Users of Subaqueous soil survey data for resource management (Phillip King, 2004).

Specific Soil Resource Based Interpretations

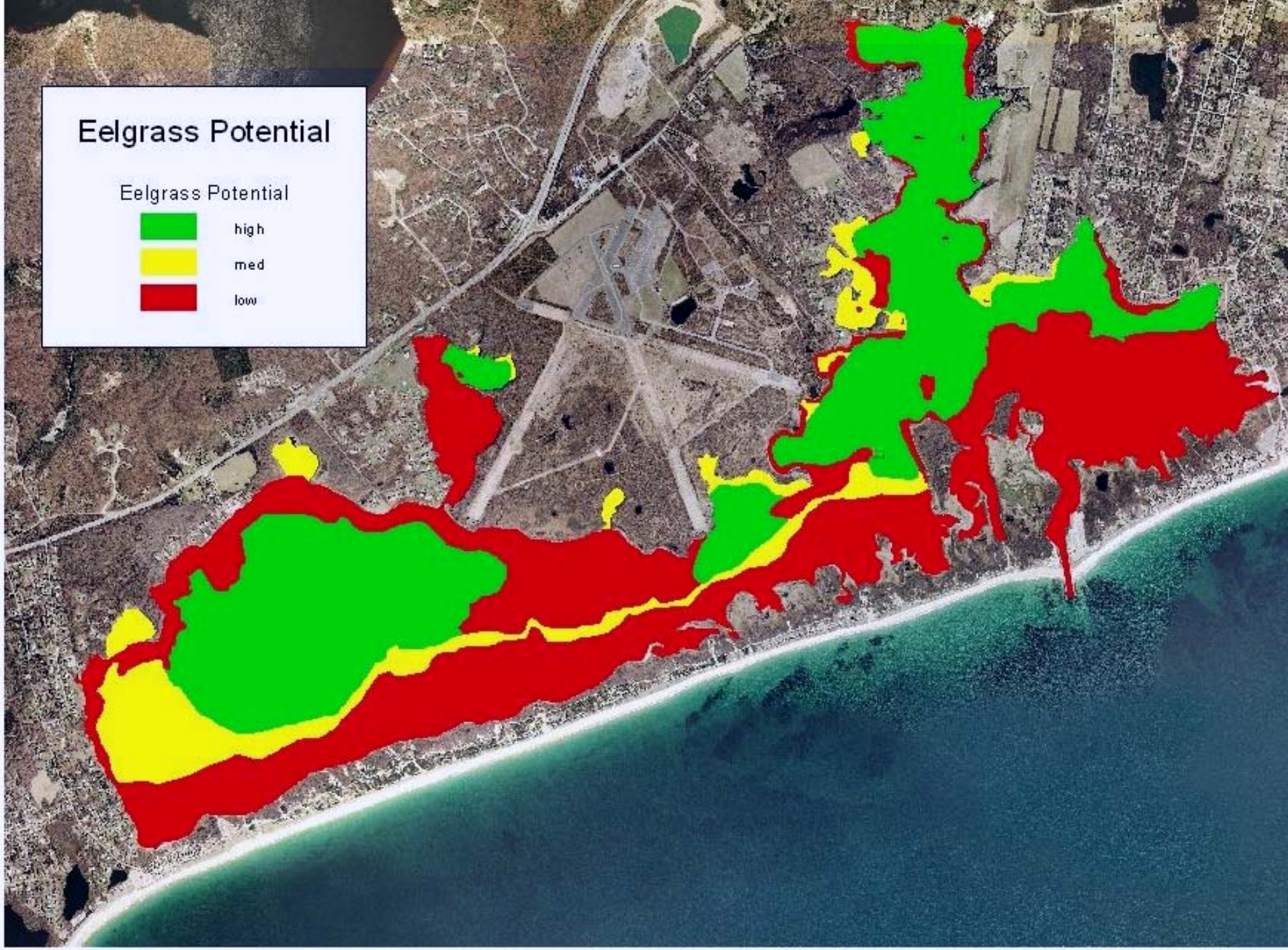
Subaqueous Soil Interpretations

Subaqueous Soil Survey, Ninigret Pond

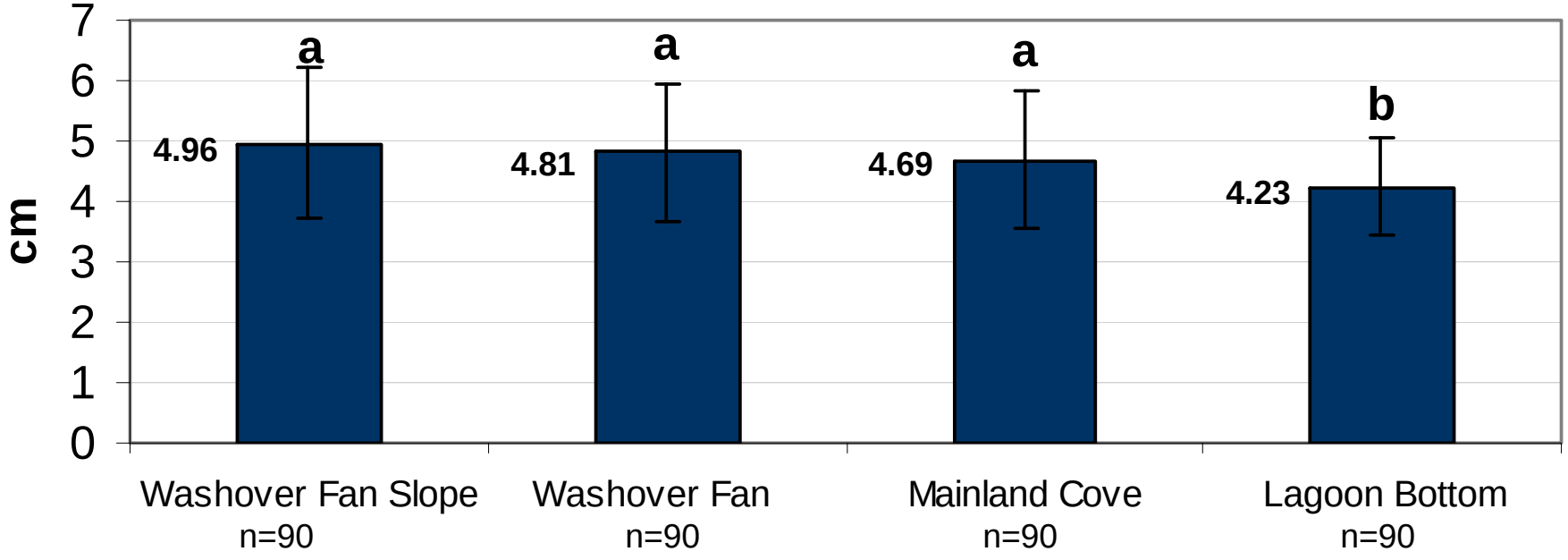
Charlestown, Rhode Island, USA

For more information, contact www.uconn.edu

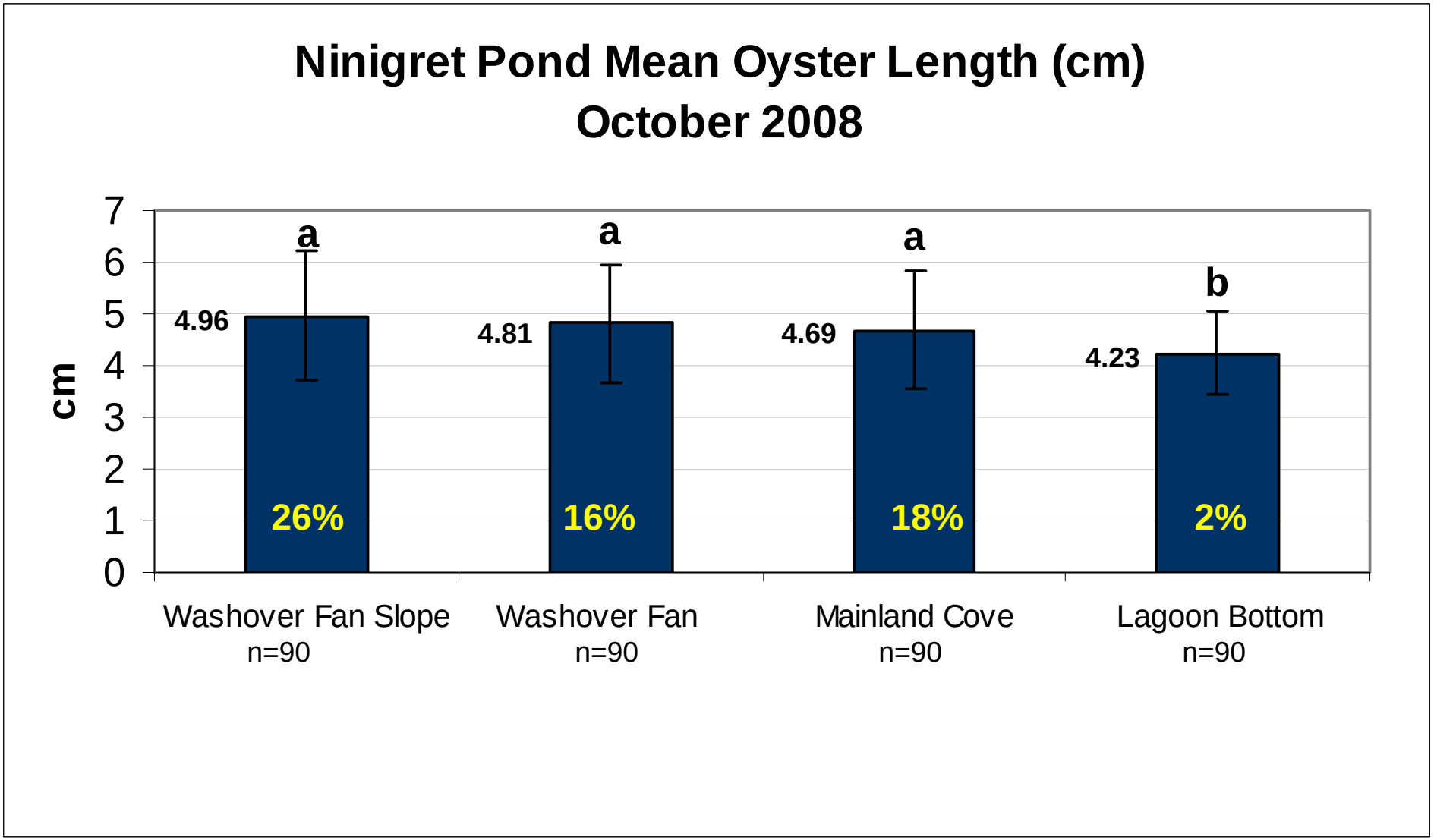
Bradley, M.P., and M.H. Stolt. 2006. Landscape-level seagrass-sediment relationships in a coastal lagoon. Aquatic Botany 84:121-128.


Eelgrass Potential
Eelgrass Potential
high
med
low

Ninigret Pond Mean Oyster Length (cm)
October 2008



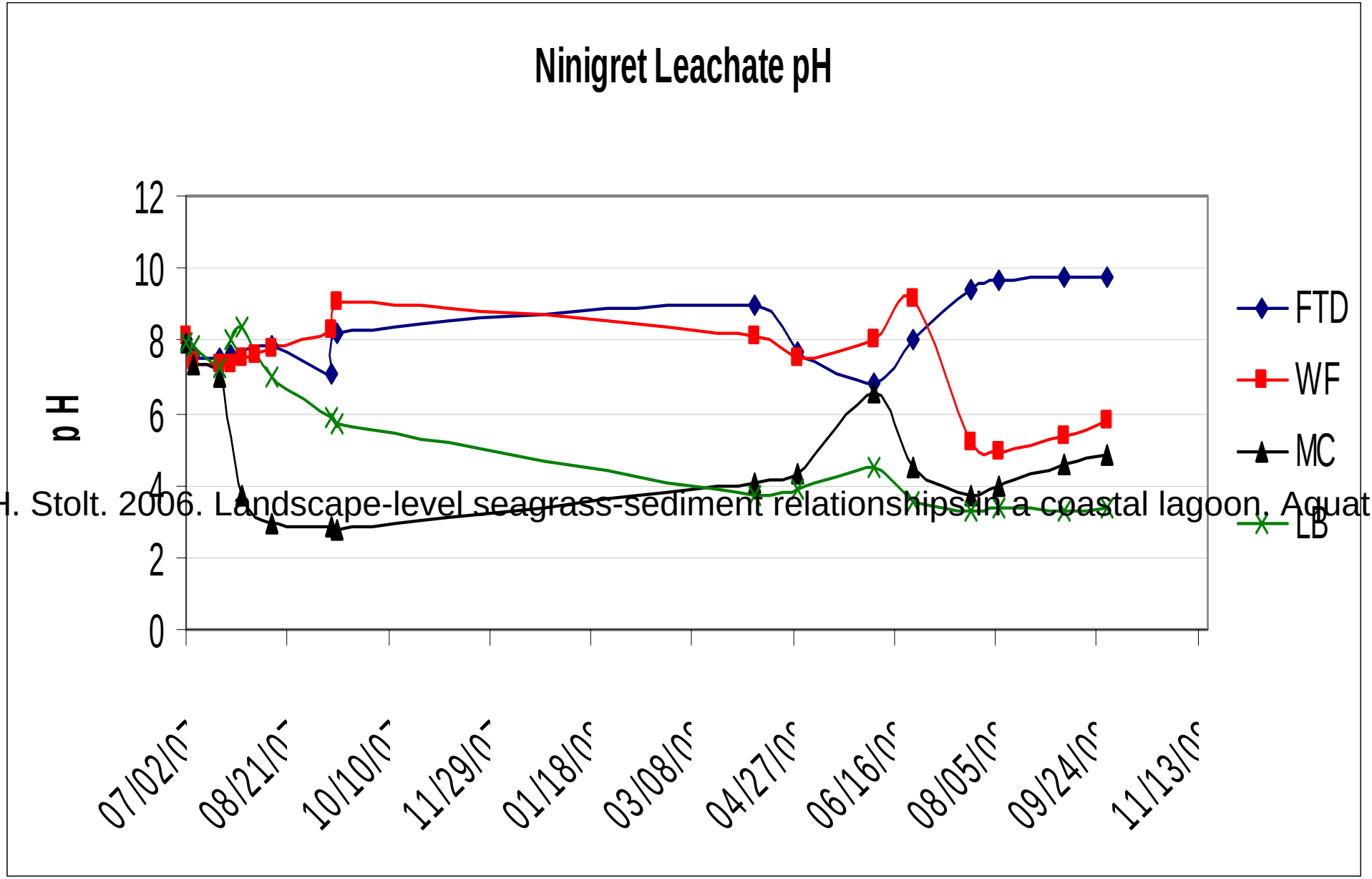
Mean oyster size on different soil-landscapes (16 week growing period).
Means with different letters are significantly different at the 0.05 level according to Tukey's HSD test. Bars represent standard deviations.



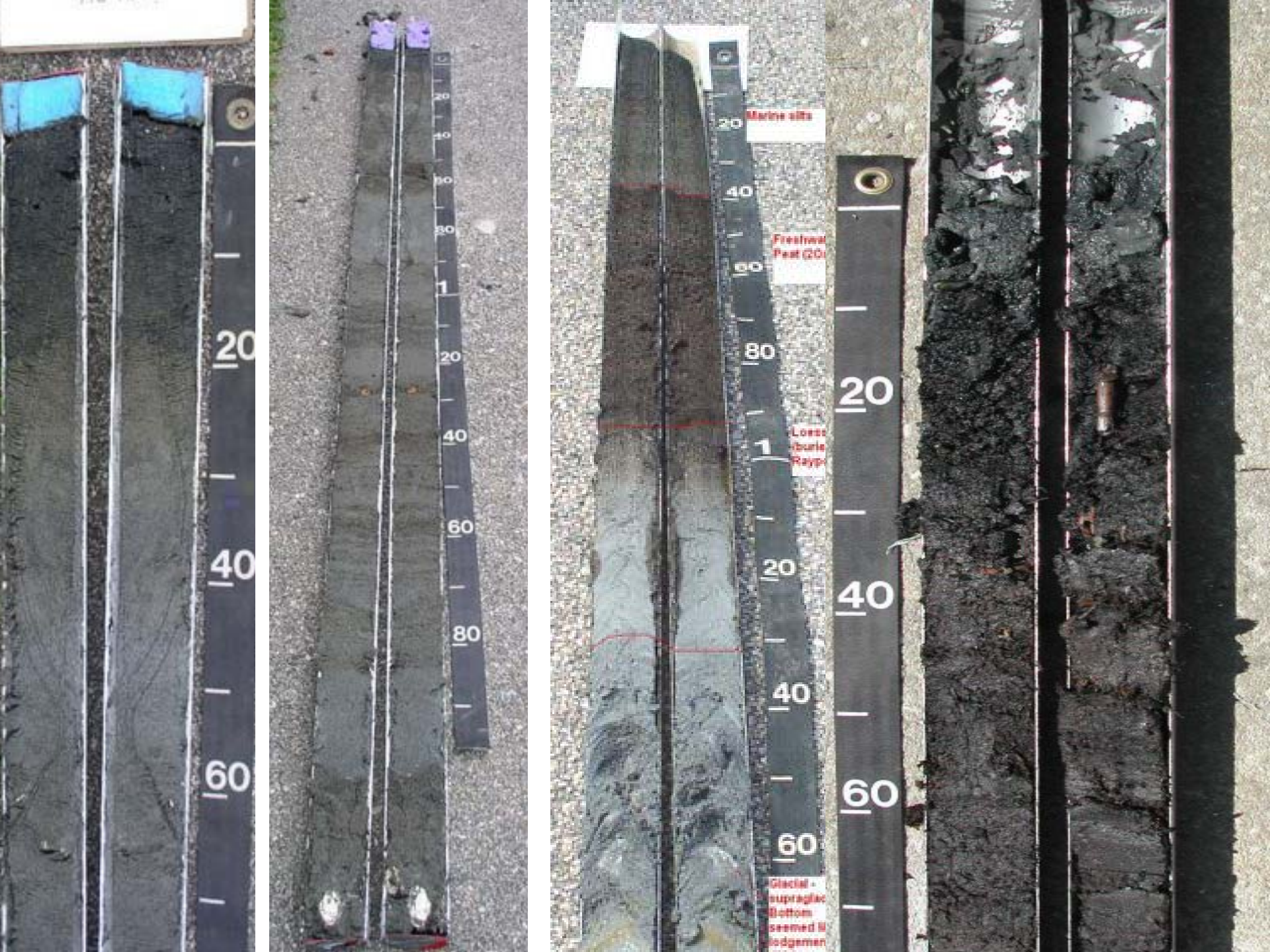
After one growing season more than 25% of the Washover Fan Slope oysters were within 15 mm of legal size or were legal sized.

Only 2% of the lagoon bottom oysters were within 15 mm of legal size.

Dredge Deposits Mesocosm Study

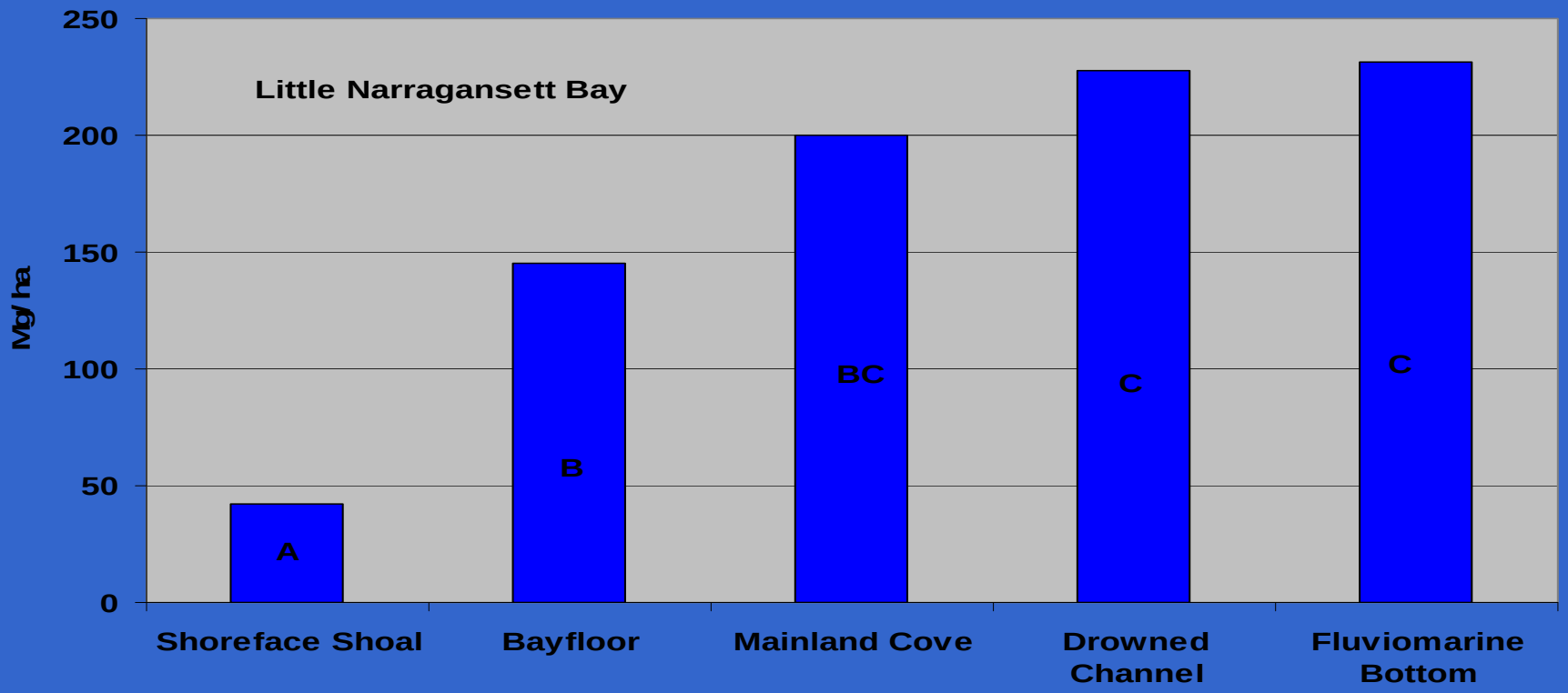


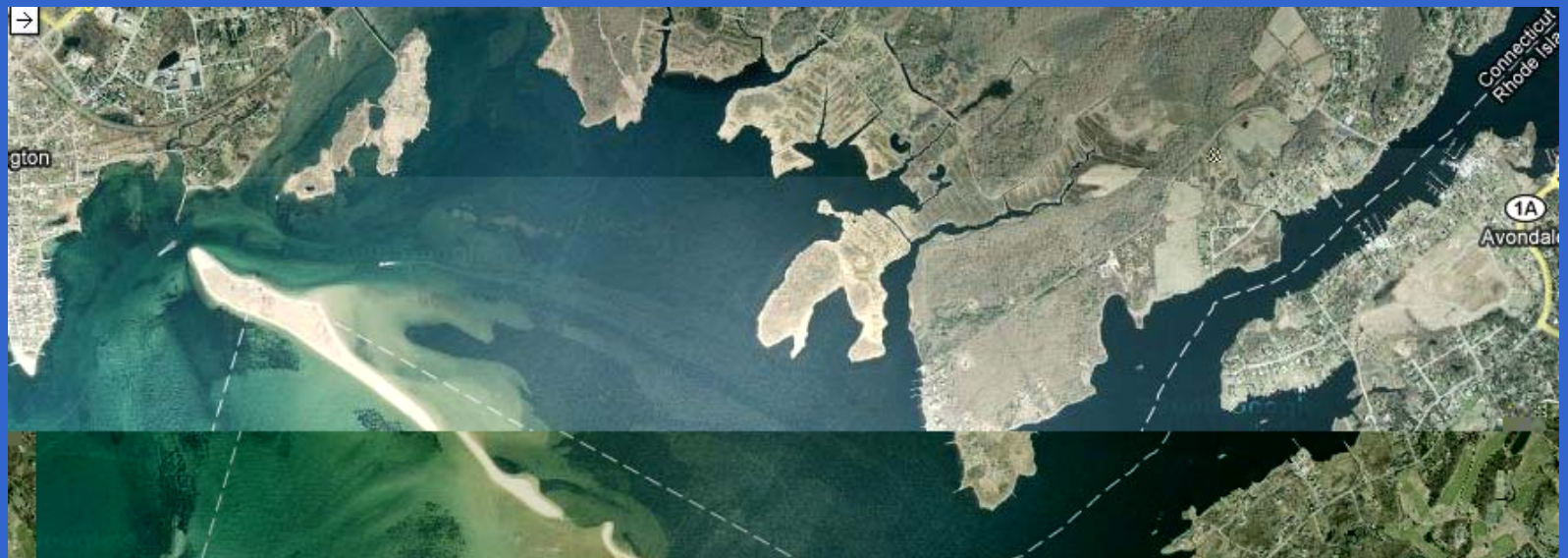
H. Stolt. 2006. Landscape-level seagrass-sediment relationships in a coastal lagoon. Aquat


Marine silts
Glacial -
supraglac
Bottom
seemed li
lodgemen

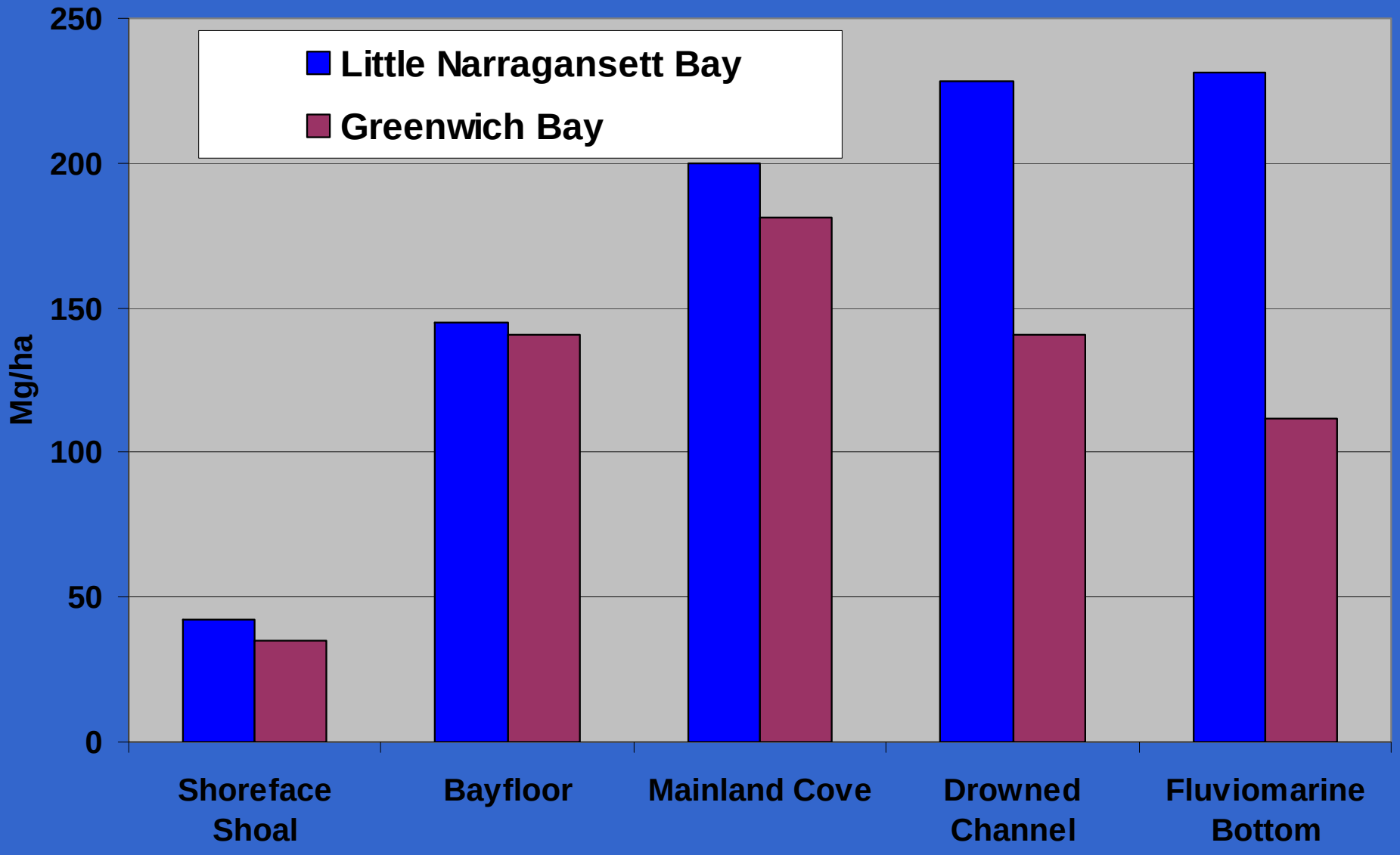
Comparison of mean SOC pools between subaqueous and subaerial soils

SOC Pools in Little Narragansett Bay Soil-Landscape Units

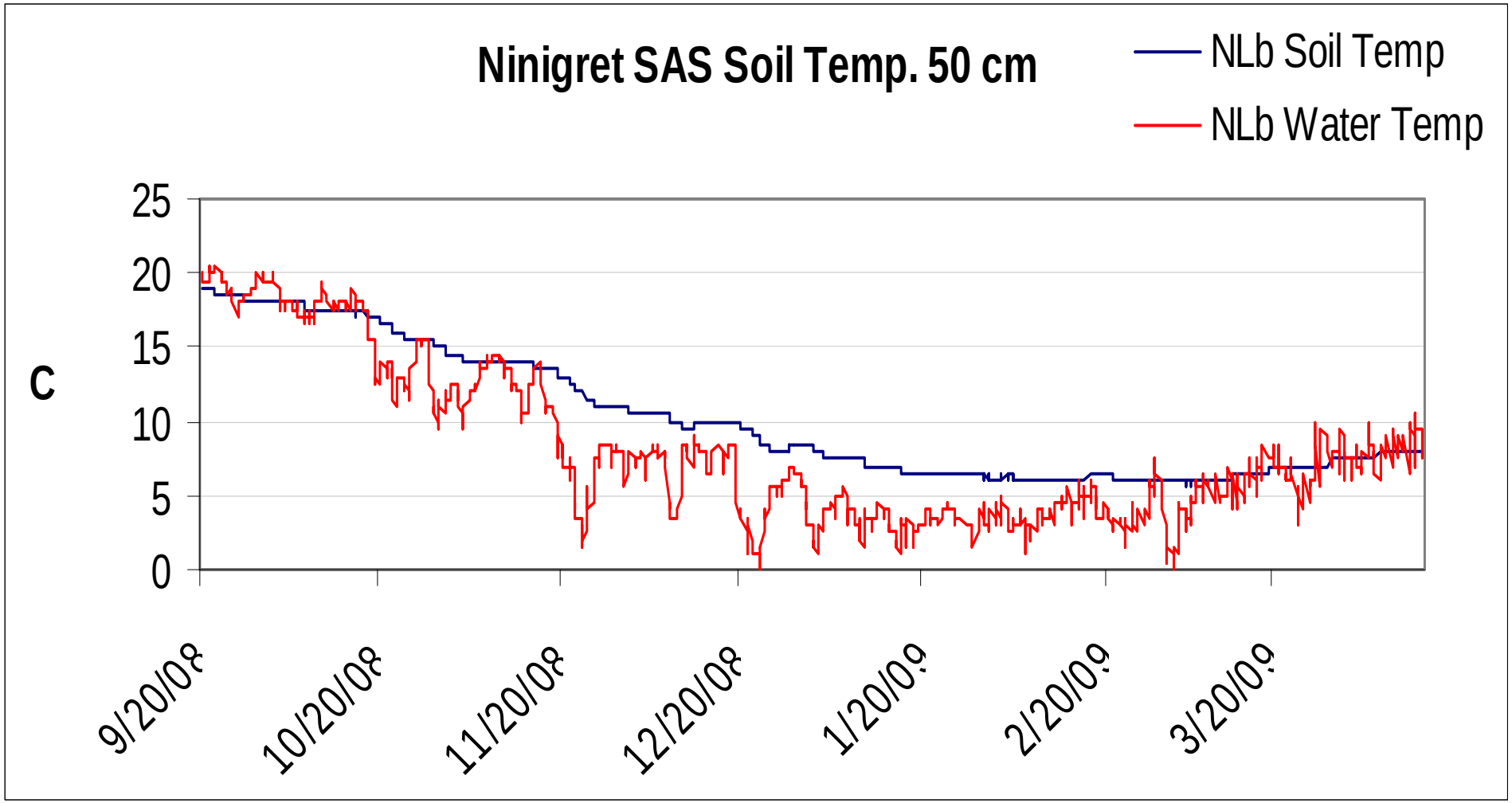




SOC Pools in Greenwich and Little Narragansett Bays



Soil Temperature



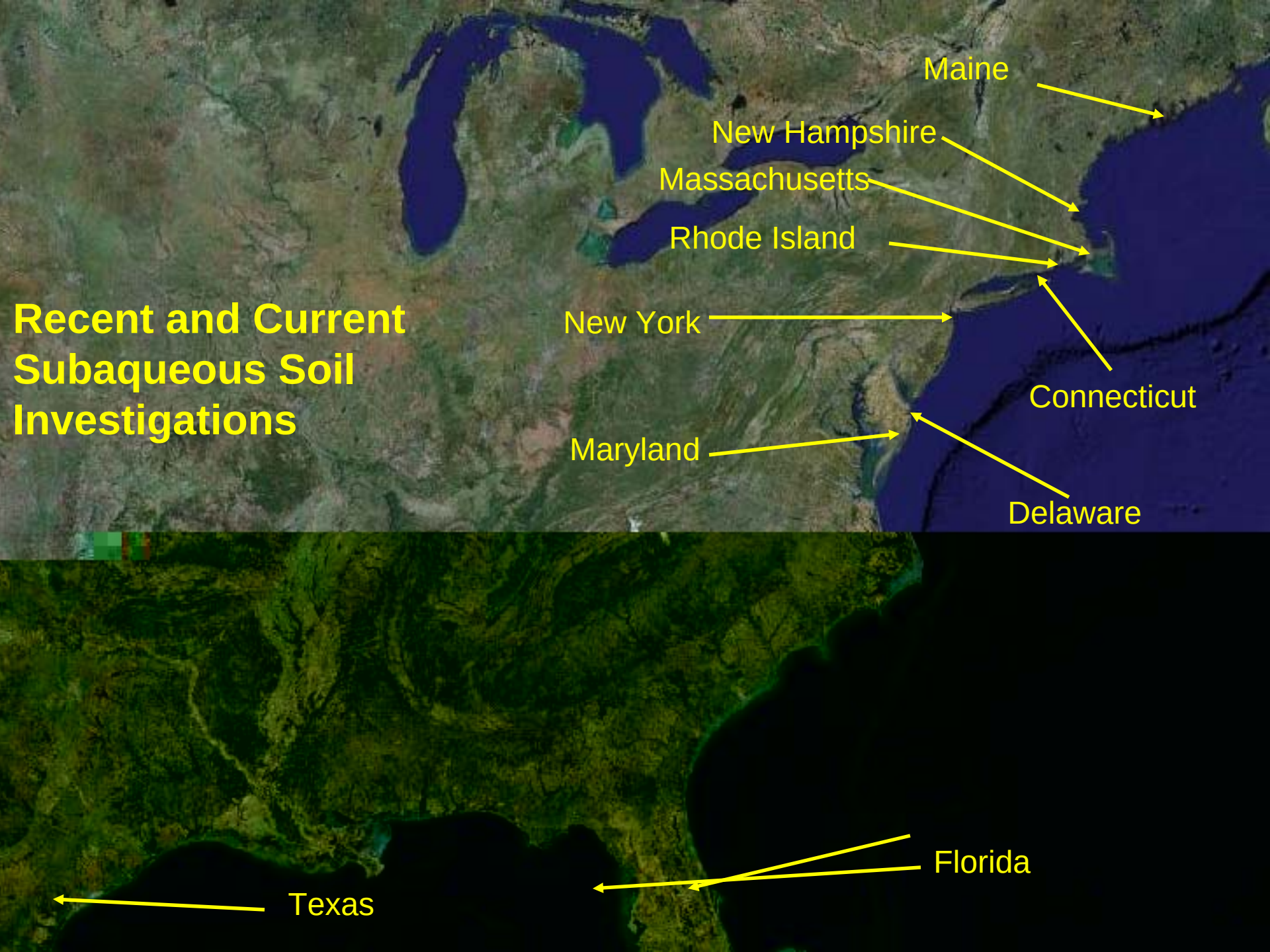
Specific Soil Resource Based Interpretations

Subaqueous Soils Update

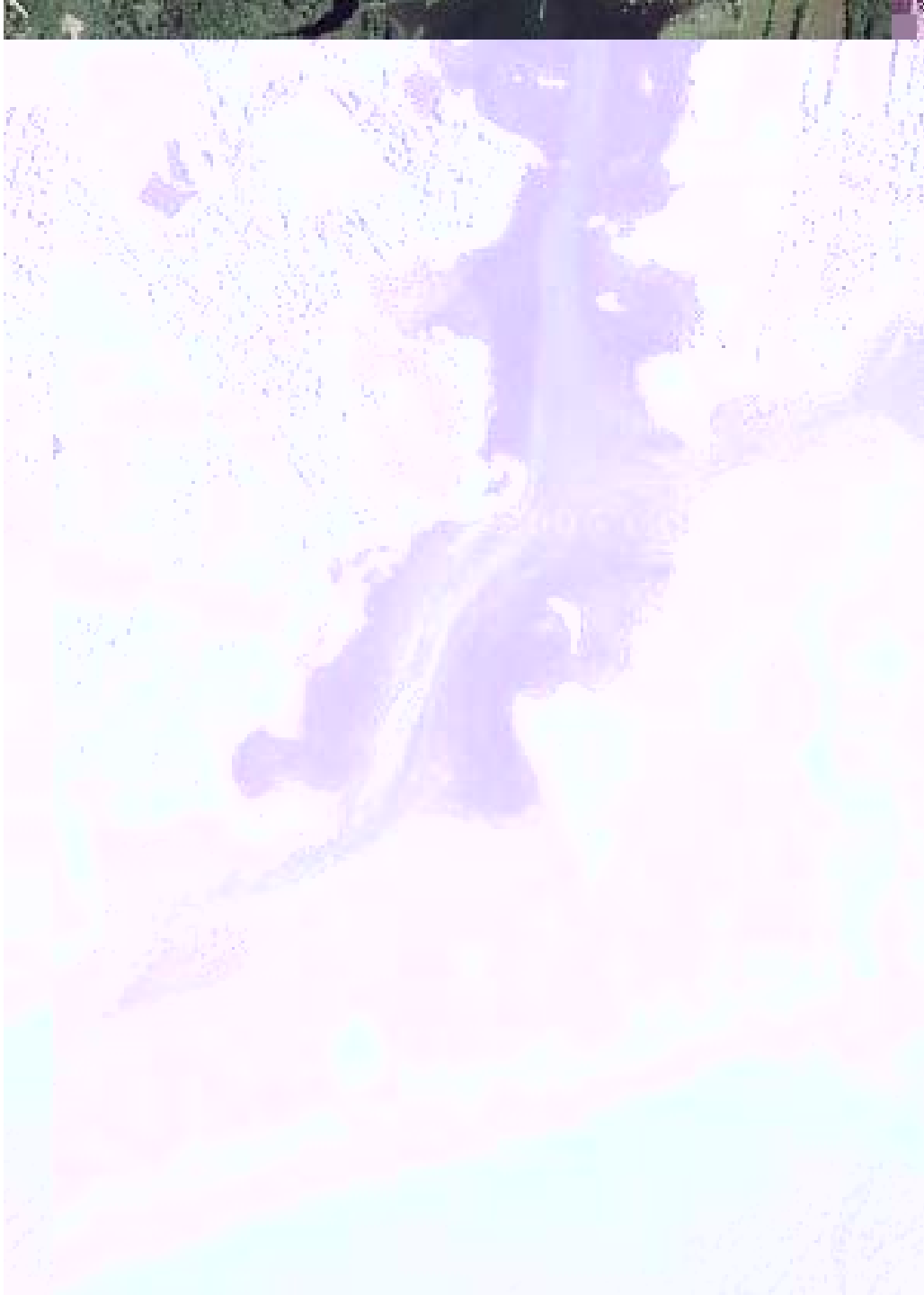
Mark H. Stolt
University of Rhode Island

Subaqueous Soils

Recent and Current Subaqueous Soil Investigations



Why the Interest Subaqueous Soils?



Glossary

Amendments to Soil Taxonomy

Wassent Great Groups

- **Frasiwassents:**
- **Psammowassents:**
- **Sulfiwassents:**
- **Hydrowassents:**
- **Fluviwassents:**
- **Haplowassents:**

Wassent Subgroups

- **Lithic Sulfiwassents**:
- **Haplic Sulfiwassents:**
- **Thapto-Histic Sulfiwassents:**
- **Fluvic Sulfiwassents:**
- **Aeric Sulfiwassents:**
- **Typic Sulfiwassents:**

Wassist Great Groups

- **Frasiwassists:**

- **Sulfiwassists:**

- **Haplowassists**

Wassist Subgroups

Fibric subgroups:

Sapric subgroups:

Typic subgroups:

Amendments to NASIS and Pedon PC

Official Series Descriptions

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

ECOLOGICAL SITE DESCRIPTION

ECOLOGICAL SITE CHARACTERISTICS

Subaqueous Grass Flat

Publications

White Papers (unpublished)

Thesis and Dissertations

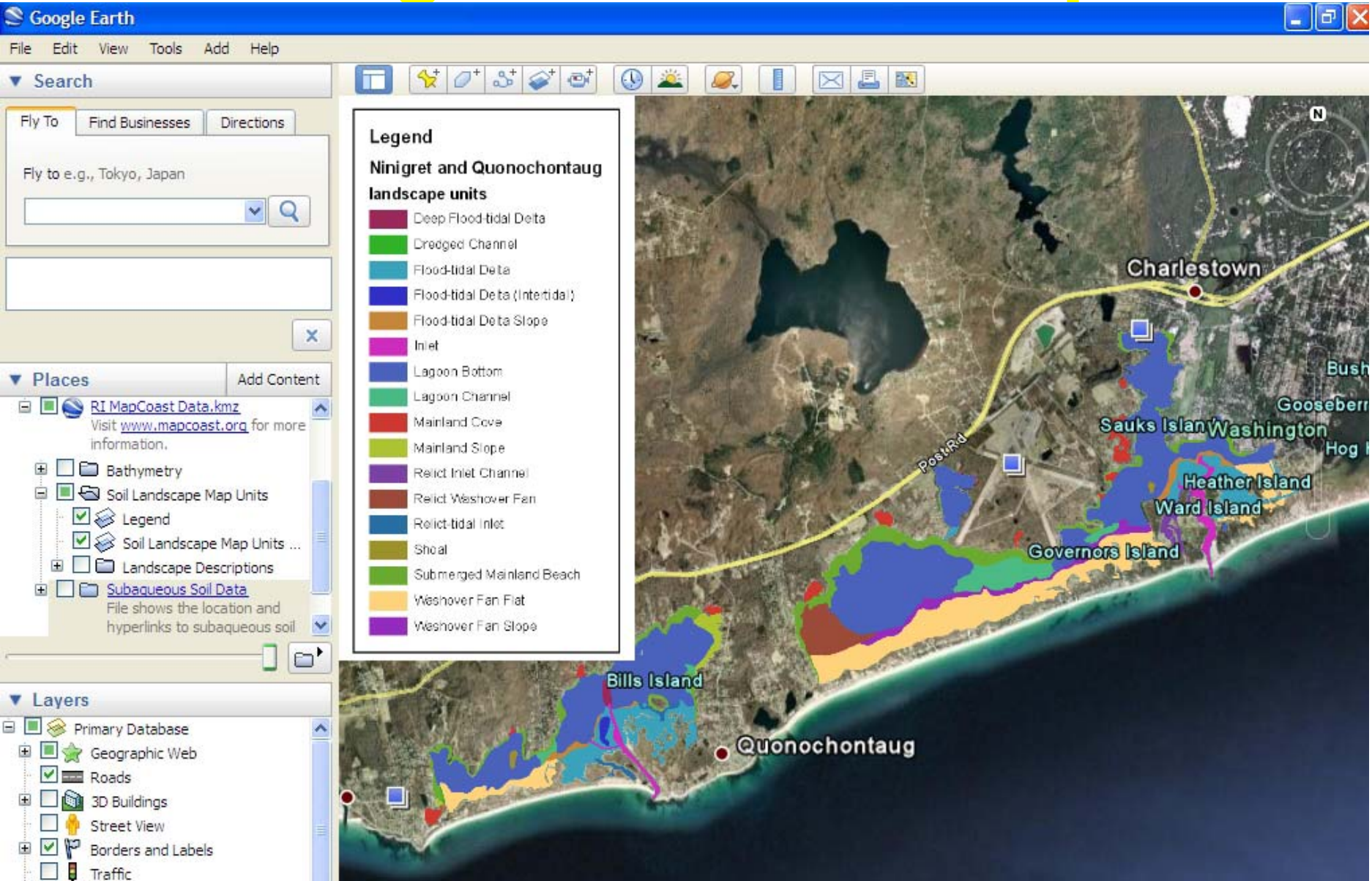
Organized Groups

MapCoast Partnership

- Interdisciplinary group of researchers
- Publish Interactive maps on-line

www.mapcoast.org

Google-Ocean Example



Coastal and Marine Ecological Classification Standard

Version III

Christopher J. Madden
Kathleen L. Goodin
Rebecca J. Allee
Giancarlo Cicchetti
Chris Moses
Mark Finkbeiner
Danielle E. Bamford

February 2009
Ver. III.2009.0213

Draft

NatureServe

NOAA

CMECS

Comparison of Particle Size Classes in Different Systems

	FINE EARTH									ROCK FRAGMENTS 150 380 600 mm					
										channers			flagst.	stones	boulders
USDA [1]	Clay [2]		Silt		Sand					Gravel			Cob-bles	Stones	Boulders
	fine	co.	fine	co.	v.fi.	fi.	med.	co.	v. co.	fine	medium	coarse			
millim															

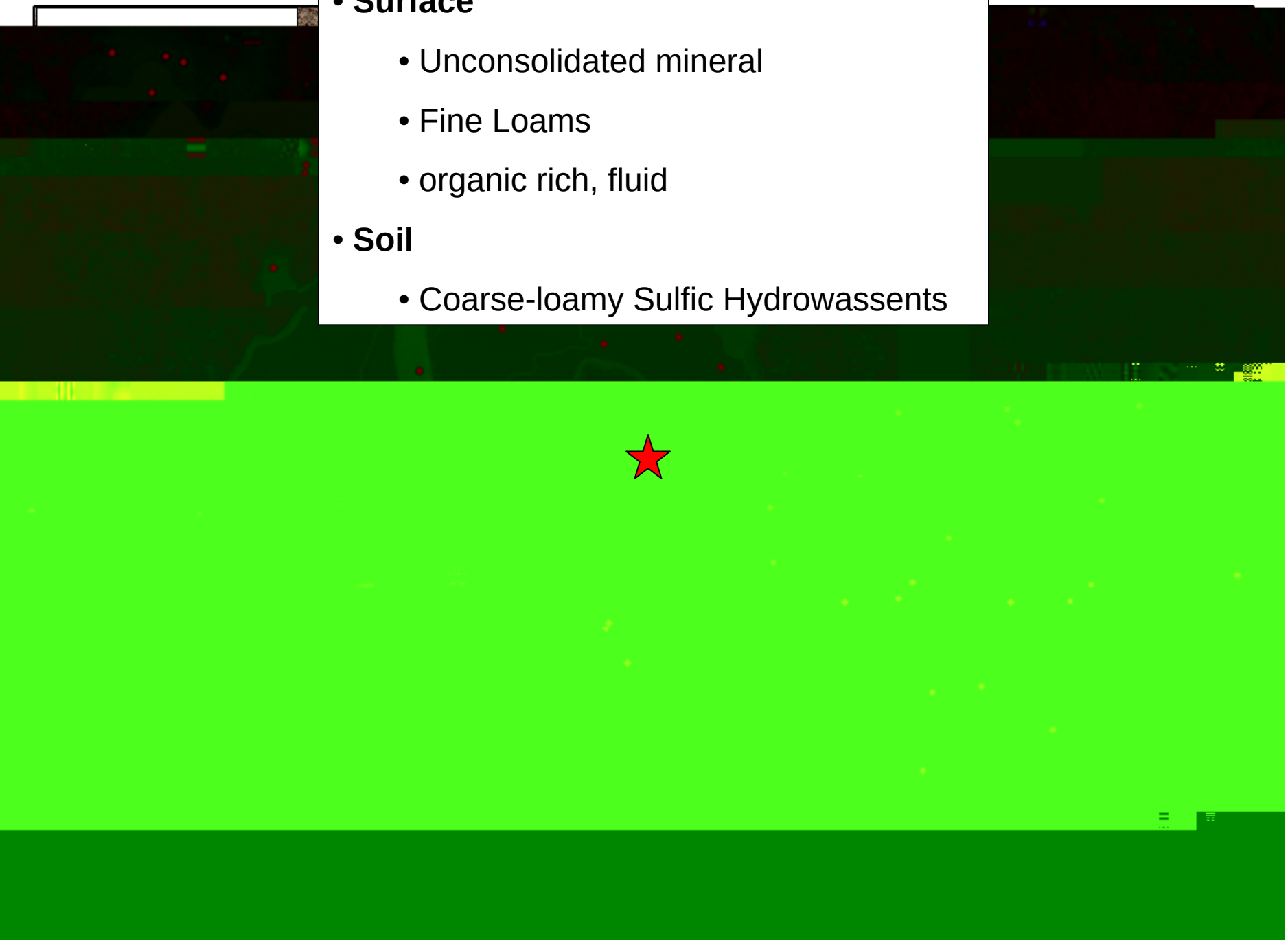
Shepard, 1954

Sub-Benthic Component (SBC) (DRAFT)

Surface Layer Class Overview

Modifiers

- **Surface**
  - Unconsolidated mineral
  - Fine Loams
  - organic rich, fluid
- **Soil**
  - Coarse-loamy Sulfic Hydrowassents



What’s Next for Subaqueous Soils?

What's Next for Subaqueous Soils?

Building Interpretations

Developing Additional Standards

- Subordinate distinction for sulfidic horizons
- Family level classification amendments