Saildrone Awarded Contract to Map Florida’s Coastal Waters



Two Saildrone Voyager USVs equipped with NORBIT WINGHEAD i80s echo sounders for high-resolution mapping will survey 2,817 square kilometers of seafloor in the Gulf of Mexico.

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St. Petersburg, Fla. – Saildrone has been selected by the Florida Department of Environmental Protection (FDEP) to map Florida’s coastal waters in the Gulf of Mexico as part of the Florida Seafloor Mapping Initiative (FSMI), a multiyear effort to provide statewide stakeholders with accessible, high-quality, and high-resolution seafloor data of Florida’s coastal waters within the continental shelf. Updated mapping data of coastal systems is critical for protecting offshore infrastructure, habitat mapping, restoration projects, emergency response, coastal resilience, and hazard studies for the state’s citizens.

Saildrone has been tasked with collecting high-resolution

multibeam data in a region known as Middle Grounds. The mission, valued at $1.66M, will use two 10-meter Saildrone Voyager uncrewed surface vehicles (USVs) equipped with NORBIT WINGHEAD i80s echo sounders for high-resolution mapping, and radar, AIS, and cameras for maritime domain awareness. Saildrone will map 2,817 square kilometers of seafloor, approximately 130 kilometers northwest of St. Petersburg.

“Mapping the Florida coastline is vital for understanding our dynamic coastal environments, supporting sustainable resource management, and enhancing resilience against extreme weather events. FSMI will provide critical insights that empower policymakers, researchers, and local communities to protect vital ecosystems and infrastructure along Florida’s coasts,” said Brian Connon, Saildrone VP Ocean Mapping. “Saildrone USVs efficiently and safely collect high-resolution bathymetric data while minimizing environmental impact.”

At 2,170 kilometers long, Florida’s coastline is second only to Alaska among US states. Many parts of the Florida coast remain unsurveyed, with existing nautical charts relying on outdated and low-resolution data.

FSMI builds on the efforts of the Florida Coastal Mapping Program (FCMaP), an initiative led by federal and Florida state agencies and other community stakeholders to generate a comprehensive high-resolution seafloor data set of Florida’s coastal waters by 2028. The data will be available for immediate use to update navigational charts and identify navigation hazards, provide fundamental baseline data for scientific research, and provide information for use by emergency managers and responders.

The data Saildrone collects will help better understand Florida’s coastal vulnerability and hurricane impact, evaluate the performance of restoration projects, and support ongoing coastal resilience efforts and flood risk mapping.