

## 2013 ACCOMPLISHMENTS



### TEACHING DIVERS & SNORKELERS TO PROTECT THE REEF

Three new businesses joined the sanctuary's Blue Star program, which recognizes charter boat operators committed to protecting the Florida Keys coral reef ecosystem. The operators support reef protection through the promotion of responsible snorkeling and diving practices. Studies have shown that divers and snorkelers that receive targeted education prior to their activities are less likely to make contact with reef habitat. Blue Star operators also produced a new reef etiquette video, "Dive into Coral Reef Conservation," which teaches divers and snorkelers how to become better stewards of the coral reefs.



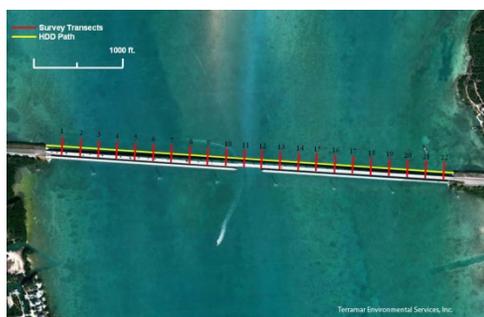
### HERITAGE AWARENESS ENHANCES TOURIST EXPERIENCE

In partnership with Florida's Public Archaeology Network and the Florida Bureau of Archaeological Research, a Heritage Awareness Diving Seminar was conducted to teach dive instructors how to proactively protect shipwrecks, reefs and underwater cultural sites. These instructors, in turn, teach their own students and tourists visiting the Keys, which receives over 700,000 visitors annually that participate in diving activities. By providing trainings to the tourism industry on submerged cultural resources, protection of non-renewable resources and the value of cultural tourism, the sanctuary is able to greatly enhance visitors' experiences.



### IMPROVING WASTEWATER TREATMENT WITH LESS IMPACT

Working under sanctuary issued permits, transmission lines supporting critical wastewater treatment upgrades are being installed in the Keys. Lines will be placed up to 75 feet below the sea floor using horizontal directional drilling (HDD) under seven channels in Islamorada and the Niles Channel. These wastewater transmission lines will further improve nearshore water quality and the use of HDD technology prevents direct impacts to marine resources. Baseline benthic assessments were performed prior to beginning work to aid in monitoring any long-term effects from the HDD procedures.

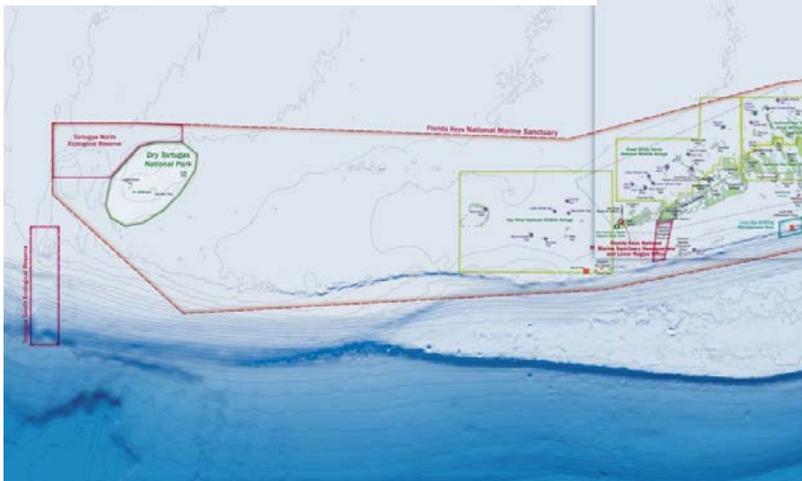
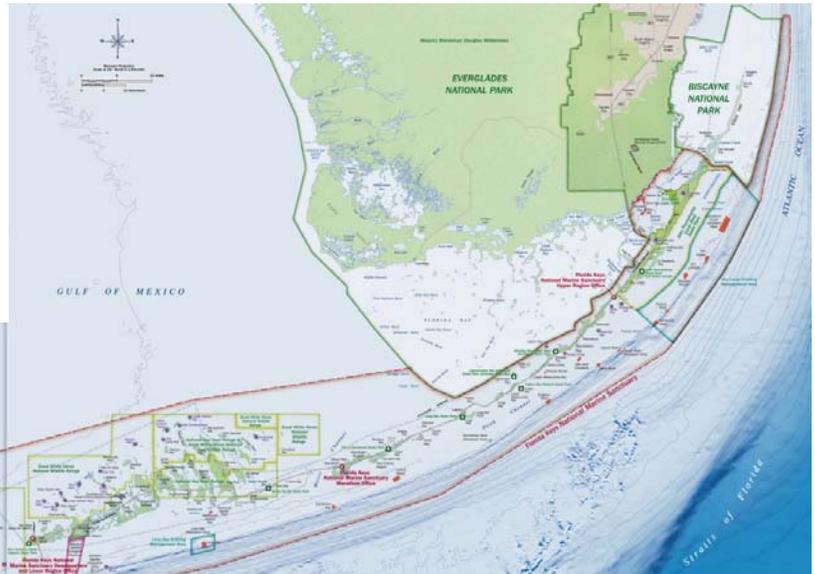


### PARTNERSHIPS IN ACTION

The first U.S. Coast Guard (USCG)–NOAA Cooperative Maritime Strategy, which enhances collaboration for a safe and sustainable marine environment, was released in February 2013. Following this release, the sanctuary worked with Stations Islamorada, Marathon, and Key West, USCG Sector Key West, Air Station Miami, and Auxiliary Flotilla and Air to conduct dedicated patrols of sanctuary waters. Key efforts included 1,756 USCG vessel patrol hours, almost 150 flight hours documenting over 1,500 vessels within Sanctuary Preservation Areas, and the distribution of charts and sanctuary education packets to boaters.

## LOOKING AHEAD

- The Sanctuary Advisory Council, State of Florida, and U.S. Fish and Wildlife Service are reviewing whether current boundaries, marine zones and regulations adequately address threats to sanctuary resources. A Draft Environmental Impact Statement will analyze recommendations.
- The sanctuary is working with Florida International University to support the operation of Aquarius Reef Base, a unique underwater ocean science and diving facility located offshore Key Largo, Fla. Aquarius provides unparalleled opportunities for ocean research, technology testing, training and public engagement.
- Canal restoration is the next Keys-wide water quality improvement effort and is being overseen by the sanctuary's Water Quality Protection Program. Select demonstration projects using weed barriers, culverts, pumping systems and backfilling will help guide future efforts.



**Florida Keys National Marine Sanctuary** surrounds the Florida Keys archipelago and supports one of the most diverse marine ecosystems in North America. The sanctuary is home to the continent's only living coral barrier reef and beckons divers from around the world. The shallow waters of the 2,900-square nautical mile sanctuary also contain mangrove fringed islands and lush seagrass meadows. Together, these complex ecosystems provide the basis for the valuable tourism and fishing industries that are vital to Florida's economy. Established Nov. 16, 1990.

*NOAA's Office of National Marine Sanctuaries is committed to supporting lives and livelihoods across the nation and in sanctuary communities through socioeconomic research and monitoring to understand the economic and social drivers of sanctuary resources and improve management practices.*

## NATIONAL MARINE SANCTUARY SYSTEM

Olympic Coast  
Cordell Bank  
Gulf of the Farallones  
Papahānaumokuākea  
Hawaiian Islands Humpback Whale  
Monterey Bay  
Channel Islands  
American Samoa (U.S.)



Thunder Bay  
Stellwagen Bank  
Monitor  
Gray's Reef  
Florida Keys  
Flower Garden Banks

○ National Marine Sanctuary  
△ Marine National Monument

Scale varies in this perspective. Adapted from National Geographic Maps.

The Office of National Marine Sanctuaries serves as the trustee for a system of 14 marine protected areas encompassing more than 150,000 square miles of marine and Great Lakes waters from Washington state to the Florida Keys, and from Lake Huron to American Samoa. The system includes 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument. For more information on the National Marine Sanctuary System, visit: <http://sanctuaries.noaa.gov>