Resilient U.S. Ocean Economy

Submitting Organization: RECOS – The Ocean Coalition
Affected Government Agencies: DOE, USGS, Army Corp, NOAA
Corresponding Appropriations: CJS, DoD, Energy & Water, Interior

Background: The Blue Economy refers to economic output of many industries spanning maritime transport, offshore energy, mineral mining, sustainable fishing, finance, insurance, aquaculture, tourism and real estate, among others. Each year it contributes an estimated $2.5T USD globally and is expected to double over the next decade. Ensuring sustainable growth is dependent on knowledge of the ocean's capacity and condition to support a wide range of economic activity. Science-based knowledge provides a competitive advantage for the U.S., hazard mitigation for coastal communities, and ensures a healthy ocean for future generations. These needs are relevant to NOAA, Department of Energy, U.S. Geological Survey, Environmental Protection Agency, the National Science Foundation, FEMA, and the U.S. Navy.

The evolving Earth system, its impact on humans, and the need for accurate prediction and response planning is evident following events such as extreme weather. Fisheries that feed more than 40% of the global human population are migrating poleward faster than they can be measured or studied, causing geopolitical conflict. As a result, the U.S. faces risks in environmental, economic, and food security. Ocean based solutions need to be modeled, scientifically tested and proven before implementation, otherwise lasting impacts could overshadow short-term benefits. And we need to move fast and the Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA) supplemental appropriations were a great start to tackling ocean issues impacting the U.S. economy.

Many industries require vast amounts of ocean data, which vary broadly in scope and span many federal agencies. Industries like ocean shipping, energy production, fisheries and other ocean uses depend on understanding the nexus of the ocean environment and human activities. Funding and development of advanced tools for characterizing and operating in the ocean is critical for safe, economically viable, and sustainable ocean use. The needs include more monitoring and observations, which underpins weather forecasts and is critical to generating and maintaining a competitive global advantage. Scientific knowledge of the oceans makes critical contributions to the nation's commercial vitality and national security and enables safe and resilient communities along our coasts.

Federal investment in ocean research is the essential precursor to developing the needed technologies, models, data tools, and knowledge critical for maintaining global leadership. These investments support universities and industries across the U.S. and will ensure we have the advanced work force and science and technology capabilities the country needs. Critical in this endeavor is the academic research fleet, which supports multidisciplinary, multi-investigator research ocean technology development. Large research vessels are vitally important to the U.S. oceanographic effort due to their range, payload, duration, and ability to effectively conduct scientific operations in remote areas and high sea states.

Recommendation in legislation: RECOS maintains that U.S. investment in science and technology is essential in preparing the nation for current and emerging opportunities. We recommend the highest possible funding levels for basic and applied research programs, including research instrumentation and future academic research fleet recapitalization.