WRITTEN TESTIMONY BY

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HEARING ON

LEGISLATION TO REAUTHORIZE THE CORAL REEF CONSERVATION ACT OF 2000

BEFORE THE

COMMITTEE ON NATURAL RESOURCES
SUBCOMMITTEE ON WATER, OCEANS, AND WILDLIFE
U.S. HOUSE OF REPRESENTATIVES

May 4, 2021

Chairman Huffman, Ranking Member Bentz, and Members of the Subcommittee, thank you for the opportunity to testify today regarding the Restoring Resilient Reefs Act of 2021 (H.R. 160). The bill reauthorizes the National Oceanic and Atmospheric Administration's (NOAA) Coral Reef Conservation Program through Fiscal Year 2024 and includes several modifications to the Program. While NOAA supports the goals of H.R. 160, we offer recommendations below to more closely align the bill with the Biden Administration's priorities on advancing socioeconomic equity, environmental justice, and climate resilience. We thank the Subcommittee for recognizing that the threats to coral reefs have increased since passage of the Coral Reef Conservation Act of 2000 and for taking a more community-based approach to coral restoration and recovery.

Overview of U.S. Coral Reef Ecosystems

Coral reef ecosystems play an outsized role in the health of our ocean; they occupy less than one percent of the planet's surface area but support an estimated 25 percent of all marine species.[1] Healthy coral reefs provide culturally and economically valuable ecosystem services to the American public such as food, opportunities for recreation and tourism, coastal protection and resilience, and raw materials used to create bio-pharmaceutical products. These services are

[1] Burke, L., D. Bryant, J. McManus, and M. Spalding. 2008 Reefs at Risk, World Resources Institute (WRI): 56p.

valued at approximately $9.8 trillion globally,[2,3] including $8.5 billion for Southeast Florida coral reefs[4] and $9.7 billion for Hawaii coral reefs.[5] It is also important to recognize the cultural significance of healthy coral reefs to the indigenous peoples, who were the original stewards of these resources, and to the many people who depend on corals for their livelihoods, recreation, and sense of place.

Coral reef ecosystems confront multiple, compounding stressors on a global scale. Pollution, fishing impacts, and the climate-induced impacts of coral bleaching and ocean acidification have destroyed or severely damaged many of the world's reefs. In 2006, NOAA listed two coral species as threatened under the Endangered Species Act. NOAA listed twenty additional shallow coral species as threatened in 2014, and coral reefs subsequently experienced unprecedented losses during the third global bleaching event between 2014 and 2017.

Additionally, Stony Coral Tissue Loss Disease, first detected in 2014 in south Florida, continues to spread to coral populations throughout the wider Caribbean region, and may pose a threat to the Indo-Pacific region. The outbreak is unique due to its large geographic range, extended duration, rapid progression, high rates of coral mortality, and the number of species affected. Once infected, coral colonies typically die within weeks to months. NOAA's Coral Reef Conservation Program is taking proactive measures to address Stony Coral Tissue Loss Disease by leading efforts to identify the pathogen responsible for it, treating affected corals to halt its spread on individual colonies, rescuing threatened species ahead of the spread of disease, and captively breeding them to maintain genetic diversity for species recovery, restoration, and future repopulation.

Coral Reef Conservation Program Overview

History

Established in 2000, the Coral Reef Conservation Program fulfills NOAA's responsibilities under the Coral Reef Conservation Act of 2000 and Executive Order 13089 on Coral Reef Protection. The Program brings together expertise from across NOAA and other partners, including federal managers, state and territorial governments, academic institutions, nongovernmental organizations, and community groups. The primary purpose of these cross-cutting multi-sector collaborations is to improve the scientific understanding of coral reef ecosystems for more effective ecosystem management, conservation, and restoration. The Program works in American Samoa, the Commonwealth of the Northern Mariana Islands, Florida, Guam, Hawaii, Puerto Rico, and the U.S. Virgin Islands. The Program also monitors coral reefs in the Northwestern

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[2] Costanza, R. et. al. Changes in the global value of ecosystem services. Global Environmental Change. 2014; 26: 152-158.

[3] deGroof, R., et al. Global estimates of the value of ecosystems and their services in monetary units. 2012; 1(1): 50-61.

[4] Johnson, GM, VR Leeworthy, FW Bell, and MA Bonn. (2001). *Socioeconomic Study of Reefs in Southeast Florida Final Report. Final Report for Broward County, Palm Beach County, Miami-Dade County, Florida Fish and Wildlife Conservation Commission, and NOAA.*

[5] NOAA. (2013). *Summary Report The Economic Value of U.S. Coral Reefs*.

Hawaiian Islands, the Pacific Remote Island Areas, and Flower Garden Banks National Marine Sanctuary in the Gulf of Mexico, and supports capacity-building efforts in international areas in the Caribbean and Pacific.

NOAA's Coral Reef Conservation Program Strategic Plan

The strategic plan for NOAA's Coral Reef Conservation Program uses a resilience-based management approach, focused on conservation actions that support the ability of corals to withstand and recover from stressors, including climate change impacts and disease. The plan focuses on ways to reduce the three main threats to coral ecosystems (i.e., climate impacts, unsustainable fishing, and land-based sources of pollution), and also incorporates ecosystem-scale restoration of viable populations of coral. Collaboration is critical to achieving success in implementing the plan. The plan guides investments in the near term to achieve longer-term goals, and identifies opportunities to strengthen and create partnerships across the conservation community, including through the U.S. Coral Reef Task Force.

Coral Reef Conservation Program Funding

Congress appropriated $33 million for the Coral Reef Conservation Program in Fiscal Year 2021. With these funds, the Coral Reef Conservation Program is addressing the objectives of the Coral Reef Conservation Act of 2000 and its strategic plan. For example, the Coral Reef Conservation Program is providing over $16.7 million to support partnerships among academic institutions, nongovernmental organizations, and governments to reduce threats to coral reef ecosystems, restore degraded coral reefs, and help make coral reefs more resistant and resilient to the effects of climate change. Notable recent accomplishments include:

- Sponsoring a National Academy of Sciences study, A Research Review of Interventions to Increase the Persistence and Resilience of Coral Reefs, and supporting science to operationalize several coral interventions identified in the study.
- Producing A Manager's Guide to Coral Reef Restoration Design and Planning, already in use in the U.S. coral reef jurisdictions and internationally, to develop comprehensive coral restoration plans.
- Expanding partnerships and support for Mission: Iconic Reefs to restore seven iconic reefs in Florida Keys National Marine Sanctuary.
- Producing National Coral Reef Monitoring Program status reports for all U.S. coral reef ecosystems to capture status and trends as well as human connections.
- Commencing a comprehensive ecosystem services valuation of U.S. coral reefs.
- Developing and implementing the NOAA Strategy to Respond to and Prevent the Spread of Stony Coral Tissue Loss Disease, which aims to:
    - Expand our capacity to respond to the epidemic in the Atlantic-Caribbean region;
    - Support timely, efficient, and effective action to slow the outbreak by unifying regional efforts under a nationwide response framework; and

- Prevent and prepare for the potential spread of Stony Coral Tissue Loss Disease to the Indo-Pacific region.

Restoring Resilient Reefs Act of 2021

H.R. 160 Overview

Specific to the Department of Commerce and NOAA, the Restoring Resilient Reefs Act of 2021 (H.R. 160) reauthorizes NOAA's Coral Reef Conservation Program through Fiscal Year 2024 and includes several program modifications. Changes include directing NOAA to: (1) develop a national coral reef resilience strategy; (2) provide block grants to states and territories; (3) establish standards for the formation of stewardship partnerships; and (4) establish a National Coral Reef Management Fellowship Program. The bill also requires the Department of Commerce to provide grants for coral reef emergency declarations to implement emergency plans. Additionally, the bill provides statutory authority for the U.S. Coral Reef Task Force to continue its current operations.

H.R. 160 Technical Suggestions

The Administration has not yet taken a position on this bill. The bill recognizes the importance of partnerships in conserving and restoring coral reefs through public-private Coral Reef Stewardship Partnerships, the codification of the U.S. Coral Reef Task Force, and robust local stakeholder engagement processes. NOAA appreciates the integration of coral restoration throughout the bill and the role restoration plays in a comprehensive conservation strategy to recover lost ecosystem functions with resilient reefs. The bill provides new mechanisms including, but not limited to: (1) an increased recognition and prioritization of coral restoration; (2) the authority for NOAA to receive funds from a range of entities or individuals for the purpose of supporting NOAA's coral reef activities; and (3) the ability to enter into non-competitive agreements for the purpose of supporting NOAA's coral reef activities. New authorities in the bill would allow the managers of coral reefs covered by statute to adopt other relevant plans, encourage NOAA to provide technical assistance, and broaden federal participation in stewardship partnerships.

NOAA offers the following technical suggestions to improve the bill. The first relates to Section 207, which creates new State Block Grants. The intent of the block grants appears to be to incentivize the seven state and territorial coral jurisdictions to provide non-federal sources of funding the federal government could match. As written, though, the block grant funding formula may unintentionally increase administrative burdens and disparities among the jurisdictions. Under the proposed formula, territories with smaller budgets and less philanthropic and nonprofit support would receive less federal support than states with greater means to directly support coral conservation work. This in turn may exacerbate existing inequities and require jurisdictions of lesser means to seek additional sources of financial assistance.

NOAA's Coral Reef Conservation Program currently provides more equitable support to all seven jurisdictions than the formula in Section 207 of the proposed bill, including by offering partial match waivers to all territories based on need and competitive priorities. NOAA therefore suggests modifying the State Block Grants formula, similar to NOAA's existing approaches, to achieve a more equitable distribution of resources.

Second, NOAA notes that while Section 215(c) authorizes the establishment of Cooperative Institutes in the Pacific and Atlantic, NOAA already conducts coral reef research in the geographic regions described by H.R. 160 through its existing Cooperative Institutes portfolio. In 2003, Congress authorized NOAA to designate Cooperative Institutes "to use the personnel, services, or facilities of such organizations for research, education, training, and outreach" (P.L. 108-7). This authority was extended indefinitely by P.L. 108-199. NOAA establishes new Cooperative Institutes on the basis of possessing unique capabilities in a mission-critical area of research (see NOAA Administrative Order 216-107). Section 215(c) would duplicate capabilities and capacity at NOAA's existing Cooperative Institutes.

Pursuant to our authority from Congress, NOAA has established six Cooperative Institutes that advance and sustain essential capabilities in coral reef research. Among these are the Joint Institute of Marine and Atmospheric Research at the University of Hawaii and the Cooperative Institute for Marine and Atmospheric Studies, a consortium of ten universities spanning Florida, Puerto Rico, and the U.S. Virgin Islands. These Pacific and Atlantic Cooperative Institutes fulfill the requirements of the Act by improving our understanding of and responses to continuing and emerging threats to U.S. coral reefs, and by enhancing their resilience, conservation, restoration, and management. NOAA would appreciate the opportunity to discuss with the Subcommittee our plan for implementing Section 215(c) given the established capacities within the existing Cooperative Institutes.

Finally, the terms "Secretary" and "Administrator" appear to be used interchangeably throughout H.R. 160. NOAA recommends using the term "Administrator" throughout the bill to provide a clear delegation of authority from the Department of Commerce to the NOAA Administrator to reduce confusion and ensure operational efficiency.

Conclusion

Thank you again for the invitation to join you today and for your consideration of coral reef conservation and resilience. I look forward to answering any questions.