

# NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION



Dr. Margarita Gregg  
[Margarita.Gregg@noaa.gov](mailto:Margarita.Gregg@noaa.gov)

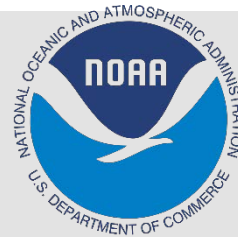
Sharon Mesick  
[Sharon.Mesick@noaa.gov](mailto:Sharon.Mesick@noaa.gov)



# Overview

- Introduction to NOAA's National Centers for Environmental Information (NCEI)
- NCEI Contract Areas
- Doing Business with NOAA

# Who Are We?



Office of Marine & Aviation Operations



National Ocean Service



National Weather Service



**National  
Environmental  
Satellite, Data, and  
Information Service**



National Marine Fisheries Service



Office of Ocean and Atmospheric Research

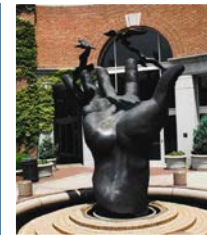


North Carolina



Colorado

**National Centers  
for  
Environmental  
Information**



Maryland



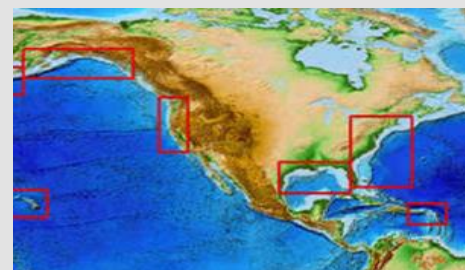
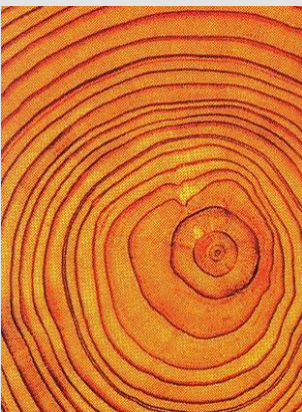
Mississippi





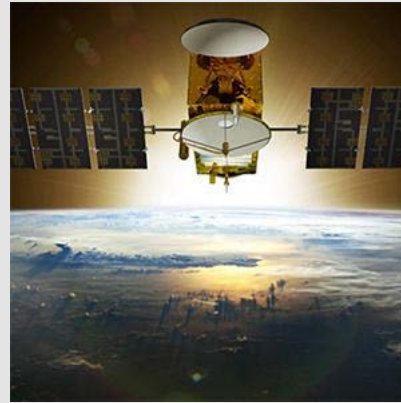
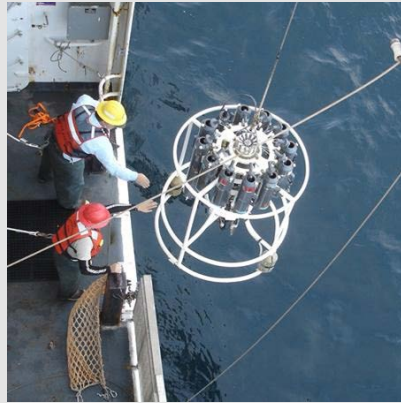
# Steward of the Nation's Environmental Information

*With data that spans stone-age to space-age, from the depths of the ocean to the sun, and across the globe*





# Data: Collect Once, Use Many Times





**Making Data Useful**

**Earth Observing Systems**

**National Centers for Environmental Information**

**Science products for decision-making**

**NOAA**  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
U.S. DEPARTMENT OF COMMERCE

**Scientific Data Stewardship**

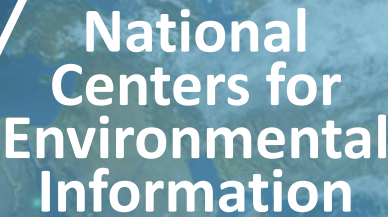
- Acquire
- Preserve
- Monitor
- Assess

**Science products for decision-making**

- Hurricane Tracks  
Emergency Planners
- Coastal Digital Elevation Models  
Hazard Mitigation
- Harmful Algal Blooms Observing  
Fishing, Tourism
- World Ocean Database  
Numerous Sectors
- Hypoxia Watch  
Fishing
- Tsunami Warning  
Emergency Managers
- Ocean Acidification  
Decision Makers
- Temperature & Precipitation Outlooks  
Agriculture
- Global Ocean Currents  
Shipping
- Global & U.S. Climate Summaries  
Numerous Sectors
- Billion \$ Disasters, Climate Extremes Index  
Insurance
- Coral Reefs  
Tourism, Management

[www.ncei.noaa.gov](http://www.ncei.noaa.gov)

# Earth Observing Systems



# Scientific Data Stewardship

- Acquire
- Preserve
- Monitor
- Assess

<b>Hurricane Tracks</b> <i>Emergency Planners</i>	<b>Coastal Digital Elevation Models</b> <i>Hazard Mitigation</i>	<b>Harmful Algal Blooms Observing</b> <i>Fishing, Tourism</i>
<b>World Ocean Database</b> <i>Numerous Sectors</i>	<b>Hypoxia Watch</b> <i>Fishing</i>	<b>Tsunami Warning</b> <i>Emergency Managers</i>
<b>Ocean Acidification</b> <i>Decision Makers</i>	<b>Temperature &amp; Precipitation Outlooks</b> <i>Agriculture</i>	<b>Global Ocean Currents</b> <i>Shipping</i>
<b>Global &amp; U.S. Climate Summaries</b> <i>Numerous Sectors</i>	<b>Billion \$ Disasters, Climate Extremes Index Insurance</b>	<b>Coral Reefs</b> <i>Tourism, Management</i>

## Harmful Algal Blooms

### Observing *Fishing, Tourism*

**Tsunami  
Warning**  
*Emergency  
Managers*

## Global Ocean Currents

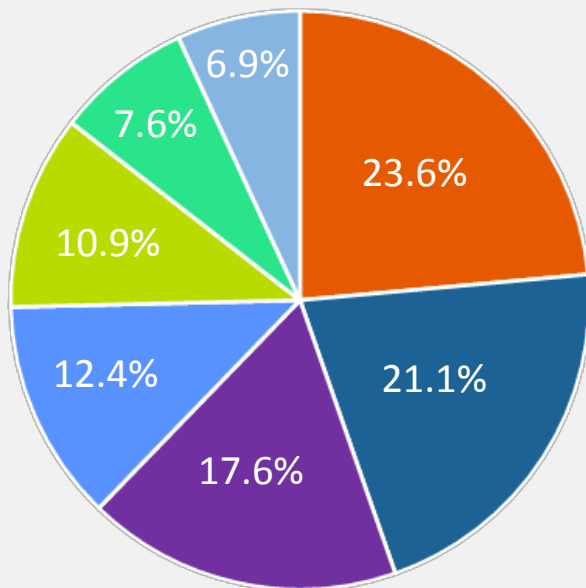
### *Shipping*

## Coral Reefs

### *Tourism, Management*

# NCEI Value to the Nation

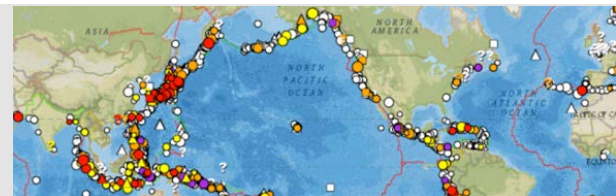
## NCEI Stakeholders by Sector



- Science, Technology, & Engineering
- Ecosystems (Agriculture/Aquaculture)
- Transportation & Infrastructure
- Energy
- Insurance, Finance, and Legal
- Health and Emergency Management
- Higher Education

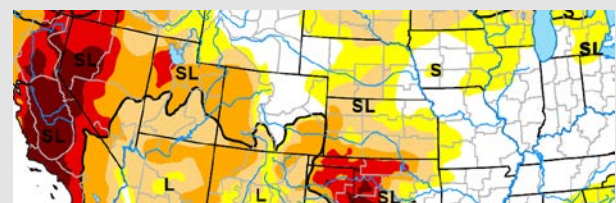
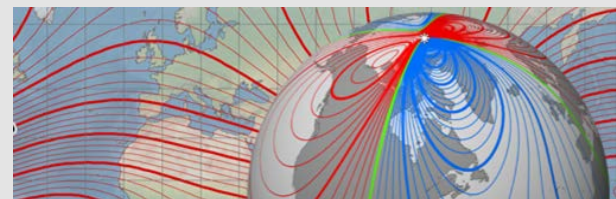
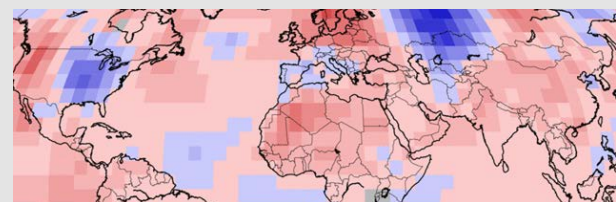
## Range of Products

- Time scale: Hourly to Decadal
- Geographic scale: Local to Global



## Technical Expertise

- Aerosols to Coastal Inundation
- Drought Monitoring to Ocean Surface Winds
- Paleoclimatology to US/Global Climate Monitoring





# Ocean Exploration in the Gulf

## TECHNOLOGY



### PARTNERSHIPS

- NOAA Research
- NOAA Marine Operations
- NOAA Fisheries
- NOAA Ocean Service
- UNH Center for Coastal Ocean Mapping
- Global Foundation for Ocean Exploration

### ACQUIRE

Data Acquisition

- Bathymetry
- Oceanography
- Video
- Images
- Acoustics

### MONITOR

CCOG Science Value Added

- QA/QC
- Processing
- Metadata
- Archive

### ASSESS

Scientific Products Services

- Analyze
- Discovery
- Access

## PRESERVATION

## OUTCOMES

### Gulf Digital Elevation Models



### U.S. Extended Continental Shelf



Others



# Partnerships Support the Gulf

## TECHNOLOGY



## PARTNERSHIPS

- NOAA Fisheries
- NOAA Data Buoy Center
- Naval Oceanographic Office

**ACQUIRE**  
Data  
Acquisition

- Temperature
- Salinity
- Dissolved Oxygen
- Depth

**MONITOR**  
CCOG Science  
Value Added

- QA/QC
- Processing
- Metadata
- Archive

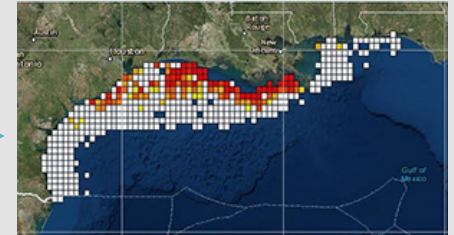
**ASSESS**  
Scientific  
Products  
Services

- Analyzing
- Discovery
- Access

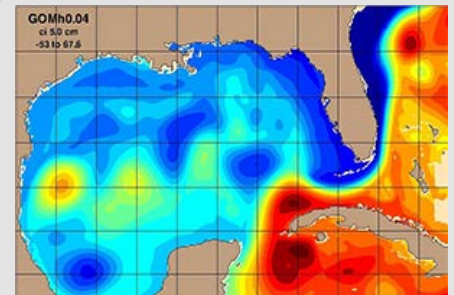
**PRESERVATION**

## OUTCOMES

Hypoxic Zone Modeling



Navy Ocean Models



Others

# Gulf of Mexico Data Atlas

**FUNDAMENTAL  
DATASET(s) – DWH  
Response Collection  
(NOAA Ships & Aircraft)**



**US Coast  
Guard &  
NRDA  
Trustees**



## INTEGRATE

- Water Quality
- Habitat
- Living Marine Resources
- Socio-economic



## ENHANCE

- Data quality assessment
- Common format
- Metadata

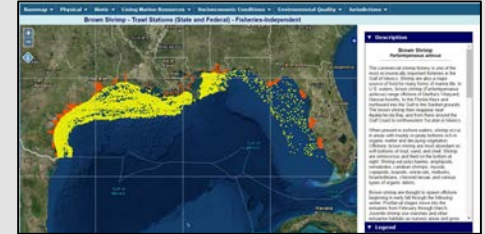


## ASSESS

- Build data tiling scheme
- Geospatial services



## TAILORED PRODUCT/SERVICE



**Gulf of Mexico baseline compilations  
BENEFIT TO THE NATION**



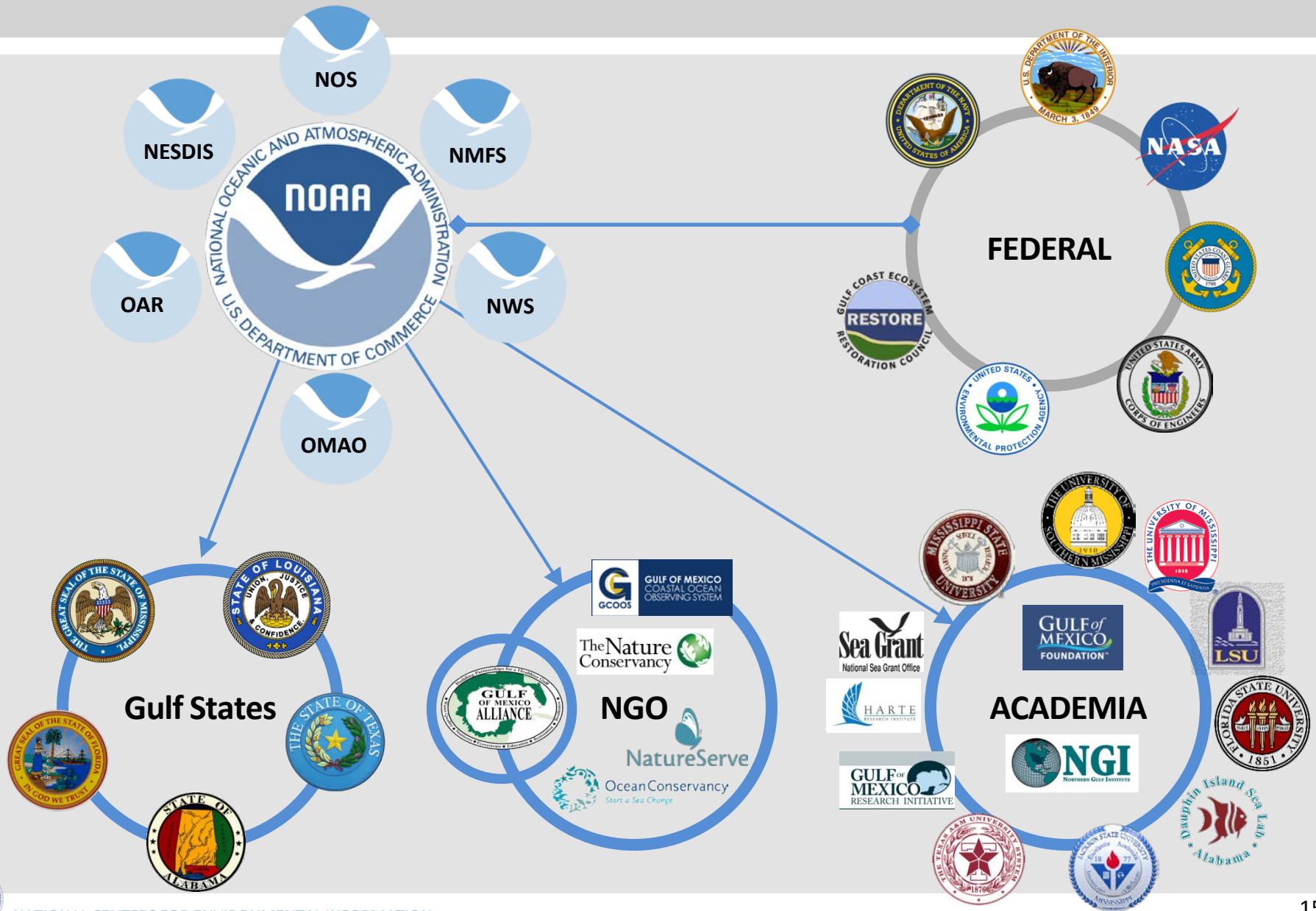
**Measuring the progress of Gulf of  
Mexico recovery and restoration**



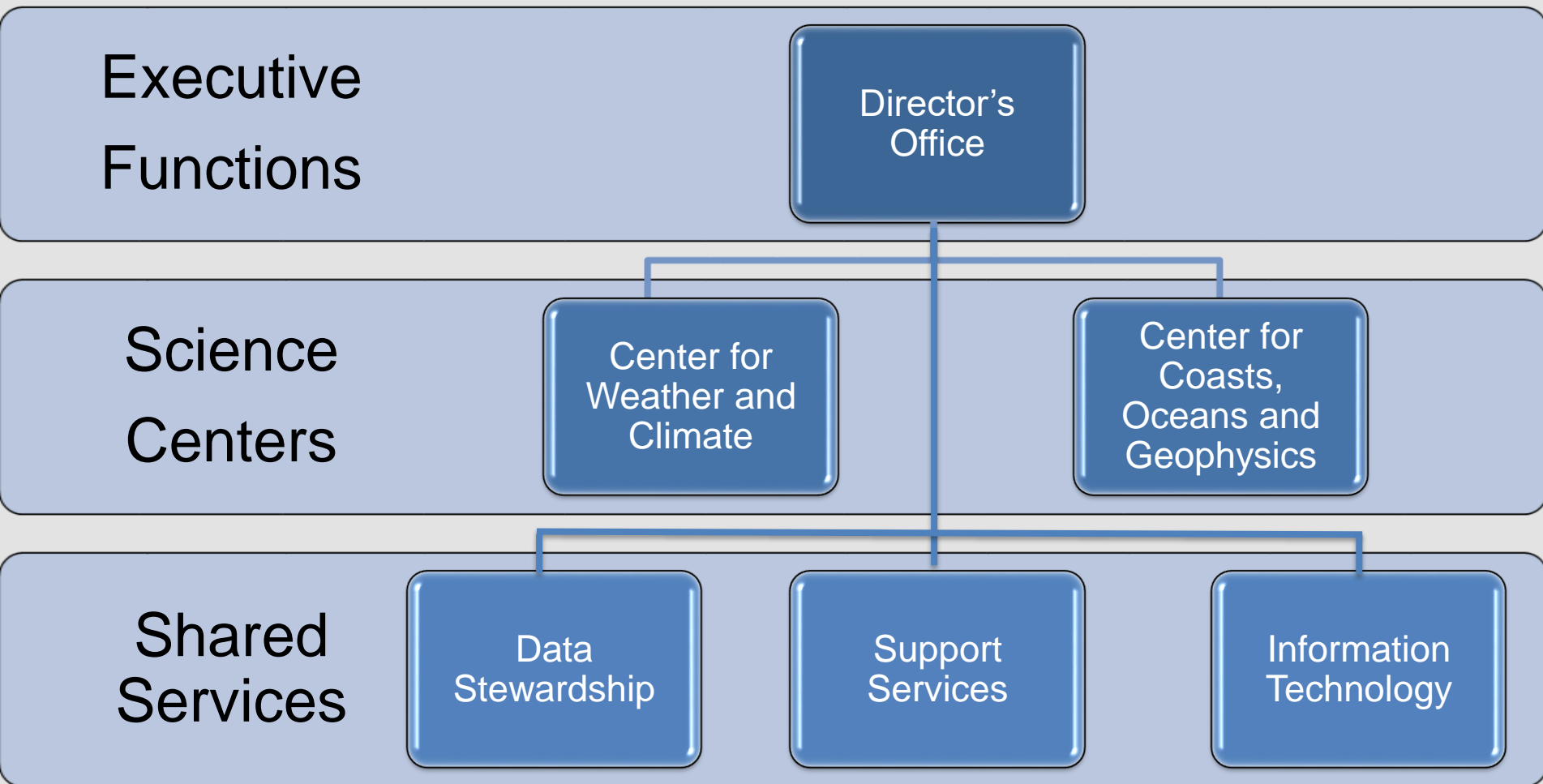
**PRESERVATION**



# NOAA Partnerships in the Gulf of Mexico

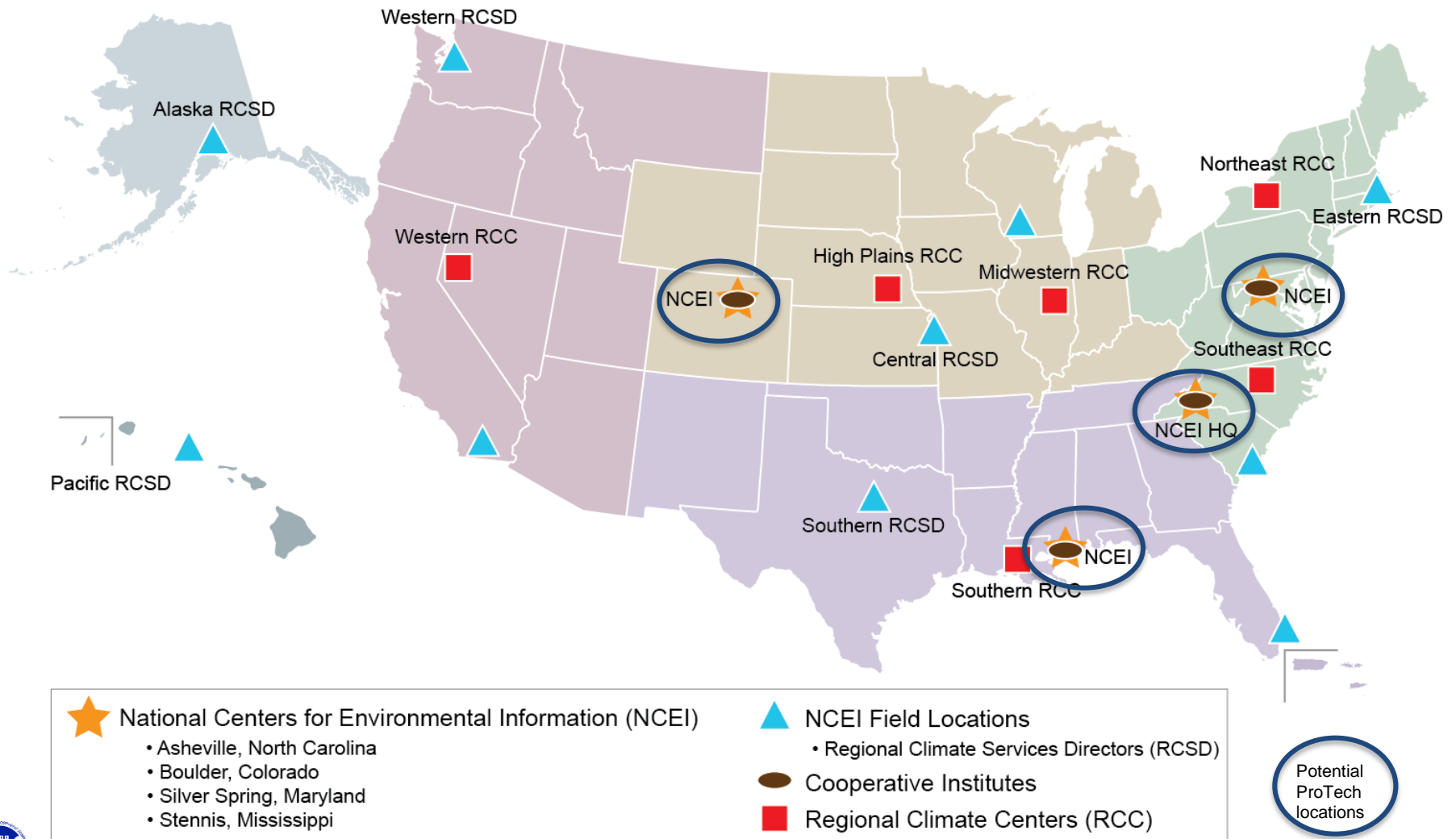


# NCEI's Organization



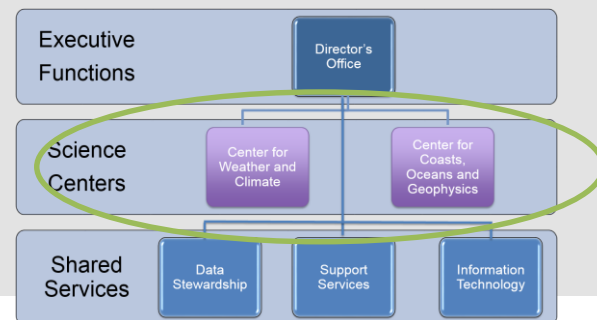


# NCEI has a Nationwide Presence



# NCEI Contract Areas: Science Centers

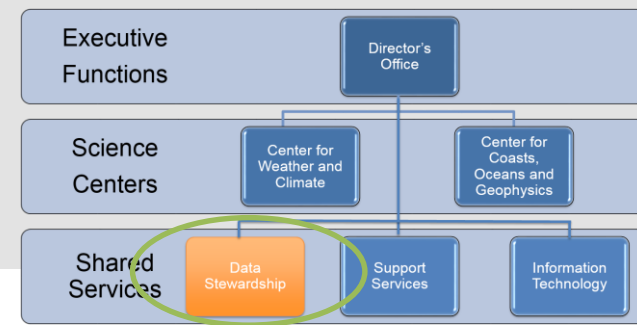
- Science-based project and program management
- Scientific datasets & products development generation, sustainment, and user services
- Scientific analysis supporting data and metadata quality consistency and improvement
- Scientific outreach and engagement promoting NCEI products and services and collecting feedback, including usage information/analytics
- Develop and sustain applications and databases for environmental information





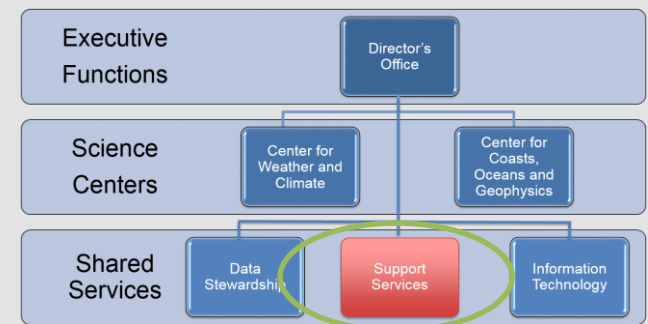
# NCEI Contract Areas: Data Stewardship

- Data Access technology, maintenance, and improvements
- Software engineering support, including SCM, SQA
- Operations & maintenance support for science data flows (ingest, archive, access, and distribution)
- Archivist support, including physical records management, digital conversions, and metadata
- Webpages & web portals content management and administration
- Multi-user scientific database development and sustainment



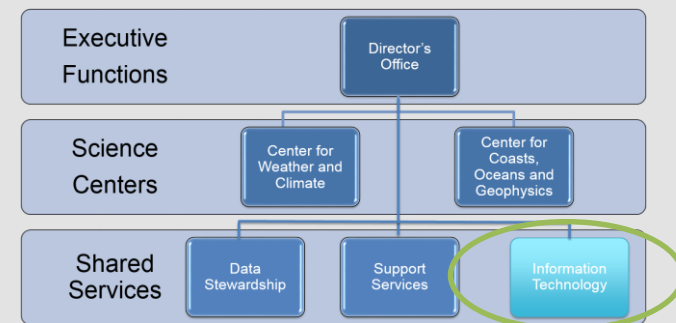
# NCEI Contract Areas: Support Services

- Enterprise Configuration Management & (Tech) Document Management including data entry
- Enterprise Quality Management & Quality Assurance
- Process Asset Library Administration
- Process Engineering Group support



# NCEI Contract Areas: Information Technology

- Technology, processes and procedure support for the interface(s) between scientific code, applications, and operations and IT infrastructure software, platforms, and operations.
- Science mission planning and coordination support to ensure compatibility with IT infrastructure plans and technology change.





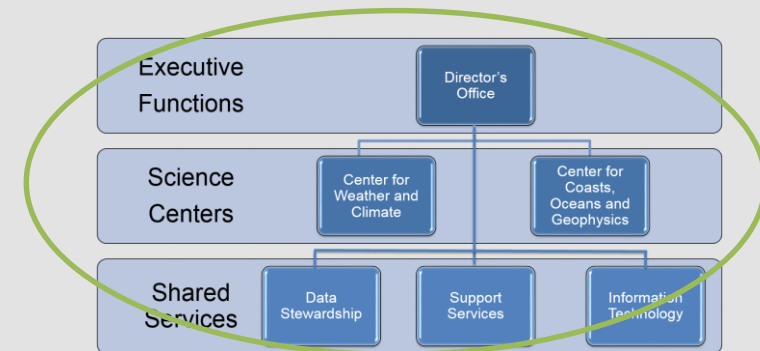
# NCEI Contract Areas: Office and Policy Support

## Office Support

- Administrative
- Property
- Budget/Finance
- Acquisition
- Mail Room
- Copy Center
- Logistics
  - facilities management
  - emergency generator refueling & maintenance
  - fire alarms
  - electrical usage data
  - furniture installation/movement, etc.

## Policy Support

- Analyses and Assessments
- Council/Committee Support
- Project Management
- Position paper drafting
- Prioritization suggestions



# Learn More About NCEI



The screenshot shows the NOAA NCEI website. At the top is the NOAA logo and the text "NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION" and "NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION". A navigation bar includes "Home", "About", and "Contact". A search bar is on the right. The main banner features a collage of environmental images and the NCEI logo. Below the banner, two columns describe the "Center for Weather and Climate" and the "Center for Coasts, Oceans, and Geophysics".

**NOAA** NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Home About Contact

**National Centers for Environmental Information (NCEI)**

NOAA's National Centers for Environmental Information (NCEI) are responsible for hosting and providing public access to one of the most significant archives for environmental data on Earth with over 20 petabytes of comprehensive atmospheric, coastal, oceanic, and geophysical data. [Read more about NCEI »](#)

**Center for Weather and Climate**

NCEI's Center for Weather and Climate acquires, preserves, monitors, and assesses the Nation's treasure of climate and historical weather data and information.

[Weather and Climate](#)

**Center for Coasts, Oceans, and Geophysics**

NCEI's Center for Coasts, Oceans, and Geophysics acquires, preserves, monitors, and assesses the Nation's treasure of coastal, oceanographic, and geophysical data and information.

[Coasts](#) [Oceans](#) [Geophysics](#)

[www.ncei.noaa.gov](http://www.ncei.noaa.gov)



# Doing Business at NOAA







# How to Develop a Strategic Relationship with NOAA

- Register your firm on the [NOAA Small Business Profile Registration System](#)
- If you wish to submit your firm's capability statement please forward to [NOAASB@noaa.gov](mailto:NOAASB@noaa.gov) (as an attached PDF)
- Review NOAA's Forecast at <http://fido.gov/doc/aap/publicview.asp>. If you have questions about a specific requirement, contact the POC listed there for further information
- Review the [SBA's 12 Steps to Success – A Practical Guide to Doing Business with the Federal Government](#)
- The NOAA Small Business Office hosts Industry Outreach Opportunities days 4 times a month, by appointment only. Please see the [Small Business Calendar](#) for current availability and self reservation instruction
- Review the [Small Business Frequently Asked Questions \(FAQ\)](#)

# Pro-Tech

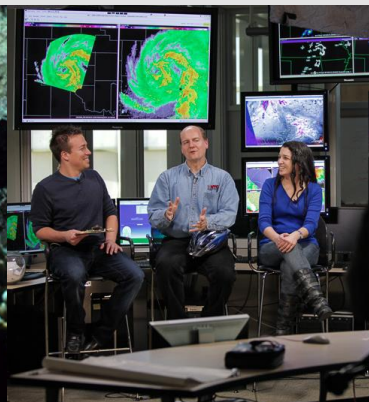
NOAA's Acquisition and Grants Office (AGO) has approved an Acquisition Plan for its "Pro-Tech" program for professional and technical services. The Pro-Tech program is a set of Indefinite Delivery / Indefinite Quantity (IDIQ) contracts awarded to large, medium, and small businesses in **five domains**:



Fisheries



Oceans



Weather



Satellites



Enterprise  
Operations

## Pro-Tech Point of Contact:

*Marcelle Loveday*

[marcelle.loveday@noaa.gov](mailto:marcelle.loveday@noaa.gov)

Phone: 301-628-1364

[http://www.ago.noaa.gov/acquisition/pro-tech/10\\_pro-tech.html](http://www.ago.noaa.gov/acquisition/pro-tech/10_pro-tech.html)

Information on  
Pro-Tech Website  
is updated  
frequently



# Small Business Innovation Research (SBIR)

- NOAA's SBIR Program seeks highly innovative products with excellent commercial potential
- All SBIR proposals must directly benefit the NOAA mission, but also be responsive to the greater market demands.
- All DBIR applications must be made in response to a NOAA solicitation, which will be made available once per year.
- The NOAA SBIR Program 2017 solicitation closed January 25, 2017.
- Look for the 2018 solicitation to come out in October of 2017.

**For more information, visit:**

**<http://techpartnerships.noaa.gov/SBIR.aspx>**







# NOAA Acquisition and Grants Office (AGO) Small Business Program

If you have additional questions, please contact:

## **NOAA Small Business Program**

1325 East-West Highway SOU6

Silver Spring Metro Center Building 2 (SSMC2)

11th Floor

Silver Spring, MD 20910

301-628-1411

[NOAASB@noaa.gov](mailto:NOAASB@noaa.gov)

[http://www.ago.noaa.gov/acquisition/NOAASmallBusiness/small\\_business.html](http://www.ago.noaa.gov/acquisition/NOAASmallBusiness/small_business.html)