



# Mapping and characterizing coral cover of patch reefs in the Florida Keys

### Introduction:

Live coral cover has declined significantly over the past three decades in the Florida Keys. However, current trends suggest that patch reefs may be home to healthier coral reefs than the long-studied outer shelf coral reefs (where coral cover is less than 4 percent). The goal of this project is to determine if patch reefs can be considered healthier than others in the Florida Keys.

### Objectives:

1. Map the location, number and size of patch reefs in the Florida Keys from satellite imagery.
2. Determine coral cover and type and associated benthic components for patch reefs from field surveys.
3. Openly disseminate the information via Web site.

### Approach:

High resolution satellite imagery is analyzed to determine the location, number and size of patch reefs. This information is quality-

controlled to confirm the presence or absence of the reefs from other datasets.

Field sites are selected from the satellite imagery to confirm the satellite imagery and derive benthic coral cover and type and other benthic components. The underwater surveys are completed by two divers using SCUBA.

### Benefits:

This project is providing, for the first time, a comprehensive number and location for patch reefs in the Florida Keys, as well as adding detailed benthic information about coral cover from field data. This information will be of significant value to resource managers tasked with protecting the coral reefs and to research scientists. Initial results from the Lower Florida Keys estimate three times as many patch reefs as previously known, with a live coral cover of approximately 20 percent.

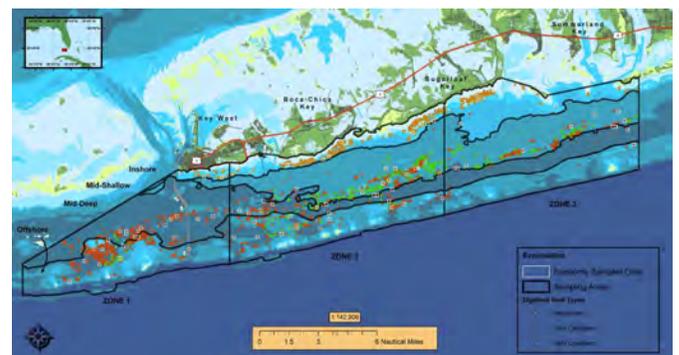
### Location:

Florida Keys

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