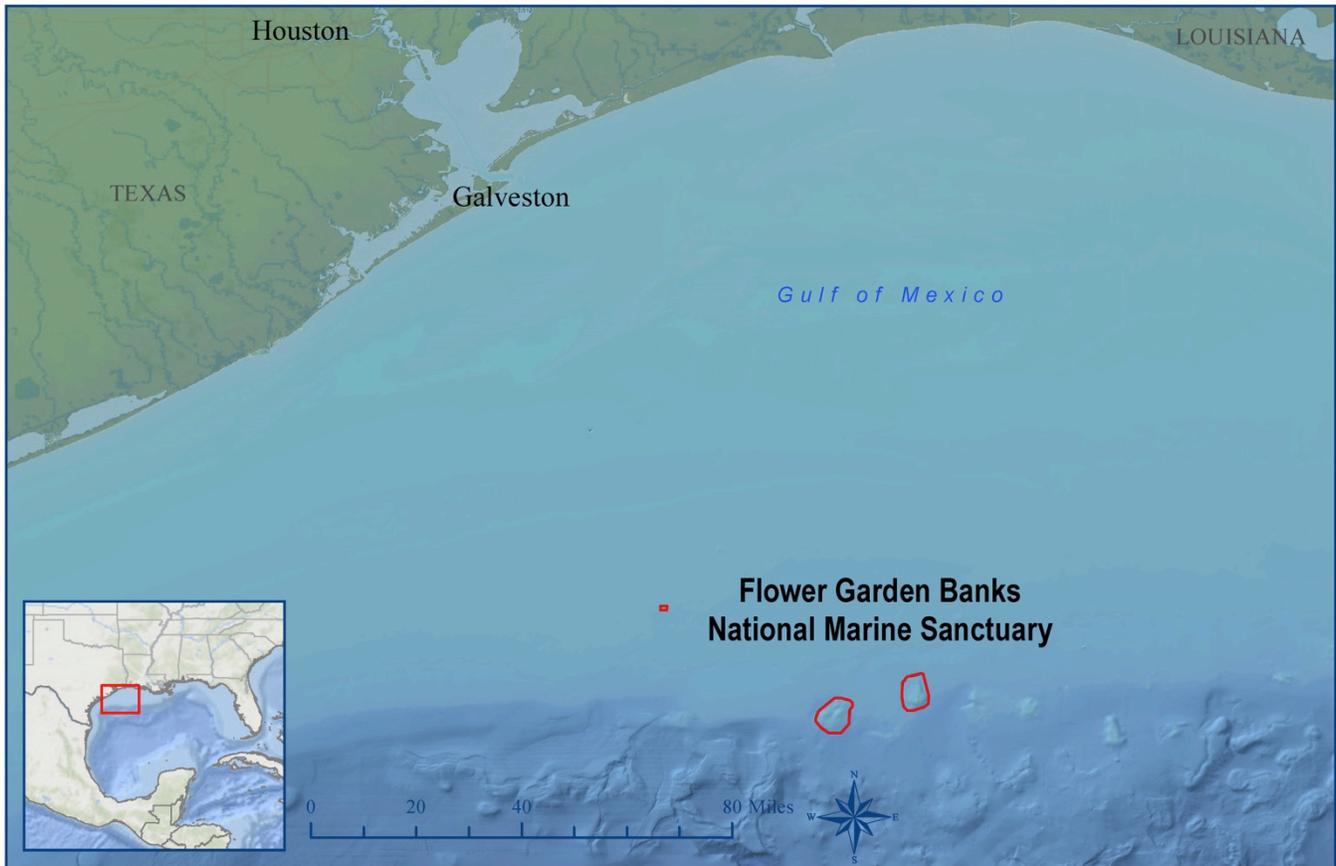


## FY17 Accomplishments



### BACKGROUND

Flower Garden Banks National Marine Sanctuary was established in 1992 to protect and preserve small underwater mountains created by salt domes. These salt domes rise from the depths of the Gulf of Mexico and are separated from each other by miles of open ocean. The tops of the banks are covered by gardens of coral, sponges and algae that provide habitat for a variety of tropical wildlife.

Flower Garden Banks National Marine Sanctuary is part of the National Marine Sanctuary System, which is a network of underwater parks

encompassing more than 600,000 square miles of marine and Great Lakes waters from Washington state to the Florida Keys, and from Lake Huron to American Samoa. National marine sanctuaries are managed for the conservation of their natural and cultural resources, while supporting sustainable recreation, tourism and compatible commercial activities. The network includes a system of 13 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments.

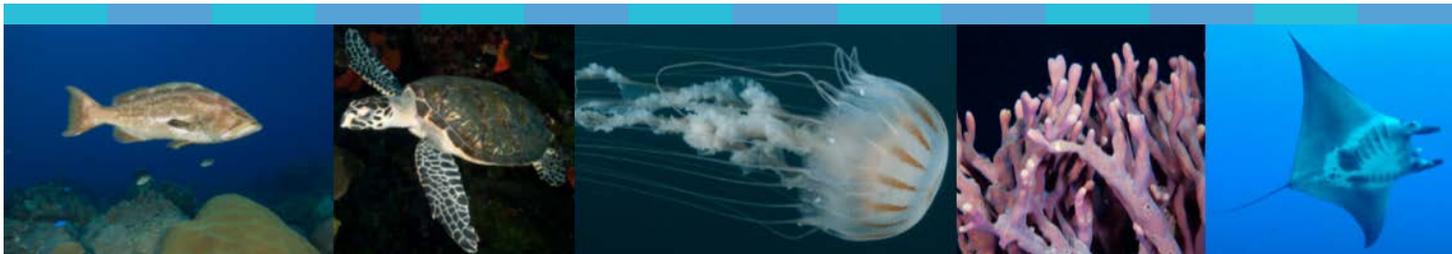


Photo: NOAA

Students from the Houston Zoo Collegiate Conservation Program dissect lionfish caught in the sanctuary.



Photo: NOAA

Coral colonies showed signs of recovery in January 2017.



Photo: NOAA

The R/V *Manta* crew identified vessel-prohibiting debris and obstacles in the aftermath of Hurricane Harvey.

The invasion of lionfish, a native Pacific species, served as an excellent topic to draw people into conversations about the sanctuary. Staff offered a variety of lionfish dissections via Facebook Live, on-site demonstrations, and hands-on participation. The program reached a significant range of ages, from very young to senior citizens, and included both formal and informal formats. Vivid descriptions of the sanctuary resulted from conversations about how the presence of lionfish negatively affects the local environment. Participants also engaged in discussions about solutions, such as developing a commercial fishery.

### Long-term monitoring

As part of the long-term monitoring program at Flower Garden Banks National Marine Sanctuary, repetitive monitoring stations helped track coral bleaching and recovery after the 2016 bleaching event. This program was a partnership between the sanctuary and Bureau of Ocean Energy Management. New monitoring stations installed at each bank (depths ranging from 100 to 130 feet) allowed for additional comparisons in the coral community between deep and shallower monitoring stations. These monitoring stations, a critical component to the program, are photographed annually to track changes in coral colonies over time.

### Hurricane Harvey response

In 2017, Hurricane Harvey inundated the Houston/Galveston area with rain. Using the sanctuary's R/V *Manta*, the crew helped the U.S. Coast Guard and partners survey the Houston Ship Channel following the storm. Subsequently, many partners came together to assess the hurricane's impact on Flower Garden National Marine Sanctuary. The team used moored buoys to track fresh water as it drained into the Gulf of Mexico. Salinity dropped significantly at marked buoys within sanctuary waters. While salinity level recovered within a few days, long-term impacts to the reef remain to be determined.

## Flower Garden Banks National Marine Sanctuary Looking Ahead to FY18

- The Sanctuary Advisory Council's 10-member Boundary Expansion Working Group will present its final recommendation regarding the proposed sanctuary expansion to the full council in early 2018.
- The R/V *Manta* will provide the research platform for scientific cruises, including Cooperative Institute for Ocean Exploration, National Coral Reef Monitoring Program's biennial monitoring, and ROV explorations.
- The sanctuary will work with partners to initiate an Ocean Guardian program for local schools. Grant recipients will implement programs that teach students about the watershed and include active protection.