



A novel monitoring
framework to assess intertidal
biodiversity in mixed coarse
substrate habitats across the
Boston Harbor Islands

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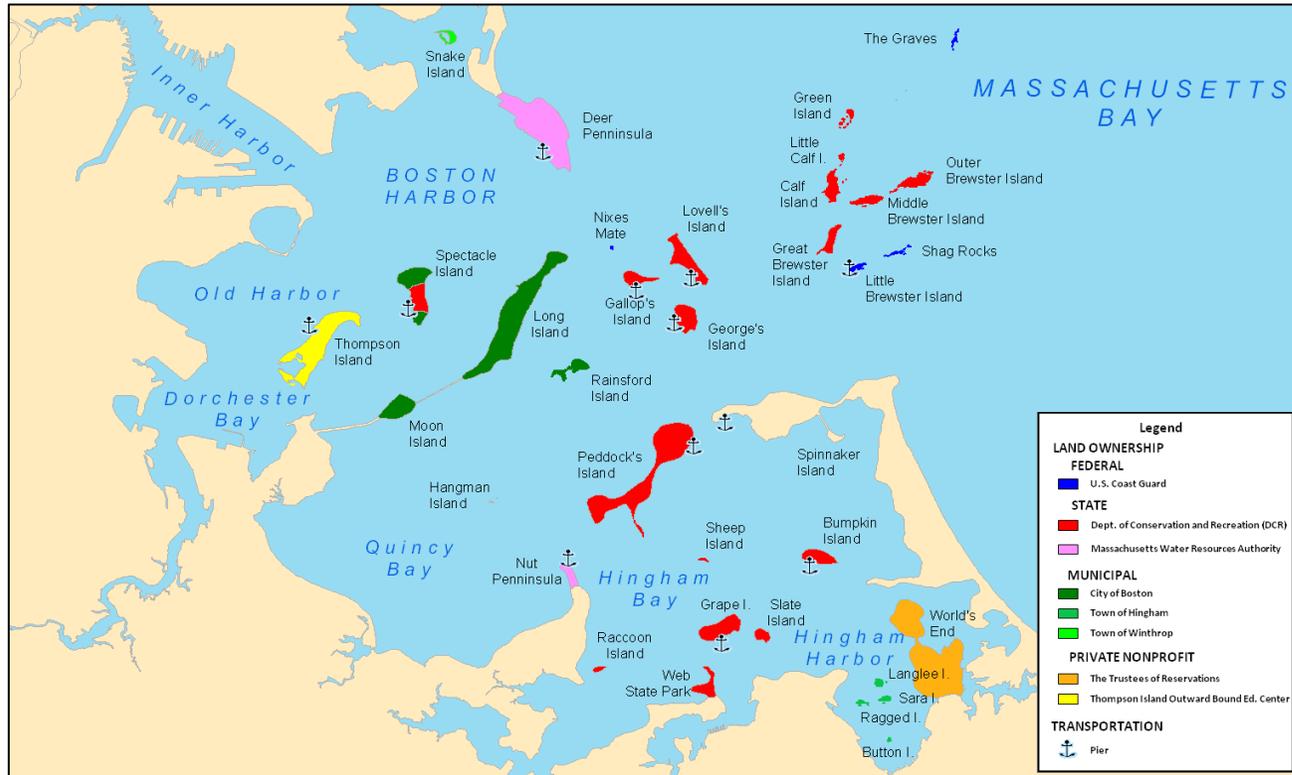
Aly Putnam

University of Massachusetts Amherst

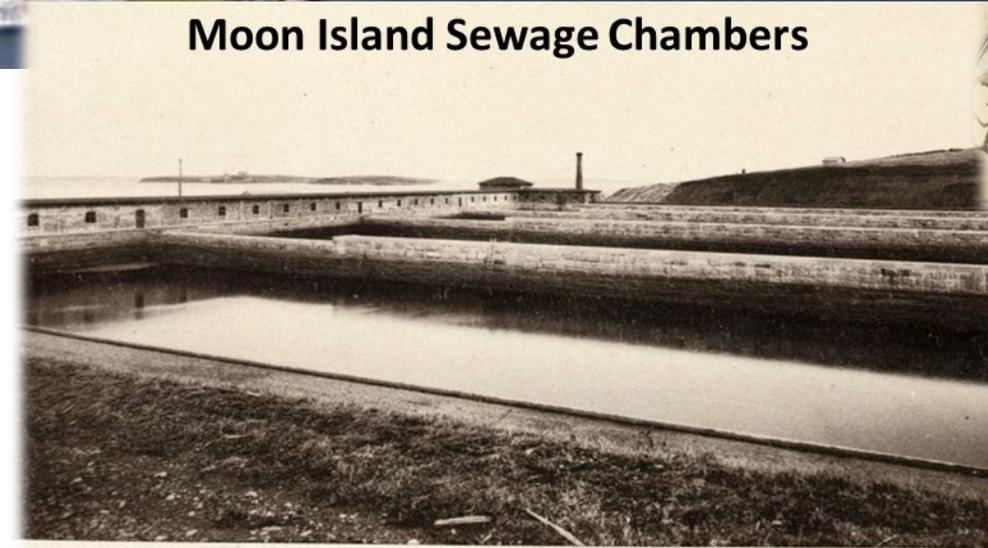
Natural Resources Preservation Program



Boston Harbor Islands History



Moon Island Sewage Chambers



Source: Ellen Berkland

Storage Reservoir at Moon Island

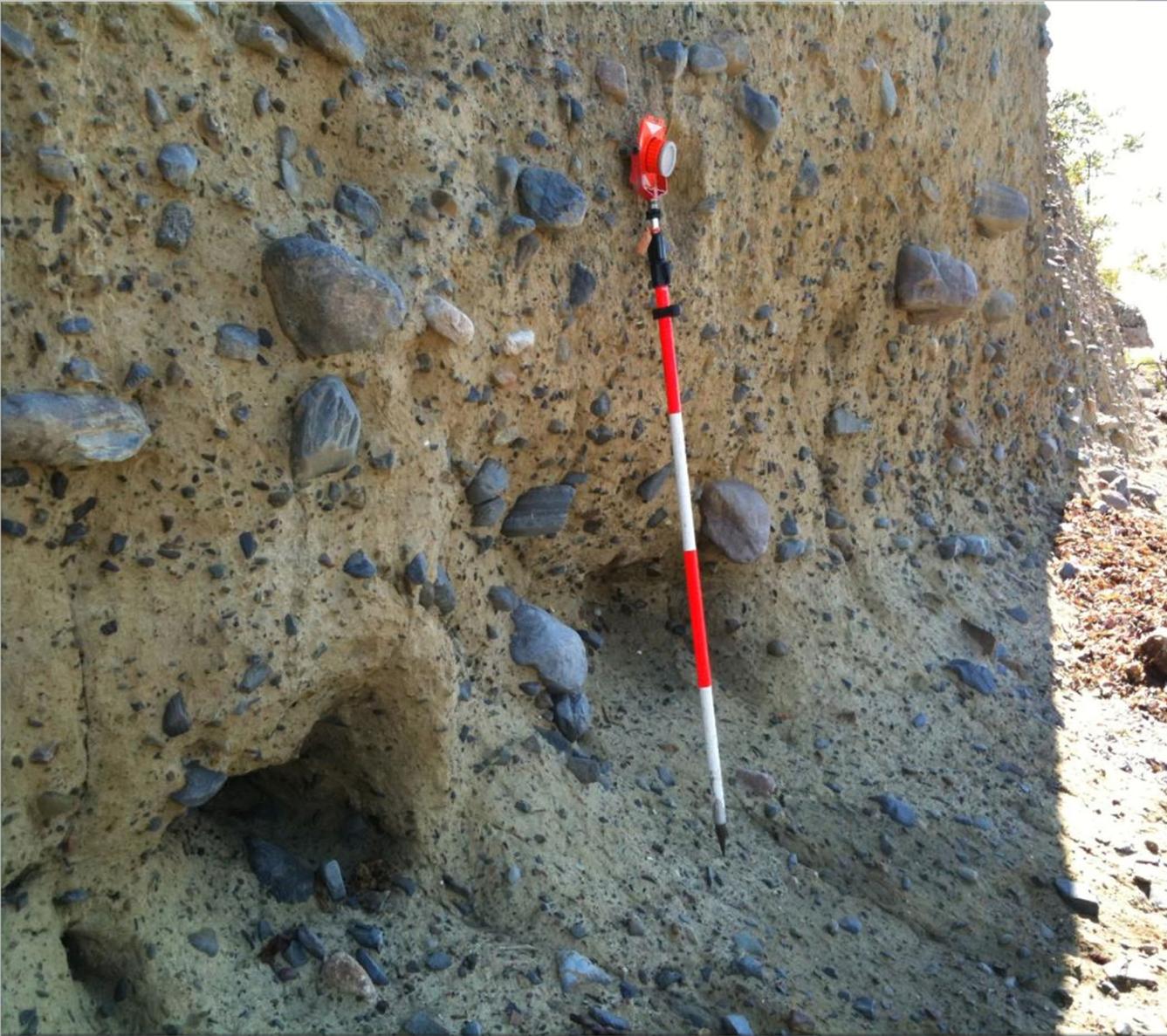
A model of successful restoration



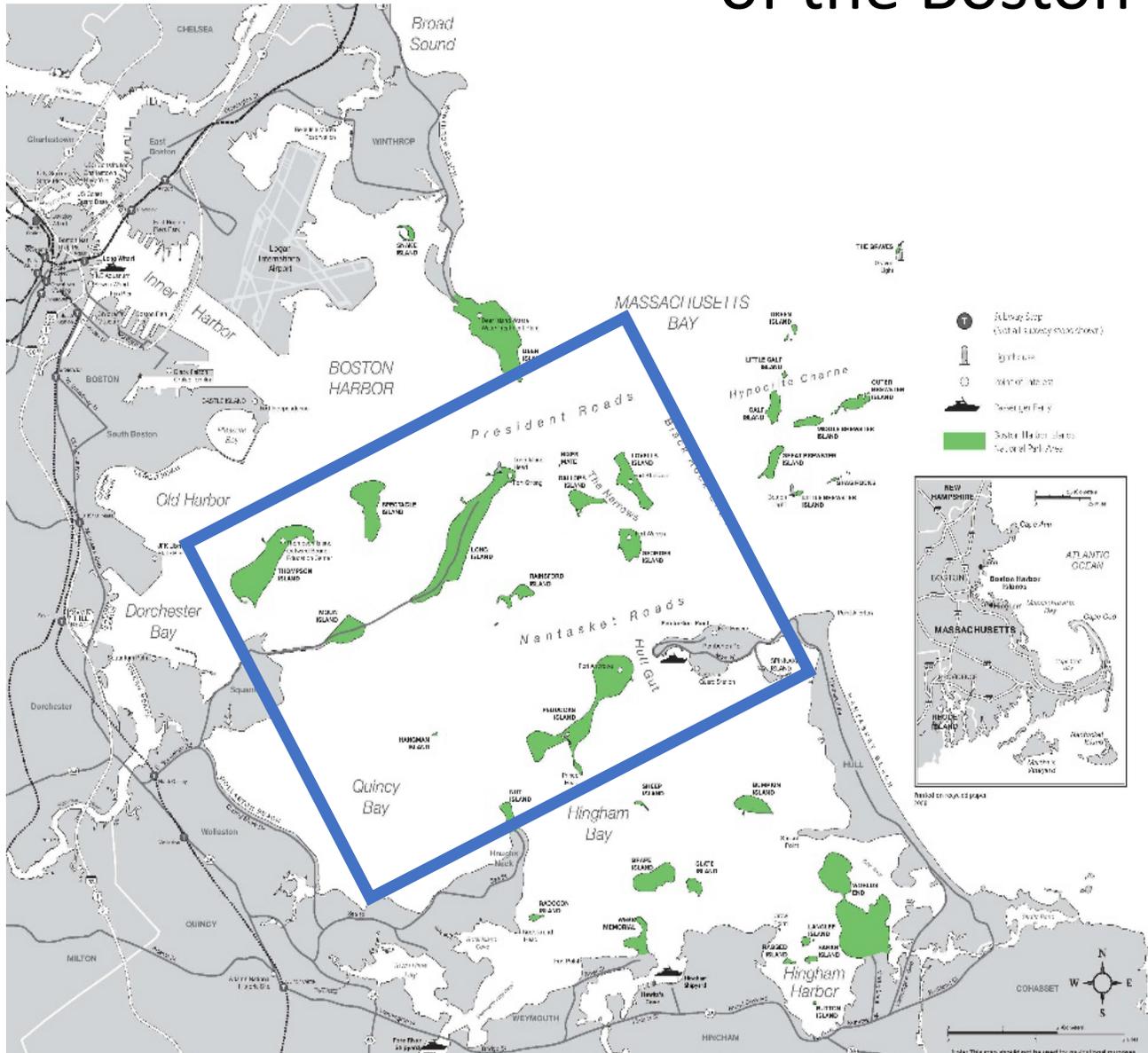
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11 MOST ENDANGERED HISTORIC PLACES

Increasing resilience while avoiding maladaptation



Intertidal biodiversity in mixed coarse substrate habitats of the Boston Harbor Islands



Target Islands

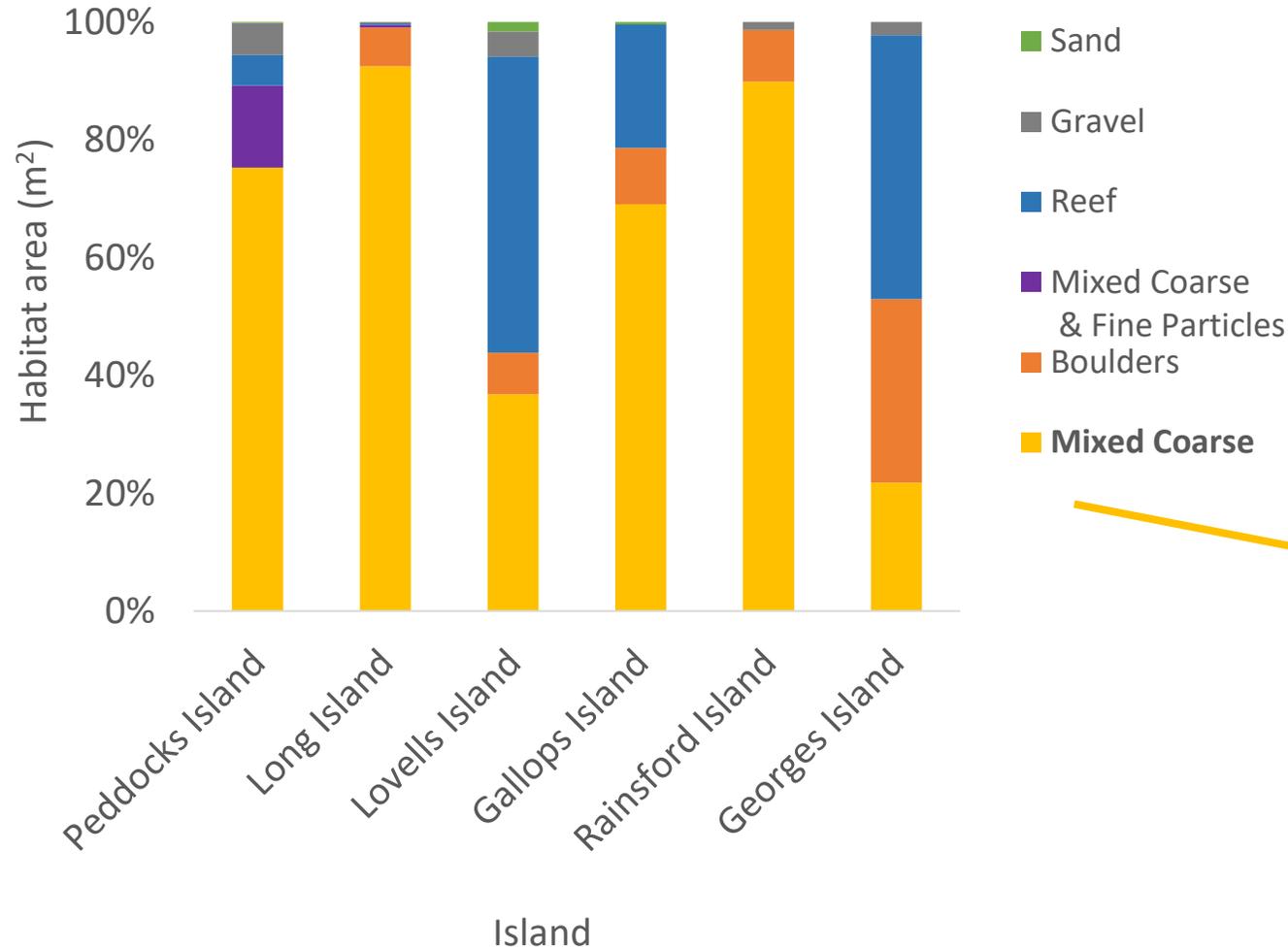
- Georges
- Gallops
- Peddocks
- Thompson
- Rainsford
- Lovells
- Long

Target habitat - Mixed Coarse Substrate

“Substrata consisting of rocks, boulders, cobbles, gravel, shell, and sand (no one substratum type exceeding 75% surface cover, less than 50% cover by rocks or boulders).” - *Bell et al., 2003*



Mixed coarse substrate habitats



Emergent Species

“Shifty” species



Non-native invasive species

