



Oceans and Society: Blue Planet

Emily Smail
AquaWatch Workshop
June 9, 2016
Koblenz, Germany







Blue Planet Goal

 The goal of the Blue Planet Initiative is to bring together and leverage existing Earth observation and user engagement work in marine and coastal environments to enable informed decisions and sustained Earth observations and information.

User needs Data Products Information Knowledge





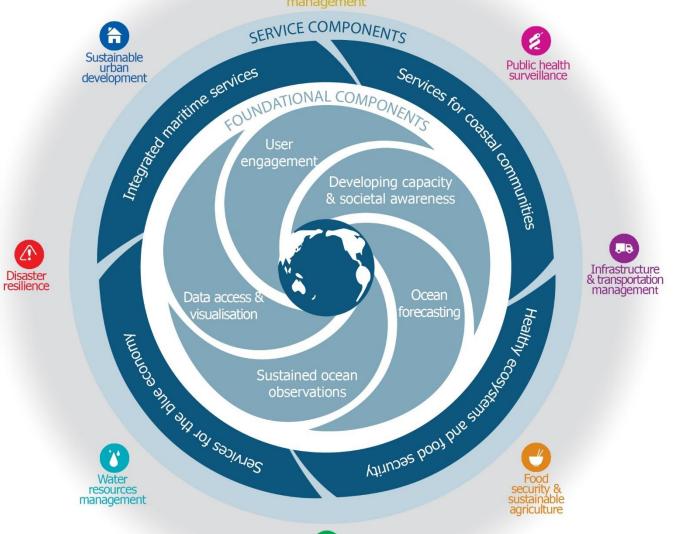
Blue Planet Objectives

- Objective 1: Provide foundational support across the ocean observing and broader user communities by supporting and linking partners.
- Objective 2: Identify and articulate user needs and gaps in meeting these needs and work with observing (in situ and earth observing) programs to develop and demonstrate end-to-end services in the following service area of people, environment, economy & industry.
- Objective 3: Provide sustained ocean observing information services to underpin policy-relevant regional and global ocean assessments.















Foundational Components

- Represent the infrastructure, data collection, data processing and engagement mechanisms that are needed to produce end-user oriented services.
- These components will consist of working groups from existing organizations and associated projects in the ocean observing community and will link to and collaborate with GEO Foundational Tasks.



User Engagement



Sustained Ocean
Observations



Ocean Forecasting



Data Access & Visualization



Developing
Capacity & Societal
Awareness





Service Components

- Rely on the Foundational Components to develop and deliver endto-end services.
- Envisioned that services that are associated with a specific policy mandate will evolve into GEO Flagships













Services for Coastal Communities

 Goal: to produce services that improve access to environmental intelligence for stakeholders in the coastal zone.



- Improved forecasts of local coastal sea-level rise and associated increases in coastal inundation
- Services focusing on the state and potential degradation of coastal ecosystems, including loss and modification of crucial habitats such as mangroves, coral reefs and estuaries
- AquaWatch: Ongoing development of a global water quality monitoring and forecasting service





Healthy Ecosystems and Food Security

 Goal: to produce services that monitor the health, productivity and sustainable development of aquatic ecosystems.



- Maintenance of existing services including ChloroGIN and SAFARI
- Services focused on marine debris
- Services focused on monitoring of aquaculture operations
- assessments of blue carbon potential and assessment frameworks of estuaries and large inland waters





Services for the Blue Economy

 Goal: to produce services that support the sustainable development and use of living and non-living aquatic resources



- Environmental and sea-state forecasting for Small Island States and coastal industries
- Providing access to bathymetric, habitat and biodiversity data to assist with spatial planning of industry development
- Environmental monitoring of large and offshore aquaculture industries





Maritime Services

 Goal: to provide services to national maritime authorities and other bodies with responsibilities within the maritime safety, environmental, security, commerce, transportation and operation domains



- Real-time, short-term and climate predictions for high density traffic areas, polar regions and environmentally sensitive areas
- Monitoring of illegal, unreported and unregulated fishing
- Detection of pollution occurrences and monitoring of incidents





Blue Planet – moving forward

Next year

- Strategic communications and engagement
- Transition to new governance structure
- Build the Blue Planet community

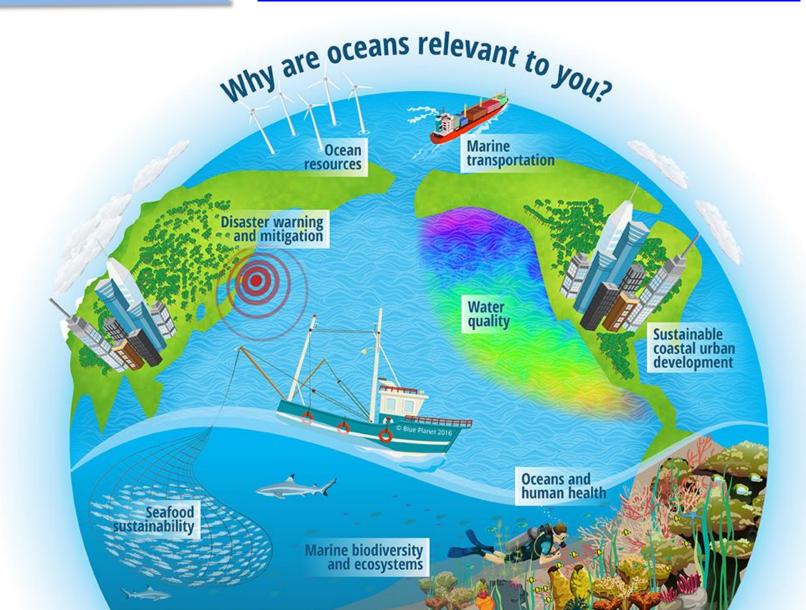
Next 3 years

- Increase communication and coordination within the ocean observing community
- Increase communication with the ocean observing community and end users
- Development of end-to-end services and GEO Flagships





New website - http://geoblueplanet.com/











































Intergovernmental Oceanographic Commission RESOURCES, MEETINGS, DOCUMENTS, PEOPLE





GEOMAR









Helmholtz Centre for Ocean Research Kiel



Emily.Smail@noaa.gov













































British Antarctic Survey

NATURAL ENVIRONMENT RESEARCH COUNCIL





























