

Chair Lizzie Fletcher (D-TX) of the Subcommittee on Environment

Subcommittee on Environment Hearing:

Ocean Exploration: Diving to New Depths and Discoveries

Wednesday, June 5, 2019

Good morning, and welcome to the Subcommittee on Environment's hearing entitled "Ocean Exploration: Diving to New Depths and Discoveries." The Committee is holding this hearing at the beginning of World Oceans Month and Capitol Hill Ocean Week, to celebrate the oceans and the wonders that they hold. I would like to welcome and thank all of our witnesses for being here today to discuss the state and importance of ocean exploration to the United States.

As we've discussed in this Subcommittee this Congress, the oceans are incredibly important for sustaining life on earth, regulating the earth's climate, supplying over half of the oxygen we breathe, providing a major source of protein for billions of people around the planet, and more. Human health is intricately connected to ocean health.

We live on a blue planet. The oceans cover 71% of our planet, and yet we have mapped only about 15% of the seafloor. Human eyes have seen less than 5% of it. While we have sent 12 people to the Moon, only four have gone to the deepest part of the ocean. The ocean is earth's final frontier.

Yesterday, we held a hearing on biodiversity loss and heard about the rapid rate at which the oceans are changing -- through climate change, ocean acidification, pollution, overfishing, and more. The clock is ticking.

At today's hearing, I look forward to a discussion with our distinguished panel of experts, innovators, and explorers, on how we can advance the pace of ocean exploration and dive to deeper depths and discovery for a better future.

I also note that the Science Committee is hosting its first-ever Ocean Exploration Expo tomorrow morning at 9:30, at which some of our panelists and many other groups from the ocean exploration community will showcase their cutting-edge technology, work, and discoveries. This will be an amazing and fun educational opportunity and encourage those who can to attend.

We know more about the surface of the moon than we do about the seafloor. Like space exploration, ocean exploration has traditionally been a difficult, time-consuming, and expensive endeavor. As Dr. Bell points out in her testimony, at the current rate of ocean exploration – using the gold-standard of oceangoing research vessels equipped with special equipment for mapping and exploration – it would take over 1,000 years and millions of dollars to explore the remaining 85% of the oceans.

As new technologies emerge for exploring the oceans, from underwater drones and smaller and cheaper remotely operated vehicles (ROVs), sensors to measure conditions in harsh ocean environments, to machine learning applications, ocean exploration is experiencing a renaissance. But the U.S. is falling behind in marine innovation, as federal investment in ocean exploration remains relatively small and stagnant, while international investment and innovation in ocean exploration grows. I am glad we are having this hearing to explore ways this Committee can look to legislative solutions to support and enhance U.S. leadership in ocean exploration.

The United States has jurisdiction over more ocean than any other nation, so we have a real leadership role to play in ocean exploration. Our exclusive economic zone covers over 4.3 million square miles, an area larger than the 3.8 million square miles of terrestrial land that make up the U.S. Having information on what's in the U.S.'s waters and seafloor is important for national security, natural resource management, economic health, and cultural identity. We must know what's out there in order to better manage and conserve our resources for generations to come.

Ocean exploration would not be possible without a diverse enterprise of federal, commercial, academic, and non-profit investors and stakeholders. The National Oceanic and Atmospheric Administration is home to the nation's only dedicated federal ocean exploration program. This Committee is interested in learning about how the members of the ocean exploration community work together and how these roles can be better defined and partnerships leveraged to increase the pace, scope, and efficiency of ocean exploration.

We are a nation of explorers, and we must keep exploring and learning about the oceans because our future depends on it.