UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
OFFICE OF MARINE AND AVIATION OPERATIONS
1315 East-West Highway, 10th Floor
Silver Spring, Maryland 20910-3282

FINDING OF NO SIGNIFICANT IMPACT (ID# 45471.642) for the FINAL PROGRAMMATIC ENVIRONMENTAL ASSESSMENT for VESSEL OPERATIONS

NATIONAL OCEANIC AND ATMOPSHERIC ADMINISTRATION OFFICE OF MARINE AND AVIATION OPERATIONS

DECEMBER 2025

Background

The Office of Marine and Aviation Operations (OMAO) operates, manages, and maintains the National Oceanic and Atmospheric Administration's (NOAA) fleet of research and survey ships, small boats, and an Uncrewed Systems Operation Center at mission-readiness levels in support of NOAA's at-sea observational requirements. NOAA's at-sea mission objectives provide products and services that are vital to safe navigation, commerce, environmental stewardship, and socioeconomic security. OMAO's vessel operations occur while NOAA ships are underway (i.e., when ships are either moving in open water or secured to a specific location in open water), during which time OMAO conducts training, testing, calibration, and troubleshooting of vessel equipment and instruments in preparation for use by other NOAA Line Offices or organizations outside of NOAA.

OMAO has prepared a Programmatic Environmental Assessment (PEA) in accordance with the National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] §§ 4321, et seq.); NOAA's Policy and Procedures for Compliance with the National Environmental Policy Act and Related Authorities (NOAA Administrative Order [NAO] 216-6A and Companion Manual for NAO 216-6A); and other relevant federal and state laws and regulations. The PEA discloses the environmental impacts that would result from the Proposed Action and alternatives and is herein incorporated by reference.

Purpose and Need

The purpose of the Proposed Action is to ensure that NOAA's current and future fleet is maintained and operated in a manner that is safe, environmentally compliant, and allows NOAA to fulfill its at-sea mission objectives and data collection requirements.

The need for the Proposed Action is to maintain uninterrupted operational fleet capabilities to support NOAA scientific data collection in marine, coastal, and freshwater environments. OMAO needs to continue to operate the NOAA fleet to maintain it at mission-readiness levels; however, almost half of NOAA's ships will exceed their design service life during the timeframe

of the PEA. If NOAA does not invest in modernizing its fleet, it will not be able to produce the high quality, comprehensive data that are essential for NOAA products and services needed to protect lives and property, generate billions of dollars in American commerce and international trade each year, support stewardship of ecosystem resources, and facilitate research on ocean and atmospheric processes. To continue OMAO's vessel operations, NOAA needs to modernize its fleet. NOAA's vessels must be environmentally compliant and adaptable to provide the infrastructure and capabilities necessary to meet NOAA mission requirements now and in the future.

Proposed Action

The Proposed Action evaluated in the PEA is to continue OMAO vessel operations over a 15-year timeframe from 2025 to 2040 as the NOAA fleet is modernized by updating vessels in the existing fleet and replacing aging vessels with new vessels built specifically to support NOAA missions. NOAA has developed an integrated approach for fleet modernization that involves building new ships, making significant maintenance investments to extend the service life of existing NOAA ships, and increasing the utilization of the NOAA fleet. Specific plans for vessel improvements and new vessel design and construction are evolving based on developing mission needs, technology advancements, and funding availability; therefore, the PEA analyzes a range of fleet improvements that may be implemented over the next 15 years. The geographic scope includes the oceans from the United States (U.S.) baseline to the limits of the U.S. Exclusive Economic Zone (EEZ) (370 kilometers (km) [200 nautical miles (nm)]) and the U.S. portions of the Great Lakes, extending to the international maritime boundaries with Canada and Mexico. The PEA also considers OMAO's operations in areas outside of U.S. jurisdiction.

Alternatives Considered

Alternative A: No Action Alternative – Continue Vessel Operations with Current NOAA Fleet

Under Alternative A, OMAO would continue to use the current NOAA fleet to conduct activities to support NOAA's primary mission activities of oceanographic assessment and management of living marine resources; charting and hydrographic surveying; and oceanographic monitoring, research, and modeling. This would include vessel movement; anchoring; waste handling and discharge operations; vessel repair and maintenance; equipment testing, calibration, training, and troubleshooting; uncrewed marine system operations; uncrewed aircraft operations; small boat operations; and over the side (OTS) handling. Additionally, OMAO is constructing two oceanographic research vessels that are expected to come online in 2026 and two new charting and mapping vessels that are expected to come online in 2028 and 2029. Under Alternative A, OMAO would provide a maximum annual capacity of 3,568 operational days at sea (DAS) for scientific projects. This alternative reflects the ships, technology, equipment, fleet utilization, scope, and methods currently in use by OMAO. OMAO would continue to operate NOAA's fleet of survey and research ships until the end of their service life.

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Alternative B: Vessel Operations with Fleet Modernization and Optimizing At-Sea Capabilities

Alternative B would consist of a phased approach to implementing measures for long-term modernization of the NOAA fleet and fleet management best practices. In addition to continuing the OMAO vessel operation activities with the current NOAA fleet and building two new oceanographic research vessels and two new charting and mapping vessels, additional measures adopted under Alternative B in the next 15 years would include:

- Designing and constructing up to four additional ships needed to replace vessels that would reach the end of their design service life between 2025 and 2040;
- Extending the service life of aging NOAA ships;
- Increasing NOAA fleet utilization; and
- Integrating new technology

Full utilization of the NOAA fleet under Alternative B could provide 4,138 annual operational DAS, which is 570 DAS (or 14 percent) more than Alternative A.

Alternative C: Vessel Operations with Fleet Modernization and Optimization with Greater Funding Support

Alternative C would consist of an overall funding increase of 20 percent relative to Alternative B. In addition to implementing the measures under Alternative B (i.e., executing long-term modernization of the NOAA fleet and continuing the current OMAO vessel operations with optimization of the current fleet), OMAO would adopt the following additional measures in the next 15 years under Alternative C:

- Designing and constructing two new ships in addition to those that would be added to the NOAA fleet under Alternative B;
- Increasing the number of uncrewed systems integrated into new ships that would be added to the NOAA fleet;
- Shortening the timeframe of fleet improvement activities;
- Extending the service life of aging NOAA ships;
- Implementing efficiency techniques proposed for the new ships across the existing current fleet over a shortened timeframe;
- Shortening the timeframe to improve the OMAO small boat fleet; and
- Purchasing or developing technology to enable more efficient scheduling of vessels, equipment, and personnel to maximize crew productivity and enhance overall fleet performance by increasing DAS.

Full utilization of the NOAA fleet under Alternative C could provide 4,873 annual operational DAS, which is 735 DAS (or 12 percent) more than Alternative B.

Reasons for the Decision

Alternative B was selected as the Preferred Alternative because it best satisfied the purpose and need of the Proposed Action while minimizing environmental impacts. Alternative A (No Action Alternative) was not selected because it fails to satisfy the purpose and need of the Proposed Action. While Alternative C satisfied the purpose and need of the Proposed Action, it was not selected. Specific plans for vessel improvements and new vessel design are evolving based on at-sea requirements, technology advancements, and funding availability; at this time, it is difficult to predict whether OMAO would have the ability to implement Alternative C.

Affected Environment and Consequences

The Preferred Alternative would not significantly impact any of the resource categories analyzed in the PEA. A summary of these resource categories analyzed and the consequences of the implementation of the Preferred Alternative is presented below:

- Air Quality: No significant impact. Impact on air quality would be adverse, negligible to minor, temporary, and regional or localized depending on whether the vessel is stationary or moving. NOAA ships would generate diesel engine and generator emissions and incinerator emissions, which would contribute to air pollution and affect air quality. Some vessel repair and maintenance activities could release ozone depleting substances and affect air quality. All NOAA vessels are required to abide by all policies, procedures, and regulations related to diesel fuel, incinerator usage, and ozone depleting substances, which would minimize any potential impacts to air quality.

- Water Quality: No significant impact. Impacts on water quality would be adverse, negligible to moderate, temporary to long term, and regional or localized depending on whether the vessel is stationary or moving. NOAA ships have the potential to accidentally discharge, leak, or spill fuels, chemicals, and other contaminants; wastewater (i.e., sewage and greywater); or marine debris (i.e., trash, recyclables, or other solid waste) into surrounding waters, which would affect water quality. Vessel operations could also increase sedimentation and/or turbidity and affect water quality. All NOAA vessels are required to abide by all policies, procedures, and regulations related to transferring oily substances or bunkering fuel onto ships, wastewater management, and solid waste management, which would minimize any potential impacts to water quality. OMAO follows safe navigation and prudent mariner practices, which help to minimize sedimentation and turbidity.

- Acoustic Environment: No significant impact. Impacts to the acoustic environment would be adverse, minor, temporary to short-term, and regional or localized depending on whether the vessel is stationary or moving. Vessel operations could impact the acoustic environment from the production of airborne sound and underwater sound. The operation

of NOAA vessels would contribute low-frequency anthropogenic sounds to the local airborne acoustic environment that would not be discernable from sounds generated by other vessels or vehicle traffic. NOAA vessels would also contribute low and high-frequency sounds to the underwater acoustic environment. These sounds would be expected to occur in only one location, attenuate to background sound levels within several hundred to several thousand feet away from the vessel, and last from several minutes to several hours (high frequency) or a few hours to a few days (low frequency) at a time.

- Habitats: No significant impact. Impacts to habitats would be adverse, minor, temporary to short-term, regional or localized depending on whether the vessel is stationary or moving. OMAO operations could impact habitat characteristics through physical impacts to bottom substrate; increases in sedimentation, turbidity, and/or chemical contaminants; increases in ambient sound levels; facilitated dispersal of invasive species; and impacts to the water column. The majority of these impacts would be limited to the immediate vicinity of vessels and equipment testing and would not persist beyond the duration of operations within the area. These temporary disruptions would not likely change the availability of space, shelter, cover, or nutrients necessary for dependent species outside of the range of natural variability. OMAO crews would implement all policies, procedures, and regulations to limit potential impacts on habitats.

- Biological Resources: No significant impact. Impacts on biological resources (e.g., marine mammals, sea turtles, fish, aquatic macroinvertebrates, and birds) would be adverse, minor, temporary to short-term, and regional or localized depending on whether the vessel is stationary or moving. OMAO operations could affect biological resources including, but not limited to, increased ambient sound levels; accidental leakage or spillage of oil, fuel, or chemicals; vessel presence and movement of equipment in the water; trash and debris; and disturbances of the seafloor. Impacts would not be considered outside the natural range of variability of species' populations, their habitats, or the natural processes sustaining them. All NOAA vessels are required to abide by all policies, procedures, and regulations related to transferring oily substances or bunkering fuel onto ships, wastewater management, and solid waste management, which would minimize or prevent impacts to biological resources. OMAO follows safe navigation, prudent mariner practices, and other best practices, which would minimize or prevent impacts to biological resources.

- Cultural and Historic Resources: No significant impact. Impacts on cultural and historic resources would be adverse, minor, temporary to permanent, and localized. OMAO vessel operations could impact cultural and historic resources through physical impacts to submerged cultural and historic resources, visual and noise impacts to historic properties from the presence of NOAA vessels, and visual and noise impacts to Traditional Cultural Places (TCPs) and subsistence hunting and fishing areas from the presence of NOAA vessels and operation of active acoustic sources. All NOAA vessels abide by all OMAO

procedures and practices to minimize and prevent potential impacts to submerged cultural and historic resources. NOAA vessels would not remain in one area for more than a few hours to a few days, and the presence of a transient vessel would not impact the integrity of the area. Ongoing communication between OMAO, other Line Offices, Tribal Historic Preservation Officers, and tribal officials would minimize impacts, along with attempted avoidance of these areas during peak times to the extent practicable.

- Socioeconomic Resources: No significant impact. Impacts on socioeconomic resources would be beneficial, moderate, long term, and regional. OMAO's vessel operations would continue to contribute to the ocean economy indirectly, primarily by increasing operational efficiency and reducing risks associated with using ocean resources in a variety of economic sectors (e.g., facilitation of safe and efficient marine navigation, protection of key species and resources for tourism, sustainable management and harvest of fish species for commercial and recreational fisheries, provision of emergency response services to minimize interruptions to maritime trade and commerce). Indirect economic benefits would range in the magnitude of hundreds of millions of dollars for each product, although it is important to note these estimates are broadscale and contingent on assumptions of data use and availability.

- Subsistence Resources: No significant impact. Impacts on subsistence resources would be adverse, minor, temporary to permanent, and regional. OMAO operations could impact marine mammals and fish species harvested for subsistence by some communities, which include increased ambient sound levels; vessel strike and movement of equipment in the water; accidental leakage or spillage of oil, fuel, and chemicals into surrounding waters; entanglement with equipment and marine debris and trash and potential ingestion; and availability of updated ocean data. Subsistence species would only be subject to behavioral disruption exposures and would primarily experience behavioral disruptions. OMAO would follow appropriate policies and procedures to prevent and minimize accidental spills. Potential impacts from vessel strikes, water turbulence, seafloor disturbance, entanglement with equipment, or ingesting marine trash and debris would be very low. OMAO operations would also have beneficial, minor impacts from the availability of ocean surveying and mapping data, which could contribute to the economic stability of subsistence communities.

- Hazardous, Universal, and Special Waste: No significant impact. Impacts on hazardous, universal, and special waste would be adverse, negligible to moderate, temporary, and regional or localized depending on whether the ship is stationary or moving. OMAO operations could impact potentially hazardous, universal, and special waste through the generation of hazardous, universal, or special waste; the storage and handling of hazardous, universal, or special waste; and the transfer and disposal of hazardous, universal, and special waste. Since NOAA ships are public vessels, they are exempt from the storage, manifest, inspection, or recordkeeping requirements of hazardous waste. All NOAA ships are still required to adhere to all OMAO policies and procedures to prevent

or minimize adverse impacts from storing and handling potentially hazardous, universal, or special waste. NOAA shoreside support facilities identify hazardous waste once it has been transferred and assume all responsibilities regarding storage, manifesting, and inspection requirements. Any OMAO activities that occur in port or at a shoreside facility are not covered under the PEA.

- Human Health and Safety: No significant impact. Impacts on human health and safety would be adverse, minor, short term, and localized. OMAO operations could impact human health and safety through vessel movements (e.g., from slips, trips, and falls); chemical and biological hazards; and over-the-side handling, and crane, davit, and winch operations. Mitigation measures would be in place to reduce the likelihood of onboard personnel becoming injured from vessel movements, coming into contact with chemical and biological hazards, or operating weight handling equipment. OMAO adheres to the rigorous standards set forth by the Occupational Safety and Health Administration, the American Bureau of Shipping, and NOAA.

- Climate: No significant impact. Impact on climate would be adverse, negligible, long term to permanent, and regional to global. NOAA vessels require fossil fuel combustion for ship propulsion, electricity, and operation, and CO2 emissions into the atmosphere would incrementally contribute to atmospheric totals. However, OMAO's emissions represent less than a fraction of a percent of all U.S. and global CO2 emissions. The impact on OMAO vessel operations on climate would be adverse, negligible to minor, long term to permanent, and regional to global. The changes that would occur over the next 15 years, including continuing sea level rise, ocean acidification and deoxygenation, reductions in Arctic Ocean sea ice, and increases in the frequency of extreme weather events, would all be relatively small from those experienced at present.

Best Management Practices

This FONSI and the PEA outline mitigation measures or Best Management Practices (BMPs) that would be implemented during vessel operations under the Preferred Alternative. OMAO requires that all Commands and offices incorporate and employ BMPs for all at-sea activities when practicable to reduce or minimize the potential impact of OMAO activities on endangered and threatened species, marine mammals, critical habitat, and Essential Fish Habitat (EFH). All applicable BMPs must be communicated to vessel crews and support personnel and employed as appropriate for the specific at-sea activities being conducted. OMAO's full list of BMPs is presented in Appendix E of the Final PEA.

Public Involvement

A notice of availability (NOA) of the Draft PEA was published in the Federal Register (FR) on December 21, 2023 (88 FR 88370), and the Draft PEA was available for review on the OMAO website. The NOA advised other federal and state agencies, territories, tribal governments, local

governments, private parties, and the general public on where they could review the Draft PEA and submit comments. OMAO also sent letters via email or U.S. mail to federally recognized tribes to announce the publication of the Draft PEA and invite comments. The 40-day public comment period began on December 21, 2023, and concluded on January 31, 2024; no public comments were received during this period.

Compliance and Coordination

OMAO has completed consultation under the Magnuson-Stevens Fishery Conservation and Management Act for Essential Fish Habitat. After the publication of the Draft PEA, OMAO pursued a nationwide consistency determination to comply with section 307 of the Coastal Zone Management Act; concurrence was confirmed or presumed from all 34 states and territories.

OMAO has completed formal consultation under section 7 of the Endangered Species Act (ESA) with the U.S. Fish and Wildlife Service (USFWS) following publication of the Draft PEA. USFWS issued a Biological Opinion (BiOp) to OMAO on June 23, 2025 that contained an Incidental Take Statement (ITS) for spectacled eiders and Steller's eiders. The ITS contained reasonable and prudent measures and associated terms and conditions to minimize the impacts of the incidental take of these species, and OMAO has incorporated these reasonable and prudent measures and terms and conditions into the best management practices described above. The USFWS BiOp also contained monitoring and reporting requirements, which OMAO has similarly incorporated into the best management practices described above.

OMAO has separately initiated an ESA section 7 informal consultation process with the National Marine Fisheries Service (NMFS) Office of Protected Resources (OPR). On July 11, 2025, OMAO received a letter of concurrence from NMFS, which concurred that OMAO's vessel operations for fiscal year 2025-26 are not likely to adversely affect NMFS ESA-listed species and designated critical habitat; OMAO intends to work with NMFS OPR to fulfil its ESA section 7 obligations for future vessel operations within the scope of this action in a timely manner. OMAO has coordinated with NMFS OPR and confirmed that OMAO's activities would not require take authorization under the Marine Mammal Protection Act. OMAO has determined that no consultations under the National Marine Sanctuaries Act or the National Historic Preservation Act are needed at this time.

Findings and Conclusions

Implementation of the Preferred Alternative would not result in significant impacts on any of the resources analyzed within the PEA, and no further analysis or documentation, such as the preparation of an Environmental Impact Statement, is required. OMAO does not anticipate receiving further information that would change its assessment of no significant impact to any resource area. In the event unexpected issues arise, OMAO may issue follow-up NEPA documentation as appropriate. All practicable and reasonable means will be employed by OMAO to minimize potential adverse impacts on the human and natural environment. Therefore, a FONSI is warranted.

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