

An aerial photograph of a coastal area, likely the Florida Keys, showing a winding waterway through shallow, light-colored sandbars and small, dark green islands. The water is a deep blue, contrasting with the lighter sand. The text is overlaid on the upper left portion of the image.

Florida Keys Shallow Water Boating Impact Analysis and Trends Assessment – Preliminary Results

**Sponsored by the Florida Keys Environmental Fund & Monroe County
Presented to the FKNMS Sanctuary Advisory Council
August 16, 2016**

Current Efforts

- Keys-wide prop scar mapping
 - Based on Sargent et al 1995 and photointerpretation of 2015 aerials
 - Heads-up digitizing/photointerpretation in ArcGis
 - Use 3 levels of impact as before
 - Light
 - Moderate
 - Severe
- Continued review of proposed new managed areas
 - Example = Barnes Sound Shallow Bays
- Assessment of trends
- Historical perspective

- 1995 Statewide Report documented 30,000 acres of Keys shallow seagrasses impacted by boats as of 1995.
- Concluded that boats are the #2 impact to Florida's seagrasses behind water quality degradation.
- Incorporated the BIWG 4-Point Plan

FLORIDA MARINE RESEARCH INSTITUTE TECHNICAL REPORTS

Scarring of Florida's Seagrasses: Assessment and Management Options

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Florida Department of
Environmental Protection



FMRI Technical Report TR-1

1995

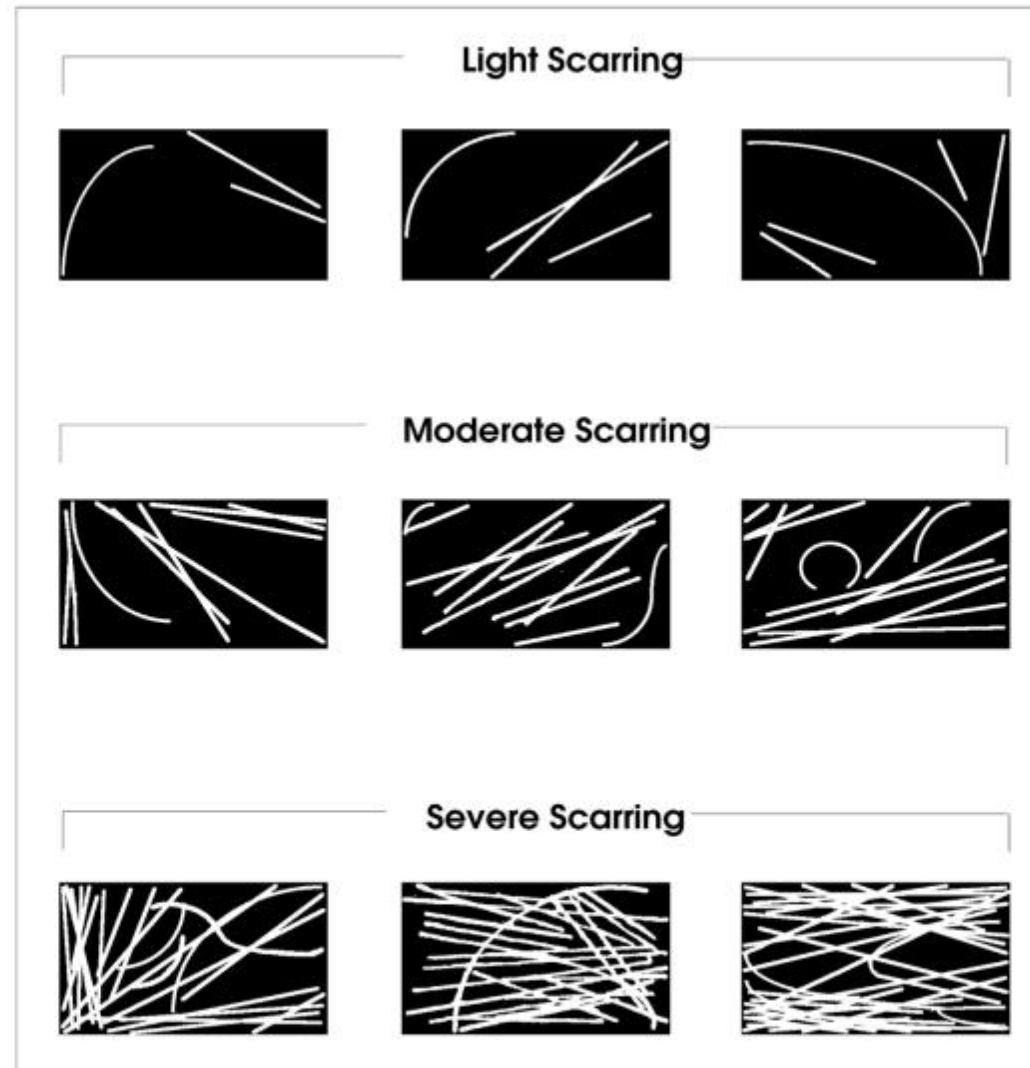


Figure 6. Diagrammatic representation of the three categories of estimated scarring intensity. Black space within each block represents seagrasses, and white marks represent scarring. Light scarring is defined as the presence of scars in less than 5 percent of the delineated polygon, moderate scarring as the presence of scars in 5 to 20 percent of the polygon, and severe scarring as the presence of scars in more than 20 percent of the polygon.



Figure 5. *Example of polygon delineation.*

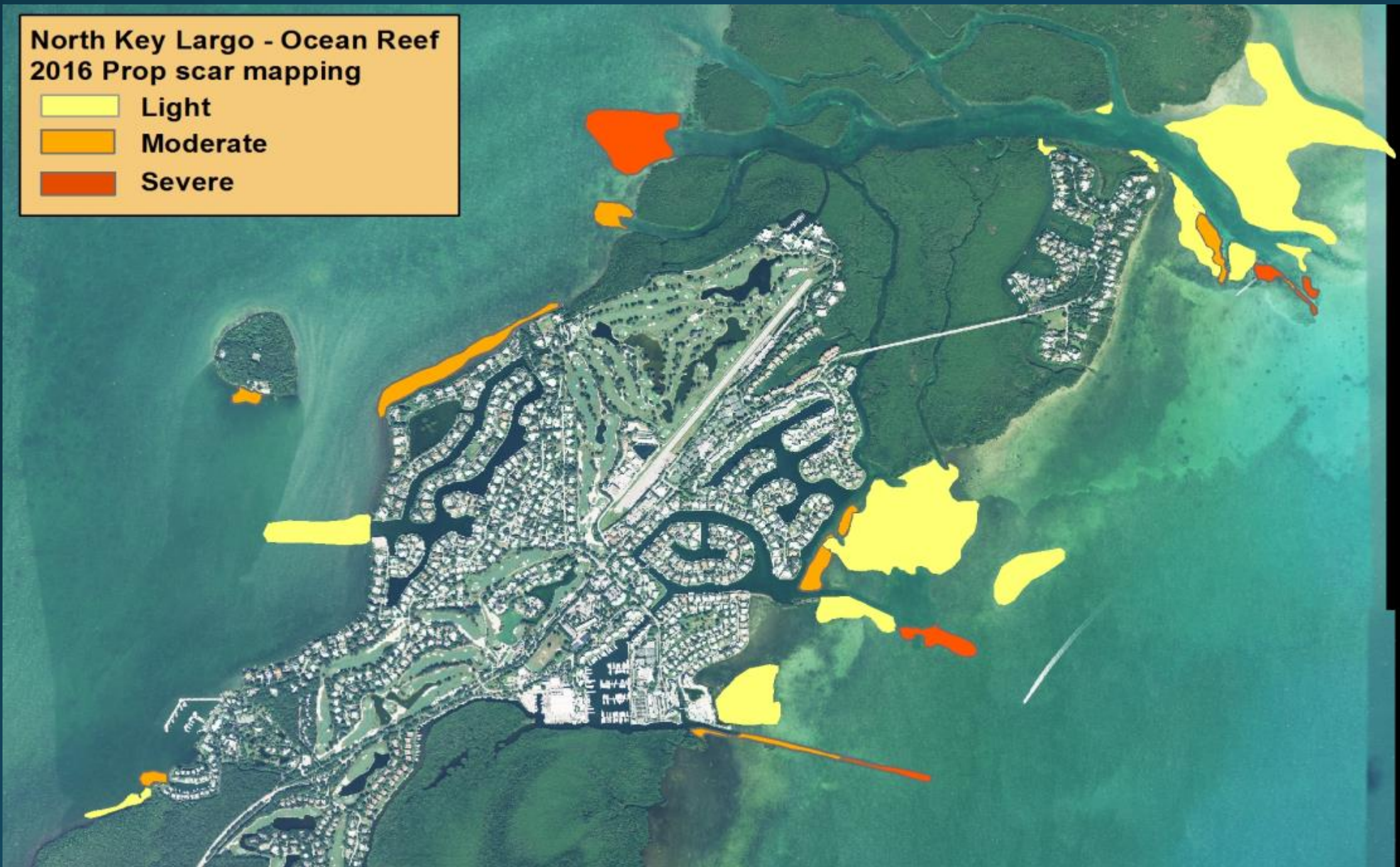
North Key Largo - Ocean Reef
1995 Prop scar mapping

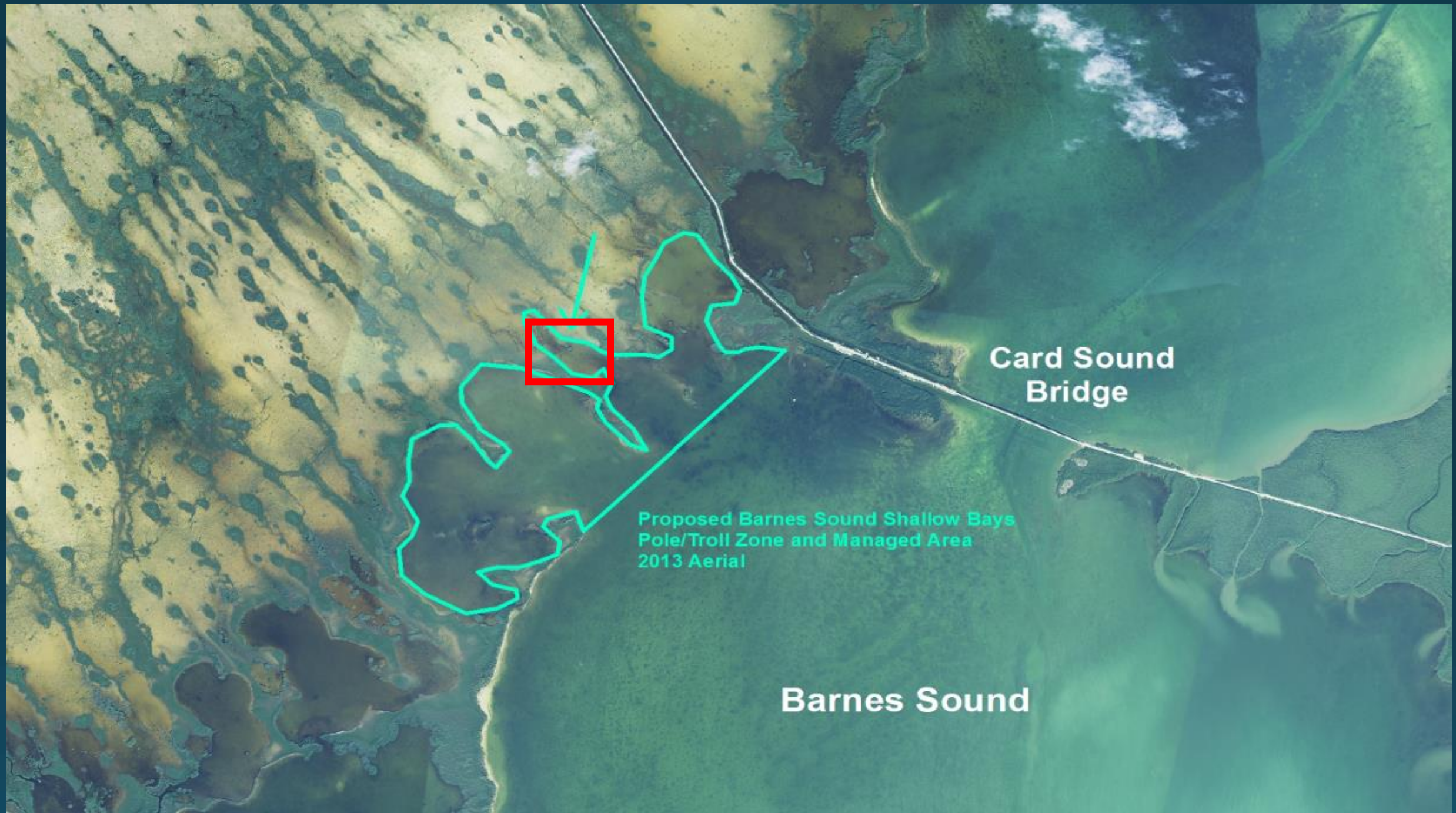
-  Light
-  Moderate
-  Severe



North Key Largo - Ocean Reef
2016 Prop scar mapping

- Light
- Moderate
- Severe






Card Sound
Bridge

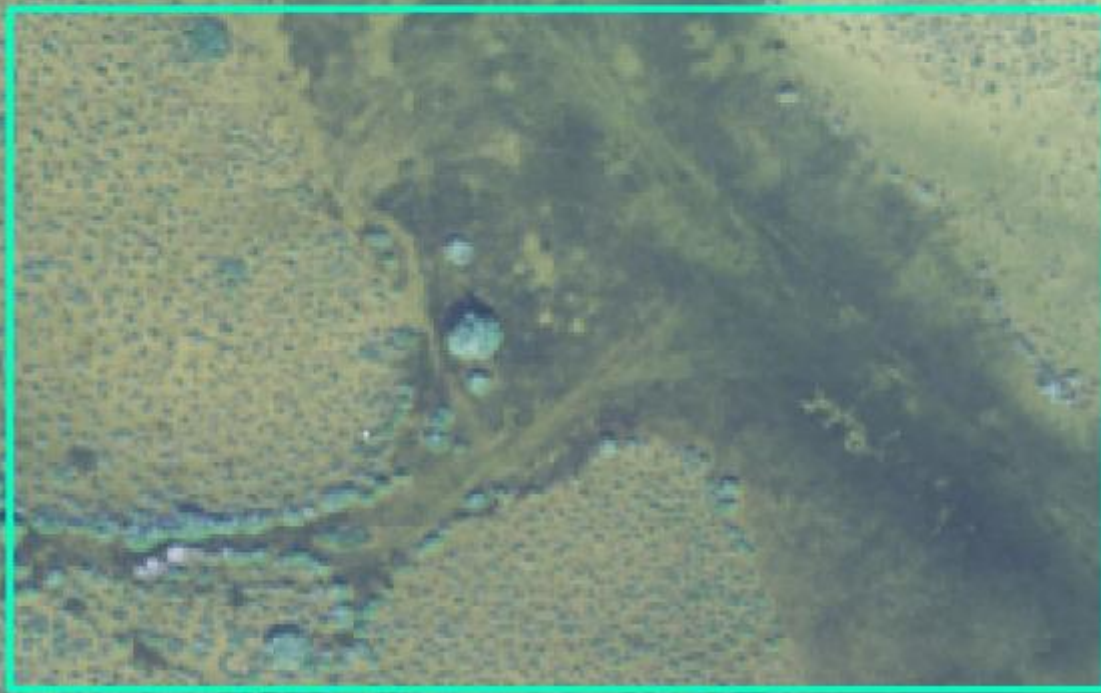
Proposed Barnes Sound Shallow Bays
Pole/Troll Zone and Managed Area
2013 Aerial

Barnes Sound



2005 North Barnes Sound

2013 North Barnes Sound



2014 North Barnes Sound



Project Goals

- To encourage review of the impending DEIS with an eye to the facts regarding boat impacts and the health of shallow seagrass habitats throughout the FKNMS
- To research and present data regarding the trend of continuing shallow habitat degradation and the role that marine zoning (i.e. pole and troll zones, idle speed zones) can play in reversing that trend.
- To develop data that can be shared with the SAC, NOAA and other agencies, NGOs, and the public on existing problem areas and potential solutions to those problems.
- To assist the FKNMS with the development of alternatives for a comprehensive shallow water protection program that can be accomplished without cutting off access to those areas.