

Updates from MassDOT Highway Division, Environmental Services

NETC Symposium

June 19, 2019

Tim Dexter, Fish & Wildlife Supervisor

State Hazard Mitigation & Climate Adaptation Plan (SHMCAP)

- E.O. 569: An integrated Climate Change Strategy for the Commonwealth
- Reduce greenhouse gases
- Protect life, property, natural resources and our economy from the impacts of climate change
- Agency Vulnerability Assessments
- Agency specific goals & actions



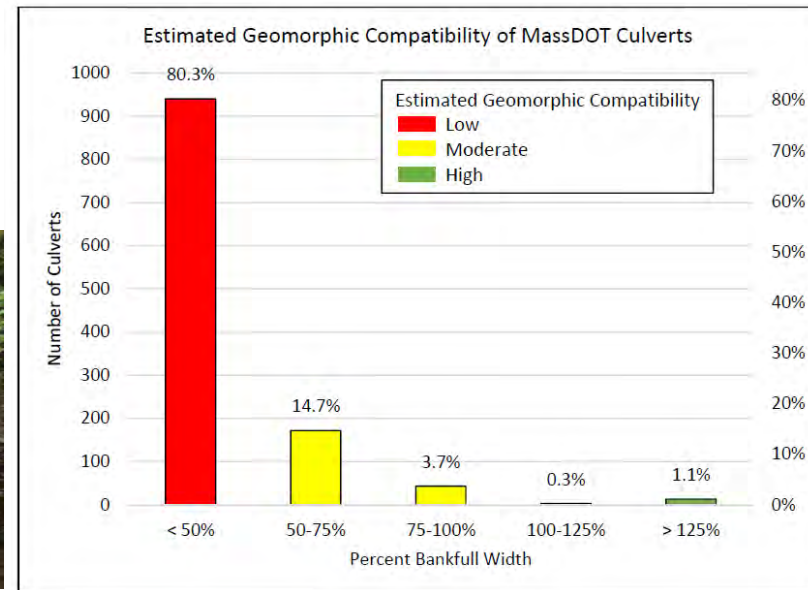
- <https://www.mass.gov/service-details/massachusetts-integrated-state-hazard-mitigation-and-climate-adaptation-plan>
- Incrementally update design standards across all Divisions for projects including roads, bridges, tunnels, and support facilities using the Massachusetts climate change projections.
- Develop climate change adaptation design guidance and provide resources and training...on bridge and culvert design interaction with emerging fluvial geomorphology practices

Climate Change Vulnerability & Adaptation Research Projects

- Mapping our Vulnerable Infrastructure Tool (MOVIT)
- Deerfield Watershed Vulnerability Analysis
- Statewide Estimated Bridge & Culvert Vulnerability Study
- Statewide Floodplain & Climate Change Study
- Boston Harbor Flood Risk Model
- Massachusetts Coastal Flood Risk Model

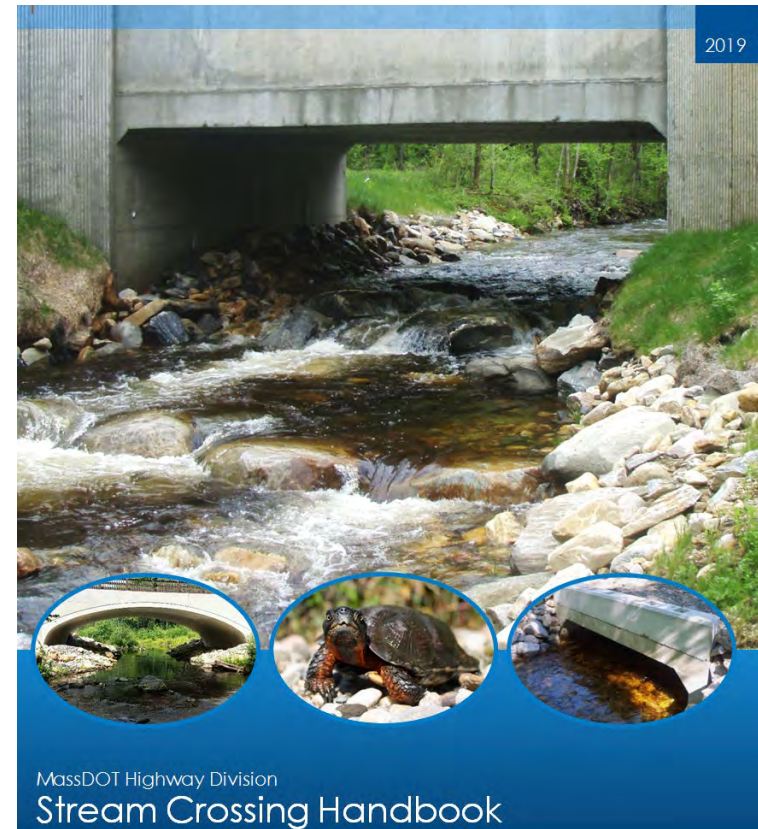


- Project Intake Tool (MaPIT)

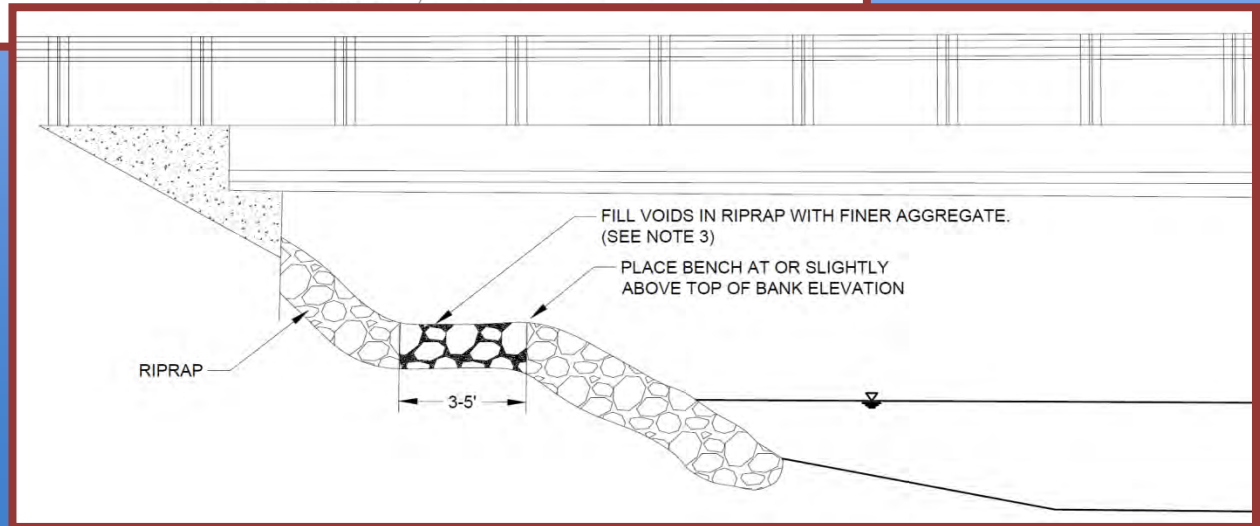
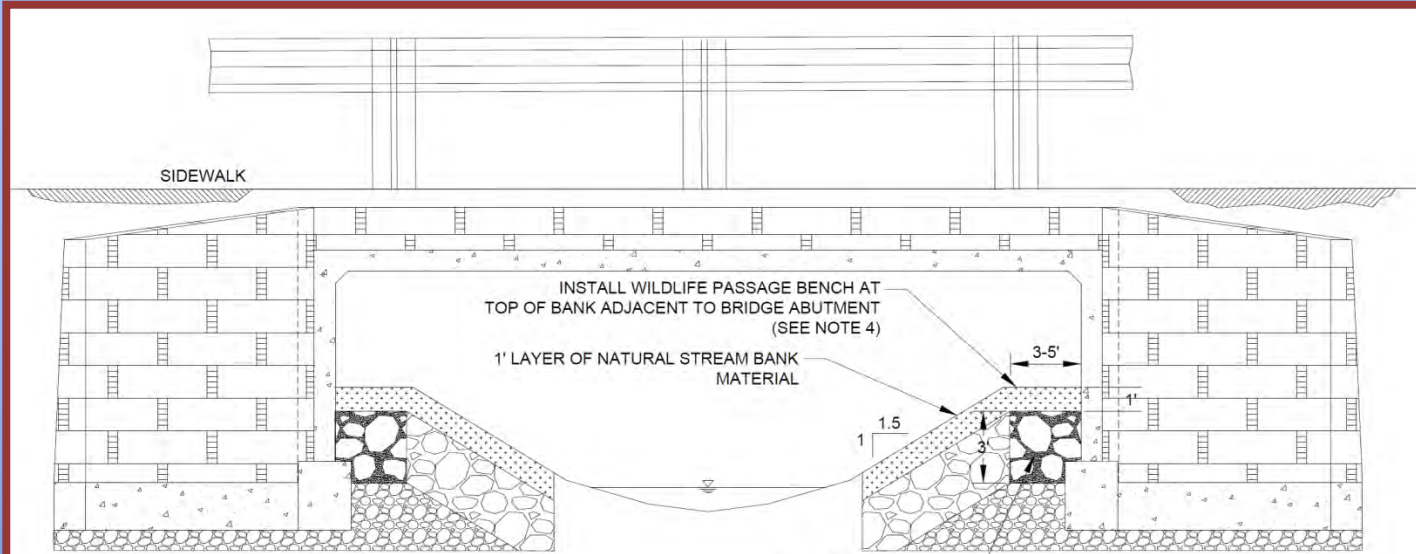


MassDOT Guidance Document Updates

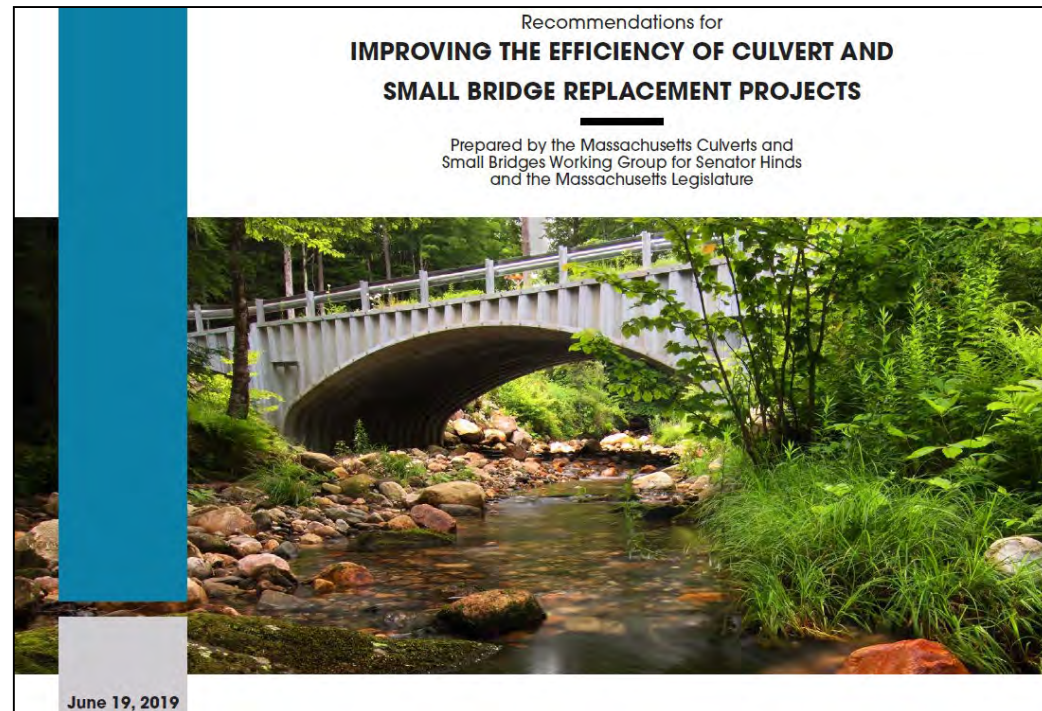
- Stormwater Handbook (2004)
- Project Development & Design (2004)
- Stream Crossing Handbook (2010)
- New MassDOT Hydraulics Manual (in development)



Stream Crossing Handbook: Template Plans & Details



- Legislatively mandated WG to evaluate issues with implementing better, more cost effective culvert & small bridge projects.
 - Evaluate current design & env. stds, processes, risk, resiliency, etc.
 - Report submittal 6/19/2019
-
- Recommendations:
 - expanding technical assistance & training;
 - expand grant programs & financing options;
 - revise engineering stds;
 - streamline environ. permitting;
 - additional agency capacity.



Fish & Wildlife Program Updates

- Rivers & Roads Training Program – Fluvial Geomorphology
- Artificial Reef Creation w/surplus materials
- Wildlife Collisions Collector App
- Salt March / Tidal Flushing Restoration Projects
- Bird nest boxes/structures, wildlife passage monitoring, turtle mortality reduction, black bear and moose research, etc.



THANK YOU



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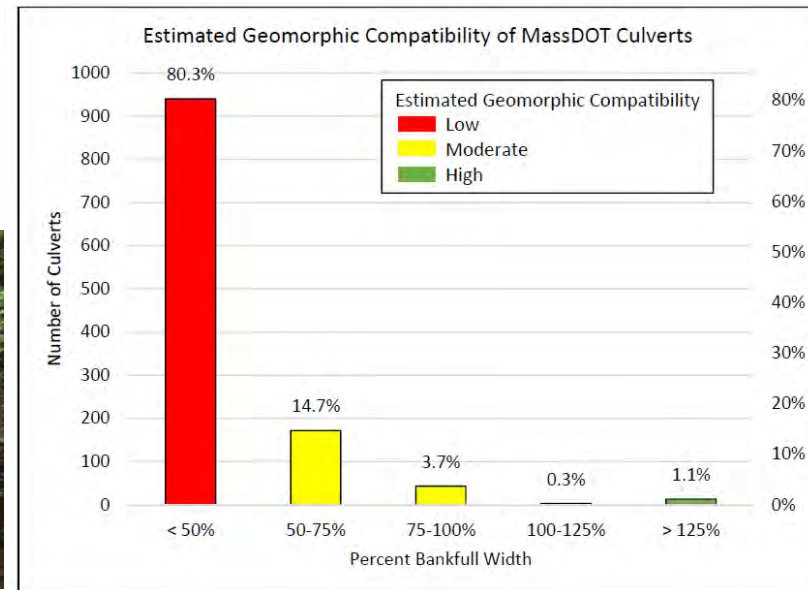
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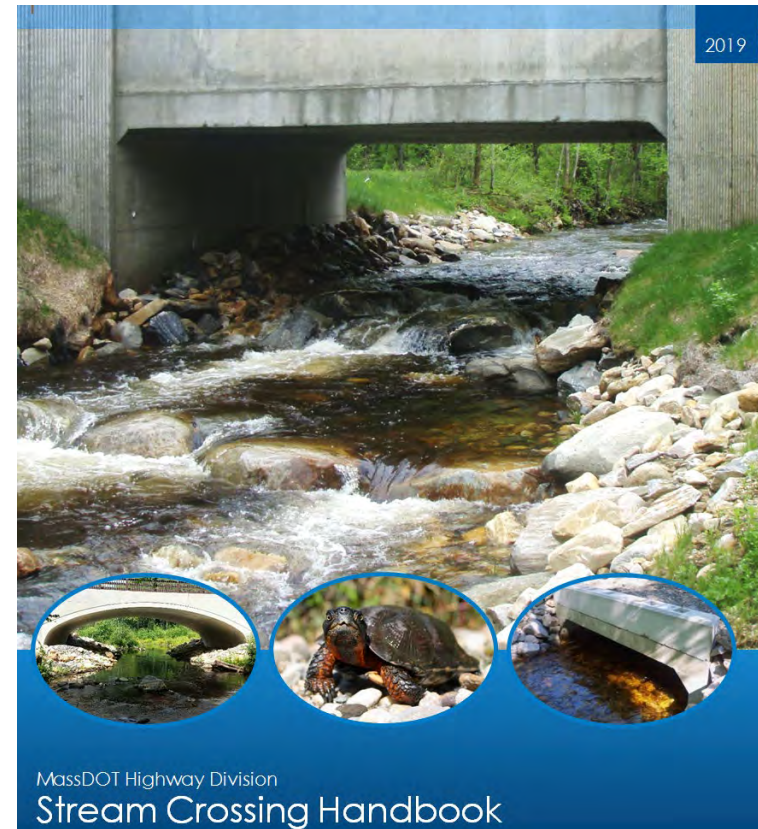


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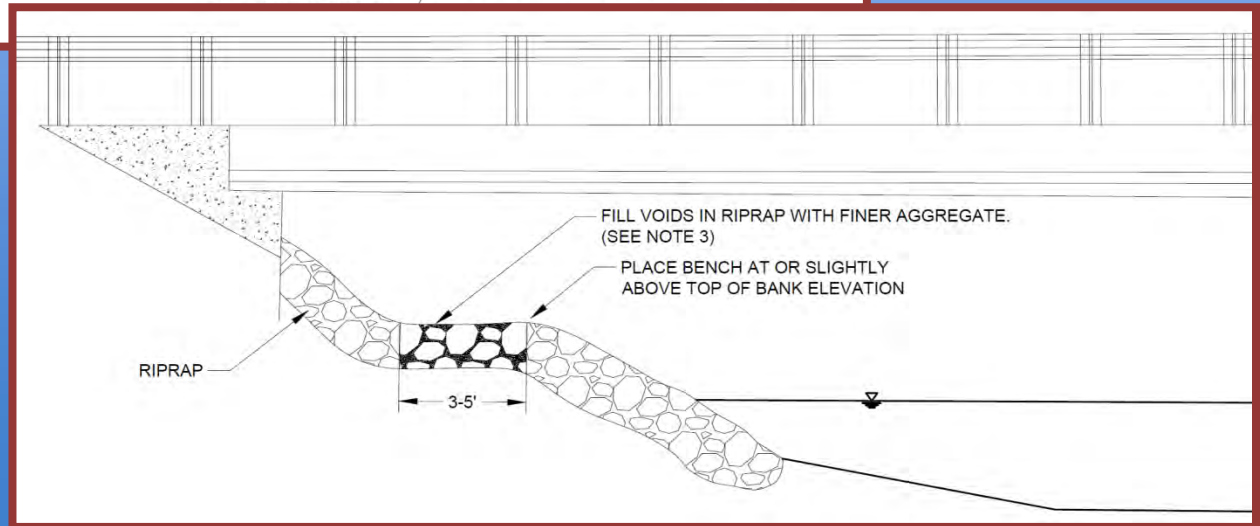
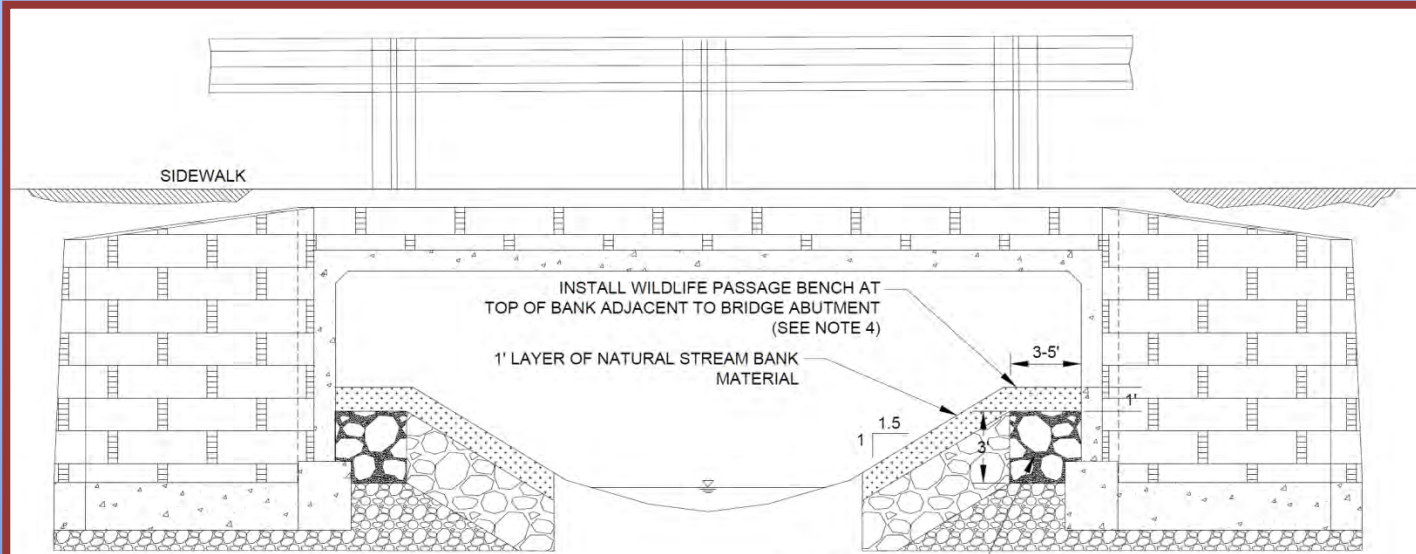


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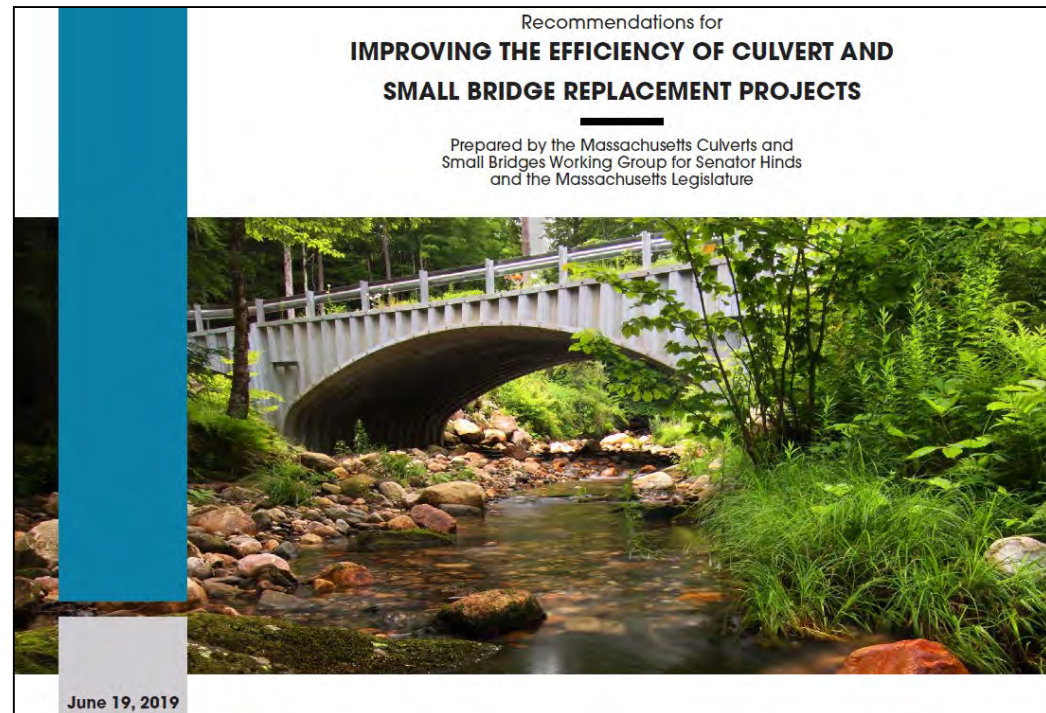
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