APPENDIX M
PUBLIC INVOLVEMENT AND DISTRIBUTION

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Final

Supplemental Environmental Impact Statement/ Overseas Environmental Impact Statement Atlantic Fleet Training and Testing

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M PUBLIC INVOLVEMENT AND DISTRIBUTION

This appendix describes the efforts to involve the public in preparing this Supplemental Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS), including distribution of the Draft EIS/OEIS.

M.1 PROJECT WEBSITE

A public website was established for this project: https://www.nepa.navy.mil/aftteis. This website address was published in the Notice of Intent to Prepare a Supplement to the 2018 *Final Atlantic Fleet Training and Testing Environmental Impact Statement/Overseas Environmental Impact Statement* (hereinafter referred to as the 2018 Final EIS/OEIS) (Appendix N, Federal Register Notices). It was subsequently reprinted in newspaper advertisements, agency letters, emails, and postcards for the Notice of Intent and the Notice of Availability of the Draft Supplemental EIS/OEIS. The scoping fact sheets, public meeting fact sheets, technical reports, and various other materials are available on the project website and were made available throughout the course of the project.

M.2 SCOPING PERIOD

The public scoping period began with issuance of the Notice of Intent in the *Federal Register* on November 17, 2023. This notice included a project description, website address, and instructions on how to provide comments. The scoping period lasted 30 days, concluding on December 16, 2023. The public was able to provide comments on the scope of the Supplemental EIS/OEIS during the scoping period via the project website or by mail.

M.2.1 PUBLIC SCOPING NOTIFICATION

The Action Proponents made significant efforts to notify the public to ensure maximum public participation during the scoping process. A summary of these efforts follows.

M.2.1.1 Notification Letters

Notice of Intent and Scoping Notification letters were distributed at the beginning of the scoping period (November 17, 2023) to federally recognized tribes; state-elected officials; and federal, regional, and state agencies. Entities that received the Scoping Notification letter can be found in Table M.2-1 and an example of the letter can be found in Figure M.2-1.

Table M.2-1: Entities that Received the Scoping Notification Letter

Federally Recognized Tribes	
Absentee Shawnee Tribe of Indians of Oklahoma	Mohegan Indian Tribe of Connecticut
Alabama-Coushatta Tribe of Texas	Nansemond Indian Nation
Aroostook Band of Micmacs	Narragansett Indian Tribe of Rhode Island
Catawba Indian Nation	Oneida Nation of New York
Cayuga Nation of New York	Onondaga Nation of New York
Chickahominy Indian Tribe	Passamaquoddy Tribe of Indian Township
Chickahominy Indian Tribe - Eastern Division	Penobscot Nation
Chitimacha Tribe of Louisiana	Poarch Band of Creek Indians of Alabama
Coushatta Tribe of Louisiana	Saint Regis Mohawk Tribe
Delaware Nation	Seminole Tribe of Florida
Delaware Tribe of Indians	Seneca Nation of Indians
Eastern Band of Cherokee Indians of North Carolina	Shawnee Tribe of Oklahoma
Houlton Band of Maliseet Indians	Shinnecock Indian Nation
Jena Band of Choctaw Indians	Stockbridge-Munsee Band of the Mohicans
Kickapoo Traditional Tribe of Texas	Tonawanda Band of Seneca Indians of New York
Mashantucket Pequot Indian Tribe	Tunica-Biloxi Indian Tribe of Louisiana
Mashpee Wampanoag Indian Tribe	Tuscarora Nation of New York
Miccosukee Tribe of Indians of Florida	Wampanoag Tribe of Gay Head of Massachusetts
Mississippi Band of Choctaw Indians	Ysleta del Sur Pueblo of Texas
Alabama	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Alabama Department of Environmental Management Alabama Historical Commission
Connecticut	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Connecticut Commission on Culture and Tourism, State Historic Preservation Office Connecticut Department of Energy and Environmental Protection, Land and Water Resources Division
Delaware	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Delaware Department of Natural Resources and Environmental Control, Delaware Coastal Programs Delaware Division of Historical and Cultural Affairs
Florida	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Florida Department of Environmental Protection, Coastal Management Program, Office of Resilience and Coastal Protection Florida Department of Environmental Protection, State Clearinghouse Florida Division of Historical Resources
Georgia	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Georgia Historic Preservation Division Georgia Department of Natural Resources, Coastal Zone Management Program
Louisiana	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Louisiana Department of Natural Resources Louisiana Office of Cultural Development, Division of Historic Preservation
Maine	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Maine Coastal Programs Maine Historic Preservation Commission

Table M.2-1: Entities that Received the Scoping Notification Letter (continued)

Maryland	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Maryland Department of Natural Resources Maryland Department of Natural Resources, Chesapeake and Coastal Service Maryland Department of Natural Resources, Wetlands and Waterways Maryland Historical Trust
Massachusetts	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Massachusetts Executive Office of Environmental Affairs, Office of Coastal Zone Management Massachusetts Historical Commission
Mississippi	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Mississippi Department of Archives and History, Historic Preservation Division, Federal and State Project Review Mississippi Department of Marine Resources, Coastal Programs
New Hampshire	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	New Hampshire Department of Environmental Services, Coastal Program New Hampshire Division of Historical Resources
New Jersey	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	New Jersey Department of Environmental Protection, Coastal Management Program New Jersey Historic Preservation Office
New York	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	New York Department of State, Office of Planning, Development, and Community Infrastructure New York Office of Parks, Recreation, and Historic Preservation
North Carolina	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	North Carolina Department of Cultural Resources North Carolina Division of Coastal Management North Carolina Division of Coastal Management, Coastal Area Management Act
Rhode Island	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Rhode Island Coastal Resources Management Council Rhode Island Historical Preservation and Heritage Commission
South Carolina	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management South Carolina State Historic Preservation Office

Table M.2-1: Entities that Received the Scoping Notification Letter (continued)

Texas	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Texas General Land Office, Coastal Resources Division Texas Historical Commission
Virginia	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Virginia Department of Environmental Quality, Coastal Program, Environmental Impact Review and Long Range Priorities Virginia Department of Historic Resources Virginia Department of Wildlife Resources
U.S. Virgin Islands	
Department of Planning and Natural Resources, Coastal Zone Management Program State Historic Preservation Office	
Federal Agencies	
Gray's Reef National Marine Sanctuary Florida Keys National Marine Sanctuary National Marine Fisheries Service National Marine Fisheries Service; Greater Atlantic Regional Fisheries Office National Marine Fisheries Service, Southeast Regional Office National Marine Fisheries Service, Office of Protected Resources National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries U.S. Fish and Wildlife Service U.S. Fish and Wildlife Service, Chesapeake Bay Ecological Services Field Office U.S. Fish and Wildlife Service, Eastern North Carolina Ecological Services U.S. Fish and Wildlife Service, Florida Ecological Services U.S. Fish and Wildlife Service, South Carolina Ecological Services U.S. Fish and Wildlife Service, Virginia Ecological Services	

M.2.1.2 Scoping Email

On November 17, 2023, emails were sent to recipients on the project mailing list, including individuals, nonprofit organizations, and for-profit organizations. The emails provided information on the Proposed Action, methods for commenting, and the project website address to obtain more information. The text of the email is shown in Figure M.2-2.

M.2.1.3 Newspaper Advertisements

To announce the scoping period, advertisements were placed in the listed newspapers in the following cities on the dates indicated in Table M.2-2. The advertisements included a description of the Proposed Action, the address of the project website, the duration of the comment period, and information on how to provide comments. An example of the advertisement is shown in Figure M.2-3.

DEPARTMENT OF THE NAVY
U.S. FLEET FORCES COMMAND
1562 MITSCHER AVENUE SUITE 250
NORFOLK VA 23551-2487

5090
Ser N46/XXX
November 17, 2023

Dear Sir or Madam:

This letter is to inform you that the United States (U.S.) Department of the Navy (Navy), jointly with the U.S. Coast Guard, is in the beginning stages of preparing a Supplemental Environmental Impact Statement (Supplemental EIS)/Overseas Environmental Impact Statement (OEIS) for Atlantic Fleet Training and Testing (AFTT) activities in the seaspace and the airspace over areas of the western Atlantic Ocean along the east coast of North America, the Gulf of Mexico, and portions of the Caribbean Sea.

The U.S. Navy and U.S. Coast Guard are requesting your comments on the scope, content, and issues to be considered during the development of the AFTT Supplemental EIS/OEIS. This document will assess training and testing activities which are proposed to be conducted at levels that support military readiness requirements beginning in November of 2025 and into the reasonably foreseeable future. Such activities will also accommodate evolving mission requirements associated with force structure changes, including those resulting from the development, testing, and ultimate introduction of new platforms (vessels, aircraft, and weapon systems) into the fleet, thereby ensuring critical military readiness requirements are met.

The purpose of the Proposed Action is to maintain a ready force, which is needed to ensure the peacetime promotion of the national security interests and prosperity of the United States and for prompt and sustained combat incident to operations at sea and to meet the needs of war, consistent with Title 10, section 8062, of the United States Code.

You may send written comments to the following address:
Naval Facilities Engineering Systems Command Atlantic
6506 Hampton Boulevard Building A
Norfolk, Virginia 23508-1278
ATTN: Code EV22 AFTT SEIS Project Manager

Comments also can be submitted electronically via the project website at:
https://www.nepa.navy.mil/aftteis.

All Comments must be postmarked or received by December 16, 2023 to be considered in the Draft Supplemental EIS/OEIS. For additional information about the AFTT Supplemental EIS/OEIS, please visit the project website.

We appreciate your comments on this important project. My point of contact for this matter is Mr. Todd Kraft at (757) 836-2943 or todd.m.kraft.civ@us.navy.mil.

Sincerely,

AGUAYO.MARIA.LORETO.1157276731
Digitally signed by AGUAYO.MARIA.LORETO.1157276731
Date: 2023.11.14 17:19:57 -05'00'

M. L. AGUAYO
Director, Fleet Installations and Environment
and Deputy Chief of Staff

Figure M.2-1: Stakeholder Scoping Notification Letter

You previously requested to receive information regarding the Department of the Navy's Atlantic Fleet Training and Testing (AFTT) Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). This email provides an update on the project an and ways to participate in the planning process.

Navy to Begin Supplemental EIS/OEIS for Atlantic Fleet Training and Testing

The Department of the Navy (including both the U.S. Navy and the U.S. Marine Corps), jointly with the U.S. Coast Guard (hereafter referred to as Action Proponents), announces its intent to prepare a supplement to the 2018 Atlantic Fleet Training and Testing (AFTT) Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS).

In the Supplemental EIS/OEIS, the Action Proponents will assess the potential environmental effects associated with ongoing and future at-sea military readiness activities conducted within the AFTT EIS/OEIS Study Area (Study Area) beyond 2025, and will include an analysis of these activities using new information that became available after the release of the 2018 Final EIS/OEIS.

Activities that will be assessed in the Supplemental EIS/OEIS are consistent with those analyzed in the 2018 Final EIS/OEIS and are representative of training and testing activities the Action Proponents have been conducting in the Study Area for decades. In addition, the Study Area remains consistent with what was described in the 2018 Final EIS/OEIS with the addition of some inland waters within the Gulf of Mexico coast.

How to Participate in the Planning Process

The 30-day public scoping period begins November 17, 2023 and ends December 16, 2023. The scoping process is used to identify the full range of issues including public concerns and local issues to be considered during the development of the Draft Supplemental EIS/OEIS.

All interested persons and organizations are encouraged to provide substantive comments on environmental resources and areas of concern that the commenter believes the Action Proponents should consider during the scoping period. To learn more, and to submit a comment, please visit the project website at https://www.nepa.navy.mil/aftteis.

Next Steps

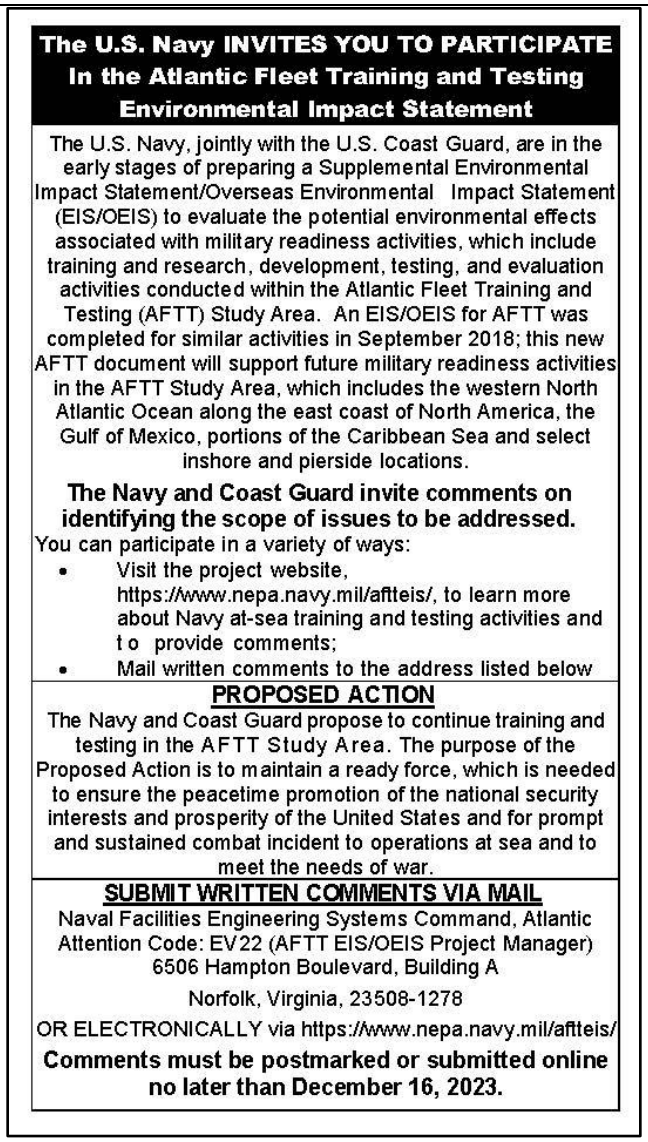
After the scoping period the Action Proponents will coordinate with participating and cooperating agencies to develop a Draft Supplemental EIS/OEIS. The Draft Supplemental EIS/OES is anticipated to be available for public review in the fall of 2024. The Final Supplemental EIS/OEIS is anticipated to be released in the fall of 2025.

Figure M.2-2: Stakeholder Scoping Email

Table M.2-2: Newspaper Announcements of Scoping Period

Bath, ME *The Times Record* November 19, 2023 November 20, 2023 November 21, 2023	**Portland, ME** *The Portland Press Herald* November 18, 2023 November 19, 2023 November 21, 2023	**New Bedford, MA** *The Standard Times* November 19, 2023 November 20, 2023 November 21, 2023
Boston, MA *The Boston Herald* November 19, 2023 November 20, 2023 November 21, 2023	**Providence, RI** *The Providence Journal* November 19, 2023 November 20, 2023 November 21, 2023	**Newport, RI** *The Newport Daily News* November 17, 2023 November 18, 2023 November 20, 2023
Salisbury, MD *The Daily Times* November 19, 2023 November 20, 2023 November 21, 2023	**Norfolk, VA** *The Virginian-Pilot* November 19, 2023 November 20, 2023 November 21, 2023	**Newport News, VA** *The Daily Press* November 19, 2023 November 20, 2023 November 21, 2023
Manteo, NC *Coastland Times* November 19, 2023 November 22, 2023 November 26, 2023	**Jacksonville, NC** *Jacksonville Daily News* November 21, 2023 November 23, 2023 November 25, 2023	**Wilmington, NC** *Wilmington Star News* November 19, 2023 November 20, 2023 November 21, 2023
Charleston, SC *Charleston Post and Courier* November 19, 2023 November 20, 2023 November 21, 2023	**Savannah, GA** *Savannah Morning News* November 19, 2023 November 20, 2023 November 21, 2023	**Jacksonville, FL** *Florida Times Union* November 19, 2023 November 20, 2023 November 21, 2023
Fort Lauderdale, FL *Florida Sun Sentinel* November 19, 2023 November 20, 2023 November 21, 2023	**Brevard, FL** *Florida Today* November 19, 2023 November 20, 2023 November 21, 2023	**Panama City, FL** *Panama City News Herald* November 19, 2023 November 20, 2023 November 21, 2023
Pensacola, FL *Pensacola News Journal* November 19, 2023 November 20, 2023 November 21, 2023	**Biloxi, MS** *Sun Herald* November 21, 2023 November 22, 2023 November 24, 2023	**New Orleans, LA** *Times-Picayune* November 19, 2023 November 20, 2023 November 21, 2023
Galveston, TX *Galveston Daily News* November 19, 2023 November 20, 2023 November 21, 2023	**Corpus Christi, TX** *Caller-Times*[1] November 19, 2023 November 20, 2023 November 21, 2023	

Notes: [1] Advertisement was also run in Spanish.



The U.S. Navy INVITES YOU TO PARTICIPATE In the Atlantic Fleet Training and Testing Environmental Impact Statement

The U.S. Navy, jointly with the U.S. Coast Guard, are in the early stages of preparing a Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) to evaluate the potential environmental effects associated with military readiness activities, which include training and research, development, testing, and evaluation activities conducted within the Atlantic Fleet Training and Testing (AFTT) Study Area. An EIS/OEIS for AFTT was completed for similar activities in September 2018; this new AFTT document will support future military readiness activities in the AFTT Study Area, which includes the western North Atlantic Ocean along the east coast of North America, the Gulf of Mexico, portions of the Caribbean Sea and select inshore and pierside locations.

The Navy and Coast Guard invite comments on identifying the scope of issues to be addressed.

You can participate in a variety of ways:

- Visit the project website, https://www.nepa.navy.mil/aftteis/, to learn more about Navy at-sea training and testing activities and to provide comments;
- Mail written comments to the address listed below

PROPOSED ACTION

The Navy and Coast Guard propose to continue training and testing in the AFTT Study Area. The purpose of the Proposed Action is to maintain a ready force, which is needed to ensure the peacetime promotion of the national security interests and prosperity of the United States and for prompt and sustained combat incident to operations at sea and to meet the needs of war.

SUBMIT WRITTEN COMMENTS VIA MAIL

Naval Facilities Engineering Systems Command, Atlantic
Attention Code: EV22 (AFTT EIS/OEIS Project Manager)
6506 Hampton Boulevard, Building A
Norfolk, Virginia, 23508-1278

OR ELECTRONICALLY via https://www.nepa.navy.mil/aftteis/

Comments must be postmarked or submitted online no later than December 16, 2023.

Figure M.2-3: Newspaper Announcement of Scoping

M.2.2 PUBLIC SCOPING COMMENTS

The scoping comments could be submitted via the project website or by mail. The Action Proponents received comments from federal agencies, state agencies, non-governmental organizations, and individuals. A total of 15 scoping comments were received. The comments provided agency input; urged the consideration of impacts to the North Atlantic right whale, Rice's whale, and marine mammals in general; requested the use of updated sea turtle data for impact analysis; and provided general support for the Proposed Action. The scoping comments submitted during the public scoping period are provided in Table M.2-3 and relevant and substantive comments were considered during the development of the Draft Supplemental EIS/OEIS. Comments received through the project website are shown in Table M.2-3. Hard copy comments received by mail, comments received via email, and the attachments provided with website comments are shown in Figure M.2-4 through Figure M.2-14.

Table M.2-3: Scoping Comments

Commenter	*Date*	*Comment*
Private Individual (1)	November 19, 2023	WHAT IS THE BREAKING SYSTERM IN USE FOR ANY AND ALL OF YOUR SHIP'S?
Virginia Department of Environmental Quality	November 20, 2023	Virginia Department of Environmental Quality, Office of Environmental Impact Review Scoping Comments (Figure M.2-4)
Federal Aviation Administration	November 21, 2023	Comment email (Figure M.2-5)
Private Individual (2)	November 24, 2023	It is critically important for the continued security of the United States of America that the U.S. Navy proceeds with the proposed action to continue training and testing in the AFTT Study Area. Other countries, particularly the USSR and China, are building up their naval capabilities, and are posing a greater and greater threat to our national security. Proceed without delay!!!!
Private Individual (3)	November 25, 2023	Hard copy comment (Figure M.2-6)
Texas Historical Commission	November 28, 2023	Comment email (Figure M.2-7)
Virginia Department of Health, Office of Drinking Water	November 30, 2023	VDH – Office of Drinking Water has reviewed the above project and has no comments to submit at this time.
Private Individual (4)	December 1, 2023	Hard copy comment (Figure M.2-8)
Private Individual (5)	December 4, 2023	As a boat captain and frequent fisherman in the Gulf of Mexico with many friends that are boat captains, we strongly support the Navy and Coast Guard training and testing in the Gulf. Current efforts to shut down large areas of the northern Gulf to "protect" the recently identified Right Whale would severely hurt our fishing in the Gulf and would likely adversely impact the Navy and Coast Guards training and testing to maintain a ready force. We believe the concerns about the whale are unjustified. Therefore we strongly support approval of this EIS.
New Jersey Department of Environmental Protection, Office of Permitting and Project Navigation	December 15, 2023	Comment provided as attachment (Figure M.2-9)

Table M.2-3: Scoping Comments (continued)

Commenter	*Date*	*Comment*
Congressman Seth Moulton	December 15, 2023	As the U.S. Navy and U.S. Coast Guard undertake a Supplemental Environmental Impact Statement (Supplemental EIS)/Overseas Environmental Impact Statement (OEIS) for Atlantic Fleet Training and Testing (AFTT) activities, I urge consideration of the impact on North Atlantic right whales. North Atlantic right whales are on the brink of extinction. As noted by the National Oceanic and Atmospheric Administration, there are approximately 360 individuals remaining of this endangered species in Atlantic waters, including fewer than 70 reproductively active females. Vessel strikes are a leading cause of mortality for North Atlantic right whales and increased ocean noise levels may interfere with their communication, stress levels, navigation, and ability to find food. Ensuring critical military readiness is of paramount importance when developing the AFTT Supplemental EIS/OEIS. When considering the environmental impacts of AFTT activities, informed decisions regarding impacts on North Atlantic right whales will be important for helping to conserve this endangered species. Thank you for your attention to this critical matter. I commend the U.S. Navy and U.S. Coast Guard's stalwart dedication to ensuring our national security interests and welcome your commitment to safeguarding the North Atlantic right whale. (Figure M.2-10)
Private Individual (6)	December 16, 2023	Hard copy comment (Figure M.2-11)
Maine Historic Preservation Commission	December 16, 2023	Hard copy comment (Figure M.2-12)
New Hampshire Division of Historical Resources	December 16, 2023	Comment email (Figure M.2-13)
Turtle Island Restoration Network	December 16, 2023	Comment provided as attachment (Figure M.2-14)

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219
P.O. Box 1105, Richmond, Virginia 23218
(800) 592-5482 FAX (804) 698-4178
www.deq.virginia.gov

Travis A. Voyles
Acting Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

November 20, 2023

Naval Facilities Engineering Systems Command, Atlantic
6506 Hampton Boulevard, Building A
Norfolk, Virginia, 23508–1278
ATTN: EV22, AFTT SEIS Project Manager

RE: Scoping Comments, Notice of Intent To Prepare a Supplement to the September 2018 Final Atlantic Fleet Training and Testing Environmental Impact Statement/Overseas Environmental Impact Statement for Continuation of Navy Atlantic Fleet Training and Testing Activities

To Whom it May Concern:

This letter is in response to the scoping request for the above-referenced project.

As you may know, the Department of Environmental Quality, through its Office of Environmental Impact Review (DEQ-OEIR), is responsible for coordinating Virginia's review of federal environmental documents prepared pursuant to the National Environmental Policy Act (NEPA) and responding to appropriate federal officials on behalf of the Commonwealth. Similarly, DEQ-OEIR coordinates Virginia's review of federal consistency documents prepared pursuant to the Coastal Zone Management Act which applies to all federal activities which are reasonably likely to affect any land or water use or natural resources of Virginia's designated coastal resources management area must be consistent with the enforceable policies Virginia Coastal Zone Management (CZM) Program.

DOCUMENT SUBMISSIONS

In order to ensure an effective coordinated review of the environmental documents, notification should be sent directly to OEIR. We request that you submit one electronic to eir@deq.virginia.gov (25 MB maximum) or make the documents available for download at a website, file transfer protocol (ftp) site or the VITA LFT file share system (Requires an "invitation" for access. An invitation request should be sent to eir@deq.virginia.gov.). We request that the review of these documents be done concurrently, if possible.

The environmental documents should include U.S. Geological Survey topographic maps as part of their information. We strongly encourage you to issue shape files with the NEPA document. In addition, project details should be adequately described for the benefit of the reviewers.

Figure M.2-4: Virginia Department of Environmental Quality Comment

ENVIRONMENTAL REVIEW UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT: PROJECT SCOPING AND AGENCY INVOLVEMENT

As you may know, NEPA (PL 91-190, 1969) and its implementing regulations (Title 40, *Code of Federal Regulations*, Parts 1500-1508) requires a draft and final Environmental Impact Statement (EIS) for federal activities or undertakings that are federally licensed or federally funded which will or may give rise to significant impacts upon the human environment. An EIS carries more stringent public participation requirements than an Environmental Assessment (EA) and provides more time and detail for comments and public decision-making. The possibility that an EIS may be required for the proposed project should not be overlooked in your planning for this project. Accordingly, we refer to "NEPA document" in the remainder of this letter.

While this Office does not participate in scoping efforts beyond the advice given herein, other agencies are free to provide scoping comments concerning the preparation of the NEPA document. Accordingly, we are providing notice of your scoping request to several state agencies and those localities and Planning District Commissions, including but not limited to:

Department of Environmental Quality:
- DEQ Regional Office*
- Air Division*
- Office of Wetlands and Stream Protection*
- Office of Local Government Programs*
- Division of Land Protection and Revitalization
- Office of Stormwater Management*

Department of Conservation and Recreation
Department of Health*
Department of Agriculture and Consumer Services
Department of Wildlife Resources*
Virginia Marine Resources Commission*
Department of Historic Resources
Department of Mines, Minerals, and Energy
Department of Forestry
Department of Transportation

Note: The agencies noted with a star (*) administer one or more of the enforceable policies of the Virginia CZM Program.

FEDERAL CONSISTENCY UNDER THE COASTAL ZONE MANAGEMENT ACT

Pursuant to the federal Coastal Zone Management Act of 1972, as amended, and its implementing regulations in Title 15, *Code of Federal Regulations*, Part 930, federal activities, including permits, licenses, and federally funded projects, located in Virginia's Coastal Management Zone or those that can have reasonably foreseeable effects on Virginia's coastal uses or coastal resources must be conducted in a manner which is consistent, to the maximum extent practicable, with the Virginia CZM Program.

Additional information on the Virginia's review for federal consistency documents can be found online at Federal Consistency | Virginia DEQ

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Figure M.2-4: Virginia Department of Environmental Quality Comment (continued)

DATA BASE ASSISTANCE

Below is a list of databases that may assist you in the preparation of a NEPA document:

- DEQ Online Database: Virginia Environmental Geographic Information Systems
  Information on Permitted Solid Waste Management Facilities, Impaired Waters, Petroleum Releases, Registered Petroleum Facilities, Permitted Discharge (Virginia Pollution Discharge Elimination System Permits) Facilities, Resource Conservation and Recovery Act (RCRA) Sites, Water Monitoring Stations, National Wetlands Inventory:
  - www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx

- DEQ Virginia Coastal Geospatial and Educational Mapping System (GEMS)
  Virginia's coastal resource data and maps; coastal laws and policies; facts on coastal resource values; and direct links to collaborating agencies responsible for current data:
  - https://www.deq.virginia.gov/?splash=https%3a%2f%2fgaia.vcu.edu%2fportal%2fapps%2fsites%2f%23%2fgemsmaps&___isexternal=true

- MARCO Mid-Atlantic Ocean Data Portal
  The Mid-Atlantic Ocean Data Portal is a publicly available online toolkit and resource center that consolidates available data and enables users to visualize and analyze ocean resources and human use information such as fishing grounds, recreational areas, shipping lanes, habitat areas, and energy sites, among others.
  - http://portal.midatlanticocean.org/visualize/#x=-73.24&y=38.93&z=7&logo=true&controls=true&basemap=Ocean&tab=data&legends=false&layers=true

- DHR Data Sharing System.
  Survey records in the DHR inventory:
  - www.dhr.virginia.gov/archives/data_sharing_sys.htm

- DCR Natural Heritage Search
  Produces lists of resources that occur in specific counties, watersheds or physiographic regions:
  - www.dcr.virginia.gov/natural_heritage/dbsearchtool.shtml

- Wetland Condition Assessment Tool (WetCAT)
  - https://www.deq.virginia.gov/our-programs/water/wetlands-streams/wetcat

- DWR Fish and Wildlife Information Service
  Information about Virginia's Wildlife resources:
  - http://vafwis.org/fwis/
- Total Maximum Daily Loads Approved Reports
  - https://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/tmdl/tmdldevelopment/approvedtmdlreports.aspx

- Virginia Outdoors Foundation: Identify VOF-protected land

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Figure M.2-4: Virginia Department of Environmental Quality Comment (continued)

- http://vof.maps.arcgis.com/home/index.html

- Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Database: Superfund Information Systems
  Information on hazardous waste sites, potentially hazardous waste sites and remedial activities across the nation, including sites that are on the National Priorities List (NPL) or being considered for the NPL:
  - www.epa.gov/superfund/sites/cursites/index.htm

- EPA RCRAInfo Search
  Information on hazardous waste facilities:
  - www.epa.gov/enviro/facts/rcrainfo/search.html

- Total Maximum Daily Loads Approved Reports
  - https://www.deq.virginia.gov/our-programs/water/water-quality/tmdl-development/approved-tmdls

- EPA Envirofacts Database
  EPA Environmental Information, including EPA-Regulated Facilities and Toxics Release Inventory Reports:
  - www.epa.gov/enviro/index.html

- EPA NEPAssist Database
  Facilitates the environmental review process and project planning:
  http://nepaassisttool.epa.gov/nepaassist/entry.aspx

If you have questions about the environmental review process and/or the federal consistency review process, please feel free to contact me (telephone (804) 659-1915 or e-mail bettina.rayfield@deq.virginia.gov).

I hope this information is helpful to you.

Sincerely,

Bettina Rayfield, Program Manager
Environmental Impact Review and
Long-Range Priorities

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Figure M.2-4: Virginia Department of Environmental Quality Comment (continued)

From: Riegert, Michael W (FAA) <Michael.W.Riegert@faa.gov>
Sent: Tuesday, November 21, 2023 8:19 AM
To: Kraft, Todd M CIV USN (USA) <todd.m.kraft.civ@us.navy.mil>
Cc: Williams, Reginald (FAA) <Reginald.Williams@faa.gov>; Favors, Lisa (FAA) <Lisa.Favors@faa.gov>
Subject: [Non-DoD Source] FW: Notice of Intent To Prepare a Supplement to the September 2018 Final Atlantic Fleet Training and Testing EIS/OEIS

Good morning Mr. Kraft,

My name is Michael Riegert with FAA, I am an Environmental protection specialist for FAA ECINA group specifically working with airspace environmental impacts. I am contacting you regarding the supplemental EIS for AFTT study area. Our management received the auto generated email below from your office and want to follow up regarding any support needed for this action from FAA. I have reviewed the website and have some questions regarding the upcoming supplemental EIS.

1-Can you provide some clarity on changes to current operations and existing foot prints for airspace within the AFTT study area?

2-Will you be expanding any airspace to include lateral or vertical changes for future training needs?

3-Has there been a request for FAA cooperating agency in support of airspace changes or modifications?

4-Is this supplemental primarily focused on impacts to marine mammals or will it also address changes to training requirements?

V/r,

Michael W. Riegert (PMP)
Environmental Protection Specialist, CI & NAS Analytics
Eastern Service Center, Operations Support Group (AJV-E25)
Phone 404-305-5962
Cell 404-861-2099

MissionSupport

1

Figure M.2-5: Federal Aviation Administration Comment

Proposed Action

The United States (U.S.) Department of the Navy (including both the U.S. Navy and the U.S. Marine Corps) and the U.S. Coast Guard (hereinafter jointly referred to as the "Action Proponents") propose to continue to conduct military readiness training and research, development, testing, and evaluation (hereinafter referred to as "testing") activities in the Atlantic Fleet Training and Testing (AFTT) Study Area, as represented in Figure 1. These military readiness activities include the use of active sonar and explosives, primarily within existing range complexes and testing ranges that are comprised of operating areas (sea space) and warning areas (airspace) located in the Atlantic Ocean along the eastern coast of North America, the Gulf of Mexico, and portions of the Caribbean Sea, at select Navy pierside locations, within port transit channels, and some inland waters.

In order to achieve and maintain military readiness, the Action Proponents propose to:

- Adjust training and testing activities from current levels to levels required to support U.S. Navy (Navy), U.S. Marine Corps (USMC), and U.S. Coast Guard (USCG) military readiness requirements beginning November 2025 and into the reasonably foreseeable future.
- Accommodate evolving mission requirements associated with force structure changes, including those resulting from the development, testing, and eventual introduction of new weapon systems and platforms (vessels, aircraft) into the fleet.

This analysis of the environmental impacts of the Proposed Action supports the Action Proponents' request for incidental takes of marine mammals from military readiness activities as required by the Marine Mammal Protection Act (MMPA). The analysis also supports the Action Proponents' requirements to consult with NMFS and the U.S. Fish and Wildlife Service (USFWS) under the Endangered Species Act (ESA). Since the Proposed Action for the fourth phase is largely similar to training and testing activities analyzed in the third phase, the Action Proponents are preparing a supplemental Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS), referred to hereinafter as the Supplemental. The Supplemental will be updated with new information to include new acoustic criteria, updated acoustic and explosive modeling, and updated marine species data.

The following range complexes fall within the AFTT Study Area:

- Northeast Range Complexes;
- Virginia Capes (VACAPES) Range Complex;
- Navy Cherry Point Range Complex;
- Jacksonville (JAX) Range Complex;
- Key West Range Complex; and
- Gulf of Mexico (GOMEX) Range Complex.

Testing ranges in the AFTT Study Area include:

- Naval Undersea Warfare Center Division, Newport Testing Range;
- Naval Surface Warfare Center, Panama City Division Testing Range; and
- Naval Surface Warfare Center Carderock Division, South Florida Ocean Measurement Facility Testing Range.

While most military readiness activities will take place in open ocean operating and warning areas, some activities, such as sonar maintenance and gunnery exercises, are conducted concurrent with normal transits and occur outside of these areas, but still within the Study Area.

The pierside testing locations and associated port transit channels are located at the following Navy ports and naval shipyards:

- Portsmouth Naval Shipyard, Kittery, Maine;
- Naval Submarine Base New London, Groton, Connecticut;
- Naval Station Newport, Newport, Rhode Island;
- Naval Station Norfolk, Norfolk, Virginia;
- Joint Expeditionary Base Little Creek-Fort Story, Virginia Beach, Virginia;

2

Figure M.2-5: Federal Aviation Administration Comment (continued)

- Norfolk Naval Shipyard, Portsmouth, Virginia;
- Naval Submarine Base Kings Bay, Kings Bay, Georgia;
- Naval Station Mayport, Jacksonville, Florida; and
- Port Canaveral, Cape Canaveral, Florida.

In addition, Navy-contractor pierside testing locations in the following cities, along with their associated port transit channels and inshore waters (such as bays and rivers) are in the AFTT Study Area:

- Bath, Maine;
- Groton, Connecticut;
- Newport News, Virginia;
- Pascagoula, Mississippi;
- North Bay, Florida;
- New Orleans, Louisiana; and
- Mobile, Alabama.

For decades, the Navy has been conducting military readiness activities in the AFTT Study Area. During this time, the tempo and types of military readiness activities in the Study Area have evolved due to changing requirements, the introduction of new technologies, the dynamic nature of international events, advances in warfighting doctrine and procedures, and force structure changes.

Figure M.2-5: Federal Aviation Administration Comment (continued)

JOHN STELLA
[redacted]

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC
ATTN.: EV22 (AFTT EIS/OEIS PROJECT MANAGER)
6506 HAMPTON BLVD BLDG A
NORFOLK, VA. 23508-1278

NOV. 25 , 2023

DEAR SIR :

I SUPPORT THE U.S. NAVY TO WORK WITH U.S. COAST GUARD FOR TRAINING AND TESTING IN THE AFTT STUDY AREA FROM MAINE COAST TO BOSTON COAST TO CAPE COD COAST TO RHODE ISLAND COAST .

MOST IMPORTANTLY THE U.S. NAVY SHOULD WORK WITH U.S. COAST GUARD TO TRAIN AND TEST ON BOSTON HARBOR COAST WHERE THE FORMER U.S. ARMY BASE BLACK FALCON PIER AND THE FORMER BOSTON NAVAL SHIPYARD AND FORMER BOSTON NAVAL STATION.

THANK YOU FOR YOUR CONSIDERATION .

SINCERELY,

JOHN STELLA

1

Figure M.2-6: Private Individual (3) Comment

From: noreply@thc.state.tx.us <noreply@thc.state.tx.us>
Sent: Monday, December 18, 2023 3:48 PM
To: Kraft, Todd M CIV USN (USA) <todd.m.kraft.civ@us.navy.mil>; reviews@thc.state.tx.us
Subject: [Non-DoD Source] Atlantic Fleet Training and Testing

TEXAS HISTORICAL COMMISSION
real places telling real stories

Re: Project Review under Section 106 of the National Historic Preservation Act
THC Tracking #202402738
Date: 12/18/2023
Atlantic Fleet Training and Testing
Western Atlantic Ocean North Am E Coast and Gulf

Description: Beginning stages of preparing a Supplemental EIS /OEIS for Atlantic Fleet Training and Testing activities.

1

Figure M.2-7: Texas Historical Commission Comment

Dear Todd Kraft:
Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act.

The review staff, led by Amy Borgens, Caitlin Brashear and Alexander Shane, has completed its review and has made the following determinations based on the information submitted for review:

We have the following comments: The Texas Historical Commission thanks the Department of the Navy for the invitation to comment on the Draft Supplemental EIS.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: amy.borgens@thc.texas.gov, caitlin.brashear@thc.texas.gov, Alexander.Shane@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit http://thc.texas.gov/etrac-system.

Sincerely,

Alexander Shane

for Mark Wolfe, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.

2

Figure M.2-7: Texas Historical Commission Comment (continued)

December 1 2023

[redacted]

Location peninsula on Boston Harbor , formerly Lawley Naval Shipyard. Atlantic Ocean inlet

Response invitation re Atlantic Fleet Training / environmental impact statement

November 21 2023 posting date. Response 12-1 -2023

Purpose : proposed action to maintain a ready force which is necessary to ensure the peacetime promotion of the national security interests of the United States and for prompt and sustained combat incident to operations at sea and meet the needs of war .

Comments : Naval facilities engineering systems command Atlantic
Attention code : EV22 (AFTT EIS / OEIS Project manager), 6506 Hampton Blvd, Building A , Norfolk , Va 23508-1278

Electronic via https:// : https www.navy .mil/ attteis/

Greetings : Nav facities engineering systems command Atlantic .

Attach pls. find resume of my lifes work including US Navy Active service , under contract , enlisted in the design and construction team USNavy NAVSEC Hyattsville Md. Dec 1972 Nov 1972 .for Project : design and construction force full time for the effort to deliver the quick turnaround of a number of vessels to be built by US naval shipyard contractors ; competive bidders in Washington State , Pascagoula Miss. And Bath Maine . full delivery . Patrol Frigate project , designed for operations in the Mekong River theatre , republic of Vietnam . Asia.

I am a semi retired registered Architect In Massachusetts who is interested in being part of our nations efforts as a part of Americas Ready force to enforce the peacetime promotion of America's national security interests. A resume will be available if requested. I may be contacted by phone :
[redacted]

John Edward Roche

Architect Massachusetts

Figure M.2-8: Private Individual (4) Comment

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Office of Permitting and Project Navigation
401 East State Street, Mail Code 401-07J, P.O. Box 420
Trenton, New Jersey 08625-0420
Phone: (609) 292-3600 Fax: (609) 292-1921
dep.nj.gov/oppn

PHILIP D. MURPHY
Governor

TAHESHA L. WAY
Lt. Governor

SHAWN M. LaTOURETTE
Commissioner

December 15, 2023

Naval Facilities Engineering Systems Command Atlantic
6506 Hampton Blvd. Building A
Norfolk, VA 23508-1278
ATTN: Code EV22 AFTT SEIS Project Manager

RE: Comments for the NEPA Supplemental EIS/OEIS
U.S. Navy/U.S. Coast Guard Atlantic Fleet Training and Testing
Location: Offshore in the Western Atlantic Ocean

Dear Maria L. Aguayo,

The New Jersey Department of Environmental Protection's (Department) Office of Permitting and Project Navigation (OPPN) has distributed, for review and comment, the information pertaining to the joint U.S. Navy/U.S. Coast Guard (Action Proponents) Atlantic Fleet Training and Testing (AFTT) proposed activities in support of the preparation of a National Environmental Policy Act (NEPA) required Supplemental Environmental Impact Statement (Supplemental EIS)/Overseas Environmental Impact Statement (OEIS). The proposed action includes conducting military readiness training and research, development, testing, and evaluation activities in the AFTT Study Area. These military readiness activities include the use of active sonar and explosives, primarily within existing range complexes and testing ranges that are comprised of operating areas (sea space) and warning areas (airspace) located in the Atlantic Ocean along the eastern coast of North America, the Gulf of Mexico, and portions of the Caribbean Sea, at select Navy pierside locations, within port transit channels, and some inland waters.

The Department offers the following comments for your consideration: A Federal Consistency Determination is required from the State of New Jersey Division of Land Resource Protection (DLRP) for the proposed activities. Federal Consistency requests should be submitted to lurfederalconsistency@dep.nj.gov. If you have any questions regarding this information, please contact Colleen Keller at Colleen.Keller@dep.nj.gov.

Thank you for giving the Department the opportunity to provide comments for the preparation of the Supplemental EIS/OEIS for the proposed action. Please contact Ryan Carter at Ryan.Carter@dep.nj.gov or at (609) 940-5616, or contact OPPN at (609) 292-3600 if you have any questions.

Sincerely,

David Pepe, Director
Office of Permitting and Project Navigation

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Figure M.2-9: New Jersey Department of Environmental Protection, Office of Permitting and Project Navigation Comment

SETH MOULTON
SIXTH DISTRICT, MASSACHUSETTS

COMMITTEE ON ARMED SERVICES

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

SELECT COMMITTEE ON STRATEGIC COMPETITION BETWEEN THE UNITED STATES AND THE CHINESE COMMUNIST PARTY

UNITED STATES
HOUSE OF REPRESENTATIVES

1126 LONGWORTH BUILDING
WASHINGTON, D.C. 20515
202.225.8020

21 FRONT STREET
SALEM, MA 01970
978.531.1669

moulton.house.gov
@REPMOULTON

December 15, 2023

As the U.S. Navy and U.S. Coast Guard undertake a Supplemental Environmental Impact Statement(Supplemental EIS)/Overseas Environmental Impact Statement (OEIS) for Atlantic Fleet Training and Testing (AFTT) activities, I urge consideration of the impact on North Atlantic right whales.

North Atlantic right whales are on the brink of extinction. As noted by the National Oceanic and Atmospheric Administration, there are approximately 360 individuals remaining of this endangered species in Atlantic waters, including fewer than 70 reproductively active females. Vessel strikes are a leading cause of mortality for North Atlantic right whales and increased ocean noise levels may interfere with their communication, stress levels, navigation, and ability to find food.

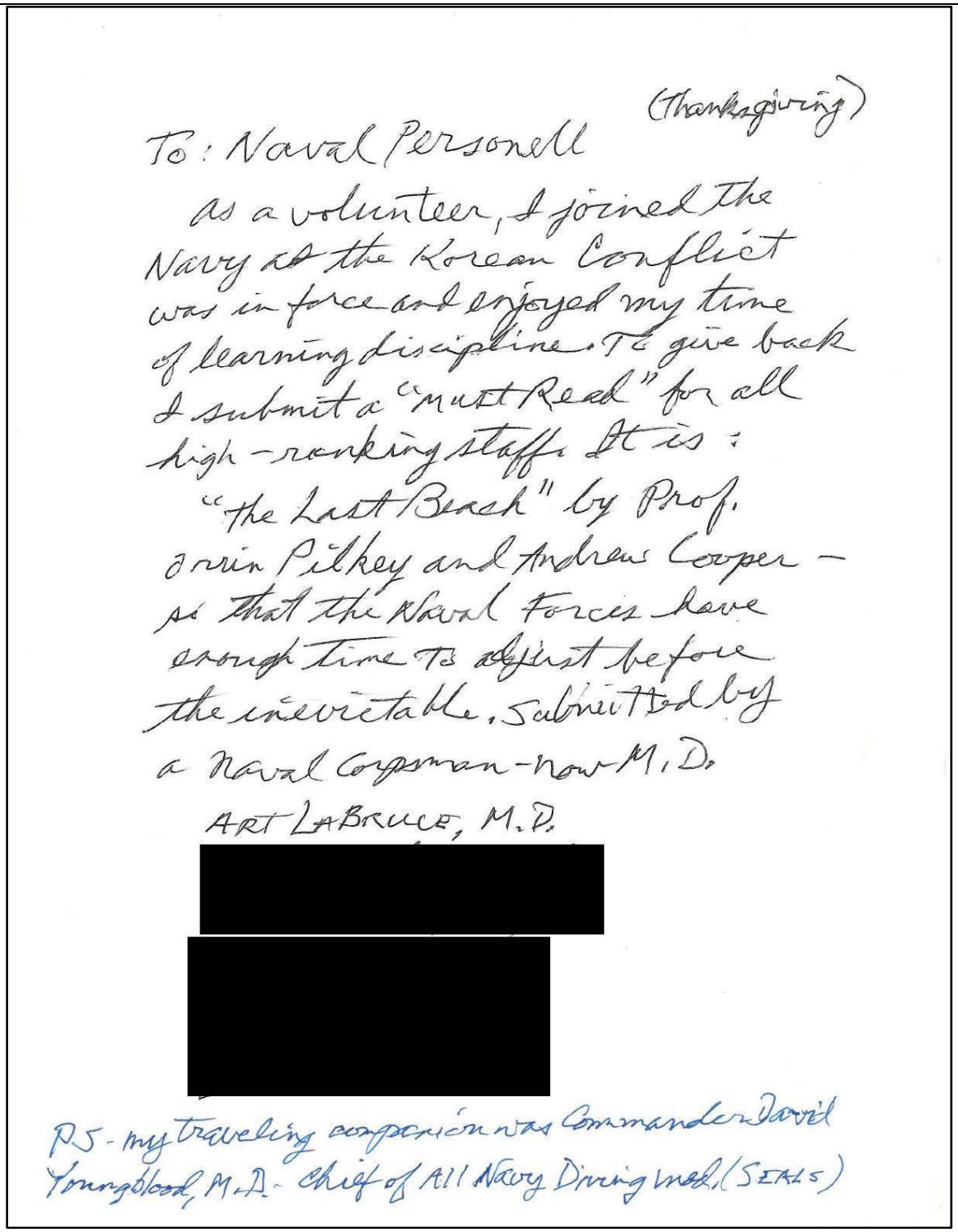
Ensuring critical military readiness is of paramount importance when developing the AFTT Supplemental EIS/OEIS. When considering the environmental impacts of AFTT activities, informed decisions regarding impacts on North Atlantic right whales will be important for helping to conserve this endangered species.

Thank you for your attention to this critical matter. I commend the U.S. Navy and U.S. Coast Guard's stalwart dedication to ensuring our national security interests and welcome your commitment to safeguarding the North Atlantic right whale.

Sincerely,

Congressman Seth Moulton
Sixth District, Massachusetts

Figure M.2-10: Congressman Seth Moulton Comment



(Thanksgiving)

To: Naval Personell

as a volunteer, I joined the Navy at the Korean Conflict was in force and enjoyed my time of learning discipline. To give back I submit a "must Read" for all high-ranking staff. It is:

"the Last Beach" by Prof. Orrin Pilkey and Andrew Cooper — so that the Naval Forces have enough time to adjust before the inevitable. Submitted by a Naval Corpsman-now M.D.

ART LABRUCE, M.D.

[redacted]

[redacted]

PS - my traveling companion was Commander David Youngblood, M.D. - Chief of All Navy Diving Med. (SEALS)

Figure M.2-11: Private Individual (6) Comment

DEPARTMENT OF THE NAVY
U.S. FLEET FORCES COMMAND
1562 MITSCHER AVENUE SUITE 250
NORFOLK VA 23551-2487

RECEIVED
NOV 22 2023
By 1784-23

5090
Ser N46/020
November 14, 2023

Dear Sir or Madam:

This letter is to inform you that the United States (U.S.) Department of the Navy (Navy), jointly with the U.S. Coast Guard, is in the beginning stages of preparing a Supplemental Environmental Impact Statement (Supplemental EIS)/Overseas Environmental Impact Statement (OEIS) for Atlantic Fleet Training and Testing (AFTT) activities in the seaspace and the airspace over areas of the western Atlantic Ocean along the east coast of North America, the Gulf of Mexico, and portions of the Caribbean Sea.

The U.S. Navy and U.S. Coast Guard are requesting your comments on the scope, content, and issues to be considered during the development of the AFTT Supplemental EIS/OEIS. This document will assess training and testing activities which are proposed to be conducted at levels that support military readiness requirements beginning in November of 2025 and into the reasonably foreseeable future. Such activities will also accommodate evolving mission requirements associated with force structure changes, including those resulting from the development, testing, and ultimate introduction of new platforms (vessels, aircraft, and weapon systems) into the fleet, thereby ensuring critical military readiness requirements are met.

The purpose of the Proposed Action is to maintain a ready force, which is needed to ensure the peacetime promotion of the national security interests and prosperity of the United States and for prompt and sustained combat incident to operations at sea and to meet the needs of war, consistent with Title 10, section 8062, of the United States Code.

You may send written comments to the following address:
Naval Facilities Engineering Systems Command Atlantic
6506 Hampton Boulevard Building A
Norfolk, Virginia 23508-1278
ATTN: Code EV22 AFTT SEIS Project Manager

Comments also can be submitted electronically via the project website at:
https://www.nepa.navy.mil/aftteis.

All comments must be postmarked or received by December 16, 2023 to be considered in the Draft Supplemental EIS/OEIS. For additional information about the AFTT Supplemental EIS/OEIS, please visit the project website.

We appreciate your comments on this important project. My point of contact for this matter is Mr. Todd Kraft at (757) 836-2943 or todd.m.kraft.civ@us.navy.mil.

Sincerely,

AGUAYO.MARIA.L ORETO.1157276731 Digitally signed by AGUAYO.MARIA.LORETO.1157276731 Date: 2023.11.14 17:19:57 -05'00'

M. L. AGUAYO
Director, Fleet Installations and Environment
and Deputy Chief of Staff

Based on the information submitted, I have concluded that there will be no historic properties affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act. Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.

Kirk F. Mohney

12/12/23

Kirk F. Mohney,
State Historic Preservation Officer
Maine Historic Preservation Commission
Date

Figure M.2-12: Maine Historic Preservation Commission Comment

From: Schneible, Elizabeth <Elizabeth.A.Schneible@dncr.nh.gov>
Sent: Thursday, December 7, 2023 12:42 PM
To: Kraft, Todd M CIV USN (USA) <todd.m.kraft.civ@us.navy.mil>
Subject: [Non-DoD Source] Supplemental EIS/OEIS for AFTT activities

Dear Mr. Kraft,

We received the attached letter regarding the Supplemental EIS/OEIS for AFTT activities. If there is a Section 106 component to this project, we need to be able to comment in official capacity, which means completing a Request for Project Review. I have attached the Request for Project Review (RPR) form and instructions here for your convenience. Please let me know if you have any questions about this process.

Sincerely,

Liz Schneible
DHR Program Specialist
NH Division of Historical Resources
NH Dept of Natural & Cultural Resources
172 Pembroke Road, Concord, NH 03301
Elizabeth.a.schneible@dncr.nh.gov

NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

1

Figure M.2-13: New Hampshire Division of Historical Resources Comment

TURTLE ISLAND RESTORATION NETWORK
FIGHTING FOR A BLUE-GREEN PLANET

December 15, 2023

Submitted Electronically

Naval Facilities Engineering Systems Command, Code EV22SG (AFTT Project Manager)
6506 Hampton Boulevard
Norfolk, Virginia 23508-1278

Dear U.S. Department of the Navy and U.S. Coast Guard,

The United States Department of the Navy (including both the U.S. Navy and the U.S. Marine Corps) and the U.S. Coast Guard have proposed they continue military readiness testing and training exercises in predetermined locations in the North Atlantic, the Gulf of Mexico, and portions of the Caribbean Sea, at select Navy pierside locations, within port transit channels, and some inland waters, as seen in **Figure 1**.

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Figure M.2-14: Turtle Island Restoration Network Comment

Figure 1: The map of the Atlantic Fleet Testing and Training area.

[1]

Different exercises are expected to be conducted involving the use of sonar, explosives, and other weaponry. Exercises will be focused on different warfare communities, including aviation, surface, submarine, and expeditionary.[2]

Turtle Island Restoration Network (TIRN) respectfully submits the following comments in regards to the notice of intent to prepare a draft supplemental environmental impact statement (SEIS) for the Atlantic Fleet Training and Testing (AFTT) study area.

1. In light of marine mammal data developments and Unusual Mortality Events (UME) along the Atlantic Coast, careful consideration must be given to the testing locations and exercises carried out.

The Atlantic coast of the United States is home to several diverse species of marine mammals. Unfortunately, many of these species are at risk due to threats associated with human activity.[3]

Humpback Whales

Humpback whales (*Megaptera novaeangliae*) along the Atlantic coast have been experiencing an UME since 2016.[4] As seen below in **Figure 2**, a large amount of humpback whale strandings associated with the UME have been located near the AFTT study area in the North Atlantic.

[1] US Department of the Navy. Available at: https://www.nepa.navy.mil/Current-Projects/At-Sea-Ranges/Atlantic-Fleet-Training-and-Testing-Phase-IV/Proposed-Action/
[2] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299472/-1/-1/1/2.0%20AFTT%20FEIS%20DESCRIPTION%20OF%20PROPOSED%20ACTION%20AND%20ALTERNATIVES.PDF Page 2-1.
[3] Waring, G. T., Palka, D. L., & Evans, P. G. (2009). North Atlantic marine mammals. In *Encyclopedia of marine mammals* (pp. 773-781). Academic Press.
[4] NOAA Fisheries. 2016–2023 Humpback Whale Unusual Mortality Event Along the Atlantic Coast. Available at: https://www.fisheries.noaa.gov/national/marine-life-distress/2016-2023-humpback-whale-unusual-mortality-event-along-atlantic-coast

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Figure M.2-14: Turtle Island Restoration Network Comment (continued)

Figure 2: A map showing the humpback whale strandings associated with the ongoing UME in the area of the AFTT location.

[5]

Necropsies have not been able to be conducted on every whale due to different factors, including location and condition of the body. However, a large percentage of the whales that were able to be necropsied presented with injuries associated with human interaction, specifically vessel strike injuries and entanglement in fishing gear. Some of the whales presented with pre-mortem vessel strike injuries indicative of being struck by a moving vessel while still alive.[6] The 2018 Final Environmental Impact Statement (FEIS) indicates that the US Navy accurately reports all collisions with whales and has historically had interactions with humpback whales.[7] With the current exercises being conducted within the AFTT study area following the 2018 FEIS, it must be considered that an increase of vessel traffic related to training and testing exercises could be having a significant impact on humpback whale populations in the North Atlantic along the east coast of the United States. As a result, the data presented within the 2018 FEIS is outdated and cannot effectively be used to pass blame to other vessels operating near the AFTT study area.

[5] NOAA Fisheries. 2016-2023 Humpback Whale Unusual Mortality Event along the Atlantic Coast Dead Animal Locations. Available at: https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=f9eef8e52fc84144b1bfc84e931ba54c

[6] NOAA Fisheries. 2016–2023 Humpback Whale Unusual Mortality Event Along the Atlantic Coast. Available at: https://www.fisheries.noaa.gov/national/marine-life-distress/2016-2023-humpback-whale-unusual-mortality-event-along-atlantic-coast

[7] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299480/-1/-1/1/3.07%20AFTT%20FEIS%20MARINE%20MAMMALS.PDF Page 3.7-25.

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Figure M.2-14: Turtle Island Restoration Network Comment (continued)

North Atlantic Right Whales

The North Atlantic Right Whale (*Eubalaena glacialis*) is approaching extinction after an UME was officially declared in 2017. Unfortunately, vessel strike injuries are a leading cause of mortality.[8] Critical habitat for the North Atlantic Right Whale has been established in areas of the North Atlantic, as seen below in **Figure 3**. The location of the critical habitat is just east of the AFTT study area.

Figure 3: A map showing the critical habitat of North Atlantic Right Whales in the North Atlantic that is located east of the AFTT location. [9]

North Atlantic Right Whales travel up the coast to feed in the waters around New England during the winter and early spring, as defined by the critical habitat.[10] North Atlantic Right Whales do not follow the boundaries of a map. Once they are outside the boundaries of the critical habitat, they are at an increased risk of experiencing anthropogenic threats. The AFTT study area is far too close to this critical habitat and increases the risk of vessel strike injuries as North Atlantic Right Whales migrate along the coast. The 2018 FEIS specifically highlights that

[8] NOAA Fisheries. 2017–2023 North Atlantic Right Whale Unusual Mortality Event. Available at: https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2023-north-atlantic-right-whale-unusual-mortality-event

[9] NOAA Fisheries. North Atlantic Right Whale Critical Habitat Map and GIS Data. Available at: https://www.fisheries.noaa.gov/resource/map/north-atlantic-right-whale-critical-habitat-map-and-gis-data

[10] Parks, S. E., Warren, J. D., Stamieszkin, K., Mayo, C. A., & Wiley, D. (2012). Dangerous dining: surface foraging of North Atlantic right whales increases risk of vessel collisions. *Biology letters*, 8(1), 57-60.

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Figure M.2-14: Turtle Island Restoration Network Comment (continued)

despite strict regulations regarding vessel speed and routing, there have been no measurable effects on reducing the number of marine mammal mortalities associated with vessel strike injuries.[11] As North Atlantic Right Whales remain critically endangered, it is vital that the SEIS is revised to contain recent data associated with North Atlantic Right Whale population distribution and vessel strike injuries.

We ask that the US Department of the Navy and the US Coast Guard consider halting training and testing exercises within these critical areas in light of the ongoing UMEs associated with both humpback and North Atlantic Right Whales.

2. All species of marine mammals are put at risk due to the type of training and testing exercises conducted within the marine environment.

Numerous species of marine mammals inhabit the waters within the AFTT study area and are at risk of disruption, injury, or death as a result of the training and testing exercises. A majority of the proposed exercises involve the use of sonar, explosives, and other weaponry.

Acoustic Stressors

In the 2018 FEIS, acoustic stressors were associated with sonar and other transducers, air guns, pile driving, vessel noise, aircraft noise, and weapons noise.[12] Marine mammals rely on sound to communicate and move around within their environment. Some species of marine mammals also use echolocation to feed. Underwater noise has the potential to disrupt essential life functions of marine mammals, such as feeding, mating, nursing, resting, and migrating.[13] Over the course of history, military training exercises have been considered to be a substantial threat to marine mammals, even suspected of leading to mass stranding events. Following a mass stranding event in the Bahamas in the 2000s after a military exercise, the US government acknowledged sonar as a potential contributing factor.[14] With many vulnerable and endangered marine mammal populations in decline, it is concerning that the continuation of testing and training exercises that will contribute significantly to noise pollution is even being considered.

Explosive, Energy, and Physical Stressors

[11] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299480/-1/-1/1/3.07%20AFTT%20FEIS%20MARINE%20MAMMALS.PDF Page 3.7-25.
[12] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299480/-1/-1/1/3.07%20AFTT%20FEIS%20MARINE%20MAMMALS.PDF Page 3.7-105.
[13] Erbe, C., Dunlop, R., & Dolman, S. (2018). Effects of noise on marine mammals. Effects of anthropogenic noise on animals, 277-309.
[14] Simmonds, M. P., Dolman, S. J., Jasny, M., Parsons, E. C. M., Weilgart, L., Wright, A. J., & Leaper, R. (2014). Marine noise pollution-increasing recognition but need for more practical action.

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Figure M.2-14: Turtle Island Restoration Network Comment (continued)

In the 2018 FEIS, explosive stressors were associated with explosions in-air and in-water, while energy stressors were associated with in-water electromagnetic devices and lasers. Physical stressors are related to vessels and in-water devices, military expended materials, and seafloor devices.[15] With an increase of vessel traffic associated with training and testing exercises, we can expect an increase in human interaction with marine mammals. Many marine mammals are often struck by moving vessels while they are at the surface feeding, as seen in a study conducted on vessel strike related mortalities in humpback whales.[16] Further research is necessary to reduce the likelihood of vessel interaction with marine mammals.

Entanglement and Ingestion

In the 2018 FEIS, entanglements were associated with wires and cables, decelerators/parachutes, and biodegradable polymer, while ingestion was associated with military expended materials–munitions and military expended materials other than munitions.[17] Some marine mammal entanglements have historically been associated with underwater cables. While technological advances have decreased the likelihood of such entanglements,[18] the risk is still present. Different types of marine debris related to the training and testing exercises are also considered to be a risk factor for entanglements among marine mammals. Marine debris can also be ingested by marine mammals, leading to impairment of gastrointestinal functionality and even death.[19]

Secondary Stressors

In the 2018 FEIS, secondary stressors were associated with impacts on habitat and prey availability.[20] Different training and testing exercises will have varying effects on the marine ecosystem as a whole. If the trophic cascade of an ecosystem is disrupted, we can expect to see different behavioral changes amongst large marine megafauna populations, including marine

[15] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299480/-1/-1/1/3.07%20AFTT%20FEIS%20MARINE%20MAMMALS.PDF Page 3.7-105.
[16] Stepanuk, J. E., Heywood, E. I., Lopez, J. F., DiGiovanni Jr, R. A., & Thorne, L. H. (2021). Age-specific behavior and habitat use in humpback whales: implications for vessel strike. Marine Ecology Progress Series, 663, 209-222.
[17] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299480/-1/-1/1/3.07%20AFTT%20FEIS%20MARINE%20MAMMALS.PDF Page 3.7-105.
[18] Taormina, B., Bald, J., Want, A., Thouzeau, G., Lejart, M., Desroy, N., & Carlier, A. (2018). A review of potential impacts of submarine power cables on the marine environment: Knowledge gaps, recommendations and future directions. Renewable and Sustainable Energy Reviews, 96, 380-391.
[19] Simmonds, M. P. (2012). Cetaceans and marine debris: the great unknown. Journal of Marine Sciences, 2012.
[20] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299480/-1/-1/1/3.07%20AFTT%20FEIS%20MARINE%20MAMMALS.PDF Page 3.7-105.

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Figure M.2-14: Turtle Island Restoration Network Comment (continued)

mammals. Marine mammal populations can be influenced by both abiotic and biotic factors. Biotic factors, including prey availability, can be considered a significant driver of marine mammal distribution and behavior.[21]

With so many different areas of military training and testing coupled with a diverse array of marine mammal species, it is imperative that updated marine mammal population and strandings data be a significant part of the SEIS.

3. Updated sea turtle data is needed for the SEIS to accurately determine the threat of different activities and exercises to vulnerable and endangered sea turtle species.

Different species of sea turtles can be found throughout the AFTT study area, including green sea turtles (*Chelonia mydas*), hawksbill turtle (*Eretmochelys imbricata*), Kemp's ridley turtle (*Lepidochelys kempii*), leatherback turtle (*Dermochelys coriacea*), and loggerhead turtle (*Caretta caretta*). According to the 2018 FEIS, some sea turtle species, like the hawksbill sea turtle, have critical habitat that is located within the AFTT study area.[22] The endangered Kemp's Ridley sea turtle has a smaller range within the Gulf of Mexico,[23] but is still at risk due to the training and testing exercises in the Gulf. In a majority of the individual species backgrounds presented in the 2018 FEIS, vessel strike injuries were not necessarily considered to be a significant threat to their populations. A multi-year study focused along the Florida coast found vessel strike related mortality in sea turtles to be a significant threat among several species.[24] We can expect to see increased vessel traffic related to testing and training exercises within the AFTT study area and, as a result, sea turtle populations are at a heightened risk of vessel strike related mortality.

In the 2018 FEIS, different types of marine debris were touched upon and discussed their overall impacts to sea turtles. Marine debris can lead to entanglements and ingestion in sea turtles. The 2018 FEIS references a study in which juvenile sea turtles were more likely to ingest marine debris than adults.[25] Different types of marine debris related to training and testing exercises are

[21] Kiszka, J. J., Heithaus, M. R., & Wirsing, A. J. (2015). Behavioural drivers of the ecological roles and importance of marine mammals. Marine Ecology Progress Series, 523, 267-281.
[22] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299481/-1/-1/1/3.08%20AFTT%20FEIS%20REPTILES.PDF Page 3.8-22.
[23] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299481/-1/-1/1/3.08%20AFTT%20FEIS%20REPTILES.PDF Page 3.8-28.
[24] Foley, A. M., Stacy, B. A., Hardy, R. F., Shea, C. P., Minch, K. E., & Schroeder, B. A. (2019). Characterizing watercraft-related mortality of sea turtles in Florida. The Journal of Wildlife Management, 83(5), 1057-1072.
[25] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299481/-1/-1/1/3.08%20AFTT%20FEIS%20REPTILES.PDF Page 3.8-15.

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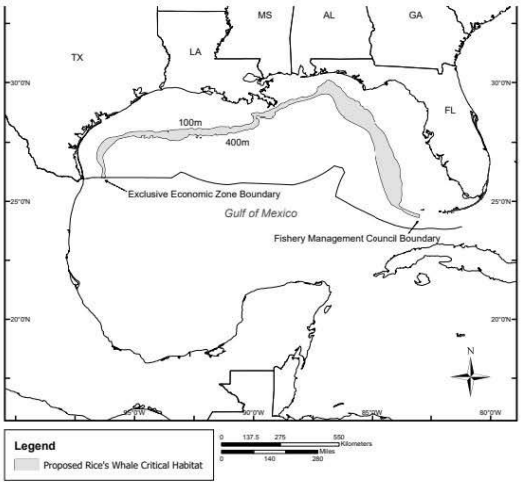
Figure M.2-14: Turtle Island Restoration Network Comment (continued)

expected to impact sea turtle populations within the AFTT study area. A more dynamic study is necessary to determine the full extent at which sea turtles would be exposed to entanglement and ingestion stressors as a result of marine debris.

To fully understand how the training and testing activities will impact sea turtle populations within the AFTT study area, the SEIS will need to analyze updated data related to strandings and population distribution in conjunction to potential stressors.

4. With less than 100 individuals remaining, the critically endangered Rice's whale is at risk of extinction.

At the time of the 2018 FEIS, the Rice's whale (*Balaenoptera ricei*) had not been identified as its own species.[26] Therefore, this species was technically not a part of the 2018 FEIS and had not been accurately assessed for potential stressors caused by training and testing exercises in the Gulf of Mexico. Recently, NOAA Fisheries proposed critical habitat designation for the Rice's whales in response to their incredibly small population size and limited distribution range. The proposed critical habitat for the Rice's whale can be seen below in **Figure 4**. A portion of the critical habitat overlaps with the AFTT study area in the Gulf of Mexico.



[26] Soldevilla, M. S., Ternus, K., Cook, A., Hildebrand, J. A., Frasier, K. E., Martinez, A., & Garrison, L. P. (2022). Acoustic localization, validation, and characterization of Rice's whale calls. The Journal of the Acoustical Society of America, 151(6), 4264-4278.

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Figure M.2-14: Turtle Island Restoration Network Comment (continued)

Figure 4: A map showing the proposed critical habitat of Rice's Whales in the Gulf of Mexico.

[27]

As with other marine mammals, the Rice's whales are at risk of the same stressors as identified in item 2. The Rice's whale is protected under both the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA). This species is considered to be depleted under the MMPA, heightening the need to further protect this species from anthropogenic threats.[28] We recommend all military training and testing be immediately stopped within the Gulf of Mexico to ensure the protection and survival of the critically endangered Rice's whale.

Final Thoughts

In light of ongoing UMEs, increased anthropogenic pressure, and declining species populations, it is vital that the SEIS further examines the impact training and testing exercises will have on the marine ecosystem. The data used in the 2018 FEIS is outdated and unreliable as the ocean is a dynamic system and always changing. We recommend that all exercises be stopped until an updated analysis becomes available to reduce the impact on our oceans and marine life.

Thank you for your consideration,

Todd Steiner
Executive Director

[27] NOAA Fisheries. Proposed Rice's Whale Critical Habitat. Available at: https://www.fisheries.noaa.gov/s3/2023-07/Rices-Whale-Proposed-CH-Map-508-Final.pdf
[28] NOAA Fisheries. Rice's Whale. Available at: https://www.fisheries.noaa.gov/species/rices-whale

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Figure M.2-14: Turtle Island Restoration Network Comment (continued)

M.3 Notification of Availability of Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement

The public comment period on the Draft Supplemental EIS/OEIS began with the issuance of the Notice of Availability and a Notice of Public Meetings in the *Federal Register* on September 20, 2024 (Appendix N, Federal Register Notices). The *Federal Register* notices included notification of the availability of the Draft Supplemental EIS/OEIS and where it can be accessed; an overview of the Proposed Action and its purpose and need; public commenting information; and the locations, dates, and times of public meetings. The purpose of the public meetings was to inform the public about the Proposed Action and to solicit public comments on the environmental issues addressed and analyzed in the Draft Supplemental EIS/OEIS. The Draft Supplemental EIS/OEIS public review and comment period lasted 60 days, concluding on November 21, 2024. Comments were accepted by mail, through the Supplemental EIS/OEIS website at https://www.nepa.navy.mil/aftteis/, and at the public meetings.

M.3.1 Notification of Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement and Public Meetings

The Action Proponents made significant efforts to distribute information about the project and notify the public to ensure maximum public participation during the public comment period. A summary of these efforts follows.

M.3.1.1 Notification Letters

Letters were sent to federally recognized tribes; state-elected officials; and federal, regional, and state agencies. The letters provided a description of the Proposed Action, address of the project website, duration of the comment period, and information on the public meetings. Entities that received the notification letters are listed in Table M.3-1. Figure M.3-1 provides an example letter.

Table M.3-1: Entities that Received the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Notification Letter

Federally Recognized Tribes	
Absentee Shawnee Tribe of Indians of Oklahoma	Mohegan Indian Tribe of Connecticut
Alabama-Coushatta Tribe of Texas	Nansemond Indian Nation
Aroostook Band of Micmacs	Narragansett Indian Tribe of Rhode Island
Catawba Indian Nation	Oneida Nation of New York
Cayuga Nation of New York	Onondaga Nation of New York
Chickahominy Indian Tribe	Passamaquoddy Tribe of Indian Township
Chickahominy Indian Tribe - Eastern Division	Penobscot Nation
Chitimacha Tribe of Louisiana	Poarch Band of Creek Indians of Alabama
Coushatta Tribe of Louisiana	Saint Regis Mohawk Tribe
Delaware Nation	Seminole Tribe of Florida
Delaware Tribe of Indians	Seneca Nation of Indians
Eastern Band of Cherokee Indians of North Carolina	Shawnee Tribe of Oklahoma
Houlton Band of Maliseet Indians	Shinnecock Indian Nation
Jena Band of Choctaw Indians	Stockbridge-Munsee Band of the Mohicans
Kickapoo Traditional Tribe of Texas	Tonawanda Band of Seneca Indians of New York
Mashantucket Pequot Indian Tribe	Tunica-Biloxi Indian Tribe of Louisiana
Mashpee Wampanoag Indian Tribe	Tuscarora Nation of New York
Miccosukee Tribe of Indians of Florida	Wampanoag Tribe of Gay Head of Massachusetts
Mississippi Band of Choctaw Indians	Ysleta del Sur Pueblo of Texas
Alabama	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Alabama Department of Environmental Management Alabama Historical Commission
Connecticut	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Connecticut Commission on Culture and Tourism, State Historic Preservation Office Connecticut Department of Energy and Environmental Protection, Land and Water Resources Division
Delaware	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Delaware Department of Natural Resources and Environmental Control, Delaware Coastal Programs Delaware Division of Historical and Cultural Affairs
Florida	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Florida Department of Environmental Protection, Coastal Management Program, Office of Resilience and Coastal Protection Florida Department of Environmental Protection, State Clearinghouse Florida Division of Historical Resources
Georgia	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Georgia Historic Preservation Division Georgia Department of Natural Resources, Coastal Zone Management Program
Louisiana	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Louisiana Department of Natural Resources Louisiana Office of Cultural Development, Division of Historic Preservation

Table M.3-1: Entities that Received the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Notification Letter (continued)

Maine	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Maine Coastal Programs Maine Historic Preservation Commission
Maryland	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Maryland Department of Natural Resources Maryland Department of Natural Resources, Chesapeake and Coastal Service Maryland Department of Natural Resources, Wetlands and Waterways Maryland Historical Trust
Massachusetts	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Massachusetts Executive Office of Environmental Affairs, Office of Coastal Zone Management Massachusetts Historical Commission
Mississippi	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Mississippi Department of Archives and History, Historic Preservation Division, Federal and State Project Review Mississippi Department of Marine Resources, Coastal Programs
New Hampshire	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	New Hampshire Department of Environmental Services, Coastal Program New Hampshire Division of Historical Resources
New Jersey	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	New Jersey Department of Environmental Protection, Coastal Management Program New Jersey Historic Preservation Office
New York	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	New York Department of State, Office of Planning, Development, and Community Infrastructure New York Office of Parks, Recreation, and Historic Preservation
North Carolina	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	North Carolina Department of Cultural Resources North Carolina Division of Coastal Management, Coastal Area Management Act
Rhode Island	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Rhode Island Coastal Resources Management Council Rhode Island Historical Preservation and Heritage Commission
South Carolina	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management South Carolina State Historic Preservation Office

Table M.3-1: Entities that Received the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Notification Letter (continued)

Texas	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Texas General Land Office, Coastal Resources Division Texas Historical Commission
Virginia	
State-Elected Officials	***State Agencies***
Office of the Governor Congressional Delegates	Virginia Department of Environmental Quality, Coastal Program, Environmental Impact Review and Long Range Priorities Virginia Department of Historic Resources Virginia Department of Wildlife Resources
U.S. Virgin Islands	
Department of Planning and Natural Resources, Coastal Zone Management Program State Historic Preservation Office	
Federal Agencies	
Gray's Reef National Marine Sanctuary Florida Keys National Marine Sanctuary National Marine Fisheries Service National Marine Fisheries Service; Greater Atlantic Regional Fisheries Office National Marine Fisheries Service, Southeast Regional Office National Marine Fisheries Service, Office of Protected Resources National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries U.S. Fish and Wildlife Service U.S. Fish and Wildlife Service, Chesapeake Bay Ecological Services Field Office U.S. Fish and Wildlife Service, Eastern North Carolina Ecological Services U.S. Fish and Wildlife Service, Florida Ecological Services U.S. Fish and Wildlife Service, South Carolina Ecological Services U.S. Fish and Wildlife Service, Virginia Ecological Services	

DEPARTMENT OF THE NAVY
U.S. FLEET FORCES COMMAND
1562 MITSCHER AVENUE SUITE 250
NORFOLK VA 23551-2487

5090
Ser N46/032
September 16, 2024

The Honorable Brian Kemp
Governor of Georgia
State Capitol
206 Washington Street Suite 203
Atlanta, GA 30334

Dear Governor Kemp:

The Department of the Navy (DON) and the U.S. Coast Guard (Coast Guard) have jointly prepared a Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) (ID# SEIS-007-17-USN-1723491961) that evaluates the reasonably foreseeable effects on the human environment of Navy, Marine Corps, and Coast Guard training and testing activities conducted within the Atlantic Fleet Training and Testing (AFTT) Study Area. DON and Coast Guard are requesting your comments on the Draft Supplemental EIS/OEIS.

Three in-person public meetings in the form of an open house will be held to inform the public about the proposed action and alternatives and about the opportunity to provide written and oral comments on the Draft Supplemental EIS/OEIS. The in-person public meetings will be held as follows:

Tuesday, October 8, 2024, 5:00 p.m. to 7:00 p.m.
New Bedford Whaling Museum
18 Johnny Cake Hill
New Bedford, MA 02740

Thursday, October 10, 2024, 5:00 p.m. to 7:00 p.m.
Silver Spring Civic Building at Veterans Plaza
1 Veterans Pl
Silver Spring, MD 20910

Wednesday, October 16, 2024, 5:00 p.m. to 7:00 p.m.
New Orleans Marriott Metairie at Lakeway
3838 N Causeway Blvd
Metairie, LA 70002

Figure M.3-1: Stakeholder Letter for the Notification of the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement

5090
Ser N46/032
September 16, 2024

Two virtual public meetings in the form of a webinar and question and answer session will also be held for the public to learn about the proposed action and alternatives. The virtual public meetings will be held:

Tuesday, October 22, 2024, 6:00 p.m. to 7:00 p.m. ET

Thursday, October 24, 2024, 2:00 p.m. to 3:00 p.m. ET

Registration for the virtual public meetings is available at the project website at www.nepa.navy.mil/aftteis/. Recordings of the virtual public meetings will be posted to the project website at www.nepa.navy.mil/aftteis/ for the public to view following their completion.

The 60-day public comment period begins on September 20, 2024, and ends November 21, 2024. Comments can be submitted at one of the in-person public meetings, online at the project website www.nepa.navy.mil/aftteis/, or by U.S. mail to the following address:

Naval Facilities Engineering Systems Command Atlantic
Attention: Code EV22SG (AFTT EIS Project Managers)
6506 Hampton Blvd
Norfolk, VA 23508-1278

All comments must be postmarked or received electronically by 11:59 p.m. ET on November 21, 2024, for consideration in the Final Supplemental EIS/OEIS. Enclosure (1) contains a project description and study area map. The complete Draft Supplemental EIS/OEIS and additional information are available on the project website at www.nepa.navy.mil/aftteis/.

Sincerely,

J. R. CUADROS
Director, Fleet Installations and Environment
and Deputy Chief of Staff

Enclosure: AFTT Supplemental EIS/OEIS Project Description and Study Area Map

2

Figure M.3-1: Stakeholder Letter for the Notification of the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (continued)

ATLANTIC FLEET TRAINING AND TESTING (AFTT) SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT (EIS/OEIS) (ID# SEIS-007-17-USN-1723491961) PROJECT DESCRIPTION AND STUDY AREA MAP

Proposed Action and Alternatives:

The Proposed Action is to conduct training and testing activities, which may include the use of active sonar and explosives, primarily within existing range complexes, operating areas, and testing ranges within the Atlantic Ocean along the eastern coast of North America, portions of the Caribbean Sea, in the Gulf of Mexico at Navy pierside locations and port transit channels, near civilian ports, and inland waters (e.g., the lower Chesapeake Bay). These military readiness activities are generally consistent with those analyzed in the AFTT EIS/OEIS completed in 2018 and are representative of training and testing that the Navy has been conducting in the AFTT Study Area for decades.

The purpose of the Proposed Action is to ensure the Action Proponents, including the Coast Guard, are able to organize, train, and equip service members and personnel to meet their respective national defense missions in accordance with their Congressionally mandated requirements.

No Action Alternative – Under the No Action Alternative, the Proposed Action would not take place (i.e., the Navy would not conduct proposed training and testing activities in the AFTT Study Area). For National Marine Fisheries Service (NMFS), denial of an application for an incidental take authorization constitutes the NMFS No Action Alternative, which is consistent with NMFS' statutory obligation under the Marine Mammal Protection Act (MMPA) to grant or deny requests for take incidental to specified activities. The resulting environmental effects from taking no action will be compared with the effects of the Proposed Action.

Alternative 1 – Alternative 1 is the preferred alternative. Under this alternative, the Navy, Marine Corps, and Coast Guard propose to conduct military readiness training and testing activities into the reasonably foreseeable future, as necessary to meet current and future readiness requirements. These military readiness training activities include new activities as well as activities subject to previous analysis that are currently ongoing and have historically occurred in the Study Area. These activities account for force structure (organization of ships, weapons, and personnel) changes and include training and testing with new aircraft, vessels, unmanned/autonomous systems, and weapon systems that will be introduced to the fleets after November 2025.

Alternative 1 reflects a representative year of training to account for the natural fluctuations of training cycles and deployment schedules. Using representative years rather than a maximum tempo of training activity in every year reduces the amount of hull-mounted mid-frequency active sonar estimated to be necessary to meet training requirements. In addition, this alternative would not include a contingency for augmenting some weapon systems tests, and assumes and accepts a stable threat environment, where military readiness requirements would not require increased levels of annual testing of anti-submarine warfare and mine warfare systems.

Enclosure (1)

Figure M.3-1: Stakeholder Letter for the Notification of the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (continued)

Alternative 2 – Under Alternative 2, the Navy, Marine Corps, and Coast Guard would meet the highest levels of required military readiness by conducting a total of four carrier strike group Composite Training Unit Exercises every year and accomplishing all unit-level training requirements using dedicated, discrete training events. Alternative 2 reflects the maximum number of training and testing activities that could occur within a given year and assumes that the maximum level of activity would occur every year over any 7-year period. This allows for the greatest capacity for the Navy to maintain readiness when considering potential changes in the national security environment, fluctuations in training and deployment schedules, and potential in-theater demands. Both unit-level training and major training exercises are assumed to occur at a maximum level every year.

This alternative also includes the contingency for augmenting some weapon systems tests in response to potential increased world conflicts and changing U.S. leadership priorities as the result of a direct challenge from a naval opponent that possesses near-peer capabilities. Therefore, this alternative would include the provision for higher levels of annual testing of certain anti-submarine warfare and mine warfare systems to support expedited delivery of these systems to the fleet.

Environmental Analysis:

This Supplemental EIS/OEIS analyzes potential impacts on environmental resources resulting from activities under the alternatives. Resource areas analyzed in detail include air quality, sediments and water quality, vegetation, invertebrates, marine habitats, marine fishes, marine mammals, marine reptiles, and birds and bats.

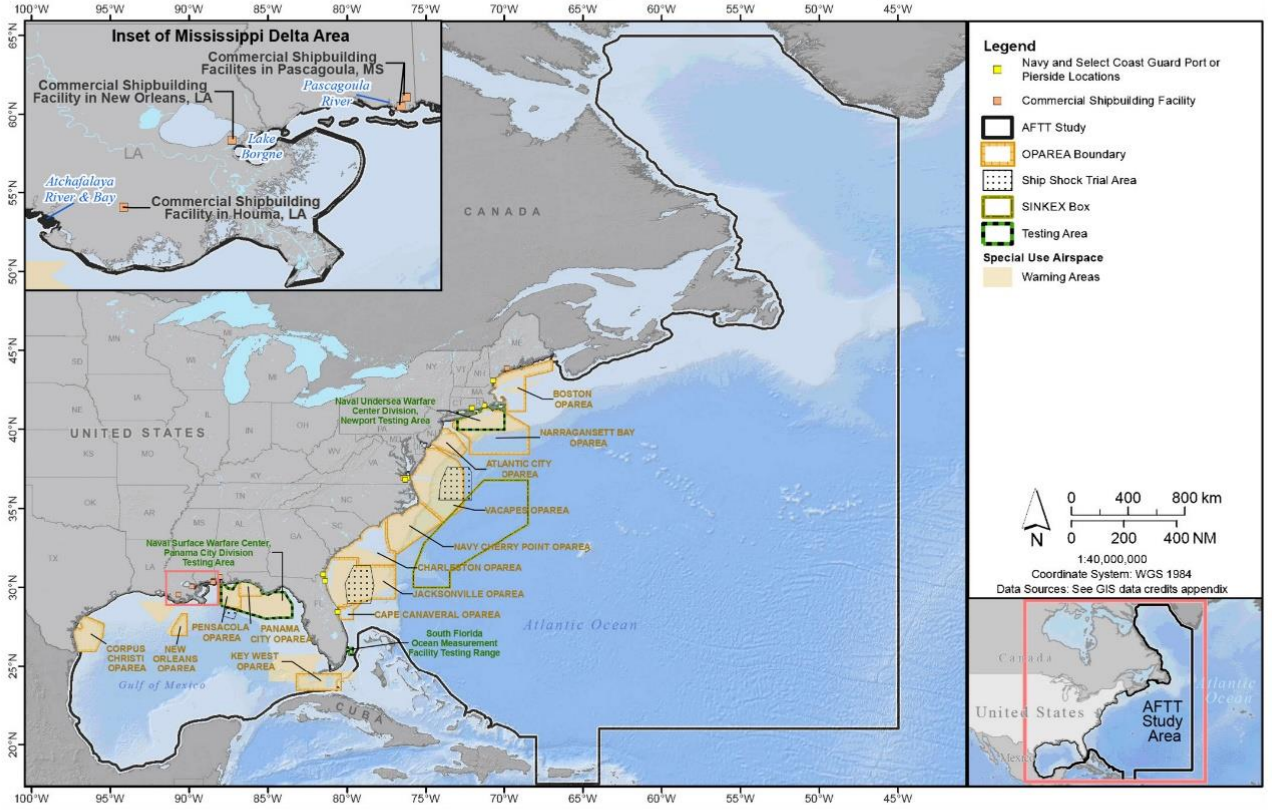
AFTT Study Area:

The Study Area shown in Figure 1 covers approximately 2.6 million square nautical miles of ocean area and includes designated Navy range complexes and testing ranges. The Study Area includes only the in-water components of the range complexes and testing ranges; land components associated with the range complexes and testing ranges are not included in the Study Area and no activities on these land areas are included as part of the Proposed Action. The Study Area also includes various bays, harbors, inland waterways, and pierside locations which are within the boundaries of the range complexes.

Enclosure (1)

Figure M.3-1: Stakeholder Letter for the Notification of the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (continued)

Figure 1: Atlantic Fleet Training and Testing EIS/OEIS Study Area



Enclosure (1)

Figure M.3-1: Stakeholder Letter for the Notification of the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (continued)

M.3.1.2 Stakeholder Postcard

Postcards were mailed to recipients on the project mailing list, including individuals, nonprofit organizations, and for-profit organizations. The postcards acted as formal notification of the Notice of Availability of the Draft Supplemental EIS/OEIS and announcement of public meetings. An example of the postcard is shown in Figure M.3-2.

M.3.1.3 Newspaper Advertisements

To announce the Notification of Availability of the Draft Supplemental EIS/OEIS and public meetings, advertisements were placed in the listed newspapers on the dates indicated in Table M.3-2. The advertisements included a description of the Proposed Action, the project website, the duration of the comment period, and information on how to provide comments. An example of the advertisement is shown in Figure M.3-3.

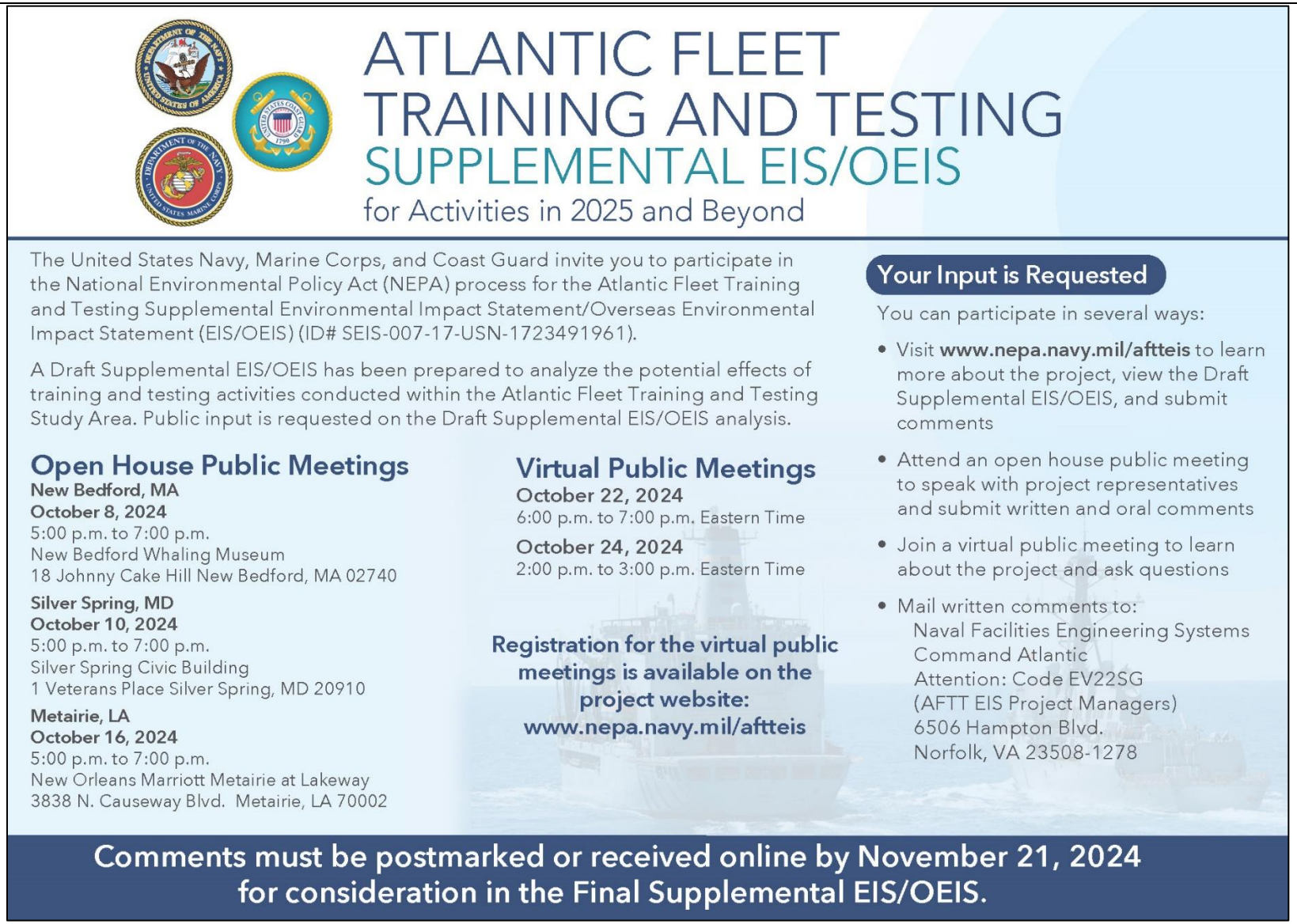


Figure M.3-2: Stakeholder Postcard

Proposed Action

The United States Navy, Marine Corps, and Coast Guard propose to continue conducting training and testing activities in the Atlantic Fleet Training and Testing (AFTT) Study Area. Proposed activities would continue training and testing with active sonar and explosives and are similar to the types of activities that have been occurring for decades in the Study Area.

The Proposed Action is needed to prepare the Navy, Marine Corps, and Coast Guard Forces to respond to world events, including large-scale conflict response, maritime security, and humanitarian assistance and disaster relief.

Naval Facilities Engineering Systems
Command Atlantic
Attention: Code EV22SG
(AFTT EIS Project Managers)
6506 Hampton Blvd.
Norfolk, VA 23508-1278

Figure M.3-2: Stakeholder Postcard (continued)

Table M.3-2: Newspaper Announcements of Notification of Availability of the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement and Announcement of Public Meetings

Bath, ME *The Times Record* September 20, 2024 September 24, 2024 September 27, 2024	**Portland, ME** *The Portland Press Herald* September 20, 2024 September 21, 2024 September 22, 2024	**New Bedford, MA** *The Standard Times* September 22, 2024 September 23, 2024 September 24, 2024
Boston, MA *The Boston Herald* September 22, 2024 September 23, 2024 September 24, 2024	**Providence, RI** *The Providence Journal* September 22, 2024 September 23, 2024 September 24, 2024	**Newport, RI** *The Newport Daily News* September 22, 2024 September 23, 2024 September 24, 2024
Salisbury, MD *The Daily Times* September 22, 2024 September 23, 2024 September 24, 2024	**Norfolk, VA** *The Virginian-Pilot* September 22, 2024 September 23, 2024 September 24, 2024	**Newport News, VA** *The Daily Press* September 22, 2024 September 23, 2024 September 24, 2024
Manteo, NC *Coastland Times* September 22, 2024 September 23, 2024 September 24, 2024	**Jacksonville, NC** *Jacksonville Daily News* September 24, 2024 September 26, 2024 September 28, 2024	**Wilmington, NC** *Wilmington Star News* September 22, 2024 September 23, 2024 September 24, 2024
Charleston, SC *Charleston Post and Courier* September 22, 2024 September 23, 2024 September 24, 2024	**Savannah, GA** *Savannah Morning News* September 22, 2024 September 23, 2024 September 24, 2024	**Jacksonville, FL** *Florida Times Union* September 22, 2024 September 23, 2024 September 24, 2024
Fort Lauderdale, FL *Florida Sun Sentinel* September 22, 2024 September 23, 2024 September 24, 2024	**Brevard, FL** *Florida Today* September 22, 2024 September 23, 2024 September 24, 2024	**Panama City, FL** *Panama City News Herald* September 22, 2024 September 23, 2024 September 24, 2024
Pensacola, FL *Pensacola News Journal* September 22, 2024 September 23, 2024 September 24, 2024	**Biloxi, MS** *Sun Herald* September 22, 2024 September 25, 2024 September 29, 2024	**New Orleans, LA** *Times-Picayune* September 22, 2024 September 23, 2024 September 24, 2024
Galveston, TX *Galveston Daily News* September 22, 2024 September 23, 2024 September 24, 2024	**Corpus Christi, TX** *Caller-Times*[1] September 22, 2024 September 23, 2024 September 24, 2024	

Notes: [1] Advertisement was also run in Spanish.

The Navy, Marine Corps, and Coast Guard INVITE YOU TO PARTICIPATE In the Atlantic Fleet Training and Testing Supplemental Environmental Impact Statement

The U.S. Navy, Marine Corps, and Coast Guard have prepared a Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) (ID# SEIS-007-17-USN-1723491961) that evaluates the reasonably foreseeable effects on the human environment of Navy, Marine Corps, and Coast Guard training and testing activities conducted within the Atlantic Fleet Training and Testing (AFTT) Study Area. Public input is requested on the Draft Supplemental EIS/OEIS analysis.

Your input is requested

You can participate in several ways:

- Visit www.nepa.navy.mil/aftteis to learn more about the project, view a copy of the Draft Supplemental EIS/OEIS, and submit comments.
- Mail written comments to the address listed below.
- Attend an open house public meeting to speak with project representatives and submit written and oral comments.
- Join a virtual public meeting to learn about the project and ask questions.

Open House Public Meetings – 5:00 to 7:00 p.m. local time

New Bedford, MA:
October 8, 2024
New Bedford Whaling Museum
18 Johnny Cake Hill
New Bedford, MA 02740

Silver Spring, MD:
October 10, 2024
Silver Spring Civic Building
1 Veterans Place
Silver Spring, MD 20910

Metairie, LA:
October 16, 2024
New Orleans Marriott, Metairie at Lakeway
3638 N. Causeway Blvd.
Metairie, LA 70002

Virtual Public Meetings:

October 22 Virtual public meeting 6 – 7 p.m. ET
October 24 Virtual public meeting 2 – 3 p.m. ET

Registration for the virtual public meetings is available on the project website:
www.nepa.navy.mil/aftteis

Proposed Action

The Navy, Marine Corps, and Coast Guard propose to continue conducting and testing in the AFTT Study Area. The purpose of the Proposed Action is to ensure that the Navy, Marine Corps, and Coast Guard Forces are prepared to respond to world events including large-scale conflict response, maritime security, and humanitarian assistance and disaster relief.

Submit Written Comments to:

Naval Facilities Engineering Systems Command Atlantic
Attention: Code EV22SG
(AFTT EIS Project Managers)
6506 Hampton Blvd.
Norfolk, VA 23508-1278

All comments must be postmarked or received online by November 21, 2024, for consideration in the Final Supplemental EIS/OEIS.

Submit Comments Online at:
www.nepa.navy.mil/aftteis

For project details or information about accessing a copy of the Draft Supplemental EIS/OEIS, visit www.nepa.navy.mil/aftteis. ***The Navy, Marine Corps, and Coast Guard appreciate your input!***

Figure M.3-3: Newspaper Announcement of Notification of Availability of the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement and Announcement of Public Meetings

M.3.2 Public Meetings

Three in-person public meetings were held on the following dates in the listed cities:

- October 8, 2024 in New Bedford, Massachusetts
- October 10, 2024 in Silver Spring, Maryland
- October 16, 2024 in Metairie, Louisiana

The meetings were structured in an open-house format, presenting informational posters and written materials and handouts, with Navy staff and project experts available to answer participants' questions.

Additionally, two virtual public meetings were held via Zoom.gov on the following dates:

- October 22, 2024
- October 24, 2024

The virtual meetings began with a presentation and were followed by a question and answer session with Navy staff and project experts.

M.3.3 Distribution of Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement

The Draft Supplemental EIS/OEIS was made available on the project website at https://www.nepa.navy.mil/aftteis/. Electronic copies of the Draft Supplemental EIS/OEIS were also delivered to the repositories listed in Table M.3-3 along with hard copies of the Executive Summary.

Table M.3-3: Repositories that Received the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement

Maine
Portland Public Library 5 Monument Square Portland, ME 04101
Massachusetts
New Bedford Free Public Library Casa da Saudade Branch 58 Crapo Street New Bedford, MA 02740
Rhode Island
Providence Public Library 150 Empire St. Providence, RI 02903
Maryland
Brigadier General Charles E. McGee Library 900 Wayne Ave. Silver Spring, MD 20910
North Carolina
Jacksonville Main Library 58 Doris Avenue East Jacksonville, NC 28540
Georgia
Camden County Public Library 1410 Highway 40 East Kingsland, GA 31548

Table M.3-3: Repositories that Received the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (continued)

Florida
Broward County Main Library 100 S. Andrews Ave. Ft. Lauderdale, FL 33301
West Florida Public Library, Southwest Branch 12248 Gulf Beach Highway Pensacola, FL 32507
Louisiana
East Bank Regional Library 4747 West Napoleon Ave. Metairie, LA, 70001
Texas
Corpus Christi Public Library La Retama Central Library 805 Comanche Corpus Christi, TX 78401

M.3.4 Comments on the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement

The Action Proponents would like to thank the elected officials, Native American tribes and nations, federal regulatory and state resource agencies, business and community leaders, organizations, and individuals for taking the time to review the Draft Supplemental EIS/OEIS, attend the public meetings, and submit comments. Public informational meetings and public participation are an essential aspect of the environmental review process.

Comments on the Draft Supplemental EIS/OEIS were received from three federal agencies, five state agencies, one nongovernmental organization and two private individuals for a total of 11 comment submissions.

The 11 comment submissions were reviewed and categorized according to topic. Longer comments were broken down into multiple separate categories to properly and fully capture all of the different points within the letter (i.e., a comment may contain more than one theme within it).

M.3.4.1 Comment Response Process

The Action Proponents considered and responded to all comments received on the Draft Supplemental EIS/OEIS. Comments were assessed and responded to as described below.

The project team carefully reviewed all comments and categorized them. Each comment was assigned to one or more resource-specific specialists from the interdisciplinary team for review. Substantive comments, defined as those that provided new information or analysis or remarked on the methodology, data, or conclusions of the Draft Supplemental EIS/OEIS, were identified for further consideration. The Final Supplemental EIS/OEIS analysis was updated as warranted based on the review of substantive comments. Comment responses were developed for every comment based on the above-described comment review and Final Supplemental EIS/OEIS update process. These responses identify sections of the Final Supplemental EIS/OEIS where revisions were made or provide details on where additional information can be found.

Substantive comments on the Draft Supplemental EIS/OEIS and responses are provided in **Error! Not a valid bookmark self-reference.**. The original copy of each comment submission is shown in Figure M.3-4 through Figure M.3-13.

Table M.3-4: Public Comments and Responses

Category	*Comment*	*Response*
Virginia Department of Environmental Quality (DEQ) (Figure M.3-4) (note: Virginia DEQ consolidated and submitted comments from all Virginia state agencies)		
Mitigation	[Department of Conservation and Recreation's Division of Natural Heritage (DCR)] recommends restricting any activities from April until August near the Parramore Island, Wreck Island, and False Cape Natural Area Preserves during migration/nesting activities for Sea Turtles and Migratory Birds.	The only activity that occurs near these islands is aircraft overflight. The Virginia Capes Bird Mitigation Area (a continuation from the 2018 Final EIS/OEIS) establishes a year-round requirement for rotary-wing aircraft to maintain shoreline standoff distances from important nesting habitats within the Virginia Capes Range Complex. While the protection focus is Endangered Species Act (ESA)-listed and other birds, nesting sea turtles would also benefit from this year-round restriction.
ESA Consultation	Due to the legal status of many of these species, DCR also recommends continued coordination with the Virginia Department of Wildlife Resources (DWR), the United States Fish and Wildlife Service (USWFS) and the National Oceanic and Atmospheric Administration-National Marine Fisheries Service (NOAA-NMFS) for information regarding the possible impacts and to ensure compliance with protected species legislation.	Thank you for your review. The Navy consulted with NMFS and USFWS. The Navy will continue to comply with its obligations under applicable laws and regulations, including reinitiating consultation as required.
Section 106 Consultation	The Department of the Navy or its agents must consult directly with [Department of Historic Resources (DHR)] pursuant to Section 106 of the National Historic Preservation Act (as amended) and its implementing regulations codified at 36 CFR Part 800 which require Federal agencies to consider the effects of their undertakings on historic properties.	Thank you for your review. The Action Proponents consulted with the State Historic Preservation Office for Virginia, as required by Section 106 of the National Historic Preservation Act and its implementing regulations. Consultation has also been conducted with State Historic Preservation Offices from all other potentially impacted States.
Permitting	Permanent or temporary impacts to surface waters and wetlands may require DEQ authorization under §401 of the Clean Water Act, Virginia Code §62.1-44.15:20, and Virginia Administrative Code 9 VAC 25-210-10 et seq. Provided that any and all necessary permits are obtained and complied with, the project will be consistent with DEQ program requirements.	The Action Proponents will comply with applicable laws and regulations.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Pollution Prevention	We have several pollution prevention recommendations that may be helpful in operations, as applicable: Consider development of an effective Environmental Management System (EMS)…Consider environmental attributes when purchasing materials…Consider contractor' commitment to the environment when choosing contractors....Integrate pollution prevention techniques into facility maintenance and operations to include inventory control for centralized storage of hazardous materials.	While the AFTT Supplemental EIS/OEIS focuses on training and testing activities conducted at sea, we recognize the importance of environmental stewardship in all Navy operations. Regarding DEQ's specific recommendations: EMS: The Department of the Navy maintains a robust EMS program, as directed by the Department of Defense, to ensure environmental compliance and readiness at Navy shore installations. This program aligns with many of the principles outlined by DEQ's Virginia Environmental Excellence Program (VEEP). Purchasing & Contractors: The U.S. Navy, in accordance with federal mandates (e.g., Federal Acquisition Regulation) and sustainability goals, actively incorporates environmental considerations into its procurement processes. This includes evaluating factors such as recycled content, toxicity levels, and packaging when selecting materials and engaging contractors. These requirements are embedded in contracts, solicitations, and certifications, and the Navy tailors its approach to address specific operational needs while promoting environmental responsibility. Pollution Prevention Techniques: The Navy is committed to integrating pollution prevention (P2) principles into its operations. This includes minimizing waste generation through source reduction, material substitution, conservation practices, and reuse initiatives, particularly for hazardous materials. The Navy also prioritizes proper waste management, including for solid waste, plastics, and ozone-depleting substances, and provides training on responding to and mitigating accidental releases. The Navy is committed to minimizing the environmental footprint of its activities. We will continue to explore opportunities to incorporate pollution prevention principles and best practices wherever feasible within the scope of the proposed AFTT activities. For a more complete description of the Navy's various Afloat and Ashore environmental compliance programs, view the Chief of Naval Operations Environmental Readiness and Program Manual (OPNAV M-5090.1) available online.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Pollution Prevention	DEQ encourages all projects to implement pollution prevention principles, including: The reduction, reuse and recycling of all solid wastes generated; and the minimization and proper handling of hazardous wastes.	The Navy complies with all applicable laws and regulations governing solid and hazardous waste. The Navy actively reduces, reuses, and recycles solid wastes generated, prioritizing waste reduction at the source and actively pursuing reuse and recycling opportunities, both onboard vessels and at shore installations. The Navy also minimizes the generation of hazardous waste and ensures its proper handling, storage, and disposal in accordance with all applicable regulations. While this Supplemental EIS/OEIS focuses on training and testing activities conducted at sea, these pollution prevention principles are integrated into all aspects of Navy operations to minimize environmental impacts.
Marine Mammal Commission (Figure M.3-5)		
Criteria & Threshold Science	The Commission recommends that the Navy review the data from Kastelein et al. (2024a) and determine whether inclusion of the data would alter the weighting function and/or thresholds for very high-frequency cetaceans and if so, whether those modifications are sufficient to warrant revision of the current weighting function and associated thresholds for non-impulsive sources as stimulated in Department of the Navy (2024a).	The Marine Mammal Commission (Commission) notes that while the Navy's Phase IV criteria (Department of Navy, 2024a) align with the thresholds recommended in Finneran (2024), Kastelein et al. (2024a) presents more recent data that could influence these calculations. The Navy acknowledges that data sharing for ongoing research is at the discretion of the researchers and funding agencies. Because the specific data from Kastelein et al. (2024a) were not shared with the Navy prior to peer review and publication, it could not be incorporated into the development of the Phase IV Criteria and Thresholds. However, the Navy's current approach, using the existing Phase IV criteria, remains conservative even when compared to the findings of Kastelein et al. (2024a). Specifically, incorporating the temporary threshold shift (TTS) onset value of 169 decibels (dB) sound exposure level (SEL) reported by Kastelein et al. (2024a) would raise the very high frequency (VHF) non-impulse exposure function by 4 dB. Thus, the current function is more protective. The impact on other impulsive and non-impulsive exposure functions is negligible (1 dB or less). Therefore, the Navy concludes that revisions to the Phase IV Criteria and Thresholds are not warranted at this time.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Criteria & Threshold Science	[T]he Commission recommends that the Navy specify whether the [low frequency (LF)] weighting function has been shifted far enough to the higher frequencies to reflect that 32 [kilohertz (kHz)] was the most sensitive frequency testing in minke whales, determine whether use of the [Phocid Composite Weighting (PCW)] composite audiogram, weighting function, and threshold parameters are more representative of [very low frequency (VLF)] and LF cetaceans than medians and means of the five other functional hearing groups, and revise the VLF and LF composite audiograms, weighting functions and thresholds as needed for impulsive and non-impulsive sources for the [Final] EIS and [Letter of Authorization (LOA)] application.	The Navy disagrees that wholesale adoption of the PCW parameters or shifting the LF weighting function solely based on the 32 kHz sensitivity of minke whales is scientifically justified. There is no scientific evidence to support the exclusive use of the PCW composite audiogram and weighting function parameters for the LF and VLF groups. Adolescent minke whales were tested by Houser et al. (2024) specifically because of their small size compared to other baleen whales. Smaller head size generally facilitates hearing at higher frequencies, so a shift of the entire LF curve to a center frequency of 32 kHz is not likely representative of most baleen whales, which are larger in size compared to adolescent minke whales. Therefore, the Navy maintains, based on the weight of the evidence, that the existing LF weighting function and the use of medians and means from multiple functional hearing groups provide a more representative and protective approach for assessing acoustic impacts on VLF and LF cetaceans. This approach incorporates data from a broader range of species and avoids overreliance on data from a single species or functional hearing group.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Criteria & Threshold Science	Justification was not provided regarding why the upper bound of the [behavioral response functions (BRFs)] increased from 185 to 200 [decibel referenced to one micropascal (dB re 1 µPa)] for Phase IV. • None of the raw behavioral data include exposures above 185 dB re 1 µPa (see Table E-1 in Department of the Navy 2024a). • Although the upper bound was set by subject matter experts for Phase III (Department of the Navy 2017a), it appears arbitrary for Phase IV. Such a change would result in the Phase IV functions moving farther to the right toward high received levels, the 50 percent probabilities occurring at high received levels, the slopes of the functions being less steep, and the overall BRFs for odontocetes and mysticetes being less precautionary as compared to Phase III (see figure 42 in Department of the Navy 2024a and note the flat slope between 185 and 200 dB re 1 µPA on all BRFs for Phase III). • Additionally, the Department of the Navy (2024a) indicated that the 50 percent probability of a behavioral response was estimated to occur at 185 dB re 1 µPA for the mysticete BRF, 8dB higher than the TTS threshold for LF and VLF cetaceans.	The Navy adjusted the upper bound of the BRFs in Phase IV to more accurately reflect observed behavioral data, particularly at higher received levels. For example, sonar received levels between 170 and 182 dB re 1 µPa for humpback whales during 3S2 and between 175 and 186 dB re 1 µPa for sperm whales during 3S3 did not elicit observable responses. Please see Table E-1 in the revised technical report *Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis (Phase IV)* (herein referred to as the Criteria and Thresholds Technical Report) (Department of Navy 2025a). Extending the upper bound to 200 dB re 1 µPa allows the BRFs to account for this lack of response at higher received levels. This adjustment does not arbitrarily shift the entire curve to the right, as the Commission suggests. For groups like pinnipeds, where responses are consistently observed at lower received levels, the BRF approaches 100 percent response probability at 185 dB re 1 µPa. Therefore, the upper bound adjustment primarily impacts the odontocete and mysticete BRFs, reflecting the observed data at higher exposures. It is also important to note that the BRFs were extended to 90 dB re 1 µPa in Phase IV (compared to the 100 dB re 1 µPa lower limit used in Phase III), further demonstrating that the adjustments were not solely focused on increasing the upper bound. The Commission's observation of a flat slope between 185 and 200 dB re 1 µPa for the Phase III BRFs shown in Figure 42 (Department of the Navy 2024a) was a result of anchoring the Phase III BRFs at 185 dB re 1 µPa and then extending them to 200 dB re 1 µPa for plotting purposes. Finally, regarding the point that the upper level of the mysticete BRF exceeds the TTS onset, it's important to emphasize that auditory and behavioral criteria are not directly linked. The Navy recognizes the evolving nature of acoustic science and will continue to refine its effects criteria as new data and understanding become available.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Criteria & Threshold Science	None of the Southall et al. (2018, 2019, 2020, 2021, 2022, 2023) data for the Atlantic behavioral response study (BRS) involving beaked whales and other odontocetes were included. However, 'in prep' data were included for auditory thresholds, and data that were underlying but not specifically included in the publications were used for the BRFs. This information may have been particularly useful to [assess] whether the less sensitive BRFs that were developed for Phase IV would have been supported by the Atlantic BRS data.	The Commission notes that data from the BRS conducted by Southall et al. (spanning 2018 to 2023) were not included in the development of the Phase IV BRFs. The Commission suggests that this information, particularly regarding beaked whales and other odontocetes, may have been valuable in assessing the appropriateness of the Phase IV BRFs. The Navy develops its BRFs using the best available scientific data. While data from the Atlantic BRS cited by the Commission were collected during the timeframe referenced, these data were not available for use in the development of the behavioral risk functions for Phase IV. These functions are always developed in close consultation with scientists conducting BRS/CEE studies, but when the data are not yet published, it is up to the researchers whether they are ready to share their raw data with the Navy. The Atlantic BRS scientists were working on their analysis methodologies and did not feel that their behavioral response results were ready to be shared in time for the development of the Navy risk thresholds. The Navy remains committed to incorporating the best available scientific data into its impact assessments and will revisit its BRFs as new information, including the published results of the Atlantic BRS, becomes available.
Criteria & Threshold Science	The odontocete BRF incorporated 30 random samples from the dose-response function developed for just the moderate and severe responses of captive bottlenose dolphins (Houser et al. 2013b) to give equal weighting to the field and captive studies. • Houser et al. (2013b) included dose-response functions derived from all of the raw data. It is unclear why the Navy used only the moderate and severe responses to derive a new dose-response function for captive bottlenose dolphins, as this would skew the subsequent odontocete BRF to the right, particularly at the lower response probabilities and lower received levels, as seen in Figure 42 in Department of the Navy (2024a). • Further, there are more than 30 exposures for the field studies, so equal weighting of field to captive studies was not achieved as specified in Department of the Navy (2024a).	All the data from Houser et al. (2013a, 2013b) were included in the modified risk functions developed for subsampling in the Navy's BRFs. However, low-severity responses were classified as "non-responses" when deriving the BRFs. This approach, consistent with Phase III, reflects that low-severity behavioral responses are not considered "harassment" under the Marine Mammal Protection Act (MMPA) during military readiness activities. To balance field and captive study data, a subsampling method was used. This involved creating modified risk functions incorporating the new scoring values (classifying low-severity responses as non-responses) at different received levels. Thirty data points were then randomly selected from the bottlenose dolphin risk function generated using this method.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Criteria & Threshold Science (continued)		This subsampling approach, similar to that used for beaked whale data in both Phase III and Phase IV, ensures each individual animal from the captive study receives equal weight, comparable to individuals from field studies. This allows for a more comprehensive consideration of exposures and responses for each species, unlike Phase III's selection of a single response level per individual. This methodology is clarified in the revised Criteria and Thresholds Technical Report.
Criteria & Threshold Science	The sensitive species BRF[16] incorporated 10 random samples from the generalized additive models (GAMs) that were developed from passive acoustic monitoring data in Moretti et al. (2014) and Jacobson et al. (2022) and that ranged from 120 to 180 dB re 1 µPa. • Department of the Navy (2024a) did not specify how the 10 random samples were allocated between the GAMs nor did it specify how it handled the fact that the Jacobson et al. (2022) GAM went to only 165 dB re 1 µPa and was based on the decrease in the probability of a group vocal period (GVP; i.e., foraging dive), while the Moretti et al. (2014) GAM went to 180 dB re 1 µPa and included GAMs for both the decrease in the probability of a GVP and probability of disturbance. • Jacobson et al. (2022) specifically stated that they did not make an inference on sonar received levels above 165 dB re 1 µPa, because no GVPs were observed above this received level. Since the 10 random samples used for the BRFs were not included in Table 21 of Department of the Navy (2024a), it is unclear whether those samples could be causing the lesser sensitivity at the higher received levels in the sensitive species BRF as compared to the Phase III BRF. • It also is unclear why similar passive acoustic monitoring data were not used for beaked whales at the Southern California Acoustic Range and minke whales at [Pacific Missile Range Facility (PMRF)], since those data have been collected and reported on as part of the Navy's Marine Species Monitoring Program for Phase III.	While the GAM published in Jacobson et al. (2022) only extended to 165 dB, the Navy requested that authors rerun their model to 200 dB to create a new curve that could be subsampled for the Navy Phase IV risk function; the same was done for the Moretti et al. (2014) data. Therefore, the two beaked whale range-based risk functions extended to the same bandwidth as the Navy BRF and the subsampling matched the rest of the data. The Criteria and Thresholds Technical Report has been updated to reflect that the published GAMs were rerun with the broader bandwidth. The Navy is committed to ensuring scientific integrity in datasets used for BRF development. Using data that do not meet these criteria could result in unreliable or misleading risk assessments. A risk function has not yet been fit to Southern California Anti-Submarine Warfare Range (SOAR) data for beaked whales, nor has one been fit for minke whales at PMRF. The BRFs in Phase IV utilized only individual response-RL data outside of the four pre-existing risk functions that were subsampled. There were not individual response-RL data available for beaked whales at SOAR nor for minke whales at PMRF, therefore those data were not used in the Phase IV BRFs. As the science continues to evolve, the Navy will continue to refine its effects criteria. The Navy remains committed to incorporating new data and analyses, including those from SOAR and PMRF, as they become available and meet the rigorous standards required for robust BRF development.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Criteria & Threshold Science (continued)	[16] Department of the Navy (2024a) indicated that, for harbor porpoises, a large enough aggregation of controlled exposure studies involving captive animals existed such that a risk function could be developed. The Commission understands that the Navy was referring to development of the actual BRF, not a separate harbor porpoise dose-response function that was used for other captive studies. This should be clarified in Department of the Navy (2024a).	As requested in footnote to this comment (#16), the statement in the revised Criteria and Thresholds Technical Report regarding the use of harbor porpoise data in behavioral response function development has been clarified.
Criteria & Threshold Science	For harbor porpoises, multiple received levels were noted for the same individual exposed to the same sound source (i.e., high-frequency active sonar (HFAS)) in table E-1. Since the specific Kastelein et al. references were not provided, it is unclear whether the experimental scenarios differed enough that the data were considered independent or whether only the lowest received level for each individual should have been used.	When the same individuals were tested at multiple received levels for the same source within a single study, only the lowest received level eliciting a response was included in the Kastelein data used for BRF development. However, in some studies Kastelein tested the same sources using different parameters, such as an upsweep versus a downsweep signal (e.g., Kastelein et al. 2014b, where both low frequency and mid frequency active sonar signals were tested as both a downsweep and upsweep), or as a continuous versus pulsed active sonar signal (e.g. Kastelein et al. 2018b). In that case, the response to both signal parameters would have been used in the BRF as those would be considered different signals. The citations for the relevant Kastelein studies, previously provided in Tables 19 and 20, have been added to Table E-1 in the revised Criteria and Thresholds Technical Report.
Criteria & Threshold Science	The pinniped BRF incorporated 15 random samples from the dose-response function developed for just the moderate and severe responses of captive California sea lions (Houser et al. 2013a). • It is unclear why the captive dose-response function from Houser et al. (2013a) that was derived from all of the raw data was not used for subsampling.	The Navy confirms that all data from the Houser et al. (2013a) California sea lion controlled exposure experiment were considered in developing the Phase IV BRFs. However, as with the odontocete BRF, low-severity responses were classified as "non-responses" when deriving the BRF. This decision aligns with the Navy's approach to assessing potential harassment under the MMPA during military readiness activities, where low-severity responses are not considered indicative of harassment. The original curves developed by Houser et al. (2013a) were not used because they included the low-severity responses as responses. This approach is clarified in the revised Criteria and Thresholds Technical Report.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Criteria & Threshold Science	The executive summary, Tables 21-24, Figures 43-45, and accompanying text, as well as Table E-1 in Department of the Navy (2024a) included contradictory information regarding the range of received levels for both exposures and responses, distances at which the responses occurred, and the number of significant responses (see the Addendum herein). Further, Table E-1 does not appear to include the Blainville's beaked whale information from Tyack et al. (2011), Moretti et al (2014), and Jacobson et al. (2022). The table also appears to include only the raw data from Houser et al. (2013a, b), not the subsampled data from the re-derived dose-response functions that then were used for the BRFs. Absent consistent information, it is difficult to assess the appropriateness of the various BRFs and the Navy's cut-off distances. The Commission recommends that the Navy revise Department of the Navy (2024a) to clarify and address all of these points. The Commission further recommends that the Navy use the dose-response functions that were developed from all the raw data rather than those that were regenerated for only moderate and severe responses and refrain from extrapolating beyond the bounds of the underlying data when revising BRFs.	The Navy has carefully reviewed the discrepancies identified in the Commission's addendum and has made the necessary corrections to the revised Criteria and Thresholds Technical Report. These revisions ensure consistency in the reported ranges of received levels, distances, and significant responses across the executive summary, tables, figures, and accompanying text. Specifically, the Navy updated Table E-1 in the revised Criteria and Thresholds Technical Report to include data for Blainville's beaked whales from Tyack et al. (2011). The studies by Moretti et al. (2014) and Jacobson et al. (2022) involved aggregated and modeled data rather than individual animal responses and were therefore incorporated into the BRFs through a random subsampling process, as described in the Criteria and Thresholds Technical Report, rather than being presented directly in Table E-1, which focuses on individual-level data. Finally, the Navy confirms that it used the data from Houser et al. (2013a, 2013b) to develop the new risk functions. As noted earlier, low-severity responses were scored as "non-responses" within these functions to align with the Navy's approach to assessing potential harassment under the MMPA. These new risk functions were then subsampled using the same method applied to the beaked whale range risk functions in both Phase III and Phase IV, ensuring consistency in the Navy's treatment of such data. This subsampling approach, described in detail within those reports, ensures appropriate weighting of individual responses and contributes to the robustness of the Navy's BRFs.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Modeling	The Commission recommends that the Navy make a concerted effort to incorporate data that support criteria and threshold development more often than on a decadal cycle and revise [the Navy Acoustic Effects Model (NAEMO)] to implement the relevant criteria and thresholds at a true post-processing stage so that animate dosimeter data can be re-queried if thresholds change, rather than needing to remodel the animate-portion of NAEMO.	Navy Criteria and Thresholds are typically updated at the beginning of each at-sea Phase. This is a significant effort that involves collecting published data; working with marine mammal researchers to collect and understand emergent data; developing methods to incorporate the data; writing and publishing the technical report; and seeking approvals from Navy leadership and NMFS. Nevertheless, emergent data is continuously assessed against the current criteria and thresholds to ascertain whether it would create significant changes to the Navy's analysis. If so, the analysis would be altered to reflect this emergent data. The Navy is continuously reassessing and evolving its analysis methods including the need to more frequently update criteria and threshold and the feasibility for NAEMO to more rapidly incorporate such changes.
Criteria & Threshold Science	The Commission remains concerned that, following the development of the BRFs and consistent with Phase III, the Navy implemented various cut-off distances beyond which it considered the potential for significant behavioral responses to be unlikely (Table 4 in Department of the Navy 2024a). The Navy previously indicated that the context of the exposure is likely more important than the amplitude at large distances (Department of the Navy 2017a)—that is, the context-based response dominates the level-based response. The Commission agrees with that notion but notes that the Bayesian BRFs specifically are intended to incorporate those factors. Thus, including additional cut-off distances would contradict the data underlying the Bayesian BRFs, negate the intent of the functions, and ultimately underestimate the numbers of takes.	The Phase IV approach represents a refinement in assessing potential behavioral impacts. It employs a probability of response condition for high source level exposures, addressing previous concerns from the Commission about potentially cutting off responses when the probability remained above 50 percent. This approach, combined with the distance cut-off, provides a more nuanced and protective assessment compared to the Phase III methodology, which relied solely on distance cut-offs. Therefore, directly comparing Phase III and Phase IV cut-off distances is not appropriate. The Navy is confident that this combined distance and probability threshold approach is well-substantiated by available data and effectively avoids underestimating potential behavioral responses to acoustic sources.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Criteria & Threshold Science (continued)	For Phase IV activities, the Navy did add a condition that if a take were to occur beyond the relevant cut-off distance but above the 50 percent probability for a given BRF (e.g., a bottlenose dolphin exposed at 18 km and at a received level where the probability of response was 65 percent), it would be considered a significant response. That condition was further qualified based on the Navy assuming that animats would avoid a sound source between the response probabilities of 50 to 90 percent (avoidance is discussed further herein). Regardless of how the cut-off distances were qualified, they remain unsubstantiated and are less than what the Navy used for Phase III activities. Regardless of how the cut-off distances were qualified, they remain unsubstantiated and are less than what the Navy used for Phase III activities.	To clarify, Section 3.1.4 (Dose and Contextual Responses) of the Criteria and Thresholds Technical Report explains that at low received levels, distance to the sound source or platform likely mediates the likelihood of a behavioral response. Although distance was investigated as a covariate in the Bayesian behavioral response function model, most behavioral response studies to date have used similar source levels making received level and source-receiver distance tightly correlated (see Section 3.1.9 [Behavioral Cut-off Conditions] of the Criteria and Thresholds Technical Report). Therefore, including distance in the model using the available response- received level data did not improve the behavioral response functions. Still, the Navy agrees that distance is an important contextual factor. Since it was not possible to directly account for distance in the Bayesian model at this time, the Navy incorporated the behavioral cut-off conditions, beyond which significant behavioral reactions are assumed to be unlikely. As described in Section 3.1.9 ([Behavioral Cut-off Conditions)] of the Criteria and Thresholds Technical Report, the distance cut-off conditions were conservatively estimated based on observations from multiple cited studies. Applying the distance cut-off condition is appropriate to reasonably estimate significant impacts. In addition, high source level exposures are addressed using a probability of response condition rather than the dual distance cut-off applied in Phase III. This method was devised in part to address public comments, including those from the Commission, received in Phase III that were concerned with cutting off behavioral responses, in some cases, where the probability of response was still above 50 percent. The concurrent application of this probability of response condition in Phase IV increases the prediction of significant impacts beyond the distance cut-off in some instances.
Criteria & Threshold Science	Further, Figures 43–45 in Department of the Navy (2024a) are missing certain data that were specified in Table E-1 and in some instances have depicted the data incorrectly in terms of response, range, received level, and/or sample size relative to Table E-1. These inconsistencies make it difficult to assess the Navy's assumptions regarding cut-off distances similar to the BRFs.	Appendix E in the Navy's Criteria and Thresholds Technical Report has been revised to correct these discrepancies.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Criteria & Threshold Science	As another example, a sperm whale stopped resting and had a moderate change in its dive profile that occurred for a shorter duration than the exposure. It is unclear how long the response lasted but it did occur nearly 38 km from the sound source and at a received level of approximately 114 dB re 1 µPa (Table E-1 in Department of the Navy 2024a)—the cut-off distance for odontocetes is 15 [kilometers (km)] and the received level for the 50-percent probability of response is 168 dB re 1 µPa. Although this animal was incorrectly denoted as having a significant behavioral response in Table E-1 of Department of the Navy (2024a) due to the length of response, it highlights that responses do occur at larger distances and lower received levels than the cut-off distances and 50-percent probability of response portray. For harbor porpoises and pinnipeds, there currently are no data on a wild animal's response and relative distance to Navy acoustic sound sources.	As described in Section 3.1.9 (Behavioral Cut-off Conditions), the cut-off conditions are applied to predict significant behavioral responses. As the Commission points out, data to support distant cut-offs is not absent. The data used to inform the behavioral response functions includes observations beyond 10 km, as do other studies cited in Section 3.1.9 (Behavioral Cut-Off Conditions) in the Navy's Criteria and Thresholds Technical Report. This includes data on exposures to other sound sources which is informative when data on exposure to sonars is limited. The cut-off conditions encompass the data (where distance and received level are known) used to develop the behavioral response functions. Although behavioral responses are predicted beyond the cut-off conditions, these are not expected to rise to the level of harassment under the MMPA as defined for military readiness activities. Finally, the Commission raises a separate point about a mysticete response; however, this example refers to a bottlenose whale, which falls under the Sensitive Species group (including beaked whales). This response, occurring at 16.8 km and 128 dB re 1 µPa, falls within the established cut-off conditions for this group. The error in the entry for the sperm whale in Table E-1 of the Criteria and Thresholds Technical Report has been addressed.

Table M.3-4: Public Comments and Responses (continued)

Criteria & Threshold Science	The Commission again recommends that the Navy refrain from using cut-off distances in conjunction with the Bayesian BRFs and re-estimate the numbers of marine mammal takes based solely on the Bayesian BRFs for the [Final Supplemental EIS/OEIS] and LOA application.	The Navy acknowledges the Commission's perspective but maintains that the combined use of cut-off distances and BRFs provides a more accurate and realistic assessment of potential behavioral impacts, particularly for military readiness activities. While Tyack and Thomas (2019) cautioned against using step functions anchored to the 50 percent response level of dose-response curves, the Navy's methodology does not employ such an approach. Instead, the cut-off distances, informed by the farthest observed distances of significant behavioral reactions in the available data (including those exceeding 10 km), serve as a threshold for identifying responses reasonably likely to rise to the level of harassment under the MMPA as applied to military readiness activities. This approach prevents underestimation of significant impacts while acknowledging that responses occurring beyond these distances, while possible, are less likely to reach this level of concern. The Navy's Phase IV approach, incorporating both BRFs and scientifically informed cut-off distances, offers a more nuanced and realistic assessment of potential behavioral impacts compared to relying solely on BRFs. This approach balances the statistical probabilities derived from the BRFs with empirical observations of behavioral responses in the field. The Navy is confident that this combined approach, while still incorporating conservatism to account for uncertainty, does not underestimate potential Level B takes under the MMPA during military readiness activities and provides a more accurate representation of potential impacts. Therefore, the Navy believes that re-estimating marine mammal takes solely based on BRFs is not warranted. As the science related to marine mammal behavior advances, the Navy will continue to work with NMFS to refine consideration of contextual factors, such as distance, in its assessment of behavioral responses. Currently, the Navy's behavioral response functions with the cut-off conditions provide the public and regulators with a more realistic (but still conservative where uncertainties exist) estimate of impacts and potential takes under military readiness for the Proposed Action. Because the Navy's estimations were realistic and conservative where uncertainties exist, it is not necessary for the Navy to re-estimate marine mammal takes.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Criteria & Threshold Science	The Commission recommends that the Navy include behavior takes of marine mammals during all explosive activities, including those that involve single detonations and gunnery exercises that have several detonations occurring with a few seconds, in the [Final Supplemental EIS/OEIS] and LOA application and invest additional resources in conducting behavioral response studies on marine mammals' responses, including pinnipeds, to underwater detonations for the derivation of explosive BRFs.	There is limited information upon which to estimate behavioral response thresholds specific to explosives. Therefore, as described in the Criteria and Thresholds Technical Report, the behaviors exhibited by animals exposed to brief intense tones in the Schlundt et al. (2000) study continue to inform the behavioral response threshold for explosives. Some of the observed behaviors in that study would be considered moderate severity for captive animals with trained behaviors and thus may be potentially significant. Appropriate threshold metrics are applied for this criterion given the supporting data. Additionally, root-mean-square sound pressure levels are not a preferred metric for explosives due to the challenge of identifying the appropriate time window. Most explosive activities, including all explosive gunnery activities, analyzed in this Supplemental EIS/OEIS include multiple detonations. For these activities, significant behavioral responses are assumed to occur if the cumulative sound exposure levels are equal to or greater than 5 dB less than the threshold for onset of TTS. For single detonations, the analysis in Appendix E (Acoustic and Explosive Impact Analysis) assumes that any auditory impact (TTS or AINJ) may have a concurrent significant behavioral response. This assumption for single detonations has been clarified in the revised Criteria and Thresholds Technical Report.
Marine Mammal Science	Department of the Navy (2024b) did not justify why spherical spreading was used rather than the propagation loss resulting from NAEMO modeling for each individual event. The Commission recommends that the Navy use an avoidance swim speed of no more than 2 [meters per second (m/s)] for harbor porpoises and 1 m/s for pinnipeds and revise the NAEMO modeling and take estimates appropriately for the [Final Supplemental EIS/OEIS] and LOA application.	The avoidance method was newly integrated into the existing NAEMO software framework for Phase IV and was built into the post-processor stage. The post processor stage does not have access to the propagation loss data. Using a generalized spherical spreading propagation loss was most appropriate given the data available within the post processor and the design of the avoidance methods. Therefore, using a simplified propagation loss model for this specific analysis does not significantly impact the overall conservatism of the impact assessment.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Marine Mammal Science (continued)		The Navy acknowledges the importance of using appropriate swim speeds in the avoidance analysis, which assesses the potential for animals to mitigate high-intensity sound exposures that could lead to auditory injury. While baseline swim speeds can be informative, the Navy prioritizes data on swim behavior observed near and during anthropogenic disturbance. These data are considered more representative of how animals might respond to acoustic stimuli and potentially reduce injury risk. The Commission references a study by Kastelein et al. (2018) as support for a lower harbor porpoise swim speed. However, the cited 7.1 kilometers per hour (km/hr) (approximately 2 m/s) represents the sustained average speed of a single captive harbor porpoise in a relatively small pool during a pile driving playback study at exposures below those causing auditory injury. This specific observation does not accurately reflect the full range of harbor porpoise swim capabilities. As documented in Table 8 of the technical report, Quantifying Acoustic Impacts on Marine Mammals and Sea Turtles: Methods and Analytical Approach for Phase IV Training and Testing, data from free-swimming harbor porpoises indicate swim speeds up to and exceeding 3 m/s, supporting the Navy's chosen value for modeling avoidance. For pinnipeds, the avoidance analysis uses a reasonable swim speed of 2 m/s for a limited duration (10 minutes), acknowledging the lack of observed data on their swim behavior during acoustic exposures. This assumption balances the need for a realistic representation of potential avoidance behavior with the limited data availability, contributing to a conservative assessment of potential impacts.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Modeling	Since NAEMO's current animat modeling and avoidance processes are not considered best available science, the Commission recommends that the Navy incorporate moving animates that can actively avoid sound sources based on species-specific dive profiles and swim speeds for Phase V activities and, if that is not feasible, incorporate species-specific swim speeds and the actual modeled sound propagation to simulate avoidance for a given event into NAEMO.	The Navy's approach to modeling impacts, as described in the Criteria and Thresholds Technical Report, is based on the best available science. In early NAEMO development, the Navy compared the number of exposures (i.e., >120 dB) using the Marine Mammal Movement and Behavior (3MB) model vs. horizontally stationary animats and concluded that there was no significant difference in behavioral exposures between the two distribution methods. Thus, horizontally stationary animats were selected for computational efficiency. The Navy recognizes the evolving nature of modeling techniques and acknowledges the Commission's desire for more dynamic and species-specific avoidance behaviors in future iterations of NAEMO. The Navy will consider species-specific swim speeds and potentially more complex movement models, as data availability and computational capabilities allow. Currently, however, detailed avoidance data for many species are limited, necessitating the use of surrogate data and generalized approaches, as is also the case with dive profiles. The Navy will continue to prioritize research and development efforts to enhance the accuracy of its impact modeling tools, ensuring the best available science informs its environmental assessments.
Modeling	To better assess repeated exposures of individuals and population-level consequences, the Commission recommends that the Navy use NAEMO to conduct modeling of both multi-day events and multiple single-day events to estimate the number of repeated exposures an individual is expected to incur.	While the assessment of the distribution of repeated takes amongst individuals may appear basic, calculating repeated takes is challenging to do at the scale required for the major Navy study areas. A credible assessment of the repeated takes due to the Navy's proposed action per the approach suggested in the comment would require treating animats as unique individuals over the course of a year's activity and across a large study area, while incorporating migration patterns and nomadic movement. Such an effort would be computationally intensive and likely infeasible given reasonable resources. In contrast, the action analyzed by Zeddies et al. was less complex than the Navy action. Thus, Zeddies et al. could assess repeated takes within spatially and temporally limited areas with undirected animal ingress/egress.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Modeling (continued)		Still, the Navy's analysis provides sufficient information to assess impacts to marine mammal populations. In addition to the ratio of takes to abundance presented in Appendix E (Acoustic and Explosive Impacts Analysis), the Navy has presented other information in its assessment that can inform the potential for repeated takes of individuals and impacts to each stock. This includes the geographic region in which impacts are predicted, whether impacts occur in cold or warm seasons, stock vulnerability factors (defined in Section 2.3.4 [Risks to Marine Mammal Populations] of Appendix E), and relevant information related to the population consequences of disturbance themes identified in Keen et al. (2021). The Navy will review the best available science and consider additional methods to assess repeated exposures in future updates to NAEMO software.
Modeling	The Commission recommends that the Navy conduct a rigorous comparison of [the Comprehensive Acoustic Simulation System using the Gaussian Ray Bundle model (CASS/GRAB)] and the similitude equation and the in situ measurements of the USS Ford ship shock trial from Seger et al. (2023) to fulfill the intent of the project.	The Navy plans to conduct a verification of the impulsive propagation methods in NAEMO using the Seger et al (2023) data.
Modeling	It is unclear why [the Range-dependent Acoustic Model/Parabolic Equation (RAM/PE)] was not used for underwater detonations that would occur in waters 50 m or less, where CASS/GRAB generally is not used. Further, Department of the Navy (2024b) specified that the similitude equation is valid only over a range of pressures equating to a NEW of up to 28.8 lbs. The Commission further recommends that the Navy use RAM/PE to model all underwater detonations for Phase IV activities for which modeling has not been completed and for all Phase V activities, until such time that CASS/GRAB and the similitude equation have been validated for the range of detonation sizes and environmental parameters (water depth and receiver range) in which it would be used.	The NAEMO impulsive modeling methods, as described in the technical report *Quantifying Acoustic Impacts on Marine Mammals and Sea Turtles: Methods and Analytical Approach for Phase IV Training and Testing* (Department of the Navy, 2024b), require arrival times, sound levels, and phases to be output from the propagation model. RAM/PE does not output the time information necessary for simulation and is thus not a suitable option for impulsive modeling in NAEMO. The limitations of the similitude equation are discussed in Section 4.1.3.2 of the technical report *Quantifying Acoustic Impacts on Marine Mammals and Sea Turtles: Methods and Analytical Approach for Phase IV Training and Testing,* and comparisons between the peak pressure computed at various ranges against the theoretical value based on the similitude equation showed agreement, providing confidence that the similitude equation was appropriate for use in NAEMO.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Modeling (continued)		The Navy is committed to ensuring the accuracy of its impulsive propagation models and recognizes the importance of ongoing validation efforts. While the similitude equation has been evaluated and demonstrated good agreement with measured data, as detailed in Section 4.1.3.2 of the technical report *Quantifying Acoustic Impacts on Marine Mammals and Sea Turtles: Methods and Analytical Approach for Phase IV Training and Testing*, the Navy is open to exploring alternative approaches to meet NAEMO's requirements.
Modeling	Thus, contrary to the Navy and NMFS's continued presumption, behavioral responses do in fact occur at ranges beyond TTS for single detonations.	The Navy clarifies that it does not presume that behavioral responses are absent beyond the TTS range for single detonations. Rather, the Navy assumes that any significant behavioral responses rising to the level of harassment under the MMPA for military readiness activities are unlikely to occur beyond the range to TTS. For most locations and animal classes, acoustic presence was not significantly different after the detonation compared to before the detonation. The researchers note that decreases in acoustic presence following the detonations could have been affected by natural diel or crepuscular cycles.
Modeling	The Commission recommends that the Navy review its previous monitoring reports for both construction activities and any pile-driving activities associated with AFTT Phase I, II, or III [Final EISs] to estimate the mean time an animal is expected to remain near a pile-driving activity and revise the accumulation time, range to effects, and numbers of takes accordingly for the [Final Supplemental EIS/OEIS] and LOA application.	The Navy's monitoring procedures for shoreline construction activities are often not able to ascertain residence time due to several factors. Although there are some cases where animals are reported near pile driving activities during monitoring efforts, this is often during pre- and post- monitoring periods or after a pile driving activity has been shut down (i.e., no sound). These instances are also reported while the animals are beyond any predicted AINJ or TTS range to effect. Time frames from these efforts therefore are not always indicative of typical sound exposure durations. The Navy's assumption is that most animals would avoid areas with higher sound levels that could cause injury over periods of time shorter than 5 minutes.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Modeling (continued)		Since pile driving occurs in relatively calm, shallow, coastal waters, and lookouts are on stationary platforms (e.g., elevated piers, bulkhead walls), there is a high likelihood that marine mammals would be sighted within or approaching the 100 yd shutdown zone and mitigation implemented preventing potential TTS or AINJ as all the predicted ranges for these effects are shorter than 100 yds. For individuals sighted within this zone during active pile driving training, even if the source was not immediately turned off, bottlenose dolphins (the only species with estimated impacts from pile driving activities) would be able to swim far beyond the estimated AINJ and TTS zones in less than 5 minutes (see the technical report titled *Quantifying Acoustic Impacts on Marine Mammals and Sea Turtles: Methods and Analytical Approach for Phase IV Training and Testing* for nominal swim speeds). Furthermore, criteria for AINJ and TTS are already conservative in that they do not account for recovery of hearing effects during breaks in sound exposure (i.e., silent periods as the hammer is repositioned). This likely results in an over estimation of take under the current analysis. Regardless, additional data would be needed to justify an increased accumulation period, which currently is not available.
Mitigation	The Commission recommends that, in the [Final EIS] and LOA application, the Navy (1) ensure that the Gulf of Mexico Rice's Whale Mitigation Area encompasses the Rice's whale parent [biologically important area (BIA)], (2) consider the new delineations for the North Atlantic right whale feeding, migrating, and most importantly reproductive BIAs and expand the various North Atlantic Right Whale Mitigation Areas as needed, (3) ensure that the Ship Shock Trial Mitigation Areas are at least 5 nmi beyond the boundaries of the Rice's whale parent and child BIAs and all of the North Atlantic right whale BIAs, and (4) evaluate whether any of the draft BIAs for the other marine mammal species should inform expansion of or additional mitigation areas.	The Action Proponents have worked collaboratively with NMFS to develop mitigation areas, using the best available science described in Chapter 3 (Affected Environment and Environmental Consequences), marine species monitoring and density data, predicted activity impact footprints, and inputs from the operational community. A Biological Assessment and operational analysis of potential mitigation areas were completed throughout the entire Study Area. Even though the revised BIAs (BIA II) are not yet finalized or published, the Navy and NMFS have considered the best available science, which forms the basis of the BIA II effort, as part of our consultation process.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Mitigation (continued)		Rice's Whale: The Action Proponents' current Rice's Whale Mitigation Area fully encompasses the existing designated critical habitat and BIA for this species. This mitigation area was developed using the best available science, including the information used in the development of the BIA, ensuring that this important habitat is protected. As noted in Table 5.7-10, the Action Proponents repositioned the northern Gulf of America ship shock trial box so it is situated outside of the Rice's whale core distribution area identified by NMFS in 2019 (84 Federal Register 15446). Further repositioning of this box would have unacceptable impacts on the Action Proponents' ability to test new vessels. There are five of these events anticipated over the seven-year period and they have extensive mitigation measures. North Atlantic Right Whale: The Action Proponents' mitigation areas for North Atlantic right whales consider the currently designated critical habitat and BIAs. • The feeding and mating BIAs, as well as the foraging unit of the Critical Habitat, are contained wholly within the Gulf of Maine Mitigation Area, the Northeast NARW Mitigation Area, and the Northeast Major Training Exercise Planning Awareness Mitigation Area. • The migration BIA is contained wholly within the Dynamic North Atlantic Right Whale Mitigation Areas. • Much of the calving BIA and the calving unit of the Critical Habitat are contained within the Southeast NARW Mitigation Area. Extending this Mitigation Area to fully encompass the calving unit of the critical habitat was carefully evaluated in both Phase 3 and 4 of and was determined to have unacceptable impacts on the ability for the Action Proponents to continue meetings its mission requirements. See references 85, 119, and 214 on Table H.3-1 (Comment Response Matrix) of the 2018 Final EIS/OEIS. In 2018, the Action Proponents created the Southeast North Atlantic Right Whale Special Reporting Mitigation Area that does cover the entire unit of the critical habitat.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Mitigation (continued)		The mitigation measures identified in Section 5.7 (Geographic Mitigation) represent those considered safe and practical to implement, and balancing the potential environmental benefit with the impact on military readiness activities. Expanding mitigation areas further would ultimately prevent the Action Proponents from meeting critical training and testing objectives. Additional details regarding the operational impacts and impracticality of further expanding these mitigation areas are provided in Chapter 5 (Mitigation) and Table H.3-1 (Comment Response Matrix) of the 2018 Final EIS/OEIS. We remain committed to minimizing impacts on marine mammals while ensuring essential training and testing activities can be conducted effectively. We will continue to monitor the best available science, including updated BIAs, and adapt our mitigation strategies as appropriate.
Mitigation	Given that visual observations by Navy lookouts have proven to be ineffective (Oedekoven and Thomas 2022)—such that the Navy has removed any 'credit' for mitigation implementation from the Phase IV DEIS and other compliance documents—the Navy's currently proposed mitigation measure that still relies on a lookout's visual observations is insufficient.	The Navy maintains that visual observations by trained lookouts remain a valuable component of its multi-layered mitigation strategy. Lookouts provide a crucial real-time monitoring capability, enabling the Navy to respond promptly to potential marine mammal presence and implement adaptive mitigation measures when necessary. While biologist observer teams offer specialized expertise, their availability and deployment feasibility can be limited by factors such as cost, logistics, safety, security, and operational constraints.
Mitigation	The Commission recommends that the Navy use its instrumented ranges and sonobuoys to localize marine mammals and implement the relevant mitigation measures during active acoustic events for Phase IV activities, take a harder look at the technologies that the Canadian [Department of National Defense (DND)] use during its at-sea activities, and incorporate accordingly for other Phase IV [Draft EISs].	In the AFTT Study Area, a small subset of Navy training and testing takes place on the one instrumented range within the study area. Furthermore, Navy's instrumented ranges do not have the capabilities to be used effectively for mitigation. See Section 5.5.3 (Active and Passive Acoustic Monitoring Devices) of the 2018 Final EIS/OEIS for further details.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Mitigation (continued)		Navy assets with passive acoustic monitoring capabilities (such as sonobuoys) that are already participating in an activity will continue to monitor for marine mammals, as described in Section 5.6 (Activity-based Mitigations). However, the fluidity and nature of military readiness activities (e.g., fast-paced and mobile readiness evolutions), as well as the limitations of these monitoring capabilities make it impractical for passive acoustic devices to be used as precise real-time indicators of marine mammal location for mitigation (e.g., active sonar power downs or shutdowns, ceasing use of explosives) without an accompanying visual sighting. The Action Proponents will continue to follow progress on and lessons learned from the Canadian DND's project seeking real-time detection of marine mammals during sonar operations, and consider whether any elements could be used to improve mitigation in AFTT.
Mitigation	The Commission recommends that the Navy include the use of passive acoustic monitoring prior to and during activities involving explosive sonobuoys, explosive torpedoes, sinking exercises, and ship shock trials for Phase IV activities in the [Final Supplemental EIS/OEIS] and its LOA application.	The Navy intends to continue to utilize passive acoustic monitoring prior to activities involving explosive sonobuoys and explosive torpedoes, and during sinking exercises, as required in Phase III. A change in terminology caused an omission of these requirements in the Draft Supplemental EIS/OEIS and a correction has been made for the Final Supplemental EIS/OEIS. These tables in the Final Supplemental EIS/OEIS are instead focused on "Mitigation Requirements" and the requirement for passive acoustic monitoring has been added to rows for activities involving explosive sonobuoys and explosive torpedoes, and for sinking exercises The requirement was removed because Clarke, 2005, in studying the 2001 Churchill full ship shock trial, found that passive acoustic monitoring did not contribute to effective mitigation even though it was the most expensive mitigation component to design and implement. No large whales (e.g. mysticetes or sperm whales) were heard or seen during the entire shock trial period. This is not unexpected since the time and location are selected specifically to minimize presence.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Mitigation	The Commission recommends that the Navy include a 600-yard and 1,000-yard mitigation zone for surface-to-surface activities using explosive medium- and large-caliber projectiles, respectively, in the [Final Supplemental EIS/OEIS] and its LOA application. The Commission again recommends that the Navy include the use of passive acoustic devices (i.e., DIFAR and other types of passive sonobuoys, operational hydrophones) prior to air-to-surface and surface-to-surface explosive bomb, missile, and rocket exercises to detect marine mammals and implement the necessary mitigation measures in the [Final Supplemental EIS/OEIS] and LOA application and, when sonobuoys are used, deploy them at the same time as the surface target.	The Navy does implement these recommended mitigation zones. These mitigations were unintentionally omitted from the Draft Supplemental EIS/OEIS Table 5.6-2 (Visual Observations for Explosives). They were included in an updated LOA application and in Table 5.6-2 (Activity-Based Mitigations for Explosives) of this Final Supplemental EIS/OEIS. The aircraft that are used in explosive bombing exercises are not the same aircraft that are used in anti-submarine warfare exercises (i.e. that have the capability to deploy sonobuoys) and these different types of aircraft are based in different locations. There are significant manpower and logistical constraints that make constructing and maintaining additional passive acoustic monitoring systems or platforms for additional training and testing activities impracticable. Additionally, diverting platforms that have passive acoustic monitoring capabilities would impact their ability to meet their Title 10 requirements and reduce the service life of those systems.
Mitigation	The Commission recommends that the Navy include the requirement to delay, relocate, or cease activities if floating vegetation or jellyfish are observed in the mitigation zone during activities involving active acoustic sources, pile driving, airguns, and explosives consistent with Phase III mitigation measures in the [Final Supplemental EIS/OEIS] and LOA application.	The Navy does implement this recommended mitigation measure. These requirements are stated in section 5.6.1 (Mitigation Specific to Acoustic Stressors, Explosives, and Non-Explosive Ordnance) of the Final Supplemental EIS/OEIS.
Mitigation	The Commission recommends that the Navy include the requirement that lookouts wear polarized sunglasses in the Inshore Manatee and Sea Turtle Mitigation Areas to better implement the required mitigation measures in the [Final Supplemental EIS/OEIS] and Biological Assessment submitted under the Endangered Species Act. The Commission recommends that the Navy cease any active acoustic, explosive, pile driving, or airgun activity if a marine mammal is observed to be injured or killed during or immediately after the activity and consult with NMFS to review or adapt the mitigation measures, as necessary.	In consultation with operators, this mitigation requirement, as previously written in Phase III, was determined to not be practicable. Rather than removing it altogether, Navy maintained it as a recommendation for all Lookouts regardless of location as described in Section 5.6 (Activity-Based Mitigations). Navy Marine Species Awareness Training also states that polarized sunglasses should be used whenever possible to help reduce sun glare.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Mitigation (continued)		Besides ship strike, the only training or testing activity that could result in injury or mortality is use of explosives. It has been Navy policy for many years to suspend the use of explosives if a marine mammal is visibly injured or killed as a result of detonation. However, since the publication of the Proposed Rule, the Action Proponents have explicitly added this requirement to the activity-based mitigations for all activities involving the use of explosives. It has also always been Navy policy and a requirement of the LOA that incident reporting procedures be followed.
U.S. Environmental Protection Agency (Figure M.3-6)		
MPRSA and SINKEX Program	The [Environmental Protection Agency (EPA)] recommends that the Navy incorporates additional details in Vol 1 about the [sinking exercise (SINKEX)] Program concerning the [Marine Protection, Research, and Sanctuaries Act] general permit, the decommissioned vessels that will be used for sinking exercises, the Navy's vessel clean-up procedures, and information about when and where sinking exercises may take place (including whether these exercises will always take place in the "SINKEX box" identified in most of the maps).	The Navy has incorporated more detail in Chapter 6, Table 6.1-1 of the Final Supplemental EIS/OEIS.
MPRSA and SINKEX Program	Additionally, EPA recommends adding a discussion of the potential localized impacts to the environment, including the seafloor specifically associated with SINKEX. Once provided, this information could then be referenced to other sections of the EIS/OEIS that discusses impacts from explosives more generally.	The Navy has incorporated more detail in Chapter 6, Table 6.1-1 of the Final Supplemental EIS/OEIS.
MPRSA and SINKEX Program	The EPA recommends adding the Marine Protection, Research and Sanctuaries Act to Table 6.1-1 (Summary of Environmental Compliance for the Proposed Action) with a brief statement about the status of compliance as similarly addressed for other applicable laws included in the table.	The Navy has incorporated more detail in Chapter 6, Table 6.1-1 of the Final Supplemental EIS/OEIS.
MPRSA and SINKEX Program	Additionally, Navy may consider adding a short text summary in Section 6.1 generally describing the Marine Protection, Research and Sanctuaries Act and the general permit authorizing SINKEX activities.	The Navy has incorporated more detail in Chapter 6, Table 6-1 of the Final Supplemental EIS/OEIS.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Environmental Justice	The EPA recommends that the Navy evaluate any areas (or incorporate by reference the analysis in any separate [National Environmental Policy Act (NEPA)] documents) that include inshore waters consistent with Executive Orders on environmental justice and NEPA regulations to determine whether there are disproportionate and adverse human health and environmental effects on communities with environmental concerns as appropriate. If any disproportionate and adverse effects to communities with [Environmental Justice (EJ)] concerns are identified, mitigation measures should be incorporated to address these effects.	Executive Order (EO) 14148, issued in January 2025, rescinded previous executive orders related to EJ, including EO 12898, EO 13985, EO 14031, and EO 14096. Therefore, a specific EJ evaluation focused on areas including inshore waters was not conducted for this Final Supplemental EIS/OEIS. However, the Action Proponents remain committed to considering potential impacts on all communities. The comprehensive impact analyses included in this document encompass a wide range of environmental and socioeconomic factors, providing a robust assessment of potential effects on all potentially affected populations. This includes a thorough evaluation of potential impacts on human populations in coastal areas, addressing concerns related to noise, visual impacts, and potential economic effects.
Social cost of greenhouse gas (SC-GHG)	EPA recommends that the climate damages from all reasonably foreseeable emissions be monetized using the best available estimates of the SC-GHG.	Analysis of SC-GHG is not required by law, regulation, or government policy. While NEPA requires the consideration of environmental impacts, it does not mandate the specific use of the SC-GHG methodology for quantifying climate damages. EO 14154, issued on January 20, 2025, explicitly revoked all SC-GHG guidance and instructions. This EO, titled "Unleashing American Energy," stated that "The calculation of the 'social cost of carbon' is marked by logical deficiencies, a poor basis in empirical science, politicization, and the absence of a foundation in legislation." As such, reliance on SC-GHG estimates would be inconsistent with current Executive Branch policy. On March 12, 2025, the EPA announced that it was revisiting the SC-GHG measurements. This announcement further underscores the uncertainty surrounding the SC-GHG estimates and suggests that the current values may not be the most reliable basis for decision-making.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Social cost of greenhouse gas (SC-GHG) (continued)		A comprehensive analysis of greenhouse gas (GHG) emissions has been provided. To help the public and decision-makers understand the potential climate change impacts associated with the Proposed Action, we have included a thorough analysis of GHG emissions. This analysis provides a sufficient basis for informed decision-making regarding the environmental impacts of the Proposed Action.
SC-GHG	EPA notes that there appears to be an error in the "Climate Change" section on page 4-11. It states, "For example, the estimated SC-GHG emissions from Alternative 1 and 2 are similar to that of electricity used by 197,000 and 232,100 average U.S. households annually (U.S. Environmental Protection Agency, 2024)." EPA recommends that the "SC-GHG emissions" be replaced with "greenhouse gas emissions."	This error was corrected in Section 4.3.1 (Air Quality) of this Final Supplemental EIS/OEIS
Spill Response	The draft Supplement EIS/OEIS briefly references ship-to-shore fuel transfer system training and major spill events. However, there is no discussion about refueling at sea. This includes both refueling a ship at sea (underway replenishments (UNREP)) and refueling an aircraft while at sea (Vertical replenishments (VERTREP)). There is a potential risk of oil spillage for each of these issues. EPA recommends that the final Supplement EIS/OEIS provide a discussion about spill response for each of these issues as appropriate.	UNREP and VERTREPs are not part of the proposed action. The Navy has plans and procedures for preventing, reporting, and responding to spills.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
U.S. Department of the Interior (Figure M.3-7)		
Consultation/ Mitigation	For any training activities occurring within a National Park Service (NPS) unit, the Navy shall coordinate with the affected NPS unit. Homestead Air Force Base regularly coordinates training activities within the Biscayne National Park (NP) boundary with park staff. A similar level of coordination with the Navy is requested to mitigate potential negative impacts to sensitive habitats and wildlife.	While the Navy is committed to minimizing impacts on sensitive habitats and wildlife within all NPS units, the dynamic and often unpredictable nature of Navy training and testing activities, which are essential for maintaining national security, necessitates a high degree of operational flexibility. Requiring pre-activity coordination with the NPS for activities in its vicinity would significantly hinder the Navy's ability to respond to evolving training needs and maintain operational readiness. The Navy already implements a comprehensive suite of mitigation measures designed to minimize impacts on marine resources. These measures, detailed in Section 5.6 (Activity-Based Mitigation) and Section 5.7 (Geographic Mitigation), encompass activity-based mitigation, which are specific procedures and protocols implemented during activities to reduce the potential for impacts, and geographic mitigation, which are designated areas where certain activities are restricted or modified to minimize impacts on sensitive habitats and species. The Action Proponents completed a full biological assessment and operational analysis of potential mitigation areas throughout the entire Study Area. This analysis considered the best available science, predicted activity impact footprints, and marine species monitoring and density data. Developing additional mitigation areas or establishing a formal coordination process specifically for NPS units would be impracticable due to implications for safety, sustainability, and the Action Proponents' ability to continue meeting its Title 10 requirements to successfully accomplish military readiness objectives. Notices to Airmen and notices to mariners will be posted prior to Navy training and testing activities and will provide information about what the Navy may be doing off the coast near Biscayne NP. These notices will help to inform the public, including Biscayne NP staff, about the general nature and location of Navy activities.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Mitigation	Extend the offshore mitigation area well beyond NPS unit boundaries. Biscayne NP is primarily a marine park whose boundary lies approximately 15 nautical miles (nm) offshore (60' isobath). Therefore, the Navy's standard mitigation practice of conducting activities greater than 12 nm from the coast, is not sufficient for Biscayne NP and potentially jeopardizes a significant portion of the park's marine resources	East of Biscayne NP, a NARW mitigation area, shallow-water coral reef mitigation area, and artificial reef, live hard bottom, shipwreck, or submerged aquatic vegetation mitigation area cover from 0-15 nm from shore to ensure the Navy activities do not jeopardize the park's marine resources (See Figure 5.7-5, Mitigation Areas off the Southeastern United States and in the Eastern Gulf of America). The Action Proponents avoid coral reefs, artificial reefs, live hard bottom, shipwrecks, and submerged aquatic vegetation in these mitigation areas. Chapter 6 (Regulatory Considerations) presents information on the national system of marine protected areas located in the Study Area, as well as the training and testing activities that could occur within each area and the marine protected area considerations at the local level. The Action Proponents will avoid or reduce impacts to the maximum extent practicable through activity-based mitigation (see Section 5.6, Activity-Based Mitigation) and mitigation areas (see Section 5.7, Geographic Mitigation). The Action Proponents completed a full biological assessment and operational analysis of potential mitigation areas throughout the entire Study Area. Developing additional mitigation areas beyond what is described in Section 5.7 (Geographic Mitigation) would be impracticable due to implications for safety, sustainability, and the Action Proponents' ability to continue meeting its Title 10 requirements to successfully accomplish military readiness objectives.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Louisiana Department of Energy and Natural Resources (Figure M.3-8)		
CZMA	Chapter 6, Regulatory Considerations, notes that the [Navy] will provide Louisiana with a consistency determination as required by the Coastal Zone Management Act [(CZMA)] of 1972, as amended. In preparing your consistency determination, please be aware that Louisiana' s approved coastal management program includes, in its list of federal agency activities, "Outer Continental Shelf activities adjacent to the coastal zone which are not subject to consistency review under other provisions of Section 307 of the CZMA." In practice, this encompasses any reasonably foreseeable coastal effects resulting from federal activities anywhere within the 200 mile Exclusive Economic Zone off Louisiana's coast, including the New Orleans [Operating Area] identified in the OEIS. Most of the proposed activities will take place far from Louisiana's coastal zone, and relatively few effects to the State's coastal resources are anticipated. Among the State' s coastal uses and resources for which there may be reasonably foreseeable impacts, are the offshore oil and gas industry, shipping, and commercial and recreational fishing. These uses have a significant presence in the Gulf, and may occur in proximity to Navy operations	The Navy prepared CZMA consistency determinations to ensure consistency with the enforceable policies of the applicable Coastal Zone Management Programs. Please see Section 6.1.1 (Coastal Zone Management Act Compliance) and Appendix L (Agency Correspondence) of the Final Supplemental EIS/OEIS for details.
Birds	Louisiana is host to large residential and migratory bird populations. It is noted that the National Marine Protected areas have been updated in this submission to mirror those of the International Union for Conservation of Nature. To the extent practicable, we request that overflights of the Louisiana coastal zone in any location should be managed to minimize potential adverse impacts.	The Navy prepared CZMA consistency determinations to ensure consistency with the enforceable policies of the applicable Coastal Zone Management Programs. Please see Section 6.1.1 (Coastal Zone Management Act Compliance) and Appendix L (Agency Correspondence) of the Final Supplemental EIS/OEIS for details. The Navy has implemented a comprehensive suite of mitigation measures and developed Standard Operating Procedures (SOPs), both of which contribute to minimizing potential impacts on birds. Details on these measures and SOPs can be found in Section 3.9 (Birds and Bats) and Appendix A, Section A.1.7 (Standard Operating Procedures) of this Final Supplemental EIS/OEIS.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Massachusetts Office of Coastal Zone Management (Figure M.3-9)		
DOPAA	The Massachusetts Office of Coastal Zone Management (CZM) has reviewed the Draft Supplemental Environmental Impact Statement (SEIS) for the Navy's Atlantic Fleet Training and Testing Phase IV (AFTT). CZM is supportive of the least environmentally harmful alternative that meets the purpose and need of the Proposed Action, which based on the SEIS appears to be Alternative 1.	The Navy prepared CZMA consistency determinations to ensure consistency with the enforceable policies of the applicable Coastal Zone Management Programs. Please see Section 6.1.1 (Coastal Zone Management Act Compliance) and Appendix L (Agency Correspondence) of the Final Supplemental EIS/OEIS for details.
Species Monitoring	CZM is also highly supportive of the Navy's continued support of research and monitoring of potentially impacted wildlife including marine mammals, sea turtles, and protected fish species. The data gathered through these research and monitoring studies is used not only to ensure impacts from Navy activities are mitigated, but also to increase the scientific understanding of the ecology of the ocean including the distributions, behaviors, and abundance of protected species. The knowledge gained through Navy-supported research and monitoring has contributed to CZM's responsible management of ocean resources for a variety of uses beyond the military, and we encourage the Navy to continue to support these efforts.	Thank you for your participation in the National Environmental Policy Act process. Your comment is part of the official project record.
New Hampshire Division of Historical Resources (comment received via website)		
Cultural Resources	The New Hampshire Division of Historical Resources is New Hampshire's State Historic Preservation Office. We have reviewed the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement and do not have concerns with either above-ground or archaeological resources within the project area.	Thank you for your participation in the National Environmental Policy Act process. Your comment is part of the official project record.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Turtle Island Restoration Network (Figure M.3-10)		
Marine Mammals	Given the recent developments in marine mammal data and the occurrence of Unusual Mortality Events (UME) along the Atlantic Coast, it is crucial to carefully evaluate the testing locations and the exercises being conducted…We urge the US Department of the Navy and the US Coast Guard to consider halting training and testing exercises within these critical areas in light of the ongoing UMEs associated with both humpback and North Atlantic Right Whales...However, with ongoing training and testing activities within the AFTT study area following the 2018 [Final EIS], it is important to consider that an increase in vessel traffic related to these exercises could be having a significant impact on humpback whale populations along the North Atlantic coast. Given this, the data in the 2018 [Final EIS/OEIS] is now outdated and cannot reliably be used to attribute blame to other vessels operating near the AFTT study area…As the North Atlantic Right Whales are still critically endangered, the testing boundaries should not be allowed to be located so close to their critical habitat.	This Supplemental EIS/OEIS builds upon the 2018 Final EIS/OEIS, updating the data, effects analysis, and underlying science. The Action Proponents' impact analysis is therefore based on the most current information, and the conclusions have been modified accordingly to reflect these updates. The Action Proponents are committed to minimizing impacts on marine mammals, particularly those experiencing UMEs and endangered species like the North Atlantic Right Whale. The analysis in the Supplemental EIS/OEIS demonstrates that the Proposed Action is not expected to have significant impacts on marine species, including those affected by UMEs. Chapter 3 (Affected Environment and Environmental Consequences) provides a detailed assessment of potential effects from training and testing activities, incorporating the latest available data and scientific understanding. The updated ship strike analysis can be found in Section 3.7.3.4. The Navy has consulted with NMFS who have determined that the Proposed Action will not jeopardize the continued existences of endangered species, including the North Atlantic Right Whale. Further, as described in Chapter 5 (Mitigation) of the Supplemental EIS/OEIS, the Action Proponents implement mitigation measures during training and testing activities. The Action Proponents have specific mitigation measures to reduce interactions with whales when vessels are transiting, as well as measures to avoid specific areas that have been determined to be important to certain marine mammal life functions (e.g. breeding). There has not been an increase in vessel traffic related to AFTT activities since the 2018 analysis. In fact, there has been a decrease in most areas and an overall decrease in the study area as a whole (see Table 3.0-9). Sonar and explosive use related to AFTT activities has also decreased significantly since the 2018 analysis. The volume of vessel traffic generated by Navy activities represents approximately 1 percent of the total vessel traffic within the AFTT study area. The vast majority of vessel traffic in this region is attributed to civilian activities, such as commercial shipping and recreational boating.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Marine Mammals (continued)		The request to reduce the size of the Study Area to exclude North Atlantic Right Whale critical habitat is not supportable. The Navy's operating areas are essential for ensuring effective training and testing while providing the flexibility required to meet evolving national security needs. The Action Proponents work closely with NMFS to minimize potential impacts within these boundaries through a comprehensive suite of mitigation measures, as detailed in Chapter 5 (Mitigation) of the Supplemental EIS/OEIS. These measures include specific protocols to reduce interactions with North Atlantic right whales during vessel movements, commensurate with the increased likelihood that whales may be present. See Section 5.7.10 (Northeast North Atlantic Right Whale Mitigation Area), Section 5.7.12 (Jacksonville Operating Area North Atlantic Right Whale Mitigation Area), Section 5.7.13 (Southeast North Atlantic Right Whale Mitigation Area), and Section 5.7.15 (Dynamic North Atlantic Right Whale Mitigation Area). The Navy also avoids conducting Major Training Exercises in more sensitive locations as part of its mitigation strategy agreed upon with NMFS. See Section 5.7.9 (Major Training Exercise Planning Awareness Mitigation Areas). The Action Proponents are confident that their comprehensive mitigation strategy, combined with the anticipated reduction in overall activity levels, will effectively minimize potential impacts on marine mammal populations, including those experiencing UMEs and endangered species like the North Atlantic Right Whale.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Marine Mammals	The type of training and testing activities will have negative impacts on the behavior, physiology, and communication of marine mammals. [The comment provides examples of how marine mammals rely on sound and are negatively impacted by anthropogenic noise, including specific examples of sonar-related strandings and behavioral disruptions for various species.] With so many different areas of military training and testing coupled with a diverse array of marine mammal species, it is imperative that testing and training should not be conducted near critical habitats of marine mammals.	All of the potential effects from training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) and Appendix E (Acoustic and Explosives Impact Analysis) of the Final Supplemental EIS/OEIS. The current best available science indicates that potential sonar effects depend on how loud the sound is, how close the animal is to the sound source, and the duration of exposure. The Navy remains committed to researching the effects of sound and reducing potential impacts to marine mammals. Much of the research currently funded by the Navy is related to better understanding how marine mammals produce, receive, and process sound in an effort to reduce the potential for human generated sound impacts in the future. In addition, as described in Chapter 5 (Mitigation) of the Final Supplemental EIS/OEIS, the Action Proponents implement various mitigation measures to further reduce any potential impacts to marine mammals and have consulted with the National Marine Fisheries Service on all potential impacts to marine mammal critical habitats under the Endangered Species Act. After analysis of all training and testing activities, NMFS concurred with the Action Proponents that the proposed action will either have no effect or is not likely to adversely affect any marine mammal critical habitat.
Sea Turtles	The presence of military training and testing can negatively impact endangered and vulnerable sea turtle populations. [The commentor highlights the presence of various sea turtle species in the AFTT study area, including those with critical habitat, and expresses concern about vessel strikes and marine debris related to Navy activities.]	The analysis in the Supplemental EIS demonstrates that there is not a significant impact on marine species, including sea turtles. All of the potential effects from training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the Final Supplemental EIS/OEIS. These included potential effects from all stressors, to include interactions with vessels and military expended materials. Also, as described in Chapter 5 (Mitigation) of the Final Supplemental EIS/OEIS, the Action Proponents implement mitigation measures during training and testing activities. In addition, the Action Proponents consulted with the National Marine Fisheries Service for sea turtles in the marine environment. It's important to note that vessel traffic associated with Navy activities constitutes less than 1 percent of the total vessel traffic within the AFTT study area, with the vast majority attributed to civilian activities like commercial shipping and recreational boating.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Marine Mammals	With nearly 50 individuals remaining, the critically endangered Rice's whale is at risk of extinction... [The commenter notes that Rice's whale was not recognized as a distinct species during the 2018 Final [Supplemental EIS/OEIS] and highlights the overlap between the proposed critical habitat and the AFTT study area.] We recommend all military training and testing be immediately stopped within the Gulf of [America] to ensure the protection and survival of the critically endangered Rice's whale, especially within the bounds of their proposed critical habitat.	Halting all training and testing activities in the Gulf of America is not a feasible option. These activities are essential for maintaining national security and ensuring the readiness of U.S. forces. The Action Proponents developed the alternatives considered in this Supplemental EIS/OEIS after careful re-evaluation by subject matter experts, including military units and commands that utilize the ranges, and environmental managers and scientists. The alternatives carried forward meet the Action Proponents' purpose and need (Chapter 1- Purpose and Need) to ensure that it can fulfill their statutory obligations under Title 10 of the United States Code. See Section 2.3 (Action Alternative Development) for more detailed information on the development of alternatives. The Navy has carefully considered the potential impacts of its activities on Rice's whales, as detailed in Chapter 3 (Affected Environment and Environmental Consequences) of this Supplemental EIS/OEIS. This analysis includes a thorough evaluation of all potential stressors, incorporating the latest available data and scientific understanding of this species. To minimize potential impacts, the Navy has implemented a comprehensive suite of mitigation measures, developed in consultation with NMFS, as described in Chapter 5 (Mitigation) of the Draft Supplemental EIS/OEIS. NMFS concurred with the Action Proponents that the proposed action will either have no effect or is not likely to adversely affect any marine mammal critical habitat.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Marine Mammals	In light of ongoing UMEs, increased anthropogenic pressure, and declining species populations, it is vital that the location of military training and testing be re-evaluated in an effort to protect vulnerable and endangered species. We recommend that all exercises be stopped until safer locations and practices can be determined.	Halting all training and testing activities is not a feasible option. These activities are essential for maintaining national security and ensuring the readiness of U.S. forces. The Action Proponents developed the alternatives considered in this Supplemental EIS/OEIS after careful re-evaluation by subject matter experts, including military units and commands that utilize the ranges, and environmental managers and scientists. The alternatives carried forward meet the Action Proponents' purpose and need (Chapter 1- Purpose and Need) to ensure that it can fulfill their statutory obligations under Title 10 of the United States Code. See Section 2.3 (Action Alternative Development) for more detailed information on the development of alternatives. The Navy has carefully considered the potential impacts of its activities on marine species, as detailed in Chapter 3 (Affected Environment and Environmental Consequences) of this Supplemental EIS/OEIS. This analysis includes a thorough evaluation of all potential stressors, incorporating the latest available data and scientific understanding, including information on UMEs and other anthropogenic pressures. To minimize potential impacts, the Navy has implemented a comprehensive suite of mitigation measures, developed in consultation with NMFS, as described in Chapter 5 (Mitigation) of the Draft Supplemental EIS/OEIS. NMFS concurred with the Navy that the proposed action will have either no effect or is not likely to adversely affect any listed species or designated critical habitat.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Florida State Clearinghouse (Figure M.3-11)		
Mitigation	Mitigation measures for right whales as described in the draft EIS/OEIS include not detonating explosives, not conducting ship shock training, and minimizing the use of sonar and north-south oriented vessel transits in the Jacksonville [Operating Area] and Southeast North Atlantic Right Whale Mitigation Area between 15 November and 15 April each year. Additionally, the Navy will consult Early Warning System (EWS) data when planning vessel transits and military readiness activities. [Fish and Wildlife Commission (FWC)] continues to commend the Navy's support and use of the EWS surveys. However, the EWS surveys, Lookouts, and other modes of detecting marine mammals and other marine wildlife have weaknesses, which includes marine wildlife cannot always be detected when present in an area. Additionally, airspace restrictions due to military activities have limited the EWS aerial surveys in the past, reducing their effectiveness as mitigation. FWC staff encourages the Navy to continue working with NOAA Fisheries to improve species detection and effectiveness of the EWS surveys.	The Action Proponents are committed to reducing impacts to the North Atlantic right whale and will continue to collaborate with NMFS to improve species detection and the effectiveness of the EWS surveys.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Mitigation	Time-area restrictions are the most effective form of mitigation measures given the challenges associated with detecting [North Atlantic Right Whale (NARW)] and other marine wildlife. The draft EIS/OEIS describes a time-area closure in the Southeast NARW Mitigation Area, which resembles the NARW critical habitat designated by NOAA Fisheries in 1994, and only reporting requirements in the larger Southeast NARW Special Reporting Mitigation Area, which covers the current NARW critical habitat established by NOAA Fisheries in 2016. The draft EIS/OEIS states that "the mitigation area is the largest area practical to implement within the North Atlantic right whale reproduction critical habitat". However, NARWs occur throughout and beyond the current critical habitat, and their distribution within the Southeast NARW Mitigation Area may be uneven (Roberts et al. 2024). If the area covered by mitigation is limited, FWC encourages the Navy to consult with NOAA Fisheries to consider modifying the configuration of the Mitigation Area in a way that provides the most risk reduction possible for NARW. If the area covered by mitigation can be increased, FWC encourages the Navy to consult with NOAA Fisheries on expanding the size of the Southeast NARW Mitigation Area to further reduce the risks posed to NARWs.	The Action Proponents have worked collaboratively with NMFS to develop mitigation areas using inputs from the operational community, the best available science discussed in Chapter 3 (Affected Environment and Environmental Consequences) of the Final Supplemental EIS/OEIS, published literature, predicted activity impact footprints, and marine species monitoring and density data. The Action Proponents completed a biological assessment and operational analysis of potential mitigation areas throughout the entire Study Area. The mitigation identified in Chapter 5 (Mitigation) of the Final Supplemental EIS/OEIS represents the maximum mitigation within the identified mitigation areas that is practicable to implement under the Proposed Action.
Marine Mammals	The draft EIS/OEIS describes mitigation measures for NARWs in the Southeastern and Northeastern United States. However, NARWs also occur in the mid-Atlantic where vessel strikes to NARWs have been documented. FWC encourages the Navy to consult with NOAA Fisheries on increasing situational awareness of and other mitigation measures for NARWs, particularly for activities east of the mouth of the Chesapeake Bay in the [Virginia Capes Operating Area], in the Atlantic City [Operating Area], and in the Narragansett Bay [Operating Area], where right whales have been observed in high densities in recent years.	The Action Proponents have worked collaboratively with NMFS to develop mitigation areas using inputs from the operational community, the best available science discussed in Chapter 3 (Affected Environment and Environmental Consequences) of the Final Supplemental EIS/OEIS, published literature, predicted activity impact footprints, and marine species monitoring and density data. Mitigation for the NARW in the Mid-Atlantic and Northeast (including east of the mouth of the Chesapeake Bay in the Virginia Capes Operating Area, in the Atlantic City Operating Area, and in the Narragansett Bay Operating Area) fall under the Dynamic Management Areas (shown in Figure 5.7-3) that could be applied as needed throughout the year. NMFS manages the Dynamic Management Areas program off the U.S. East Coast with the primary goal of reducing the likelihood of North Atlantic right whale vessel strikes from all mariners.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Protected/ Endangered Species	Protected Species Monitoring Programs in Florida are recommended for in-water or over-water activities that have been documented and determined to pose an increased risk of injury or death to a protected marine species. The FWC has created the Observer Guidelines for Protected Species Monitoring Programs in Florida State Waters manual for entities conducting these activities to determine if individuals have the recommended qualifications for the proposed activities. Please note that FWC staff recommend a 30-minute wait period, when feasible, to allow the animal to move out of the impact area.	The Action Proponents have developed a full suite of mitigation measures which can be found in Chapter 5 (Mitigation) of the Final Supplemental EIS/OEIS. Navy Lookouts must complete Lookout Training, which includes marine resource sighting cues and observation techniques, as well as the roles and responsibilities of Lookouts and the official in charge of an activity. Additionally, the Action Proponents have also developed Marine Species Awareness Training that is required for all personnel tasked with carrying out mitigation measures (See Section 5.3 of the Final Supplemental EIS/OEIS. Finally, the Action Proponents' mitigation measures include waiting periods for all activities following a sighting (see Tables 5.6-1, 5.6-2, and 5.6-3).
Protected/ Endangered Species	Any collision with or injury to a manatee, within Florida state waters, should be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or in Vero Beach (1-772-562-3909) for south Florida and emailed to FWC at ImperiledSpecies@MyFWC.com.	The Action Proponents comply with the reporting and response requirements for incidents involving ESA-listed species under USFWS' jurisdiction as outlined in the USFWS consultation documents, which would include immediately halting an event if harassment, injury, or death of a manatee is observed. See Section 5.4 (Reporting) for more information.
Protected/ Endangered Species	Inshore activities within Florida should adhere to all posted speed zones, including state Manatee Protection Zones, state Boating Restricted Areas, and local regulations. Maps identifying the location of these zones can be found on the FWC website at: https://myfwc.com/wildlifehabitats/wildlife/manatee/data-and-maps/.	As discussed in Chapter 5 (Mitigation) of the Final Supplemental EIS/OEIS, the Action Proponents implement mitigation to avoid vessel strikes throughout the Study Area. As described in Section 2.3.3 (Standard Operating Procedures) of the 2018 Final EIS/OEIS, vessels operate in accordance with the navigation rules established by the U.S. Coast Guard, which require that vessels proceed at a safe speed so that proper and effective action can be taken to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.
Protected/ Endangered Species	Due to available foraging habitat and warm-water refuge sites, manatees are active near Port Canaveral and Tampa Bay year-round. To minimize impacts to manatees, FWC staff recommend limiting any in-water demolition, explosive, and/or other high impact activities occurring adjacent to Port Canaveral and Tampa Bay between November 15th and March 31st. Information on the location of identified warm-water sites in Florida can be found in the 2020 Manatee Warm-water Habitat Action Plan.	Demolition or explosive activities are not proposed for use in Port Canaveral or Tampa Bay under this proposed action.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Protected/ Endangered Species	Any collision with (or injury to) a marine turtle, within Florida state waters, should be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 888-404-3922 and to the Sea Turtle Stranding and Salvage Network (STSSN) at SeaTurtleStranding@MyFWC.com.	The Action Proponents comply with the reporting and response requirements for incidents involving ESA-listed species under NMFS' jurisdiction as outlined in the NMFS consultation documents, which would include immediately halting an event if harassment, injury, or death of a sea turtle is observed. See Section 5.4 (Reporting) for more information.
Habitat	The draft EIS/OEIS indicates that less than 2.2 acres of submerged aquatic vegetation will be affected annually by all military expended materials in all training and testing areas. To address these impacts, FWC staff recommend working with federal regulatory agencies to develop a mitigation plan to offset any impacts that satisfies federal requirements.	The Action Proponents are committed to minimizing military expended materials release and actively recover expended materials whenever practical and safe to do so. This includes capturing expended shells during gunnery exercises, recovering targets and parachutes, and removing unexploded ordnance. The Action Proponents will continue these efforts to minimize impacts on submerge aquatic vegetation. For context, the estimated impact of 2.2 acres is spread across the entire Study Area, and potential effects are thoroughly analyzed in the Essential Fish Habitat (EFH) analysis, where conservation recommendations are developed as part of the consultation process with NMFS.
Habitat	Several of the areas identified and proposed to mitigate habitat impacts from the proposed activities are already closed off and would be closed regardless of the proposed activities occurring, due to the presence of military equipment/cables or security measures. FWC staff recommend identification of alternative actions to mitigate for the proposed activities that do not include the identification of areas that are already closed for other purposes.	The Shallow-Water Coral Reef Mitigation Areas and Artificial Reef, Live Hard Bottom, Submerged Aquatic Vegetation, and Shipwreck Mitigation Areas are a continuation from the 2018 Final EIS/OEIS. The geographic database used to inform these mitigation areas identifies relevant habitat features independent of military equipment or security measures. It's important to note that the Navy utilizes this database to inform operators about all manner of seafloor conditions and sensitive areas, including those already closed for other reasons. This tool helps Navy operators avoid conducting training and testing activities that could potentially harm these sites, regardless of their existing closure status. This multi-layered approach ensures that the Navy proactively avoids sensitive habitats and resources, even those already subject to restrictions, further minimizing potential impacts.
Private Individual (1) (Figure M.3-12)		
Information	In today's Boston Herald The Navy is asking the Public for input about the Atlantic Fleet Training and Testing Supplemental Impact Statement.	Thank you for your participation in the National Environmental Policy Act process. Your comment is part of the official project record.

Table M.3-4: Public Comments and Responses (continued)

Category	*Comment*	*Response*
Private Individual (2) (Figure M.3-13)		
Mitigation	I viewed the videos and feel grateful for the partnership with agencies to protect aquatic wildlife. However, testing with explosives- though I understand its necessary for combat- seems contradictory to wildlife protection. how do you reconcile these two goals?	The Action Proponents are committed to the protection of marine species and health of ecosystems. Naval forces must be ready for a variety of military operations, which includes the use of explosives in training and testing activities. However, the Action Proponents recognize the potential impact of these activities on marine life and strives to strike a balance between operational readiness and environmental stewardship. This balance is achieved through the implementation of robust mitigation measures, as detailed in Table 5.6-2, designed to reduce impacts to marine species as much as practicable. Additionally, the Action Proponents consult extensively with regulatory agencies, such as the National Marine Fisheries Service and the U.S. Fish and Wildlife Service, and obtain all necessary permits to ensure their activities comply with environmental regulations and minimize potential harm to marine life.

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

www.deq.virginia.gov

Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

October 31, 2024

Naval Facilities Engineering Systems
Command Atlantic
Attention: Code EV22SG
(AFTT EIS Project Managers)
6506 Hampton Blvd.
Norfolk, VA 23508-1278
Online: https://www.nepa.navy.mil/aftteis/

RE: Comments on the Draft Supplemental Environmental Impact Statement/ Overseas Environmental Impact Statement for Atlantic Fleet Training and Testing, Department of the Navy (DEQ 24-168F)

Dear Sir of Madam:

The Commonwealth of Virginia has completed its review of the Draft Supplemental Environmental Impact Statement (DSEIS)/ Overseas Environmental Impact Statement (OEIS) for the Atlantic Fleet Training and Testing. The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of federal environmental documents submitted under the National Environmental Policy Act (NEPA) and responding to appropriate federal officials on behalf of the Commonwealth. This is in response to the September 2024 DSEIS/OEIS submitted by the Department of the Navy for the above referenced project. The following agencies participated in the review of this proposal:

Department of Environmental Quality
Department of Conservation and Recreation (DCR)
Department of Historic Resources (DHR)
Department of Aviation (DOAV)
Department of Health (VDH)

Figure M.3-4: Virginia Department of Environmental Quality Comment

Navy Atlantic Fleet Training and Testing
24-168F

In addition, the Department of Wildlife Resources, Virginia Institute of Marine Science, Virginia Marine Resources Commission, Accomack-Northampton Planning District Commission (PDC), and the Hampton Roads PDC were invited to comment on the proposal.

PROJECT DESCRIPTION

The Department of the Navy (Navy) has developed a DSEIS/OEIS that evaluates the potential environmental effects associated with military readiness training and research, development, test, and evaluation activities conducted within the Atlantic Fleet Training and Testing (AFTT) Study Area. The Study Area includes areas of the western Atlantic Ocean along the east coast of North America, Gulf of Mexico, and portions of the Caribbean Sea. It also includes Navy and Coast Guard pierside locations and port transit channels, bays, harbors, inshore waterways, and civilian ports where training and testing activities occur as well as transits between homeports and operating areas. The Study Area encompasses approximately 2.6 million square nautical miles of ocean area and includes designated Navy operating areas and special use airspace. Virginia offshore and inland coastal waters in the study area includes the Virginia Capes (VACAPES) Range Complex and the lower Chesapeake Bay. VACAPES includes 250 miles along the coast from Delaware to North Carolina, from the shoreline to 150 NM seaward. The VACAPES Range Complex is associated with the following inshore waters: the Chesapeake Bay, James River and tributaries, Broad Bay, and the York River. The following pierside locations, civilian ports, and coast guard stations within Virginia are included within the study area: Portsmouth Naval Shipyard, Naval Station Norfolk, JEB Little Creek Fort Story, Norfolk Naval Shipyard, Hampton Roads, VA, Virginia Beach, VA, and Portsmouth, VA.

The Navy proposes to conduct training activities and research, development, testing, and evaluation (hereinafter referred to as "testing") activities in the Atlantic Fleet Training and Testing Study Area. Training and testing activities, also referred to as "military readiness activities," prepare the Navy to fulfill their mission to protect and defend the United States and its allies but have the potential to affect the environment.

In the DSEIS/OEIS, the Navy has analyzed military readiness activities that could potentially affect human and natural resources, especially marine mammals, sea turtles, and other marine resources. Since the completion of the 2018 Final EIS/OEIS, the best available science has been updated, the regulatory environment has changed, the Study Area has changed, and the Proposed Action has been refined. Proposed activities in this DSEIS/OEIS are consistent with those analyzed in the 2018 Final EIS/OEIS and are representative of the activities that the Action Proponents have been conducting in the Study Area for decades. Activities that comprise the Proposed Action are necessary to meet military readiness requirements beyond 2025 and into the reasonably foreseeable future.

The National Marine Fisheries Service (NMFS) is a cooperating agency because the Proposed Action and alternatives involve activities that have the potential to affect protected resources under the agency's jurisdiction and for which they have special expertise, including marine mammals, threatened and endangered species, and essential fish habitat.

Alternative 1 is the Preferred Alternative as well as the environmentally preferable Action

Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

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Alternative. It reflects a representative year of training and testing to account for the natural fluctuations of training cycles, testing programs, and deployment schedules that generally limit the maximum level of training and testing that could occur in the reasonably foreseeable future.

DEQ previously reviewed the June 2017 Draft Environmental Impact Statement/Overseas Environmental Impact Statement for the Atlantic Fleet Training and Testing under DEQ #17-101F. Additionally, DEQ reviewed a Federal Consistency Determination for this project under DEQ 18-048F.

ENVIRONMENTAL IMPACTS AND MITIGATION

1. Natural Heritage Resources. The DSEIS (page 3.3-1) indicates there may be direct impacts on habitat features (water column, sandy shores, rocky bottoms) from the proposed action. This may include disturbance by explosives and other physical disturbances. The DSEIS notes that the surface area of bottom substrate affected over the short term would be a tiny fraction of the total training and testing area available in the Study Area.

1(a) Agency Jurisdiction.

1(a)(i) The Virginia Department of Conservation and Recreation's (DCR) Division of Natural Heritage (DNH). DNH's mission is conserving Virginia's biodiversity through inventory, protection and stewardship. The Virginia Natural Area Preserves Act (Virginia Code §10.1-209 through 217), authorized DCR to maintain a statewide database for conservation planning and project review, protect land for the conservation of biodiversity, and the protect and ecologically manage the natural heritage resources of Virginia (the habitats of rare, threatened and endangered species, significant natural communities, geologic sites, and other natural features).

1(a)(ii) Virginia Department of Agriculture and Consumer Services (VDACS): The Endangered Plant and Insect Species Act of 1979 (Virginia Code Chapter 39 §3.1-1020 through 1030) authorizes VDACS to conserve, protect and manage endangered and threatened species of plants and insects. Under a Memorandum of Agreement established between VDACS and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species.

1(b) Agency Findings. DCR's Division of Natural Heritage (DNH) searched its Biotics Data System (Biotics) for occurrences of natural heritage resources from the area outlined on the submitted map and identified natural heritage resources in the vicinity.

The Parramore Island, Wreck Island and False Cape Natural Area Preserves are adjacent to the project area and support several different populations of rare nesting birds including the Piping plover (*Charadrius melodus,* G3/S2B/S1N/LT/LT), Least tern (*Sternula antillarum,* G4/S2B/NL/NL), Black skimmer (*Rynchops niger,* G4/S2BS1N/NL/NL), and, at False Cape Natural Area Preserve, Loggerhead sea turtle (*Caretta caretta,* G3/S1B,S1N/LT/LT). In addition, several state and federally listed sea turtles, whales and other marine mammals are located in the project vicinity and may be affected by the proposed activities.

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Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

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1(b)(i) State-listed Plant and Insect Species. The current activity will not affect any documented state-listed plants or insects.

1(b)(ii) State Natural Area Preserves. There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

1(c) Recommendation. Contact DCR-DNH to secure updated information on natural heritage resources if the scope of the project changes and/or six months has passed before it is utilized. New and updated information is continually added to the Biotics Data System.

DCR recommends restricting any activities from April until August near the Parramore Island, Wreck Island and False Cape Natural Area Preserves during migration/nesting activities for sea turtles and migratory birds. Due to the legal status of many of these species, DCR also recommends continued coordination with the Virginia Department of Wildlife Resources (DWR), the United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration-National Marine Fisheries Service (NOAA-NMFS) for information regarding the possible impacts and to ensure compliance with protected species legislation.

2. Historic Resources. The DSEIS (page 3.0-7) states that there are standard operating procedures to avoid shipwrecks and mitigation measures in place to minimize impacts to cultural and historic resources. In the event that there are inadvertent impacts to a submerged prehistoric site or historic resource, consultation would be conducted with the appropriate State Historic Preservation Officer(s).

2(a) Agency Jurisdiction. The Virginia Department of Historic Resources (DHR) conducts reviews of both federal and state projects to determine their effect on historic properties. Under the federal process, DHR is the State Historic Preservation Office, and ensures that federal undertakings - including licenses, permits, or funding - comply with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulation at 36 CFR Part 800. Section 106 requires federal agencies to consider the effects of federal projects on properties that are listed or eligible for listing on the National Register of Historic Places. Please see DHR's website for more information about applicable state and federal laws and how to submit an application for review: https://www.dhr.virginia.gov/programs/federal-state-review/.

2(b) Requirement. The Department of the Navy or its agents must consult directly with DHR pursuant to Section 106 of the National Historic Preservation Act (as amended) and its implementing regulations codified at 36 CFR Part 800 which require Federal agencies to consider the effects of their undertakings on historic properties.

3. Aviation. The DSIES (page 3.0-7) states when military readiness activities are scheduled that require specific areas to be free of non-participating vessels and aircraft due to public safety concerns, the U.S. Coast Guard and Federal Aviation Administration issue Notices to Mariners and Notices to Air Missions, respectively, to warn the public of upcoming Navy activities. Many military readiness activities occur in established restricted areas or danger zones as published on navigational and aeronautical charts. Some frequently used areas have standing Notices to

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Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

Mariners and Notices to Airmen to allow real-time, immediate use. The Navy will accommodate the needs of commercial and civilian aviation by maintaining a working relationship with the Federal Aviation Administration.

3(a) Agency Jurisdiction. The Virginia Department of Aviation is a state agency that plans for the development of the state aviation system; promotes aviation; grants aircraft and airports licenses; and provides financial and technical assistance to cities, towns, counties, other governmental subdivisions, and airport sponsors other governmental subdivisions for the planning, development, construction and operation of airports, and other aviation facilities.

3(b) Agency Findings. The DOAV reviewed the SEIS/OEIS and believes that the activities should not present any significant impacts given the existing operations at the facilities included in the Study Area.

4. Water Quality and Subaqueous Lands. The DSEIS (page ES-7) states that chemical and physical changes to sediment and water quality, as measured by the concentrations of explosives byproduct compounds, would not result in harmful effects on biological resources and habitats. The effects of releases from expended material or munitions to sediment and water quality may be measurable within the area adjacent to the metal object, but concentrations would be below applicable regulatory standards or guidelines for adverse effects' levels on biological resources and habitats. Chemical and physical changes to sediment and water quality, as measured by the concentrations of contaminants associated with the expended material, would likely be indistinguishable from conditions at reference locations.

4(a) Agency Jurisdiction.

4(a)(i) Virginia Department of Environmental Quality. The State Water Control Board promulgates Virginia's water regulations covering a variety of permits to include the Virginia Pollutant Discharge Elimination System Permit regulating point source discharges to surface waters, Virginia Pollution Abatement Permit regulating sewage sludge, storage and land application of biosolids, industrial wastes (sludge and wastewater), municipal wastewater, and animal wastes, the Surface and Groundwater Withdrawal Permit, and the Virginia Water Protection (VWP) Permit regulating impacts to streams, wetlands, and other surface waters. The VWP permit is a state permit which governs activities in state surface waters including wetlands, and certain surface water withdrawals, diversion, and impoundments. It also may serve as Section 401 Water Quality Certification of the federal licenses and permits under the Clean Water Act. The VWP Permit Program is under the Office of Wetlands and Stream Protection, within the DEQ Division of Water Permitting. Six DEQ regional offices perform permit application reviews and issue permits or coverages for the covered activities.

- Clean Water Act Sections 404 and 401 (33 U.S.C. § 1251 *et seq.*);
- Section 404(b)(i) Guidelines Mitigation Memorandum of Agreement (2/90) (40 CFR Part 230);
- State Water Control Law, Chapter 3.1 of Title 62.1 of the Code of Virginia; and
- State Water Control Board regulations 9VAC25-210 *et seq.*; 9VAC25-660 *et seq.*; 9VAC25-670 *et seq.*; 9VAC25-680 *et seq*; and 9VAC25-690 *et seq*.

Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

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4(a)(ii) Virginia Marine Resources Commission. The Virginia Marine Resources Commission (VMRC) regulates encroachments in, on or over state-owned subaqueous beds as well as tidal wetlands pursuant to Virginia Code §28.2-1200 through 1400, as well as sharing jurisdiction for tidal wetlands with the Virginia Department of Environmental Quality. For nontidal waterways, VMRC states that it has been the policy of the Habitat Management Division to exert jurisdiction only over the beds of perennial streams where the upstream drainage area is 5 square miles or greater. The beds of such waterways are considered public below the ordinary high water line mark. However, in nontidal waters where a Virginia Water Protection (VWP) permit or coverage is obtained issued for in-stream activities, a VMRC permit is not required in certain circumstances (Memorandum of Agreement between VMRC and DEQ for Implementation of 2023 Va. Acts Chs. 258 and 259 Regarding Permitting in Non-tidal Waters of the Commonwealth (Amd 8/23)).

4(b) Agency Findings.

4(b)(i) DEQ. Permanent or temporary impacts to surface waters and wetlands may require DEQ authorization under §401 of the Clean Water Act, Virginia Code §62.1-44.15:20, and Virginia Administrative Code 9 VAC 25-210-10 *et seq*. Provided that any and all necessary permits are obtained and complied with, the project will be consistent with DEQ program requirements. For additional information, contact Jeff Hannah, DEQ-TRO at (757)407-2510.

4(b)(ii) VMRC. The VMRC did not respond to the request for comments on this proposal.

5. Pollution Prevention. DEQ's Office of Pollution of Prevention hosts a number of programs and initiatives that serve for non-regulatory assistance to businesses, institutions, and communities including the Virginia Environmental Excellence Program and Virginia Green.

5(a) Recommendations. We have several pollution prevention recommendations that may be helpful in operations, as applicable:

- Consider development of an effective Environmental Management System (EMS). An effective EMS will ensure that the proposed facility is committed to complying with environmental regulations, reducing risk, minimizing environmental impacts, setting environmental goals, and achieving improvements in its environmental performance. DEQ offers EMS development assistance and recognizes facilities with effective Environmental Management Systems through its Virginia Environmental Excellence Program (VEEP). VEEP provides recognition, annual permit fee discounts, and the possibility for alternative compliance methods.
- Consider environmental attributes when purchasing materials. For example, the extent of recycled material content, toxicity level, and amount of packaging should be considered and can be specified in purchasing contracts.
- Consider contractors' commitment to the environment when choosing contractors. Specifications regarding raw materials and construction practices can be included in contract documents and requests for proposals.

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Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

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- Integrate pollution prevention techniques into facility maintenance and operation, to include inventory control for centralized storage of hazardous materials. Maintenance facilities should have sufficient and suitable space to allow for effective inventory control and preventive maintenance.

DEQ's Office of Pollution Prevention provides information and technical assistance relating to pollution prevention techniques and EMS. For more information, contact DEQ's Office of Pollution Prevention, Meghann Quinn at (804) 774-9076.

6. Solid and Hazardous Waste Management. The DSEIS (page 3.1-19) notes that the proposed training and testing activities would emit hazardous pollutants, mainly due to the combustion of fuels in vessels and aircraft. Training and testing activities also would produce negligible to minor increases of ambient concentrations of hazardous pollutants at any onshore location. The DSEIS does not indicate that significant solid or hazardous wastes will be produced by the training exercises.

6(a) Agency Jurisdiction. On behalf of the Virginia Waste Management Board, the DEQ Division of Land Protection and Revitalization is responsible for carrying out the mandates of the Virginia Waste Management Act (Virginia Code §10.1-1400 et seq.), as well as meeting Virginia's federal obligations under the Resource Conservation and Recovery Act and the Comprehensive Environmental Response Compensation Liability Act , commonly known as Superfund. The DEQ Division of Land Protection and Revitalization also administers those laws and regulations on behalf of the State Water Control Board governing Petroleum Storage Tanks (Virginia Code §62.1-44.34:8 et seq.), including Aboveground Storage Tanks (9VAC25-91 et seq.) and Underground Storage Tanks (9VAC25-580 et seq. and 9VAC25-580-370 et seq.), also known as Virginia Tank Regulations, and § 62.1-44.34:14 et seq. which covers oil spills.

Virginia:

- Virginia Waste Management Act, Virginia Code § 10.1-1400 et seq.
- Virginia Solid Waste Management Regulations, 9VAC20-81
  - (9VAC20-81-620 applies to asbestos-containing materials)
- Virginia Hazardous Waste Management Regulations, 9VAC20-60
  - (9VAC20-60-261 applies to lead-based paints)
- Virginia Regulations for the Transportation of Hazardous Materials, 9VAC20-110.

Federal:

- Resource Conservation and Recovery Act (RCRA), 42 U.S. Code sections 6901 et seq.
- U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 Code of Federal Regulations, Part 107
- Applicable rules contained in Title 40, Code of Federal Regulations.

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Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

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6(b) Requirements.

6(b)(i) Waste Management. Any soil that is suspected of contamination or wastes that are generated during the action must be tested and disposed of in accordance with applicable federal, state, and local laws and regulations. All construction and demolition debris must be characterized in accordance with the *Virginia Hazardous Waste Management Regulations* prior to disposal at an appropriate facility. It is the generator's responsibility to determine if solid waste meets the criteria of hazardous waste and as a result be managed as such.

6(b)(ii) Petroleum Releases and Contaminated Soils. If evidence of a petroleum release is discovered during implementation of this project, it must be reported to DEQ, as authorized by Virginia Code § 62.1-44.34.8 through 9 and 9 VAC 25-580-10 *et seq*. Petroleum contaminated soils generated during this project must be characterized and disposed of properly.

6(b)(iii) Petroleum Storage Tanks. Installation, operation, removal, or relocation of any regulated petroleum storage tank(s) either AST or UST must also be conducted in accordance with the Virginia Regulations 9 VAC 25-91-10 et seq and / or 9 VAC 25-580-10 et seq. Documentation and / or questions should be submitted to TRO Tanks at Tidewater Regional Office – 5636 Southern Blvd., Virginia Beach, VA 23462. tro.tanks@deq.virginia.gov.

6(c) Agency Recommendation. DEQ encourages all projects to implement pollution prevention principles, including:

- the reduction, reuse and recycling of all solid wastes generated; and
- the minimization and proper handling of generated hazardous wastes.

REGULATORY AND COORDINATION NEEDS

1. Natural Heritage Resources. Contact DCR-DNH, Rene Hypes at (804) 371-2708, to secure updated information on natural heritage resources if the scope of the project changes and/or six months has passed before the project is implemented, since new and updated information is continually added to the Biotics Data System.

The DWR maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed at https://services.dwr.virginia.gov/fwis/ or contact Hannah Schul at Hannah.Schul@dwr.virginia.gov.

The U.S. Fish and Wildlife Service (USFWS) utilizes an online project review process (https://www.fws.gov/office/virginia-ecological-services/virginia-field-office-online-review-process) to facilitate compliance with the Endangered Species Act (16 U.S.C. 1531-1544, 87 Stat. 884) (ESA), as amended. The process enables users to 1) follow step-by-step guidance; 2) access information that will allow them to identify threatened and endangered species, designated critical habitat, and other Federal trust resources that may be affected by their project; and 3) accurately reach determinations regarding the potential effects of their project on these

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Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

resources as required under the ESA. If you have questions regarding the online review process, please contact Jackie Luu at jackie_luu@fws.gov.

2. Historic Resources. Consult with DHR (Jenny Bellville-Marrion at Jennifer.Bellville-Marrion@dhr.virginia.gov) pursuant Section 106 of the National Historic Preservation Act, which requires federal agencies to consider the impacts of their projects on historic properties.

3. Solid and Hazardous Wastes. All solid waste, hazardous waste, and hazardous materials must be managed in accordance with all applicable federal, state, and local environmental regulations. Contact DEQ TRO (Melinda Woodruff, 757-407-2516) for information on the location and availability of suitable waste management facilities in the project area or if free product, discolored soils, or other evidence of contaminated soils are encountered.

3(a) Petroleum Releases/ Storage. If evidence of a petroleum release is discovered during construction, it must be reported to DEQ TRO (Melinda Woodruff, 757-407-2516).

For installation, operation, or removal of any regulated ASTs or USTs, documentation and / or questions should be submitted to TRO Tanks at Tidewater Regional Office – 5636 Southern Blvd., Virginia Beach, VA 23462. tro.tanks@deq.virginia.gov.

4. Federal Consistency under the Coastal Zone Management Act. Pursuant to the Coastal Zone Management Act of 1972, as amended, federal activities located inside or outside of Virginia's designated coastal management area that can have reasonably foreseeable effects on coastal resources or coastal uses must, to the maximum extent practicable, be implemented in a manner consistent with the Virginia CZM Program. The Virginia CZM Program consists of a network of programs administered by several agencies. In order to be consistent with the Virginia CZM Program, the project activities must be consistent with the enforceable policies of the Virginia CZM Program and all the applicable permits and approvals listed under the enforceable policies of the Virginia CZM Program must be obtained prior to commencing the project. DEQ coordinates the review of FCDs with agencies administering the enforceable and advisory policies of the Virginia CZM Program. Pursuant to the federal consistency regulation 15 Code of Federal Regulations Part 930 Subpart C Section 930.31(c)(residual category), the Navy should submit a Federal Consistency Determination to DEQ for this project.

Project submissions may be emailed to eir@deq.virginia.gov.

CONCLUSION

Thank you for the opportunity to review and respond to the Draft Supplemental Environmental Impact Statement/ Overseas Environmental Impact Statement for the Atlantic Fleet Training and Testing. Detailed comments of reviewing agencies are attached for your review. Please contact Janine Howard at (804) 659-1916 for clarification of these comments.

Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

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Sincerely,

Bettina Rayfield, Manager
Environmental Impact Review and Long-Range Priorities Program
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Tiffany Birge, VMRC
Rusty Harrington, DOAV
R. Hiss, Bedford County
Elaine Meil, Accomack-Northampton Planning District Commission
Ben McFarlane, Hampton Roads Planning District Commission

Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

MEMORANDUM

DATE: October 22, 2024

TO: Janine Howard, DEQ

FROM: Allison Tillett, Environmental Impact Review Coordinator

SUBJECT: DEQ 24-168F, Draft Supplemental EIS for Atlantic Fleet Training and Testing

Division of Planning and Recreation Resources

The Department of Conservation and Recreation (DCR), Division of Planning and Recreational Resources (PRR), develops the *Virginia Outdoors Plan* and coordinates a broad range of recreational and environmental programs throughout Virginia. These include the Virginia Scenic Rivers program; Trails, Greenways, and Blueways; Virginia State Park Master Planning and State Park Design and Construction. PRR also administers the Land & Water Conservation Fund (LWCF) program in Virginia.

Division of Natural Heritage

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

The Parramore Island, Wreck Island and False Cape Natural Area Preserves are adjacent to the project area and support several different populations of rare nesting birds including the Piping plover (*Charadrius melodus,* G3/S2B/S1N/LT/LT), Least tern (*Sternula antillarum,* G4/S2B/NL/NL), Black skimmer (*Rynchops niger,* G4/S2BS1N/NL/NL), and, at False Cape Natural Area Preserve, Loggerhead sea turtle (*Caretta caretta,* G3/S1B,S1N/LT/LT). In addition, several state and federally listed sea turtles, whales and other marine mammals are located in the project vicinity and may be affected by the proposed activities. DCR recommends restricting any activities from April until August near these preserves during migration/nesting activities for sea turtles and migratory birds. Due to the legal status of many of these species, DCR also recommends continued coordination with the Virginia Department of Wildlife Resources (VDWR), the United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration-National Marine Fisheries Service (NOAA-NMFS) for information regarding the possible impacts and to ensure compliance with protected species legislation.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

New and updated information is continually added to Biotics. Please re-submit project information and map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

The U.S. Fish and Wildlife Service (USFWS) utilizes an online project review process (https://www.fws.gov/office/virginia-ecological-services/virginia-field-office-online-review-process) to facilitate compliance with the Endangered Species Act (16 U.S.C. 1531-1544, 87 Stat. 884) (ESA), as amended. The process enables users to 1) follow step-by-step guidance; 2) access information that will allow them to identify threatened and endangered species, designated critical habitat, and other Federal trust resources that may be affected by their project; and 3) accurately reach determinations regarding the potential effects of their project on these resources as required under the ESA. If you have questions regarding the online review process, please contact Jackie Luu at jackie_luu@fws.gov.

The VDWR maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed at https://services.dwr.virginia.gov/fwis/ or contact Hannah Schul at Hannah.Schul@dwr.virginia.gov.

Division of State Parks

DCR's Division of State Parks is responsible for acquiring and managing, state parks. Park development and master planning are managed by the Division of Planning and Recreation Resources. Master plans are required prior to a parks opening and are updated every ten years (Virginia Code § 10.1-200 *et seq.*).

Division of Dam Safety and Floodplain Management

Dam Safety Program:
The Dam Safety program was established to provide proper and safe design, construction, operation and maintenance of dams to protect public safety. Authority is bestowed upon the program according to *The Virginia Dam Safety Act*, Article 2, Chapter 6, Title 10.1 (10.1-604 et seq) of the Code of Virginia and Dam Safety Impounding Structure Regulations (Dam Safety Regulations), established and published by the Virginia Soil and Water Conservation Board (VSWCB).

Floodplain Management Program:
The National Flood Insurance Program (NFIP) is administered by the Federal Emergency Management Agency (FEMA), and communities who elect to participate in this voluntary program manage and enforce the program on the local level through that community's local floodplain ordinance. Each local floodplain ordinance must comply with the minimum standards of the NFIP, outlined in 44 CFR 60.3; however, local communities may adopt more restrictive requirements in their local floodplain ordinance, such as regulating the 0.2% annual chance flood zone (Shaded X Zone).

All development within a Special Flood Hazard Area (SFHA), as shown on the locality's Flood Insurance Rate Map (FIRM), must be permitted and comply with the requirements of the local floodplain ordinance.

Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

State Agency Projects Only

Executive Order 45, signed by Governor Northam and effective on November 15, 2019, establishes mandatory standards for development of state-owned properties in Flood-Prone Areas, which include Special Flood Hazard Areas, Shaded X Zones, and the Sea Level Rise Inundation Area. These standards shall apply to all state agencies.

1. Development in Special Flood Hazard Areas and Shaded X Zones
    A. All development, including buildings, on state-owned property shall comply with the locally-adopted floodplain management ordinance of the community in which the state-owned property is located and any flood-related standards identified in the Virginia Uniform Statewide Building Code.
    B. If any state-owned property is located in a community that does not participate in the NFIP, all development, including buildings, on such state-owned property shall comply with the NFIP requirements as defined in 44 CFR §§ 60.3, 60.4, and 60.5 and any flood-related standards identified in the Virginia Uniform Statewide Building Code.
        (1) These projects shall be submitted to the Department of General Services (DGS), for review and approval.
        (2) DGS shall not approve any project until the State NFIP Coordinator has reviewed and approved the application for NFIP compliance.
        (3) DGS shall provide a written determination on project requests to the applicant and the State NFIP Coordinator. The State NFIP Coordinator shall maintain all documentation associated with the project in perpetuity.
    C. No new state-owned buildings, or buildings constructed on state-owned property, shall be constructed, reconstructed, purchased, or acquired by the Commonwealth within a Special Flood Hazard Area or Shaded X Zone in any community unless a variance is granted by the Director of DGS, as outlined in this Order.

The following definitions are from Executive Order 45:

Development for NFIP purposes is defined in 44 CFR § 59.1 as "Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials."

The Special Flood Hazard Area may also be referred to as the 1% annual chance floodplain or the 100-year floodplain, as identified on the effective Flood Insurance Rate Map and Flood Insurance Study. This includes the following flood zones: A, AO, AH, AE, A99, AR, AR/AE, AR/AO, AR/AH, AR/A, VO, VE, or V.

The Shaded X Zone may also be referred to as the 0.2% annual chance floodplain or the 500- year floodplain, as identified on the effective Flood Insurance Rate Map and Flood Insurance Study.

The Sea Level Rise Inundation Area referenced in this Order shall be mapped based on the National Oceanic and Atmospheric Administration Intermediate-High scenario curve for 2100, last updated in 2017, and is intended to denote the maximum inland boundary of anticipated sea level rise.

"State agency" shall mean all entities in the executive branch, including agencies, offices, authorities, commissions, departments, and all institutions of higher education.

"Reconstructed" means a building that has been substantially damaged or substantially improved, as defined by the NFIP and the Virginia Uniform Statewide Building Code.

Federal Agency Projects Only

Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

Projects conducted by federal agencies within the SFHA must comply with federal Executive Order 11988: Floodplain Management.

DCR's Floodplain Management Program does not have regulatory authority for projects in the SFHA. The applicant/developer must reach out to the local floodplain administrator for an official floodplain determination and comply with the community's local floodplain ordinance, including receiving a local permit. Failure to comply with the local floodplain ordinance could result in enforcement action from the locality. For state projects, DCR recommends that compliance documentation be provided prior to the project being funded. For federal projects, the applicant/developer is encouraged reach out to the local floodplain administrator and comply with the community's local floodplain ordinance.

To find flood zone information, use the Virginia Flood Risk Information System (VFRIS): www.dcr.virginia.gov/vfris

To find community NFIP participation and local floodplain administrator contact information, use DCR's Local Floodplain Management Directory: www.dcr.virginia.gov/dam-safety-and-floodplains/floodplain-directory

The remaining DCR divisions have no comments regarding the scope of this project. Thank you for the opportunity to comment.

Cc: Hannah Schul, VDWR
Brian Hopper, NOAA Fisheries-Protected Species Division
Shannon Alexander, DCR-DNH – Eastern Shore Regional Steward

Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

COMMONWEALTH of VIRGINIA

Travis A. Voyles
Secretary of Natural and Historic Resources

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan
Director
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www.dhr.virginia.gov

October 29, 2024

Janine Howard
Dept. of Environmental Quality
Office of Environmental Impact Review
P.O. Box 1105
Richmond, VA 23218

Re: Naval Supplemental EIS Atlantic Fleet Training and Testing
DHR File No. 2023-5533
DEQ # 24-168S

Dear Ms. Howard

We have received your request for comments on the project referenced above. Our comments are provided as assistance to the Virginia Department of Environmental Quality (DEQ).

We request that the Department of the Navy or its agents consult directly with DHR pursuant to Section 106 of the National Historic Preservation Act (as amended) and its implementing regulations codified at 36 CFR Part 800 which require Federal agencies to consider the effects of their undertakings on historic properties.

If you have any questions, please contact me at jennifer.bellville-marrion@dhr.virginia.gov.

Sincerely,

Jenny Bellville-Marrion, Project Review Archaeologist
Review and Compliance Division

Western Region Office
962 Kime Lane
Salem, VA 24153
Tel: (540) 387-5443
Fax: (540) 387-5446

Northern Region Office
5357 Main Street
PO Box 519
Stephens City, VA 22655
Tel: (540) 868-7029
Fax: (540) 868-7033

Eastern Region Office
2801 Kensington Avenue
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

Outlook

RE: NEW PROJECT Navy DSEIS for Atlantic Fleet Training and Testing, DEQ 24-168F

From Harrington, Rusty N. (DOAV) <Rusty.Harrington@doav.virginia.gov>
Date Mon 10/28/2024 1:59 PM
To Howard, Janine (DEQ) <Janine.Howard@deq.virginia.gov>

Good afternoon, Janine-

Thank you for requesting our comments regarding the Navy DSEIS for Atlantic Fleet Training and Testing Activities, Project Number 24-168F.

The Virginia Department of Aviation has reviewed the documents provided. The Department believes that, as presented, the activities should not present any significant impacts, given the existing operations at these facilities.

The Department appreciates the consideration you have given to us by requesting our comments on this project. Please do not hesitate to contact me should you have any questions or require further assistance regarding the Department's review of this project.

--R. N. (Rusty) Harrington, MBA
Chief Planner
Virginia Department of Aviation
5702 Gulfstream Road
Richmond, Virginia 23250
(804) 236-3522

From: Howard, Janine (DEQ) <Janine.Howard@deq.virginia.gov>
Sent: Monday, October 28, 2024 1:32 PM
To: dgif-ESS Projects (DWR) <ESSProjects@dwr.virginia.gov>; Kirchen, Roger (DHR) <Roger.Kirchen@dhr.virginia.gov>; advisory@vims.edu (advisory@vims.edu) <advisory@vims.edu>; MRC - Scoping (MRC) <Scoping@mrc.virginia.gov>; Harrington, Rusty N. (DOAV) <Rusty.Harrington@doav.virginia.gov>; Meil, Elaine <emeil@a-npdc.org>; Ben McFarlane <bmcfarlane@hrpdcva.gov>; Ballou, Thomas (DEQ) <Thomas.Ballou@deq.virginia.gov>; Lovain, Ava (DEQ) <Anna.Lovain@deq.virginia.gov>; Hannah, Jeffrey (DEQ) <Jeffrey.Hannah@deq.virginia.gov>
Cc: Howard, Janine (DEQ) <Janine.Howard@deq.virginia.gov>
Subject: Re: NEW PROJECT Navy DSEIS for Atlantic Fleet Training and Testing, DEQ 24-168F

Good afternoon,

Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE

Environmental Impact Review
Coordination Review

To: Office of Environmental Impact Review

From: Jeff Hannah, Regional VWPP Program Manager

Date: October 18, 2024

Project: Draft Supplemental EIS for Atlantic Fleet Training and Testing, DEQ #24-168F

As requested, the DEQ Tidewater Regional Office has reviewed the supplied information and offers the following comments:

Air Compliance Program :
The following air regulations may be applicable: Virginia Administrative Code 9 VAC 5-50-60 *et seq*. which addresses the abatement of visible emissions and fugitive dust emissions, and Virginia Administrative Code 9 VAC 5-130-10 et *seq*. which addresses open burning. For additional information, contact John Brandt, DEQ-TRO at (757)407-2341 or john.brandt@deq.virginia.gov .

Land Program (Solid and Hazardous Waste):
All construction and demolition waste, including any excess soil, must be characterized in accordance with the Virginia Solid and Hazardous Waste Management Regulations and disposed of at an appropriate facility as applicable.
For additional information, contact Melinda Woodruff, DEQ-TRO at melinda.woodruff@deq.virginia.gov .

Stormwater:
No comment as proposed action does not include land disturbing activities.

Virginia Water Protection Permit Program (VWPP):
Potential adverse impacts to water quality and wetlands resulting from surface runoff due to construction activities must be minimized. This can be achieved by using Best Management Practices (BMPs). Permanent or temporary impacts to surface waters and wetlands may require DEQ authorization under §401 of the Clean Water Act, Virginia Code §62.1-44.15:20, and Virginia Administrative Code 9 VAC 25-210-10 *et seq*. Provided that any and all necessary permits are obtained and complied with, the project will be consistent with DEQ program requirements. For additional information, contact Jeff Hannah, DEQ-TRO at (757)407-2510.

Water Permit Program (VPDES):

No comments as there does not appear to be any point source discharges of process water or wastewater that would necessitate a VPDES permit.

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Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

Petroleum Storage Tank Program:

DEQ recognizes that active and or closed petroleum pollution complaint cases may be encountered adjacent to or within proposed project footprints. If evidence of a petroleum release is discovered during implementation of any project, it must be reported to DEQ, as authorized by CODE # 62.1-44.34.8 through 19 and 9 VAC 25-580-10 et seq. Contact Ms. Melinda Woodruff at (757)407-2516. Petroleum-contaminated soils and ground water generated during implementation of this project must be properly characterized and disposed of properly.

Installation, operation, removal, or relocation of any regulated petroleum storage tank(s) either AST or UST must also be conducted in accordance with the Virginia Regulations 9 VAC 25-91-10 et seq and / or 9 VAC 25-580-10 et seq. Documentation and / or questions should be submitted to TRO Tanks at Tidewater Regional Office – 5636 Southern Blvd., Virginia Beach, VA 23462. tro.tanks@deq.virginia.gov.

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Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

Outlook

RE: NEW PROJECT Navy DSEIS for Atlantic Fleet Training and Testing, DEQ 24-168F

From Warren, Arlene (VDH) <Arlene.Warren@vdh.virginia.gov>
Date Thu 10/17/2024 12:33 PM
To Howard, Janine (DEQ) <Janine.Howard@deq.virginia.gov>

The Office of Drinking Water – VDH does not have any comments currently on the Atlantic Fleet Training and Testing Draft Supplemental EIS.

Best Regards,

Arlene F. Warren
GIS Program Support Technician
Mobile 804-389-2167 (office/cell/text)
Email [arlene.warren@vdh.virginia.gov]arlene.warren@vdh.virginia.gov
VDH, Office of Drinking Water
109 Governor Street, 6th Floor
Richmond, VA 23219

From: Fulcher, Valerie (DEQ) <Valerie.Fulcher@deq.virginia.gov>
Sent: Thursday, October 3, 2024 2:01 PM
To: dgif-ESS Projects (DWR) <ESSProjects@dwr.virginia.gov>; DCR-PRR Environmental Review (DCR) <envreview@dcr.virginia.gov>; odwreview (VDH) <odwreview@vdh.virginia.gov>; Kirchen, Roger (DHR) <Roger.Kirchen@dhr.virginia.gov>; advisory@vims.edu (advisory@vims.edu) <advisory@vims.edu>; MRC - Scoping (MRC) <Scoping@mrc.virginia.gov>; Harrington, Rusty N. (DOAV) <Rusty.Harrington@doav.virginia.gov>; Meil, Elaine <emeil@a-npdc.org>; Ben McFarlane <bmcfarlane@hrpdcva.gov>; Ballou, Thomas (DEQ) <Thomas.Ballou@deq.virginia.gov>; Lovain, Ava (DEQ) <Anna.Lovain@deq.virginia.gov>; Hannah, Jeffrey (DEQ) <Jeffrey.Hannah@deq.virginia.gov>
Cc: Howard, Janine (DEQ) <Janine.Howard@deq.virginia.gov>
Subject: NEW PROJECT Navy DSEIS for Atlantic Fleet Training and Testing, DEQ 24-168F

Good afternoon- this is a new OEIR review request/project:

Document Type: Draft Supplemental Environmental Impact Statement

Project Sponsor: Department of the Navy

Project Title: Draft Supplemental EIS for Atlantic Fleet Training and Testing

Project Number: DEQ #24-168F

Figure M.3-4: Virginia Department of Environmental Quality Comment (continued)

MARINE MAMMAL COMMISSION

4 November 2024

Naval Facilities Engineering Systems Command, Atlantic
Attn: AFTT EIS Project Managers, Code EV22SG
6506 Hampton Boulevard
Norfolk, VA 23508-1278

Dear Sir or Madam:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the U.S. Navy's (the Navy) Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (DEIS) for training and research, development, test, and evaluation (testing) activities conducted within the Atlantic Fleet Training and Testing (AFTT) study area (Phase IV; 89 Fed. Reg. 77113). The DEIS addresses the impacts on marine mammals from conducting training and testing activities in the AFTT study area and is associated with the letter of authorization (LOA) application that the Navy submitted to the National Marine Fisheries Service (NMFS). The Navy previously analyzed the various impacts, first under the Tactical Training Theater Assessment and Planning DEISs (TAP I) and then under the Phase II and III DEISs.

Background

The Navy's AFTT study area is in the western Atlantic Ocean and encompasses the waters along the east coast of North America, the Gulf of Mexico, and portions of the Caribbean Sea, at Navy pierside locations and in port transit channels, near civilian ports and Coast Guard stations, and in bays, harbors, inland waters, and rivers. The activities would involve the use of low-, mid-, high- and very high-frequency active sonar, weapons systems, explosive and non-explosive practice munitions and ordnance, high-explosive underwater detonations (including ship shock trials), expended materials, vibratory and impact hammers, airguns, electromagnetic devices, high-energy lasers, vessels, underwater vehicles, and aircraft. Under the No Action Alternative, the Navy would not conduct training or testing activities. Alternative 1, the Preferred Alternative, includes a representative number of training and testing activities; whereas, Alternative 2 includes the maximum number of training and testing activities. In addition to some time-area closures, mitigation measures would include visual monitoring to implement delay and shut-down procedures.

Auditory thresholds

As the Commission has noted in letters related to NMFS's Technical guidance for assessing the effects of anthropogenic sound on marine mammal hearing: Underwater and in-air criteria for

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www.mmc.gov

Figure M.3-5: Marine Mammal Commission Comment

onset of auditory injury and temporary threshold shifts (AINJ and TTS, respectively; NMFS 2024)[1], the Commission supports the weighting functions and associated thresholds as stipulated in Finneran (2024), which are the same as were used for Navy Phase IV activities (Department of Navy 2024a). However, new data are available since the Navy updated the weighting functions and thresholds. For example, Kastelein et al. (2024a) provided additional TTS data for harbor porpoises exposed to one-sixth octave band sound at 8 kHz. Although the Kastelein et al. (2024a) manuscript likely was 'in prep' at the time Finneran (2024) was drafted, it is unclear why the data were not included, as other data that were and still are part of 'in prep' manuscripts (i.e., Kastelein et al. in prep, Reichmuth et al. in prep) were incorporated in Finneran (2024)[2]. The Commission recommends that the Navy review the data from Kastelein et al. (2024a) and determine whether inclusion of the data would alter the weighting function and/or thresholds for very high-frequency[3] cetaceans and if so, whether those modifications are sufficient to warrant revision of the current weighting function and associated thresholds for non-impulsive sources as stipulated in Department of the Navy (2024a).

For mysticetes, more recent data were incorporated into the weighting function for Phase IV activities. The first hearing tests were conducted on minke whales in 2023 and showed that the whales were sensitive to frequencies much higher than expected—at least 45 kHz and potentially as high as 90 kHz (National Marine Mammal Foundation (NMMF) 2023, Houser et al. 2024[4]). As such, the Navy split the low-frequency (LF cetacean) functional hearing group into very low-frequency (VLF) and LF cetaceans[5], with the LF cetacean weighting function shifted to encompass higher frequencies. Since 2023, additional hearing data have been collected that showed minke whales were the most sensitive at 32 kHz for the frequencies that were tested in 2024[6]. Department of the Navy (2024a) based various VLF and LF parameters that inform the composite audiograms, weighting functions, and thresholds on the mean or median parameters of the other functional hearing groups. In its 31 August 2015 letter on NMFS's technical guidance and the Navy's original Phase III criteria and thresholds, the Commission recommended that the phocid (PCW) weighting and exposure function parameters be used to inform the LF weighting and exposure functions[7]. Recently, others[8] also have suggested that mysticete hearing appears to be more similar to that of phocids. Therefore, the Commission recommends that the Navy specify whether the LF weighting function has been shifted far enough to the higher frequencies to reflect that 32 kHz was the most sensitive frequency tested in minke whales, determine whether use of the PCW composite audiogram, weighting function, and threshold parameters are more representative of VLF and LF cetaceans than medians and means of the five other functional hearing groups, and revise the VLF and LF composite

[1] The Commission appreciates that the Navy, and in turn NMFS, incorporated its recommendations in the 26 June 2023 letter to (1) include the California sea lion hearing threshold data from Kastelein et al. (2021, 2022a and b, and 2024b) in the derivation of the otariid composite audiogram and revise the weighting function accordingly and (2) fix the rounding issues for K to ensure that the impulsive AINJ thresholds were 15 dB greater than the TTS thresholds.
[2] As well as NMFS (2024) and Department of the Navy (2024a).
[3] VHF.
[4] Which is similarly part of an in prep manuscript.
[5] VLF cetaceans include right, bowhead, fin, and blue whales; whereas, LF cetaceans include minke, sei, Bryde's, Rice's, Omura's, humpback, gray, and pygmy right whales.
[6] Which is part of another in prep manuscript.
[7] Which incorporate the weighting functions and associated weighted thresholds.
[8] D. Houser during his presentation of minke whale hearing results at the Effects of Sound on Marine Mammals meeting.

Figure M.3-5: Marine Mammal Commission Comment (continued)

audiograms, weighting functions, and thresholds as needed for impulsive and non-impulsive sources for the FEIS and LOA application.

Behavior thresholds for acoustic sources

To further define its behavior thresholds for acoustic sources (i.e., sonars and other transducers), the Navy developed multiple[9] Bayesian biphasic dose response functions[10] (Bayesian BRFs) for Phase IV activities. The Bayesian BRFs were a generalization of the monophasic functions previously developed[11] and applied to behavioral response data[12] (see Department of the Navy 2024a for specifics). The biphasic portions of the functions are intended to describe both level- and context-based responses as proposed in Ellison et al. (2011). At higher amplitudes, a level-based response relates the received sound level to the probability of a behavioral response; whereas, at lower amplitudes, sound can cue the presence, proximity, and approach of a sound source and stimulate a context-based response based on factors other than received sound level[13]. The Commission agrees that the general method by which Bayesian BRFs are derived is reasonable. The Commission, however, questions whether best available data were used to inform them.

In its review of Department of the Navy (2024a), the Commission notes the following in regard to the BRFs—

- Justification was not provided regarding why the upper bound of the BRFs increased from 185 to 200 dB re 1 µPa for Phase IV.
  - None of the raw behavioral data include exposures above 185 dB re 1 µPa (see Table E-1 in Department of the Navy 2024a).
  - Although the upper bound was set by subject matter experts for Phase III (Department of the Navy 2017a), it appears arbitrary for Phase IV. Such a change would result in the Phase IV functions moving farther to the right toward higher received levels, the 50-percent probabilities occurring at higher received levels, the slopes of the functions being less steep, and the overall BRFs for odontocetes and mysticetes[14] being less precautionary as compared to Phase III (see Figure 42 in Department of the Navy 2024a and note the flat slope between 185 and 200 dB re 1 µPa on all BRFs for Phase III).
  - Additionally, the Department of the Navy (2024a) indicated that the 50 percent probability of a behavioral response was estimated to occur at 185 dB re 1 µPa for the mysticete BRF, 8 dB higher than the TTS threshold for LF or VLF cetaceans.
- None of the Southall et al. (2018, 2019, 2020, 2021, 2022, 2023) data for the Atlantic behavioral response study (BRS) involving beaked whales and other odontocetes were included. However, 'in prep' data were included for auditory thresholds, and data that were

[9] For sensitive species (beaked whales and harbor porpoises), odontocetes, mysticetes, and pinnipeds.
[10] Comprising two truncated cumulative normal distribution functions with separate mean and standard deviation values, as well as upper and lower bounds. The model was fitted to data using the Markov Chain Monte Carlo algorithm.
[11] By Antunes et al. (2014) and Miller et al. (2014).
[12] From both wild and captive animals.
[13] e.g., the animal's previous experience, separation distance between the sound source and the animal, sound source speed and heading, and behavioral state of the animal including feeding, traveling, etc.
[14] And less precautionary for sensitive species at higher received levels. The Phase IV pinniped BRF is more precautionary than the Phase III BRF, but would have been more so if the upper bound had been 185 dB re 1 µPa.

Figure M.3-5: Marine Mammal Commission Comment (continued)

underlying but not specifically included in the publications were used for the BRFs[15]. This information may have been particularly useful to assess whether the less sensitive BRFs that were developed for Phase IV would have been supported by the Atlantic BRS data.

- The odontocete BRF incorporated 30 random samples from the dose-response function developed for just the *moderate and severe responses* of captive bottlenose dolphins (Houser et al. 2013b) to give equal weighting to the field and captive studies.
  - Houser et al. (2013b) included dose-response functions derived from all of the raw data. It is unclear why the Navy used only the moderate and severe responses to derive a new dose-response function for captive bottlenose dolphins, as this would skew the subsequent odontocete BRF to the right, particularly at the lower response probabilities and lower received levels, as seen in Figure 42 in Department of the Navy (2024a).
  - Further, there are more than 30 exposures for the field studies, so equal weighting of field to captive studies was not achieved as specified in Department of the Navy (2024a).
- The sensitive species BRF[16] incorporated 10 random samples from the generalized additive models (GAMs) that were developed from passive acoustic monitoring data in Moretti et al. (2014) and Jacobson et al. (2022)[17] and that ranged from 120 to 180 dB re 1 µPa[18].
  - Department of the Navy (2024a) did not specify how the 10 random samples were allocated between the GAMs nor did it specify how it handled the fact that the Jacobson et al. (2022) GAM went to only 165 dB re 1 µPa and was based on the decrease in the probability of a group vocal period (GVP; i.e., foraging dive), while the Moretti et al. (2014) GAM went to 180 dB re 1 µPa and included GAMs for both the decrease in the probability of a GVP and probability of disturbance[19].
  - Jacobson et al. (2022) specifically stated that they did not make an inference on sonar received levels above 165 dB re 1 µPa, because no GVPs were observed above this received level. Since the 10 random samples used for the BRFs were not included in Table 21 of Department of the Navy (2024a), it is unclear whether those samples could be causing the lesser sensitivity at the higher received levels in the sensitive species BRF as compared to the Phase III BRF.
  - It also is unclear why similar passive acoustic monitoring data were not used for beaked whales at the Southern California Acoustic Range and minke whales at PMRF, since those data have been collected and reported on as part of the Navy's Marine Species Monitoring Program for Phase III[20].
- For harbor porpoises, multiple received levels were noted for the same individual exposed to the same sound source (i.e., high-frequency active sonar (HFAS)) in Table E-1. Since the specific Kastelein et al. references were not provided, it is unclear whether the experimental scenarios differed enough that the data were considered independent or whether only the lowest received level for each individual should have been used.

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[15] i.e., data from Jacobson et al. (2022).
[16] Department of the Navy (2024a) indicated that, for harbor porpoises, a large enough aggregation of controlled exposure studies involving captive animals existed such that a risk function could be developed. The Commission understands that the Navy was referring to development of the actual BRF, not a separate harbor porpoise dose-response function that was used for other captive studies. This should be clarified in Department of the Navy (2024a).
[17] Moretti et al. (2014) included data from the range hydrophones at the Atlantic Undersea Test and Evaluation Center, and Jacobson et al. (2022) included data from the Pacific Missile Range Facility (PMRF).
[18] This range is indicated in the text, whereas, Table 21 specified the range was 100–180 dB re 1 µPa.
[19] i.e., whether they were considered a one-to-one comparison.
[20] https://www.navymarinespeciesmonitoring.us/reporting/pacific/. See DiMarzio et al. (2019) as one example.

Figure M.3-5: Marine Mammal Commission Comment (continued)

- The pinniped BRF incorporated 15 random samples from the dose-response function developed for just the *moderate and severe responses* of captive California sea lions (Houser et al. 2013a).
  - It is unclear why the captive dose-response function from Houser et al. (2013a) that was derived from all of the raw data was not used for subsampling.
- The executive summary, Tables 21–24, Figures 43–45, and accompanying text, as well as Table E-1 in Department of the Navy (2024a) included contradictory information regarding the range of received levels for both exposures and responses, distances at which the responses occurred, and the number of significant responses (see the Addendum herein). Further, Table E-1 does not appear to include the Blainville's beaked whale information from Tyack et al. (2011), Moretti et al. (2014), and Jacobson et al. (2022). The table also appears to include only the raw data from Houser et al. (2013a, b), not the subsampled data from the re-derived dose-response functions that then were used for the BRFs. Absent consistent information, it is difficult to assess the appropriateness of the various BRFs and the Navy's cut-off distances.

The Commission recommends that the Navy revise Department of the Navy (2024a) to clarify and address all of these points. The Commission further recommends that the Navy use the dose-response functions that were developed from all of the raw data rather than those that were regenerated for only moderate and severe responses and refrain from extrapolating beyond the bounds of the underlying data when revising the BRFs.

To derive criteria and thresholds for auditory and behavioral impacts, new data are being collected and new methods to analyze existing data are continually being developed. The Navy currently implements the thresholds at the animat stage within the Navy Acoustic Effects MOdel (NAEMO; Department of the Navy 2024b) rather than at a true post-processing stage after the sound propagation and animat modeling has been conducted. This means that the Navy cannot re-query the animat dosimeters using different thresholds when thresholds change, instead it must rerun the animat portion of NAEMO using the new thresholds. This is not only inefficient, but it has caused the Navy and NMFS to rely on the same outdated thresholds for more than a decade. Criteria and thresholds usually are developed at least three years before a DEIS and proposed rule are finalized, and a final rule is valid for seven years[21]. When Navy-funded projects (e.g., Southall et al. 2018, 2019, 2020, 2021, 2022, 2023) are not able to provide the data to the Navy by a specific deadline, those data then are not able to be incorporated until the next Phase based on the current paradigm. Thus, the Navy is not able to benefit from the data that it has funded to be collected, sometimes for at least 15 years, by which time the thresholds are not considered best available. The Commission recommends that the Navy make a concerted effort to incorporate data that support criteria and threshold development more often than on a decadal cycle and revise NAEMO to implement the relevant criteria and thresholds at a true post-processing stage so that animat dosimeter data can be re-queried if thresholds change, rather than needing to remodel the animat-portion of NAEMO.

[21] The same criteria and thresholds also have been used for all DEISs and rulemakings under a given Phase, meaning that the Phase IV thresholds will be used for Navy activities until the Phase IV Gulf of Alaska rulemaking would expire in 2037.

Figure M.3-5: Marine Mammal Commission Comment (continued)

Cut-off distances for behavior takes

The Commission remains concerned that, following the development of the BRFs and consistent with Phase III, the Navy implemented various cut-off distances beyond which it considered the potential for significant behavioral responses to be unlikely (Table 4 in Department of the Navy 2024a). The Navy previously indicated that the context of the exposure is likely more important than the amplitude at large distances (Department of the Navy 2017a)—that is, the context-based response dominates the level-based response. The Commission agrees with that notion but notes that the Bayesian BRFs specifically are intended to incorporate those factors. Thus, including additional cut-off distances would contradict the data underlying the Bayesian BRFs, negate the intent of the functions, and ultimately underestimate the numbers of takes.

For Phase IV activities, the Navy did add a condition that if a take were to occur beyond the relevant cut-off distance but above the 50 percent probability for a given BRF (e.g., a bottlenose dolphin exposed at 18 km and at a received level where the probability of response was 65 percent), it would be considered a significant response. That condition was further qualified based on the Navy assuming that animats would avoid a sound source between the response probabilities of 50 to 90 percent (avoidance is discussed further herein). Regardless of how the cut-off distances were qualified, they remain unsubstantiated and are less than what the Navy used for Phase III activities[22].

Department of the Navy (2024a) indicated that the models did not select range as a factor in the final BRFs, as it was too confounded with received level. The Navy also indicated that it was not surprising given that only 21 of 196 exposures that informed the four BRFs occurred at 10 km or greater from the sound source—19 animals had no response at all, one had a minor vocal response, and one had a strong avoidance response but it did not last for the full duration of the exposure. Delving into Department of the Navy (2024a), Table E-1 specified only 18 exposures occurred at 10 km or more from the sound source. Of those 18 exposures, one animal had minor vocal response, one had a strong avoidance response that lasted less time than the exposure, one stopped singing for as long as or longer than the duration of exposure, one had a strong avoidance response that was considered significant and lasted longer than the exposure, and another animal ceased its feeding, changed its dive and vocal behavior, and exhibited prolonged avoidance behavior. Thirteen animals exhibited no response at ranges of approximately 17 to 232 km from the source (Table E-1). Further, Figures 43–45 in Department of the Navy (2024a) are missing certain data that were specified in Table E-1 and in some instances have depicted the data incorrectly in terms of response, range, received level, and/or sample size relative to Table E-1. These inconsistencies make it difficult to assess the Navy's assumptions regarding cut-off distances similar to the BRFs.

Department of the Navy (2024a) however is correct in its statement that the probability of reaction at distances of 10 km and farther is not well represented. As such, it is unclear how the Navy can assert that those few data points provide support that beyond a certain distance, significant responses are unlikely to occur or that the source-receiver range must be included as a separate consideration to estimate likely significant behavioral reactions. Absence of data means just

[22] For Phase III, two different cut-off distances were used per behavioral group (one for moderate source level, single platform events and one for high source level or multiple platform events). For Phase IV, a single distance was used for all platforms and source levels for each behavioral group, but each of the four distances is less than the cut-off distance for high source level or multiple platform events from Phase III (see Table 4 in Department of the Navy 2024a).

Figure M.3-5: Marine Mammal Commission Comment (continued)

that, there are no data to support including such cut-off distances or assumptions that a significant response is unlikely to occur beyond a certain distance.

The Navy specified that the probability of significant behavioral responses occurring beyond the cut-off distances at received levels above the 50 percent probability of response is unknown, but was included as a conservative assumption due to the paucity of data (Department of the Navy 2024a). Even with the scant data available it is clear that the cut-off distances do not encompass the significant behavioral responses that have been observed to occur and that inform the revised BRFs. Further, significant behavioral responses are occurring at received levels *below* the 50-percent probability of response. For example, the cut-off distance for mysticetes is 10 km and the received level for the 50-percent probability of response is 185 dB re 1 µPa (Table 4 in Department of the Navy 2024a). However, a humpback whale exhibited a significant behavioral response in which it stopped foraging, changed its dive and vocal behavior, and conducted prolonged avoidance behavior at a distance of 16.8 km from the source and a received level of 128 dB re 1 µPa (Table E-1 in Department of the Navy 2024a). This example calls into question the appropriateness of both the received level estimated to equate to the 50-percent probability of response and the cut-off distance.

As another example, a sperm whale stopped resting and had a moderate change in its dive profile that occurred for a shorter duration than the exposure. It is unclear how long the response lasted but it did occur nearly 38 km from the sound source and at a received level of approximately 114 dB re 1 µPa (Table E-1 in Department of the Navy 2024a)—the cut-off distance for odontocetes is 15 km and the received level for the 50-percent probability of response is 168 dB re 1 µPa. Although this animal was incorrectly denoted as having a significant behavioral response in Table E-1 of Department of the Navy (2024a) due to the length of response, it highlights that responses do occur at larger distances and lower received levels than the cut-off distances and 50-percent probability of response portray. For harbor porpoises and pinnipeds, there currently are no data on a wild animal's response and relative distance to Navy acoustic sound sources.

Tyack and Thomas (2019) previously highlighted that the number of animals that are predicted to have a low probability of response may represent the dominant impact from a given sound source, as well as the shortcomings associated with assuming only a portion of the animals respond[23]. In addition to the Commission's ongoing concerns, use of cut-off distances has been criticized in public comments as an attempt to reduce the numbers of takes (85 Fed. Reg. 72326). Given the lack of data for certain behavioral groups in general and the fact that best available science was not used when data were available, the Commission again recommends that the Navy refrain from using cut-off distances in conjunction with the Bayesian BRFs and re-estimate the numbers of marine mammal takes based solely on the Bayesian BRFs for the FEIS and LOA application.

Behavior thresholds for explosives[24]

The Navy assumed a behavior threshold for explosives that was 5 dB less than the TTS threshold for each functional hearing group (Department of the Navy 2024a). The 5-dB value was

[23] Which corresponds to using various arbitrary cut-off distances.
[24] The Commission appreciates that the Navy incorporated the Commission's previous recommendations and used only the onset mortality, slight lung injury, and slight gastrointestinal tract injury thresholds for estimating the numbers of takes of marine mammals rather than the 50 percent thresholds that were used in Phase III.

Figure M.3-5: Marine Mammal Commission Comment (continued)

derived from observed onset behavioral responses of captive bottlenose dolphins during non-impulsive TTS testing[25] (Schlundt et al. 2000). Aside from the issues associated with conducting behavioral response studies on trained animals and using a different metric than all other BRFs or behavior thresholds[26], there is no scientific basis for using data from 1-sec tones to replicate or be comparable to an animal's behavioral response to underwater detonations. The Navy itself in Department of the Navy (2017a) stated that, although data from Schlundt et al. (2000) were used to derive the TAP I/Phase II BRFs for *acoustic sources*, they were not used in the quantitative derivation of the Phase III BRFs (or Phase IV BRFs) because the study was a hearing study where animals were conditioned and reinforced to tolerate high noise levels. It is illogical that the Navy removed such data from the estimation of BRFs for acoustic sources, which are similar to the 1-sec tones used in Schlundt et al. (2000), but then continued to use the same inappropriate data for a completely different sound source—data that underestimate impacts.

Another concerning assumption is that the Navy continues to maintain that marine mammals do not exhibit behavioral responses to single detonations (Department of the Navy 2024a)[27]. The Navy has asserted that the most likely behavioral response would be a brief alerting or orienting response and significant behavioral reactions would not be expected to occur due to no further detonations following the initial detonation based on reasoning that it historically has applied to shock trials (Department of the Navy 2024a). It is irrelevant that the same reasoning goes back to 1998. There were no data then, and there are no data now to support the assumption that animals would not behaviorally respond to a single detonation that could have been up to 58,000 lbs in net explosive weight (NEW)[28].

Larger single detonations (such as explosive torpedo testing or ship shock trials[29]) are expected to elicit 'significant behavioral responses' as described in Department of the Navy (2024a). The Navy has yet to justify why it believes that an animal would exhibit a significant behavioral response to two 5-lb charges detonated within a few minutes of each other but would not exhibit a similar response for a single detonation of 50 lbs, let alone detonations of up to 14,500 lbs. In response to Commission comments on the AFTT Phase III DEIS, the Navy indicated that there is no evidence to support that animals have significant behavioral reactions to temporally and spatially isolated explosions and that it has been monitoring detonations since the 1990s and has not observed those types of reactions. Due to human safety concerns, the Navy has never stationed personnel at the target site to monitor marine mammal responses during large single detonations. In other instances (i.e., bombs dropped from aircraft), lookouts are tasked with clearing the mitigation zone, not documenting an animal's behavioral response to the activity.

Although neither the Navy nor NMFS is aware of evidence to support the assertion that animals will have significant behavioral responses to temporally or spatially isolated explosions at

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[25] Based on 1-sec tones.
[26] Department of the Navy (2024a) used the cumulative sound exposure level (SEL_{cum}) metric for behavior thresholds for explosives rather than the root-mean-square sound pressure level (SPL_{rms}), which is used for behavior thresholds for all other sources. NMFS's behavior thresholds also are based on SPL_{rms} for all other sources.
[27] Including certain gunnery exercises that have several detonations of small munitions occurring within a few seconds.
[28] Takes for which were authorized under AFTT Phase III compliance documents, and ship shock trial activities for which the Navy conducted.
[29] With net explosive weights of 500 to 650 lbs (Bin E11) and 7,250 to 14,500 lbs (Bins E16), respectively, for Phase IV activities.

Figure M.3-5: Marine Mammal Commission Comment (continued)

received levels below the TTS threshold (85 Fed. Reg. 72325), a lack of evidence, particularly when concerted monitoring has not occurred in the Level B harassment zones during detonations, does not mean that takes have not occurred. Behavior takes from numerous types of activities have not been documented, but the Navy and in turn NMFS presumes that they could occur—essentially for all Navy acoustic sources but low- and mid-frequency active sonar. Given the lack of justification for continuing to ascribe validity to assumptions that clearly are not based on best available science, the Commission recommends that the Navy include behavior takes of marine mammals during *all* explosive activities, including those that involve single detonations and gunnery exercises that have several detonations occurring within a few seconds, in the FEIS and its LOA application and invest additional resources in conducting behavioral response studies on marine mammals' responses[30], including pinnipeds, to underwater detonations for the derivation of explosive BRFs.

Avoidance and other NAEMO limitations

Avoidance—NAEMO does not use moving animats for estimating avoidance, as it does moving sound sources for the propagation model (Department of the Navy 2024b). NAEMO simply simulates an animat moving away from a sound source by mathematically reducing the received SPLs of individual exposures based on a spherical spreading calculation for the source(s) present on each unique platform. Avoidance speeds and durations were informed by a review of available exposure and baseline data (Department of the Navy 2024b). In prior Phases, avoidance was not modeled in NAEMO. Instead, 95 percent of the takes for permanent threshold shift (PTS), now referred to as AINJ, predicted by NAEMO were assumed to be reduced to TTS due to avoidance (Department of the Navy 2017b). This reduction was based on the assumption that an animal avoided the AINJ zone of a moving MF1 source (i.e., a hull-mounted surface ship sonar as defined in NAEMO).

Department of the Navy (2024b) did not justify why spherical spreading was used rather than the propagation loss resulting from NAEMO modeling for each individual event. The Navy did however specify swim speeds that were used for the various groups for avoidance (see Table 5 in Department of the Navy 2024b). Some of the assumed avoidance speeds are greater than were noted in the underlying references. For example, Table 8 specified that Kastelein et al. (2018) was one of the references for harbor porpoise avoidance speeds. Even though Table 8 did not specify the speed, Kastelein et al. (2018) indicated that the highest sustainable swim speed for a harbor porpoise responding to pile-driving activities was 7.1 km/hr (or 1.97 m/s). The other harbor porpoise swim speeds mentioned were not sustainable for the duration of a Navy acoustic activity, while the baseline speed specified was 1.5 m/s (Table 8 in Department of the Navy 2024b). As such, it is unclear how a sustained swim speed of 3 m/s can be justified for harbor porpoises. Further, the baseline swim speed in Table 8 for otariids was 0.8 m/s, 0.4 m/s for harbor seals, and less than 1.7 m/s for northern elephant seals. No swim speeds were available for avoiding sound sources. Given that harbor seals comprise the vast majority of the phocid takes and swim speeds for a given group should be based on the slower species, pinniped swim speeds should have been no more than 1 m/s. For these reasons, the Commission recommends that the Navy use an avoidance swim speed of no more than 2 m/s for harbor porpoises and 1 m/s for pinnipeds and revise the NAEMO modeling and take estimates appropriately for the FEIS and LOA application.

[30] Living Marine Resources has provided funding for a few opportunistic studies involving behavioral response of cetaceans exposed to underwater detonations (Falcone et al. 2024).

Figure M.3-5: Marine Mammal Commission Comment (continued)

Moving animats, as well as animat-based avoidance behavior, has been modeled for quite some time. The Navy funded the development of the publicly-available Marine Mammal Movement and Behavior (3MB)[31] model 25 years ago (Houser and Cross 1999, Houser 2006) that incorporated moving animats and avoidance behavior. Although never included in NAEMO, 3MB has been modified over the years to be used for geophysical surveys (Zeddies 2015) and is currently used as the basis for animat modeling that is conducted for offshore wind activities (e.g., Denes et al. 2020, Küsel et al. 2022). Since NAEMO's current animat modeling and avoidance processes are not considered best available science, the Commission recommends that the Navy incorporate moving animats that can actively avoid sound sources based on species-specific dive profiles and swim speeds for Phase V activities and, if that is not feasible, incorporate species-specific swim speeds and the actual modeled sound propagation to simulate avoidance for a given event into NAEMO.

Repeated exposures—For Phase IV activities, the Navy has again used relative proportions or percentages of the stock to estimate impacts on individuals from repeated exposures and population-level consequences, which ultimately inform negligible impact determinations[32] under the Marine Mammal Protection Act (Department of the Navy 2024b). It is unclear why the Navy has not used NAEMO to model multi-day events or multiple single-day events that would provide information regarding repeated exposures of individuals by querying the animat dosimeters. This seems fairly basic, with something similar having been conducted for geophysical and geological activities in the Gulf of Mexico in 2015 (Zeddies et al. 2015 and 2017). To better assess repeated exposures of individuals and population-level consequences, the Commission recommends that the Navy use NAEMO to conduct modeling of both multi-day events and multiple single-day events to estimate the number of repeated exposures an individual is expected to incur.

Explosive propagation modeling—For Phase II activities, the Navy used its Refraction in Multilayered Ocean/Ocean Bottoms with Shear Wave Effects (REFMS) model to estimate sound propagation associated with underwater detonations. However, the Navy has since used Comprehensive Acoustic Simulation System/Gaussian Ray Bundle (CASS/GRAB) and a similitude equation to model underwater detonations for Phase III and IV activities (Department of the Navy 2017b, Department of the Navy 2024b). The Navy indicated that CASS/GRAB was approved by the Ocean and Atmospheric Master Library (OAML)[33], could vary environmental parameters with range, had a built-in absorption model, and was more numerically stable than REFMS (Department of the Navy 2017b). Although those assertions may be correct, the Navy also has used its Range-Dependent Acoustic Model (RAM) and the Navy's Standard Parabolic Equation (PE) model for non-impulsive sources with frequencies of less than 100 Hz[34] and for water depths of less than 50 m (Department of the Navy 2024b). It is unclear why RAM/PE was not used for underwater detonations that would occur in waters 50 m or less, where CASS/GRAB generally is not used. Further, Department of the Navy (2024b) specified that the similitude equation is valid only over a range of pressures equating to a NEW of up to 28.8 lbs.

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[31] http://oalib.hlsresearch.com/Sound%20and%20Marine%20Mammals/3MB%20HTML.htm.
[32] As well as small numbers determinations for construction activities conducted by the Navy.
[33] The Commission notes that CASS/GRAB is OAML-approved only for frequencies higher than 100 Hz per Department of the Navy (2017b). The Navy just uses it down to 25 Hz for impulsive sources.
[34] The main portion of an underwater detonation's energy occurs at frequencies less than 100 Hz.

Figure M.3-5: Marine Mammal Commission Comment (continued)

Department of the Navy (2017b and 2024b) did indicate that the CASS/GRAB modeling process compared favorably with in-situ data, but the data were for small explosives at short ranges (i.e., no larger than 15-lb charges in less than 5 m of water at a range of hundreds of meters[35]; Deavenport and Gilchrest 2015). Department of the Navy (2017b) specified that data for large explosions *and* at long ranges were needed to fully validate the model. During the most recent ship shock trials off the east coast of Florida in 2021, some such data were collected. Seger et al. (2023) collected in-situ measurements of the three individual shots of a NEW of up to 58,000 lbs fired near the USS Gerald R. Ford for the purpose of validating NAEMO propagation models. The researchers conducted their own modeling using the Peregrine version of RAM/PE for optimal placement of the acoustic recorders and to compare with the in-situ measurements.

The measured sound levels exceeded what the Navy had estimated for Phase III modeling for the ship shock trials (Bin E17 in Tables 9-15 to 9-22 in Department of the Navy 2017b) by orders of magnitude[36]. For example, the maximum volume modeled out to a radius of 201 km was exceeded for both the SPL_{peak} and SEL_{cum} metrics for PTS and TTS for LF cetaceans[37] (Table 12 in Seger et al. 2023), the largest range of which was estimated by NAEMO to be 47 km. Since the Navy has yet to conduct a rigorous comparison between the radii provided by NAEMO and those measured in-situ, the total amount NAEMO had underestimated the zones is unknown. However, Seger et al. (2023) noted in Table 12 that the impact volumes for PTS and TTS were 16.5 times as large as the Grand Canyon and 1/40th the size of the Gulf of Mexico[38]. The researchers also noted that the sound energy from the 2016 ship shock trial of only 10–11,000 lbs reached Ascension Island[39] nearly 8,200 km away at received levels of 135 dB re 1 µPa, thus the far field was a relatively very far distance in that context. For the USS Ford ship shock trial, the maximum received level at the Ascension Island hydrophones was 157 dB re 1 µPa (Seger et al. 2023). The Commission recommends that the Navy conduct a rigorous comparison of CASS/GRAB and the similitude equation and the in situ measurements of the USS Ford ship shock trial from Seger et al. (2023) to fulfill the intent of the project. Given the comparability of the modeled zones from the Peregrine version of RAM/PE to the measured values and that RAM/PE is already used by the Navy for modeling non-impulsive sources that operate at less than 100 Hz and in shallow water, the Commission further recommends that the Navy use RAM/PE to model all underwater detonations for Phase IV activities for which modeling has not been completed and for all Phase V activities, until such time that CASS/GRAB and the similitude equation have been validated for the range of detonation sizes and environmental parameters (water depth and receiver range) in which it would be used.

Seger et al. (2023) also were tasked with determining whether vocal activity of odontocetes and mysticetes differed before and after each shot of the ship shock trial. Odontocete vocal activity decreased at four recorders, increased at two recorders, and remained the same at seven recorders.

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[35] Parameters which are exceeded by modeled scenarios for even the smallest detonations, Bin E1 (i.e., see Table 2.5-9 in Appendix E of the DEIS).
[36] The Peregrine modeled received levels at the various monitoring device locations were comparable to measured values (Seger et al. 2023).
[37] For unknown reasons, Seger et al. (2023) used the 160 dB re 1 uPa threshold as the behavior threshold. The Navy has never used that threshold to estimate the range to behavioral response for underwater detonations.
[38] For reference, Department of Navy (2017b) estimated that the TTS zone for the SEL_{cum} threshold was 3.7 km for MF cetaceans.
[39] Where Comprehensive Nuclear-Test-Ban Treaty Organization hydrophones are installed.

Figure M.3-5: Marine Mammal Commission Comment (continued)

Mysticete vocal activity decreased at eight recorders, increased at one recorder, and remained the same at four recorders. Certain vocal activity changes were statistically significant. Although Seger et al. (2023) did not provide ranges from each of the detonations to the recorders, some recorders were very likely beyond the range of TTS for LF cetaceans and most definitely beyond the range of TTS for MF cetaceans (47.4 km and 6 km, respectively; Department of the Navy 2017b). Thus, contrary to the Navy and NMFS's continued presumption, behavioral responses do in fact occur at ranges beyond TTS for single detonations.

Pile-driving calculations—The Navy indicated that, based on the best available science regarding animal reactions to sound, selecting a reasonable accumulation period was necessary to accurately reflect the period that an animal is likely to be exposed to the sound (Department of the Navy 2024b). The Navy chose a 5-minute accumulation time for the SEL_{cum} thresholds for AINJ and TTS, because most marine mammals should be able to easily move away from the expanding AINJ and TTS zones within that timeframe, especially considering that soft-start procedures may warn the animals. The Navy also suggested that the animal could avoid the zone altogether if it is outside the immediate area when pile driving begins. Those assumptions may hold if an animal avoids pile-driving activities, but many times, certain species such as pinnipeds and bottlenose dolphins do not avoid the activities. As such, the assumed 5-min accumulation time would be insufficient. Since the Navy currently has 13 active incidental take authorizations for construction activities and has had at least 35 incidental take authorizations issued in the last 10 years, it should be able to review its monitoring data to determine whether a 5-minute accumulation time is sufficient for species that are known to remain near pile-driving activities. The Commission recommends that the Navy review its previous monitoring reports for both construction activities and any pile-driving activities associated with AFTT Phase I, II, or III FEISs to estimate the mean time an animal is expected to remain near a pile-driving activity and revise the accumulation time, range to effects, and numbers of takes accordingly for the FEIS and LOA application.

Mitigation measures

Mitigation Areas—Various mitigation areas in the AFTT study area were informed by biologically important areas (BIAs), critical habitat, important habitat, etc. for Phase III activities. BIAs in particular are of known importance for reproduction, feeding, or migration or are areas where small and resident populations are known to occur (see Harrison et al. 2023 for details). The BIAs for the Atlantic Ocean and Gulf of Mexico currently are in draft form and have not yet been incorporated into Navy compliance documents for Phase IV activities. However, the draft BIAs specifically for North Atlantic right whales and Rice's whales have been provided to the Navy and NMFS. Those draft BIAs vary from, and in some cases are larger than, the various North Atlantic Right Whale Mitigation Areas (LaBrecque et al. in prep) and the Gulf of Mexico Rice's Whale Mitigation Area (LaBrecque et al. in prep). The Commission understands that the other draft BIAs will be provided to the Navy and NMFS in the coming months. The Commission recommends that, in the FEIS and LOA application, the Navy (1) ensure that the Gulf of Mexico Rice's Whale Mitigation Area encompasses the Rice's whale parent BIA, (2) consider the new delineations for the North Atlantic right whale feeding, migrating, and most importantly reproductive BIAs and expand the various North Atlantic Right Whale Mitigation Areas as needed, (3) ensure that the Ship Shock Trial Mitigation Areas are at least 5 nmi beyond the boundaries of the Rice's whale parent and child BIAs and all of the North Atlantic right whale BIAs, and (4) evaluate whether any of the draft BIAs for the other marine mammal species should inform expansion of or additional mitigation areas.

Figure M.3-5: Marine Mammal Commission Comment (continued)

Passive acoustic monitoring—The Navy proposed to use information from passive acoustic detections (presumably from instrumented ranges, sonobuoys, etc.) to inform visual observations of lookouts when passive acoustic devices are already being used in events involving active acoustic sources (Table 5.6-1 in the DEIS). Given that visual observations by Navy lookouts have proven to be ineffective (Oedekoven and Thomas 2022)—such that the Navy has removed any 'credit' for mitigation implementation from the Phase IV DEIS and other compliance documents—the Navy's currently proposed mitigation measure that still relies on a lookout's visual observations is insufficient. Passive acoustic monitoring via range instrumentation, and sonobuoys, has reached the level of performance needed for use during military readiness activities (e.g., Department of the Navy 2013 and 2014, U.S. Air Force (USAF) 2016), contrary to the Navy's stance that they have not. The Navy's mitigation measures have yet to be supplemented from a technology standpoint[40] beyond those measures proposed for TAP I activities more than 15 years ago. Although the DEIS indicated that many of the technologies have yet to reach the level of performance needed for deployment during military readiness activities, many are and have been used by the Department of National Defence (DND) in Canada[41] to supplement detections when there are visual monitoring limitations (Binder et al. 2021, Thomson and Binder 2021, Binder et al. 2024). Therefore, the Commission remains skeptical of the Navy's insistence in the DEIS that use of passive acoustic monitoring is impractical as a precise real-time indicator of a marine mammal's location for mitigation implementation absent a confirmed visual sighting. The Commission recommends that the Navy use its instrumented ranges and sonobuoys to localize marine mammals and implement the relevant mitigation measures during active acoustic events for Phase IV activities, take a harder look at the technologies that the Canadian DND use during its at-sea activities, and incorporate accordingly for other Phase IV DEISs.

The Navy also proposed to use passive acoustic detections to inform lookouts prior to the initiating detonations only if the passive acoustic devices are already being used during the event. Passive acoustic monitoring was required for explosive sonobuoys, explosive torpedoes, and sinking exercises for Phase III and prior activities, including in NMFS's final rules. The effectiveness of passive acoustic devices has not diminished nor has use of the devices become impracticable. Thus, requirements to use passive acoustic devices should be included for Phase IV explosive sonobuoys, explosive torpedoes, and sinking exercises as well. It is unclear why passive acoustic monitoring, particularly the use of expendable sonobuoys, has not been a requirement before for ship shock trials. The Commission recommends that the Navy include the use of passive acoustic monitoring prior to and during activities involving explosive sonobuoys, explosive torpedoes, sinking exercises, and ship shock trials for Phase IV activities in the FEIS and its LOA application.

Further, since passive acoustic monitoring is not required for surface detonations[42] (i.e., air-to-surface explosive bombs, missiles, rockets), multiple sonobuoys could be deployed with a surface target prior to an activity to better determine whether the target area is clear and remains clear until the munition is launched. This would supplement any pre-activity visual observations for air-to-

[40] In fact, over the years some mitigation measures have been removed (i.e., surface-to-surface projectiles, passive acoustic monitoring requirements for certain explosive activities) and some of the mitigation zones have been reduced in size (i.e., explosive mine neutralization exercises not involving positive control).
[41] i.e., automated passive acoustic monitoring via fixed hydrophones, mobile autonomous systems, and sonobuoys; detection and tracking capabilities using bottom-mounted hydrophones on instrumented ranges; electro-optical, infrared, and space-based detection methods to supplement naked-eye monitoring.
[42] Mitigation is not required to be implemented at all for surface-to-surface detonations.

Figure M.3-5: Marine Mammal Commission Comment (continued)

surface exercises and would serve as the only mitigation measure for surface-to-surface detonations[43]. Specifically, Directional Frequency Analysis and Recording (DIFAR) sonobuoys[44] provide both range and bearing to vocalizing animals, can determine an animal's location and confirm its presence in a mitigation zone, and are routinely used by the Navy.

The Navy itself has drawn attention to the success of using sonobuoys to detect bottlenose dolphins in real-time during mine exercises, provides sonobuoys to researchers for the same purpose of detecting and localizing marine mammals[45], and has highlighted numerous instances of various types of sonobuoys being used to detect and localize baleen whales, delphinids, and beaked whales[67]. A broadband repertoire of frequencies, as well as narrow-band frequencies, can be monitored by sonobuoys. For these reasons, the Commission again recommends that the Navy include the use of passive acoustic devices (i.e., DIFAR and other types of passive sonobuoys, operational hydrophones) prior to air-to-surface and surface-to-surface explosive bomb, missile, and rocket exercises to detect marine mammals and implement the necessary mitigation measures in the FEIS and LOA application and, when sonobuoys are used, deploy them at the same time as the surface target.

Other mitigation measures—The Commission notes that mitigation measures for air-to-surface explosive large-caliber gunnery exercises[46] are lacking for Phase IV activities. Mitigation measures also are lacking for surface-to-surface activities involving explosive medium-caliber projectiles. The mitigation measures are similar to those included for explosive gunnery exercises for air-to-surface medium-caliber projectiles in Table 5.6-2 of the DEIS, except the mitigation zones were 600 yards for surface-to-surface activities using explosive medium-caliber projectiles and 1,000 yards for surface-to-surface activities using explosive large-caliber projectiles for Phase III activities. The Navy eliminated mitigation measures for surface-to-surface missiles and rockets (see Table 5.9-1 in the DEIS), but those measures should not have been eliminated for surface-to-surface explosive medium- and large-caliber projectiles. Given that the measures have been deemed practicable for Phase III and previous activities, the Commission recommends that the Navy include a 600-yard and 1,000-yard mitigation zone for surface-to-surface activities using explosive medium- and large-caliber projectiles, respectively, in the FEIS and its LOA application.

For Phase III and previous activities, the Navy would delay and/or move activities if floating vegetation or jellyfish[47] were observed in the relevant mitigation zone for active acoustic sources, pile driving, airguns, and explosive activities. Chapter 5 in the DEIS makes note of floating vegetation and jellyfish but does not specify what measures, if any, would be implemented if either

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[43] The Navy indicated in the DEIS that mitigation would not be effective for vessel-deployed missiles and rockets because of the distance between the firing platform and target location and it would not be possible for vessels to conduct close-range observations due to the length of time (and associated operational costs and exercise delays) it would take to complete observations and then transit back to the firing position (typically 28 to 139 km each way).
[44] And other types of passive (e.g., Vertical Line Array Directional Frequency Analysis and Recording (VLAD)) and active (Directional Command Active Sonobuoy System (DICASS) and the Multistatic Active Coherent (MAC) system and Air Deployed Active Receiver (ADAR)) sonobuoys.
[45] Including DIFAR sonobuoys, which have an upper frequency cutoff of 2.4 kHz, and other types of sonobuoys, including omnidirectional sonobuoys that have a higher frequency cutoff. https://www.navymarinespeciesmonitoring.us/files/4714/0069/6940/Spr14_Sonobuoys_Reasearch_Monitoring.pdf.
[46] For the projectiles themselves. Mitigation measures for explosive and non-explosive large-caliber gunnery firing noise is included in Table 5.6-2 of the DEIS.
[47] That the Navy has historically used as a proxy for the potential presence of marine mammals.

Figure M.3-5: Marine Mammal Commission Comment (continued)

were to be observed during a given activity. The Commission recommends that the Navy include the requirement to delay, relocate, or cease activities if floating vegetation or jellyfish are observed in the mitigation zone during activities involving active acoustic sources, pile driving, airguns, and explosives consistent with Phase III mitigation measures in the FEIS and LOA application.

In addition, the Navy removed the requirement for lookouts to wear polarized sunglasses in the Inshore Manatee and Sea Turtle Mitigation Areas (Table 5.8-1 in the DEIS). The Navy instead will *encourage* lookouts to use polarized sunglasses. Polarized sunglasses are more effective at observing submerged manatees and sea turtles than non-polarized sunglasses and are clearly practicable and not cost-prohibitive. It seems a bit absurd that such a minor 'technology' has been proposed to be removed as a requirement. The Commission recommends that the Navy include the requirement that lookouts wear polarized sunglasses in the Inshore Manatee and Sea Turtle Mitigation Areas to better implement the required mitigation measures in the FEIS and Biological Assessment submitted under the Endangered Species Act.

For ship shock trials, the Navy indicated that, if an incident involving a marine mammal is observed after an individual detonation, it would follow established incident reporting procedures and halt any remaining detonations until the Navy can consult with NMFS and review or adapt the mitigation plan. It is unclear why such a measure would not apply to all activities. The Commission recommends that the Navy cease any active acoustic, explosive, pile driving, or airgun activity if a marine mammal is observed to be injured or killed during or immediately after the activity and consult with NMFS to review or adapt the mitigation measures, as necessary.

The Commission appreciates the opportunity to provide comments on the Navy's DEIS for training and testing activities conducted within the AFTT study area. Most, if not all, of the Commission's recommendations would apply to the Navy's LOA application as well and should be considered as such. Please contact me if you have questions concerning the Commission's recommendations or rationale.

Sincerely,

Peter O Thomas

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Figure M.3-5: Marine Mammal Commission Comment (continued)

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Addendum

The following are some of the errors, inconsistencies, or missing information observed in Tables 21–24, Figures 43–45, and Table E-1 of Department of the Navy (2024a). These issues should be addressed and the various tables, figures, and accompanying text should be revised accordingly.

Table 21—

- The range of response received levels (RLs) for bottlenose whales was 117–130 dB re 1 µPa in Table 21, while Table E-1 noted RLs of 127.2–128 dB re 1 µPa in Table E-1.
- The range of exposure RLs in Table 21 for Cuvier's and Baird's beaked whales from the Southern California Behavioral Response Study (SOCAL BRS) was 91–43 dB re 1 µPa, which is not an appropriate range. Table E-1 noted 138 dB re 1 µPa as the highest exposure RL for Cuvier's and Baird's beaked whales from the SOCAL BRS.
- Table 21 indicated that 9 significant responses occurred for harbor porpoises, while Table E-1 specified only 8 significant responses.
- Table 21 and the executive summary indicated that the response RLs for all species ranged from 95–138.4 dB re 1 µPa, while Table E-1 indicated a range of 98–138 dB re 1 µPa.

Table 22—

- The range of response RLs for killer whales was 94–164 dB re 1 µPa in Table 22, while Table E-1 noted a range of 94–161 dB re 1 µPa. The distances of responses for killer whales were 0.4–2.5 km in Table 22, while the distances at a response were 0.7–8.9 km in Table E-1.
- The number of significant exposures for sperm whales was 15 in Table 22, while only 14 are noted in Table E-1[48]. The distances of responses for sperm whales were 0.65–12.3 km in Table 22, while the distances at a response were 1.8–12.3 km in Table E-1.
- The range of response RLs for pilot whales was 115–159 dB re 1 µPa in Table 22, while Table E-1 noted a range of 114–152 dB re 1 µPa. The distances of responses for pilot whales were 0.08–0.3 km in Table 22, while the distances at a response were 0.09–6.2 km in Table E-1.

Table 23—

- The number of significant exposures for hooded seals was 12 in Table 23, while only 4 are noted in Table E-1. The range of response RLs for hooded seals was 161–170 dB re 1 µPa in Table 23, while Table E-1 noted a range of 165–170 dB re 1 µPa.

Table 24—

- The range of response RLs for blue whales from the SOCAL BRS was 105–143 dB re 1 µPa in Table 24, while Table E-1 noted a range of 111–146 dB re 1 µPa.
- The range of exposure RLs for fin whales from the SOCAL BRS was 110–161 dB re 1 µPa in Table 24, while Table E-1 noted a range of 104–156 dB re 1 µPa.
- The response RL for minke whales from the 3S project was 146 dB re 1 µPa at 4.5 km in Table 42, while Table E-1 noted a response RL of 138 dB re 1 µPa at less than 8 km.

[48] Since the Navy confirmed that it did not consider Sw_17_182a exposed to low LFAS to have exhibited a significant response.

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- The number of significant exposures for humpback whales from the 3S project was 4 in Table 24, while 5 exposures are noted in Table E-1. The distances of responses for humpback whales were 0.1–0.4 km in Table 24, while the distances at a response were 0.81–0.98 km in Table E-1.

Figure 43—

- Although nine exposure RLs with accompanying distances were included in the figure, of the nine exposures in Table E-1 three of the Cuvier's beaked whale exposures do not have distances denoted. Also, animals Ha12_176a and bb12_214a were not included in the figure, and it is unclear where the exposures from 140–155 dB re 1 µPa originated because the RLs in Table E-1 are all less than or equal to 138 dB re 1 µPa. Further, no data in Table E-1 represent distances at or around 60 km, as denoted in the figure.

Figure 44—

- The figure specified that 101 exposures were included, whereas only 97 exposures were included in Table E-1. Given the number of exposures included in the figure, its accuracy based on Table E-1 cannot be assessed.

Figure 45—

- The figure specified that 85 exposures were included, whereas only 79 exposures were included in Table E-1.
- Animal bw_193a was not included in the figure, and Animal bp_075a was incorrectly denoted at 47 rather than 57 km.

Table E-1—

- The relevant data on Blainville's beaked whales from Tyack et al. (2011), Moretti et al. (2014) and Jacobson et al. (2022) were not included in the table. At a minimum, the 10 data points that were randomly subsampled from the Moretti et al. (2014) and Jacobson et al. (2022) dose response functions should have been included in the table.
- Data from the minke whale from the SOCAL BRS from Kvadsheim et al. (2017) was not included in the table.
- The distances at a response are included as '?' for Cuvier's and Baird's beaked whales from the SOCAL BRS, while 2–5 km is provided in Table 21 for the distances of responses.
- The raw data were included in the table for bottlenose dolphins and California sea lions from Houser et al. (2013a, b) rather than the subsampled data from the dose response functions that the Navy derived specifically from the moderate and severe responses of the dolphins and sea lions.

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Passive acoustic monitoring—The Navy proposed to use information from passive acoustic detections (presumably from instrumented ranges, sonobuoys, etc.) to inform visual observations of lookouts when passive acoustic devices are already being used in events involving active acoustic sources (Table 5.6-1 in the DEIS). Given that visual observations by Navy lookouts have proven to be ineffective (Oedekoven and Thomas 2022)—such that the Navy has removed any 'credit' for mitigation implementation from the Phase IV DEIS and other compliance documents—the Navy's currently proposed mitigation measure that still relies on a lookout's visual observations is insufficient. Passive acoustic monitoring via range instrumentation, and sonobuoys, has reached the level of performance needed for use during military readiness activities (e.g., Department of the Navy 2013 and 2014, U.S. Air Force (USAF) 2016), contrary to the Navy's stance that they have not. The Navy's mitigation measures have yet to be supplemented from a technology standpoint[40] beyond those measures proposed for TAP I activities more than 15 years ago. Although the DEIS indicated that many of the technologies have yet to reach the level of performance needed for deployment during military readiness activities, many are and have been used by the Department of National Defence (DND) in Canada[41] to supplement detections when there are visual monitoring limitations (Binder et al. 2021, Thomson and Binder 2021, Binder et al. 2024). Therefore, the Commission remains skeptical of the Navy's insistence in the DEIS that use of passive acoustic monitoring is impractical as a precise real-time indicator of a marine mammal's location for mitigation implementation absent a confirmed visual sighting. The Commission recommends that the Navy use its instrumented ranges and sonobuoys to localize marine mammals and implement the relevant mitigation measures during active acoustic events for Phase IV activities, take a harder look at the technologies that the Canadian DND use during its at-sea activities, and incorporate accordingly for other Phase IV DEISs.

The Navy also proposed to use passive acoustic detections to inform lookouts prior to the initiating detonations only if the passive acoustic devices are already being used during the event. Passive acoustic monitoring was required for explosive sonobuoys, explosive torpedoes, and sinking exercises for Phase III and prior activities, including in NMFS's final rules. The effectiveness of passive acoustic devices has not diminished nor has use of the devices become impracticable. Thus, requirements to use passive acoustic devices should be included for Phase IV explosive sonobuoys, explosive torpedoes, and sinking exercises as well. It is unclear why passive acoustic monitoring, particularly the use of expendable sonobuoys, has not been a requirement before for ship shock trials. The Commission recommends that the Navy include the use of passive acoustic monitoring prior to and during activities involving explosive sonobuoys, explosive torpedoes, sinking exercises, and ship shock trials for Phase IV activities in the FEIS and its LOA application.

Further, since passive acoustic monitoring is not required for surface detonations[42] (i.e., air-to-surface explosive bombs, missiles, rockets), multiple sonobuoys could be deployed with a surface target prior to an activity to better determine whether the target area is clear and remains clear until the munition is launched. This would supplement any pre-activity visual observations for air-to-

[40] In fact, over the years some mitigation measures have been removed (i.e., surface-to-surface projectiles, passive acoustic monitoring requirements for certain explosive activities) and some of the mitigation zones have been reduced in size (i.e., explosive mine neutralization exercises not involving positive control).
[41] i.e., automated passive acoustic monitoring via fixed hydrophones, mobile autonomous systems, and sonobuoys; detection and tracking capabilities using bottom-mounted hydrophones on instrumented ranges; electro-optical, infrared, and space-based detection methods to supplement naked-eye monitoring.
[42] Mitigation is not required to be implemented at all for surface-to-surface detonations.

Figure M.3-5: Marine Mammal Commission Comment (continued)

surface exercises and would serve as the only mitigation measure for surface-to-surface detonations[43]. Specifically, Directional Frequency Analysis and Recording (DIFAR) sonobuoys[44] provide both range and bearing to vocalizing animals, can determine an animal's location and confirm its presence in a mitigation zone, and are routinely used by the Navy.

The Navy itself has drawn attention to the success of using sonobuoys to detect bottlenose dolphins in real-time during mine exercises, provides sonobuoys to researchers for the same purpose of detecting and localizing marine mammals[45], and has highlighted numerous instances of various types of sonobuoys being used to detect and localize baleen whales, delphinids, and beaked whales[67]. A broadband repertoire of frequencies, as well as narrow-band frequencies, can be monitored by sonobuoys. For these reasons, the Commission again recommends that the Navy include the use of passive acoustic devices (i.e., DIFAR and other types of passive sonobuoys, operational hydrophones) prior to air-to-surface and surface-to-surface explosive bomb, missile, and rocket exercises to detect marine mammals and implement the necessary mitigation measures in the FEIS and LOA application and, when sonobuoys are used, deploy them at the same time as the surface target.

Other mitigation measures—The Commission notes that mitigation measures for air-to-surface explosive large-caliber gunnery exercises[46] are lacking for Phase IV activities. Mitigation measures also are lacking for surface-to-surface activities involving explosive medium-caliber projectiles. The mitigation measures are similar to those included for explosive gunnery exercises for air-to-surface medium-caliber projectiles in Table 5.6-2 of the DEIS, except the mitigation zones were 600 yards for surface-to-surface activities using explosive medium-caliber projectiles and 1,000 yards for surface-to-surface activities using explosive large-caliber projectiles for Phase III activities. The Navy eliminated mitigation measures for surface-to-surface missiles and rockets (see Table 5.9-1 in the DEIS), but those measures should not have been eliminated for surface-to-surface explosive medium- and large-caliber projectiles. Given that the measures have been deemed practicable for Phase III and previous activities, the Commission recommends that the Navy include a 600-yard and 1,000-yard mitigation zone for surface-to-surface activities using explosive medium- and large-caliber projectiles, respectively, in the FEIS and its LOA application.

For Phase III and previous activities, the Navy would delay and/or move activities if floating vegetation or jellyfish[47] were observed in the relevant mitigation zone for active acoustic sources, pile driving, airguns, and explosive activities. Chapter 5 in the DEIS makes note of floating vegetation and jellyfish but does not specify what measures, if any, would be implemented if either

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[43] The Navy indicated in the DEIS that mitigation would not be effective for vessel-deployed missiles and rockets because of the distance between the firing platform and target location and it would not be possible for vessels to conduct close-range observations due to the length of time (and associated operational costs and exercise delays) it would take to complete observations and then transit back to the firing position (typically 28 to 139 km each way).
[44] And other types of passive (e.g., Vertical Line Array Directional Frequency Analysis and Recording (VLAD)) and active (Directional Command Active Sonobuoy System (DICASS) and the Multistatic Active Coherent (MAC) system and Air Deployed Active Receiver (ADAR)) sonobuoys.
[45] Including DIFAR sonobuoys, which have an upper frequency cutoff of 2.4 kHz, and other types of sonobuoys, including omnidirectional sonobuoys that have a higher frequency cutoff. https://www.navymarinespeciesmonitoring.us/files/4714/0069/6940/Spr14_Sonobuoys_Reasearch_Monitoring.pdf.
[46] For the projectiles themselves. Mitigation measures for explosive and non-explosive large-caliber gunnery firing noise is included in Table 5.6-2 of the DEIS.
[47] That the Navy has historically used as a proxy for the potential presence of marine mammals.

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were to be observed during a given activity. The Commission recommends that the Navy include the requirement to delay, relocate, or cease activities if floating vegetation or jellyfish are observed in the mitigation zone during activities involving active acoustic sources, pile driving, airguns, and explosives consistent with Phase III mitigation measures in the FEIS and LOA application.

In addition, the Navy removed the requirement for lookouts to wear polarized sunglasses in the Inshore Manatee and Sea Turtle Mitigation Areas (Table 5.8-1 in the DEIS). The Navy instead will *encourage* lookouts to use polarized sunglasses. Polarized sunglasses are more effective at observing submerged manatees and sea turtles than non-polarized sunglasses and are clearly practicable and not cost-prohibitive. It seems a bit absurd that such a minor 'technology' has been proposed to be removed as a requirement. The Commission recommends that the Navy include the requirement that lookouts wear polarized sunglasses in the Inshore Manatee and Sea Turtle Mitigation Areas to better implement the required mitigation measures in the FEIS and Biological Assessment submitted under the Endangered Species Act.

For ship shock trials, the Navy indicated that, if an incident involving a marine mammal is observed after an individual detonation, it would follow established incident reporting procedures and halt any remaining detonations until the Navy can consult with NMFS and review or adapt the mitigation plan. It is unclear why such a measure would not apply to all activities. The Commission recommends that the Navy cease any active acoustic, explosive, pile driving, or airgun activity if a marine mammal is observed to be injured or killed during or immediately after the activity and consult with NMFS to review or adapt the mitigation measures, as necessary.

The Commission appreciates the opportunity to provide comments on the Navy's DEIS for training and testing activities conducted within the AFTT study area. Most, if not all, of the Commission's recommendations would apply to the Navy's LOA application as well and should be considered as such. Please contact me if you have questions concerning the Commission's recommendations or rationale.

Sincerely,

Peter O Thomas

Peter O. Thomas, Ph.D.,
Executive Director

cc: Jolie Harrison, National Marine Fisheries Service
Amy Scholik-Schlomer, National Marine Fisheries Service
Ron Salz, National Marine Fisheries Service
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Figure M.3-5: Marine Mammal Commission Comment (continued)

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Figure M.3-5: Marine Mammal Commission Comment (continued)

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Addendum

The following are some of the errors, inconsistencies, or missing information observed in Tables 21–24, Figures 43–45, and Table E-1 of Department of the Navy (2024a). These issues should be addressed and the various tables, figures, and accompanying text should be revised accordingly.

Table 21—

- The range of response received levels (RLs) for bottlenose whales was 117–130 dB re 1 µPa in Table 21, while Table E-1 noted RLs of 127.2–128 dB re 1 µPa in Table E-1.
- The range of exposure RLs in Table 21 for Cuvier's and Baird's beaked whales from the Southern California Behavioral Response Study (SOCAL BRS) was 91–43 dB re 1 µPa, which is not an appropriate range. Table E-1 noted 138 dB re 1 µPa as the highest exposure RL for Cuvier's and Baird's beaked whales from the SOCAL BRS.
- Table 21 indicated that 9 significant responses occurred for harbor porpoises, while Table E-1 specified only 8 significant responses.
- Table 21 and the executive summary indicated that the response RLs for all species ranged from 95–138.4 dB re 1 µPa, while Table E-1 indicated a range of 98–138 dB re 1 µPa.

Table 22—

- The range of response RLs for killer whales was 94–164 dB re 1 µPa in Table 22, while Table E-1 noted a range of 94–161 dB re 1 µPa. The distances of responses for killer whales were 0.4–2.5 km in Table 22, while the distances at a response were 0.7–8.9 km in Table E-1.
- The number of significant exposures for sperm whales was 15 in Table 22, while only 14 are noted in Table E-1[48]. The distances of responses for sperm whales were 0.65–12.3 km in Table 22, while the distances at a response were 1.8–12.3 km in Table E-1.
- The range of response RLs for pilot whales was 115–159 dB re 1 µPa in Table 22, while Table E-1 noted a range of 114–152 dB re 1 µPa. The distances of responses for pilot whales were 0.08–0.3 km in Table 22, while the distances at a response were 0.09–6.2 km in Table E-1.

Table 23—

- The number of significant exposures for hooded seals was 12 in Table 23, while only 4 are noted in Table E-1. The range of response RLs for hooded seals was 161–170 dB re 1 µPa in Table 23, while Table E-1 noted a range of 165–170 dB re 1 µPa.

Table 24—

- The range of response RLs for blue whales from the SOCAL BRS was 105–143 dB re 1 µPa in Table 24, while Table E-1 noted a range of 111–146 dB re 1 µPa.
- The range of exposure RLs for fin whales from the SOCAL BRS was 110–161 dB re 1 µPa in Table 24, while Table E-1 noted a range of 104–156 dB re 1 µPa.
- The response RL for minke whales from the 3S project was 146 dB re 1 µPa at 4.5 km in Table 42, while Table E-1 noted a response RL of 138 dB re 1 µPa at less than 8 km.

[48] Since the Navy confirmed that it did not consider Sw_17_182a exposed to low LFAS to have exhibited a significant response.

Figure M.3-5: Marine Mammal Commission Comment (continued)

Naval Facilities Engineering Systems Command Atlantic
4 November 2024
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- The number of significant exposures for humpback whales from the 3S project was 4 in Table 24, while 5 exposures are noted in Table E-1. The distances of responses for humpback whales were 0.1–0.4 km in Table 24, while the distances at a response were 0.81–0.98 km in Table E-1.

Figure 43—

- Although nine exposure RLs with accompanying distances were included in the figure, of the nine exposures in Table E-1 three of the Cuvier's beaked whale exposures do not have distances denoted. Also, animals Ha12_176a and bb12_214a were not included in the figure, and it is unclear where the exposures from 140–155 dB re 1 µPa originated because the RLs in Table E-1 are all less than or equal to 138 dB re 1 µPa. Further, no data in Table E-1 represent distances at or around 60 km, as denoted in the figure.

Figure 44—

- The figure specified that 101 exposures were included, whereas only 97 exposures were included in Table E-1. Given the number of exposures included in the figure, its accuracy based on Table E-1 cannot be assessed.

Figure 45—

- The figure specified that 85 exposures were included, whereas only 79 exposures were included in Table E-1.
- Animal bw_193a was not included in the figure, and Animal bp_075a was incorrectly denoted at 47 rather than 57 km.

Table E-1—

- The relevant data on Blainville's beaked whales from Tyack et al. (2011), Moretti et al. (2014) and Jacobson et al. (2022) were not included in the table. At a minimum, the 10 data points that were randomly subsampled from the Moretti et al. (2014) and Jacobson et al. (2022) dose response functions should have been included in the table.
- Data from the minke whale from the SOCAL BRS from Kvadsheim et al. (2017) was not included in the table.
- The distances at a response are included as '?' for Cuvier's and Baird's beaked whales from the SOCAL BRS, while 2–5 km is provided in Table 21 for the distances of responses.
- The raw data were included in the table for bottlenose dolphins and California sea lions from Houser et al. (2013a, b) rather than the subsampled data from the dose response functions that the Navy derived specifically from the moderate and severe responses of the dolphins and sea lions.

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Figure M.3-5: Marine Mammal Commission Comment (continued)

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Figure M.3-5: Marine Mammal Commission Comment (continued)

OFFICE OF FEDERAL ACTIVITIES
WASHINGTON, D.C. 20460

November 6, 2024

Naval Facilities Engineering Systems Command Atlantic
Attention: Code EV22SG (AFTT EIS Project Managers)
6506 Hampton Boulevard
Norfolk, VA 23508–1278

Dear Sir/Madam,

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA) and the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency has reviewed the U.S. Navy's Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) for Atlantic Fleet Training and Testing (CEQ No. 20240164). The CAA Section 309 role is unique to EPA. It requires EPA to review and comment publicly on any proposed federal action subject to NEPA's environmental impact statement requirements.

The U.S. Navy in cooperation with the U.S. Coast Guard as a Joint Lead has prepared a Supplemental DEIS to the 2018 Final Atlantic Fleet Training and Testing EIS/OEIS. The purpose of the Proposed Action is to ensure the U.S. Naval Services, including the Coast Guard, are able to organize, train, and equip service members and personnel to meet their respective national defense missions as prescribed by Congress. The Preferred Alternative, which is also the environmentally preferable Action Alternative, reflects a representative year of training and testing to account for the natural fluctuations of training cycles, testing programs, and deployment schedules that generally limit the maximum level of training and testing that could occur in the reasonably foreseeable future.

The missions mentioned above are achieved in part by conducting military readiness activities within a Study Area in accordance with established Department of the Navy military readiness requirements. The Atlantic Fleet Training and Testing Study Area in this EIS/OEIS includes areas of the western Atlantic Ocean along the east coast of North America, Gulf of Mexico, and portions of the Caribbean Sea. It also includes Navy and Coast Guard pier-side locations and port transit channels, bays, harbors, inshore waterways, and civilian ports where training and testing activities occur as well as transits between homeports and operating areas. The U.S. Navy and U.S. Coast Guard will request authorization to "take" marine mammals incidental to conducting training and testing activities in the Study Area to comply with the Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA).

The National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) is a cooperating agency and has coordinated in the development of this document to meet their separate

Figure M.3-6: U.S. Environmental Protection Agency Comment

and distinct obligations and to support the independent decision making regarding this action and compliance with the MMPA and Section 7 of ESA. NMFS plans to adopt this Supplemental EIS/OEIS and issue a separate Record of Decision associated with its decision on whether to grant a request for incidental take authorizations.

EPA is providing recommendations for consideration regarding the Supplemental EIS/OEIS with a focus on EPA's responsibilities for marine protection permitting as required by the Marine Protection, Research and Sanctuaries Act[1] and role for assessing other agencies' environmental justice analyses as directed in EO 14096[2] on Revitalizing Our Nation's Commitment to Environmental Justice for All. EPA is also providing recommendations regarding the climate change and spill response discussions in the document. These recommendations are provided in the detailed comments enclosed.

We appreciate the opportunity to review this draft Supplemental EIS/OEIS and look forward to reviewing the final Supplemental EIS/OEIS. If you have any questions on our review, please contact Marthea Rountree, Lead Reviewer, NEPA Compliance Division, at 202-564-7141 or by email at rountree.marthea@epa.gov

Sincerely,

PRASAD CHUMBLE Digitally signed by PRASAD CHUMBLE Date: 2024.11.06 11:20:29 -05'00'

Prasad Chumble
Acting Director
Office of Federal Activities

Enclosure

[1] Summary of the Marine Protection, Research, and Sanctuaries Act | US EPA
[2] Executive Order on Revitalizing Our Nation's Commitment to Environmental Justice for All | The White House

2

Figure M.3-6: U.S. Environmental Protection Agency Comment (continued)

U.S. Navy's Supplemental Environmental Impact Statement/ Overseas Environmental Impact Statement (EIS/OEIS) for Atlantic Fleet Training and Testing
EPA Detailed Comments

Marine Protection Permitting

The primary focus of EPA's Marine Protection Permitting Program is on the Marine Protection, Research and Sanctuaries Act (MPRSA). EPA is responsible for the implementation of MPRSA under regulations (40 CFR 220-230) which cover a broad scope of marine environmental protection issues. The primary regulated activity under MPRSA is the transportation and disposition of material into ocean waters.

The Atlantic Fleet Training and Testing draft Supplemental EIS/OEIS notes in several locations throughout the document that sinking exercises, (activities which result in the deliberate sinking of decommissioned vessels) are being proposed. The EPA has issued a MPRSA general permit to the U.S. Navy for the transport and ocean disposal of target vessels used in the U.S. Navy's Sink Exercise (SINKEX) Program (40 CFR 229.2 - 229.3). During the review, EPA observed that the information concerning the program is not complete and clearly presented. The EPA recommends that the Navy incorporates additional details in Volume 1 about the SINKEX Program concerning the MPRSA general permit, the decommissioned vessels that will be used for sinking exercises, the Navy's vessel clean-up procedures, and information about when and where sinking exercises may take place (including whether these exercises will always take place in the "SINKEX box" identified in most of the maps). Additionally, EPA recommends adding a discussion of the potential localized impacts to the environment, including the seafloor specifically associated with SINKEX. Once provided, this information could then be referenced to other sections of the EIS/OEIS that discusses impacts from explosives more generally.

EPA also notes that Chapter 6 addresses the regulatory considerations for activities described in the EIS/OEIS. The EPA recommends adding the Marine Protection, Research and Sanctuaries Act to Table 6.1-1 (Summary of Environmental Compliance for the Proposed Action) with a brief statement about the status of compliance as similarly addressed for other applicable laws included in the table. Additionally, Navy may consider adding a short text summary in Section 6.1 generally describing the Marine Protection, Research and Sanctuaries Act and the general permit authorizing SINKEX activities.

Environmental Justice

Section 3 (b)(i) of EO 14096 directs the EPA to assess whether each agency analyzes and avoids or mitigates disproportionate human health and environmental effects on communities with environmental justice concerns when carrying out responsibilities under Section 309 of the Clean Air Act, 42 U.S.C. 7609. EPA understands that this Supplemental EIS/OEIS specifically analyzes in-water activities as well as activities occurring over water. It states that "any land-based impacts from activities associated with the Proposed Action are analyzed in separate NEPA documents; therefore, some resource areas are not analyzed." This includes environmental justice (EJ). The Supplemental EIS/OEIS

Figure M.3-6: U.S. Environmental Protection Agency Comment (continued)

also states that environmental justice was "not analyzed in detail because the proposed activities would result in minor and insignificant impacts to the human population in coastal areas." In addition, in the 2018 Final EIS/OEIS, environmental justice "was eliminated as an issue for further consideration because all of the proposed activities occur in the ocean and in harbors and bays, where there are no human residences present". However, the current draft Supplemental EIS/OEIS discusses a new Study Area that includes "inshore waters and pierside testing locations adjacent to the Gulf of Mexico" but does not provide information on whether disproportionate and adverse effects to communities with EJ concerns were analyzed. For this reason, EPA recommends that the Navy evaluate any areas (or incorporate by reference the analysis in any separate NEPA documents) that include inshore waters consistent with Executive Orders on environmental justice and NEPA regulations to determine whether there are disproportionate and adverse human health and environmental effects on communities with environmental justice concerns as appropriate. If any disproportionate and adverse effects to communities with EJ concerns are identified, mitigation measures should be incorporated to address these effects.

Social Cost of Greenhouse Gases

While the draft Supplemental EIS/OEIS acknowledges that the Social Cost of Greenhouse Gases (SC-GHG) estimates can provide additional context on greenhouse (GHG) emissions and are recommended by the CEQ's 2023 Guidance, it fails to apply the SC-GHG values to monetize the GHG emissions from the project Alternatives, including the No Action Alternative. EPA recommends that the climate damages from all reasonably foreseeable emissions be monetized using the best available estimates of the SC-GHG.

In November 2023, the EPA published the Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances. This report provides updated estimates of the SC-GHGs that reflect advancements in the scientific literature on climate change and its economic impacts and incorporates recommendations made by the National Academies of Science, Engineering, and Medicine[3]. In this update, the methodology underlying each of the four components, or modules, of the SC-GHG estimation process – socioeconomics and emissions, climate, damages, and discounting – is developed by drawing on the latest research and expertise from the scientific disciplines relevant to that component. Regarding discounting, the EPA's report presents updated estimates of the SC-GHG at multiple discount rates. Considering the multiple lines of evidence on the appropriate certainty-equivalent near-term rate, the modeling results presented in this report consider a range of near-term target rates of 1.5%, 2.0%, and 2.5%. This range of rates allows for a symmetric one point spread around 2.0%. The updated SC-GHG estimates have also undergone an expert peer review and a public comment process.

The EPA released a Microsoft Excel "Workbook for Applying SC-GHG Estimates" spreadsheet to better assist lead agencies with the utilization of these updated estimates, and it can be accessed at

[3] Valuing Climate Damages: Updating Estimation of the Social Cost of Carbon Dioxide | The National Academies Press

2

Figure M.3-6: U.S. Environmental Protection Agency Comment (continued)

https://www.epa.gov/environmental-economics/scghg. This workbook presents a straightforward tool for applying the updated SC-GHG values to monetize project GHG emissions.

EPA notes that there appears to be an error in the "Climate Change" section on page 4-11. It states, "For example, the estimated *SC-GHG emissions* from Alternatives 1 and 2 are similar to that of electricity used by 197,000 and 232,100 average U.S. households annually (U.S. Environmental Protection Agency, 2024)". EPA recommends that the "SC-GHG emissions" be replaced with "greenhouse gas emissions."

Spill Response

The draft Supplement EIS/OEIS briefly references ship-to-shore fuel transfer system training and major spill events. However, there is no discussion about refueling at sea. This includes both refueling a ship at sea (underway replenishments (UNREP)) and refueling an aircraft while at sea (vertical replenishments (VERTREP)). There is a potential risk of oil spillage for each of these issues. EPA recommends that the final Supplement EIS/OEIS provide a discussion about spill response for each of these issues as appropriate.

3

Figure M.3-6: U.S. Environmental Protection Agency Comment (continued)

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
100 Alabama Street SW
1924 Building, Room 5158
Atlanta, GA 30303

November 21, 2024

IN REPLY REFER TO:
ER 24/0412

Todd Kraft
Naval Facilities Engineering Systems Command Atlantic
Attention: Code EV22SG (AFTT EIS Project Managers)
6506 Hampton Boulevard
Norfolk, VA 23508–1278.

Subject: Comments on the Draft Supplemental EIS for Atlantic Fleet Training and Testing, Alabama

Dear Mr. Kraft,

We acknowledge these concerns are similar to those submitted by the Department of the Interior during the previous version of this EIS in 2018 but are seeking additional response and coordination if possible.

- For any training activities occurring within a National Park Service (NPS) unit, the Navy shall coordinate with the affected NPS unit. Homestead Air Force Base regularly coordinates training activities within the Biscayne National Park (NP) boundary with park staff. A similar level of coordination with the Navy is requested to mitigate potential negative impacts to sensitive habitats and wildlife.

- Extend the offshore mitigation area well beyond NPS unit boundaries. Biscayne NP is primarily a marine park whose boundary lies approximately 15 nautical miles (nm) offshore (60' isobath). Therefore, the Navy's standard mitigation practice of conducting activities greater than 12 nm from the coast, is not sufficient for Biscayne NP and potentially jeopardizes a significant portion of the park's marine resources.

For additional information contact Erin Hodel, Natural Resources Program Manager, National Park Service Southeast Regional Office at erin_hodel@nps.gov or on (470) 259-2323. I can be reached on (404) 331-4524 or via email at joyce_stanley@ios.doi.gov.

Figure M.3-7: U.S. Department of the Interior Comment

Draft Supplemental EIS for Atlantic Fleet Training and Testing, Alabama - - ER 24/0412

Sincerely,

JOYCE STANLEY

Digitally signed by JOYCE STANLEY
Date: 2024.11.21 10:01:56 -05'00'

Joyce Stanley, Ph.D.
Regional Environmental Officer

cc: Christine Willis - FWS
Jon Janowicz - USGS
Erin Hodel – NPS
Matt Moran - OSMRE
OEPC – WASH

2

Figure M.3-7: U.S. Department of the Interior Comment (continued)

JEFF LANDRY
GOVERNOR

TYLER PATRICK GRAY
SECRETARY

KEITH LOVELL
ASSISTANT SECRETARY

State of Louisiana
DEPARTMENT OF ENERGY AND NATURAL RESOURCES
OFFICE OF COASTAL MANAGEMENT

October 30, 2024

Naval Facilities Engineering Command, Atlantic
Attention: AFTT EIS/OEIS Project Manager
Code: EV22SG
6506 Hampton Boulevard
Norfolk, Virginia, 23508-1278

Re: C20240094 U.S. Navy Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (OEIS) for Atlantic Fleet Training and Testing Study Area

Dear Project Manager:

Louisiana Department of Energy Natural Resources Director of Federal Affairs Neal McMillin received your September 16, 2024, invitation to review the referenced Draft Supplemental Environmental Impact Statement. The letter was forwarded to the Office of Coastal Management (OCM) for review. The following comments are offered for your consideration.

Chapter 6, Regulatory Considerations, notes that the USN will provide Louisiana with a consistency determination as required by the Coastal Zone Management Act of 1972, as amended. In preparing your consistency determination, please be aware that Louisiana's approved coastal management program includes, in its list of federal agency activities, "Outer Continental Shelf activities adjacent to the coastal zone which are not subject to consistency review under other provisions of Section 307 of the CZMA." In practice, this encompasses any reasonably foreseeable coastal effects resulting from federal activities anywhere within the 200 mile Exclusive Economic Zone off Louisiana's coast, including the New Orleans OPAREA identified in the OEIS.

Most of the proposed activities will take place far from Louisiana's coastal zone, and relatively few effects to the State's coastal resources are anticipated. Among the State's coastal uses and resources for which there may be reasonably foreseeable impacts, are the offshore oil and gas industry, shipping, and commercial and recreational fishing. These uses have a significant presence in the Gulf, and may occur in proximity to Navy operations.

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Figure M.3-8: Louisiana Office of Coastal Zone Management Comment

Also, Louisiana is host to large residential and migratory bird populations. It is noted that the National Marine Protected areas have been updated in this submission to mirror those of the International Union for Conservation of Nature. To the extent practicable, we request that overflights of the Louisiana coastal zone in any location should be managed to minimize potential adverse impacts.

We appreciate this opportunity to review and comment on the OEIS, and look forward to receiving your consistency determination for the proposed training and testing activities. If you should have any questions, please contact Ray Reich of the Consistency Section at (225) 342-7949 or ray.reich@la.gov.

Sincerely yours,

/S/ **Charles Reulet**
Administrator
Interagency Affairs/Field Services Division
CR/ MH/ rar

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Figure M.3-8: Louisiana Office of Coastal Zone Management Comment (continued)

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
100 Cambridge Street, Suite 900, Boston, MA 02114 • (617) 626-1200

Naval Facilities Engineering Systems Command Atlantic
Attention: Code EV22SG
(AFTT EIS Project Managers)
6506 Hampton Blvd.
Norfolk, VA 23508-1278

RE: Atlantic Fleet Training and Testing Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement

November 21, 2024

AFTT EIS Project Managers,

The Massachusetts Office of Coastal Zone Management (CZM) has reviewed the Draft Supplemental Environmental Impact Statement (SEIS) for the Navy's Atlantic Fleet Training and Testing Phase IV (AFTT). CZM is supportive of the least environmentally harmful alternative that meets the purpose and need of the Proposed Action, which based on the SEIS appears to be Alternative 1.

CZM is also highly supportive of the Navy's continued support of research and monitoring of potentially impacted wildlife including marine mammals, sea turtles, and protected fish species. The data gathered through these research and monitoring studies is used not only to ensure impacts from Navy activities are mitigated, but also to increase the scientific understanding of the ecology of the ocean including the distributions, behaviors, and abundance of protected species. The knowledge gained through Navy-supported research and monitoring has contributed to CZM's responsible management of ocean resources for a variety of uses beyond the military, and we encourage the Navy to continue to support these efforts.

The proposed project may be subject to CZM federal consistency review and, if so, must be found to be consistent with CZM's enforceable program policies. For further information on this process, please contact Sean Duffey, Project Review Coordinator, at sean.duffey@mass.gov or visit the CZM website at https://www.mass.gov/federal-consistency-review-program.

Thanks for the opportunity to review and comment on the SEIS. Please contact my office with any questions.

Sincerely,

Alison Brizius

Figure M.3-9: Massachusetts Office of Coastal Zone Management Comment

November 8, 2024

Submitted Electronically

Naval Facilities Engineering Systems Command Atlantic
Attention: Code EV22SG
(AFTT EIS Project Managers)
6506 Hampton Blvd.
Norfolk, VA 23508-1278

To Whom it May Concern:

The United States Department of the Navy, which includes both the U.S. Navy and U.S. Marine Corps, along with the U.S. Coast Guard, proposes to continue military readiness testing and training activities at selected sites along the North Atlantic, Gulf of Mexico, and parts of the Caribbean Sea. Such activities would include, but are not limited to, those proposed at specific Navy pierside sites, within port transit channels, and in certain inland waters, as shown in **Figure 1** below.

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Figure M.3-10: Turtle Island Restoration Network Comment

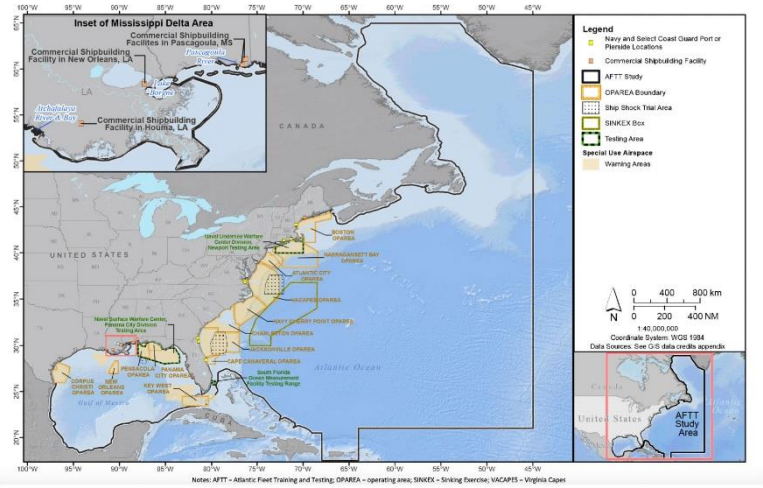

Figure 1: The map of the Atlantic Fleet Testing and Training area.

Sonar, explosives, and other weapons will be used in the various exercises proposed. Different military readiness aspects will be the focus of these activities targeted at different warfare communities: aviation, surface, submarine, and expeditionary forces.[1]

Turtle Island Restoration Network (TIRN) respectfully submits the following comments in regards to the Atlantic Fleet Training and Testing (AFTT) Draft Supplemental EIS/OEIS to continue to conduct military readiness training and research, development, testing and evaluation activities in the AFTT Study Area.

1. Given the recent developments in marine mammal data and the occurrence of Unusual Mortality Events (UME) along the Atlantic Coast, it is crucial to carefully evaluate the testing locations and the exercises being conducted.

The Atlantic coast of the United States is home to a variety of marine mammal species, many of which are threatened by the impacts of human activity, including vessel strike injuries and fishing gear entanglements.[2]

[1] U.S. Department of the Navy. (2024). *AFTT DEIS Volume I: Draft supplemental EIS*(https://www.nepa.navy.mil/Portals/20/Documents/aftteis4/AFTT%20DEIS%20Volume%20I%20Draft%20Supplemental%20EIS.pdf). U.S. Department of the Navy.
[2] Waring, G. T., Palka, D. L., & Evans, P. G. (2009). North Atlantic marine mammals. In *Encyclopedia of marine mammals* (pp. 773-781). Academic Press.

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Figure M.3-10: Turtle Island Restoration Network Comment (continued)

Humpback Whales

Humpback whales (*Megaptera novaeangliae*) along the Atlantic coast have been experiencing an Unusual Mortality Event (UME) since 2016. A large number of the UME-related strandings of humpback whales have occurred near the AFTT study area in the North Atlantic.[3] Necropsies have not been performed on every whale due to various factors, including the location of the stranding and the condition of the body. However, a significant proportion of the whales that were necropsied showed signs of injuries consistent with human interaction, particularly vessel strikes and entanglement in fishing gear. Some whales exhibited pre-mortem vessel strike injuries, suggesting they were struck by a moving vessel while still alive.[4] The 2018 Final Environmental Impact Statement (FEIS) notes that the U.S. Navy accurately reports all whale collisions and has historically had interactions with humpback whales.[5] However, with ongoing training and testing activities within the AFTT study area following the 2018 FEIS, it is important to consider that an increase in vessel traffic related to these exercises could be having a significant impact on humpback whale populations along the North Atlantic coast. Given this, the data in the 2018 FEIS is now outdated and cannot reliably be used to attribute blame to other vessels operating near the AFTT study area.

North Atlantic Right Whales

The North Atlantic Right Whale (*Eubalaena glacialis*) is approaching extinction after an UME was officially declared in 2017. Unfortunately, vessel strike injuries are a leading cause of mortality.[6] Critical habitat for the North Atlantic Right Whale has been established in areas of the North Atlantic, as seen below in **Figure 3**. The location of the critical habitat is just east of the AFTT study area.

[3] NOAA Fisheries. 2016–2024 Humpback Whale Unusual Mortality Event Along the Atlantic Coast. Available at: https://www.fisheries.noaa.gov/national/marine-life-distress/2016-2023-humpback-whale-unusual-mortality-event-along-atlantic-coast

[4] NOAA Fisheries. 2016–2023 Humpback Whale Unusual Mortality Event Along the Atlantic Coast. Available at: https://www.fisheries.noaa.gov/national/marine-life-distress/2016-2023-humpback-whale-unusual-mortality-event-along-atlantic-coast

[5] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299480/-1/-1/1/3.07%20AFTT%20FEIS%20MARINE%20MAMMALS.PDF

[6] NOAA Fisheries. 2017–2023 North Atlantic Right Whale Unusual Mortality Event. Available at: https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2023-north-atlantic-right-whale-unusual-mortality-event

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Figure M.3-10: Turtle Island Restoration Network Comment (continued)

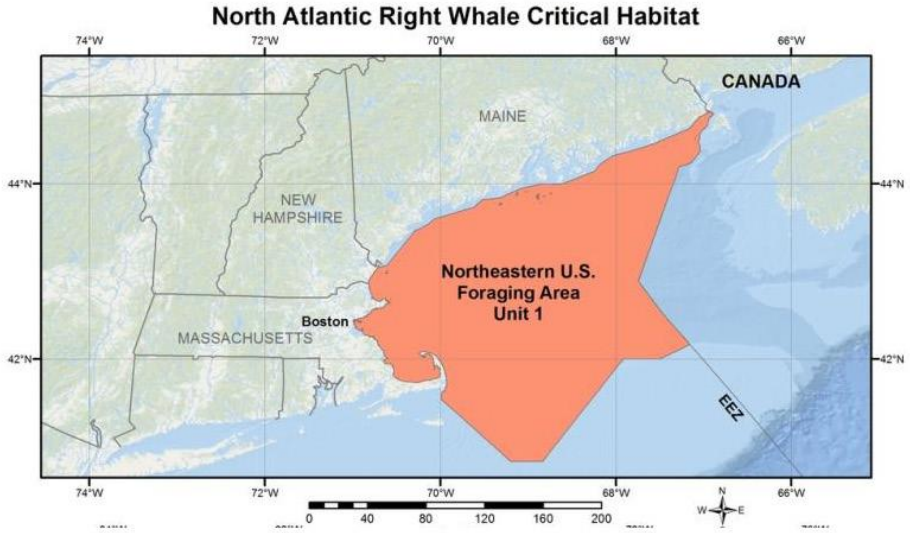

Figure 3: A map showing the critical habitat of North Atlantic Right Whales in the North Atlantic that is located east of the AFTT location.

[7]

The North Atlantic Right Whales migrate up the coast to feed in the waters around New England during winter and early spring.[8] This area is considered their critical habitat. However, whales do not stay within the boundaries of the critical habitat. Outside of these areas, their exposure to anthropogenic threats increases. Its proximity to this critical habitat-the AFTT study area-heightens the risk of vessel strike injuries as North Atlantic Right Whales travel along the coast. For their part, the 2018 FEIS recognizes that even with strict regulations on vessel speed and routing, no measurable reduction in marine mammal fatalities caused by vessel strikes has occurred.[9] As the North Atlantic Right Whales are still critically endangered, the testing boundaries should not be allowed to be located so close to their critical habitat.

Another risk associated with the ongoing military testing is the impact an increase in vessel traffic will have on North Atlantic Right Whales. 2024 was a deadly year for North Atlantic Right Whales with several whales falling victim to vessel strikes. Most notable, the first calf of

[7] NOAA Fisheries. North Atlantic Right Whale Critical Habitat Map and GIS Data. Available at: https://www.fisheries.noaa.gov/resource/map/north-atlantic-right-whale-critical-habitat-map-and-gis-data
[8] Parks, S. E., Warren, J. D., Stamieszkin, K., Mayo, C. A., & Wiley, D. (2012). Dangerous dining: surface foraging of North Atlantic right whales increases risk of vessel collisions. *Biology letters*, 8(1), 57-60.
[9] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299480/-1/-1/1/3.07%20AFTT%20FEIS%20MARINE%20MAMMALS.PDF

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Figure M.3-10: Turtle Island Restoration Network Comment (continued)

the season, the calf of Juno, suffered from a severe vessel strike injury that affected its mouth and head. Unfortunately, the young calf was later found dead after a courageous fight.[10] Another young Right Whale suffered a similar fate after she was hit and killed by a vessel. The one year old whale suffered from blunt force trauma, including skull fractures.[11] According to the current vessel speed rule that was put into place to protect North Atlantic Right Whales, military vessels are exempt from the speed restrictions.[12] With increased vessel traffic associated with military testing and speed restrictions not required for military vessels, North Atlantic RIght Whales are at significant risk of experiencing a fatal vessel strike injury.

We urge the US Department of the Navy and the US Coast Guard to consider halting training and testing exercises within these critical areas in light of the ongoing UMEs associated with both humpback and North Atlantic Right Whales.

2. The type of training and testing activities will have negative impacts on the behavior, physiology, and communication of marine mammals.

Marine mammals rely on sound to communicate and move around within their environment. Some species of marine mammals also use echolocation to feed. Underwater noise has the potential to disrupt essential life functions of marine mammals, such as feeding, mating, nursing, resting, and migrating.[13] Many marine animals are sensitive to loud unnatural sounds traveling through the water because it is not typical of their environment. Some known affected species are Beaked whales, dwarf, pygmy sperm whales (*Kogia* spp.), pilot whales (*Globicephala* spp.), several dolphin species (*Stenella* sp., *Delphinus delphis*), and harbor porpoises (*Phocoena phocoena*).[14]

There is a consistent history of harm being caused to these animals due to active sonar during military testing. In 2000, the United States government determined that many of the strandings in the Bahamas were a result of mid-frequency active sonar use from the military.[15] Years later, in

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[10] Kershaw, F. (2024, March 15). Right Whale Calf Succumbs to Vessel Strike Injuries. Natural Resources Defense Council. https://www.nrdc.org/bio/francine-kershaw/right-whale-calf-succumbs-vessel-strike-injuries

[11] Rousseau, M. (2024, February 17). A second right whale found dead off Georgia coast suffered a vessel strike, NOAA says. Boston.com. https://www.boston.com/news/environment/2024/02/17/a-second-right-whale-found-dead-off-georgia-coast-suffered-a-vessel-strike-noaa-says/

[12] National Oceanic and Atmospheric Administration. (2020). *Final report on the North Atlantic right whale vessel speed rule* (June 2020). NOAA Fisheries. https://www.fisheries.noaa.gov/s3/2021-01/FINAL_NARW_Vessel_Speed_Rule_Report_Jun_2020.pdf

[13] Erbe, C., Dunlop, R., & Dolman, S. (2018). Effects of noise on marine mammals. Effects of anthropogenic noise on animals, 277-309.

[14] Van Dyke, J. M. (2004). Whales, submarines and active sonar. https://scholarspace.manoa.hawaii.edu/server/api/core/bitstreams/cac22f22-8645-4a06-beda-bc36538c25fc/content

[15] Simmonds, M. P., Dolman, S. J., Jasny, M., Parsons, E. C. M., Weilgart, L., Wright, A. J., & Leaper, R. (2014). Marine noise pollution-increasing recognition but need for more practical action.

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Figure M.3-10: Turtle Island Restoration Network Comment (continued)

September of 2002, 15 Cuvier's beaked whales were beached on the Canary Islands and necropsies revealed brain damage consistent with acoustic impact, usually associated with sonar exposure.[16] In May of 2003, the *USS Shoup* emitted mid-range sonar for five consecutive hours near Vancouver Island, pinging louder than 200 dB. This sonar session resulted in the disruption of feeding behaviors for a pod of 22 orcas and a minke whale. They were observed to form a tight group and flee the region to try to get away from the sound.[17] After this test, it was found that eight harbor porpoises stranded with severe trauma in their brains.[18] Ultimately, a correlation was discovered between naval sonar and marine organism injury after stranding events occurred globally, including regions in the Caribbean, Scotland, Ireland's coast, the Mediterranean, and Guam.[19]

Underwater noise, including sonar, can impact marine mammals both behaviorally and physiologically. At 40-50 dB, porpoises show avoidance behavior. At <100 dB, beaked whales display a change in behavior, including beating tail flukes, paused echolocation and foraging, and abnormal diving patterns. Sounds of 130 dB results in avoidance behavior of bottlenose dolphins, increased swim speed and body movement of Baird's beaked whales, and disrupted foraging in sperm whales. 140 dB results in abnormal feeding behavior and swimming displacement of blue whales and avoidance behavior of migrating gray whales. 150 dB results in mass stranding of beaked whales, increased tachycardia as dB increased, and abnormal respiration rate in beluga whales. 160 dB results in internal injuries, mass stranding of beaked whales, increased tachycardia as dB increased, abnormal respiration rate in beluga whales, changed singing behavior and reduced lunge feeding rates in humpback whales. 170 dB results in mass stranding of beaked whales.[20] [21]

With so many different areas of military training and testing coupled with a diverse array of marine mammal species, it is imperative that testing and training should not be conducted near critical habitats of marine mammals.

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[16] Parsons, E. C. M. (2017). Impacts of navy sonar on whales and dolphins: now beyond a smoking gun?. *Frontiers in Marine Science*, *4*, 295. https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2017.00295/full

[17] Parsons, E. C. M. (2017). Impacts of navy sonar on whales and dolphins: now beyond a smoking gun?. *Frontiers in Marine Science*, *4*, 295. https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2017.00295/full

[18] Parsons, E. C. M. (2017). Impacts of navy sonar on whales and dolphins: now beyond a smoking gun?. *Frontiers in Marine Science*, *4*, 295. https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2017.00295/full

[19] Van Dyke, J. M. (2004). Whales, submarines and active sonar. https://scholarspace.manoa.hawaii.edu/server/api/core/bitstreams/cac22f22-8645-4a06-beda-bc36538c25fc/content

[20] Van Dyke, J. M. (2004). Whales, submarines and active sonar. https://scholarspace.manoa.hawaii.edu/server/api/core/bitstreams/cac22f22-8645-4a06-beda-bc36538c25fc/content

[21] Parsons, E. C. M. (2017). Impacts of navy sonar on whales and dolphins: now beyond a smoking gun?. *Frontiers in Marine Science*, *4*, 295. https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2017.00295/full

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Figure M.3-10: Turtle Island Restoration Network Comment (continued)

3. The presence of military training and testing can negatively impact endangered and vulnerable sea turtle populations.

Different species of sea turtles can be found throughout the AFTT study area, including green sea turtles (*Chelonia mydas*), hawksbill turtle (*Eretmochelys imbricata*), Kemp's ridley turtle (*Lepidochelys kempii*), leatherback turtle (*Dermochelys coriacea*), and loggerhead turtle (*Caretta caretta*). According to the 2018 FEIS, some sea turtle species, like the hawksbill sea turtle, have critical habitat that is located within the AFTT study area.[22] The endangered Kemp's Ridley sea turtle has a smaller range within the Gulf of Mexico,[23] but is still at risk due to the training and testing exercises in the Gulf. A multi-year study focused along the Florida coast found vessel strike related mortality in sea turtles to be a significant threat among several species.[24] The 2024 Draft SEIS indicates that species of sea turtles, including the leatherback sea turtle, are at a heightened risk of vessel strikes due to their surface behavior.[25] We can expect to see increased vessel traffic related to testing and training exercises within the AFTT study area and, as a result, sea turtle populations are at a heightened risk of vessel strike related mortality.

The impacts of different types of marine debris were touched upon in the 2024 Draft SEIS. Marine debris can lead to entanglements and ingestion in sea turtles. The 2024 Draft SEIS references a study in which juvenile sea turtles were more likely to ingest marine debris than adults.[26] Different types of marine debris related to training and testing exercises are expected to impact sea turtle populations within the AFTT study area.

4. With nearly 50 individuals remaining, the critically endangered Rice's whale is at risk of extinction.

[22] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299481/-1/-1/1/3.08%20AFTT%20FEIS%20REPTILES.PDF Page 3.8-22.
[23] US Department of the Navy. Final Environmental Impact Statement. 2018. Available at: https://media.defense.gov/2020/May/13/2002299481/-1/-1/1/3.08%20AFTT%20FEIS%20REPTILES.PDF Page 3.8-28.
[24] Foley, A. M., Stacy, B. A., Hardy, R. F., Shea, C. P., Minch, K. E., & Schroeder, B. A. (2019). Characterizing watercraft-related mortality of sea turtles in Florida. The Journal of Wildlife Management, 83(5), 1057-1072.
[25] U.S. Department of the Navy. (2024). *AFTT DEIS Volume IV: Draft supplemental EIS*(https://www.nepa.navy.mil/Portals/20/Documents/aftteis4/AFTT%20DEIS%20Volume%20IV%20Appendices%20F%20through%20P.pdf). U.S. Department of the Navy.

[26] U.S. Department of the Navy. (2024). *AFTT DEIS Volume IV: Draft supplemental EIS*(https://www.nepa.navy.mil/Portals/20/Documents/aftteis4/AFTT%20DEIS%20Volume%20IV%20Appendices%20F%20through%20P.pdf). U.S. Department of the Navy.

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Figure M.3-10: Turtle Island Restoration Network Comment (continued)

At the time of the 2018 FEIS, the Rice's whale (*Balaenoptera ricei*) had not been identified as its own species.[27] Therefore, this species was technically not a part of the 2018 FEIS and had not been accurately assessed for potential stressors caused by training and testing exercises in the Gulf of Mexico. NOAA Fisheries proposed critical habitat designation for the Rice's whales in response to their incredibly small population size and limited distribution range. In the 2024 SEIS, the proposed critical habitat directly overlaps with the study area for military training and testing, as seen below in **Figure 4**.[28]

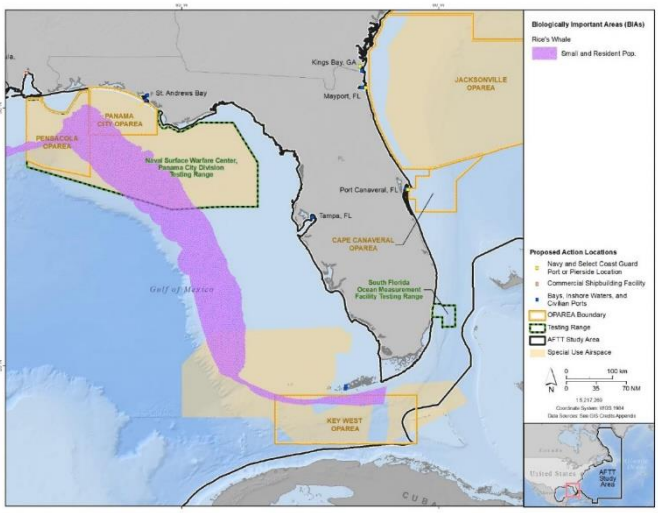

Figure F.5-4: Biologically Important Areas for Rice's Whales in the Study Area – Eastern Gulf of Mexico

Figure 4: A map showing the proposed critical habitat of Rice's Whales in the Gulf of Mexico overlapping with the study area.

29

As with other marine mammals, the Rice's whales are at risk of the same stressors as identified in item 2. The Rice's whale is protected under both the Endangered Species Act (ESA) and the

[27] Soldevilla, M. S., Ternus, K., Cook, A., Hildebrand, J. A., Frasier, K. E., Martinez, A., & Garrison, L. P. (2022). Acoustic localization, validation, and characterization of Rice's whale calls. The Journal of the Acoustical Society of America, 151(6), 4264-4278.
[28] U.S. Department of the Navy. (2024). *AFTT DEIS Volume IV: Draft supplemental EIS*(https://www.nepa.navy.mil/Portals/20/Documents/aftteis4/AFTT%20DEIS%20Volume%20IV%20Appendices%20F%20through%20P.pdf). U.S. Department of the Navy.
[29] U.S. Department of the Navy. (2024). *AFTT DEIS Volume IV: Draft supplemental EIS*(https://www.nepa.navy.mil/Portals/20/Documents/aftteis4/AFTT%20DEIS%20Volume%20IV%20Appendices%20F%20through%20P.pdf). U.S. Department of the Navy.

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Figure M.3-10: Turtle Island Restoration Network Comment (continued)

Marine Mammal Protection Act (MMPA). This species is considered to be depleted under the MMPA, heightening the need to further protect this species from anthropogenic threats.[30]

We recommend all military training and testing be immediately stopped within the Gulf of Mexico to ensure the protection and survival of the critically endangered Rice's whale, especially within the bounds of their proposed critical habitat.

Final Thoughts

In light of ongoing UMEs, increased anthropogenic pressure, and declining species populations, it is vital that the location of military training and testing be re-evaluated in an effort to protect vulnerable and endangered species. We recommend that all exercises be stopped until safer locations and practices can be determined.

Thank you for your consideration,

Elizabeth Purcell
Environmental Policy Coordinator

Savannah Martinez
Environmental Policy Intern

[30] NOAA Fisheries. Rice's Whale. Available at: https://www.fisheries.noaa.gov/species/rices-whale

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Figure M.3-10: Turtle Island Restoration Network Comment (continued)

LaVere, Ashley

From: Stahl, Chris <Chris.Stahl@FloridaDEP.gov>
Sent: Thursday, November 14, 2024 2:40 PM
To: elizabeth.nashold@navy.mil
Cc: State_Clearinghouse; LaVere, Ashley
Subject: State Clearance Letter for FL202409250246C- Draft Supplemental Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS), Atlantic Fleet Training And Testing Activities(AFTT), Atlantic Ocean And Gulf Of Mexico, Florida
Attachments: FWC Comments_Atlantic Fleet Training And Testing DEIS-OEIS_File No. FL202409250246C.pdf

[EXTERNAL SENDER] Use Caution opening links or attachments

November 14, 2024

Elizabeth Nashold
Naval Facilities Engineering Command, Atlantic
6506 Hampton Boulevard
Norfolk, Virginia 23508-1278

RE: Department of Defense, Department of the Navy, Draft Supplemental Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS), Atlantic Fleet Training and Testing Activities(AFTT), Atlantic Ocean and Gulf of Mexico, Florida
SAI # FL202409250246C

Dear Elizabeth:

Florida State Clearinghouse staff has reviewed the proposal under the following authorities: Presidential Executive Order 12372; § 403.061(42), Florida Statutes; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended.

Attached are comments generated by Florida Fish and Wildlife Conservation Commission (FWC) staff and incorporated hereto.

If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05,

Based on the information submitted, the state has no objections to the subject project and, therefore, it is consistent with the Florida Coastal Management Program (FCMP). Thank you for the opportunity to review the proposed plan. If you have any questions or need further assistance, please don't hesitate to contact me at (850) 717-9076.

1

Figure M.3-11: Florida State Clearinghouse Comment

Thank You,

Chris Stahl

Chris Stahl, Coordinator
Florida State Clearinghouse
Florida Department of Environmental Protection
3900 Commonwealth Blvd., M.S. 47
Tallahassee, FL 32399-2400
ph. (850) 717-9076
Chris.Stahl@floridadep.gov

Figure M.3-11: Florida State Clearinghouse Comment (continued)

Florida Fish and Wildlife Conservation Commission

Commissioners
Rodney Barreto
Chairman
Coral Gables

Steven Hudson
Vice Chairman
Fort Lauderdale

Preston Farrior
Tampa

Gary Lester
Oxford

Albert Maury
Coral Gables

Gary Nicklaus
Jupiter

Sonya Rood
St. Augustine

Office of the Executive Director
Roger A. Young
Executive Director

Charles "Rett" Boyd
Assistant Executive Director

George Warthen
Chief Conservation Officer

Jessica Crawford
Chief of Staff

Division of Habitat and Species Conservation
Melissa Tucker
Director

850-488-3831

Managing fish and wildlife resources for their long-term well-being and the benefit of people.

620 South Meridian Street
Tallahassee, Florida
32399-1600
Voice: 850-488-4676

Hearing/speech-impaired:
800-955-8771 (T)
800 955-8770 (V)

MyFWC.com

November 6, 2024

Chris Stahl, Coordinator
Florida State Clearinghouse
Florida Department of Environmental Protection
2600 Blair Stone Road, M.S. 47
Tallahassee, FL 32399-2400
Chris.Stahl@dep.state.fl.us

Subject: FWC Comments, File No. FL202409250246C, Atlantic Fleet Training and Testing (AFTT) Draft Environmental Impact Statement (DEIS)/Overseas Environmental Impact Statement (OEIS), Atlantic Ocean and Gulf of Mexico, Florida

Dear Mr. Stahl,

Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed the Department of the Navy Environmental Impact Statement (EIS) / Overseas Environmental Impact Statement (OEIS) for the above-referenced project, and provides the following comments and recommendations for your consideration in accordance with Chapter 379, Florida Statutes (F.S.), and pursuant to the federal National Environmental Policy Act (NEPA), the federal Coastal Zone Management Act, and the State of Florida Coastal Management Program.

Project Description

The U.S. Navy proposes to conduct military readiness training activities and research, development, testing, and evaluation activities in the Atlantic Fleet Training and Testing (AFTT) Study Area. These activities include the use of vessels, active sonar, and explosives within the in-water areas of the western Atlantic Ocean along the eastern coast of North America (including the Jacksonville Operating Area and South Florida Ocean Measurement Testing Range), in portions of the Caribbean Sea (Key West Operating Area) and the Gulf of Mexico (Panama City and Pensacola Operating Area), at select Navy pier-side locations (Naval Station Mayport, Naval Surface Warfare Center-Panama City), within port transit channels, near select civilian ports, and in bays and harbors (St. Johns River, Mayport, Port Canaveral, Demolition Key, Truman Harbor, Tampa, St. Andrew Bay, North Bay). These military readiness activities are generally consistent with those analyzed in the AFTT DEIS/OEIS completed in 2018 and are representative of training and testing that the Navy has been conducting in the AFTT Study Area for decades. The Navy proposes an annual level of testing that reflects a representative year of training and testing to account for the natural fluctuations of training cycles, testing programs, and deployment schedules that generally limit the maximum level of training and testing that could occur in the reasonably foreseeable future (Alternative 1).

Since the completion of the 2018 Final EIS/OEIS, the best available science has been updated, the regulatory environment has changed, the Study Area has changed, and the Proposed Action has been refined. Under the current draft EIS/OEIS the study area has been updated to include inshore waters and pier side testing locations adjacent to the Gulf of Mexico, and changes to ship shock trial areas including the shift of the Gulf of Mexico ship shock trial area to the south to avoid Rice's whale core habitat, to expand the Jacksonville ship shock area, and to remove the Key West ship shock trial area.

Figure M.3-11: Florida State Clearinghouse Comment (continued)

Potentially Affected Resources

The draft EIS/OEIS indicated that the following federally listed sea turtles and marine mammals could be affected by the proposed activities: green sea turtles (*Chelonia mydas,* Federally Threatened [FT]), hawksbill sea turtle (*Eretmochelys imbricata*, Federally Endangered [FE]), Kemps ridley sea turtle (*Lepidochelys kempii*, FE), leatherback sea turtle (*Dermochelys coriacea*, FE), loggerhead sea turtle (*Caretta caretta*, FT), North Atlantic right whale (*Eubalaena glacialis*, FE), blue whale (*Balaenoptera musculus*, FE), finback whale (*Balaenoptera physalus*, FE), sperm whale (*Physeter microcephalus*, FE), and West Indian manatee (*Trichechus manatus latirostris*, FT). FWC staff reviewed relevant agency data and confirmed the species list provided in the draft EIS/OEIS.

Mitigation for potential impacts includes personnel training, reporting and monitoring, visual observations, and geographic mitigation for physical habitats, marine species habitats, or cultural resources.

Comments and Recommendations

North Atlantic Right Whale:

The North Atlantic Right Whale (NARW) is a federally endangered species which the population size has declined from a peak of approximately 483 individuals in 2011 to 372 individuals in 2023 (Linden 2024). Additionally, the population's ability to recover is limited, as there are only an estimated 70 breeding females remaining in the population (Linden 2024).

- Mitigation measures for right whales as described in the draft EIS/OEIS include not detonating explosives, not conducting ship shock training, and minimizing the use of sonar and north-south oriented vessel transits in the Jacksonville OPAREA and Southeast North Atlantic Right Whale Mitigation Area between 15 November and 15 April each year. Additionally, the Navy will consult Early Warning System (EWS) data when planning vessel transits and military readiness activities. FWC continues to commend the Navy's support and use of the EWS surveys. However, the EWS surveys, Lookouts, and other modes of detecting marine mammals and other marine wildlife have weaknesses, which includes marine wildlife cannot always be detected when present in an area. Additionally, airspace restrictions due to military activities have limited the EWS aerial surveys in the past, reducing their effectiveness as mitigation. FWC staff encourages the Navy to continue working with NOAA Fisheries to improve species detection and effectiveness of the EWS surveys.

- Time-area restrictions are the most effective form of mitigation measures given the challenges associated with detecting NARW and other marine wildlife. The draft EIS/OEIS describes a time-area closure in the Southeast NARW Mitigation Area, which resembles the NARW critical habitat designated by NOAA Fisheries in 1994, and only reporting requirements in the larger Southeast NARW Special Reporting Mitigation Area, which covers the current NARW critical habitat established by NOAA Fisheries in 2016. The draft EIS/OEIS states that "the mitigation area is the largest area practical to implement within the North Atlantic

Figure M.3-11: Florida State Clearinghouse Comment (continued)

right whale reproduction critical habitat". However, NARWs occur throughout and beyond the current critical habitat, and their distribution within the Southeast NARW Mitigation Area may be uneven (Roberts et al. 2024). If the area covered by mitigation is limited, FWC encourages the Navy to consult with NOAA Fisheries to consider modifying the configuration of the Mitigation Area in a way that provides the most risk reduction possible for NARW. If the area covered by mitigation can be increased, FWC encourages the Navy to consult with NOAA Fisheries on expanding the size of the Southeast NARW Mitigation Area to further reduce the risks posed to NARWs.

- The draft EIS/OEIS describes mitigation measures for NARWs in the Southeastern and Northeastern United States. However, NARWs also occur in the mid-Atlantic where vessel strikes to NARWs have been documented. FWC encourages the Navy to consult with NOAA Fisheries on increasing situational awareness of and other mitigation measures for NARWs, particularly for activities east of the mouth of the Chesapeake Bay in the VACAPES OPAREA, in the Atlantic City OPAREA, and in the Narragansett Bay OPAREA, where right whales have been observed in high densities in recent years.

Florida Manatee:

- Protected Species Monitoring Programs in Florida are recommended for in-water or over-water activities that have been documented and determined to pose an increased risk of injury or death to a protected marine species. The FWC has created the Observer Guidelines for Protected Species Monitoring Programs in Florida State Waters manual for entities conducting these activities to determine if individuals have the recommended qualifications for the proposed activities. *Please note that FWC staff recommend a 30-minute wait period, when feasible, to allow the animal to move out of the impact area.*

- Any collision with or injury to a manatee, within Florida state waters, should be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or in Vero Beach (1-772-562-3909) for south Florida and emailed to FWC at ImperiledSpecies@MyFWC.com.

- Inshore activities within Florida should adhere to all posted speed zones, including state Manatee Protection Zones, state Boating Restricted Areas, and local regulations. Maps identifying the location of these zones can be found on the FWC website at: https://myfwc.com/wildlifehabitats/wildlife/manatee/data-and-maps/.

- Due to available foraging habitat and warm-water refuge sites, manatees are active near Port Canaveral and Tampa Bay year-round. To minimize impacts to manatees, FWC staff recommend limiting any in-water demolition, explosive, and/or other high impact activities occurring adjacent to Port Canaveral and Tampa Bay between November 15th and March 31st. Information on the location of identified warm-water sites in Florida can be found in the 2020 Manatee Warm-water Habitat Action Plan.

Figure M.3-11: Florida State Clearinghouse Comment (continued)

Marine Turtles:

- Any collision with (or injury to) a marine turtle, within Florida state waters, should be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 888-404-3922 and to the Sea Turtle Stranding and Salvage Network (STSSN) at SeaTurtleStranding@MyFWC.com.

Marine Habitat:

- The draft EIS/OEIS indicates that less than 2.2 acres of submerged aquatic vegetation will be affected annually by all military expended materials in all training and testing areas. To address these impacts, FWC staff recommend working with federal regulatory agencies to develop a mitigation plan to offset any impacts that satisfies federal requirements.

- Several of the areas identified and proposed to mitigate habitat impacts from the proposed activities are already closed off and would be closed regardless of the proposed activities occurring, due to the presence of military equipment/cables or security measures. FWC staff recommend identification of alternative actions to mitigate for the proposed activities that do not include the identification of areas that are already closed for other purposes.

We appreciate the opportunity to provide information on this project. If you have specific technical questions regarding the content of this letter, please contact Ashley LaVere by email at Ashley.LaVere@MyFWC.com. All other inquiries may be sent to ImperiledSpecies@MyFWC.com.

Sincerely,

Ron Mezich, Section Leader
Imperiled Species Management Section
Division of Habitat and Species Conservation
Florida Fish and Wildlife Conservation Commission

References

Linden, D. 2024. Population size estimation of North Atlantic right whales from 1990-2023. US Department of Commerce Northeast Fisheries Science Center Technical Memorandum 325. 15p.

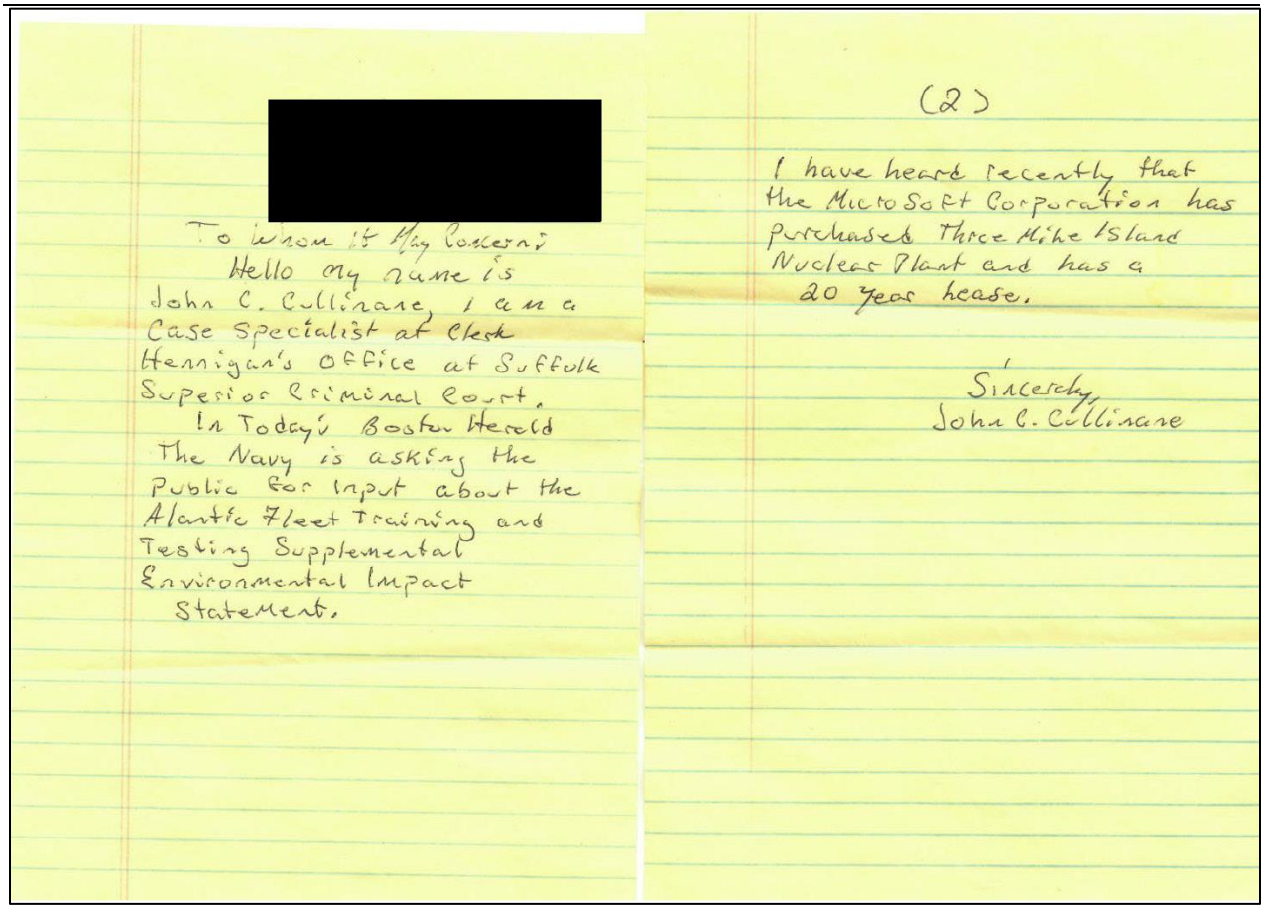
Roberts, J., et al. 2024. North Atlantic right whale density surface model for the US Atlantic evaluated with passive acoustic monitoring. Marine Ecology Progress Series 732: 167–192.

cc: Caity Savoia, FWC
Lisa Gregg, FWC
Michelle Pasawicz, FWC

Figure M.3-11: Florida State Clearinghouse Comment (continued)

Nathan Crum, FWC
Robbin Trindell, FWC
Tom Pitchford, FWC

Figure M.3-11: Florida State Clearinghouse Comment (continued)


[redacted]

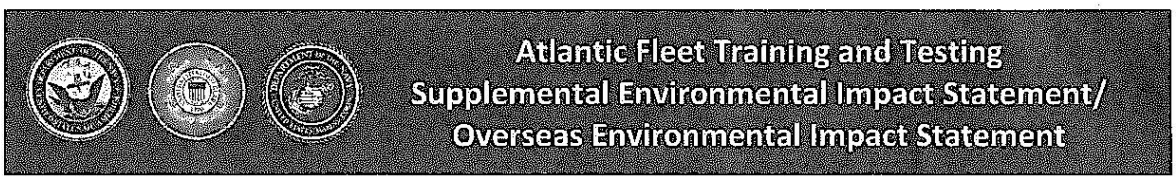
To whom it May Concern:
Hello my name is John C. Cullinane, I am a Case Specialist at Clerk Hennigan's Office at Suffolk Superior Criminal Court.
In Today's Boston Herald The Navy is asking the Public for input about the Atlantic Fleet Training and Testing Supplemental Environmental Impact Statement.

(2)

I have heard recently that the Micro Soft Corporation has purchased Three Mile Island Nuclear Plant and has a 20 year lease.

Sincerely,
John C. Cullinane

Figure M.3-12: Private Individual (1) Comment



Atlantic Fleet Training and Testing
Supplemental Environmental Impact Statement/
Overseas Environmental Impact Statement

Comment Form

Date: 11-4-2024

Comments must be submitted by November 21, 2024, to be considered in the development of the Final Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). Comments should describe specific issues or topics. The public may submit written comments in one of the following ways:

- Through the project website: **www.nepa.navy.mil/aftteis**
- In person at one of the open house public meetings
- By mail, postmarked no later than **November 21, 2024**

The Navy, Marine Corps, and Coast Guard will consider each comment during the National Environmental Policy Act (NEPA) process, and all comments become part of the public record and will be made publicly available without change. All personally identifiable information (for example name, email, or address) voluntarily submitted by the commenter may be publicly accessible. You may also submit a comment anonymously. Do not submit confidential, sensitive, or protected information. The Navy, Marine Corps, and Coast Guard do not retain personally identifiable information voluntarily submitted by the commenter in any system of records outside of the scope of this Supplemental EIS/OEIS.

** Please Print Clearly ** Additional Space is Provided on Back **

1. Name: _____
2. Organization/Affiliation (if applicable): _____
3. Email: _____
4. Mailing Address: _____

☐ *I would like to receive future email notifications about the project*

I viewed the videos and feel grateful for the partnership with agencies to protect aquatic wildlife. However, testing with explosives - though I understand its necessity for combat - seems contradictory to wild life protection. How do you reconcile these two goals.

Mail comments to:
Naval Facilities Engineering Systems Command Atlantic
Attention: Code EV22SG (AFTT EIS Project Managers)
6506 Hampton Blvd
Norfolk, VA 23508-1278
If available, please use a pre-addressed stamped envelope for mailing your comments.

Figure M.3-13: Private Individual (2) Comment