Northern Coastal Basin
Oyster Condition Assessment

Andrea Noel
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Northern Coastal Basin

• Stretches >100 miles of coastline.
• Covers all the watersheds that drain towards the Atlantic from St. Mary's inlet in Nassau County to Ponce Inlet in Volusia County.
Funding

**St. Johns River Water Management District (SJRWMD)** - $30,000

**Coastal Zone Management Grant** - $50,000

**Collaborative Project:**
Andrea Noel, Northeast Florida Aquatic Preserves;
Dr. Nikki Dix, Guana Tolomato Matanzas National Estuarine Research Reserve;
Ron Brockmeyer, St. Johns River Water Management District;
Dr. Linda Walters, University of Central Florida;
and, associated support staff from each organization.
Overview

• In conjunction with SJRWMD (NEW) oyster mapping project
  • Expanded NCB Boundary
  • 2008 oyster mapping
  • Ended south of Jax Beach

• Collecting base line data for future comparison

• Subset of reefs in 5 counties (~100 reefs)

• Seasonal variance
  • Data will be collected summer and winter
Points were produced through a computer generated random selection of polygons from the new oyster maps.

<table>
<thead>
<tr>
<th>County</th>
<th>~# Reefs</th>
<th>Date Monitored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volusia</td>
<td>52</td>
<td>June</td>
</tr>
<tr>
<td>Flagler</td>
<td>6</td>
<td>July</td>
</tr>
<tr>
<td>St. Johns</td>
<td>20</td>
<td>July</td>
</tr>
<tr>
<td>Duval</td>
<td>15</td>
<td>August</td>
</tr>
<tr>
<td>Nassau</td>
<td>15</td>
<td>August</td>
</tr>
<tr>
<td></td>
<td>108</td>
<td></td>
</tr>
</tbody>
</table>
Reefs are Categorized

- Patch
- Fringe
- String
Data Collection

• Reef Information
  • Length
  • Width
  • Height
  • Thickness

• Mapped & Photographed
Data Collection

Percent Cover

• (3) 1M x 1M quadrats @ random points along the transect
• 100 points in each transect
• Record: live, dead, sediment, other
Data Collection

• Oyster Density
  • Count all live oysters including spat
  • Measure shell length

• Count Clusters
Data Collection

Oyster Burial Depth
Associated Fauna

• Mollusks & Crown Conch
  • Numbers & size

• Sessile invertebrates
  • Barnacles, mussels, ascidians, etc

• Motile invertebrates
  • Crabs, oyster drills, etc.
Products

• Regional scale product
  • Available to public ~June 2016

• Map of oyster reefs
  • Live vs Dead
  • Ability to access data for monitored reefs

• Baseline assessment that we can use to measure change in the future
  • Better understanding of the current condition of the reefs

• Standardized oyster monitoring protocol for the region
Thank You

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