

Methods/description of habitat polygons for Quonochontaug Pond - Emily Shumchenia

- Side scan sonar data from July 20th and 21st 2005 at 100% coverage
- Unprocessed data was to Quester Tangent SIDEVIEW
- Ten classes identified, RGB values assigned to each class based on acoustic similarity
- Several acoustic classes identified as distinct consistently co-occurred in several areas
- Classes occurring at the center of each side scan line considered processing artifacts
- Merge co-occurring classes and eliminate artifact classes - 5 classes remained
- Polygons drawn in ArcMap to delineate these classes

ATTRIBUTES

Acoustic signatures “ACOUSTIC”

QTC 1368: high backscatter, between 8-93% sand, *Zostera* present in some areas

QTC 274: low backscatter, no grain size pt, no algae, lots of *Zostera*

QTC 9: transition between areas of high and low backscatter, ~11-70% sand

QTC 10: medium backscatter, 7-20% sand, algae present

QTC 4: coarse low backscatter, 0.83 – 12% sand, lots of algae and *Zostera*

Macrohabitats as defined by NOAA Coastal/Marine Ecological Classification Standard (CMECS) Level 4 “MACROHABT”




Estuarine lagoon softbottom: includes sand, mud, organic-rich substrates

Estuarine lagoon hardbottom: includes boulder outcrops, boulder coastlines

Estuarine lagoon subtidal flat: includes overwash platform, portions of flood tidal delta

Habitats as defined by NOAA CMECS Level 5 “HABITAT”

 <p>AUG 26 2005 11:17:04AM</p>	Vegetated organic mud: mud rich in organic matter, supporting <i>Zostera</i> beds
 <p>AUG 25 2005 10:54:20AM</p>	Vegetated mud: mud supporting <i>Zostera</i> beds or algal mats/crusts

	Bare mud: mud with no associated flora
	Bare organic mud: mud rich in organic matter, no associated flora
	Vegetated sandy mud: transition between sand and mud basin, characterized by algal mats/crusts, mainly in the eastern end of the pond
	Vegetated mud and mixed-fine sediments: fine substrate supporting dense <i>Zostera</i> beds in the western end of the pond or algal mats/crusts east of the narrows
 	Vegetated sand: sand supporting fringing <i>Zostera</i> beds or algal crusts
	Shallow sand: subtidal sandy shorelines with no associated flora
	Very shallow sand/gravel flat: coarse to very coarse substrate comprising the overwash platform and portions of flood tidal delta
	Vegetated rock and boulder: boulder outcrop in western end of pond with scattered <i>Zostera</i> plants
	Boulder coast: boulder-lined shore