



# INTEGRATED OCEAN OBSERVING SYSTEM - IOOS

Saving Lives, Protecting Health & Promoting Commerce



Image courtesy of NOAA

IOOS is essentially the weather service for the coastal oceans and Great Lakes, providing the ability to “see” what is happening both above and below the surface and making the information readily available. IOOS is led by NOAA’s National Ocean Service and includes 17 Federal agencies and a national network of 11 regional observing systems.

IOOS is efficient; it builds on and leverages local and regional partnerships. **IOOS provides the coastal infrastructure necessary to support jobs, economic development, maritime safety and environmental health.**

## SUSTAINING THE NATIONAL NETWORK OF REGIONAL OBSERVING SYSTEMS

NOAA’s National Ocean Service provides support for 11 IOOS Regional Associations through a competitive merit-based grant process. The Regional Associations spend these funds to **deploy, operate, and maintain over 300 observing assets** that collect oceanographic and coastal data to help improve safety, enhance the economy, and protect the environment.

The Regional Associations engage with local and regional user communities to understand information needs and transform raw observation data into useful tools. The Regional Associations fill critical ocean observing information gaps at the local and national levels. For example, **non-federal organizations provide over 50 percent of the marine data used by the NOAA National Weather Service.**

Service now comes from non-Federal sources. IOOS Regional Observations also include the Marine Sensor Innovation program - which supports research, development, testing, and evaluation of new sensor technology, observing strategies, and modeling.

## IOOS IS MAKING A DIFFERENCE

IOOS is efficient, flexible and cost-effective. One of the hallmarks of IOOS is that it is a single system in support of many missions including:



Weather Forecasting



Efficient and Safe Marine Operations



Flooding and Coastal Hazards



Search and Rescue



Fisheries



Aquaculture



Water Quality



**IOOS**  
Integrated Ocean  
Observing System

### Who depends on IOOS data?

- Emergency managers
- Fishermen
- Oil spill responders
- Ports
- Public health officials (e.g. beaches, water quality)
- Recreational boaters
- Researchers
- Seafood safety officials
- Shellfish growers
- Tribes
- Bureau of Ocean Energy Management
- Environmental Protection Agency
- National Oceanic and Atmospheric Administration
- Office of Naval Research
- U.S. Arctic Research Commission
- U.S. Army Corps of Engineers
- U.S. Coast Guard
- U.S. Department of State

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 Jet Propulsion Lab, estimates that a total of \$534 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.

## ICOOS ACT REAUTHORIZATION

The ICOOS Act provides the foundation for coordinating the observing efforts of the Federal agencies and the regional systems. To ensure citizens have continued access to quality data - please support reauthorization of the ICOOS Act. Contact Representative Young for more information.



## FY 19 REGIONAL SYSTEM REQUEST: \$37.7 MILLION

**\$25.2 million**

for the national network of 11 regional coastal observing systems

**\$7 million**

**\$3.7m** to install high-frequency radar systems to close key gaps in the U.S. surface current mapping system AND

**\$3.3m** to support underwater gliders to improve hurricane warnings, detect harmful algal blooms, and ensure safe navigation

**\$5.5 million**

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

## FY 19 NATIONAL SYSTEM REQUEST: \$6.7 MILLION

These funds will support the IOOS Program Office effort to:

- + integrate Federal and non-Federal data
- + coordinate across NOAA and the 17 Federal IOOS agencies

## Appropriations Chart for NOAA's National Ocean Service Regional IOOS

	FY 13 Spend Plan	FY14 Enacted	FY 15 Enacted	FY 16 Enacted	FY 17 Enacted	FY 18 Pres. Budget	FY 18 House	FY 18 Senate	FY 18 IA Request	FY 19 Pres. Budget	FY 19 IA Request
<b>Regional IOOS Total</b>	\$26.5m	\$28.5m	\$29.5m	\$29.5m	\$30.7m	\$29.5m	\$31m	\$33.7m	\$37.1m	\$19.4m	\$37.7m
<i>National network of regional infrastructure systems, gaps in radars and gliders</i>	\$23.5m	\$24.3m	\$24.5m	\$24.5m	\$25.2m				\$25.2m for systems, \$3.1m for radars, \$3.3m for gliders		\$25.2m for systems, \$3.7m for radars, \$3.3m for gliders
<i>Marine Sensor Innovation Grants, Modeling Test Bed, Sensor Verification</i>	\$3m	\$4.2m	\$5m	\$5m	\$5.5m				\$5.5m		\$5.5m
<b>U.S. IOOS Program Office*</b>	\$5.9m	\$6.6m	\$6.6m	\$6.6m	\$6.6m	\$6.6m	\$6.6m	\$6.6m	\$6.7m	TBD	\$6.7m
<b>Total U.S. IOOS</b>	\$32.4m	\$35.1m	\$36.1m	\$36.1m	\$37.3m	\$36.1m	\$37.6m	\$40.3m	\$43.8m		\$44.4m



Here's what top decision-makers are saying about IOOS data...



*Ocean information matters if you want to eat seafood, or buy anything that comes from shipping.*



*IOOS is like putting your headlights on when you're on a dark road.*



**IOOS Coverage in U.S. Waters**  
The national network of regional observing system provides services to the entire coastline of the U.S. The 11 Regional Associations design, maintain and operate regional coastal observing systems.

\* Funding included in the Navigation, Observations and Positioning funding line