

Finding Solutions to our Coastal Challenges
Salem Sound Coastwatch 25th Anniversary Symposium

Eyes on The Coast

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Report to the Community

- Salt Marshes

Efforts

Changes

Successes

*Citizen Scientists Become
The Local Stewardship Network.*

Monitoring Salt Marshes

CZM – EPA – SSCW Protocol 1998

Affordable long-term data collection

Citizen-Scientists Volunteers



Pre and Post Restoration

Monitoring Good Harbor Marsh



August, 2005

Reference Site for Eastern Point Restoration

Sea Level Rise? Creek Bank Collapse?



Same Site 7 years later!

Sea Level Rise? Creek Bank Collapse?



August 2015

Same Site 10 years later!

Subtle Changes in Vegetation

August 2005



August 2012

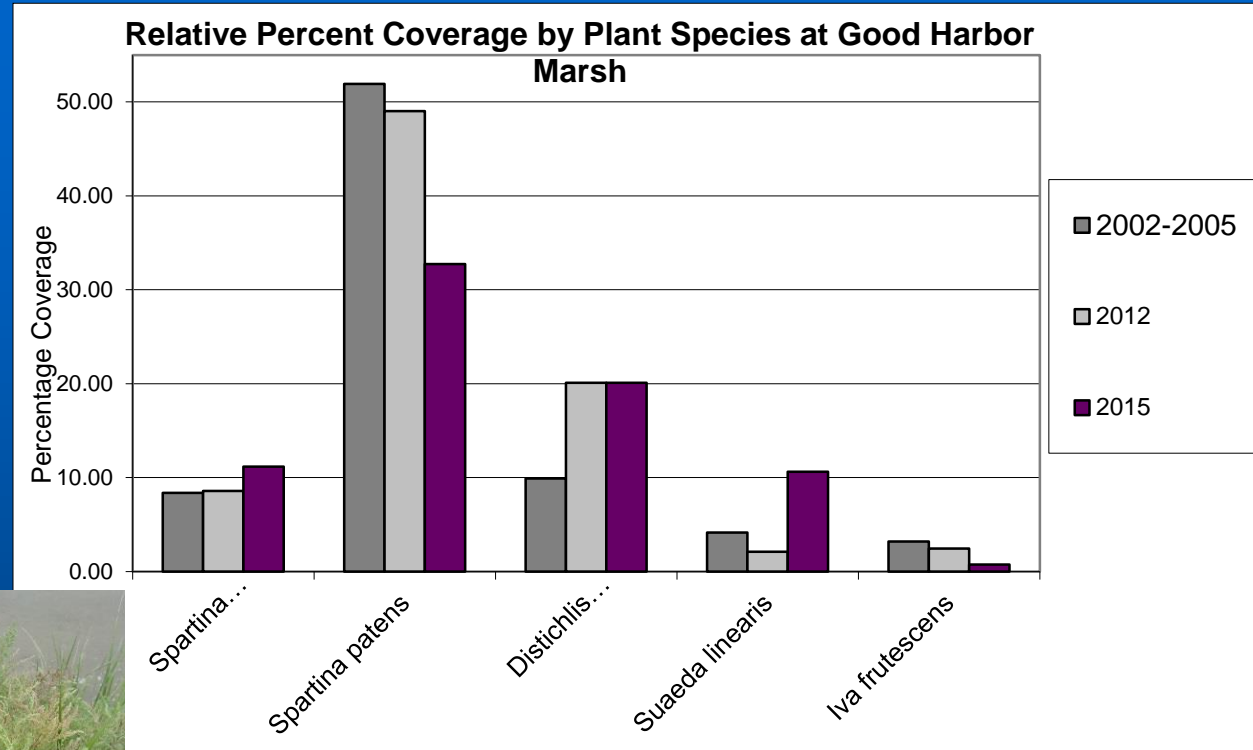


Loss of *Iva frutescens* (HIGH MARSH BUSH)

in the upper marsh at Good Harbor Marsh

Need to monitor for sea level rise

Good Harbor Marsh, Gloucester

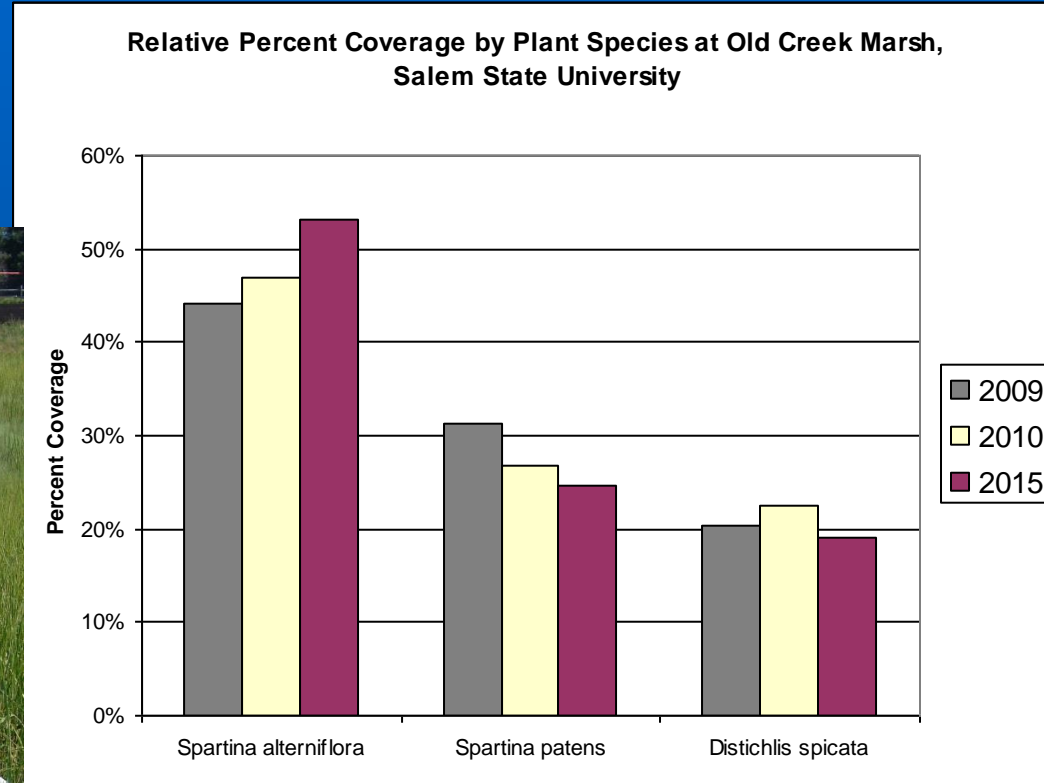


Seeing Changes in Vegetation
From 2002-2005; 2012; 2015

Increase in Spartina alterniflora & Suaeda linearis

Old Creek Marsh, Salem

Similar Changes in Vegetation in Salem from 2009 to 2015



Less High Marsh Grasses; More Low Marsh Grass

Future Citizen Science

Need to Work Together to come up with Standard Methods

1. Sea level rise

Document marsh elevation, Vertical accretion or subsidence

2. Bank erosion

Begin measuring creek and selected ditch widths, bank slumping

3. Invasive *Phragmites australis* assessment

Map for signs of retreat

4. Salt Pannes

