

Ecosystem Protection Working Group: Human Use Information for the Upper Keys

- NOAA – Florida Keys National Marine Sanctuary
- Florida Fish and Wildlife Commission
- NOAA – National Centers for Coastal Ocean Science



Socioeconomics

National Marine Sanctuaries
National Oceanic and Atmospheric Administration



Florida Keys National Marine Sanctuary Socioeconomics Factsheet



Florida Keys National Marine Sanctuary is a center for strong local economies and has economic value reaching far beyond the water

Human Use Information

Activities:

- **Commercial Fishing**
- **Recreational and Charter Fishing**
- **Diving**

Impacts:

- **Vessel Groundings**



Datasets

Human use

- Commercial Fishing
 - Density of **Commercial Fishers**
 - Distribution of Commercial Fishing Landings
- Recreational Fishing
 - Distribution of **Recreational and Charter Fishing Vessels**
- Recreational Diving
 - Distribution of Diving Vessels
 - Distribution of **Recreational Divers**
- Distribution of Marine Debris
- Density of **Vessel Groundings**



Commercial Fishing Activity Metric

- **Distribution of Fishers – How many people fish in an area?**



Photo credits: NOAA

Recreational and Charter Fishing Activity Metric

- Where are recreational and charter fishing boats located?



Photo credits: NOAA

Diving Activity Metrics

- How many divers dive in certain areas?



Impacts Metric

- Where were vessel groundings reported?



Prioritizing Locations

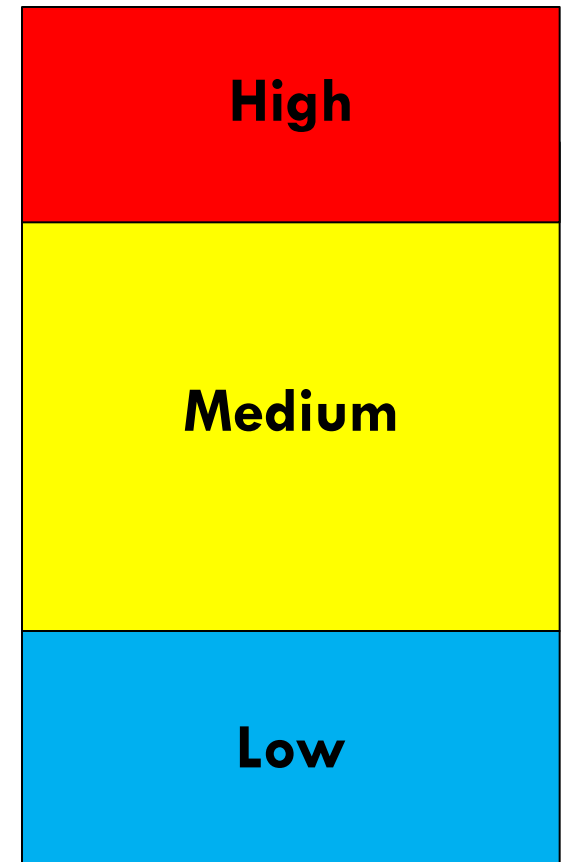
Rank data in given locations by highest to lowest score

Lump them relative to each other:

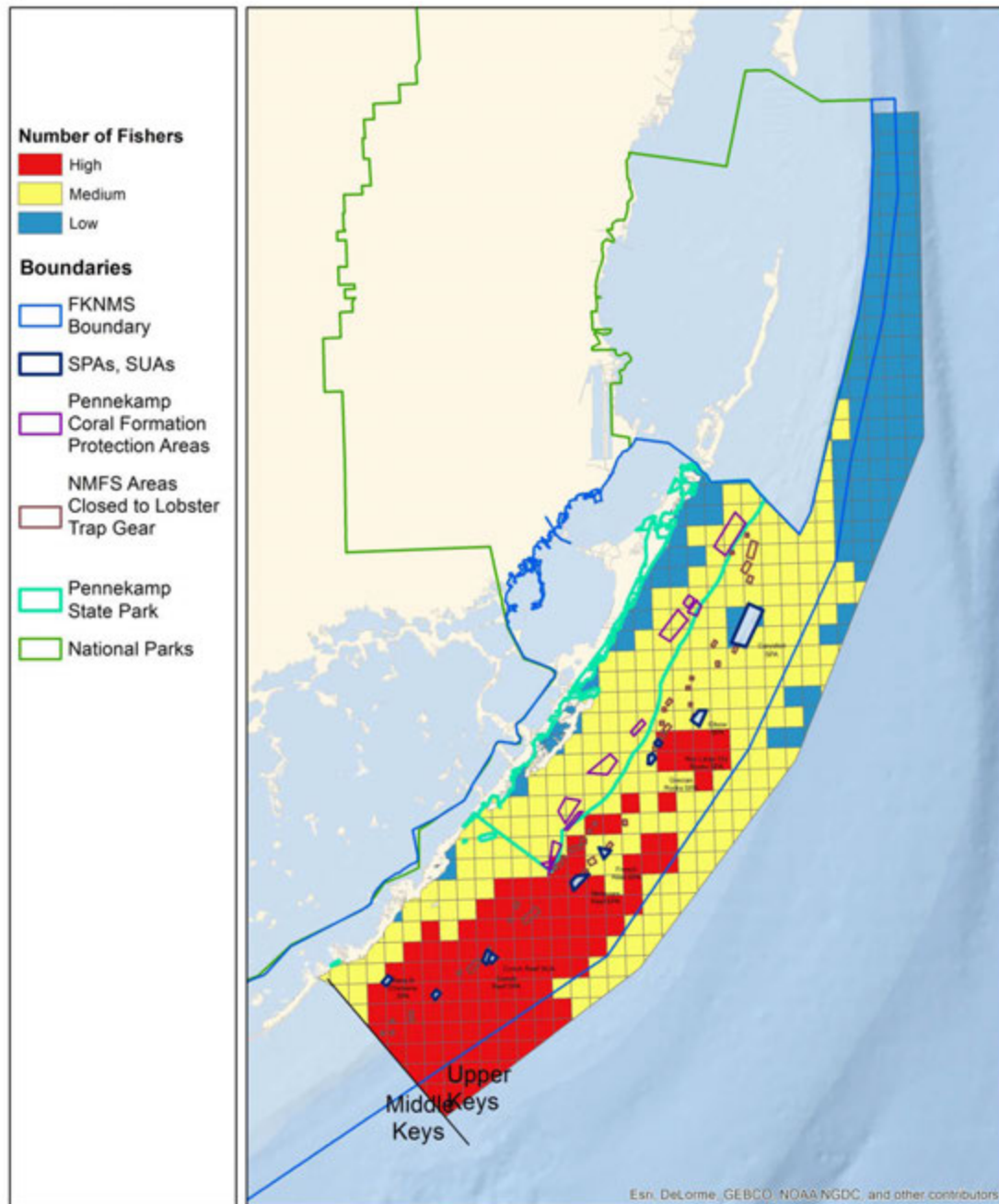
High 75 – 100 %

Medium 25 – 75 %

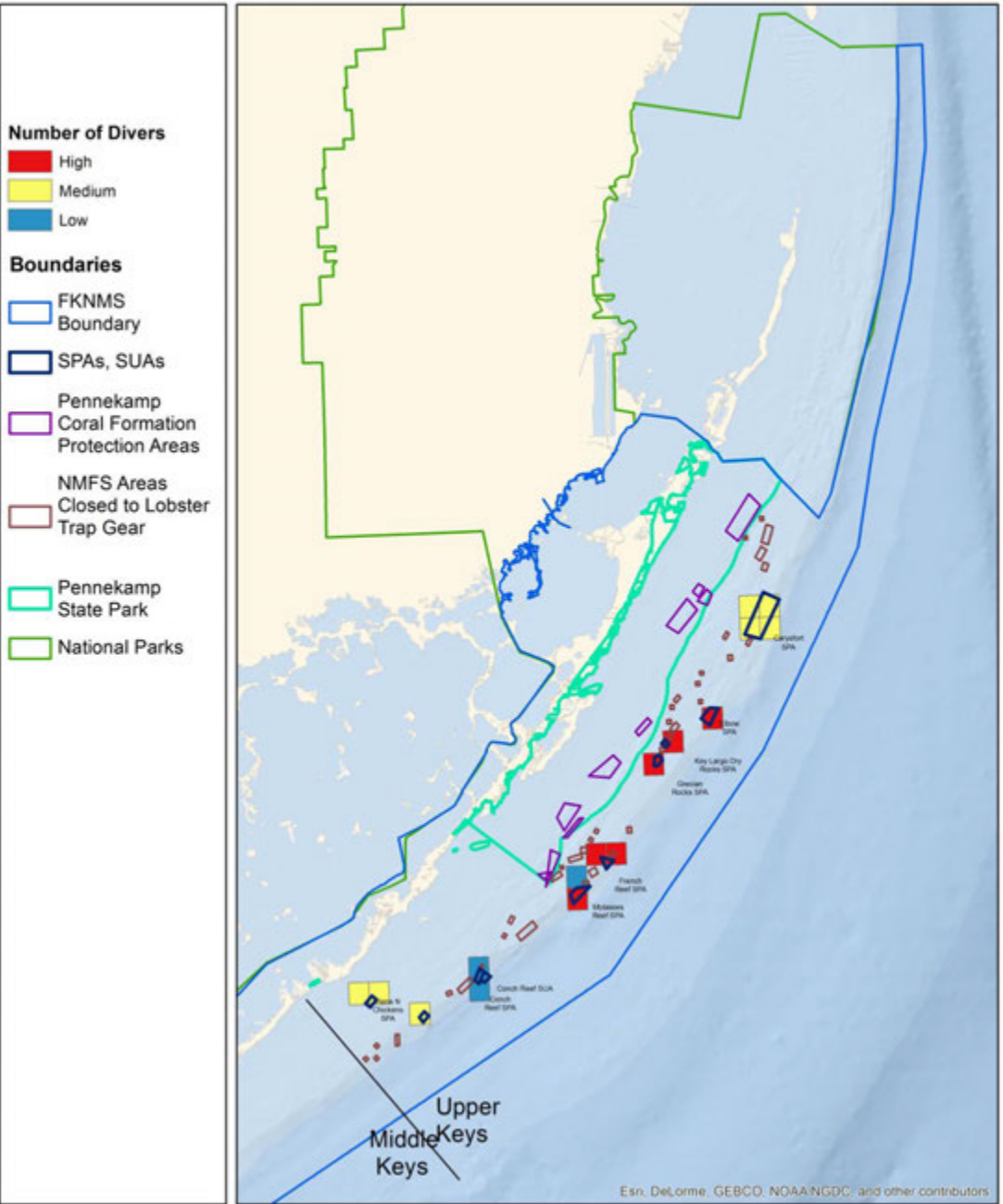
Low >0 – 24 %



Commercial Fishers, Oceanside



Diving Activity

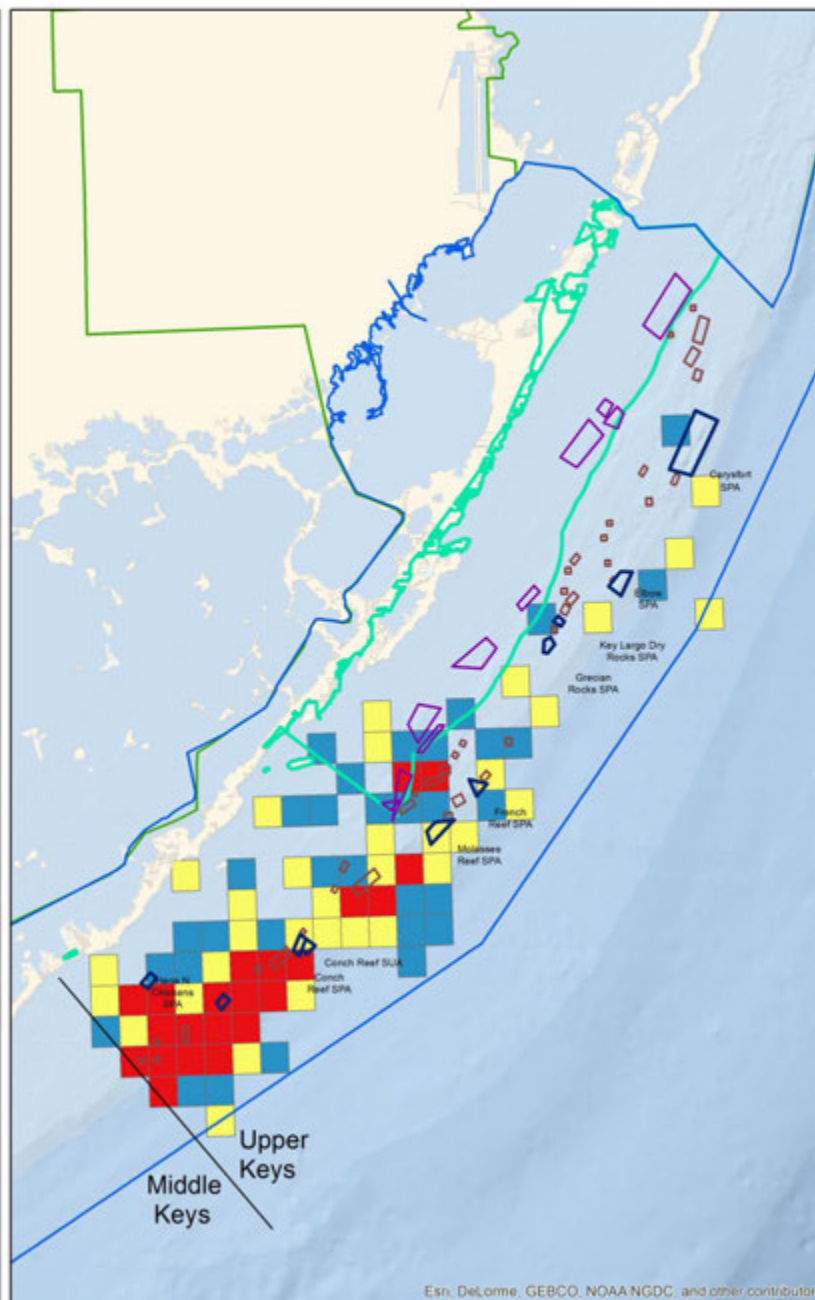


Recreational and Charter Fishing

Number of Vessels

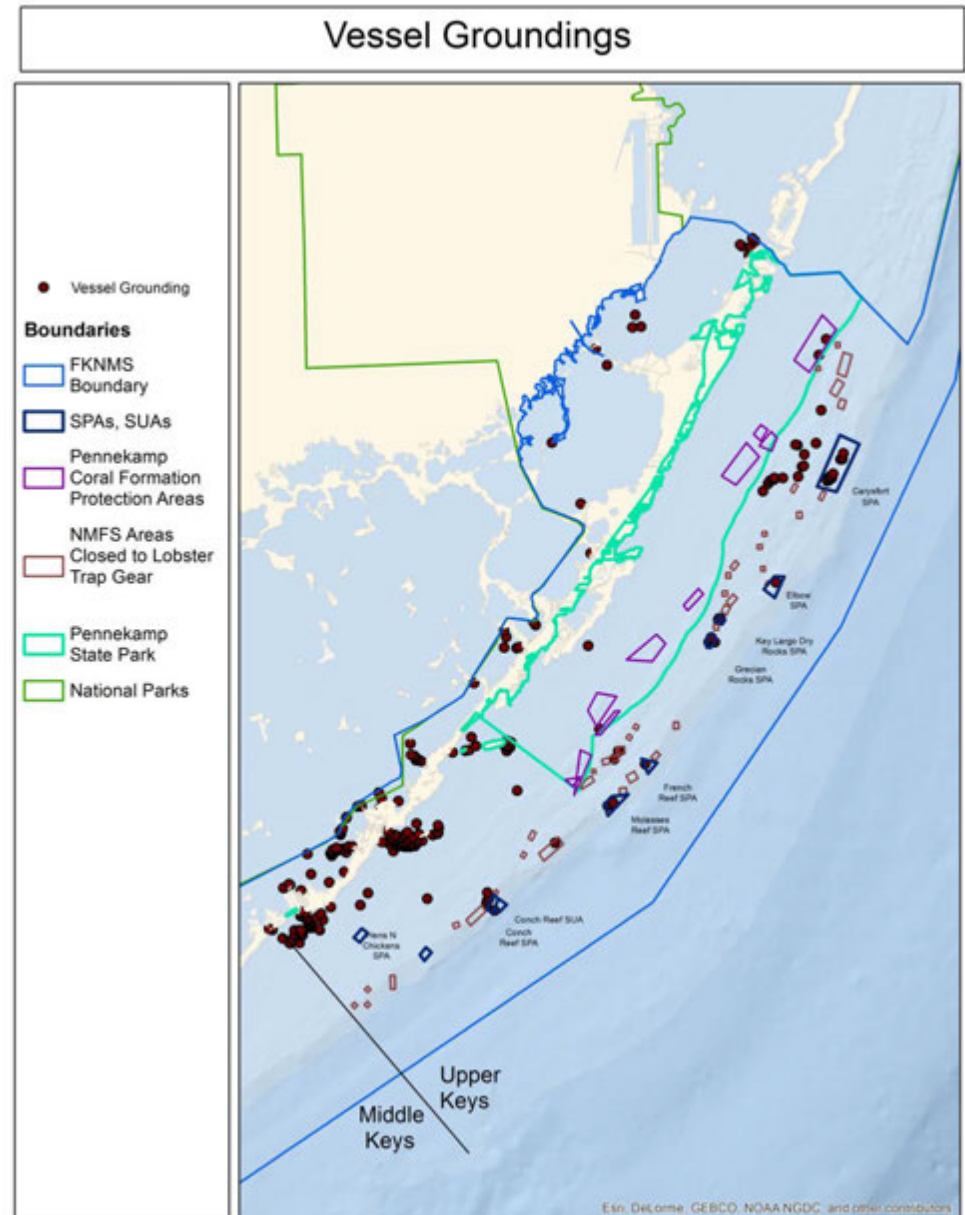
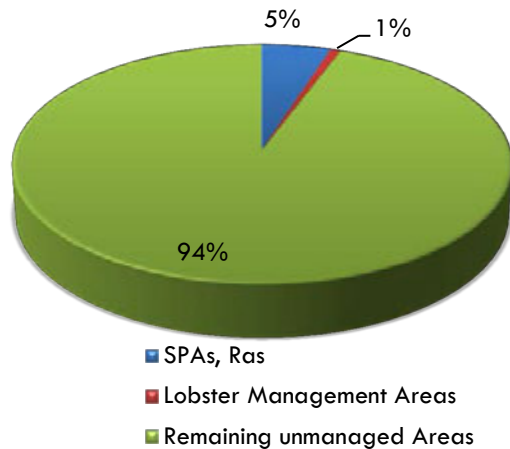


Boundaries

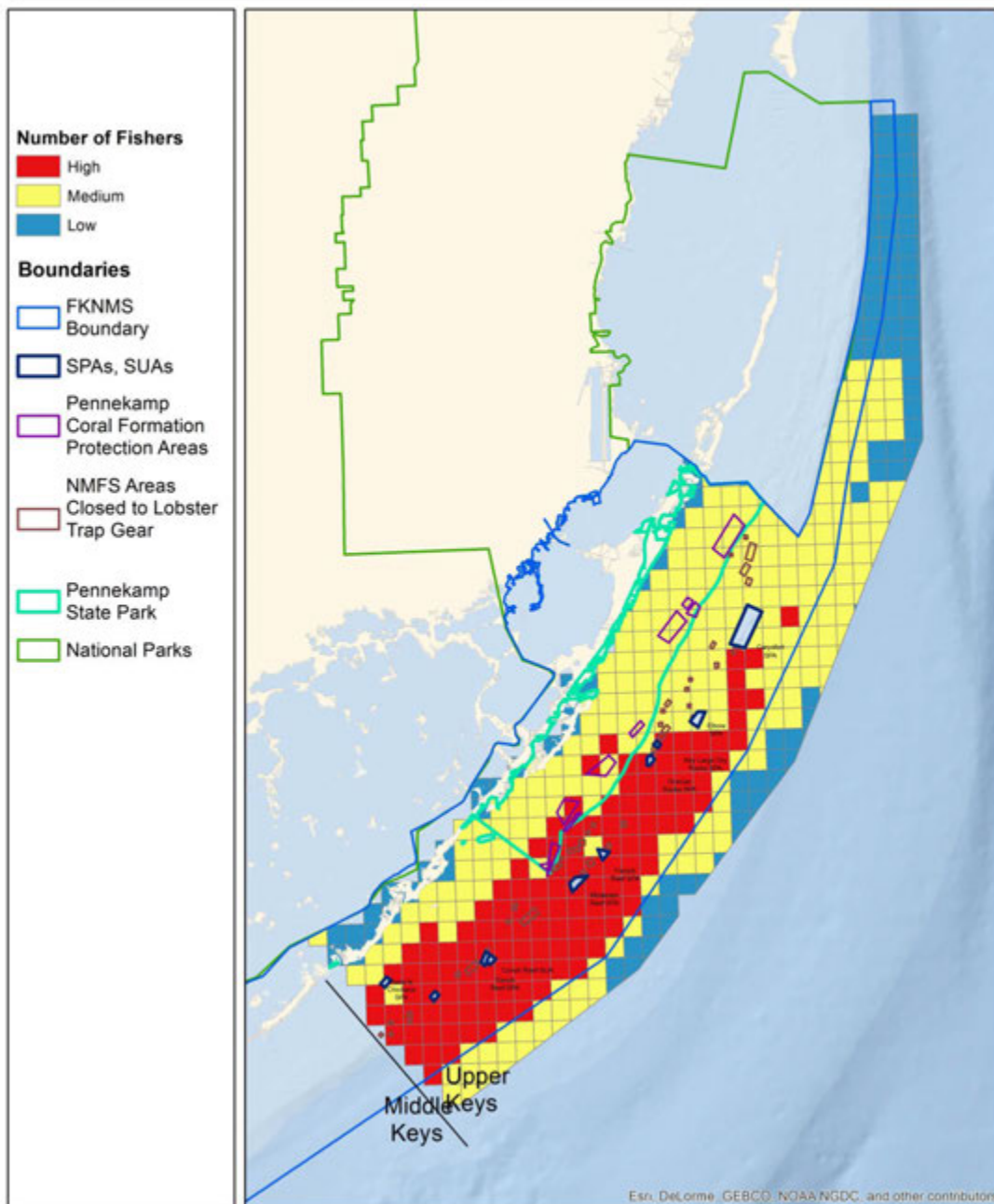


Impacts – Vessel Groundings

Management Zone	Groundings (#)
SPAs, SUAs	47
NMFS and Pennekamp lobster management areas	7
Remaining FKNMS, oceanside	885
Total	939



Spiny Lobster Fishers



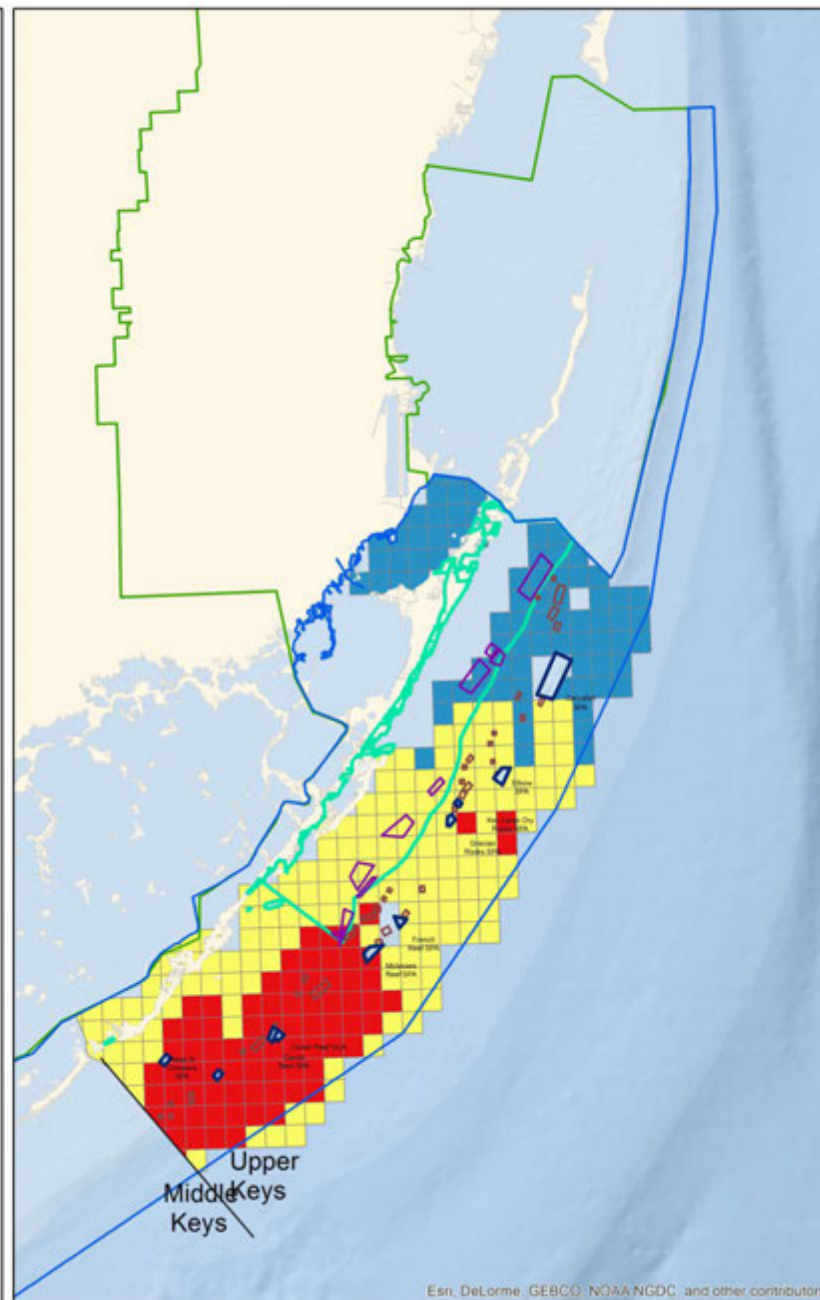
Stone Crab Fishers

Number of Fishers

- High
- Medium
- Low

Boundaries

- FKNMS Boundary
- SPAs, SUAs
- Pennekamp Coral Formation Protection Areas
- NMFS Areas Closed to Lobster Trap Gear
- Pennekamp State Park
- National Parks



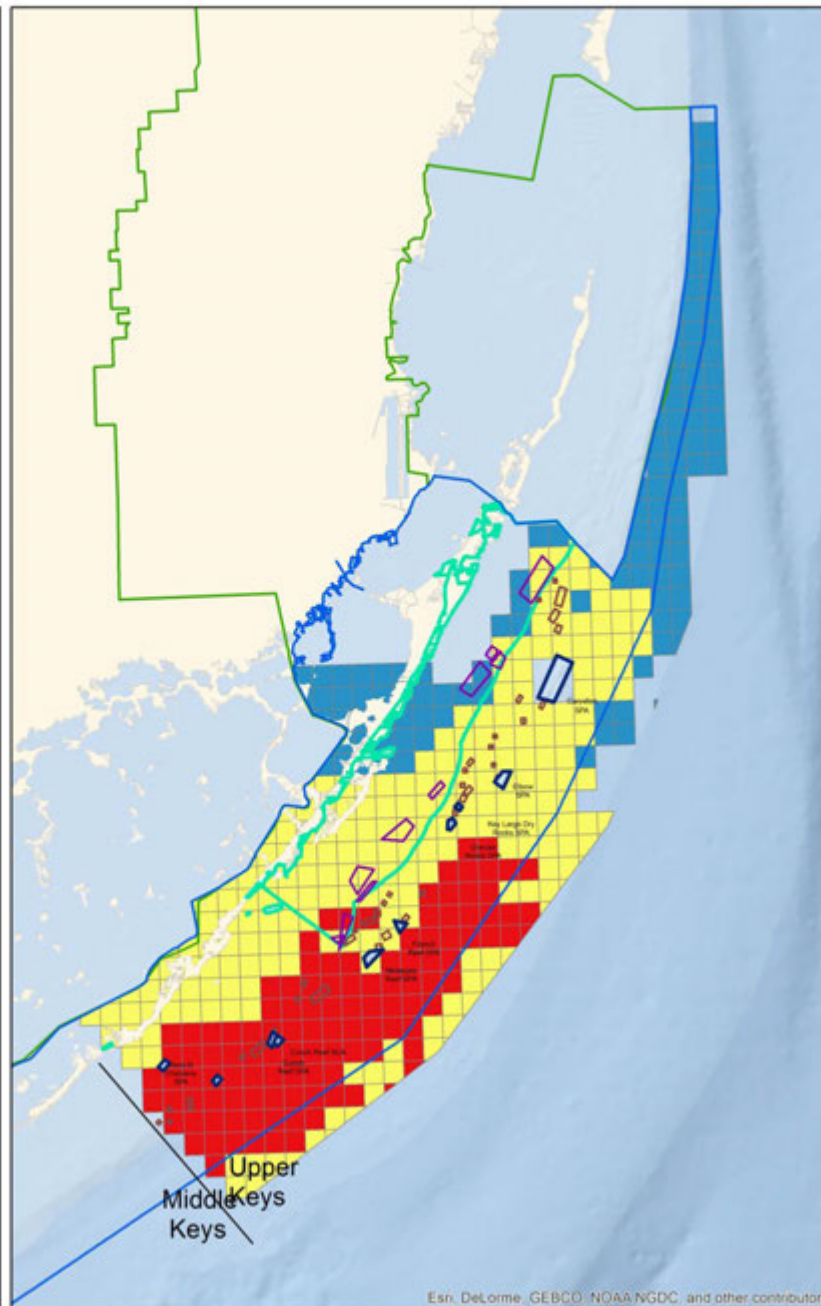
Reef Fish Fishers (Snapper/Grouper)

Number of Fishers

- High
- Medium
- Low

Boundaries

- FKNMS Boundary
- SPAs, SUAs
- Pennekamp Coral Formation Protection Areas
- NMFS Areas Closed to Lobster Trap Gear
- Pennekamp State Park
- National Parks



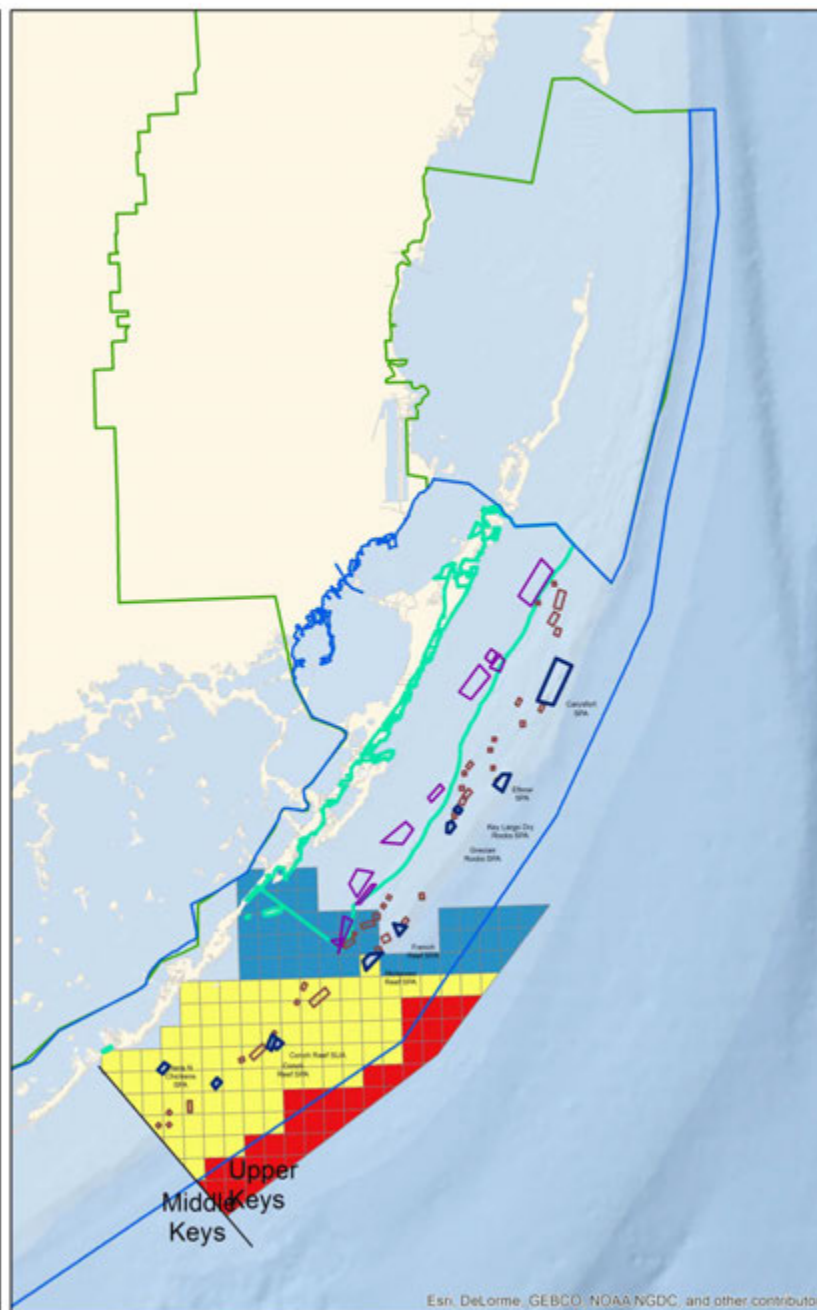
King Mackerel Fishers

Number of Fishers

- High
- Medium
- Low

Boundaries

- FKNMS Boundary
- SPAs, SUAs
- Pennekamp Coral Formation Protection Areas
- NMFS Areas Closed to Lobster Trap Gear
- Pennekamp State Park
- National Parks

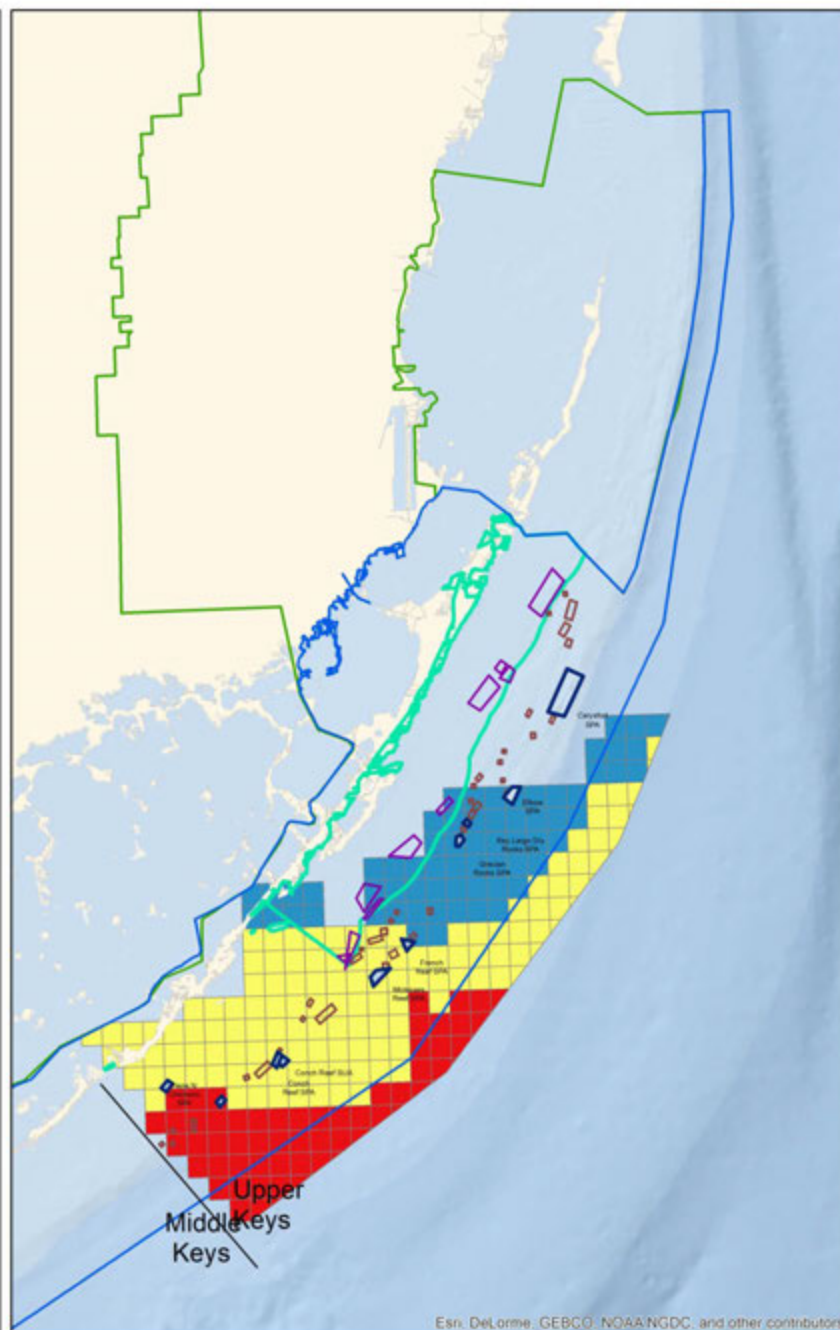


Other Pelagics Fishers (Cobia, Wahoo, Dolphin)

Number of Fishers



Boundaries

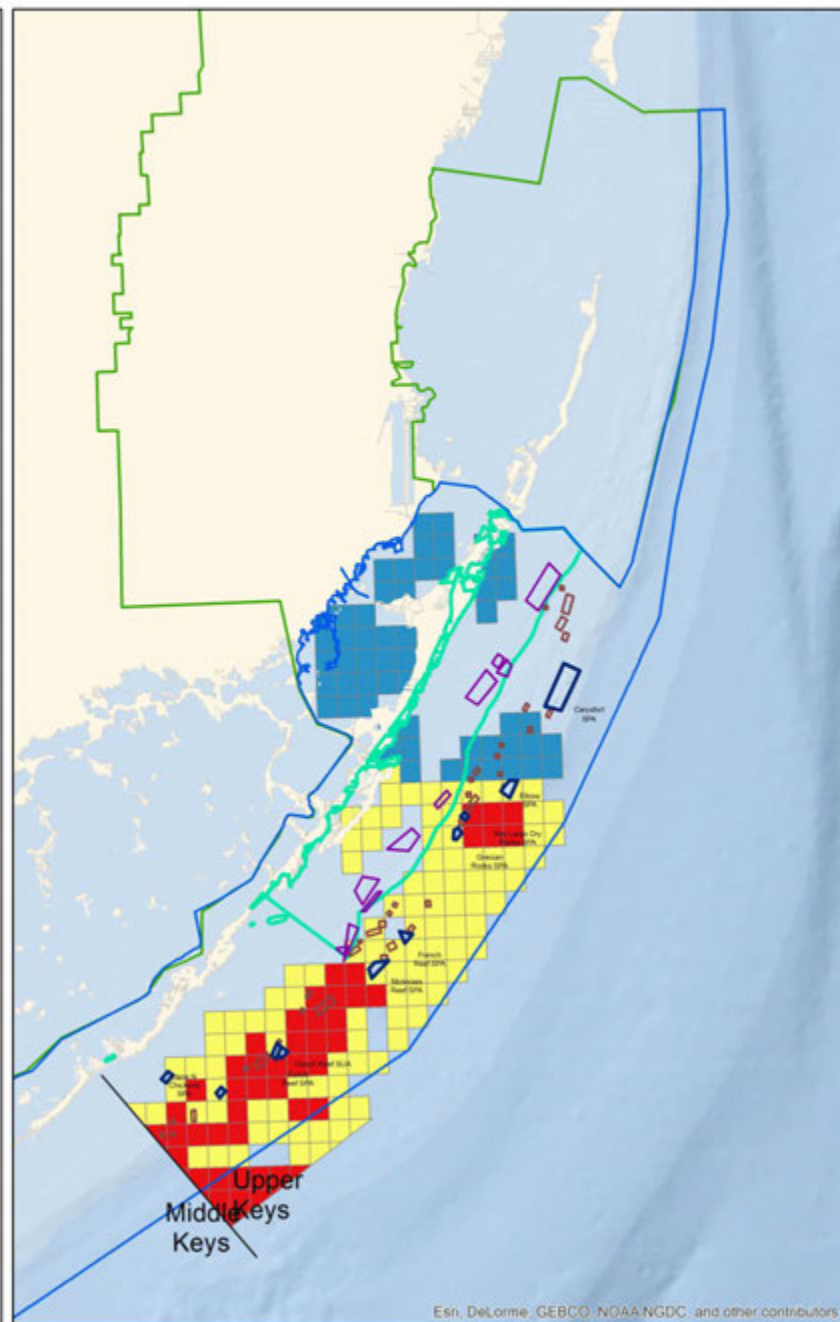
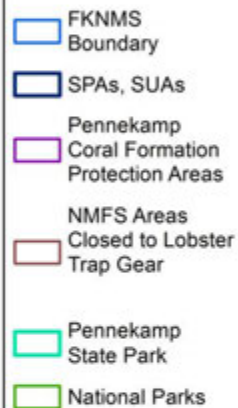


Bait Fish Fishers

Number of Fishers



Boundaries



THANK YOU

