

Enhanced Assessment for Recovery of Gulf of Mexico Fisheries – Red Snapper, Gag Grouper, and Amberjack

**Monitoring large scale movement of
economically important reef species
with acoustic tagging, telemetry, and
analysis**

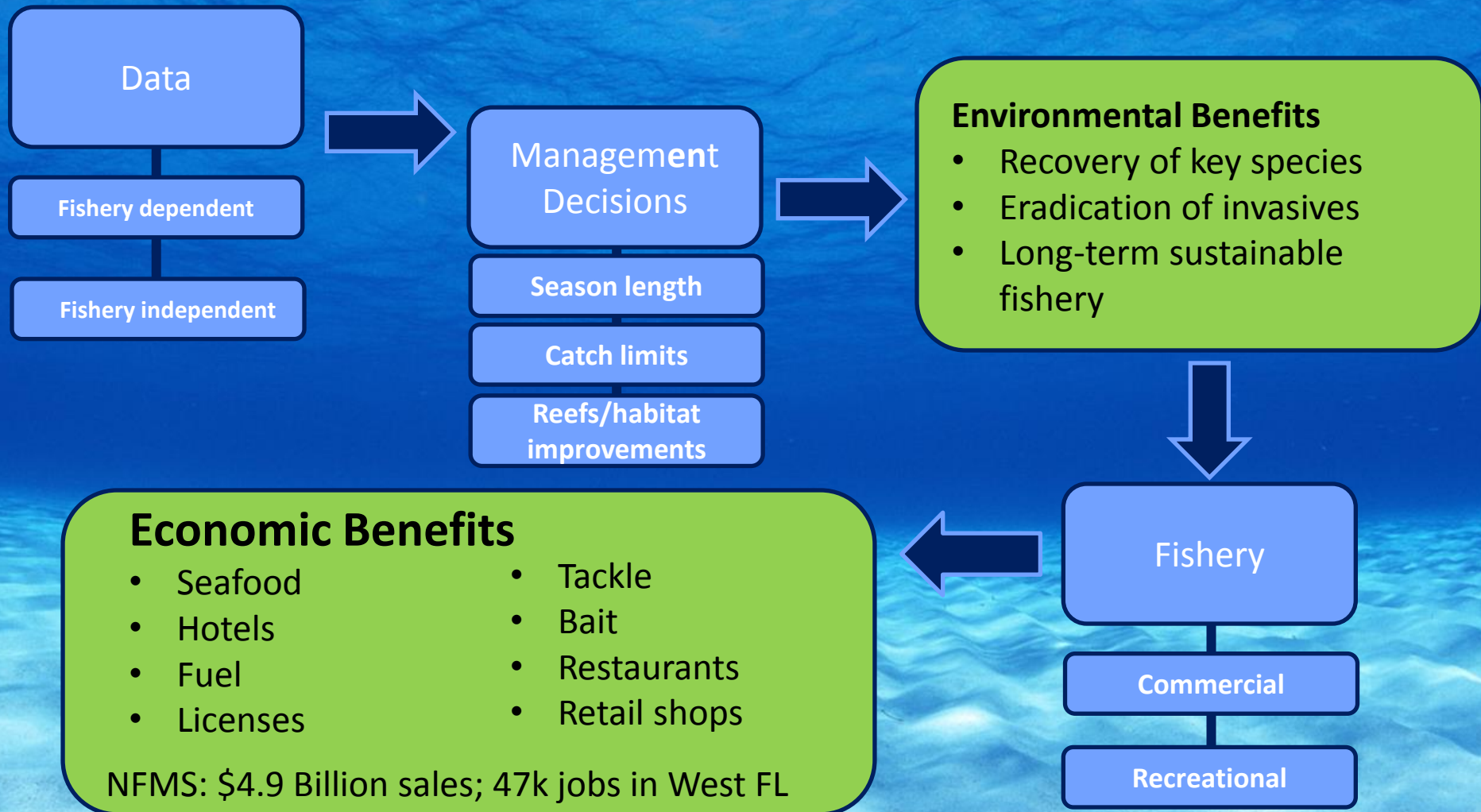
Goals

- Provide additional data to decision-makers to better inform fishery management decisions
- Contribute to long-term recovery and sustainability of economically important reef species
- Revitalize and enhance Florida economy through enriched fishery (seafood, tourism)

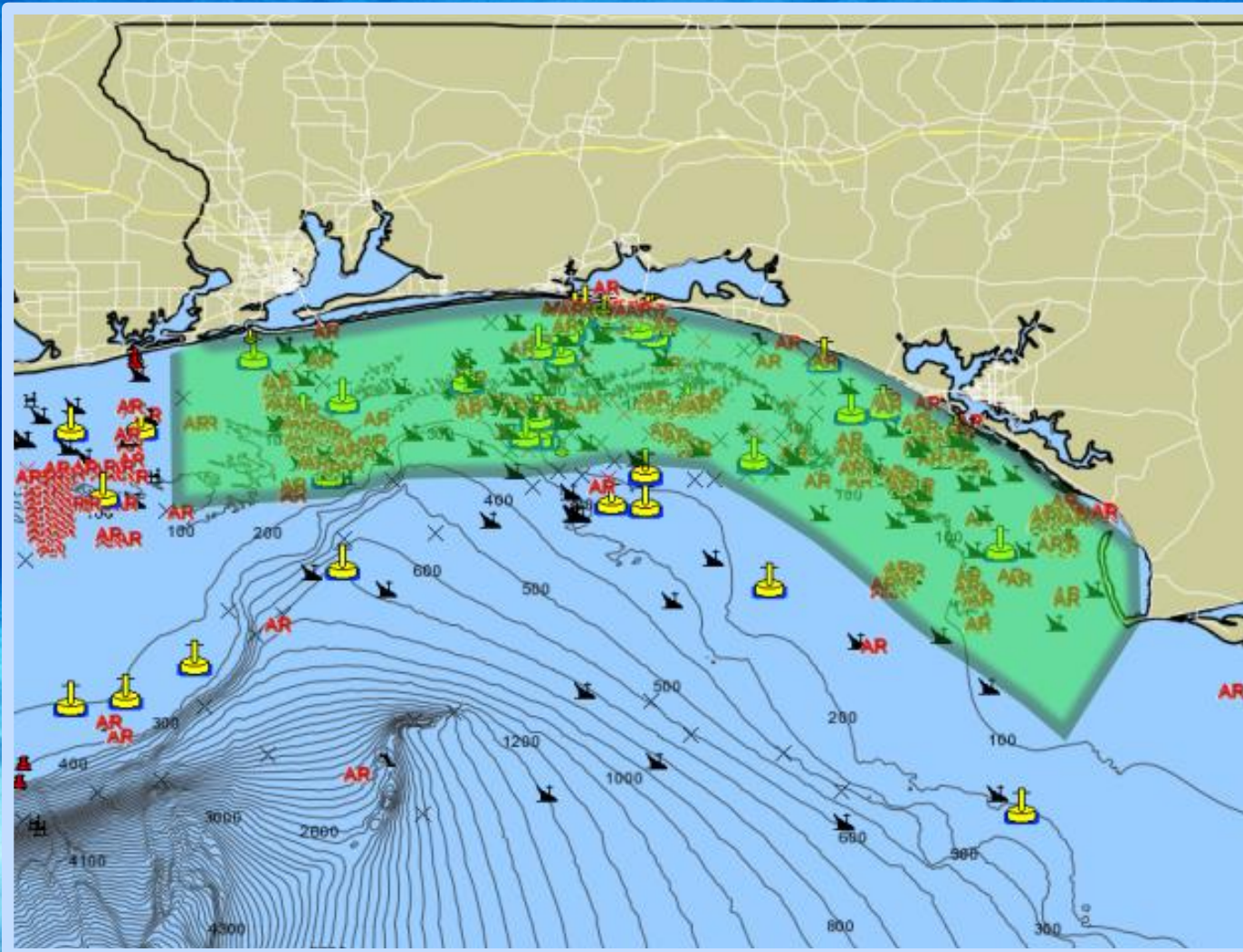
Benefits

- Support fisheries-independent research and decision making
- Supplement some key data needs in stock assessment reports
 - Western and eastern sub-units
 - Exchange rates
 - Natural and fishing mortality data
 - Improve model inputs used in stock assessment reports

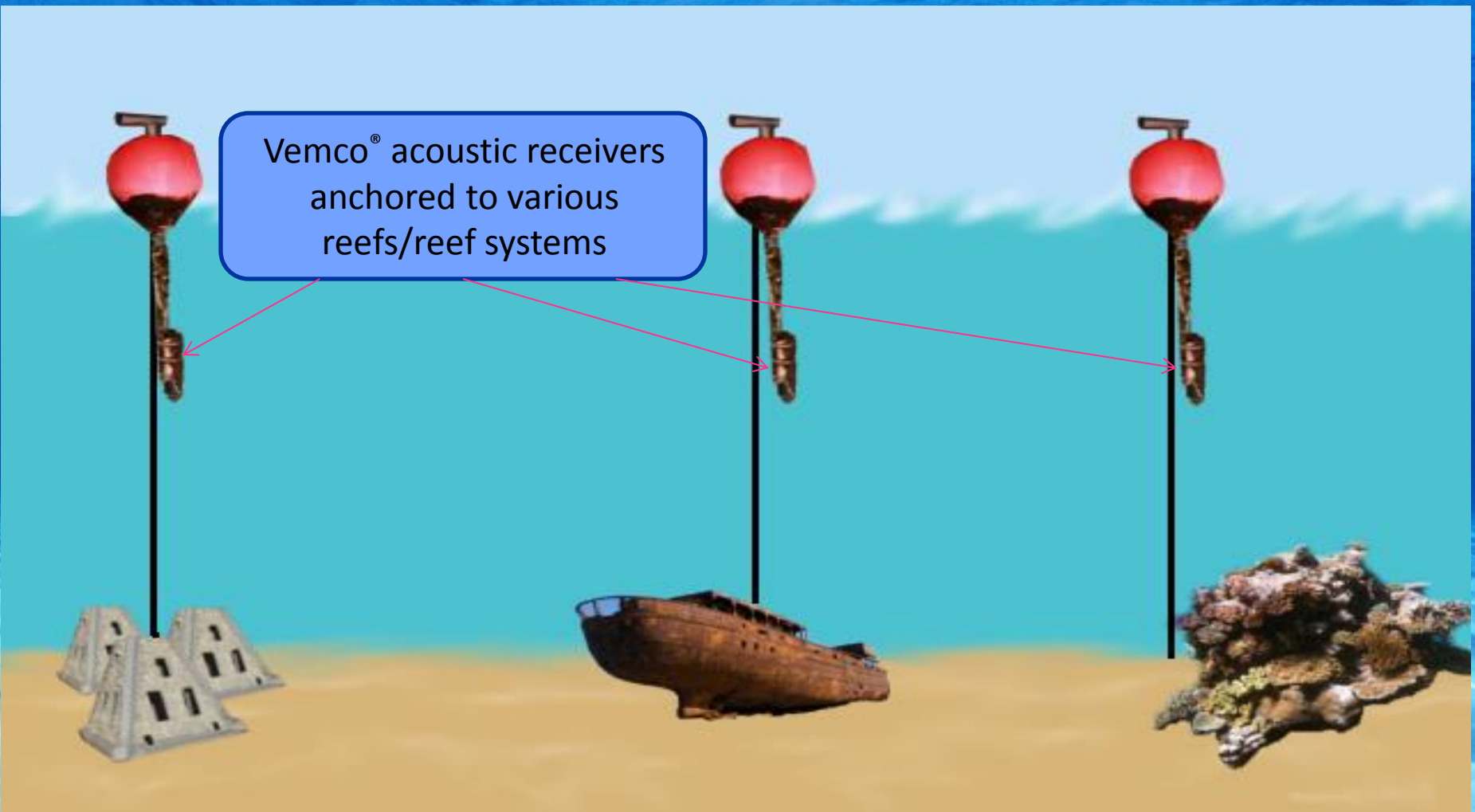
Justification



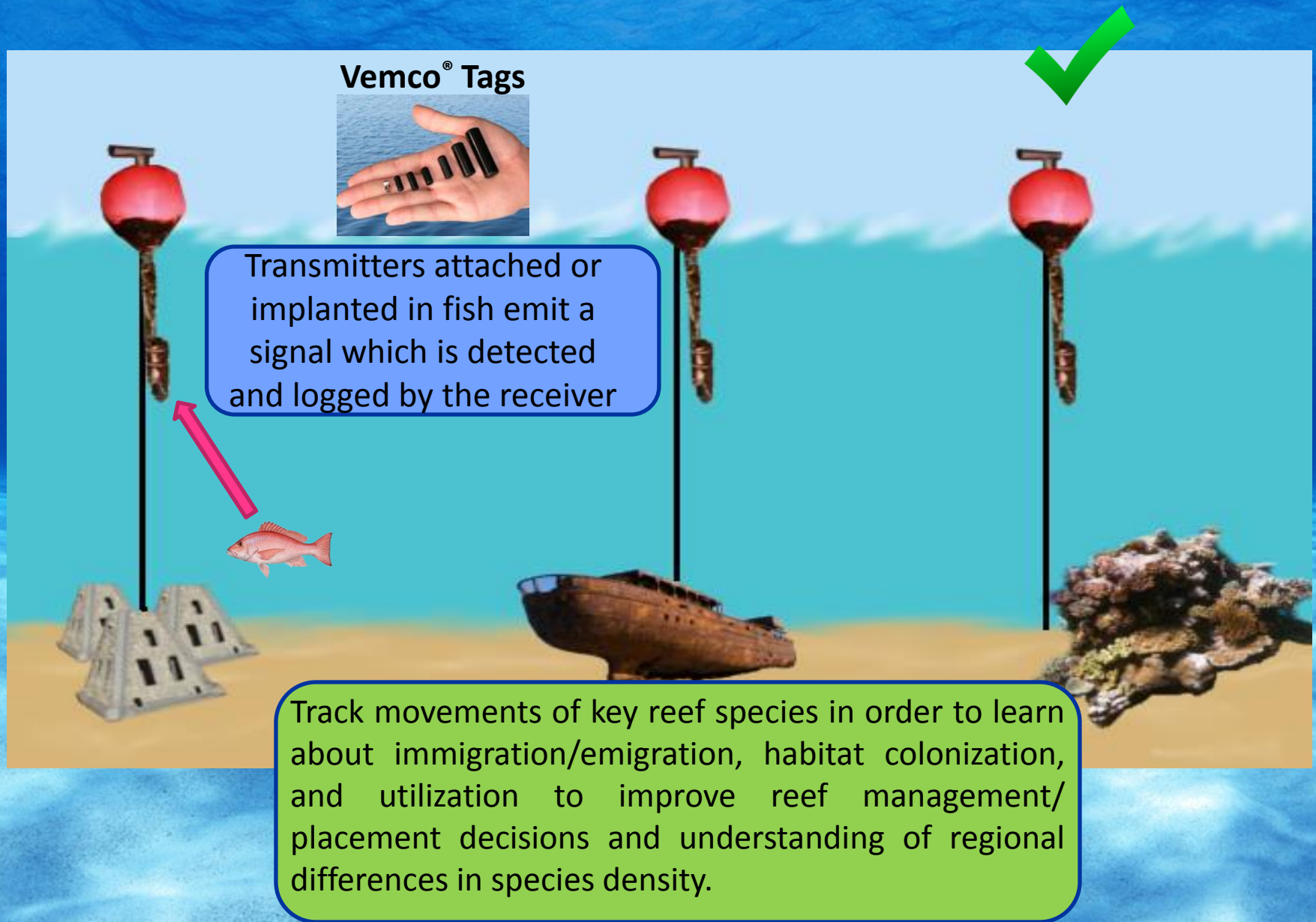
Proposed Study Area



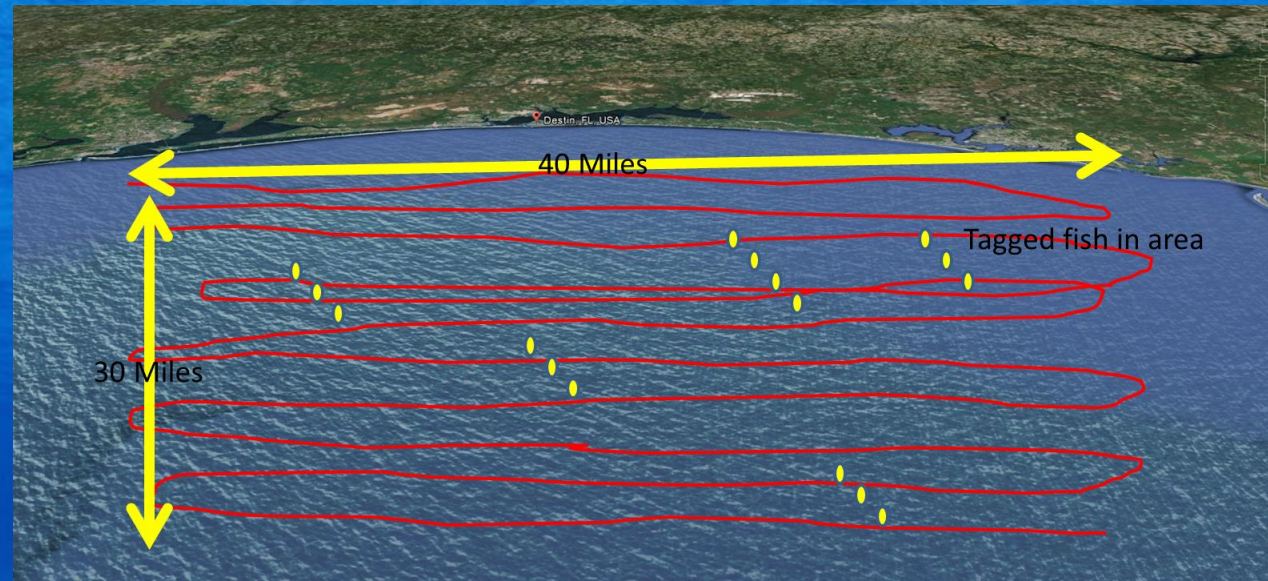
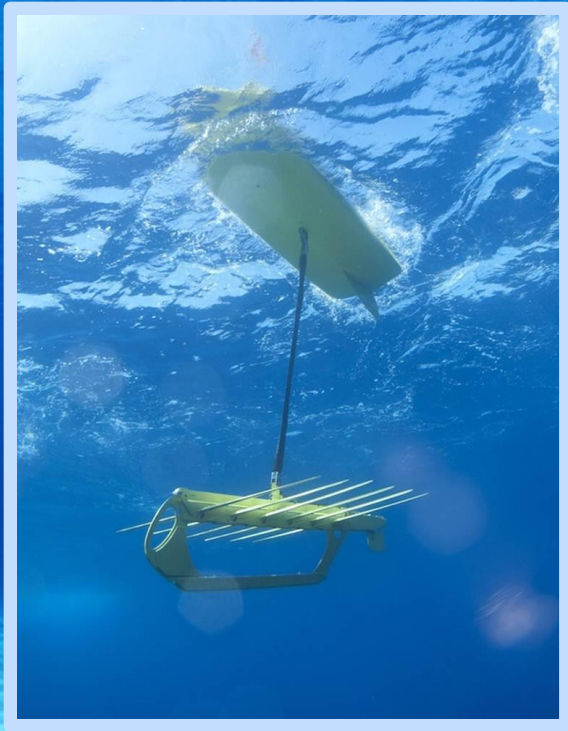
Monitoring Large Scale Movements of Reef Species with Acoustic Telemetry



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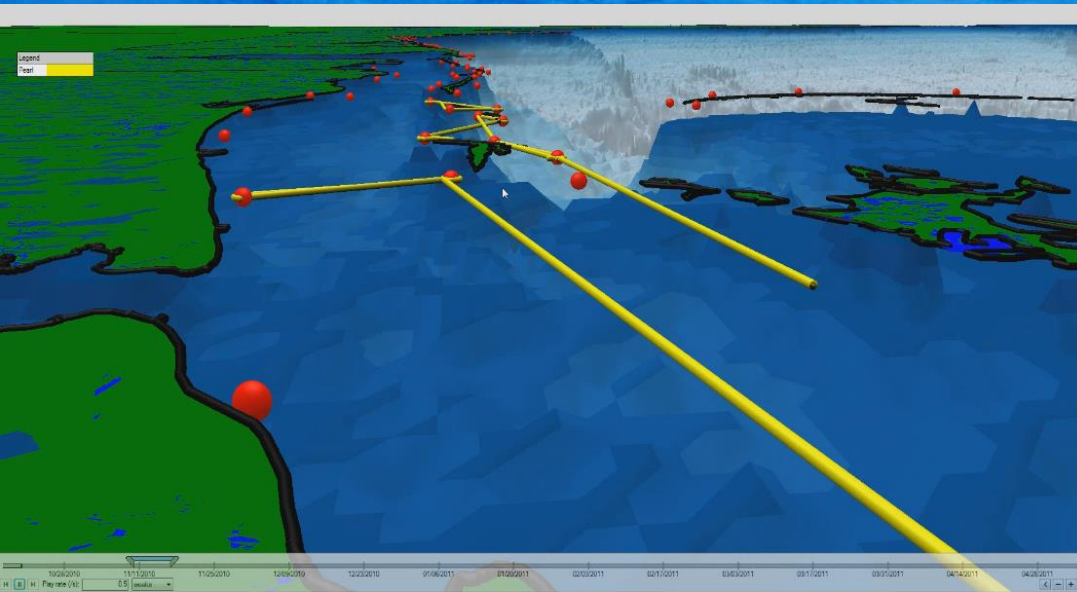
Wave Glider used to capture large scale movements of reef species throughout the Gulf of Mexico. Continuous acoustic monitoring of fish populations, at a fraction of the operational costs of shipboard surveys

Technical Feasibility



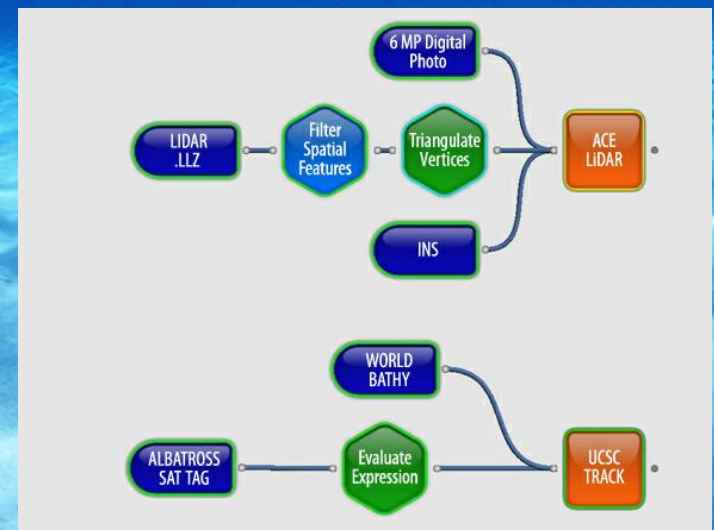
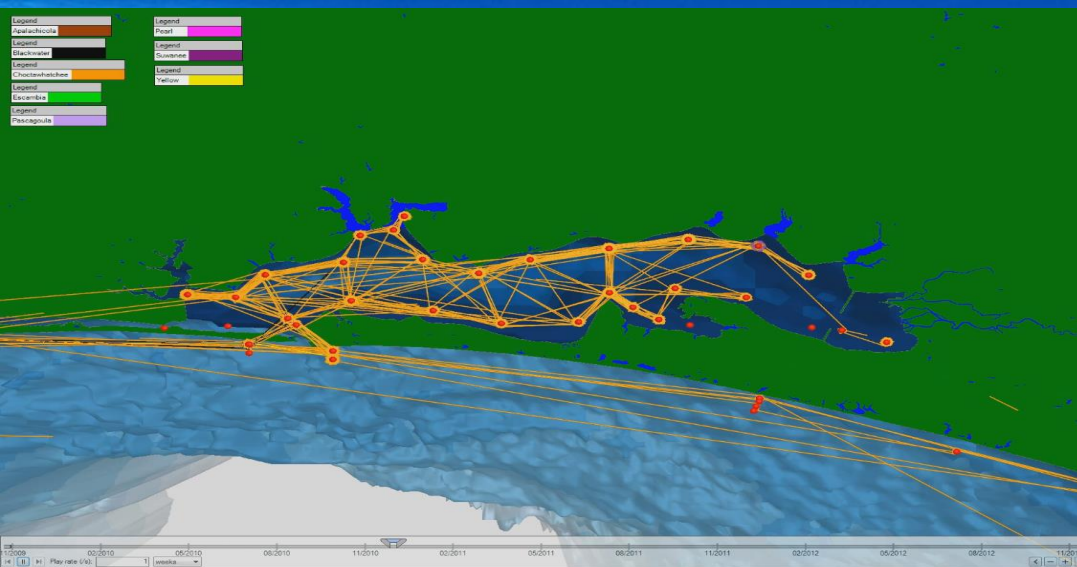
Multi-year Gulf Sturgeon NRDA Study in
partnership with U.S. Fish and Wildlife Service

Analysis



- View georeferenced data in 4-D
- Analyze other spatial and time related variables with respect to data via intuitive dataflow model

Note: Images created using actual hydroacoustic tracking data for Gulf sturgeon collected and analyzed during NRDA assessment



Summary

- Improved understanding of species, processes, habitats, and relationships
- Leads to improved management of these ecological resources
- Improves stocks and sustainability
- Directly tied to economic prosperity on the Gulf Coast