

# The Hotspots Mapping Initiative

## BACKGROUND

In 2019, the Deepwater Horizon Open Ocean Trustees released a final Open Ocean Restoration Plan. They selected 18 projects to help restore fish, sea turtles, marine mammals, and deepsea coral habitats injured by the 2010 oil spill in the Gulf. The Communications Networks and Mapping Tools to Reduce Bycatch Project, aka The Hotspots Mapping Initiative, is one of the 18 projects. The five-year, \$4.4 million project managed by the National Fish and Wildlife Foundation (NFWF) and the National Oceanic and Atmospheric Administration (NOAA)—will explore the feasibility of communication and mapping tools to help fishermen and anglers avoid unwanted catch.

Commercial fishing fleets have successfully used communication programs to reduce bycatch in different regions of the United States. In Alaska, trawl fisheries have partnered with a private company (Sea State, Inc.) to establish and manage a fleet communication program designed to reduce bycatch including chum and Chinook salmon, halibut, crab, and Pacific rockfish. On the East Coast, the Cornell Cooperative Extension Marine Program has worked with commercial fishermen to help identify hotspots of bycatch for nine species, including butterfish and windowpane flounder.

# **PROJECT DETAILS**

The goal of the project is to reduce bycatch by supporting collaborations among fishermen and anglers to share fishing information, develop communication and mapping tools to avoid unwanted fishing interactions, and improve fishing experiences. For the initial phase of the project, we are working to identify and engage with individuals from fisheries, fleets, and fishing organizations in and around the Gulf coast who may benefit from a hotspot management system and would be willing to discuss coordination, logistics, and data needs. Later in the project, we will work with commercial and recreational fishery participants to identify fisheries, regions, fleets, and/or ports that would benefit from hotspot communication networks,

as well as determine what data and technologies are needed to support these networks. If hotspot communication networks seem feasible, NOAA may seek resources to implement them through a subsequent, separate project.

# **QUESTIONS AND ANSWERS**

#### Who can participate?

We want to talk to potential participants from a wide array of fishing communities in and around the Gulf coast, including commercial, charter, and recreational fishermen. Anyone at all interested in the use of hotspot communication networks to reduce unwanted catch and improve productivity should consider participating.

#### WHAT IS A BYCATCH HOTSPOT?

Bycatch can be defined as incidentally caught marine life that is then discarded. "Bycatch hotspots" are geographical areas with elevated risks of high levels of discards or bycatch during recreational or commercial fishing activities. Hotspots may be influenced by habitat, oceanographic features, spatio-temporal distribution patterns of target and non-target species, and/or the fishing practices employed, such as gear choice.



## Is this voluntary?

Yes. Hotspots will be identified by fishermen and anglers who voluntarily contribute information and data to a third-party provider. The information and data will be combined with other environmental and species/fisheries distribution data to create real-time, regularly updated spatial management guidance that will allow for better commercial and recreational fishing experiences.

### Why should I participate?

Sharing information with your fellow fishermen or anglers through a hotspot communication network will reduce unwanted catch, benefit commercial and recreational fishing economically through less sorting time and fewer dead discards, and create potential marketing or certification opportunities. **Avoiding bycatch will allow more fish to grow and reproduce, restoring natural resources that were affected by the** *Deepwater Horizon* **oil spill.** 

#### FOR MORE INFORMATION CONTACT

William D. Heyman, PhD <u>wheyman@lgl.com</u> Senior Marine Scientist, LGL Ecological Research Associates Inc.

Taylor Beyeatbeyea@lgl.comSenior Marine Ecologist, LGL Ecological Research Associates Inc.

Phone: 979.846.7000

#### www.nfwf.org/programs/bycatch-hotspots-project

PHOTOS: Back page bottom: David Hills; Back page top: Jay Fleming

HOTSPOTS MAPPING INITIATIVE