Change of Estero Bay

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National Estuary Programs

UZA = 100/sq.mi.

Legend

- UZA
- 1980 Estimated
- 1990 Urban/Arbor
- 2000 Urban/Arbor

Legend

- Roads
- Point - 10
- POTMOP
Habitat Change

<table>
<thead>
<tr>
<th>Pre-Dev</th>
<th>2002</th>
<th>Difference</th>
<th>% Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beach</td>
<td>218</td>
<td>231</td>
<td>-13</td>
</tr>
<tr>
<td>Cypress</td>
<td>31,589</td>
<td>18,855</td>
<td>42.6</td>
</tr>
<tr>
<td>Flatwood</td>
<td>11,622</td>
<td>7,134</td>
<td>40.1</td>
</tr>
<tr>
<td>Estero Hammock</td>
<td>120</td>
<td>84.1</td>
<td>30.0</td>
</tr>
<tr>
<td>Marsh/Mangrove</td>
<td>13,211</td>
<td>11,069</td>
<td>16.2</td>
</tr>
<tr>
<td>Estuary Forest/Bush</td>
<td>21,528</td>
<td>15,099</td>
<td>29.0</td>
</tr>
<tr>
<td>Evergreen Wetland</td>
<td>2,577</td>
<td>2,844</td>
<td>10.9</td>
</tr>
<tr>
<td>Agriculture</td>
<td>0</td>
<td>29,396</td>
<td>N/A</td>
</tr>
<tr>
<td>Farming</td>
<td>0</td>
<td>51,381</td>
<td>N/A</td>
</tr>
<tr>
<td>Mining</td>
<td>0</td>
<td>520</td>
<td>N/A</td>
</tr>
<tr>
<td>Total</td>
<td>220,670</td>
<td>213,282</td>
<td>3.1</td>
</tr>
</tbody>
</table>

- 28% Wetland Loss
- 66% Upland Loss
- 52% Habitat Loss

The Florida scrub jay became locally extinct in the Estero Bay Basin in the mid-1990s. At least one and perhaps two families of Florida scrub jays were found on the Chapel Ridge site system. Presence was confirmed during surveys by Estero Bay Aquatic Preserve biologists in 1999. The nest territories were within the proposed acquisition zone for the Estero Bay Aquatic Preserve CARPL project. During site upgrades for the development project now known as West Bay Club, these jay families were no longer present. The last confirmed sighting was in 1994.

Conservancy of Southwest Florida Estuaries Report Card

- Estero Bay lowest grade of estuaries in CHNEP
- Recommended nutrient management, filter marshes, Lee Mitigation Plan
WQ Trends to Watch Out For

- Fecal Coliform in Hendry & Mullock Creeks
- Ammonia in Mullock (San Carlos Park)
- Nitrates/Nitrites Mullock to Imperial River
- Orthophosphate Mullock to Estero River
- Dissolved Oxygen Everywhere
- Specific Conductance (thru-out but not yet severe)
- Turbidity & Suspended Solids
- Copper (no trends data to year 2000)
Parameters of Concern

• Turbidity (suspended matter)
• Chlorophyll a (nutrients)
• Color (natural component)
• Prop wash re-suspending matter

Suggested Fixes for Estero Basin

• Central Sewer or Septic Mgmt Program
  San Carlos Park & Hendry Creek
• Significantly reduced Fertilizer Use
  Esp. San Carlos Park, Estero, and Bonita Springs
• Return to an older style of non-cleared and filled earth development
• Increased percentage of pervious surfaces
• Shallower and vegetated stormwater systems
• Discontinued use of Copper Sulfate
• Acquisition and protection of an additional 67,000 acres
• Restoration of another 15,000 acres of existing public conservation land
• Consider closing some areas to motor boats

Charlotte Harbor National Estuary Program

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