



SURFACE CURRENT MAPPING:

Saving Lives, Protecting Health & Commerce

Search and rescue, oil spill response, harmful algal bloom tracking and forecasting, water quality monitoring, and port and harbor navigation all depend on real-time surface current mapping. IOOS operates our nation's only network of high-frequency radars (HFR) providing this information, but we have critical gaps in coverage.



WHERE OUR NATION NEEDS SURFACE CURRENT MAPPING:



Saving Lives off Florida's Coast

Florida's east coast is one of the Coast Guard's most active search and rescue areas. Real-time surface current information dramatically increases the odds of finding lost people or vessels.

2 radars needed



Saving Millions in The Gulf of Mexico

The Gulf lacks surface current monitoring along 90 percent of its coast, including along the heavily traveled Mississippi delta. High-frequency radars provide data on the likely path of surface oil that could be released from any of the more than 300 active rigs in the Gulf, saving time and money.

3 radars needed



Protecting Lives and Public Health in the Pacific Northwest

Surface current monitoring alerts mariners to dangerous conditions and warns tribes and resource managers when harmful algal blooms may come ashore. Coverage is absent in Washington, and is needed to protect lives, economy, and culture.

3 radars needed



Safeguarding the Arctic Marine Highway

As ice recedes, more vessels traverse the dangerous waters of the Bering Strait, including commercial cruise ships. But the Arctic lacks adequate critical surface current mapping to ensure safety.

2 remote radars needed



Cleaning up the Great Lakes

The 645-mile oil pipeline under the Straits of Mackinac is showing serious signs of deterioration. Better monitoring would allow a quicker and more effective response for oil spills that threaten this major source of drinking water for millions of people.

2 radars needed

Who Uses 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

REGIONAL SYSTEM REQUEST: \$33.9 MILLION

\$24.3 million

for the national network of 11 regional coastal observing systems

\$1.5 million

for upgrades and repairs for aging regional systems

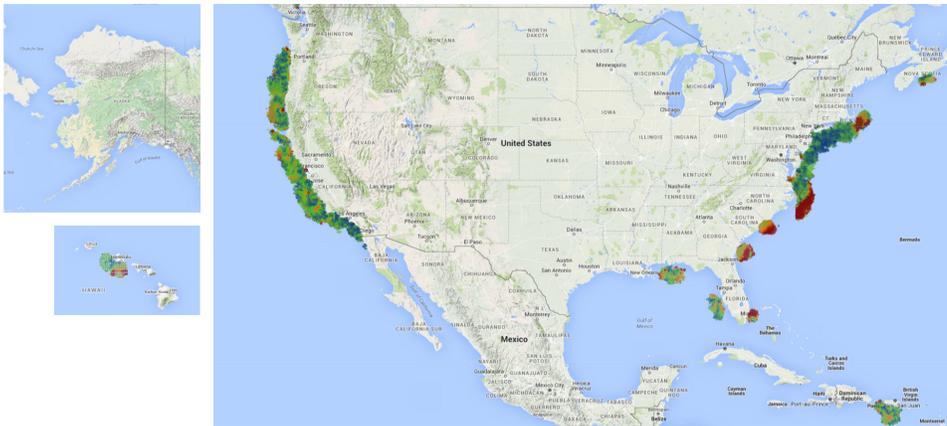
\$3.1 million

to install 12 high frequency radar systems, to close key gaps and make the U.S. surface current mapping system the most reliable, efficient and comprehensive in the world

\$5.0 million

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

Map of IOOS high-frequency radars that provide real-time surface currents



IOOS
ASSOCIATION

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.

”

HFR is really important for Coast Guard search and rescue efforts. We cover 22 million nautical miles of ocean. We save about 10 lives a day.

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

NATIONAL SYSTEM REQUEST: \$6.7 MILLION

These funds will support the IOOS Program Office, to help:

- + integrate federal and non-federal data
- + develop the nation's first quality control standards for real-time data
- + coordinate across NOAA and the 12 Federal IOOS agencies and
- + certify the regional systems.

For more information, contact Josie Quintrell, Executive Director, IOOS Association | 207-798-0857 Josie@iiosassociation.org

	FY 10 Enacted	FY 11 Spend Plan	FY 12 Spend Plan	FY 13 Spend Plan	FY 14 Enacted	FY 15 Enacted	FY 16 Enacted	Pres. Bud.	FY 17 IOOS Request
Regional IOOS Total	\$27m	\$21.9m	\$23m	\$28.5m	\$28.5m	\$29.5m	\$29.5m	\$29.5m	\$33.9m
<i>Competitive funding for the national network of regional systems, including surface currents</i>	\$7m	\$20m	\$22m	\$23m	\$24.3m	\$24.3m	\$24.3m		\$28.9m
<i>Marine Sensor Innovation Grants, Modeling Test Bed, Sensor Verification</i>	\$7m	\$1.9m	\$1m	\$3m	\$4.2m	\$5.2m	\$5.2m		\$5m
US IOOS Program Office*	\$6.5m	\$6.5m	\$6.4m	\$6.4m	\$6.5m	\$6.5m	\$6.7m	\$6.7m	\$6.7m
Total US IOOS	\$33.5m	\$28.4m	\$29.4m	\$34.9m	\$35.0m	\$36.0m	\$36.2m	\$36.2m	\$40.6m

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