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Caitlyn E. Stewart
Vice President – Regulatory Affairs

November 18, 2022

Mr. Scott Doney
Office of Science and Technology Policy
Executive Office of the President
1650 Pennsylvania Ave., NW
Washington, DC 20504

Re: RFI Response: Ocean Climate
Action Plan (OSTP-2022-21480)

Dear Mr. Doney:

The American Waterways Operators (AWO) is the tugboat, towboat and barge industry's advocate, resource, and united voice for safe, sustainable, and efficient transportation on America's waterways, oceans, and coasts. Our industry is the largest segment of the nation's 40,000-vessel domestic maritime fleet and moves 665 million tons of cargo each year safely and efficiently. On behalf of AWO's more than 300 member companies, thank you for the opportunity to provide comments on the Office of Science and Technology Policy's Ocean Climate Action Plan (OCAP). AWO members are deeply committed to sustainability and to working with government partners to advance the protection of the environment while preserving the safety, security, and economic efficiency of marine transportation. In that spirit of cooperation, AWO is pleased to offer these comments.

Background Information: The tugboat, towboat, and barge industry is not only an integral part of the U.S. intermodal transportation system, but also the most fuel-efficient, with the smallest carbon footprint, of any freight transportation mode. A single inland dry cargo barge carries as much cargo as 16 railcars or 70 tractor-trailers, and a typical inland liquid cargo barge has the capacity of 46 railcars and 144 tractor-trailers. Because barges move cargo on less fuel, they generate fewer greenhouse gas emissions: inland towing emits 15.1 grams of carbon dioxide per ton-mile as compared to 21.6 from freight rail and 140.7 from freight trucks – outperforming those modes by 43 percent and more than 800 percent, respectively.

Our industry is working hard to build on these advantages and continuously improve our stewardship of the environment. AWO members not only operate in full compliance with applicable regulations, but are going further to reduce their environmental impact, from taking small but meaningful steps to making major investments. In 2020, AWO released a set of Best Practices for Environmental Stewardship to inform, support, and guide towing vessel and barge operators in areas including energy efficiency and air quality. These best practices

include measures to reduce fuel consumption that are already widely understood and routinely implemented by our industry – such as throttle optimization to maximize fuel efficiency, consideration of routing schedules to minimize light and standby time, and utilization of shoreside electrical power where available – as well as recommendations to consider alternative fuels or propulsion systems when repowering existing vessels or planning to construct new vessels. Member companies are already engaged in projects of this type, including the construction of hybrid diesel-electric and fully electric tugboats.

For all these reasons, maximizing the utilization of tugboat, towboat, and barge transportation, as well as the efficiency and sustainability of the marine transportation system, are important steps to reduce greenhouse gas emissions and slow down climate change.

Critical Actions: The responsible utilization of our ocean resources is an important part of addressing and mitigating climate change. While there are many future-focused solutions to consider, it is also important to recognize the substantial carbon savings that can be achieved by moving more cargo by water and eliminating impediments to the efficiency of the maritime transportation system.

Shifting cargo from truck and rail to the waterways would produce a substantial decrease in carbon emissions from transportation. Supporting initiatives such as the Maritime Administration’s America’s Marine Highway Program would help to realize these benefits. Additionally, safeguarding existing navigation corridors through support for the Coast Guard’s establishment of navigation fairways would ensure that the buildout of other climate-friendly solutions, such as offshore wind energy development, can take place in tandem with preserving the cost-effectiveness and environmental benefits of barge transportation.

Increasing the efficiency of the marine transportation system will also reap climate benefits by reducing delays that lead to idling, higher fuel consumption, and greater greenhouse gas emissions, as well as by making the system more attractive to shippers. Therefore, investments should be made to modernize ports, maintain aids to navigation, and ensure adequate berthing space and drydock capacity. Also, to deploy other ocean-based solutions, such as offshore wind, investments in new vessel design and construction will be needed. These vessels and their specialized ports and terminals are an essential part of the infrastructure needed to utilize ocean resources.

Given the expected increased frequency of natural disasters in the coming years, port resiliency must also be addressed. Ports that are shut down due to storm damage or sea level rise will make maritime transportation less safe and efficient. The safety and efficiency of marine transportation must be maintained to avoid shifting more cargo to less carbon-efficient modes of transportation, increasing the carbon footprint of the entire supply chain.

Knowledge, Science, and Technology: Investing in research and development of scalable, commercially viable technologies to enhance the sustainability of the maritime industry has the potential to further build on the environmental advantages of marine transportation. Federal policy should support research and trials of alternative fuels to be used as drop-in replacements

for diesel; hydrogen and hydrogen-carrying fuels (ammonia, methanol, etc.); batteries and electrification; and other low-carbon power systems. It should also seek to eliminate barriers in government permitting and other approval processes that stymie the private sector's adoption of carbon-efficient solutions or delay their deployment.

There are also significant greenhouse gas emissions reductions that can be made without repowering vessels, which is critical due to the long life of the existing assets in the domestic fleet. Federal support should be considered for technologies and systems that improve the efficiency of current operations. Data and automation could drastically improve the carbon efficiency of the maritime transportation system. Efforts should be made to determine how relevant, actionable data could be gathered and disseminated among vessel and port operators to achieve carbon reductions.

Environmental Justice, Diversity, Equity, and Inclusion: The tugboat, towboat, and barge industry provides good-paying jobs with great potential for career mobility without the need for a college degree. Our industry supports 270,000 jobs for Americans across the country. The industry offers a career ladder by which a mariner can begin as a deckhand and work their way to a six-figure salary in the wheelhouse or engine room without the burden of college debt. Creating more demand for marine transportation by shifting cargo from landside modes will grow the mariner workforce while reducing carbon emissions.

Additionally, federal policy should support existing and ongoing efforts to improve the air quality of ports and near-port communities. These communities – in which many of our industry's employees live and work – can benefit from federal investments to support the development of alternative fuels and propulsion systems and technologies to improve the operational efficiency of the maritime transportation system.

Partnership and Collaboration: The tugboat, towboat, and barge industry is committed to sustainable transportation, serving as a critical link in the American supply chain, and creating good-paying jobs. The federal government can rely on our industry to provide these services because they are central to the very functioning of our industry and our operations. Furthermore, we are also responsible for the utilization of many ocean resources. Collaborating with our industry and the broader domestic maritime industry will be necessary to build ocean structures and to move any goods by water between points in the United States.

Additional Comments: There is great potential in our oceans for creating solutions for climate change. The utilization of these resources will no doubt increase in the coming years. It is essential that the environmental, social, and economic benefits of moving cargo by barge are not overlooked. America's tugboat, towboat, and barge industry is one of the most critical and resilient links in the national supply chain. Any projects or policies which restrict the ability of towing vessels to safely and efficiently move cargo along the coasts will incur a carbon penalty. This must be accounted for when considering the benefits of any ocean-based climate actions. During the recent historic supply chain disruptions, our industry was a notable bright spot that continued to work around the clock to get ships into crowded ports and to move goods uninterrupted along the waterways. Any federal policies or actions that disrupt the

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industry's operations will adversely affect the supply chain as a whole and have an escalatory impact on carbon emissions due to increased idling times and reliance on higher-emitting modes of transportation. The federal government's robust defense of the Jones Act also supports the health of the domestic maritime fleet and the critical role it plays in reducing the national carbon footprint.

Thank you again for the opportunity to provide comments on this plan and for your commitment to working with stakeholders to address climate change. AWO would be pleased to provide additional feedback or answer any questions as they arise.

Sincerely,

A handwritten signature in black ink that reads "Caitlyn E. Stewart". The signature is written in a cursive, flowing style.

Caitlyn E. Stewart

Vice President – Regulatory Affairs