



Funders

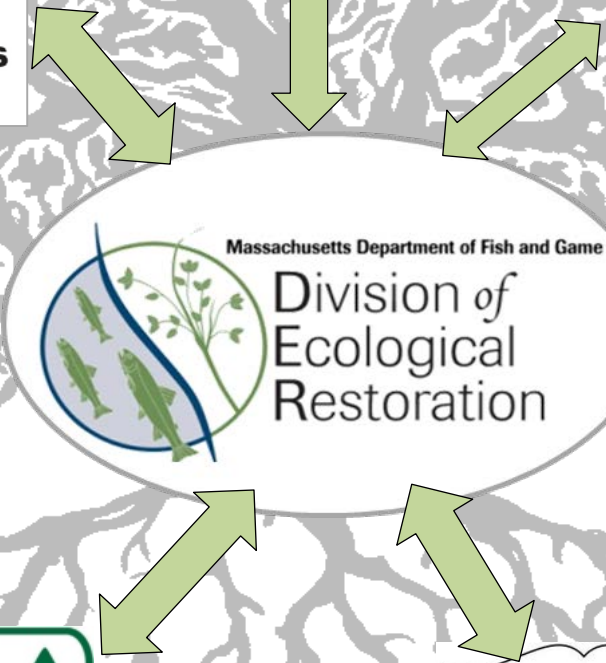


Regulators



US Army Corps of Engineers®

Consultants and Private Sector



NGOs

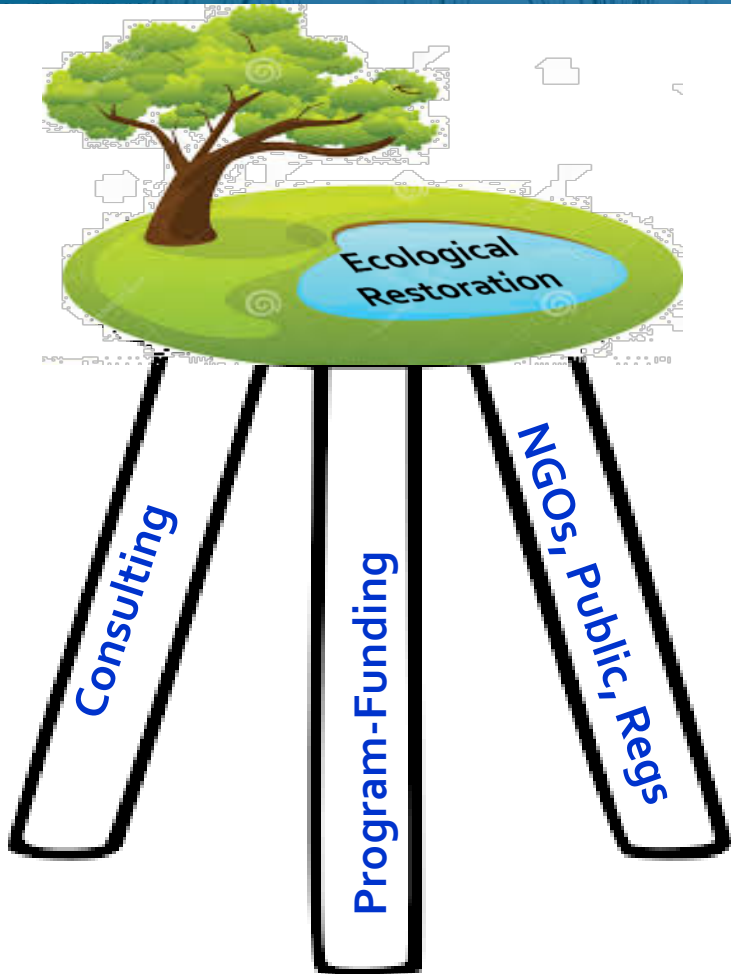
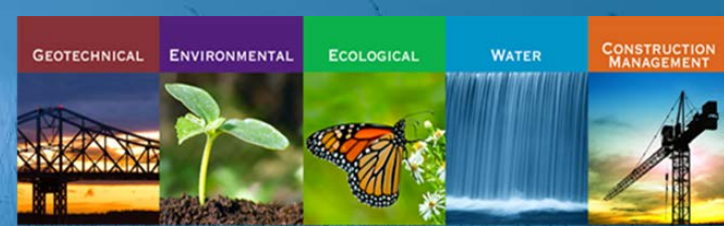


Cities and Towns



Creating & Sustaining a Robust Regional Ecological Restoration Initiative

Role of the Consultant

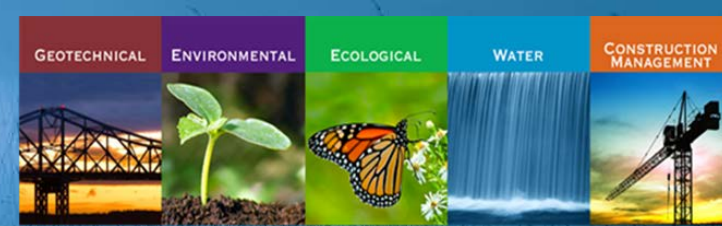


Consultant Role?

- Multi-disciplinary science & engineering & policy/permitting
 - Academic/University
 - Government
 - Private/Corporate
- Creative, forward looking
- *Best, most rewarding, work we do*



Creating & Sustaining a Robust Regional Ecological Restoration Initiative



Role of the Consultant

What is the Technical Consultant Role?

- Provide the *"right tools in the toolbox"*
 - Diverse disciplines: earth science, biology, ecology, bio/traditional engineering
- Select the most appropriate *"tools"* for the project





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Role of the Consultant



The Challenge

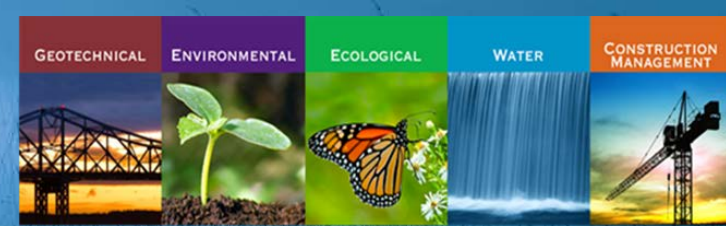
- **Diverse Field, Need Lots of Expertise & Experts/Consultants**
- **Dynamic field of study: new studies/results constantly shape what we do and how we do it**
- **Solutions/approaches: need to be.....**
 - **State of the Art**
 - **Proven (*it needs to actually work*)**
 - **Practical**
 - **Fit the *regulations du jour* – (*must be “permittable”*)**
- **Concept to Reality:**
 - **Assessment, Design, Construction (reactive capacity/ adaptive management), & Long-term Follow-up**





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Role of the Consultant



Case Study – Implementation Scale

Roberts Meadow Brook Dam

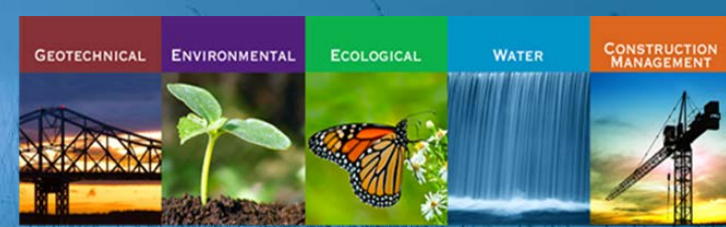
- 150 y.o. City Dam, former water supply, “Poor Condition”
- Office of Dam Safety says “fix or remove” the high hazard dam
- High quality trout habitat above & below dam; Impairment/segmentation
- Ecological desire to restore cold water fishery, 1800± If restored trout brook
- Impoundment heavily silted-in, no recreational value
- Historic Dam – eligible for national register
- Opposition by “Friends of Roberts Meadow Dam”
- Partnered with City to help them move forward and resolve tensions



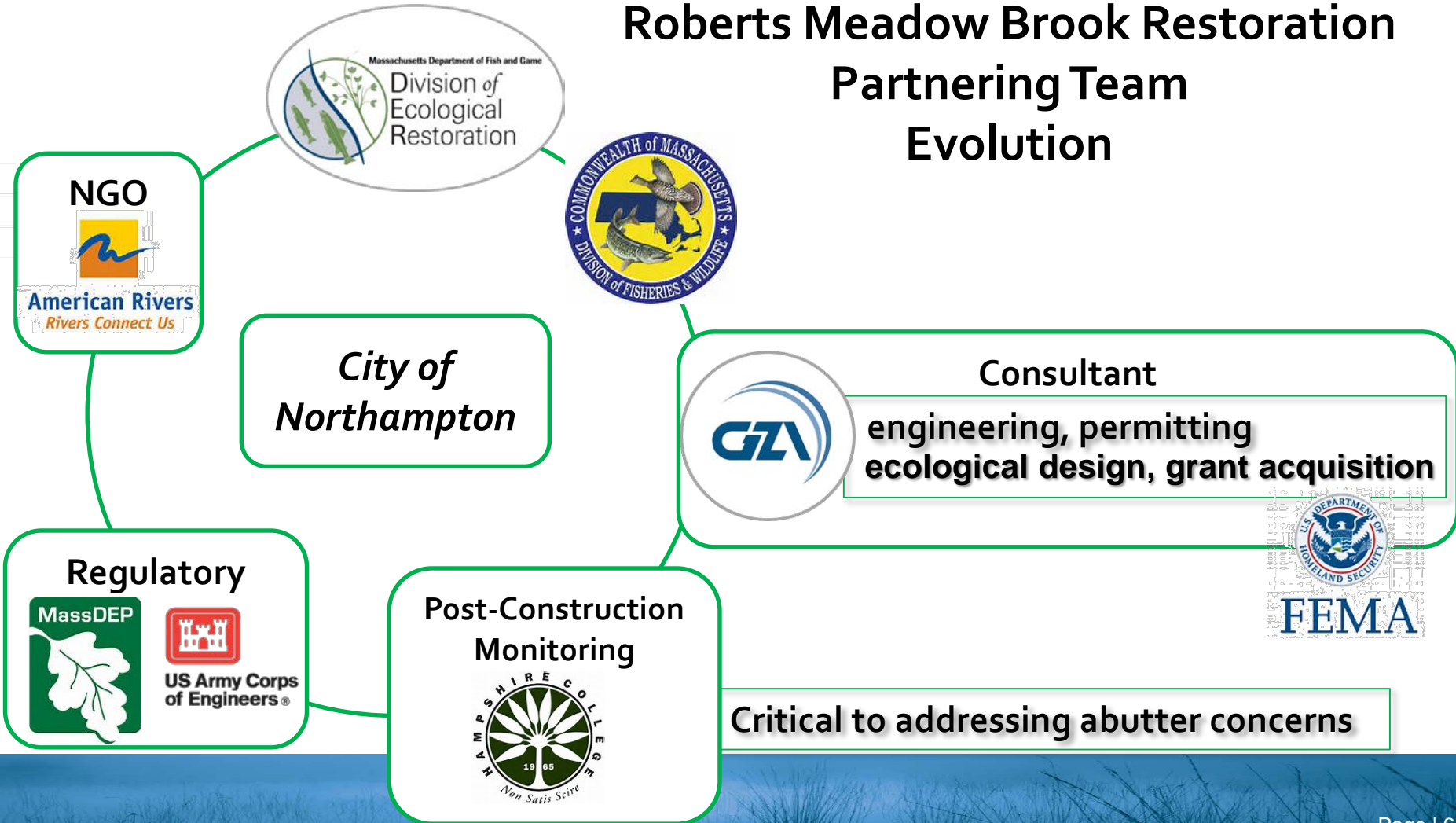


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Role of the Consultant



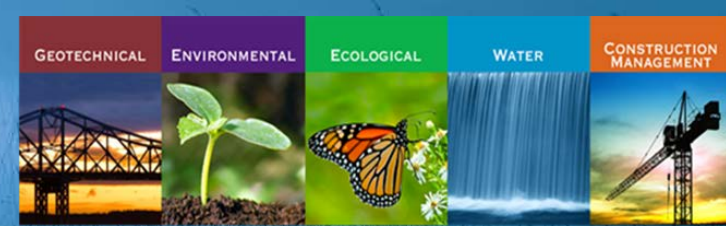
Roberts Meadow Brook Restoration Partnering Team Evolution





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Role of the Consultant



Restoration Approach Evolved/Improved Because of Partnership

- Originally extensive pre-dredging to limit sediment sluicing
- Evolved to increased reliance on natural restoration
 - (head cutting, stream channel carving, sediment sluicing, seed bed regeneration)
- Post-demolition stream/adaptive management
- Pre-demolition invasive species controls
- Post-demolition stream recovery monitoring

