Supporting the U.S. Ocean Workforce

Submitting Organization: RECOS – The Ocean Coalition
Affected Government Agencies: NOAA, EDA, Navy
Corresponding Appropriations: CJS, Defense

Background: Ocean economic sectors support nearly 350 million jobs worldwide. In the U.S., nearly one in every six jobs is marine related. There is growth potential in areas such as national defense and public administration, offshore minerals, transportation, living resources/seafood, research and education, ship and boat building, autonomous technologies, robotics, and marine construction. Blue Economic growth is tied to jobs, livelihoods, and the preservation of the health of oceans and coastline, where people live, earn, and learn. A knowledgeable, prepared, and innovative blue workforce is essential for prosperity and long term growth. Current student and professional education and training programs must be supported and evolve to stay relevant to the needs of industry and government. New programs of study must be developed to support emerging sectors and occupations. For example, artificial intelligence applications interface with navigation and ocean data analysis.

There is an increasing need for the blue workforce that have both technical acumen and the ability to work across disciplines and sectors to find solutions and create opportunities. The public faces a spectrum of challenges related to weather, food security, national security, energy independence, natural resource supply, and pollution. These challenges have great potential to create high paying and long lasting jobs while contributing innovation and technology to support resilient communities, coastlines, agriculture, and the use of natural resources. Dedicated and novel training programs will grow a cutting edge essential workforce and enable the U.S. to fully realize the economic and environmental benefits of a sustainable Blue Economy.

The Blue Economy is currently valued at approximately $2.5T USD globally each year, with the potential to double in the next ten years. By 2030 it is predicted to support ~40 million jobs in the US alone. Targeted, professional training is immediately needed in ocean engineering, robotics and autonomy, observing technologies, energy, biotechnology, aquaculture and fisheries. Supporting education and training programs will facilitate U.S. leadership in these sectors, foster industry growth, and provide information and data to government agencies and industry to support their mission. Training the future ocean workforce is necessary for human, environmental and economic health and national security.

A healthy federal research and development budget is central to U.S. leadership in ocean science and technology. Research has fueled innovation, competitiveness, and successful U.S. growth in the Blue economic sectors since World War II. Investments in applied research and associated training that enable translation of science into products and services that directly benefit the public, agencies and the economy are needed. For the U.S. to lead in the Blue Economy, replenishing U.S. scientific talent must come from training students of varied backgrounds and experiences. A longtime leader in higher education, the US must continue its leadership in training professionals in technical and vocational skills to lead a 21st century global blue economy.

Recommendation in Legislation: RECOS supports the continuation of robust funding in blue sector student and professional workforce training, including specialized advanced degree and certificate programs funded through programs within the Department of Commerce/NOAA, NSF, and NASA, and the Economic Development Administration.