

Massachusetts Tidal Crossing Info



What work have you done to assess tidal culverts/
crossings?

- Most have been assessed over two decades
- Tidal restriction atlases created (basic, planning level assessments)
- MA Division of Ecological Restoration (DER) has since completed more intensive assessments for restoration potential & feasibility
- DER (and partners) completed over 85 tidal restoration projects affecting over 1,500 acres

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What is the driver? Funding source?

- Environmental priority for state, federal agencies and other organizations
- Multiple funding sources: state capital funds, federal grants, NGO partners, corporate contributions

Do you have future assessment or other work related to tidal crossings planned?

- DER conducting internal review of all known tidal restrictions to update records and ID remaining sites
- MassBays & CZM managing tide gate inventory and assessment project (NOAA funded)

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Have you run into any road blocks with tidal crossings?

- Most prominent/frequent challenges to tidal restorations are:
 - Low-lying private property and infrastructure upstream
 - Complex, lengthy, costly regulatory compliance
 - Presence of protected rare species
 - Invasive species management post-restoration
 - Erosion of creek channels post-restoration causing sedimentation and perceived downstream impacts
 - Abutter opposition to changes in aesthetics/recreation

Massachusetts Lessons Learned



- Tide gates can be complex and risky
- In-depth assessment early on is key to avoiding problems/wasting money
- Culvert safety should be evaluated
- Sea level rise should be incorporated into designs
- Water depth & velocities for fish should be considered
- Early outreach to stakeholders & regulators is key
- Partnerships are necessary to completing projects
- Detailed data should be gathered during assessment stage to inform criteria used to prioritize projects

Massachusetts Lessons Learned



- Much assessment can happen in the office given wealth of info available (LiDAR aerial photos, tide gauge data, etc.)
- Important to think about potential impacts from upstream overland flow/flooding events
- Much coastal modeling for vulnerability and risk assessment planning is underway. Info about tidal crossings is not always available. Look for opportunities to link these two efforts.