

EXECUTIVE SUMMARY

The United States (U.S.) Department of the Navy (DoN, Navy) has prepared this Final Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS) to assess the potential environmental impacts over a 10-year planning horizon associated with Navy Atlantic Fleet training; research, development, testing, and evaluation (RDT&E) activities; and associated range capabilities enhancements in the Navy Cherry Point Range Complex. The components of the Navy Cherry Point Range Complex encompass 18,966 nm² of special use airspace (SUA) warning area; 18,617 nm² of offshore surface and subsurface operating area (OPAREA); and 12,529 nm² of deep ocean area greater than 100 fathoms (600 feet). The geographic scope of this EIS/OEIS, referred to as the Navy Cherry Point Study Area (See Figure ES-1), includes the airspace; seaspace; and undersea space of the Navy Cherry Point Range Complex, plus the 3 nm strip of coastal water between the shoreline and the OPAREA's north-western boundary. The Navy Cherry Point Study Area does not include any land ranges.

This EIS/OEIS has been prepared by the Navy in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [U.S.C.] § 4321 *et seq.*); the Council of Environmental Quality (CEQ) Regulations for implementing the procedural provisions of NEPA (Title 40 Code of Federal Regulations [CFR] Parts 1500-1508); Department of the Navy Procedures for Implementing NEPA (32 CFR 775); Executive Order (EO) 12114, Environmental Effects Abroad of Major Federal Actions; and Department of Defense (DoD) regulations implementing EO 12114 (32 CFR Part 187). The proposed action requires analysis of potential impacts within and outside U.S. territory; therefore, this document was written to satisfy the requirements of both NEPA and EO 12114. The Navy has made changes to this FEIS/OEIS based on comments received during the public comment period. These changes included factual corrections, additions to existing information, and improvements or modifications to the analyses presented in the Draft EIS/OEIS. None of the changes between the Draft and Final EIS/OEIS resulted in substantive changes to the proposed action, alternatives, or the significance of the environmental consequences of the proposed action. Additional revisions in this Final EIS/OEIS amplify information previously provided, including a more detailed descriptions of Maritime Security Operations and Mine Warfare training, descriptions of the deployment and recovery of non-explosive training mines in Onslow Bay, and more detailed Weapon System data sheets located in Appendix E.

In accordance with 50 CFR § 401.12 the Navy has prepared a separate Biological Evaluation to assess the potential effects from the proposed action on marine resources and anadromous fish (fish that live in the ocean but breed in freshwater rivers and streams) protected by the National Marine Fisheries Service (NMFS) under the Endangered Species Act (ESA). In accordance with the Marine Mammal Protection Act (MMPA) (16 U.S.C. § 1371[a][5]), the Navy has submitted a request for Letter of Authorization to the NMFS for the incidental taking of marine mammals by the proposed action. The Navy has prepared a separate Consultation Package in accordance with legal requirements set forth under regulations implementing Section 7 of the ESA (50 CFR 402; 16 U.S.C 1536 (c)) for listed species under jurisdiction of the U.S. Fish and Wildlife Service (USFWS). USFWS has concurred with the Navy's conclusions. The Record of Decision for this Final EIS/OEIS will address any additional mitigation measures which may result from these ongoing regulatory processes.

The Navy and Marine Corps use each other's training areas and integrated training, as described in Chapter 2 (Tables 2.2-1 and 2.2-2), during Expeditionary Strike Group (ESG) Strike Composite Training Unit Exercise (COMPTUEX), Joint Task Force Exercise (JTFEX), amphibious assault and amphibious raid in the three adjoining range complexes of Navy Cherry Point, Marine Corps Air Station (MCAS Cherry Point) and Marine Corps Base (MCB) Camp Lejeune. However, the majority of the Marine Corps training that occurs in the three adjoining range complexes of Navy Cherry Point, MCAS

Cherry Point and MCB Camp Lejeune is conducted independently and not in conjunction with the Navy. Despite the high degree of Navy and Marine Corps interaction in this region, the functions, structure, management and use of the three range complexes are sufficiently distinct that the Navy and Marine Corps analyzed potential environmental effects of their combined training activities in three separate documents. Each service will provide environmental documentation for the Range Complex(es) over which it has cognizance:

- Navy Cherry Point Range Complex EIS/OEIS (this document) considers training activities in the sea space and undersea space of Cherry Point Operating Area (OPAREA); overlying Special Use Airspace (SUA) of Warning Area 122; and the 3nm-wide coastal strip from the mean high tide line, up to and extending seaward to the north-western OPAREA boundary. The Navy is the Action Proponent.
- MCAS Cherry Point Range Operations EA considered training activities on the air station; its outlying and auxiliary landing fields; its two impact areas of Bombing Target (BT) 11 and BT-9 in Pamlico Sound; and overlying SUA. Sections 1.5 and 1.7.1 describe the scope of the analysis in more detail. Section 6.2 discusses past and present actions resulting from Marine Corps training, and Section 6.4 includes Marine Corps action in foreseeable future training. The Marine Corps is the Action Proponent for the MCAS Cherry Point Range Operations EA.
- MCB Camp Lejeune Range Operations EA considered training activities on the installation's many ranges and impact areas, some of which extend into the Cherry Point OPAREA (e.g. N-1/BT-3), and overlying SUA. Sections 1.5 and 1.7.1 describes the scope of the analysis in more detail. Section 6.2 discusses past and present actions resulting from Marine Corps training, and Section 6.4 includes Marine Corps action in foreseeable future training. The Marine Corps is the Action Proponent for the MCB Camp Lejeune Range Operations EA.

ES 1.0 Purpose and Need

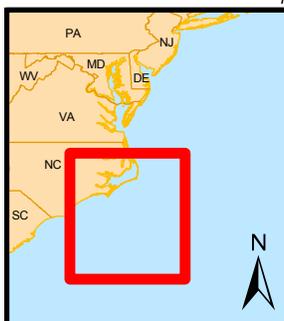
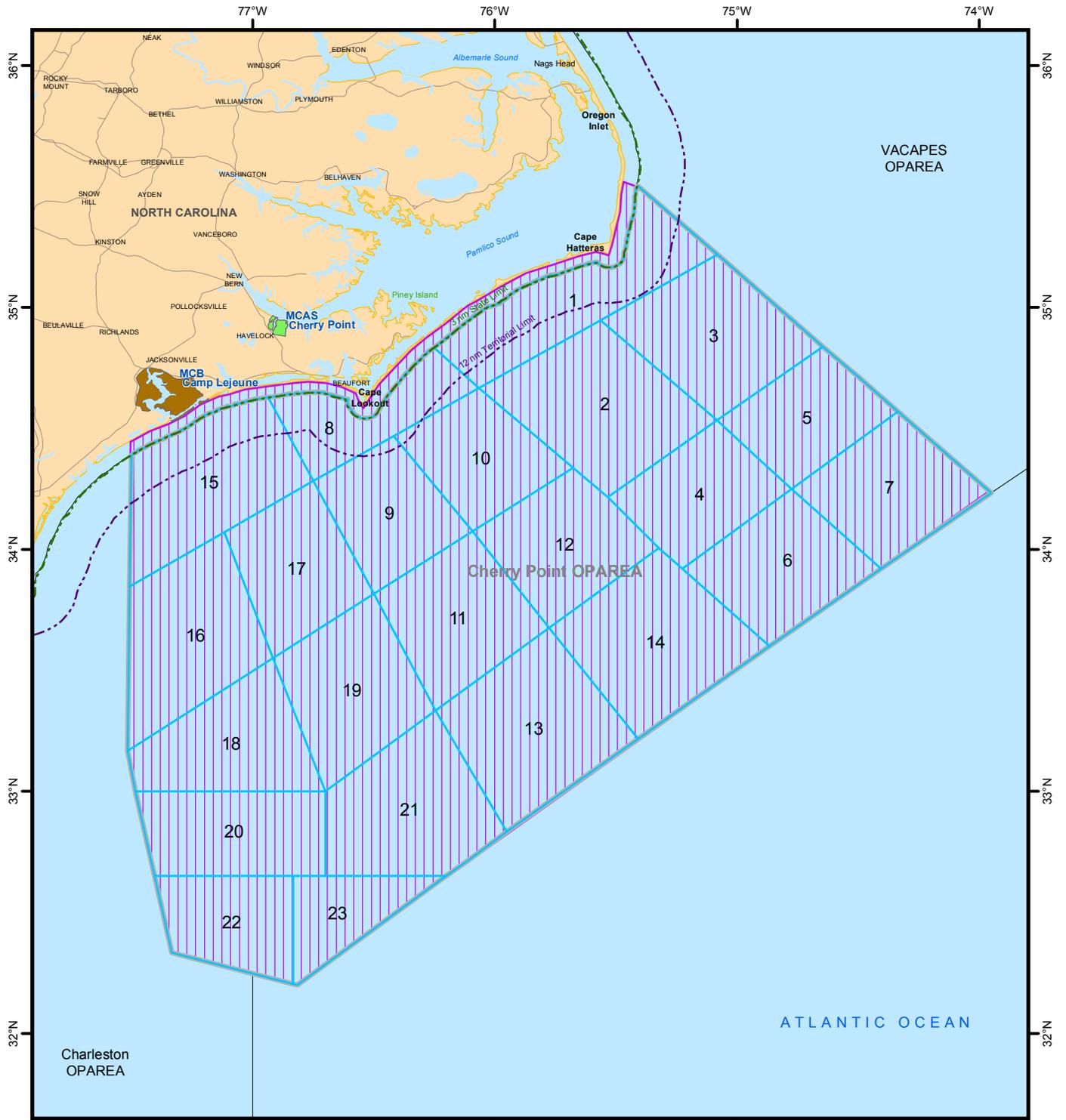
The purpose for the proposed action is therefore to:

- Achieve and maintain Fleet readiness using the Navy Cherry Point Range Complex to support and conduct current, emerging, and future training operations and RDT&E operations;
- Expand warfare missions supported by the Navy Cherry Point Range Complex; and
- Upgrade and modernize existing range capabilities to enhance and sustain Navy training and RDT&E.

The need for the proposed action is to provide range capabilities for training and equipping combat-capable naval forces ready to deploy worldwide. In this regard, the Navy Cherry Point Range Complex furthers the Navy's execution of its Congressionally mandated roles and responsibilities under Title 10 U.S.C Part 5062. For further information on the purpose and need for the proposed action refer to Chapter 1 of the FEIS/OEIS.

ES 2.0 Description of Proposed Action and Alternatives

The Navy has identified the need to support and conduct current and emerging training and RDT&E operations in the Navy Cherry Point Range Complex. The proposed action does not indicate major changes to Navy Cherry Point Range Complex facilities, operations, training, or RDT&E capacities over the 10-year planning period. Rather, the proposed action would result in relatively small-scale but critical enhancements to the Navy Cherry Point Range Complex that are necessary if the Navy is to maintain a state of military readiness commensurate with its national defense mission.



Legend

- Cherry Point OPAREA
- Surface Grid
- 3 nm State Limit
- 12 nm Territorial Limit
- MCB Camp Lejeune
- MCAS Cherry Point
- EIS Study Area

0 10 20 40 60 80
Nautical Miles

Figure ES-1

**Navy Cherry Point
Range Complex
EIS/OEIS Study Area**

**Navy Cherry Point
Range Complex**

Coordinate System: GCS WGS 1984

ES 2.1 Proposed Action

The proposed action is to support and conduct current and emerging training and RDT&E operations in the Navy Cherry Point Range Complex. To achieve this, the Navy proposes to:

- Maintain training and RDT&E operations at current levels if the No Action Alternative is selected.

If either Alternative 1 or Alternative 2 is selected, then:

- Increase or modify training and RDT&E operations from current levels in support of the Fleet Response Training Plan (FRTP) and the US Marine Corps Pre-deployment Training Program (PTP).
- Accommodate mission requirements associated with force structure changes, including those resulting from the introduction of new aircraft and weapons systems.
- Implement enhanced range complex capabilities.

The decision-maker for this FEIS/OEIS will decide both the level and mix of training and testing, and range capability enhancements, that best meet Navy and the Marine Corps requirements within the Navy Cherry Point Range Complex. The following sections discuss the alternatives with respect to the components that make up the Proposed Action.

ES 2.2 Alternatives

Alternatives in this FEIS/OEIS were evaluated to ensure they met the purpose and need, giving due consideration to range complex attributes such as: the capability to support current and emerging Fleet tactical training and RDT&E requirements; the capability to support realistic, essential training at the level and frequency sufficient to support the FRTP and PTP; and the capability to support training requirements while following Navy Personnel Tempo of Operations guidelines. Three alternatives are analyzed in this FEIS/OEIS:

1. The No Action Alternative – Under the No Action Alternative, training operations and major range events would continue at current levels. Evaluation of the No-Action Alternative provides a credible baseline for assessing environmental impacts of Alternative 1 and Alternative 2 (Preferred Alternative).
2. Alternative 1 – No Action Alternative plus: increase operational training, plus changes in type and quantity of operations and tactical employment of forces to accommodate expanded mission areas, force structure changes¹ (including training resulting from the introduction of new platforms and weapon systems), and new range capabilities. This alternative is composed of all operations currently conducted under the No Action Alternative, with modifications to current training or introduction of new training. These would include:
 - a) adjusting training levels to ensure that deployment can be stepped up quickly and at multiple locations in response to world events;
 - b) incorporating Maritime Security training into existing training events;
 - c) conducting surface-to-air missile training events;
 - d) conducting new or modified training associated with the introduction of the new MH-60 helicopter, and new organic mine countermeasure systems;
 - e) increasing use of commercial aircraft to displace Navy aircraft as oppositional forces for electronic combat, air intercept control, strike and close air support exercises, and as tow aircraft for air-to-air gunnery exercises; and
 - f) upgrading electronic combat capabilities.

¹ Force Structure Changes include changing weapon systems and platforms and homebasing new aircraft and ships.

- Alternative 2 (Preferred Alternative)– Includes all operations under Alternative 1 plus eliminating all high explosive at-sea BOMBEXs and designating two mine warfare training areas for major exercise mine training events.

For detailed information on each alternative refer to Chapter 2 of the FEIS/OEIS.

ES 2.3 Alternatives Considered but Eliminated from Further Analysis

Other approaches that were considered but eliminated because they did not meet the purpose and need included:

- No training alternative;
- Using alternative range complex locations;
- Conducting simulated training only; and
- Only using practice ammunition (non-explosive practice munitions) within the Navy Cherry Point Range Complex.

These were eliminated from further analysis, because none would be effective in putting into practice the FRTP. Specifically:

- If the Navy did not conduct training exercises along the East Coast, it would not be able to meet its obligations, as identified in Title 10 United States Code, Section 5062.
- The Navy Cherry Point Range Complex is an important component in the available suite of Navy and Marine Corps training and testing capabilities. The proximity of the Navy Cherry Point Range Complex to existing naval installations produces important advantages relating to features such as travel times, costs of operations, and personnel tempo of operations that could not be achieved at any other range complex.
- Although simulated training and practice ammunition are widely used, including in many Navy Cherry Point operations, they are no substitute for realistic field conditions. The value of live training provided by actually operating a combat system or handling explosive ammunition cannot be substituted through simulation, particularly as it relates to the physical reaction invoked by the danger, noise, and visual effects associated with these systems. Similarly, individuals and groups must be able to practice and hone their skills in communication, maneuvering, operating systems, repairing equipment, and firing weapons in an environment that is realistic and that replicates the high energy and stress of what they would encounter in an actual combat situation.

ES 3.0 Public Involvement

NEPA requires federal agencies to prepare an EIS for proposed actions that may significantly affect the quality of the human and natural environments. The EIS must disclose significant environmental impacts and inform decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. The Navy is the lead agency for the proposed action. The NMFS is a cooperating agency for this EIS/OEIS.

A notice of intent to develop the Draft EIS/OEIS was published in the Federal Register on April 30, 2007, and in five local newspapers in North Carolina. The newspaper notices were run five times in each newspaper. Two scoping meetings were held (Morehead City and Wilmington, NC) for the public to help define and prioritize issues and convey these issues to the agencies through both oral and written comments.

During the scoping process, 14 comments were received; 13 from government agencies at various levels and one from an individual. Commenters raised concerns about impacts on fish and fishing; harm to cultural resources, marine protected areas, and endangered species; and potential conflicts between boating or shipping and Navy activities. This EIS/OEIS addresses all comments received.

The Draft EIS/OEIS was provided to the U.S. Environmental Protection Agency for review and comment in accordance with its responsibilities and notice of availability of USEPA comments was published in the *Federal Register* (Vol 73, No. 178, September 12, 2008). The Navy also placed notices in local newspapers announcing the availability of the Draft EIS/OEIS and public hearings. The Draft EIS/OEIS was circulated for internal/agency review and made available for general review in public libraries. Public hearings were held in Beaufort and Wilmington, NC 14-15 October 2008. Public and agency comments were received via the Navy Cherry Point web site, facsimile, and regular mail. The public comment period for the Draft EIS/OEIS ended on 27 October 2008. Eighty-six public comments were received. This Final EIS/OEIS incorporates, and formally responds to, all public comments received on the Draft EIS/OEIS. Responses took the form of corrections of data inaccuracies, clarifications of and modifications to analytical approaches, inclusion of additional data or analyses, and modification of the proposed action or alternatives. Public and agency comments and Navy responses are located in Appendix F.

ES 4.0 Comparison of Alternatives and Effects

The comparison of alternatives presented in Table ES-1 is based on the information and analyses presented in Chapter 3 (Affected Environment and Environmental Consequences). The environmental stressors associated with each warfare area and operations were evaluated for each resource or issue in assessing potential environmental impacts under each alternative. There were no recordable differences in potential impacts between the alternatives for the following resources and issues:

- Hazardous Materials and Hazardous Waste;
- Water Resources;
- Air Quality;
- Airborne Noise;
- Land Use;
- Cultural Resources;
- Transportation;
- Demographics;
- Regional Economy;
- Recreation;
- Environmental Justice; or
- Public Health and Safety.

The potential impacts would generally be temporary, short-term, long-term, minor, and/or localized changes to these resources or issues. As defined under NEPA, no significant impacts in U.S. Territorial Seas and no significant harm in Non-Territorial Waters to resources or issues were identified considering implementation of mitigation measures described in Chapter 5. In addition, resources were evaluated in accordance with Marine Mammal Protection Act (MMPA), Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act (Eagle Act), Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), and the National Historic Preservation Act (NHPA). As a result of the cessation of high explosive BOMBEXs in Alternative 2, there is a substantial decrease in the number of marine mammals and sea turtles potentially impacted compared to the No Action Alternative and Alternative 1. The potential impacts presented in Table ES-1 form the basis for providing choices to the decision maker.

The Atlantic Fleet Active Sonar Training (AFAST) FEIS/OEIS is incorporated by reference in this FEIS/OEIS for active sonar and Anti-Submarine Warfare associated activities as they pertain to the Navy Cherry Point Range Complex. The reader should refer to the AFAST FEIS/OEIS (available at <http://afasteis.gcsaic.com>) for the full description and analysis of active sonar activities along the East Coast and within the Gulf of Mexico. The AFAST FEIS/OEIS Record of Decision (74 FR 5650) was signed on January 23, 2009. A summary of the environmental consequences due to sonar activities in the Navy Cherry Point Range Complex is provided by resource area in Section 3.19.

**Table ES-1
Comparison of Alternatives and Effects**

Resource or Issue	Alternatives		
	No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
Bathymetry and Sediments	Short term, minor impacts in the surf zone from amphibious operations (landing craft and amphibians) (Section 3.1.3.1)	Short term, minor impacts in the surf zone from amphibious operations (landing craft and amphibians) (Section 3.1.3.2)	Short term, minor impacts in the surf zone from amphibious operations (landing craft and amphibians) (Section 3.1.3.3)
Marine Communities	Long-term minor impacts to benthic habitats from accumulation of Non-explosive Practice Munitions (NEPM) (Section 3.6.3.1)	Slight increase in potential impacts to benthic habitats from accumulation of NEPM and short term, minor impacts from deployment and recovery of MIW mine shapes considering mitigation measures in place (Section 3.6.3.2)	An increase in potential impacts to benthic habitat from accumulation of NEPM and an increase in short term minor impacts from deployment and recovery of MIW mine shapes (Section 3.6.3.3)
Marine Mammals	Using acoustic modeling estimates for underwater explosions, no mortality potential exposures, 2,877 non-injurious potential exposures, and 65 injurious exposures. Under ESA, proposed activities may affect listed whale species. The proposed activities will have no effect on the manatee (Section 3.7.3.3).	Using acoustic modeling estimates for underwater explosions , no mortality potential exposures, 2,878 non-injurious potential exposures, and 65 injurious potential exposures. Under ESA, proposed activities may affect listed whale species. The proposed activities will have no effect on the manatee (Section 3.7.3.4).	Using acoustic modeling estimates for underwater explosions , no mortality potential exposure, 2 non-injurious potential exposures, and no injurious potential exposures. Under ESA, proposed activities may affect listed whale species. The proposed activities will have no effect on the manatee. The Navy has submitted to NMFS an application for a Letter of Authorization under MMPA and has initiated the ESA Section 7 formal consultation process with NMFS for listed whales. The Navy has submitted a Biological Evaluation to USFWS concluding that the proposed action would not affect manatees. The USFWS concurred (Section 3.7.3.5).

**Table ES-1
Comparison of Alternatives and Effects (Continued)**

Resource or Issue	Alternatives		
	No Action Alternative	Alternative 1	Preferred Alternative
Sea Turtles	Using acoustic modeling estimates for underwater explosions, no mortality potential exposures, 137 non-injurious exposures, and 3 injurious exposures. Under ESA, proposed activities may affect listed species (Section 3.8.3.2).	Using acoustic modeling estimates for underwater explosions, no mortality potential exposures, 137 non-injurious exposures, and 3 injurious exposures. Under ESA, proposed activities may affect listed species (Section 3.8.3.3).	Using acoustic modeling estimates for underwater explosions, no mortality potential exposures, no non-injurious exposures, and no injurious exposures. Under ESA, proposed activities may affect listed species. The Navy has initiated the ESA Section 7 formal consultation process with NMFS for listed sea turtles. (Section 3.8.3.4).
Fish	A limited number of fish would be injured or killed in the proximity of underwater explosions, but no population-level affects. (Section 3.9.3.1)	A limited number of fish would be injured or killed in the proximity of underwater explosions, but no population-level affects. (Section 3.9.3.2)	A limited number of fish would be injured or killed in the proximity of underwater explosions, but no population-level affects. (Section 3.9.3.3)
Essential Fish Habitat (EFH)	No adverse affect to EFH. Any impacts, mainly due to military expended materials, would be temporary and/or minimal. No reduction in the quality and/or quantity of EFH in the Study Area. Therefore, EFH consultation with NMFS is not required. (Section 3.9.3.1)	No adverse affect to EFH. Any impacts, mainly due to military expended materials, would be temporary and/or minimal. No reduction in the quality and/or quantity of EFH in the Study Area. Therefore, EFH consultation with NMFS is not required. (Section 3.9.3.2)	No adverse affect to EFH. Any impacts, mainly due to military expended materials, would be temporary and/or minimal. No reduction in the quality and/or quantity of EFH in the Study Area. Therefore, EFH consultation with NMFS is not required. (Section 3.9.3.3)
Seabirds and Migratory Birds	Vessel movements and high explosive detonations may affect, but not likely to adversely affect Bermuda petrels. Under ESA and MBTA, no effect would occur to other listed species and no long-term population-level effect would occur to migratory bird populations. (Section 3.10.3.1)	Vessel movements and high explosive detonations may affect, but not likely to adversely affect Bermuda petrels. Under ESA and MBTA, no effect would occur to other listed species and no long-term population-level effect would occur to migratory bird populations. (Section 3.10.3.2)	Vessel movements and high explosive detonations may affect, but not likely to adversely affect Bermuda petrels, although any effect would be less than the No Action Alternative and Alternative 1. Under ESA and MBTA, no effect would occur to other listed species and no long-term population-level effect would occur to migratory bird populations. (Section 3.10.3.3)
Atlantic Fleet Active Sonar Training (AFAST)	Potential impacts to resources or issues from AFAST and the Proposed Action combined are less than significant. (Section 3.19)	Potential impacts to resources or issues from AFAST and the Proposed Action combined are less than significant. (Section 3.19)	Potential impacts to resources or issues from AFAST and the Proposed Action combined are less than significant. (Section 3.19)

ES 5.0 Mitigation and Monitoring

The Navy recognizes that the proposed action has the potential to impact marine and other resources in the vicinity of training. Chapter 5 describes the Navy's overall mitigation and monitoring approach as well as specific mitigation measures that would be implemented to protect marine mammals, sea turtles, and other resources during training activities. Some of these measures are generally applicable and others are designed to apply to certain geographic areas and/or for specific types of Navy training. Due to the long-term nature of the proposed action, mitigation measures for many elements of the action have been established through previous environmental analyses, consultations, and/or permitting processes.

The Navy believes that a comprehensive approach to mitigation for the Navy Cherry Point Range Complex requires focus on: (1) mitigation by avoidance, in which adverse impacts are avoided altogether by altering the location, design, or other aspect of an activity, and (2) minimization of impacts when avoidance is not feasible. An important complement to the avoidance and minimization of impacts is monitoring to track compliance with take authorizations, impacts on protected resources, and effectiveness of mitigation measures. Taken together, these three elements – avoidance, minimization, and monitoring comprise the Navy's integrated approach to addressing potential environmental impacts.

The Navy is committed to demonstrating environmental stewardship while executing its National Defense Mission and is responsible for compliance with a suite of Federal environmental and natural resources laws and regulations that apply to a wide variety of environments. Consistent with the cooperating agency agreement with the NMFS, mitigation and monitoring measures presented in this EIS/OEIS focus on the requirements for protection and management of marine resources.

Between 2004 and 2008, the Navy provided over \$94 million to universities, research institutions, federal laboratories, private companies, and independent researchers around the world for marine life research. The Navy will continue to fund a significant amount of marine research directly applicable to its training activities. Currently, the Navy has budgeted nearly \$22 million and the DoD has budgeted a half a million dollars for continued marine mammal research in FY09. Major topics of Navy-supported research include the following:

- Better understanding of marine species distribution and important habitat areas,
- Developing methods to detect and monitor marine species before and during training,
- Understanding the effects of sound on marine mammals, sea turtles, fish, and birds, and
- Developing tools to model and estimate potential effects of sound.

This research is directly applicable to Atlantic Fleet training activities, particularly with respect to the investigations of the potential effects of underwater noise sources on marine mammals and other protected species. Additional details can be found in Section 5.4

ES 6.0 Cumulative Impacts

The proposed action will not make radical changes to the Navy Cherry Point Range Complex facilities, operations, training, or RDT&E capabilities. Rather, the actions proposed in Alternatives 1 and 2 are incremental increases over the No Action Alternative that would result in relatively small-scale, but critical, enhancements that are necessary if the Navy is to maintain a state of military readiness commensurate with its national defense mission.

Various types of past and present actions not related to the proposed action have the potential to impact the resources evaluated in this FEIS/OEIS. Twenty projects including, but not limited to, military

activities in other OPAREAs on the Atlantic coast, offshore oil and gas activities along the Atlantic seaboard, maritime traffic, scientific research, and marine ecotourism were analyzed for cumulative effects. For each resource area evaluated in this FEIS/OEIS, the effects to these resources from other past, present and reasonably foreseeable future projects were analyzed to assess the potential for this action to incrementally contribute to cumulatively significant impacts. Cumulative impacts resulting from sonar training were assessed using the conclusions from the Atlantic Fleet Active Sonar Training (AFAST) EIS/OEIS. Potential impacts to resources are identified in Section 6.4. Most of the summary conclusions on past, present, and reasonably future actions for the resources evaluated were no adverse impacts and potential for minor, but recoverable, adverse impacts. There were fewer summary conclusions categorized as potential for moderate, but recoverable, adverse impacts. No summary conclusions were characterized as potential for major, non-recoverable, adverse impacts (Table ES-2).

Table ES-2 Summary of Cumulative Impacts by Resource Area

		Bathymetry/Sediments	Hazardous Materials/Waste	Water Resources	Air Quality	Noise Environment	Marine Communities	Marine Mammals	Sea Turtles	Fish	Seabirds/Migratory Birds	Land Use	Cultural Resources	Transportation	Demographics	Regional Economy	Recreation	Environmental Justice	Public Health and Safety	
Past and Present Actions	Commercial and Recreational Fishing	*	*	NE	NE	NE	**	**	**	**	**	NE	*	NE	NE	NE	NE	NE	NE	
	Maritime Traffic	*	*	*	NE	*	NE	**	*	NE	NE	NE	*	*	NE	*	*	NE	*	
	Scientific Research	NE	*	NE	NE	NE	*	*	*	*	*	NE	NE	NE	NE	NE	NE	NE	NE	
	Debris	*	*	*	NE	NE	**	**	**	**	**	NE	*	NE	NE	NE	NE	NE	NE	
	Environmental Contamination and Biotoxins	NE	NE	**	NE	NE	**	**	**	**	**	NE	NE	NE	NE	NE	NE	NE	NE	
	Marine Ecotourism	NE	NE	*	NE	NE	NE	*	*	NE	NE	NE	NE	NE	NE	*	*	NE	NE	
	Military Operations	*	*	*	*	*	*	*	*	*	*	*	*	*	*	NE	*	*	NE	*
	MMS: Oil and Gas	**	*	**	**	*	*	**	**	*	**	NE	*	NE	NE	NE	NE	NE	NE	NE
	Dredging	**	**	**	**	*	**	NE	**	**	**	NE	NE	*	NE	NE	NE	NE	NE	NE
Future Actions	Military Operations	*	*	*	*	*	*	*	*	*	*	NE	*	NE	NE	NE	NE	NE	NE	*
	MMS Oil and Gas Leases	*	NE	*	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Navy Cherry Point Proposed Action		*	*	*	*	*	*	*	*	*	*	NE	*	*	NE	NE	*	NE	NE	
Cumulative Impacts		*	*	*	*	*	*	**	**	*	*	NE	*	*	NE	NE	*	NE	NE	

NE= No Adverse Impacts; *=Potential for minor, but recoverable, adverse impacts; **=Potential for moderate, but recoverable, adverse impacts
 ***=Potential for major, non-recoverable, adverse impacts