



Wahoo in the Gulf of Mexico



Michelle A. Johnston, Ph.D.
Superintendent, NOAA's Flower Garden Banks NMS

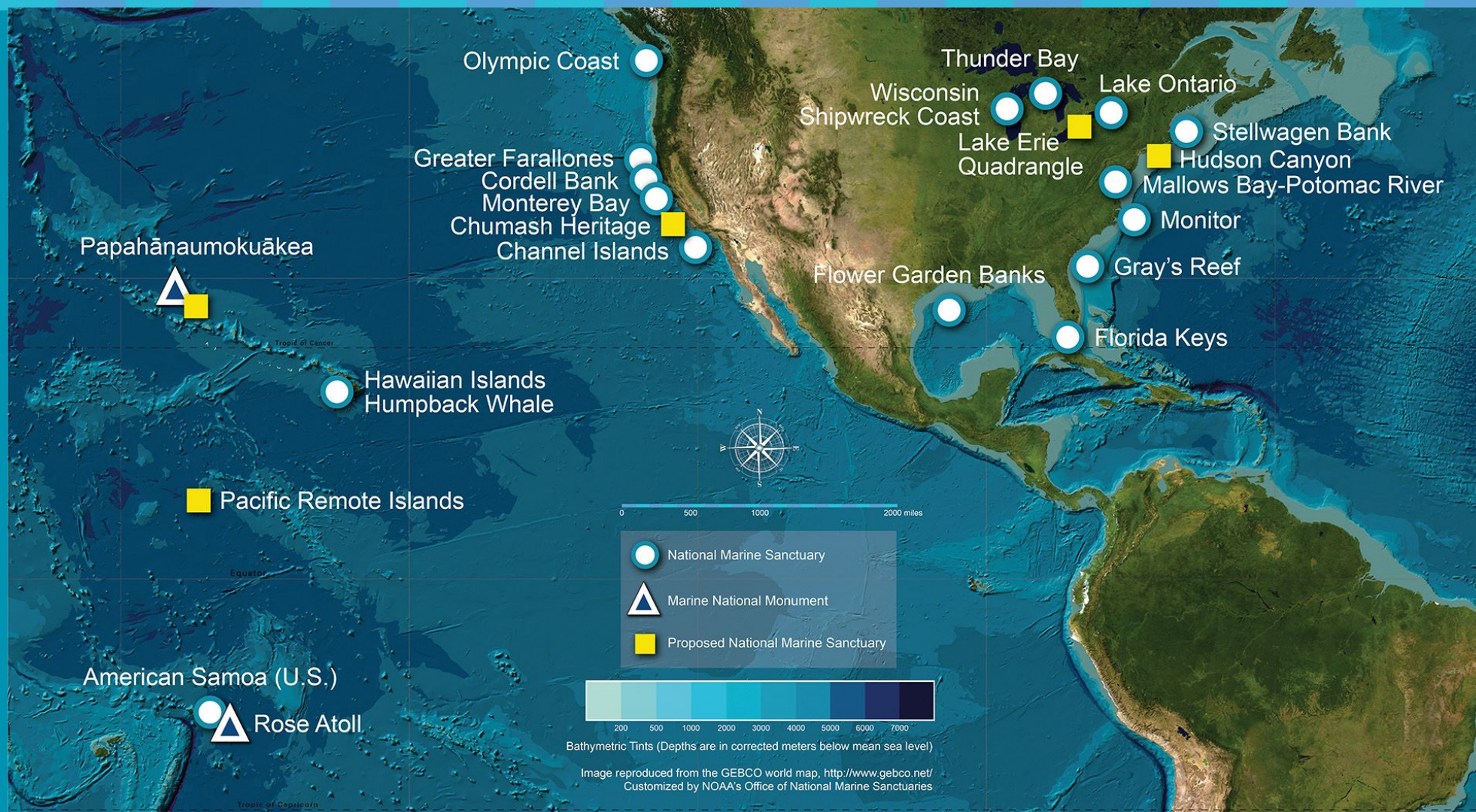
Outline and Goals

Goal - Raise awareness on wahoo in the Gulf of Mexico at request of our shared stakeholders and to discuss:

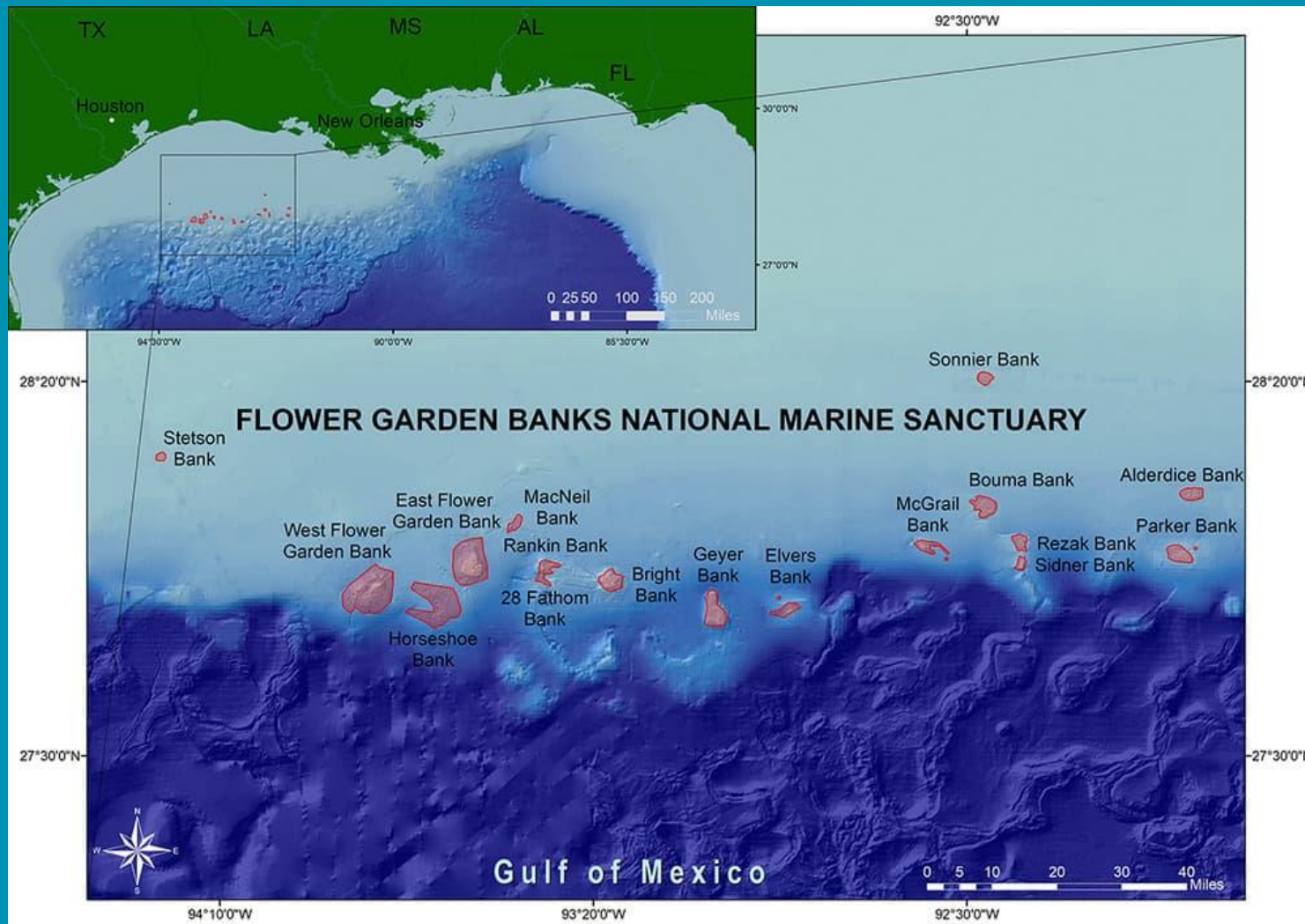
1. What we know about wahoo in the Gulf of Mexico
2. Why unlimited take of wahoo matters to shared stakeholders
3. Gauging interest in taking management action



National Marine Sanctuary System



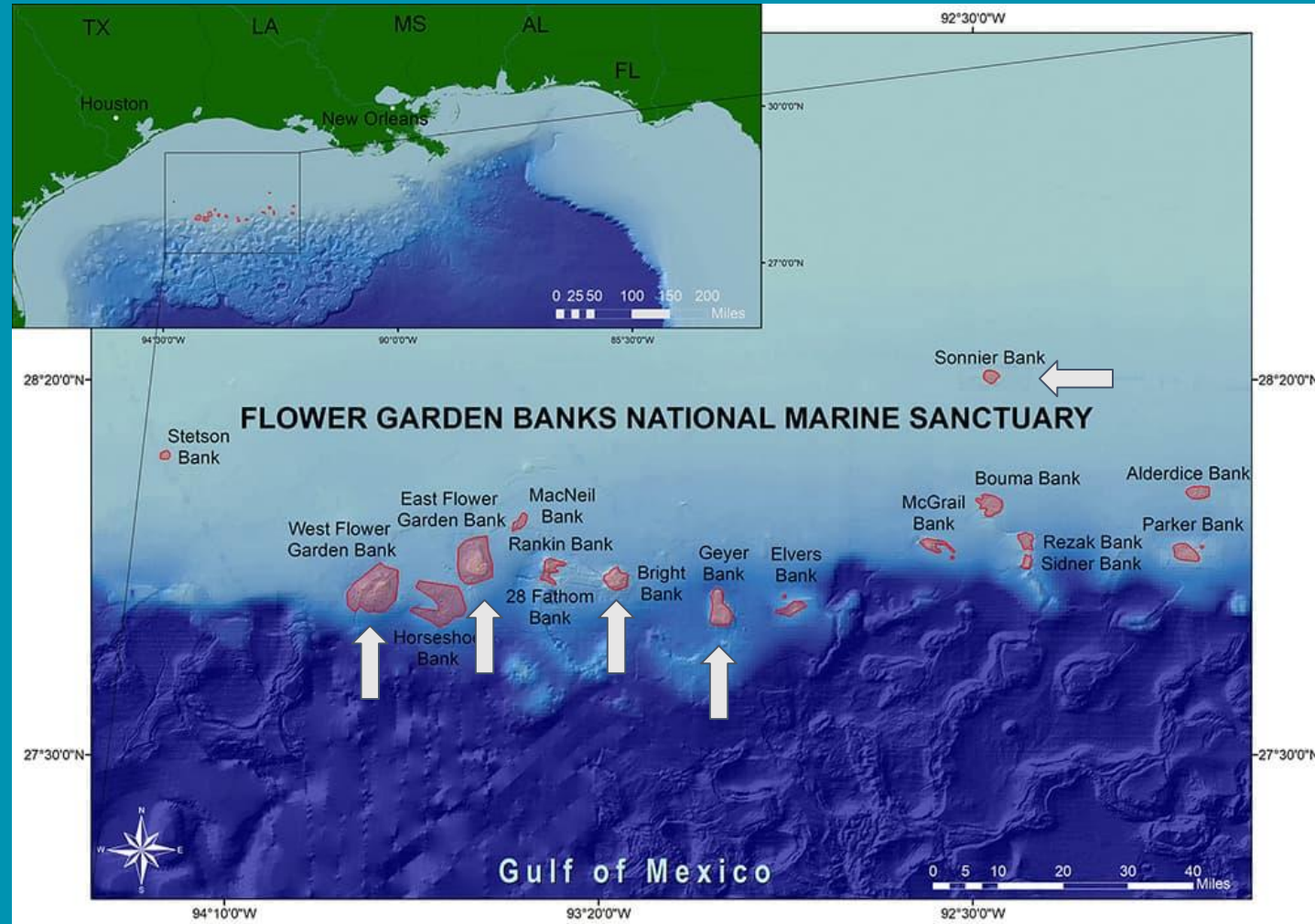
Flower Garden Banks National Marine Sanctuary



- Flower Garden Banks National Marine Sanctuary (FGBNMS) is the only sanctuary in the Gulf of Mexico
- Expanded in size in 2021 from 3 to 17 reefs and banks
- Encompasses a variety of habitats important to fish and invertebrates

Aggregations in Gulf of Mexico

- What we know:
 - Wahoo aggregate in/around FGBNMS in winter months
 - Wahoo tournaments are increasing in popularity
 - Concerns of overfishing from local fishers
 - Wahoo is key species in FGBNMS Climate Vulnerability Assessment



FGBNMS Climate Vulnerability Assessment

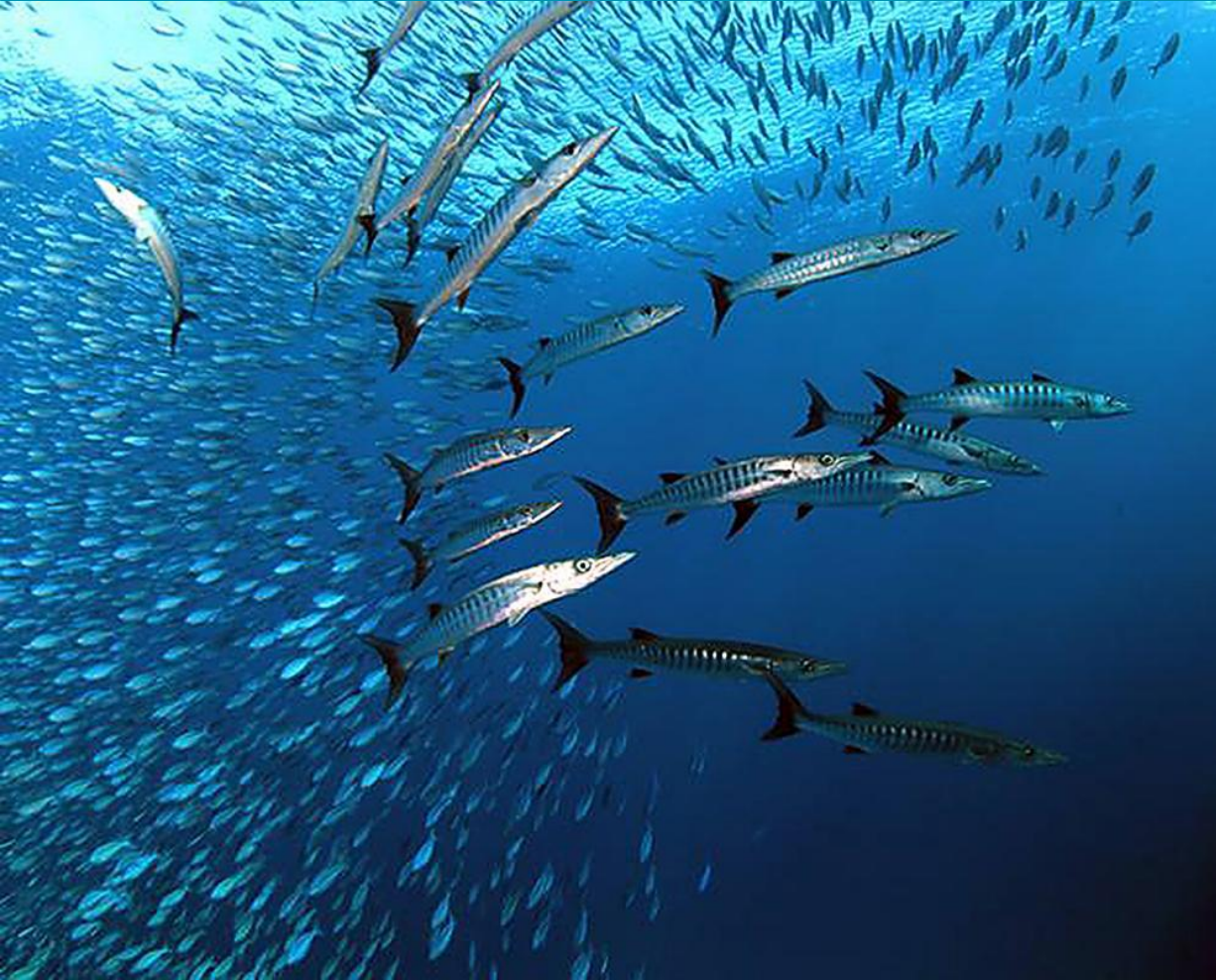
Wahoo (*Acanthocybium solandri*)

Source: Dias et al. 2023

Table 3.10 Influence of climate change on wahoo from RVA scores.

Wahoo <i>A. solandri</i>	Increased Water Temperature	Ocean Acidification	Storm Severity/Frequency
Likelihood	Almost certain	Possible	Unlikely
Consequence	Major	Minor	Minor
Risk	Extreme	Moderate	Low
Adaptive Capacity	Moderate	Moderate	Moderate
Vulnerability	High	Moderate	Low

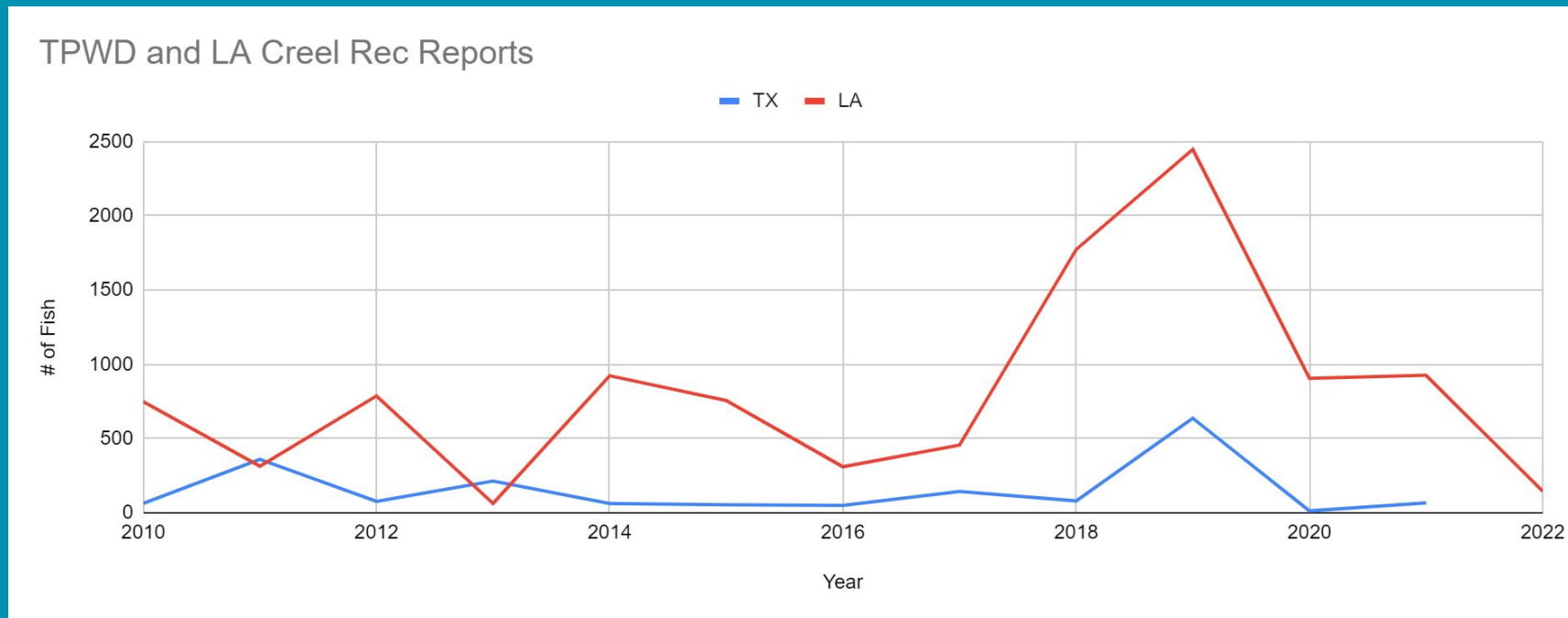
FGBNMS Wahoo Working Group



- Initiated by local fishers after public comment at FGB SAC meeting in Feb. 2023 and working group formed
- Aims of working group: To explore and understand wahoo interaction and aggregation within FGBNMS
- Working group collected wahoo data and information
- Management Concern:
 - Highly prized sport fish **without** management plan in Gulf in the wake of a changing climate

Reported Wahoo TX and LA Data

- State data does not reflect true landings for wahoo
- In 2023, fisher reports up to 15 vessels within FGBNMS often returning with 20-30 wahoo per boat
 - Previously, there would only be 1-2 vessels within the sanctuary



Recent Wahoo Caught within FGBNMS



Primary Concerns from Stakeholders

- Lack of wahoo management
 - No size or bag limit outside of FL in Gulf of Mexico
- Vulnerability to overfishing
- Aggregations are targeted
- Not sustainable for future wahoo stocks
- Data limited
 - LSU and TAMUG acoustic telemetry project started in 2023



FGBNMS and GMFMC



- Precedence for management:
 - FMPs for wahoo in South Atlantic and Caribbean Fishery Management Councils
- Management in Gulf of Mexico beneficial for future populations
- Support from local anglers and scientists in favor of management in Gulf of Mexico and FGBNMS
- Prioritization of research to support effective management
- Wahoo is key species in FGBNMS Climate Vulnerability Assessment (Dias et al. 2023)

Possible Pathways for Management Action

- Pathway 1:

- GMFMC could implement a Gulf of Mexico wide FMP for Wahoo under their authorities (Magnuson)
 - Refine existing South Atlantic and Caribbean FMPs for a Gulf of Mexico plan
 - Empirical harvest control rules can be effective for managing data-limited stocks based on historical catch and expert knowledge (Free et al., 2023)

- Pathway 2:

- NOAA could pursue regulations under the NMSA to limit or restrict take of Wahoo *within FGBNMS*

Summary



Summary



Photo: Pelagic

