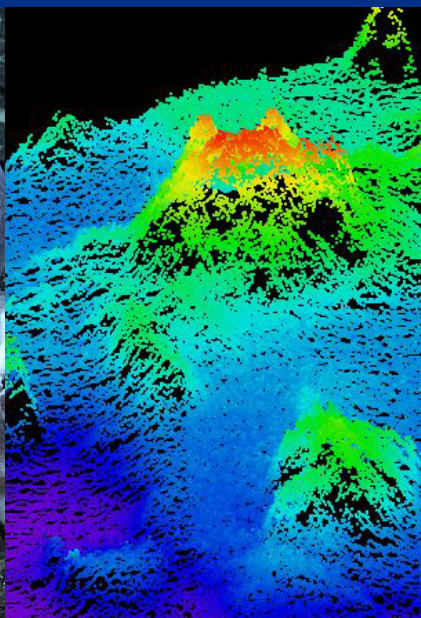


EXPLORING THE OCEAN FOR NATIONAL BENEFIT

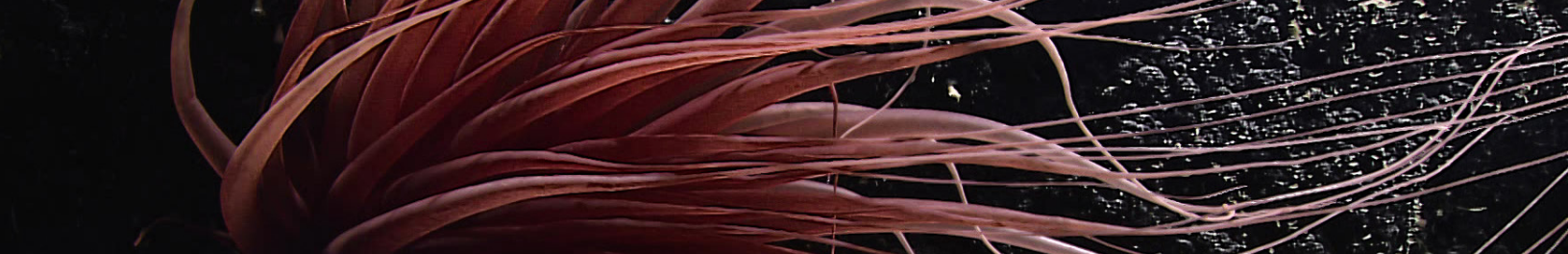
America's economic prosperity, security, and health are deeply connected to the vast ocean that touches our shores. Our ocean waters hold extensive natural and energy resources, generate jobs, safeguard our country, support areas of ecological value, allow the transportation of goods and services, and more. **Yet our understanding of these ocean waters remains limited.**

Only 54% of the U.S. Exclusive Economic Zone has been mapped and significantly less has been visually surveyed, leaving many of these waters poorly understood and undefined. How can we fully harness the marine environment if we don't understand what's out there?

NOAA Ocean Exploration (NOAA Office of Ocean Exploration and Research) is the only federal program dedicated to exploring the unknown ocean, unlocking its potential through scientific discovery, technological advancements, partnerships, data delivery, and education. By leading national efforts to fill gaps in basic understanding of the deep-ocean environment, we are providing critical data, information, and awareness needed to **protect American livelihoods, strengthen national security, and promote a vibrant U.S. economy.**



**OCEAN
EXPLORATION**



With priority placed on exploration of deep waters and the waters of the U.S. Exclusive Economic Zone, a few ways that NOAA Ocean Exploration executes its **mission to explore the ocean for national benefit** include...



Leading efforts to map deep waters of our Exclusive Economic Zone in support of National Ocean Mapping, Exploration, and Characterization Council goals to close gaps in understanding of a region critical to U.S. national security, fisheries, mineral and energy resources, and biodiversity.



Serving as a leading NOAA partner in the agency-wide response to deep-sea mining, with a focus on mapping the unknown seafloor and the collection and examination of biological and geological samples, including in mineral-rich areas of the deep sea, to increase our understanding of environments that hold critical metal and mineral deposits.



Leading and funding exploratory expeditions that have resulted in the discovery of deep-sea coral and sponge communities that represent some of the most valuable marine ecosystems on the planet, creating structures that provide shelter, food, and nursery habitat to invertebrates and fish that in turn provide us with food, medicines, and other resources.



Pushing the boundaries of technology and operations through the continued advancement and development of shipboard and uncrewed systems and the application of emerging tools such as omics and artificial intelligence and machine learning, allowing for more efficient and effective mapping, exploration, and understanding of the ocean environment.



Making collected data and information publicly available in increasingly innovative ways, providing a unique and centralized national resource of critical ocean information needed to inform decision-makers on ocean policy issues.



Establishing public, private, and academic partnerships in order to leverage complementary expertise, produce innovations in exploration tools and capabilities, and enhance the potential for significant new advances in discovery, understanding, action, and inspiration.



Providing educational and training opportunities to inspire members of the general public as well as the next generation of explorers, helping to build the future workforce needed to increase knowledge and understanding of the ocean system and maintain our country's influence and leadership in an ever-challenging global arena.

Through these and other activities, NOAA Ocean Exploration is working to broaden ocean understanding fundamental to advancing science and technology, building ocean-related industries, enhancing the Nation's prosperity and security, and informing policy and decision-making.

America's future depends on understanding our ocean, so that we can manage, sustainably use, and protect it. **Exploration is the first step to unlocking our ocean's full potential.**

