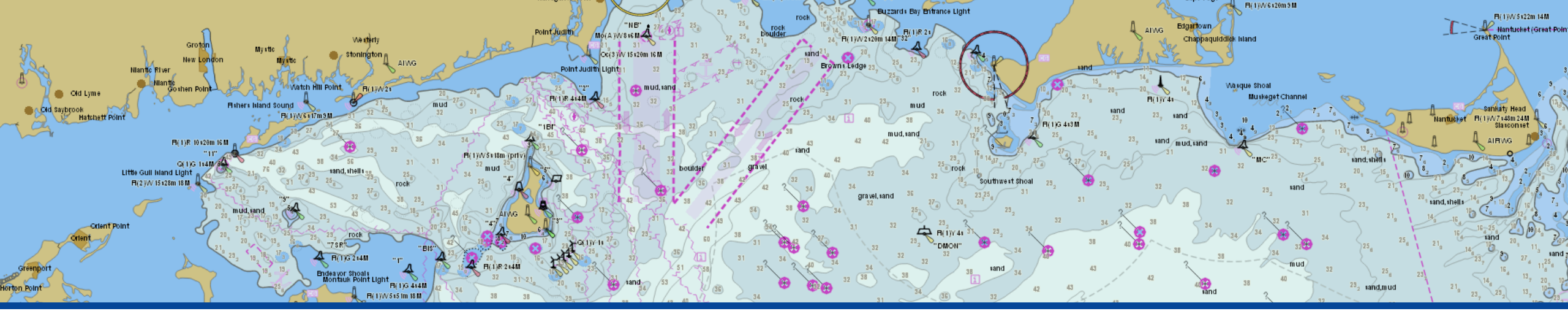
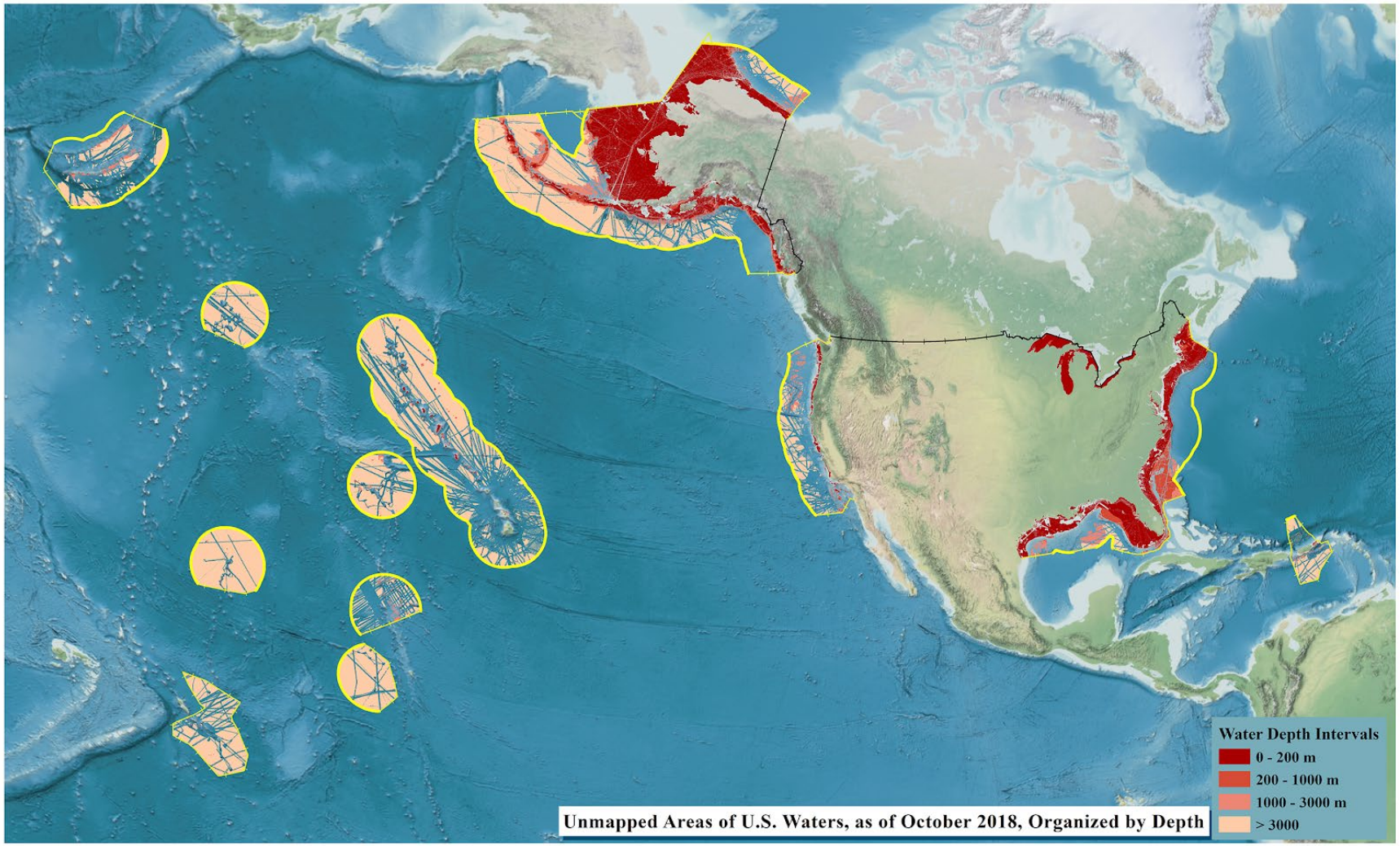



# Progress Report: Unmapped U.S. Waters

Rear Admiral Shepard M. Smith

# Gap Analysis



# Level of Effort

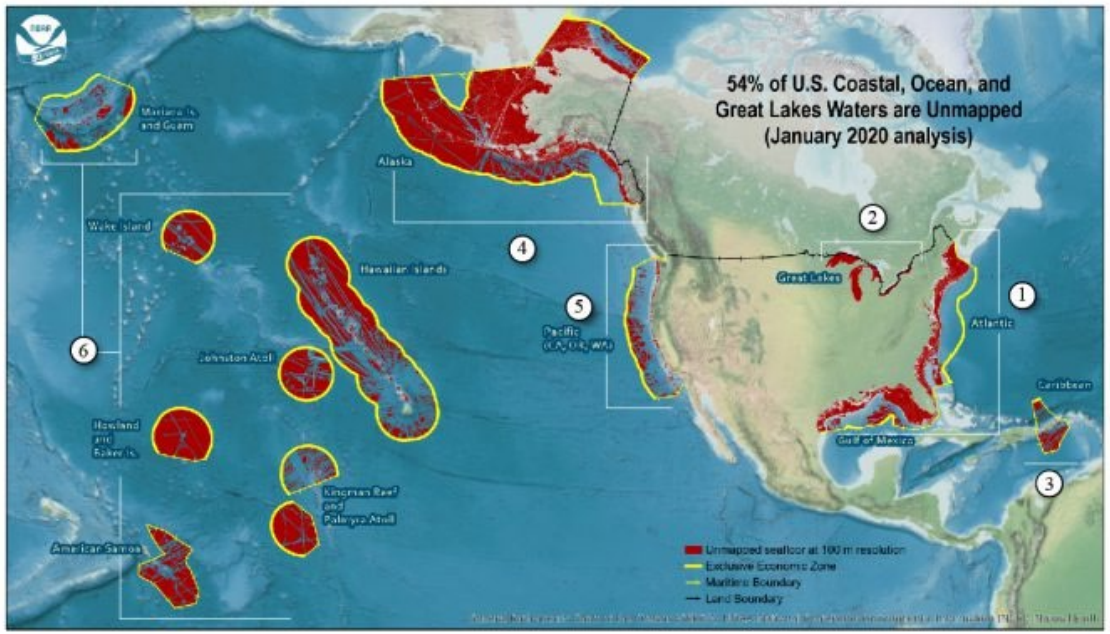
| Remaining to complete to modern standards | Effort - (ship years) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 5-20 m | 20-40 m | 40-200 m | 200-1,000 m | 1,000 - 1500 m | 1,500 to 3,000 m | 3,000-5,750 m | 5750 + | **Total** |
| New England | 2.3 | 1.5 | 3.4 | 0.2 | 0.0 | 0.0 | 0.0 | - | **7.4** |
| Atlantic | 9.5 | 6.3 | 3.3 | 0.3 | 0.0 | 0.0 | 0.0 | - | **19.5** |
| Caribbean | 0.7 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | **1.1** |
| Florida | 13.9 | 7.0 | 3.7 | 0.6 | 0.0 | 0.0 | 0.0 | - | **25.3** |
| Gulf | 7.3 | 4.1 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | - | **14.1** |
| Great Lakes | - | - | 2.8 | 0.0 | - | - | - | - | **2.8** |
| West Coast | 1.2 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 | 0.1 | - | **2.9** |
| Alaska | 32.5 | 25.3 | 40.1 | 1.3 | 0.1 | 0.2 | 0.9 | 0.0 | **100.4** |
| Hawaii & Pacific Isl. | 0.9 | 0.6 | 0.2 | 0.0 | 0.0 | 0.1 | 2.0 | 0.1 | **3.9** |
| **total** | **68.4** | **45.5** | **57.2** | **2.5** | **0.2** | **0.4** | **3.0** | **0.1** | **177.4** |
| | **39%** | **26%** | **32%** | **1%** | **0%** | **0%** | **2%** | **0%** | **100%** |

Greenaway et al. “Are we done yet? An empirical estimator of level of effort for seafloor surveys - including an estimate for the full survey of U.S. waters”. Submitted for publication.

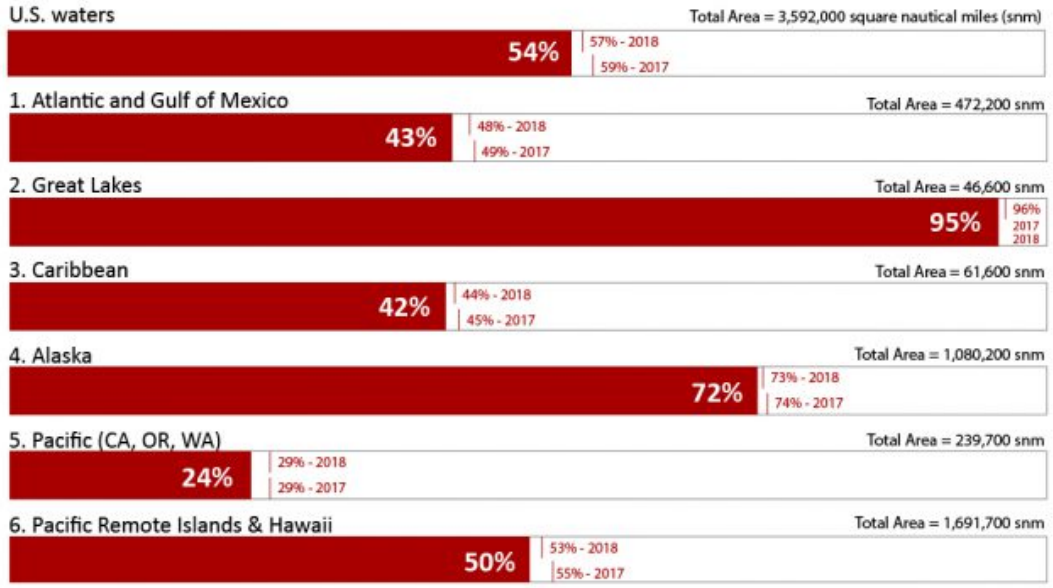
# Progress Report

## PROGRESS REPORT: Unmapped U.S. Waters

Knowledge of the depth, shape, and composition of the seafloor are foundational data elements necessary to explore, sustainably develop, understand, conserve, and manage our coastal and offshore natural resources. The 2019 **Presidential Memorandum on Ocean Mapping of the United States Exclusive Economic Zone and the Shoreline and Nearshore of Alaska** and the global **Seabed 2030** initiative make comprehensive ocean mapping a priority for the coming decade. This report, updated annually, will track our progress to this important goal.

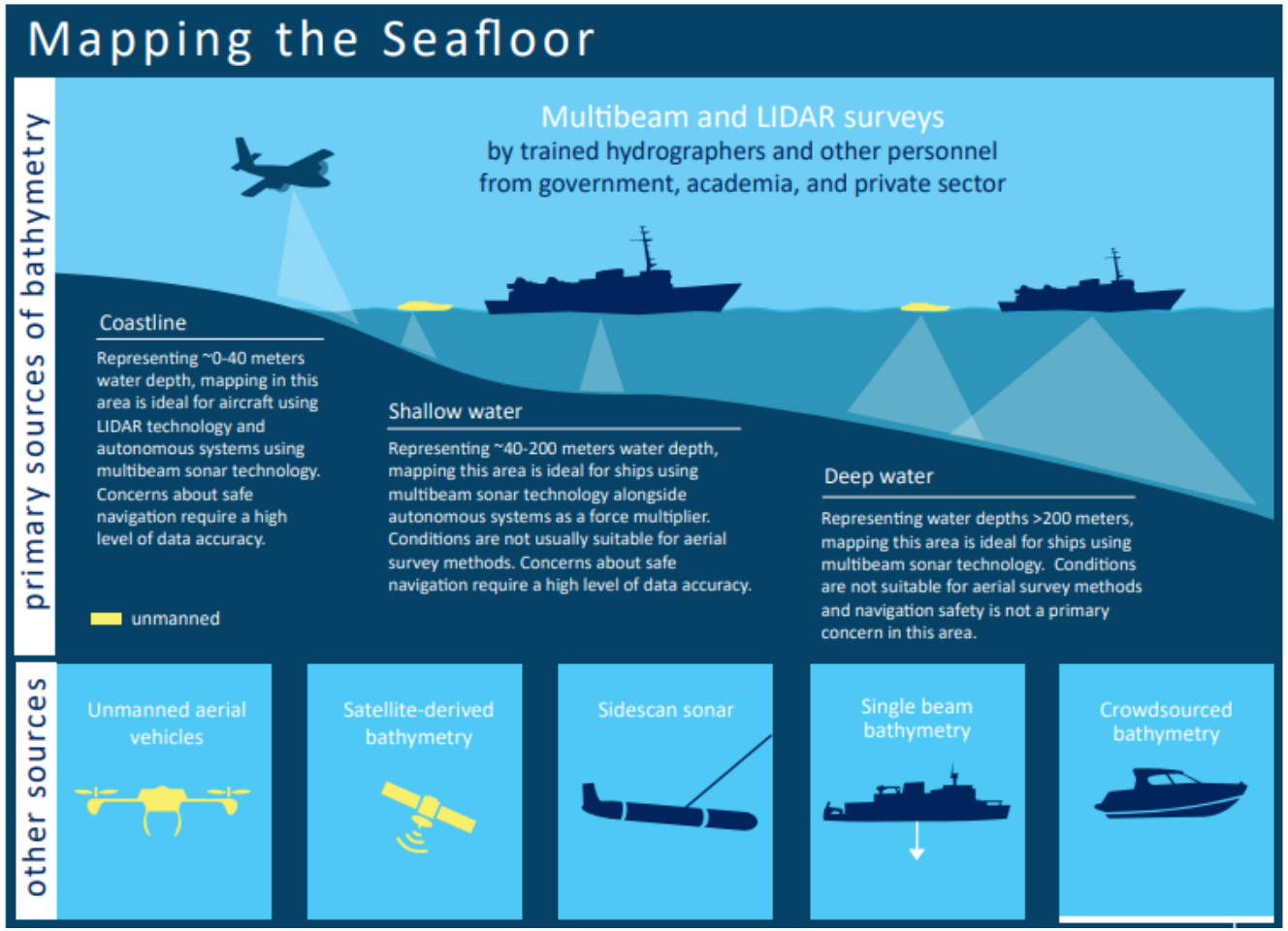



### Percent of U.S. Waters Still Unmapped in 2019



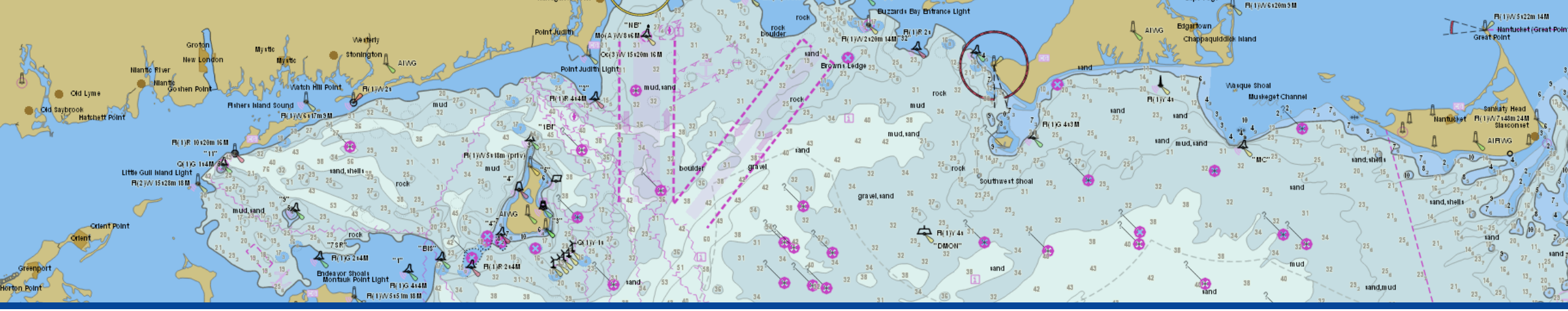

National Oceanic and Atmospheric Administration — March 2020

# Progress Report




## Strategies for Filling Gaps

Partnerships and technology innovations are key to fulfilling seafloor mapping goals. As technology improves, there are two primary ways to contribute: (1) participate in U.S. mapping coordination activities, and (2) share your data. Publicly accessible bathymetry benefits numerous communities of users and the coordinated collection of new data promotes the integrated ocean and coastal mapping goal to "map once, use many times." For the latest status on these efforts, visit http://iocm.noaa.gov/seabed-2030.html.


Point Judith
Point Judith Light
Groton
New London
Mystic
Stonington
Westerly
Niantic River
Niantic
Goshen Point
Old Lyme
Old Saybrook
Hatchett Point
Watch Hill Point
Fishers Island Sound
Little Gull Island Light
Orient Point
Orient
Greenport
Horton Point
Montauk Point Light
Endeavor Shoals
Buzzards Bay Entrance Light
Brown's Ledge
Edgartown
Chappaquiddick Island
Wasque Shoal
Muskeget Channel
Southwest Shoal
Nantucket
Sankaty Head
Great Point
Nantucket (Great Point)
AIWG
rock
boulder
mud
sand
mud, sand
gravel
gravel, sand
sand, shells
"NB"
"1"
"2"
"3"
"4"
"5"
"7SR"
"BIG"
"IBF"
"DMON"
"MC"

# Questions