Ocean, Coastal, and Great Lakes Observations, Mapping, and Infrastructure

Objective

Strengthen and integrate Federal and non-Federal ocean observing systems, sensors, data collection platforms, data management, and mapping capabilities into a national system, and integrate that system into international observation efforts.

Why Do This?

Our ability to understand weather, climate, and ocean conditions, to forecast key environmental processes, and to strengthen ocean management decision-making at all levels requires accurate data and information. Coordination and integration of the many available data collection, processing, management and access tools and infrastructure into a cohesive, unified, robust system will promote greater efficiency and effectiveness in shared efforts that significantly advance our knowledge and understanding of the ocean, our coasts, and the Great Lakes.

Potential Actions and Expected Outcomes

- **Examine the status of the National Oceanographic Fleet**–This action will identify ways to improve the coordination, management, and utilization of the National Oceanographic Fleet to achieve the Policy's priorities. The current Fleet's status, capacities, and capabilities will form the basis for planning survey and research work.

- **Examine the status of unmanned and satellite remote sensing systems–** Air and sea unmanned systems can extend or multiply the reach of survey and research missions, and are very effective in emergency situations. This action will identify ways to further take advantage of their effectiveness.

- **Observe and study global processes using advanced observation and sampling technologies –** Short- to mid-term observing projects that utilize innovative observing tools and infrastructure will provide significant advances in knowledge and understanding and address science and technology gaps in our long-term ocean observing systems.

- **Implement the Integrated Ocean Observing System (IOOS) –** A functional Integrated Ocean Observing System will provide long-term, sustained, verified and validated ocean observations to support federal, regional, state and local community stakeholder priorities.

- **Coordinate and leverage ocean and coastal mapping efforts –** Engaging providers and users in identification of information gaps and efficiencies in information development and delivery will lead to improved user access to information that supports policy and management decision-making.

- **Develop an integrated observation data management system –** A web-based data inventory, management, archive, and distribution system will capitalize on the Nation's investment in ocean, coastal, and Great Lakes data and information and allow their effective use by multiple groups addressing all National Ocean Policy objectives including Coastal and Marine Spatial Planning.