

2013 Shoreline Survey

In 2007, 2010 and again in 2013, citizen kayakers and boaters completed for the CHNEP comprehensive mapping of the privately owned estuarine shoreline in Lee and Charlotte counties. Volunteers paddled and motored along the urban and residential coasts, each time collecting important pieces of information about how much shoreline was natural vegetation, nonnative vegetation or “hardened” with seawalls or riprap. The 2007 survey combined on-site field visits by volunteers with aerial photography interpreted by scientists at Photo Science. Photo Science compared the 2007 data to aerial photo data and then incorporated it into a report.

A total of 5,543 urban parcels or lots (approximately 250 miles) were identified for this project. In 2007, 4,485 urban lots were surveyed. In 2010, the survey increased to 5,032 urban lots. The 2013 volunteer effort surveyed 4,308 urban lots. By augmenting the 2013 volunteer effort with shoreline reviews using Google Earth™, mangrove presence was assessed for 5,416 (98%) of the 5,543 urban parcels identified in 2007.

Overall, mangroves increased on the shoreline of urban lots. Mangroves gained 9 miles of presence between 2007 and 2013.

On a direct parcel-to-parcel comparison, mangroves were eliminated on 339 urban lots (nearly 13 miles) between 2007 and 2013. However, mangroves were present where they had not been before on 516 urban lots (nearly 22 miles).

The 2013 survey was possible because of a tremendous group of volunteers and a grant from the Florida Coastal Management Pro-

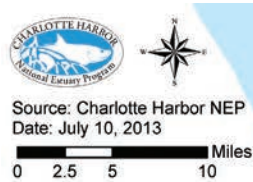


Volunteers surveyed nearly 250 miles of shoreline in Lee and Charlotte counties. Photo by Carol Granger

gram, Florida Department of Environmental Protection and National Oceanic and Atmospheric Administration. The grant funded the CHNEP to create GIS coverage that allows for presentation and analysis of the collected data and a special page of the water atlas so volunteers could input their data directly into the database. By September, the data from all three surveys will be available for your analysis at www.chnep.wateratlas.usf.edu and the survey reports will also be available on www.CHNEP.org.

These surveys provide shoreline vegetation condition information that helps inform resource managers in their efforts to restore and maintain estuary shorelines that support diverse fishery and invertebrate populations. The data is also used in research studies and helps implement the *Comprehensive Conservation and Management Plan (CCMP)*, the CHNEP’s plan to protect the environment.

Thanks to everyone who helped make these surveys possible.



2007-2013 Change in Mangrove Presence

- None
- Eliminated Mangroves
- Fewer Mangroves
- Same-Less than 30%
- More Mangroves
- Same-Greater than 30%

Photo by Joe Mullen.

