Tidal Crossings Assessments Workshop
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Rhode Island State Summary of Tidal Culvert / Crossing Assessment Efforts

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Previous Efforts

Major driver of tidal culvert / crossing assessment work to-date has been habitat restoration planning:

- In 1996, Save The Bay developed a rapid assessment protocol for salt marshes, the Save The Bay method, that included identification of tidal restrictions. Method was applied statewide through a STB-led volunteer effort.
- Marshes with restricted tidal flow were identified and mapped as potential restoration projects as part of the Habitat Restoration Portal project
- Additional mapping of potential marsh restoration sites including tidally restricted marshes completed in 1999 by Narragansett Bay Estuary Program, University of Rhode Island Environmental Data Center and in 2007 by the US Army Corps of Engineers

Present

Many of the tidal restoration projects identified through the STB assessment have been completed, including: Galilee Bird Sanctuary, Narragansett; Walker Farm / Hundred Acre Cove, Barrington; Silver Creek, Bristol; Jacob's Point, Warren; Gooseneck Cove, Newport; Town Pond, Portsmouth; RISD Marsh, Barrington

Major sources of funding for these projects include: USACE Section 206 funding, USDA-NRCS Wildlife Habitat Incentive Program, NOAA Community-Based Restoration Program, Ducks Unlimited, RI Coastal and Estuarine Habitat Restoration Trust Fund.

Sea Level Affecting Marshes Model (SLAMM) was run statewide in 2014 and has some utility for identifying tidal restrictions and potential future impact to wetlands and wetland migration.

CRMC has developed STORMTOOLS (www.beachsamp.org/resources/stormtools/) as part of its Shoreline Change Special Area Management Plan, a web-based tool that models flood impacts from storm surge and sea level rise and may have utility in identifying at-risk tidal culverts / crossings.

Key Roadblocks / Lessons Learned:

- Consider condition of restricted marsh before increasing tidal exchange—Gooseneck Cove project is an example of significant subsidence post-restoration and conversion of marsh to open water
- Plan for Sea Level Rise—time is an important factor for success of tidal restoration projects
- Tidal regulation structures may pose public safety risks