HOTSPOTS MAPPING INITIATIVE

Gulf Coast Charter-for-hire Fishery

WORKSHOPS AND PROGRESS UPDATES, AUGUST 2024

Photo by Return 'Em Right

DECEMBER 2023 AND FEBRUARY 2024 WORKSHOP SUMMARY

The National Fish and Wildlife Foundation's (NFWF) Hotspots Mapping Initiative team met with members of the charter-for-hire fishery and Charter Fisherman's Association in Galveston, Texas, and Destin, Florida, in late 2023 and early 2024, respectively. Approximately 10 fishers attended each workshop and recommended design and content preferences for communication networks to improve captains' fishing experiences on the water and to help avoid unnecessary fish mortality via depredation or bycatch. Proposed communications networks will be led by captains and supported by trusted, nongovernmental mapping initiative partners.

NFWF HOTSPOTS MAPPING INITIATIVE PURPOSE

Commercial fishing fleets have successfully used communication programs and mapping tools to identify hotspots and reduce bycatch in different regions of the United States. The goal is to support fishers in establishing communications and mapping networks in the Gulf to improve their catch and reduce unwanted bycatch and predator interactions. The initiative is nonregulatory and should help increase efficiency and improve fishing experiences by avoiding areas with high levels of discards or depredation and enhance communication technologies on fishing boats. Additional funding to support implementation and needed technology may become available in 2025, so participants should not incur additional costs if they choose to participate.

CRITICAL ISSUES FOR THE CHARTER-FOR-HIRE FISHERY

Fishers participating in workshops identified depredation (by sharks and marine mammals) and high current speeds as primary issues negatively impacting the charter fishery, with discards as a secondary issue that could be addressed later. High current speeds and frequent depredation can make areas and times unfishable and result in higher mortality rates for caught species.

Sharing information in near-real time could allow participants to avoid unwanted depredation, save fuel and tackle, and improve experiences for customers.

Photo by Return 'Em Right

HOW THE COMMUNICATION NETWORK WOULD WORK

Using a simple web-based app, participating captains would record information such as depredation intensity levels, discards, current speed, and other unfavorable fishing conditions onto a gridded map. The network and web app would be adaptable, allowing it to collect data on emerging issues as requested by fleet members. It would also display these data and/or modeled results on maps within the app, making them useful for the fishers.
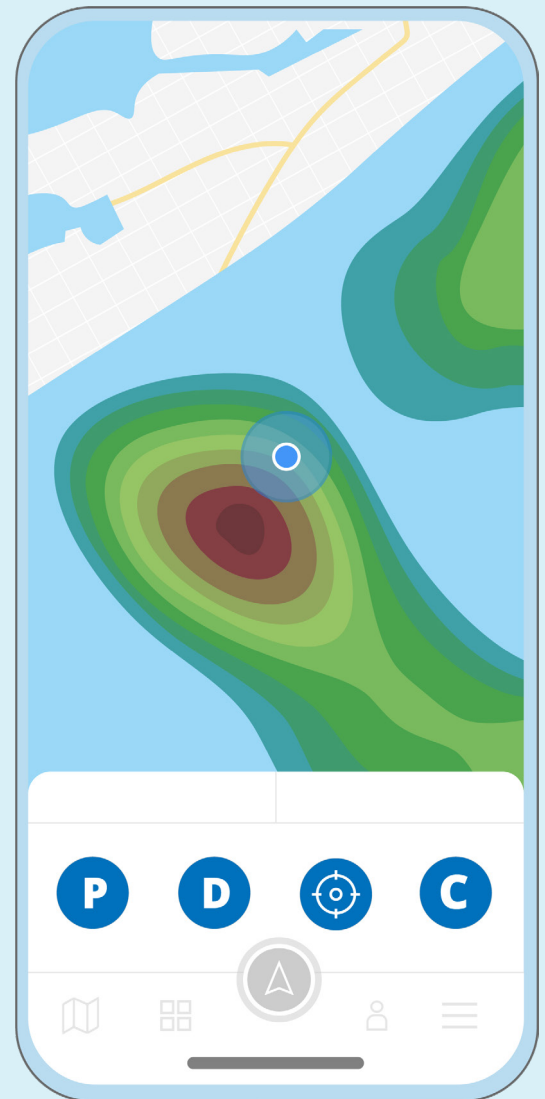
This information would be shared only among a trusted group of fleet members, with secure login access and at an agreed-upon resolution to maintain fishing locations' confidentiality. Aggregated and anonymized data would only be shared outside of the network if the members approve it.

Trusted third parties will collect and map network reports on the web-based app, allowing members to view near-real-time updates on fishing conditions.

PROGRAM FEATURES: FOR FISHERS, BY FISHERS

+ **Industry-led:** Data sharing will be determined by the fishers within the network according to what is most useful to the group. All participation is voluntary, and none of the information collected through this effort—which would be above and beyond mandatory federal and state reporting requirements—will be used for regulatory purposes.

+ **Confidentiality-focused:** Each localized network will be designed to share information only with agreed-upon members. Data will be shared at a sufficiently low resolution to protect fishing locations' confidentiality.

+ **Technology-based:** The initiative will produce implementation plans that could leverage support to provide members with technology that allows efficient, real-time communication on the water; for example, via Starlink and a web app.

The planned communication networks will be customizable to meet the individual fishing fleets' needs and could be regionally expanded to include additional interested fleets in ports across the Gulf coast.

P **Predation** (sharks, dolphins, etc)

D **Discards**

◎ **Targeting/Location**

C **Current Speeds**