SECOORA Meeting

Josie Quintrell
IOOS Association
IOOS Association

- Advocacy
- Common Issues
- IOOS federal/non-federal partnership
  - Administration
  - Congress
  - National Partners
- Emerging Issues
- Special Projects

Observing our oceans, coasts and Great Lakes
Providing information to those who need it, when they need it

“...we are tied to the Ocean. And when we go back to the sea, whether it is to sail or to watch - we are going back from whence we came.”

-John F. Kennedy
Closing the Gaps: What next?

- Scalable campaign
- Tangible outcomes
- Align with Administration Priorities
- Filling targeted gaps in:
  - HR Radars
  - Gliders
  - And Moorings?
U.S. IOOS Enacted and President’s Budgets FY04-20

- FY20 includes $1M for HAB observing and $1.5M increase to fill gaps (Regional Ocean Partnerships are funded in Office for Coastal Management at $1.5M
- ‘Request’ = the President’s Budget Request – ‘Enacted’ levels are post rescission totals
FY 21 Appropriations Request

Pres Bud: $19m

Request:
$45.25m for Regional
$34.7m for system
$6.25m gaps
$4.3m innovation
$7.3m for National

Total: $52.55m

The demand for data about our oceans, coasts, and Great Lakes is high. The IOOS Independent Cost Estimate, required by Congress and conducted by NASA's Act Propulsion Lab, estimates that a total of $53.4 million is needed to fulfill the nation's identified coastal observing needs.

Full funding is needed for the IOOS Regional Associations to operate the coastal observing systems that ensures uninterrupted access to data. People rely on the data for their lives and livelihoods.

IOOS ACT REAUTHORIZATION

The IOOS Act provides the foundation for coordinating the observing efforts of the Federal agencies and the regional systems. HR 1314 passed the House in December 2019 and S914 is expected to pass the Senate soon. To ensure citizens have continued access to quality data, please support reauthorization of the IOOS Act.

FY 21 REGIONAL SYSTEM REQUEST: $45.25 MILLION

$34.7 million for the national network of 11 regional coastal observing systems

$2.52m to install high-frequency radar systems to close key gaps in the U.S. surface current mapping system AND

$2.46m to support underwater gliders to improve hurricane warnings, detect harmful algal blooms, and ensure safe navigation

$1.27m for streamlining observations

$4.3 million for research and development, including competitive grants, modeling and verification to develop new products and systems to ensure comprehensive coverage.

FY 21 NATIONAL SYSTEM REQUEST: $7.3 MILLION

$0.5 million increase is requested for the National IOOS Program Office for program management and system development to address gap filling in the nation's regional coastal ocean observing systems, identifying opportunities for innovation and modernization while ensuring long-term sustainability and for working across the IOOS enterprise to improve ready access to data and information.

Appropriations Chart for NOAA's National Ocean Service Regional IOOS

Total: $52.55m
COVID-19

Good news - most systems are reporting

Impacts – people, delays in servicing- calibration, repairs, delays and cancelation of cruises

Submitted $25m for stimulus

Gathering input for possible economic stimulus package, including shovel ready
Fill the Gaps

- Defining success
- Next phase
  - Moorings
  - Other
- Aging infrastructure
  - “Preventing gaps”
  - Recapitalization
- Emerging needs
  - Five-year proposals
Congressional Outreach

**ICOOS Reauthorization**
- HR 1314 Passed in Dec 2019
- S 914 - marked up

**Pending legislation**
- Aquaculture bill
- BLUE GLOBE
- Ocean Exploration
- HABRCA

**Congressional Outreach**
- Webinars
- Articles
National and International

- UN Decade
- OceanObs’19
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- EO on Mapping
- EO on Aquaculture
IOOS Grand Challenges

- Ensure that all US coastal communities have accurate and timely storm surge and water level predictions

- Provide indicators and forecasts on the status and health of the oceans and Great Lakes, including protected species, fisheries, water quality, HABs, OA, hypoxia and other parameters, on a regular basis

- Develop periodic, routine assessments of species richness and biodiversity (start with biology and ecosystem EOVs) throughout the US coast, inland oceans/Great Lakes, and EEZ

- Accelerate the power of innovation in technologies, techniques, synthesis and forecasting to provide knowledge for action, including areas of modeling, sensor development, eDNA, machine learning, IT advances, and data visualizations

- Provide rapid and seamless access to data and information that includes the integration of data across disciplines and from the regional to national to global scales
IOOS Association Projects

- COVID 19
- Economic Valuation
- National HAB observing network
  - Pilot projects
  - Working group for creating national network
- Association Strategic Plan - July 22-23
  - How can the Association best support IOOS in the next 5 years?
- Gaps - Measuring success, filling gaps, preventing gaps
- OAR/IOOS Workshops - From R2O
  - Atlantic June 30- July 1
  - Pacific Basin - Late summer
Thank you! Questions?
Takeaways:

• US poised to lead new era of bold ocean S&T

• Partnerships across academia, philanthropy, the private sector, and government are essential to advancing ocean S&T

• A collaborative and dynamic strategy for partnerships in ocean S&T will coordinate, focus, and catalyze a national effort

White House Summit

• Exploring the Ocean
• Conserving Living Marine Resources
• Protecting Coastal Health and Safety
• Sustaining Ocean Observations
• Promoting Food Security
• Enabling Ocean Energy
• Characterizing Ocean Life
• Leveraging Big Data
NOAA’s Science and Technology Priorities

- NOAA’s priorities for the decade
- Relationship to RA proposals?
Building Support in DC

SENATE OCEANS CAUCUS BRIEFING
Coastal Innovations: Enhancing security, economy and the environment

SENATE OCEANS CAUCUS BRIEFING
Buoying our Nation’s Economy: The Role of Ocean Data in Supporting the Blue Economy
Senate IOOS report language:

- Integrated Ocean Observing System [IOOS]. Within funding provided for IOOS, NOS shall work to complete and operate the National High Frequency Radar System to close key gaps in the U.S. surface current mapping system. Furthermore, NOS shall expand the regional underwater profiling gliders program to ensure streamlined access to data for weather forecasting and hurricane prediction, disaster response, forecasting of freshwater and marine water quality, detection of harmful algal blooms, and safe maritime operations.

- Further, the Committee provides IOOS with $1,000,000 for pilot programs to enhance the nation's capacity for monitoring and detection of harmful algal blooms by leveraging the expertise of the IOOS regional associations. These programs shall focus on data integration and information dissemination to provide coastal managers, seafood harvesters and aquaculture practitioners, drinking water utilities, animal stranding networks, and others with information about the extent, toxicity, and length of blooms. IOOS is directed to coordinate with the National Centers for Coastal Ocean Science on the implementation of these funds.
Major Milestone: Certified National Network
## Appropriations

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$1.5m for ROP moved to OCM so this would be an increase for IOOS. Senate mark includes language for $1m for a HAB operational network. Both the

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FY 21 Request - Continue Gaps Campaign

Mapping Surface Current

Seeing Underwater with Coastal Gliders

INTEGRATED OCEAN OBSERVING SYSTEM - IOOS
Saving Lives, Protecting Health & Promoting Commerce

Image courtesy of Ben Hollings, Blue Ocean Monitoring

Image courtesy of USC

Image courtesy of GOM, BODC, Oceanographic Monitoring
Special Projects

Philanthropy - the effort or inclination to increase the well-being of humankind, as by charitable aid or donations

Economic Valuation of IOOS

RA User Survey
Activities

• Policy Meetings
  • IOOS Ex Comm and Program Office Leadership Discussion
    • Gaps Campaign and beyond
    • Funding decisions, building the network

• Fall/Spring Meetings -
  • Annapolis Sept 2018
    • Biology
  • Washington March 2019
    • Congressional

• Honorary Directors – Source of high level advice
• Federal Advisory Committee – Ru member
• Strategic Partnerships at national level
• Outreach Committee
FY 20 - Need your help
Congressional Letters of Support

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Academic
Industry
Management
NGOs
Education
General Public
Other

King  Shaheen  Warren  Whitehouse  Murphy
Collins  Hassen  Markey  Reed  Blumenthal
Pingree  Pappas (new)  Keating  Ciciline  Courtney
Golden  Langevine  DeLauro
Himes
IOOS Association

Addressing diverse needs...

AOOS  CARICOOS  CeNCOOS  GLOS

GCOOS  MARACOOS  NANOOS  NERACOOS

PacIOOS  SCCOOS  SECOORA
COVID-19

Good news - most systems are reporting

Impacts – people, delays in servicing- calibration, repairs, delays and cancelation of cruises

Submitted $25m for stimulus

Gathering input for possible economic stimulus package, including shovel ready

Immediate Needs for Resiliency: $25 million for restoring, sustaining, and building resiliency for critical observations in support of weather forecasting, safe and efficient marine operations, and search and rescue missions.

IOOS works as an integrated system of a variety of observing platforms, but to restore mission critical operations impacted by COVID-19 and continue protecting lives and livelihoods, we request support specifically for our radars, buoys, and gliders. This includes:

- $12 million for high frequency radars
  - Supporting maritime commerce and at-sea safety
- $7 million for gliders
  - Supporting accurate weather forecasting including hurricanes
- $6 million for coastal moorings
  - Supporting accurate weather forecasting and real-time data for weather forecast offices

Longer Term Resiliency

COVID-19 further exposes gaps and weaknesses in our infrastructure and their negative impacts on life and the economy. For the IOOS system to achieve full resiliency, estimated costs are $75.65 million over the next 1-3 years.

The estimated cost for full resiliency of the integrated system, by subsystem is:

- $32 million for high frequency radars
- $11.57 million for gliders
- $2.5 million for coastal moorings
- $3 million for shore stations, including water levels and met stations
- $2.15 million for modeling/computing capacity

In support of the U.S. Integrated Ocean Observing System

Alaska (AOOS) • Caribbean (CarICOOS) • Central and Northern California (CaCOOS) • Great Lakes (GLOS) • Gulf of Mexico (GCOOS) • Pacific Islands (PaciICOOS) • Mid-Atlantic (MARACOOS) • Northeast-Atlantic (NERACOOS) • Pacific Northwest (NANOOS) • Southern California (SCICOOS) • Southeast-Atlantic (SECOORA)

Learn More: Josie Quintrell | josie@ioosassociation.org | www.ioosassociation.org
Fill the Gaps

- Defining success
- Next phase
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**White House Summit**

**Takeaways:**

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- A collaborative and dynamic strategy for partnerships in ocean S&T will coordinate, focus, and catalyze a national effort

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