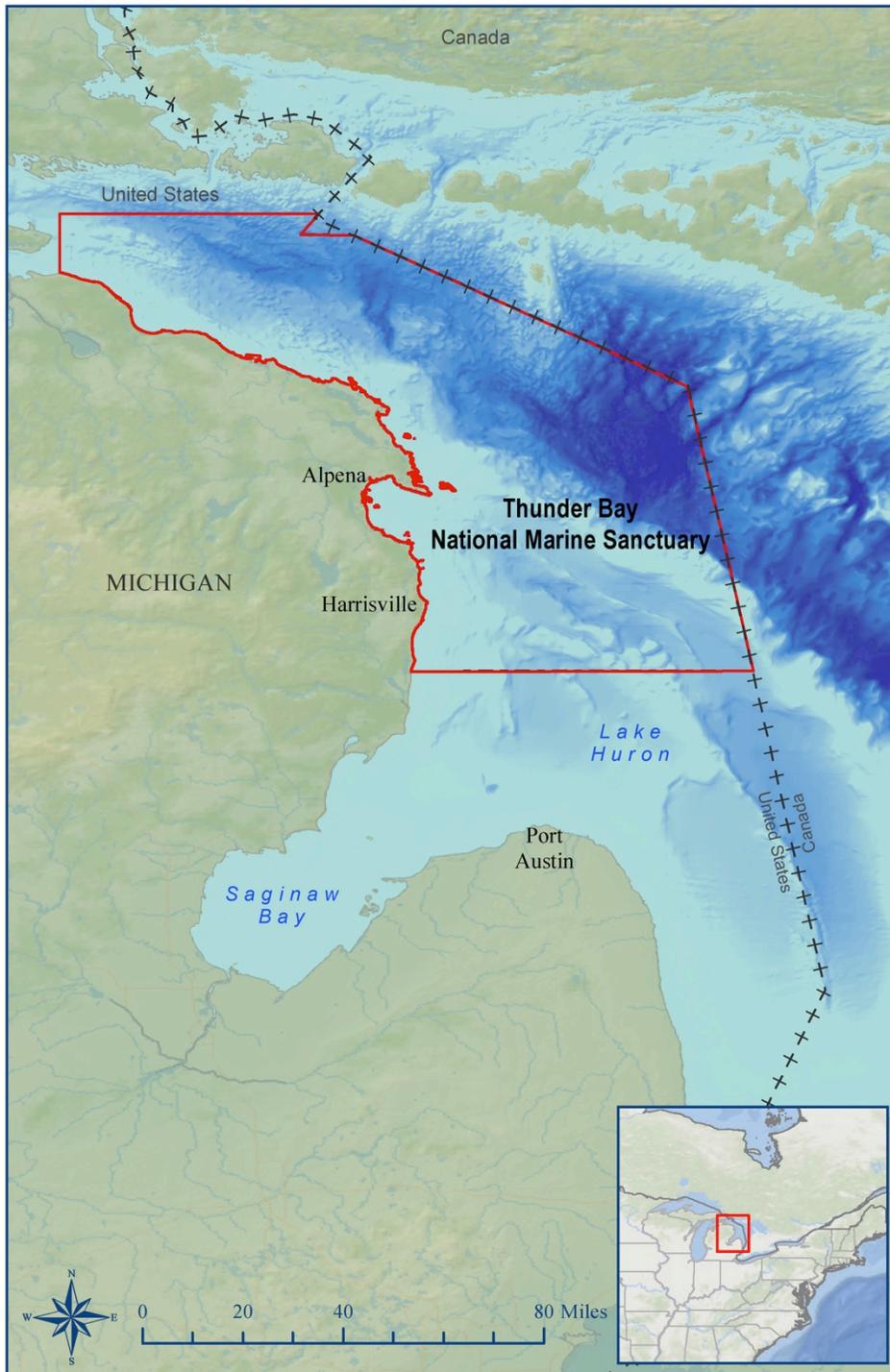


## THUNDER BAY NATIONAL MARINE SANCTUARY

### FY18 Accomplishments



### BACKGROUND

Thunder Bay National Marine Sanctuary was established in 2000 to protect one of America's best-preserved and nationally significant collections of shipwrecks. Unpredictable weather, murky fog banks, sudden gales and rocky shoals earned the area the name "Shipwreck Alley." Fire, ice, collisions and storms have claimed over 200 vessels in and around Thunder Bay.

Thunder Bay 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/TBNMS

Staff rigged a mooring buoy on the wreck of the *Grecian*, which sunk near Thunder Bay Island in 1906, in 105' of water.



Photo: Smithsonian Institute, Mrs. Arthur Pfister

The P-39 Airacobra was one of the planes flown by the Tuskegee airmen during training missions over Lake Huron.



Photo: NOAA/TBNMS

NOAA's Thunder Bay Marine Technology Test is a safe place to gain real-world experience.

### Buoys Encourage Visitors to Get Into Their Sanctuary

Divers, snorkelers, paddlers and boaters tie to moorings in Thunder Bay National Marine Sanctuary to avoid damaging the historical shipwrecks. Sanctuary divers deployed and maintained 42 mooring buoys during the tourist season on 38 shipwrecks. The moorings provided access to sites of a variety of depths, including Thunder Bay's first deep water (165 feet) system at the storied site, *Pewabic*, recently listed on the National Register of Historic Places. The buoys are an important part of the region's tourism infrastructure and blue economy.

### Aviator Down! Lake Huron's Tuskegee Airmen

During World War II, both Tuskegee and Free French fighter pilots conducted training missions over Lake Huron. Unfortunately, as with many similar training programs during World War II, dozens of accidents occurred resulting in the loss of both aircraft and crewmen. During the 2018 field season, sanctuary staff, partners, volunteers and students conducted multibeam and side-scan-sonar surveys and dove to identify targets. The project was funded by a NOAA Ocean Exploration and Research (OER) grant to locate military aircraft lost over what are now sanctuary waters.

### STEM Education Dives into Thunder Bay's Marine Technology Test Tank

The reconstructed Thunder Bay dive tank provided hands-on learning opportunities for Science, Technology, Engineering, and Mathematics. Fourteen teams of middle and high school students were the first to use the tank, competing at the 14th annual Marine Advanced Technology Education (MATE) GreatLakes Regional Remotely Operated Vehicle Competition. Students in Alpena Community College's Marine Tech Program practice, test, and gain real-world experience by operating their underwater robotics in the tank. The Dive Tank hosted training sessions for Michigan State Police Marine Services Team, NOAA tethered communications, and cold water training classes.

### Thunder Bay National Marine Sanctuary Looking Ahead to FY19

- A new exhibit on the effect of marine debris on the environment will be installed at NOAA's Great Lakes Maritime Heritage Center in 2019. The Center's 100,000 yearly visitors will learn about this important ocean and Great Lakes issue.
- Partnering with Air National Guard's Combat Readiness Training Center, Thunder Bay will conduct multibeam sonar and mapping to identify historic and prehistoric cultural resources in the R4207 Overwater Range, a designated area for live weaponry tests.
- Funded by the Michigan Department of Transportation, Thunder Bay and partners will install 89 interpretive panels featuring historical shipwrecks and lighthouses along the Great Lakes Maritime Heritage Trail in Alpena, Alcona, and Presque Isle counties.