



# Office of Coast Survey

CAPT Rick Brennan

March 3, 2021

HYDROGRAPHIC SERVICES REVIEW PANEL



noaa

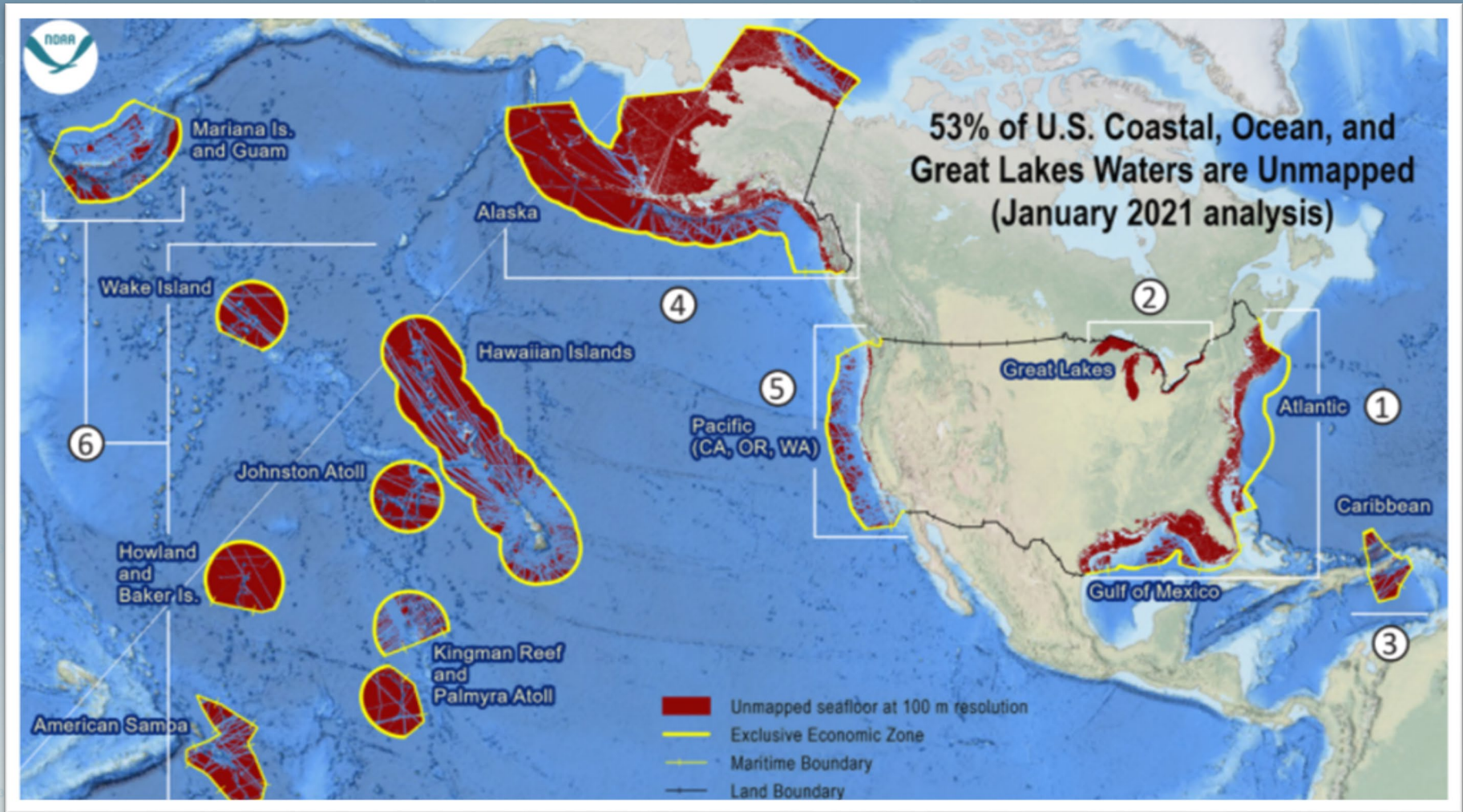
# NOMEAC Implementation at Coast Survey

## NOMEAC Objective

| Coast Survey Ocean Mapping measurable strategy   | Objective 2.1. Establish a Standard Ocean Mapping Protocol (SOMP) | Objective 2.2. Coordinate and Execute Campaigns to Map the U.S. EEZ | Objective 2.3. Make Mapping Data Usable and Available | Objective 4.2. Support Development, Testing, Deployment, and Use of New Technologies | Objective 4.3. Support Partnerships with Orgs that are Promoting, Investing in, or Developing Ocean... | Objective 5.1. Maximize Opportunities for Non-Federal Participation | Objective 5.2. Foster Cross-Sector Engagement | Objective 5.3. Inspire and Involve the Public |
|--|---|---|---|--|--|---|---|---|
| 2.1.1 – Work with IWG-OCM to develop ocean mapping and characterizations standards         | ✓   |   |   |  |  |   |   |   |
| 2.1.2 - Develop annual mapping priorities with key partners                                |   | ✓   |   |  |  |   | ✓   |   |
| 2.1.3 - Map at least 20,000 square nautical miles annually with partners                   |   | ✓   |   |  | ✓  |   |   |   |
| 2.2.1 – Provide funding to address mapping gaps  |   | ✓   |   |  |  |   |   |   |
| 2.2.2 – Annually update and share the Hydrographic Surveys Specifications and Deliverables | ✓   |   |   |  |  |   |   |   |
| 2.2.3 – Provide hydrographic training to non-NOAA partners                                 |   |   |   |  | ✓  | ✓   |   |   |
| 2.2.4 – Increase mapping contributions from external partners                              |   |   |   |  | ✓  | ✓   | ✓   | ✓   |
| 2.3.2 – Pilot project to operationalize uncrewed system swarm for force-multiplied surveys |   |   |   | ✓  |  |   | ✓   |   |
| 2.3.3 – Use airborne systems and satellite derived bathymetry to increase nearshore data   |   |   | ✓   | ✓  |  |   |   |   |
| 2.3.4 – Apply innovative research and techniques to reduce ping to chart time              |   |   | ✓   | ✓  | ✓  |   |   |   |



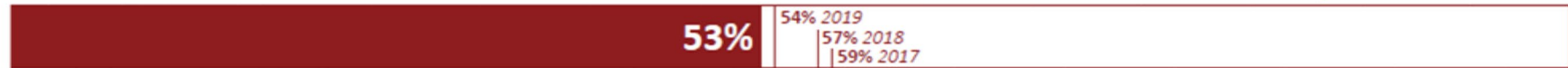
# Progress Report on Ocean Mapping



# Progress Report on Ocean Mapping

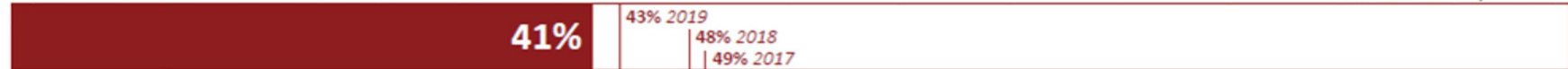
## U.S. waters

Total Area = 3,592,000 square nautical miles (snm)



### 1. Atlantic and Gulf of Mexico

Total Area = 472,200 snm



### 2. Great Lakes

Total Area = 46,600 snm



### 3. Caribbean

Total Area = 61,600 snm



### 4. Alaska

Total Area = 1,080,200 snm



### 5. Pacific (CA, OR, WA)

Total Area = 239,700 snm

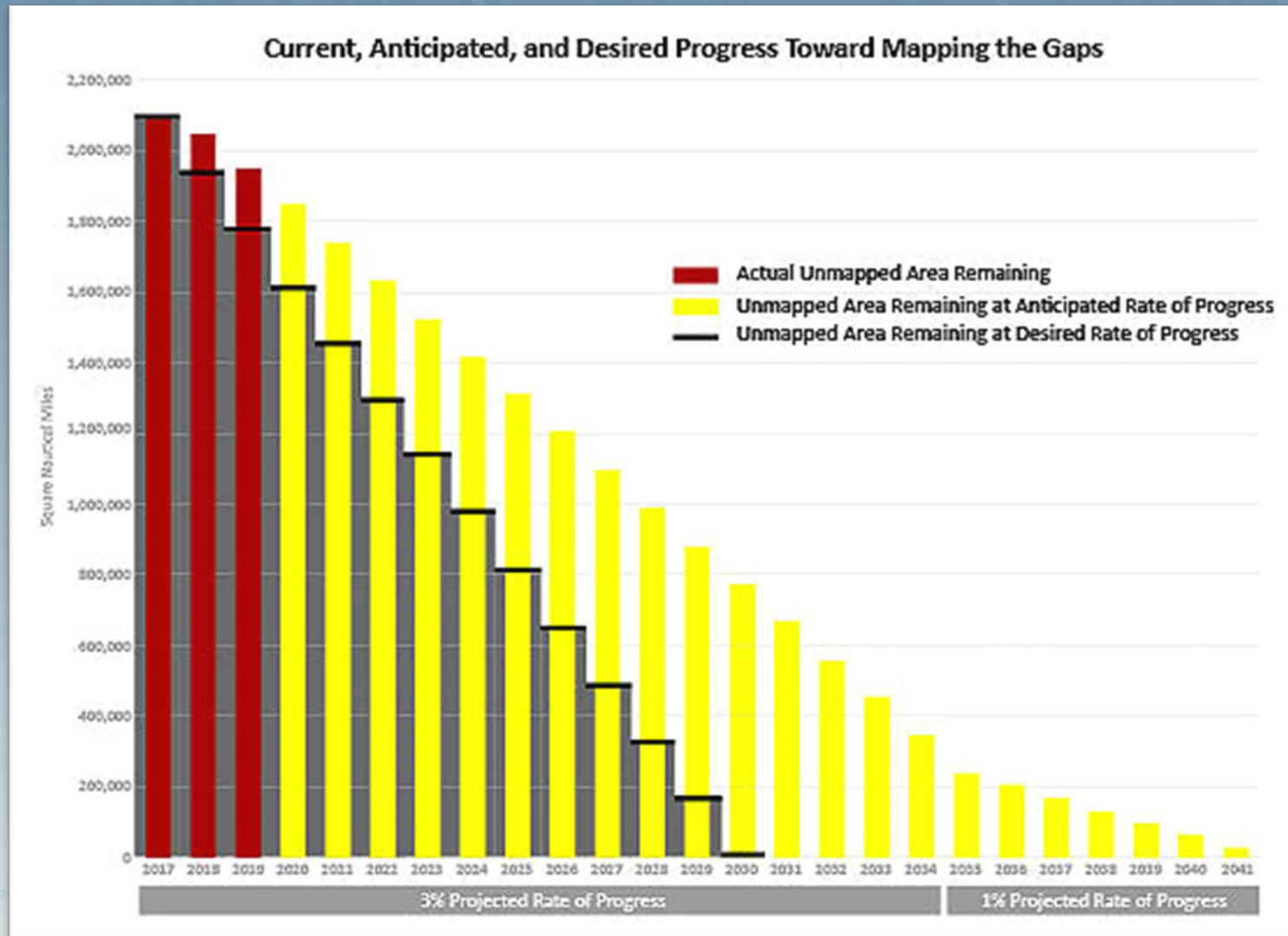


### 6. Pacific Remote Islands & Hawaii

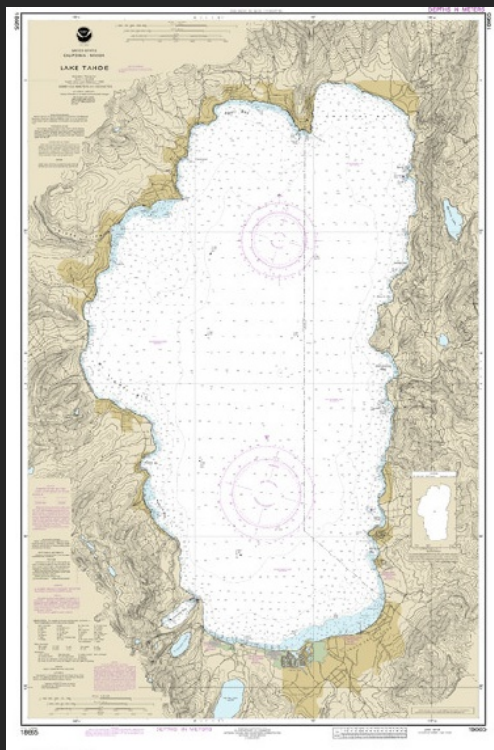
Total Area = 1,691,700 snm



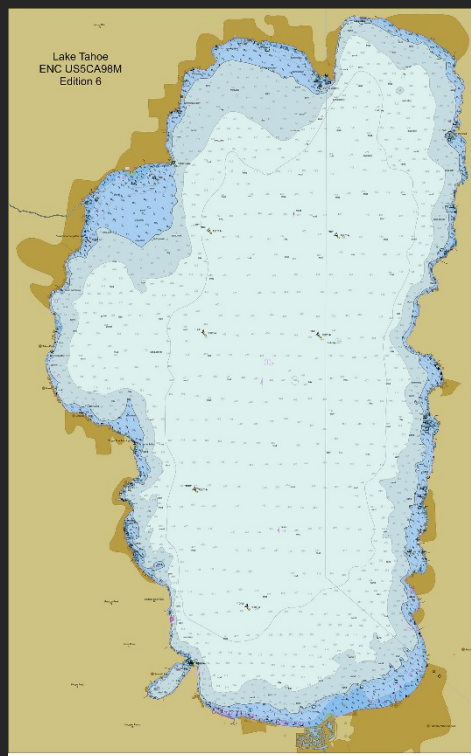
# Progress Report on Ocean Mapping



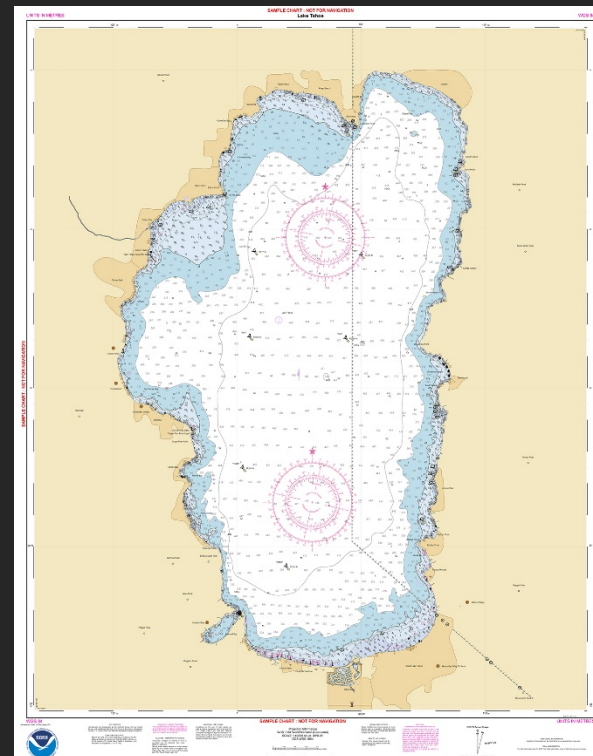
# Farewell to Paper Nautical Charts



Traditional Paper Chart



NOAA ENC®



NOAA Custom Chart

# Farewell to Paper Nautical Charts

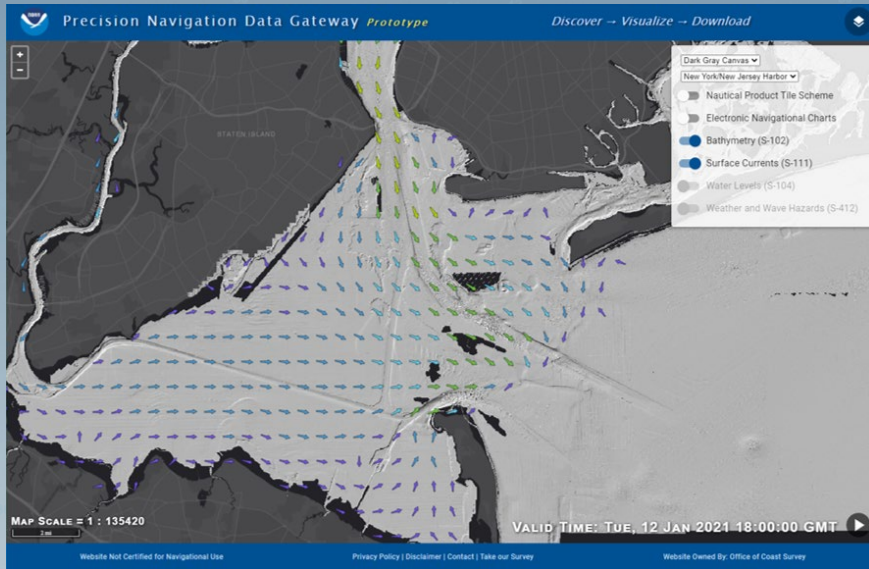
The screenshot shows the NOAA Office of Coast Survey website. At the top left is the NOAA logo and the text 'Office of Coast Survey, National Oceanic and Atmospheric Administration, U.S. Department of Commerce'. To the right is a search bar. Below this is a blue navigation bar with links: HOME, CHARTS, PUBLICATIONS, DATA, LEARN, CUSTOMER SERVICE, ABOUT US, and ENDING RASTER CHART PRODUCTION (highlighted in red). Below the navigation bar is a breadcrumb trail: HOME > CHARTS > FAREWELL TO TRADITIONAL NAUTICAL CHARTS. The main heading is 'Farewell to Traditional Nautical Charts'. Below the heading is a nautical chart of a coastal area with various markers and a red circle highlighting a specific location. Underneath the chart is the text 'Sunsetting NOAA raster nautical charts has started. What does that mean?' followed by a sub-heading 'Details about the NOAA Raster Sunsetting are provided through the section tabs below.' To the right of this text is a 'Related Links' box containing several links: 'National Charting Plan', 'Certified NOAA ENC® Distributors', 'ENC Direct to GIS', 'NOAA encourages all mariners to use NOAA ENC® for latest updates and other advantages'. Below the text and links is a vertical list of eight expandable tabs, each with a downward arrow: 'NOAA nautical chart products and a new ENC-based option for paper charts', 'What specific products and services will be canceled?', 'Rationale for ending NOAA paper and raster chart production', 'Progression of chart cancellations', 'How cancellations of NOAA nautical charts are announced', 'Chart Number References - Notices to Mariners, Light Lists, and Coast Pilot', 'Immediate impact on ENC and raster chart production', and 'Historical charts and training charts'.

[nauticalcharts.noaa.gov/charts/farewell-to-traditional-nautical-charts.html](https://nauticalcharts.noaa.gov/charts/farewell-to-traditional-nautical-charts.html)

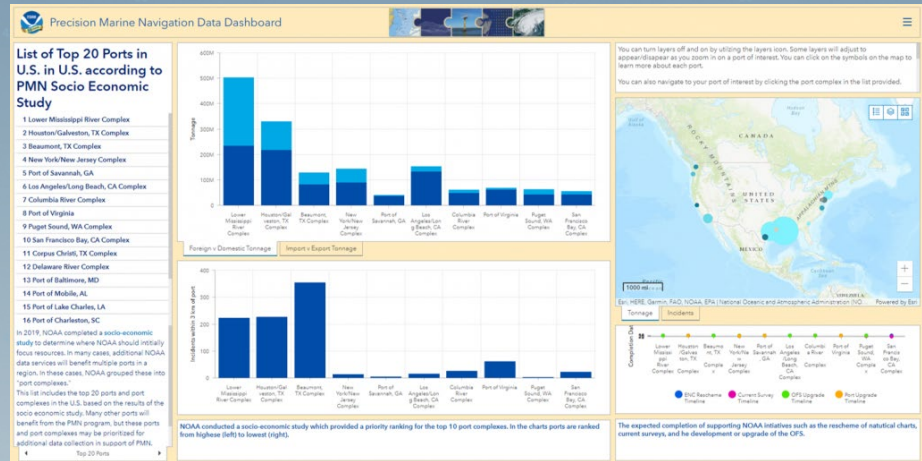


# Precision Marine Navigation

## Data Gateway



## Data Dashboard





# Hydrographic Field Season 2021

## Alaska Survey Projects

### Cape Newenham

OPR-R320-FA-21  
NOAA Ship Fairweather  
~170 SNM

### Nushagak

OPR-R311-RA-21  
NOAA Ship Rainier  
~480 SNM

### North Kodiak Island

OPR-P366-RA-21  
NOAA Ship Rainier  
~470 SNM

### Prince William Sound

OPR-P358-FA-21  
NOAA Ship Fairweather  
~195 SNM

### Egegik

OPR-R340-KR-21  
Contractor Project  
749 SNM

### South Coast of Kodiak

OPR-R355-FA-21  
NOAA Ship Fairweather  
~355 SNM

### Glacier Bay

OPR-O351-RA-21  
NOAA Ship Rainier  
~132 SNM

### Unimak

OPR-Q350-KR-20  
Contractor Project  
874 SNM

Bering Sea = ~ 2,273 SNM  
Gulf Of Alaska = ~ 1,152 SNM  
Alaska Total = ~3,425 SNM

# Hydrographic Field Season 2021

## Great Lakes and Gulf of Mexico Survey Projects

### Whitefish Bay, MI

OPR-Z394-KR-21  
Contractor Project  
~344 SNM



### Green Bay, WI

OPR-Y390-KR-21  
Contractor Project  
330 SNM

### Pascagoula, MI

OPR-J315-KR-21  
Contractor Project  
189 SNM



### Freeport, TX

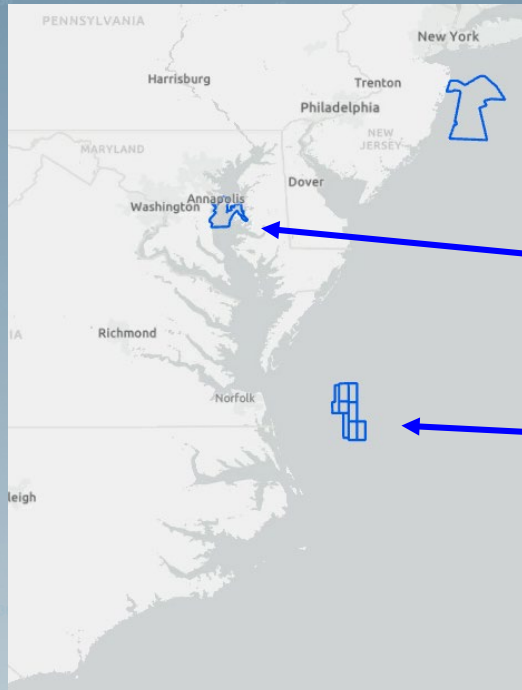
OPR-K380-KR-21  
Contractor Project  
254 SNM

Great Lakes = ~ 670  
SNM

Gulf of Mexico = ~443  
SNM

# Hydrographic Field Season 2021

## East Coast and Florida Projects



### Approaches to New York

OPR-C319-FH-21  
NOAA Ship Ferdinand Hassler  
~1340 SNM

### Interior Chesapeake Bay

OPR-xTBDx-TJ-21  
NOAA Ship Thomas Jefferson  
~177 SNM

### Approaches to Chesapeake

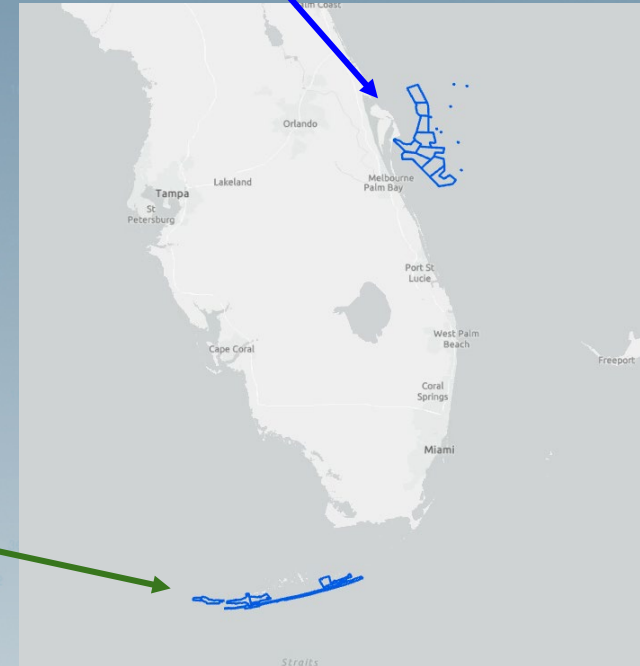
OPR-D304-TJ-21  
NOAA Ship Thomas Jefferson  
~287 SNM

### Blake Plateau

OPR-xTBDx-NF-21  
NOAA Ship Nancy Foster  
~1850 SNM

### Cape Canaveral, FL

OPR-xH321-FH-21  
NOAA Ship Ferdinand Hassler  
~430 SNM



### Key West, FL

OPR-H355-KR-21  
Contractor Project  
~ 150 SNM

East Coast = ~3,654  
SNM

Florida = ~ 580 SNM



# Questions

HYDROGRAPHIC SERVICES REVIEW PANEL



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