: fish, macroinvertebrates, vegetation, water quality (temp, nutrients)

Division of Ecological Restoration





Ox Pasture Brook Dam



Construction December 2009



December, 2009



June, 2006



Photo by A. Hackman



6/16/10. Six months post-removal. Note bare channel margins; this is the tidal influence.

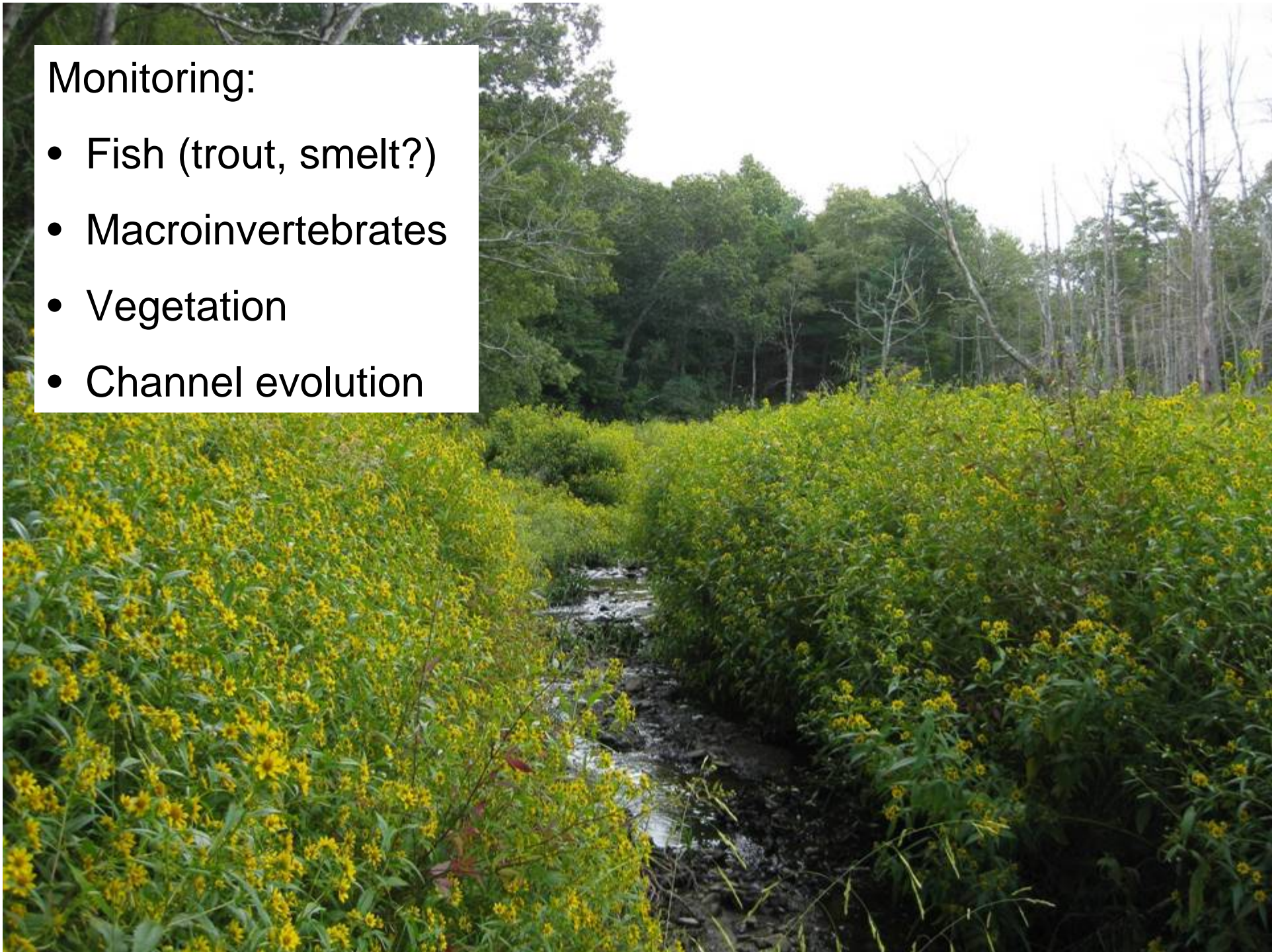
September, 2010



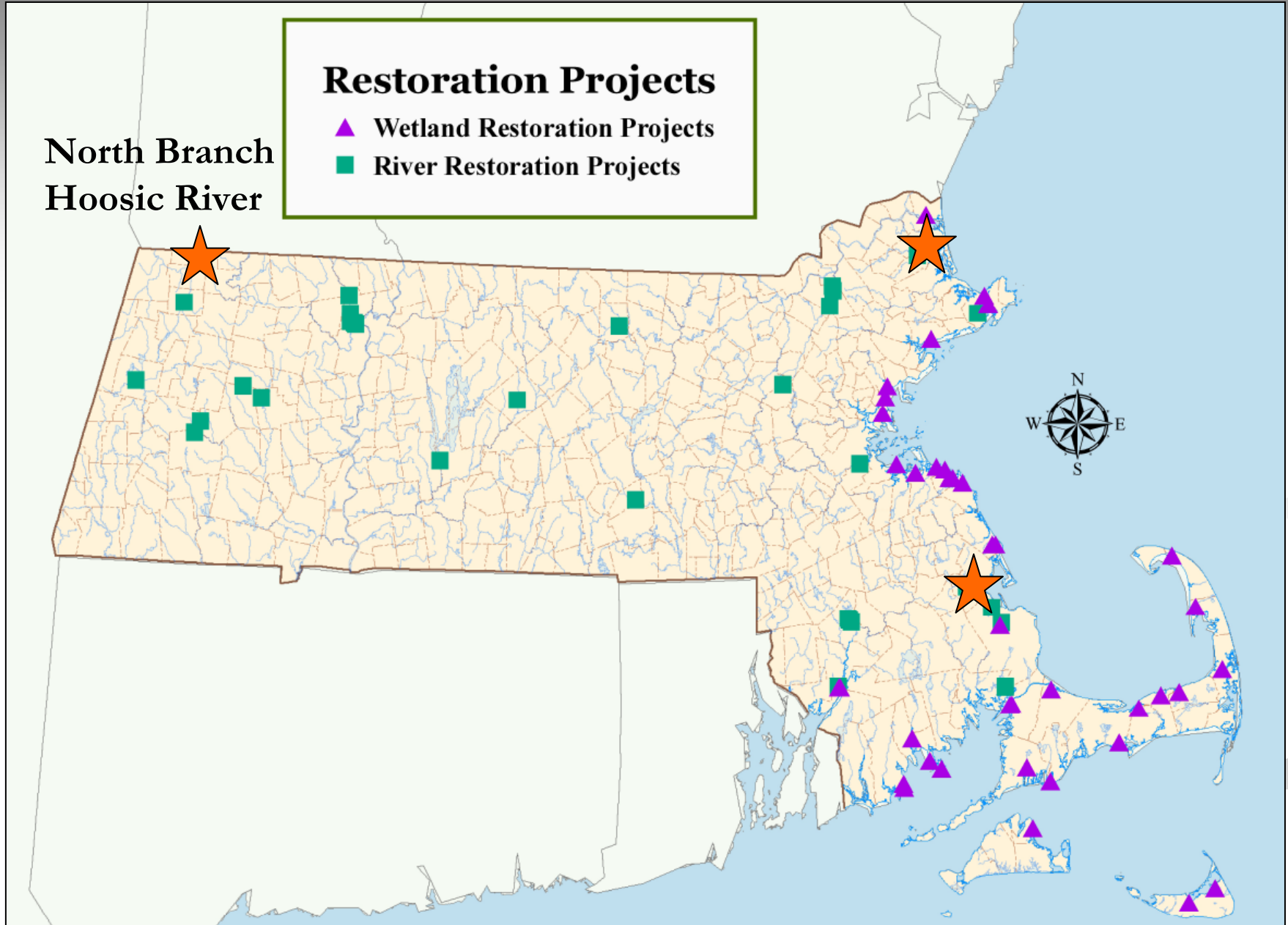
Photo by B. Lambert

Monitoring:

- Fish (trout, smelt?)
- Macroinvertebrates
- Vegetation
- Channel evolution



Division of Ecological Restoration



September 2008



15 feet

Photo by B. Lambert

November, 2010



Photo by N. Wildman

Emergency removal: Forge Pond Dam, Assonet River, Freetown



Forge Pond Dam from left bank



Forge Pond Dam from right bank







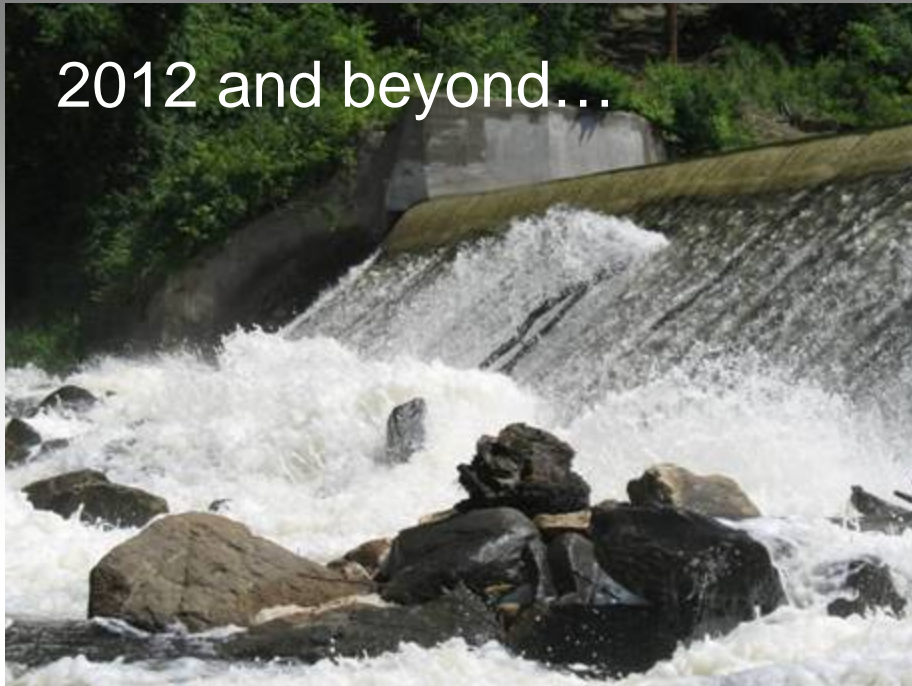
Amethyst Brook, Pelham

1000 Acre Brook, Athol

2011

Jones River, Kingston

2012 and beyond...



Other things we do

- Trainings for dam removal project managers
- Develop / update guidance
- Speak at conferences and meetings
- Share information (Restoration Potential Model)
- Expand our approach

Barriers to dam removal

- Funding
 - For ecological restoration
 - To remediate dam safety issues
- Technical
 - Infrastructure – utility pipes, bridges, roads
 - Contaminated sediment
- Process
 - Understanding permitting (8 or more permits)
 - Time



SAVE THE DATE! - May 18 & 19, 2011

**Conference on River Monitoring and Climate Change in
Massachusetts**

How citizen-based monitoring can help us understand and address the impacts of climate change on our rivers.

- Are you concerned about the impact of climate change on rivers?
- Does your organization have a river or stream monitoring program?
- Are you interested in learning what other organizations, government agencies, and universities are doing to address climate impacts on rivers?
- Would you like guidance in developing a climate change plan for your river or watershed?

If the answer is "yes" to any of these questions, this conference is for you!

This conference is presented by the **Massachusetts Rivers Alliance** in partnership with the **MA Department of Fish and Game's Division of Ecological Restoration**. **Day #1, May 18th** will consist of presentations, break-out sessions, and discussions from 9am-4pm at the Trustees of Reservations' Doyle Conservation Center in Leominster, MA. **Day #2, May 19th**, participants may choose to go on one of two fields trips, to sites in either eastern or western Massachusetts. The conference is funded primarily by a grant from the Massachusetts Environmental Trust. The cost of the conference is \$20 per person.