IOOC Societal Indicators Task Team

Scope of Work

OVERVIEW

The application of social science has been recognized as a priority for effective ocean and coastal management, driving much discussion and fostering emerging efforts in several areas. Previously, the Interagency Working Group on Ocean Social Science (IWG-OSS) was tasked with assisting the Subcommittee on Ocean Science and Technology (SOST) to integrate social science into ocean, coastal, and Great Lakes governance structures, agency functions, policies, and decision-making. The IWG-OSS formally disbanded under the SOST consolidation. However, societal indicators are re-emerging today as a critical priority, and agencies are weighing how to incorporate better metrics to develop ocean observing systems that enhance the blue economy and sustainable development.

Moreover, the application of social sciences has been less explored with the design and management of ocean observing systems. This Interagency Ocean Observing Committee (IOOC) Ocean Societal Indicators Task Team (OSI-TT) will engage social scientists representing U.S. federal agencies to provide input on how agencies can enhance current ocean observing governance, design, end-user engagement, data integration, best practices, and innovation.

GOALS AND OBJECTIVES

The OSI-TT's overarching objectives are to increase our understanding of ocean and coastal systems and to improve science-based products and services for decision-making. The team will accomplish these objectives by leveraging existing observing programs that are conducting integrated observations (e.g. plankton/fish) to include socioeconomic and sociocultural indicators. Activities described in this scope of work will be consistent with the outcomes OceanObs'19, the U.N. Decade for Ocean Science and Sustainable Development, and the U.N. Sustainable Development Goals.

Pilot Studies

The team will assess the maturity and quality of observing programs in the U.S. that are sampling physical, biological and chemical attributes; and conduct pilot studies that prioritize socioeconomic and sociocultural indicators. These case studies may fall within a particular geographic region. For example, large scale, long-term, integrated observing programs like the California Collaborative Fisheries Research Program (CalCOFI) take a holistic approach to indicators (i.e. across physics and biology) and link to the socioeconomic and sociocultural component through the Integrated Ecosystem Assessments (IEAs). The OSI-TT will explore a variety of pilot studies and build on the work of the IOOC Metrics for Ocean Observing Systems Task Team.

Essential Societal Indicators

The team will leverage existing efforts to identify socioeconomic and sociocultural indicators, such as those established by the US Global Climate Research Program (GCRP) Social Science Coordinating Committee (SSCC). In addition, there are existing social indicator for ocean observing programs such as the Gulf of Mexico Coastal Ocean Observing System (GCOOS social indicators for Red Tides; this type of data will be collected. The team will also coordinate with the Global Ocean Observing System (GOOS) and U.S. Integrated Ocean Observing System (IOOS) to

develop societal Essential Ocean Variables (EOVs) in the context of the Framework on Ocean Observing and other feasibility impact assessments.

Other Guiding Principles

The OSI-TT will:

- Coordinate across scientific and management communities to identify social science data requirements;
- Use socioeconomic and natural sciences to identify, develop, and apply valuation frameworks for ecosystem services; and
- Synthesize ongoing social indicator efforts that characterize human interactions with the ocean, coasts, and Great Lakes, and providing recommendations for applications to inform long-term trend analyses and integrated ecosystem assessments for coastal communities.

Initially, the OSI-TT will meet with external participants to discuss priorities, opportunities, barriers, challenges, and lessons-learned related to the application of and/or need for incorporating ecosystem services approaches and broader use of social science in ocean and coastal decision-making and governance.

The OSI-TT will then evaluate how to coordinate and incorporate joint observations of social indicators between two or more agencies. The ultimate goal would be a system of sustained socioeconomic observations that serve as a better foundation for multisectoral ocean management.

Federal Agency Interests

Regulatory agencies, such as the Bureau of Ocean Energy Management (BOEM), have a statutory requirement under the National Environmental Policy Act to consider the impacts of their activities, such as offshore energy production, on the human environment. Regulatory outcomes have significant impacts on people who live near ocean coasts, and whose livelihoods depend on the ocean economy. BOEM carries out environmental studies on the impacts of planned and operational ocean energy developments to help balance the Nation's energy needs while protecting the environment. However, energy development is an activity that is limited in duration and area, and this limits the applicability of socioeconomic information that BOEM collects in a broader agency context. It is possible that the regulatory interests of BOEM may intersect both geospatially and temporally with activities of other ocean agencies who contribute to the IOOC.

This evaluation is relevant to broader integrated coastal and ocean federal management programs; as it links physical, ecological, and social indicators, as well as to marine spatial planning and ocean zoning, as society transitions to increasing ocean uses and a sustainable blue economy.

Partnerships

Partnerships include entities already conducting ecosystem-based management and socioeconomic impacts across local, state, federal, academic, private, and other NGOs. In addition, specific industries to partner with may include fisheries, aquaculture, offshore energy, and other sectors that will continue to increase interactions in the coming decade.

TIMELINE & MILESTONES

Below is a high-level work plan for the OSI-TT. Efforts are subject to change as activities evolve.

First 6 months:

- Explore interagency efforts conducting similar evaluations that the OSI-TT could leverage
- Develop list of partnerships across existing networks for coordinated social sciences on a national scale
- Identify capacity needs for social science among the coastal management and conservation community

6-18 months:

- Identify priority social science indicators at different time and space scales
- Develop ocean societal indicator case studies

18-24 months:

- Recommend administrative structures required to effectively integrate social science and application of ocean observing and ecosystem services
- Recommend ways to overcome administrative and political hurdles for effective integration of societal indicators
- Suggest a role for state and federal agencies, NGOs, academia, and industry to play in fostering and facilitating inclusion of ecosystem services approaches in ocean and coastal governance

OUTCOMES & BENEFITS

Communications and collaborations

1) Strengthened communication and collaboration between physical, chemical, biological, and social scientists; and other ocean, coastal and Great Lakes managers, and agency leaders.
2) Recommendations for methods that improve public understanding of the social sciences related to ocean, coastal, and Great Lakes matters; and best practices on integrating the social sciences into coastal and marine spatial planning.
3) Understanding of values and perceptions of the implications of the suite of ocean observations to inform engagement strategies and partnership building across federal agencies.

Science

1) Develop scientifically robust social indicator metrics that enhance our understanding of ocean and coastal systems, which can be mapped to sustainable ocean social indicators of the blue economy and sustainable development.
2) Synthesize data from social scientists across U.S. federal agencies related to understanding of social vulnerability to ocean observations and fully leverage the information to publicize ocean observing governance, design, end-user engagement, data integration, best practices, and innovation.
3) Disseminate a suite of indicators synthesized through joint state-federal-academic institutions, which inform problem solving of key issues, such as relocation/displacement, impacts to cultural identity, impacts to economies, etc.es, etc.

RESOURCES REQUIRED

The OSI-TT may convene in-person workshops, which would range between $10,000-$50,000 depending on location and participation. The OSI-TT will also require IOOC staff support.

MEMBERSHIP AND REPRESENTATION

The OSI-TT has one IOOC Co-Chair sponsor with more than three agencies represented, satisfying the IOOC Task Team requirements, and will seek input from other relevant partners.

1. Marilyn TenBrink, EPA
2. Rachel Seary
3. Emily Smail, NOAA
4. Erin Satterthwaite, UCSD
5. Victoria Ramenzoni

6. Abigail Harley
7. Jason Landrum, Pew
8. Libby Larson, NASA
9. Laura Lorenzoni, NASA
10. Jonathan Blythe, BOEM
11. Kimberly Marshall-McLean, BOEM
12. Patricia Clay, NOAA, GCRP
13. IOOS (?)
14. Staff: Sheri Rahman, Maggie Chory

SUNSET DATE

The OSI-TT will disband on March 27, 2023 unless extended by the IOOC.