

**STATEMENT FOR THE RECORD OF  
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U.S. DEPARTMENT OF COMMERCE**

**ON MARINE DEBRIS, OIL SPILL PREPAREDNESS, RESPONSE,  
AND DAMAGE ASSESSMENT  
BEFORE THE  
SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION  
HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE  
UNITED STATES HOUSE OF REPRESENTATIVES**

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**Introduction**

Good morning, Chairman Webster, Ranking Member Carbajal, and members of the Subcommittee, thank you for this opportunity to provide a Statement for the Record about marine debris and oil spill preparedness, response, and restoration. My name is Nancy Wallace, and I am the Director of the Marine Debris Program, within the National Ocean Service Office of Response and Restoration, at the National Oceanic and Atmospheric Administration (NOAA) within the Department of Commerce.

Marine Debris, as defined by the Marine Debris Act, is “any persistent solid material that is manufactured or processed and directly or indirectly, intentionally, or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes (33 U.S.C. § 1956(3)).” Marine debris ranges from lost or abandoned fishing gear and vessels, to plastics, glass, metal, and rubber of any size, and is an on-going international problem that impacts our natural resources. The NOAA Marine Debris Program (MDP) leads national efforts to research, prevent, and reduce the impacts of marine debris. Authorized by the Marine Debris Act, as amended (33 U.S.C. § 1951 et seq., “Marine Debris Act”), the program supports marine debris projects in partnership with state and local agencies, tribes, non-governmental organizations, academia, and industry. NOAA spearheads national research efforts, engages with the Department of State and international organizations on global marine debris efforts, and works to change behavior through outreach and education initiatives.

NOAA recognizes that marine debris is a global problem and that there is no ‘one size fits all’ solution to addressing this issue on national and international scales. A recent study estimated

that in 2016, as much as 23 million metric tons of plastic waste entered aquatic ecosystems from land around the world (Borelle et al., 2020). This number may seem huge, but it does not include marine debris items not made of plastic, or ocean-based marine debris, such as lost fishing gear and vessels. That number has also likely increased with time. If current practices continue, the amount of plastic discharged into the ocean could reach up to 53 million metric tons per year by 2030 (Borrelle et al. 2020, Jambeck and Johnsen 2015, Pauly and Zeller 2016). The United States alone, despite a well-developed formal waste management system, contributed approximately 1 million to 2 million metric tons of plastic waste to the environment at home and abroad in 2016 (Law et al. 2020). It is clear that there is still much work to be done to find solutions to marine debris on both the national and international levels.

Today, I will focus my testimony on the Marine Debris Act, the impacts of marine debris in the ocean and Great Lakes, the program pillars of NOAA's MDP, implementation of the Save Our Seas 2.0 Act, and H.R. 886, Save Our Seas 2.0 Amendments Act and NOAA's oil spill preparedness, response, and damage assessment.

### **Marine Debris Impacts**

Marine debris causes significant threats not only to ocean and coastal environments and wildlife, but also to human health, safety, and navigation. Each year, countless marine animals, sea turtles, and seabirds are injured or die because of entanglement in or ingestion of marine debris. Additionally, debris can scour, break, smother, or otherwise damage important marine habitat, such as coral reefs and tidal wetlands, that serve as the basis of marine ecosystems and are critical to the survival of many important species. Derelict fishing gear, such as nets and crab pots, can continue to capture fish – something we refer to as “ghost fishing” – for years after they are lost. Not only does this affect the species that end up as bycatch in the lost gear by reducing the abundance and reproductive capacity of the population, but it also causes fishermen economic losses. Marine debris can facilitate the introduction and range expansion of invasive species.

Marine debris also creates navigation hazards. Ropes, plastics, derelict fishing gear, and other objects can become entangled in vessel propellers or clog water intakes, causing operational problems. Larger items, such as lost shipping containers, can become collision dangers. Such interactions with marine debris involve costly engine repairs and disablement. Abandoned vessels are another navigational threat in our coastal waterways that have become a serious marine debris problem in many states. The dangerous and costly impacts of these different types of marine debris affect both the recreational boating and commercial shipping communities.

### **Marine Debris Act**

The MDP is authorized by Congress as the federal lead to work on marine debris through the Marine Debris Act. The Act authorizes the NOAA Administrator, through the MDP, to “identify,

determine sources of, assess, prevent, reduce, and remove marine debris and address the adverse impacts of marine debris on the economy of the United States, marine environment, and navigation safety.” (33 U.S.C. § 1952). The Act further directs the Administrator, through the MDP, to “provide national and regional coordination to assist States, Indian tribes, and regional organizations,” “undertake efforts to reduce the adverse impacts of lost and discarded fishing gear on living marine resources and navigation safety,” “undertake outreach and education activities for the public and other stakeholders” on marine debris issues, develop “interagency plans for the timely response to events,” and “enter into cooperative agreements and contracts and provide financial assistance in the form of grants for projects to accomplish the purpose” of the Act. 33 U.S.C. § 1952(b)-(d). The 2012 amendments (P.L. 112-213) directed NOAA to address and determine severe marine debris events. The Save Our Seas Act of 2018 (P.L. 115-265), which reauthorized and amended the Marine Debris Act, directed NOAA to “promote international action, as appropriate, to reduce the incidence of marine debris” and, in the case of a severe marine debris event, to “assist in the cleanup and response required by the severe marine debris event” or conduct such other activity as NOAA deems appropriate.

### **The NOAA Marine Debris Program**

The MDP, guided by the Marine Debris Act, is focused around six program pillars: prevention, removal, research, monitoring and detection, response, and coordination.

#### *Prevention*

One of the most effective ways to reduce marine debris is through prevention, which requires that boaters, fishermen, industry, and the general public have the knowledge and training to change the behaviors that create marine debris. NOAA’s robust outreach and education activities focus on improving awareness and changing behavior through developing and disseminating public information, and by partnering with and providing funding support to external groups including academic partners and nonprofit groups.

#### *Removal*

While prevention is essential to stemming the input of new debris into the ocean, removal is necessary to diminish the impacts of debris already introduced into the ocean and Great Lakes. The MDP provides funding through its removal grants competitive funding opportunity. The program also provides support to the annual International Coastal Cleanup.

#### *Research*

A key tenet of the MDP is research. Congress recognized the need for research that determines the sources and helps us understand the adverse impacts of debris on the marine environment and navigation safety (33 U.S.C. § 1952(b)(1)). Since its establishment, the MDP has funded research projects that help expand our understanding of debris by investigating where debris

comes from, how it moves through the environment, and how it impacts wildlife and our ocean, waterways, and Great Lakes.

### *Monitoring and Detection*

The MDP supports projects that generate monitoring and detection data, involve the public, incorporate innovative technologies, and provide guidance to the marine debris community. Monitoring and detection efforts improve our understanding of the scope, scale, and distribution of marine debris in the environment, as well as provides critical data on the types and amount of debris, which can inform management practices and prevention. In particular, the MDP maintains the NOAA Marine Debris Monitoring and Assessment Project, an initiative that helps answer fundamental questions about the types of marine debris found on shorelines.

### *Response*

Coastal storms and natural disasters are another source of marine debris that create hazards in our inland and coastal waters. NOAA has responded to emergency events including Hurricanes Florence, Michael, Harvey, Irma, and Maria, and Typhoon Yutu. The MDP also works before disasters strike to help communities prepare to respond to marine debris. As part of this work, the MDP partners with coastal states and U.S. territories to develop state/territory-specific marine debris emergency response guides. These guides outline the processes and roles of each partner for responding to and recovering from a severe marine debris event, such as a hurricane.

### *Regional Coordination*

The MDP works with local communities to address region-specific marine debris issues. The MDP has 11 Regional Coordinators working in Alaska, the Pacific Northwest, California, the Pacific Islands, the Gulf of Mexico, Florida, the Caribbean, the Southeast, the Mid-Atlantic, the Northeast, and the Great Lakes to support projects and partnerships with state and local agencies, tribes, nongovernmental organizations, academia, and industry that addresses marine debris locally.

The MDP Regional Coordinators also work with partners to develop and implement regional marine debris action plans. These action plans focus on long-term solutions to the causes and impacts of marine debris in the regions, as well as outline operational best practices and data collection protocols. The purpose of these action plans is to aid states in preventing and reducing debris and mitigating coastal impacts.

### *National Coordination*

As authorized in the Marine Debris Act, 33 U.S.C. § 1954, NOAA is the chair of the Interagency Marine Debris Coordinating Committee (IMDCC), a multi-agency body that is responsible for streamlining the federal government's efforts to address marine debris. Representative agencies coordinate a comprehensive program of marine debris activities and report to Congress every

two years on research priorities, monitoring techniques, educational programs, and regulatory action. Members include: the Departments of Energy, Interior, Justice, and State; the U.S. Environmental Protection Agency; the U.S. Coast Guard; the U.S. Navy; the Marine Mammal Commission; the National Aeronautics and Space Administration; the National Science Foundation; and the U.S. Agency for International Development.

In addition to the IMDCC, the program also partners with other agencies on funded projects. For example, the MDP provides support for missions to remove marine debris from Papahānaumokuākea Marine National Monument. Project partners for these missions have included the National Fish and Wildlife Foundation, Papahānaumokuākea Marine Debris Project, U.S. Fish and Wildlife Service, State of Hawaii, and other NOAA programs. In Fiscal Year 2021, the mission removed 118,400 pounds of derelict fishing nets and nearly 5,300 pounds of plastic and other debris.

### *International Engagement*

There are many ongoing international, multilateral, and bilateral initiatives to understand and combat the issue of marine debris across the world. The MDP works closely with the Department of State and other U.S. national agencies to provide input and leadership on the issue, and also collaborates with other countries to research, prevent, and remove marine debris.

### **Implementation of the Save Our Seas 2.0 Act**

The Save Our Seas (“SOS”) 2.0 Act (P.L. 116-224) was signed into law on December 18, 2020. The Act contains three titles that address: (1) the United States’ domestic programs to combat marine debris, (2) international engagement to combat marine debris, and (3) domestic infrastructure to prevent marine debris. The lead agencies with responsibilities under the Titles of the Act are NOAA, the Department of State, and the Environmental Protection Agency, respectively.

Significant components of the SOS 2.0 Act within NOAA’s jurisdiction include:

- Clarifying the scope of the Marine Debris Act to include waters in the jurisdiction of the United States, the high seas, and waters in the jurisdiction of other countries (Sec. 101);
- Establishing a Marine Debris Foundation (Subtitle B);
- Establishing a Genius Prize for Save Our Seas Innovation (Subtitle C); and
- Requiring several new reports and studies on different aspects of marine debris (Subtitle D), including the sources and impacts of derelict fishing gear, innovative uses of plastic waste, microfiber pollution, vessel recycling, and the United States’ contribution to global plastic pollution, as well as a pilot program for providing incentives to fishermen to collect and dispose of plastic found at sea.

### ***Marine Debris Foundation***

The SOS 2.0 Act (33 U.S.C. § 4211 et. seq.) also established the Marine Debris Foundation as a charitable and nonprofit organization (33 U.S.C. § 4211). The Marine Debris Foundation is charged with augmenting the efforts of NOAA to assess, prevent, reduce, and remove marine debris, and with taking actions to support other Federal agencies, and other entities, to address marine debris (33 U.S.C. § 4211(b)). The SOS 2.0 Act specifies that the Under Secretary of Commerce for Oceans and Atmosphere (NOAA Administrator) is responsible for appointing, and serves on, the Board of Directors of the Marine Debris Foundation (33 U.S.C. § 4212(a)).

On April 6, 2022, NOAA announced the inaugural Board of Directors for the new Marine Debris Foundation. The appointment of the inaugural Board of Directors was approved by the Secretary of Commerce, consistent with the Presidential signing statement for the Save Our Seas 2.0 Act. The 12 new Board members bring a diverse range of expertise, experience, and perspectives. The Foundation will be an important partner to NOAA and other entities in the United States who are tackling the immense challenges that marine debris poses to nature, human health, and the U.S. economy.

### ***Studies and Reports***

The SOS 2.0 Act requires the MDP to undertake several studies and reports as described below. The MDP has completed or is in the process of completing the studies and reports using several avenues, including existing grant-funded projects, new grant awards, new contracts, and collaboration with other federal agencies.

Section 131 requires the IMDCC to submit a report to Congress on innovative uses of plastic waste in consumer products. As vice-chair of the IMDCC, the Environmental Protection Agency (EPA) has taken the lead on implementation of this report.

Section 132 requires the IMDCC to submit a report to Congress on microfiber pollution. The MDP is working closely with the EPA on this report. The draft report, and the five-year federal action plan contained within it, went out for a 30-day public comment period on September 15, 2022. The report is undergoing interagency review.

Section 133 requires NOAA to fund the National Academies of Sciences, Engineering and Medicine to conduct a study on the contributions of the United States to global ocean plastic waste. This study was released in December 2021, and the MDP is working under our current authorities on implementation of actions and activities that address the report recommendations.

Section 135 requires NOAA to submit a report to Congress on the sources and impacts of derelict fishing gear. This report is under development.

Section 136 requires NOAA to conduct a study to determine the feasibility of a nationwide vessel recycling program, using a pilot project in Rhode Island as a model. On February 8, 2023, the MDP published a report, Recycling Opportunities for Abandoned, Derelict, and End-of-Life Recreational Vessels, that summarizes the completed study. The report, created by the Rhode Island Marine Trades Association Foundation in partnership with the MDP and National Marine Sanctuary Foundation, identifies challenges associated with recycling fiberglass vessels and outlines the steps necessary to build a viable nationwide recycling program.

Section 137 requires NOAA to establish a pilot program to assess the feasibility and advisability of providing incentives to fishermen to collect and dispose of plastic found at sea. Through the MDP's FY22 competitive grant funding opportunity, we awarded funding to Mississippi Commercial Fisheries United, Inc. to develop and implement a pilot program. The project will conclude in August 2025, and we will work with the grantee to document lessons learned on the project's feasibility and advisability.

Section 307 requires the EPA and the IMDCC to conduct a study on minimizing the creation of new plastic waste. The EPA has taken the lead on implementation of this report.

### ***Genius Prize***

The SOS 2.0 Act also establishes a Genius Prize for Save Our Seas Innovation and authorizes the Secretary of Commerce to offer to enter into an agreement with the Marine Debris Foundation to administer the prize competition. The FY 24 Budget includes funding to support a Genius Prize for marine debris.

### **H.R. 886, Save Our Seas 2.0 Amendments Act**

If enacted, H.R. 886, Save Our Seas 2.0 Amendments Act, would amend the SOS 2.0 Act by:

- Providing technical and administrative corrections to the operation of the Marine Debris Foundation. For example, it would change the title of the "first officer or employee appointed by the Board" from "chief operating officer" to "chief executive officer" to align with common terminology used in the non-profit sector.
- Adding the U.S. Agency for International Development as a named agency for consultation before removal of a Director, and would clarify that the Board shall submit recommendations on new Directors to the Under Secretary.
- Adding clarification on the location of the Marine Debris Foundation's principal office and a new directive on development and implementation of "best practices for conducting outreach to Indian Tribes."
- Aligning the Marine Debris Foundation's operation into alignment with other Congressionally chartered non-profits and remove restrictions that inhibited the Marine Debris Foundation from effectively beginning operations.

- Authorizing up to twelve percent of federal funds appropriated to the Department of Commerce to carry out SOS 2.0 to be used to offset administrative expenses of the Marine Debris Foundation.
- Specifying that the 24-month window for use of federal funds for salaries of the Marine Debris Foundation begins at the enactment of the Amendments Act; and would expand the list of non-federal entities whose contributions to the Marine Debris Foundation may be matched using federal funds.

H.R. 886 would also amend the Marine Debris Act by:

- Providing more flexibility to enter into different types of agreements and to work with non-profits and individuals;
- Enabling third parties to provide funding to NOAA for projects without having to reimburse actual costs; and
- Implementing a technical fix to allow discretionary cost-share waiver for grants to address severe marine debris events.

We appreciate the close coordination with the Committees and sponsor offices and the opportunity to provide important clarifications to help guide NOAA's work with the Marine Debris Foundation and other partners.

H.R. 886 also contains language in the new section on receipt and expenditure of funds that would make available funds – “only to the extent provided in advance in appropriations acts”.

### **Oil Spill Preparedness, Response, and Damage Assessment**

NOAA’s Office of Response and Restoration (OR&R) is a center of expertise in preparing for, evaluating, and responding to threats to coastal environments, including oil and chemical spills, releases from hazardous waste sites, natural disasters, and marine debris. OR&R staff are located around the country to work with local and regional partners to address the impacts of environmental threats to our coastal communities.

Under laws such as the Oil Pollution Act of 1990 (OPA); Clean Water Act; Comprehensive Environmental Response, Compensation, and Liability Act (known as CERCLA or Superfund); and National Marine Sanctuaries Act, NOAA is a trustee for the public’s natural resources, charged with protecting and restoring them when impacted by oil and chemical spills, hazardous waste sites, and vessel groundings. In addition to these authorizations, OR&R also has a role supporting the Federal Emergency Management Agency and other federal agencies under Presidential Policy Directives 8 and 44 for natural disasters and other incidents. OR&R strives to fulfill our mission of protecting and restoring NOAA trust resources by providing scientific and technical support to prevent and prepare for, respond to, and recover from marine pollution.



### ***Preparedness***

Following the devastating 2017 hurricane season, and to address the realities of increased natural and human-caused coastal threats, NOAA created the Disaster Preparedness Program within OR&R. This program is focused on strengthening existing operational capabilities to ensure that NOAA's National Ocean Service and its partners have the tools necessary to help plan for and respond to disasters so commerce, communities, and natural resources can recover as quickly as possible. OR&R supports disaster preparedness for NOAA and our partners through planning, training, exercises, disaster coordination, continuous improvement, and long-term recovery for an optimal preparedness posture.

### ***Response***

Thousands of incidents occur each year in which oil or chemicals are released into the environment as a result of accidents or natural disasters. Spills into our coastal waters and inland waterways, whether accidental or intentional, can harm people and the environment and cause substantial disruption of marine transportation with potential widespread economic impacts.

Every year, OR&R responds to approximately 150 oil and chemical spills in U.S. waters. Under the National Response Framework and the National Contingency Plan, NOAA has responsibility for providing scientific support to the federal on-scene coordinator and other federal partners for oil and hazardous material spills. To support this work, we provide response to incidents 24 hours a day, seven days a week. When an incident occurs, OR&R's scientific support coordinators compile scientific inputs and deliver this critical information to the federal on-scene coordinator and other federal partners. Through the use of our customized tools, models, and products, information is available to provide responders with the science they depend on to protect our coastal communities.

### ***Damage Assessment***

OPA authorized NOAA and other natural resource trustees to recover damages from parties responsible for oil pollution to cover the costs of damage assessment and restoration planning and restoration implementation. Based on this authority and comparable damage assessment authority for hazardous substances under CERCLA, NOAA established a program for such assessment and restoration. Under this program, OR&R is responsible for evaluating and restoring coastal and estuarine habitats impacted by hazardous waste releases, oil spills, and vessel groundings. Our team assesses ecological risk and environmental and economic injury from contamination and ship groundings.

To fully accomplish this mission, OR&R works with NOAA's General Counsel for Natural Resources and the NOAA Office of Habitat Conservation to administer the Damage Assessment, Remediation, and Restoration Program (DARRP). This program holds polluters accountable for restoration of natural resources and human uses lost or injured by oil or hazardous substances,

saving the taxpayer the direct cost of restoration. On average, even after setting aside Exxon Valdez and Deepwater Horizon settlements, the program has delivered four dollars of restoration for every one dollar invested in DARRP support. To date, the partnership has recovered over \$10.6 billion dollars to restore a wide variety of critical habitats and resources nationwide.

### ***Recent Accomplishments***

In fiscal year 2022, OR&R:

- helped to recover \$114 million from pollution settlements for restoration in five states: New Jersey, Texas, Louisiana, Hawaii, and Pennsylvania;
- partnered with NOAA's National Sea Grant office to establish a new funding opportunity to improve disaster preparedness within coastal communities;
- supported response efforts to 151 oil spills, chemical releases, and other incident responses;
- worked with the U.S. Coast Guard to conduct important research on characterizing oil on water in ice environments at three locations in the Arctic;
- and trained over 2,500 responders in disaster preparedness, oil and chemical spill response, and planning.

These accomplishments demonstrate our dedication to science-based solutions for protecting and restoring natural resources from coastal hazards thus benefiting the environment, public, and economy.

### **Conclusion**

The efforts of NOAA's Office of Response and Restoration span the emergency management cycle from preparedness to response and restoration with particular emphasis on applying NOAA scientific and operational capabilities to coastal disasters including pollution from oil, chemical, and marine debris. We will continue this critical work to protect and restore the nation's oceans, coasts, and communities from increasing environmental threats. With our allocated resources, OR&R will remain agile as these needs evolve during a time of changing climate.

While the problem of marine debris has existed for decades and has received considerable attention from NOAA and other partners, there is still much to learn as we work to address the impacts of marine debris on the environment, marine species, and human health and safety. NOAA is committed to investigating and preventing the adverse impacts of marine debris and looks forward to working with the Committee.

Thank you very much for the opportunity to provide a Statement for the Record. I would be happy to answer any questions you may have.

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