



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON **SCIENCE, SPACE, & TECHNOLOGY**

Opening Statement

Chair Lizzie Fletcher (D-TX) Subcommittee on Environment

Subcommittee Markup of:

*H.R. 1237, the “COAST Research Act of 2019”,
H.R. 1716, the “Coastal Communities Ocean Acidification Act of 2019”,
H.R. 1921, the “Ocean Acidification Innovation Act of 2019”,
and H.R. 988, the “NEAR Act of 2019.”*

April 9, 2019

Welcome to our first Environment Subcommittee markup. Today, we will be marking up four bipartisan bills that address an invisible but growing threat to our ocean and coastal economies and communities: ocean acidification. At our March 7th Subcommittee hearing, entitled “Sea Change: Impacts of Climate Change on Our Nation’s Oceans and Coasts,” we heard from a variety of experts from the research community and industry who recognized ocean acidification as one of the top threats facing our oceans and coasts. Before going into the bills we will be marking up, I first want to give a brief explanation of why we need to address ocean acidification.

Ocean acidification is the gradual decrease in oceanic pH due to absorption of excess carbon dioxide (CO₂) in the atmosphere. It is often called “the other CO₂ problem,” because, like climate change, it is caused primarily by excess CO₂ in the atmosphere. Since the beginning of the Industrial Revolution, the oceans have absorbed about a third of anthropogenic CO₂ emissions, resulting in a 30 percent increase in acidity levels. This increase in ocean acidity can cause a number of problems that we are only beginning to fully understand.

In the mid-2000s, the multi-million dollar Pacific Northwest shellfish hatchery industry experienced a near economic collapse due to shellfish larvae struggling to develop shells, which was eventually linked to more acidic ocean waters. This was a wake-up call for the shellfish industry, researchers, and coastal communities.

Recognizing the growing threat of ocean acidification, Congress enacted the Federal Ocean Acidification Research and Monitoring Act (or FOARAM) in 2009, to support research and monitoring efforts to better understand ocean acidification and its impacts. The bill established the Ocean Acidification Program at the National Oceanic and Atmospheric Administration (NOAA), and the Interagency Working Group on Ocean Acidification, which provides a coordinated response by federal agencies to understand, monitor, and address ocean acidification.

Since FOARAM was passed into law, our understanding of ocean acidification impacts has increased substantially. For example, we know much more about why shelled marine organisms, such as oysters, mussels, clams, and corals, are particularly sensitive to low pH conditions. It is predicted that many other fisheries will be negatively impacted, with some models predicting that acidification will cause widespread declines in fish catch.

Thanks to FOARAM and the engagement of multiple sectors, including federal and non-federal researchers, shellfish industry, resource managers, and others, there has been success in adapting the shellfish hatchery industry to ocean acidification. Now, we need to help prepare other potentially vulnerable communities and industries.

However, there is still a long way to go in understanding, predicting, and preparing for changes in ocean chemistry, which is why we need to enhance existing federal efforts and add more tools to the toolbox, as the bills we're marking up today will accomplish.

H.R. 1237, the Coastal and Ocean Acidification Stressors and Threats (COAST) Research Act of 2019, reauthorizes and updates the FOARAM Act of 2009 to broaden the scope of federal efforts to better understand the effects of ocean and coastal acidification.

H.R. 1716, the Coastal Communities Ocean Acidification Act of 2019, supports federal research and monitoring efforts by identifying the socioeconomic needs of coastal communities vulnerable to ocean acidification through requiring NOAA to conduct vulnerability assessments.

H.R. 1921, the Ocean Acidification Innovation Act of 2019, creates prize competitions to incentivize innovative solutions to help vulnerable communities better understand, monitor, and respond to ocean acidification.

Finally, H.R. 988, the National Estuaries and Acidification Research (NEAR) Act of 2019, improves our understanding of the impacts of ocean acidification on our nation's ecologically and economically important estuarine environments.

Before I yield back, I would also like to place into the record this letter of support for all four bills from Ocean Conservancy. Without objection.

I'm glad we're marking up this legislation today to address the growing impacts of ocean acidification and look forward to moving these bills through the markup process, and eventually to the floor.