

Florida Fish and Wildlife Conservation Commission



Manatee Research Program Charlotte Harbor



Today's Topics

- Introduction
- Myakka River Manatee Mortality
- Myakka River Manatee Use
- Research and Monitoring
- Charlotte county Manatee Management Plan
- Questions?



Charlotte Harbor Field Lab (SWFL)

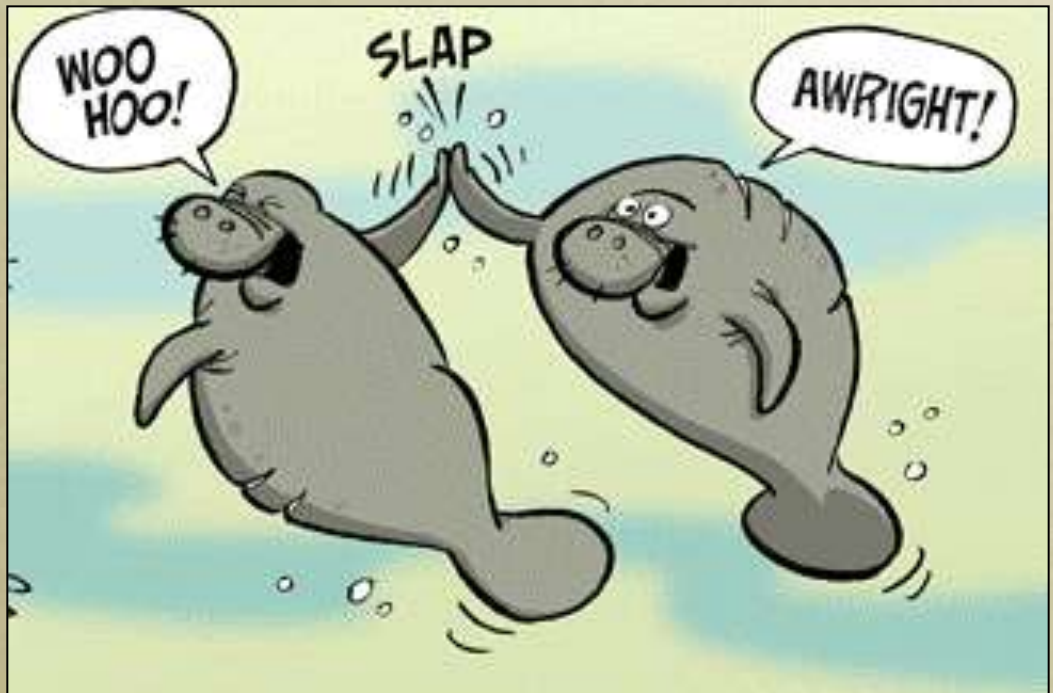


Denise Boyd, Kati Therriault, Katelin Stoltz, intern
Matthew Schubart

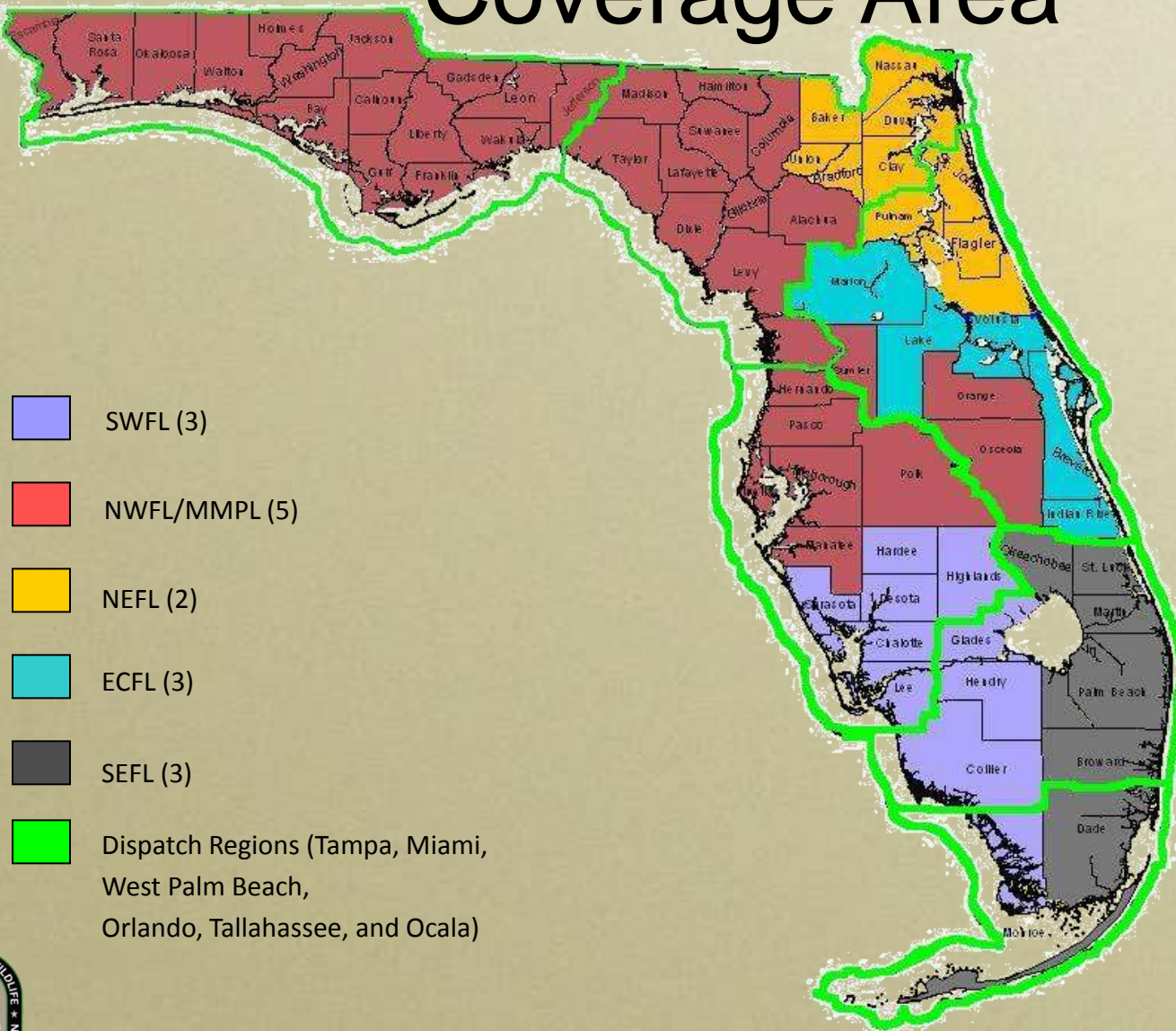


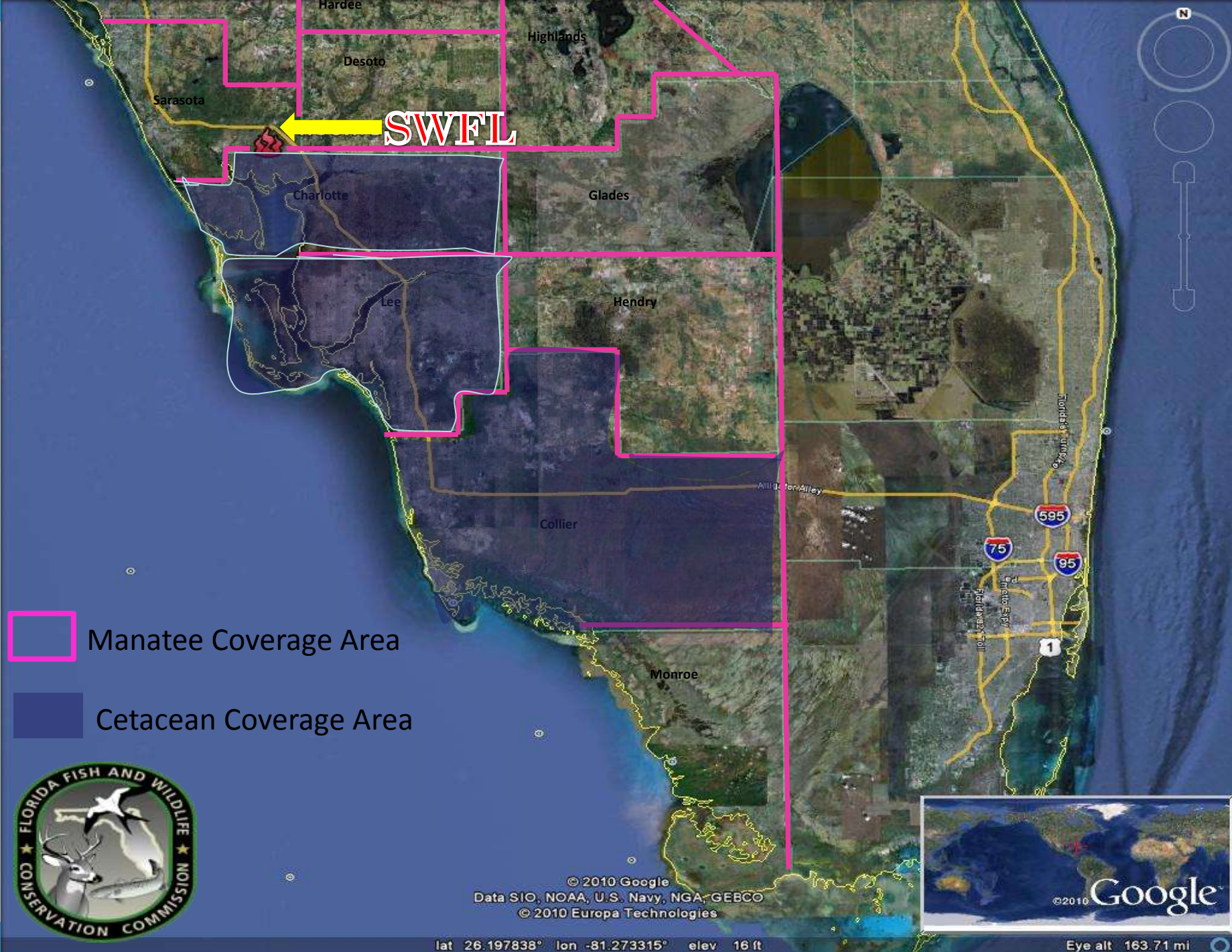
Charlotte Harbor: Manatee Research in Your Area

- Carcass Salvage & Necropsy
- Rescue & Release
- Photo ID
- Tracking



FWC Manatee Response Coverage Area





A Day in the Life...



A View From
Above
Aerial Surveys



Photo Identification



MMPL Wet
Lab



Tagging & Tracking



Outreach



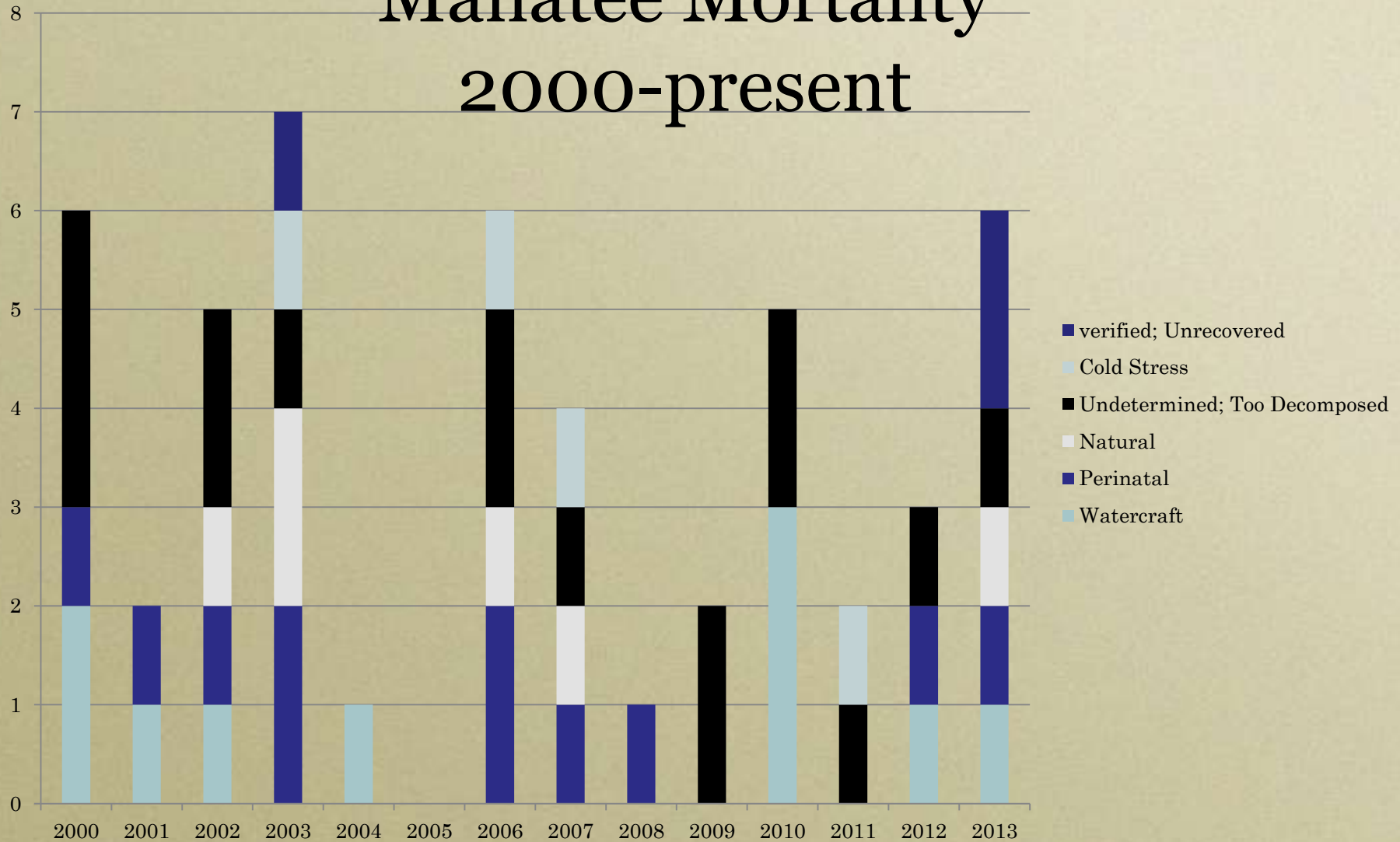
Field Necropsy



Manatee Captures



Manatee Mortality 2000-present





Myakka River Manatee Mortality

2000-2013

n = 50 mortalities

Cause Of Death

- + Human Related: Watercraft Collision
- + Perinatal (<150 cm)
- + Natural: Cold stress
- + Natural: Other
- + Undetermined: Too Decomposed
- + Undetermined: Other
- + Verified: Not Recovered

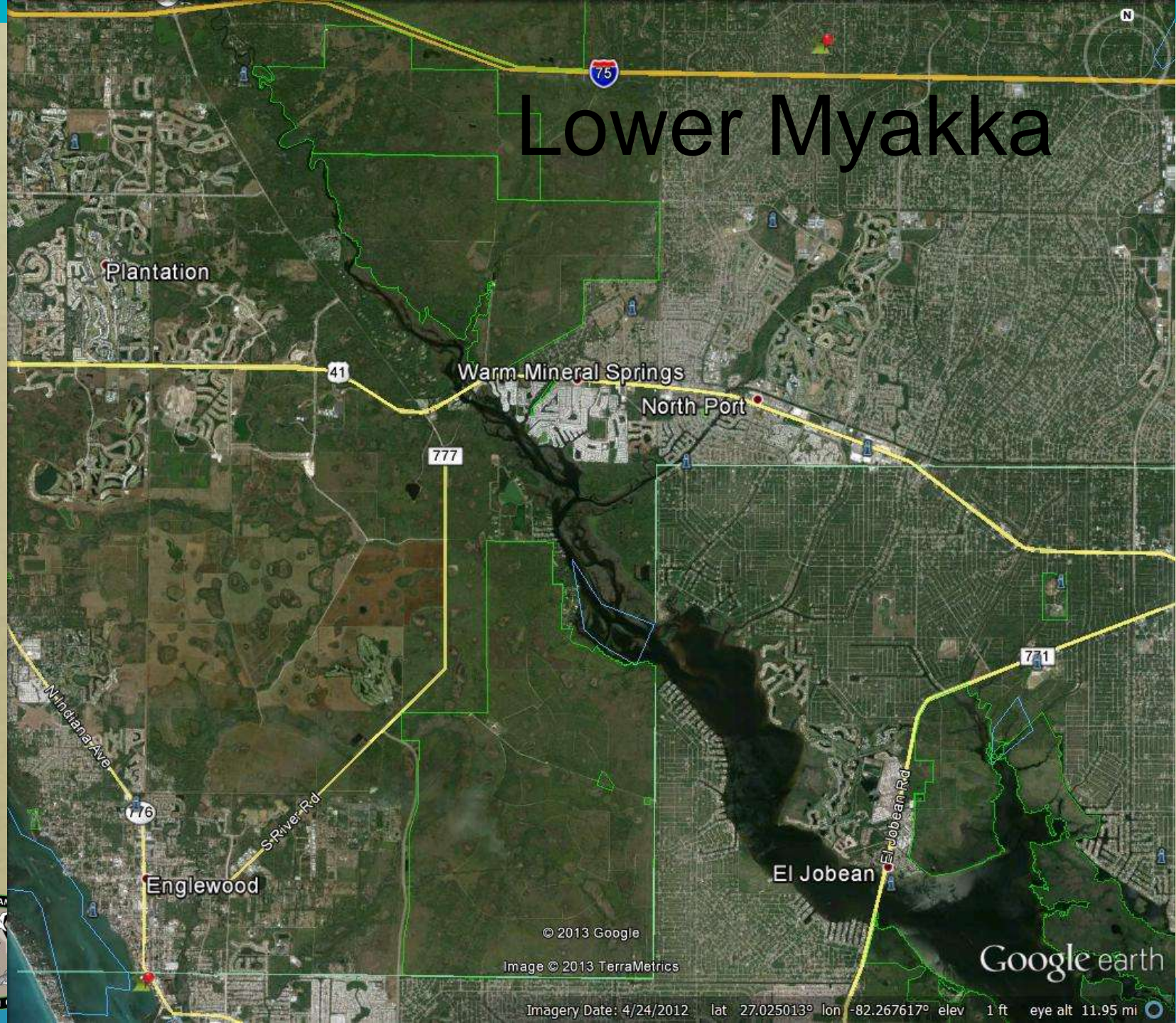


Sarasota

Charlotte



Lower Myakka



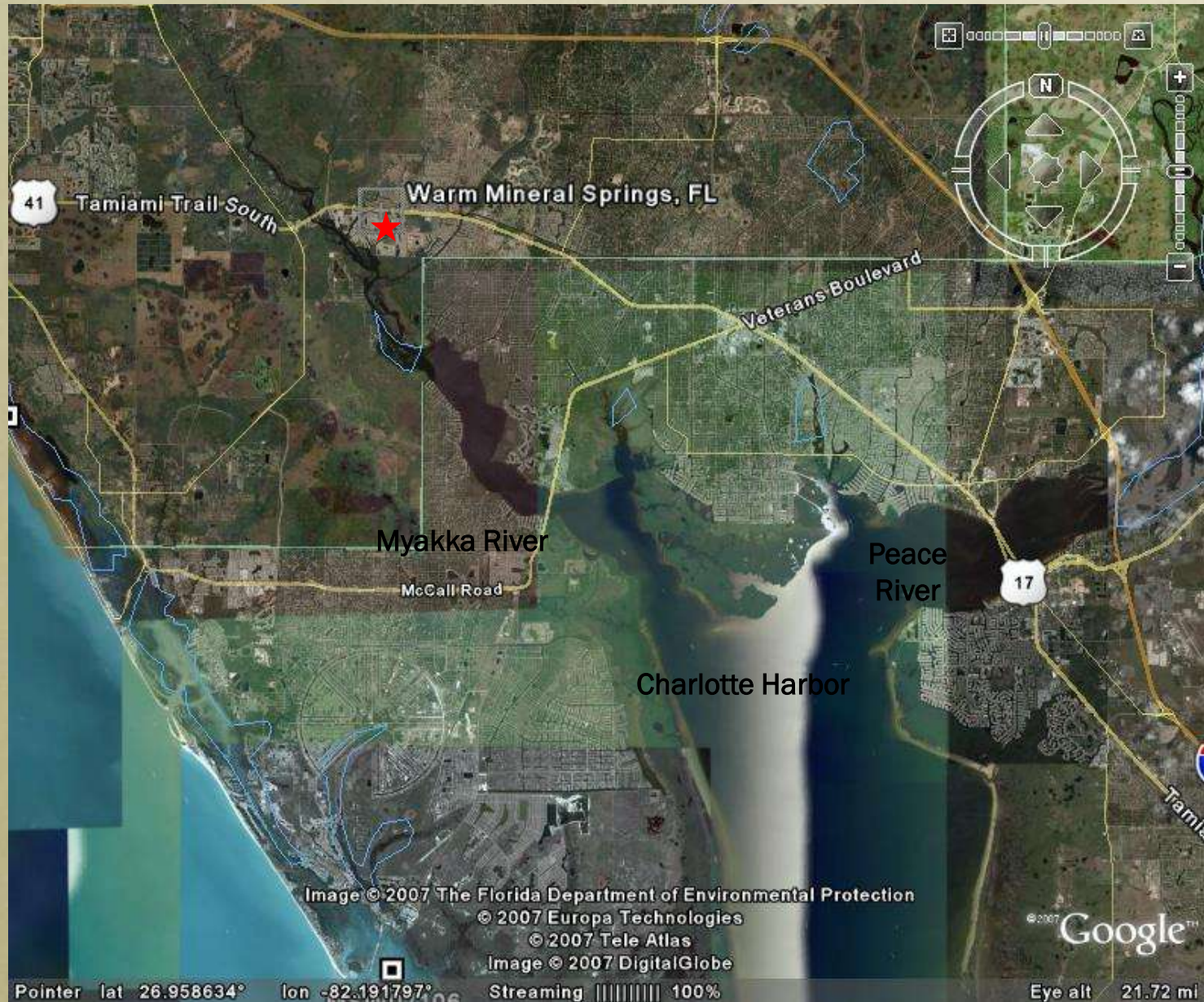
© 2013 Google

Image © 2013 TerraMetrics

Google earth

Imagery Date: 4/24/2012 lat 27.025013° lon -82.267617° elev 1 ft eye alt 11.95 mi

Salt Creek





Monitoring Efforts

- Documented since early 90s
- Natural warm water refuge
- 50-70 Manatees
- Strong site fidelity
- Photo ID, Telemetry & Temperature Monitoring



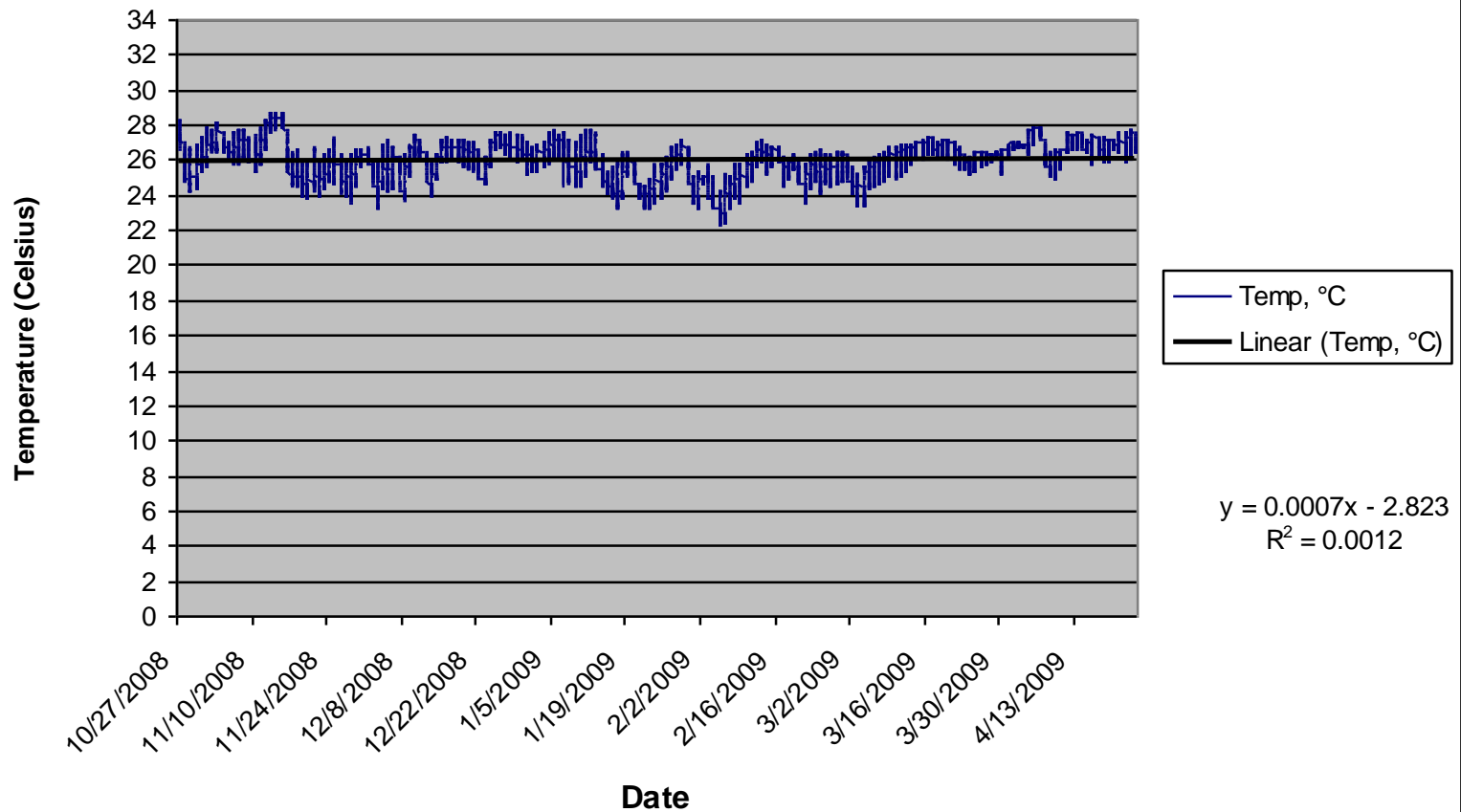
Photo-Identification

- Uses unique pattern of scars and mutilations on a manatee to identify an individual animal over time.
- Provides insight into manatee movements, site fidelity, habitat use, behavior, intra/inter specific associations, reproductive parameters
- Ultimately helps estimate annual adult survival rates and model population dynamics for state and federal assessments of Florida manatee status and recovery.



Temperature Monitoring

2008-2009 Warm Mineral Springs Temperature



Accessibility to WMS

Similar Tidal States at the Rt 41 bridge looking West



Water Level During Cold Front



Water Level 2-3 days Later

Even without a cold front, tidal extremes determine accessibility

What are the actual effects of any other changes to the system?



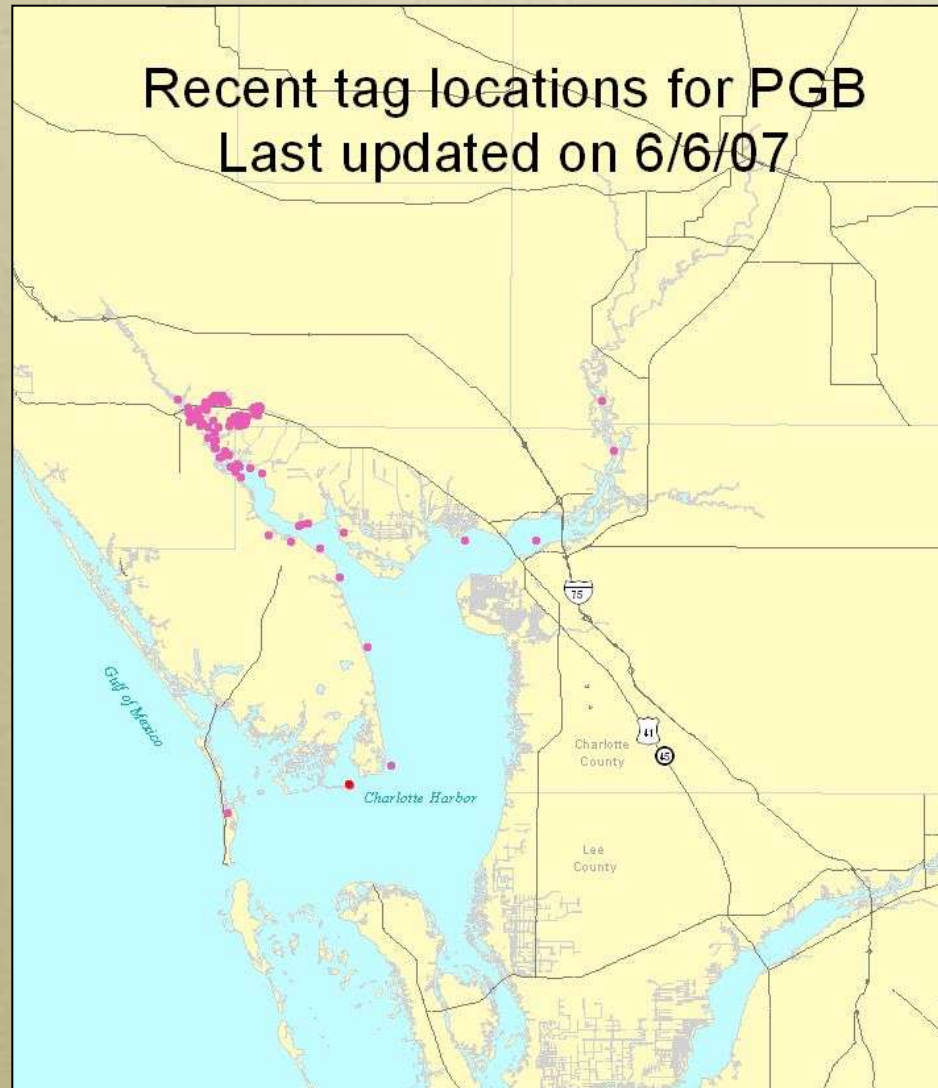
Charlotte Harbor: Tracking Manatee Habitat Use



Whittaker: A naïve animal tracking study.



Charlotte Harbor: Tracking Manatee Habitat Use



www.wildtracks.org



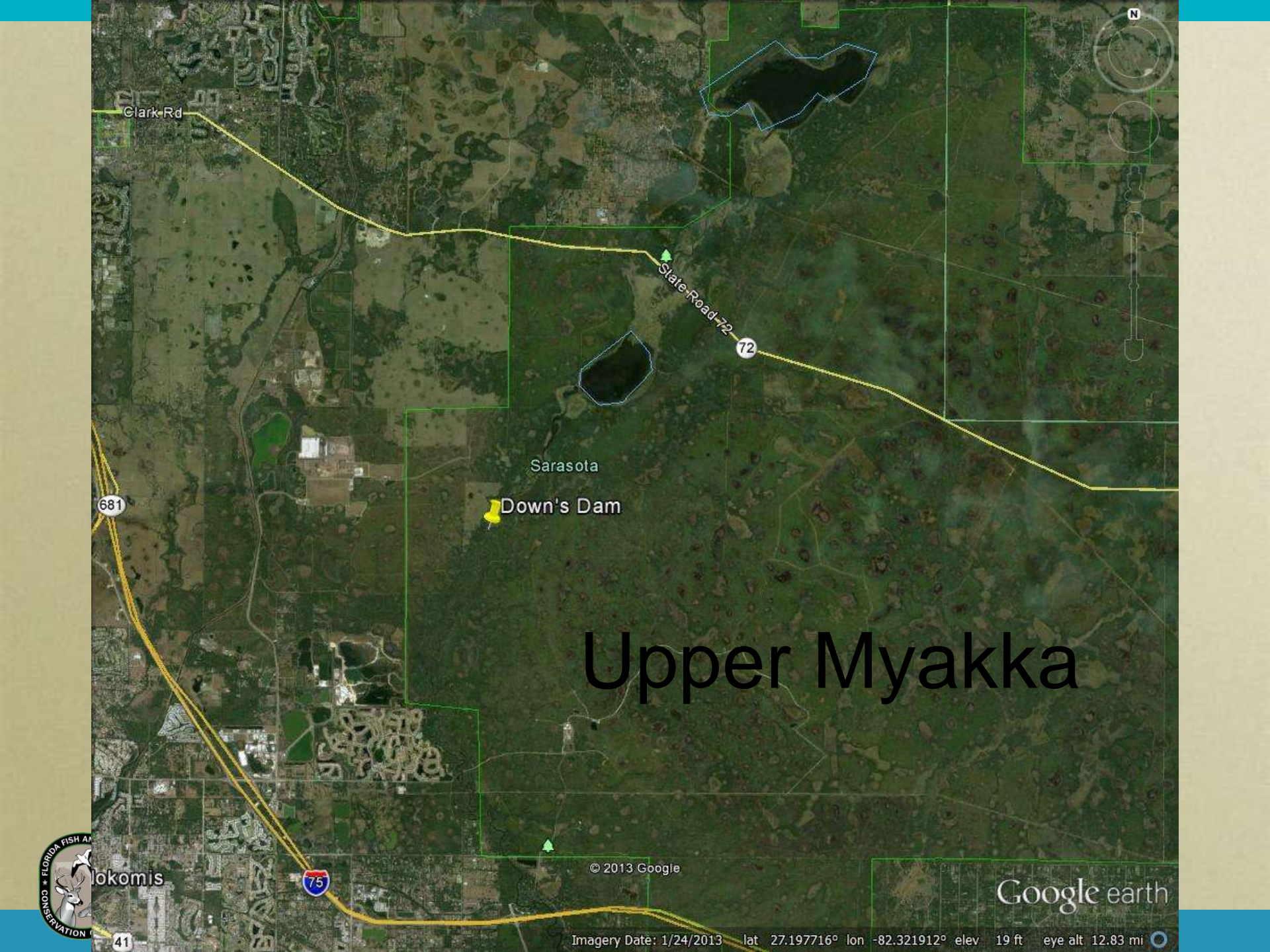
Charlotte Harbor: Tracking Manatee Habitat Use

- Over wintering patterns & strategies
- Fresh water drinking sites
- Foraging sites
- Travel patterns



www.wildtracks.org





Clark Rd

State Road 72

12

Sarasota

Down's Dam

681

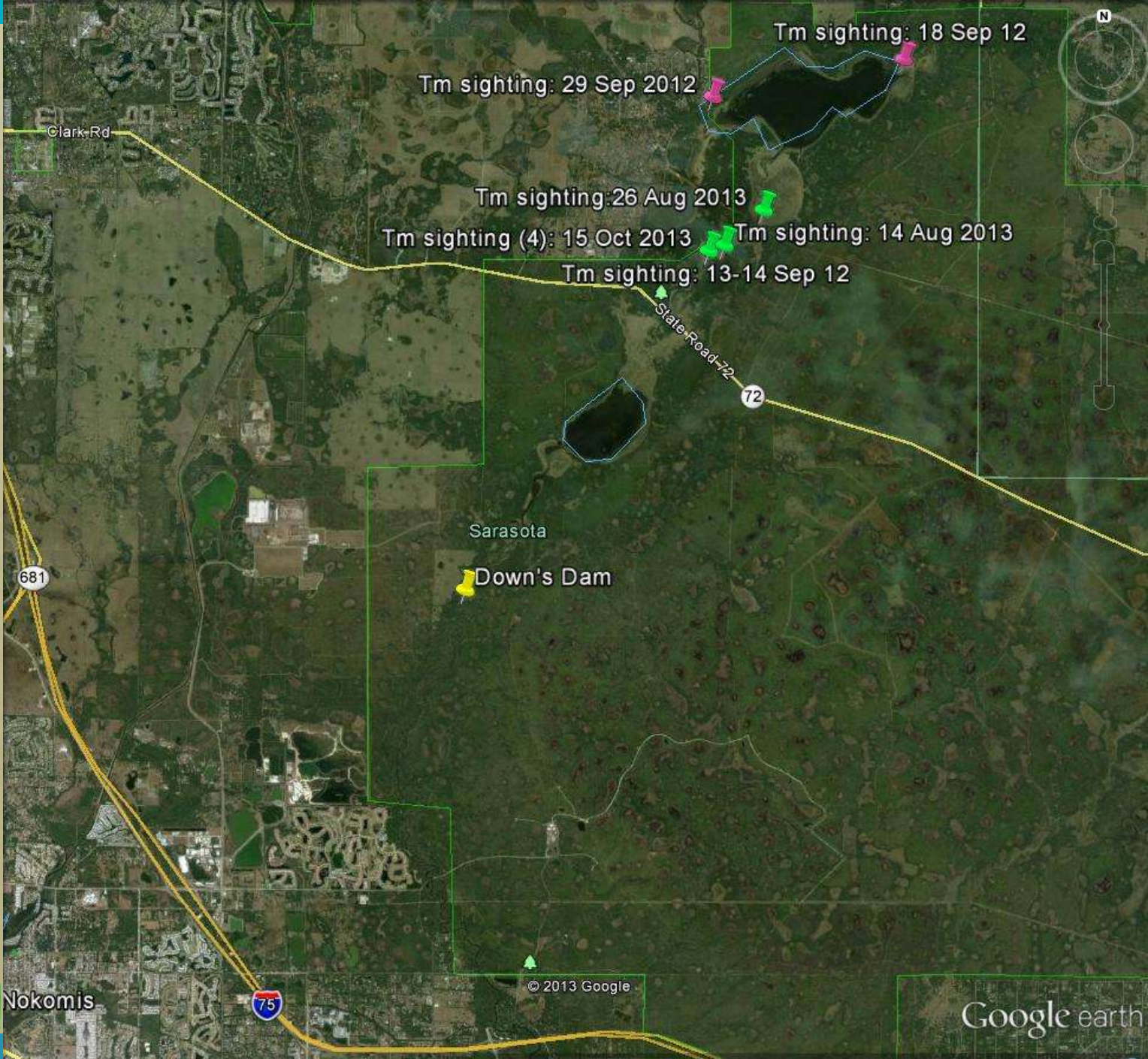
75

41

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Google earth

Imagery Date: 1/24/2013 lat 27.197716° lon -82.321912° elev 19 ft eye alt 12.83 mi



2013 Sighting at Powerlines



How YOU Can Help

Report Sick/Injured/Dead/ Tagged
Marine Mammals to FWC Wildlife Alert
Hotline:

1-888-404-3922

Be Prepared to Provide:

- Name
- Phone # where you can be reached
- Location Description
- Description of Incident





For additional information, visit MyFWC.com

