

FLORIDA COASTAL CONSISTENCY DETERMINATION

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FLORIDA UNDERSEA WARFARE TRAINING RANGE (USWTR) COASTAL CONSISTENCY DETERMINATION

27 April 2009

This document provides the State of Florida with the Department of the Navy's Coastal Consistency Determination (CCD) under the Coastal Zone Management Act (CZMA), 16 United States Code (U.S.C.) § 1456, Section 307(c)(1) and 15 Code of Federal Regulations (CFR) Section 930.36 for the proposed USWTR, and the preferred alternative located offshore of Northeastern Florida in the U.S. Navy's Jacksonville Operating Area. The State of Florida requires that federal agencies conduct a CZMA Consistency Determination for certain direct federal action, federal permits and licenses, and federal assistance programs that occur within the State's designated coastal zone, and have the potential to affect the State's coastal zone resources. Section 304(1) of the CZMA defines the seaward extent of a state's coastal zone as "*to the outer limit of state title and ownership under the Submerged Lands Act (43 U.S.C. 1301 et. seq.)*". Under the Submerged Lands Act, Florida's title and ownership extends 5.6 kilometers (km) (3 nautical miles [NM]) into the Atlantic Ocean and, in accordance with United States vs. Louisiana, et al., 364 U.S. 502 (1960), approximately 16.7 kilometers (km) (9 NM) into the Gulf of Mexico. The entire State of Florida and the waters therein are also considered a part of the coastal zone. Based on the analysis in the Draft Environmental Impact Statement (EIS)/Overseas EIS, the proposed action requires a CZMA CCD because of the potential to impact coastal resources within the State of Florida's coastal zone. Based upon a review of the Florida Coastal Management Program (FCMP), the Department of the Navy (DoN) has determined that the proposed action is consistent to the maximum extent practicable with the enforceable policies of Florida's approved coastal management program.

1.0 FEDERAL AGENCY ACTION

DoN proposes to instrument a 1,713-square-kilometer (km²) (500-square-nautical mile [NM²]) area of the ocean with undersea cables and sensor nodes and to use the area for anti-submarine warfare (ASW) training. The landward edge of the USWTR would be located approximately 93 km (50 NM) offshore of Northeastern Florida and well outside of Florida coastal waters.

Within the State's coastal zone, a trunk cable connecting the range to the shore facilities at Naval Station (NAVSTA) Mayport would be buried to a depth of approximately 0.3 to 0.9 meters (m) (1 to 3 feet [ft]). Ocean-bottom burial equipment would be used to cut (hard bottom) or plow (soft sediment) a furrow approximately 10 centimeters (cm) (4 inches [in]) wide, in which the 5.8-cm (2.3-in) cable would be placed. Cable installation would be accomplished using a tracked, remotely operated mechanical cable burial vehicle.

The trunk cable would be brought on shore and secured on land with a deadman (i.e., anchoring device). A 10-cm (4-in) conduit would be installed under the dunes to the east of the proposed cable termination facility (CTF) with the seaward end of the conduit emerging on the beach near the surf zone. The conduit would be installed using directional drilling techniques. From the land side termination point of the conduit to the CTF, the cable would be installed in a 0.6-m- (2-ft-) wide, 0.9-m- (3-ft-) deep trench.

The CTF would be an approximately 37-m² (400-ft²) structure that would house the power supplies, system electronics, and communications gear necessary to operate the offshore range. Commercial power and telecommunications connections would be made to the NAVSTA Mayport infrastructure. The communications signals would be routed to the range operations center at the Fleet Area Control and Surveillance Facility, Jacksonville, and electronics would be housed at the terminal end of the communications link.

2.0 PURPOSE

The purpose of the proposed action is to enable the U.S. Navy to train effectively in an at-sea environment ranging in water depth from 36 to 274 m (20 to 900 ft) at a suitable location for Atlantic Fleet units. The U.S. Navy's primary mission is to maintain, train, equip, and operate combat-ready Naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. ASW is a critical part of that mission. Atlantic Fleet units deploy worldwide and shifts in the military strategic landscape require increased Naval capability in the world's shallow, or littoral, seas. Training effectively for these littoral environments requires the availability of realistic conditions in which actual potential combat situations can be adequately simulated. The U.S. Navy currently lacks an instrumented shallow water (encompassing depths of 36 to 274 m [120 to 900 ft]) training range offshore of the east coast of the United States that is geographically and oceanographically similar to potential strategic areas.

3.0 FLORIDA COASTAL MANAGEMENT PROGRAM

The FCMP Act, adopted in 1978, authorized the development of a coastal management program. FCMP was approved by the National Oceanic and Atmospheric Administration (NOAA) in 1981. It consists of a network of 23 Florida statutes administered by eight state agencies and five of the five water management districts. The program is designed to ensure the wise use and protection of the State's water, cultural, historic, and biological resources; to minimize the State's vulnerability to coastal hazards; to ensure compliance with the State's growth management laws; to protect the State's transportation system; and to protect the State's proprietary interest as the owner of sovereign submerged lands. NAVSTA Mayport falls within the City of Jacksonville, which is a participating agency in the FCMP. In the "Conservation/Coastal Element" of its 2010 comprehensive plan, the City outlines 11 goals with supporting policies that direct the management and conservation of coastal resources.

4.0 ANALYSIS

4.1 FCMP STATUTES

Each of the 23 Florida statutes is evaluated in the following sections for applicability to the USWTR project. When applicable, the project's consistency with these statutes is discussed. NAVSTA Mayport is federal property and, therefore, does not fall within the jurisdiction of the Florida coastal zone. State coastal zone that may potentially be affected by the proposed action is

limited to the coastal Atlantic Ocean (within 6 km [3 NM]) adjacent to NAVSTA Mayport. Other state-regulated resources aboard NAVSTA Mayport, such as tidal wetlands and threatened and endangered species, are also discussed. Activities associated with ASW training on the proposed USWTR would not affect the State's coastal zone or affect any land or water use, or natural resource of the coastal zone; therefore this Consistency Determination does not include operations on the USWTR.

4.1.1 Beach and Shore Preservation (Chapter 161)

This policy authorizes the Bureau of Beaches and Coastal Systems within the Florida Department of Environmental Protection to regulate construction on or seaward of the State's beaches. The proposed action would be consistent with this statute because it would be undertaken in such a manner that would ensure the protection of beach/dune systems. The cable would be installed under the dunes to the east of the proposed CTF using directional drilling, with the seaward end of the conduit emerging on the beach near the surf zone, therefore, not affecting the dune system. Cable burial is the only activity proposed for the area seaward of the mean high water line and within the States' coastal waters, and therefore, this policy is not applicable to the proposed action.

4.1.2 Growth Policy, County and Municipal Planning, Land Development Regulation (Chapter 163, Part II)

This policy requires local governments to prepare, adopt, and implement comprehensive plans that encourage the most appropriate use of land and natural resources in a manner consistent with the public interest. The proposed action includes no comprehensive plans for land and natural resource use as is pertains to the Florida coastal zone. Furthermore, because NAVSTA Mayport is federal property, state and local planning is not applicable on the base.

4.1.3 State and Regional Planning (Chapter 186)

This statute details state-level planning requirements. It requires the development of special statewide plans governing water use, land development, and transportation. The proposed action does not include any development of plans to govern water use, land development, or transportation. Furthermore, because NAVSTA Mayport is federal property, state and local planning is not applicable to the base.

4.1.4 Emergency Management (Chapter 252)

This policy provides for planning and implementation of the state's response to, efforts to recover from, and the mitigation of, natural and manmade disasters. The proposed action at NAVSTA Mayport would not increase the State's vulnerability to natural disasters. Moreover, emergency response and evacuation procedures are not applicable to the proposed action.

4.1.5 State Lands (Chapter 253)

This policy addresses the state's administration of public lands and property of this state and provides direction regarding the acquisition, disposal, and management of all state lands. The proposed action aboard NAVSTA Mayport would not apply since this is federal property. No special aquatic sites are located within the project area, and a water quality management plan would be implemented prior to burying the cable into the sea floor with the States coastal zone.

Installing the cable would require an Army Corps of Engineers permit to comply with the Clean Water Act, Section 404, and Rivers and Harbors Act, Section 10. A State of Florida Program General Permit that authorizes submerged utility lines and associated dredging or excavation would also be acquired before any installation activities began.

4.1.6 State Parks and Preserves (Chapter 258)

This policy addresses administration and management of state parks and preserves. The proposed action would not affect any state parks or preserves, and therefore this policy is not applicable.

4.1.7 Land Acquisitions for Conservation or Recreation (Chapter 259)

This policy authorizes acquisition of environmentally endangered lands and outdoor recreation lands. The proposed action would not affect any land acquisition for conservation and recreation, and therefore, this policy is not applicable.

4.1.8 Florida Greenways and Trails Act (Chapter 260)

This policy authorizes acquisition of land to create a recreational trails system and to facilitate management of the system. The proposed USWTR would avoid the recreational trails system and would not affect the management of the system. Hence, this statute is not applicable.

4.1.9 Historical Resources (Chapter 267)

This policy addresses management and preservation of the state's archaeological and historical resources. There would be no effects to historical resources at the NAVSTA Mayport site or the adjacent State coastal waters, as there are no known cultural resources in the immediate vicinity of the proposed project area. The proposed action would not affect any cultural resources; therefore, this policy is not applicable to the proposed action.

4.1.10 Commercial Development and Capital Improvements (Chapter 288)

This policy provides the framework for promoting and developing the general business, trade, and tourism components of the state economy. The proposed action would not involve any commercial development or capital improvements that would affect the business, trade, or tourist components of the state economy, and therefore, this policy is not applicable.

4.1.11 Transportation Administration (Chapter 334)

This policy addresses the state's policy concerning transportation administration. The proposed action would not affect transportation, and therefore, this policy is not applicable.

4.1.12 Transportation Finance and Planning (Chapter 339)

This statute addresses the finance and planning needs of the state's transportation system. The proposed action would not affect transportation, and therefore, this policy is not applicable.

4.1.13 Saltwater Fisheries (Chapter 370)

This policy addresses management and protection of the state's saltwater fisheries. The installation of cables may result in the temporary displacement of benthic fish. Ocean bottom burial equipment would disturb a relatively narrow path of 5 m (16 ft), while digging the 10-cm (4-in) furrow in which to bury the cable. Because the equipment would only be present in any given area for a few hours, any impacts would be minor and very brief. Therefore, it is not anticipated that there would be any lethal or long-term impact to fish. Management of fisheries stocks would not be affected by implementation of the USWTR at the Mayport landfall site, and no significant impacts to fish habitats are expected. Implementation of the USWTR at the NAVSTA Mayport landfall site would be consistent with this policy on saltwater fisheries.

4.1.14 Wildlife (Chapter 372)

This policy addresses the management of the wildlife resources of the state. The proposed action would not significantly affect wildlife. There could be temporary impacts to the nesting activities of the loggerhead and green sea turtles if installation were to occur during nesting months; however, under such circumstances, consultation with the U.S. Fish and Wildlife Service would be arranged before initiating any construction activities. Further, current conservation measures in place at NAVSTA Mayport beach would minimize or eliminate the potential for adverse impact. These conservation measures include marking known sea turtle nesting areas with protective fencing and avoiding disturbance of those areas. Finally, installation of the cable across the beach and installation of the CTF would not affect NAVSTA Mayports' ability to conduct current wildlife conservation measures. The proposed action would be consistent with this policy.

4.1.15 Water Resources (Chapter 373)

This policy addresses the state's policy concerning water resources. Installation of the trunk cable at the proposed landfall site would cause minimal, short-term impacts to water quality because bottom sediments would be disturbed. Disturbed bottom sediments can cause increased turbidity that can clog fish gills and can decrease oxygen levels and photosynthesis; however, in this case the increased turbidity would not pose a significant impact, given its limited duration. Additionally, in coastal waters, suspension of bottom sediments is a natural occurrence with passing coastal storms. Construction of the landside facility is not expected to impair coastal

water quality. Implementation of the USWTR would be consistent with coastal water quality policies.

4.1.16 Outdoor Recreation and Conservation Lands (Chapter 375)

This statute authorizes the state to acquire lands, water areas, and related resources for outdoor recreation and conservation. The proposed USWTR would not affect the development of a comprehensive multipurpose outdoor recreation plan that documents recreational supply and demand, describes current recreational opportunities, estimates need for additional recreational opportunities, and proposes means to meet the identified needs. Therefore, this statute is not applicable.

4.1.17 Pollutant Discharge Prevention and Removal (Chapter 376)

This policy regulates transfer, storage, and transportation of pollutants, and cleanup of pollutant discharges. The proposed action at the NAVSTA Mayport landfall site would not result in the production of hazardous waste or the discharge of pollution; therefore, this policy is not applicable.

4.1.18 Energy Resources (Chapter 377)

This statute addresses regulation, planning, and development of energy resources of the state. The proposed action would not affect energy resources, and therefore, this policy is not applicable.

4.1.19 Land and Water Management (Chapter 380)

This policy establishes land and water management policies to guide and coordinate local decisions relating to growth and development. The proposed action would primarily occur on federally-owned lands. Under the proposed action, development of state lands would not occur. Areas of critical state concern, or areas with approved state resource management plans, would not be affected. Changes to coastal infrastructure, such as bridge construction, capacity increases of existing coastal infrastructure, or use of state funds for infrastructure planning, designing, or construction would not occur. Therefore, this policy is not applicable to the proposed action.

4.1.20 Public Health, General Provisions (Chapter 381)

The proposed action does not involve the construction of an on-site sewage treatment and disposal system. Consequently, this statute that relates to public policy concerning the state's public health system is not applicable.

4.1.21 Mosquito Control (Chapter 388)

This statute addresses mosquito control efforts in the state. The proposed action would not affect mosquito control, and therefore, this policy is not applicable.

4.1.22 Environmental Control (Chapter 403)

This statute establishes public policy concerning environmental control in the state. Installation of the trunk cable at the proposed landfall site would cause minimal, short-term impacts to water quality because bottom sediments would be disturbed, however this would not pose a significant impact, given its limited duration. Effects to ecological systems or air quality are not anticipated. The proposed action would be consistent with this policy.

4.1.23 Soil and Water Conservation (Chapter 582)

This policy provides for the control and prevention of soil erosion. Soil and erosion control measures would be implemented as par to of the construction and installation process aboard NAVSTA Mayport. Therefore, the proposed action would not result in soil erosion and/or significant impacts to water quality from soil erosion. Soil and water conservation policies would continue to be followed as currently practiced at NAVSTA Mayport. The proposed action is consistent with this policy.

4.2 CITY OF JACKSONVILLE COMPREHENSIVE PLAN

The following text addresses the applicability of the City of Jacksonville's 11 goals, objectives, and policies with respect to the proposed action at the NAVSTA Mayport landfall site.

4.2.1 Air Quality

There would be no new sources of air pollutants at the landside facility. Furthermore, the Clean Air Act (CAA) conformity rules would not apply to the landside facilities or in nearshore areas within the 6-km (3-NM) jurisdiction of the CAA, as they would be within an attainment area for all criteria pollutants. Air quality impacts from construction activities at NAVSTA Mayport would be from fugitive dust generated on site and mobile source emissions from construction vehicles and workers' automobiles. These impacts would be minor and would be short-term in nature. Thus, the construction and operation of the proposed USWTR would have no significant impact on air quality in the vicinity of NAVSTA Mayport and would be consistent with air quality policies.

4.2.2 Water Quality

Installation of the trunk cable at the proposed landfall site would cause minimal, short-term impacts to water quality because bottom sediments would be disturbed. Disturbed bottom sediments can cause increased turbidity that can clog fish gills and can decrease oxygen levels and photosynthesis; however, in this case the increased turbidity would not pose a significant impact, given its limited duration. Additionally, in coastal waters, suspension of bottom sediments is a natural occurrence with passing coastal storms. Construction of the landside facility is not expected to impair coastal water quality. Implementation and operation of the proposed USWTR would be consistent with coastal water quality policies.

4.2.3 Native Ecological Communities

The cable would be installed under the dunes to the east of the proposed cable termination facility using directional drilling, with the seaward end of the conduit emerging on the beach near the surf zone. This underground installation would not impact any native ecological communities within the City of Jacksonville, and therefore, policies with regard to native ecological communities are not applicable.

4.2.4 Wetlands Conservation

The CTF would be sited to avoid wetlands. While installing the landside portion of the trunk cable, directional drilling would be used to avoid wetlands to the maximum extent practicable. If wetlands were to be impacted, the U.S. Navy would obtain the appropriate Section 404 wetland permit from the U.S. Army Corps of Engineers prior to construction, and would implement mitigation as required by wetland permit conditions. The State of Florida has issued a State Program General Permit that authorizes submerged utility lines and associated dredging or excavation that would also be obtained, if necessary. The proposed action would be consistent with the City of Jacksonville's wetlands conservation policy.

4.2.5 Unique or Sensitive Environments

There are no unique or sensitive habitats in the vicinity of the proposed landfall site at NAVSTA Mayport; therefore, policies regarding unique or sensitive environments are not applicable.

4.2.6 Sandy Beaches and Shorelines

Aboard NAVSTA Mayport, the cable would be installed under the dunes to the east of the proposed cable termination facility using directional drilling, with the seaward end of the conduit emerging on the beach near the surf zone. This underground installation would not impact the beaches or shoreline within the City of Jacksonville, and therefore, policies regarding sandy beaches and shorelines are not applicable.

4.2.7 Coastal Storm-Related Public Safety and Health

Installation of the trunk cable at the proposed landfall site and construction of the landside facility would involve directional drilling under the dune system. The cable installation would take place in an ocean hazard area, but is not a structure. The CTF is the only structure, but is located outside of the ocean hazard area. The proposed USWTR is consistent with policies on coastal storm-related public safety and health.

4.2.8 Historical Resources

There would be no adverse impacts on historical resources at the NAVSTA Mayport site, as there are no known cultural resources in the immediate vicinity of the site. The proposed action would not effect cultural resources and coordination with the State Historic Preservation Office

is not required; therefore, policies regarding historical resources are not applicable to the proposed action.

4.2.9 Level of Service Standards

The proposed action would not involve the introduction of new vehicular traffic, so policies regarding traffic level of service standards are not applicable.

4.2.10 Siting and Operation of Boat Facilities

The proposed action would not involve, nor would it impact, the siting and operation of boat facilities; therefore, policies regarding siting and operation of boat facilities are not applicable.

4.2.11 Compatible Development

The proposed action would be consistent with the military land use of NAVSTA Mayport.

5.0 CONCLUSION

In conclusion, after careful consideration of the proposed action, the DoN has determined that the installation and operation of the USWTR would be consistent to the maximum extent practicable with the NOAA-approved enforceable policies of the FCMP and the *City of Jacksonville Comprehensive Plan*.

Commentor	Comments	Navy's Response
Florida DEP - Lynn Griffin	"The DEIS presents a project concept and general maps, but should provide diagrams or maps of cable routes and sonar nodes in relation to benthic resources, artificial reefs, fisheries habitat, etc. More information on installation methodologies is required. For example, the cable burial vehicle is described as having a width of 16 ft., but the DEIS does not clarify whether that equates to a 16-ft. impact swath along the entire estimated 600 nautical miles of cable to be installed. In addition, there are no maps showing precisely where the trunk cable would come on shore. Although the trunk cable is only 2.5 inches in diameter, the DEIS mentions that it will be installed via directional drilling, but does not provide details on the extent of disturbance related to its installation."	The text for Chapter 2 of the FEIS has been revised and can help address this comment.
Florida DEP - Lynn Griffin	"The DEIS should include detailed maps depicting the locations of benthic resources in relation to proposed structures and cables. Benthic resource information should be obtained from biological and photographic surveys using protocols sufficient to allow the types and areal extent of affected resources and ecosystems, especially those that may be unique to the area, to be quantified and mapped."	Revised text from Chapter 2 of the FEIS states: The risk of harming benthic organisms during the installation of the cable and nodes would be minimized by thoroughly surveying the area prior to the burial process. The survey would use multi-beam sonar to collect information such as bathymetry, seabed morphology at scales of 1.6 to 33 feet (0.5 to 10 meters), sediment types, and surface geology. This information would be coupled with photographs of the ocean bottom and biological/geological samples to provide accurate data on the location of existing habitats.
Florida DEP - Lynn Griffin	"The DEIS should examine and quantify all permanent, temporary and secondary impacts to habitats, especially the acreage of live and hardbottom to be eliminated or disturbed by installation of the cable grid and the long term effects of USWTR training activities. The DEIS should describe how these impacts will be avoided or minimized. Resource impact evaluations and project alternatives should be based on complete descriptions of all aspects of the proposed activities, including alignment and construction options."	The text for Chapter 2 of the FEIS has been revised and can help address this comment.

Commentor	Comments	Navy's Response
Florida DEP - Lynn Griffin	"A discussion of mitigation for unavoidable impacts to resources should be included in the DEIS and address impacts to all marine resources, not only marine mammals, resulting from the installation and operational use of the established training area. In particular, the DEIS should evaluate the need for mitigation of any potential long-term effects of operational waste materials left on the seafloor ecosystem."	The Navy is making every effort to minimize waste materials during installation and operation of the range (refer to revised Subchapter 4.1), and will adhere to all relevant regulatory requirements regarding mitigation of impacts.
Florida DEP - general	"Will other types of exercises be conducted on the USWTR besides the Anti-submarine Warfare (ASW). If so, please explain."	A description of all of the training to be performed on the USWTR can be found in Chapter 2 and Subchapter 4.8 of the EIS.
Florida DEP - general	"From the table presented, it appears that the USWTR will have almost constant use. Was this accounted for when analyzing the possible effects on coastal and marine resources? Will this significantly increase the amount of ship traffic coming out of Jacksonville on a daily basis, if so, how much? Could this increased traffic affect the areas of known North Atlantic right whale habitat?"	The frequent use of the USWTR was accounted for when analyzing the effects to coastal and marine resources. It is not anticipated that ship traffic out of Naval Station Mayport would increase as a result of the construction of the USWTR, as these same ships are already transiting the right whale critical habitat to train out at sea.
Florida DEP - general	"It is stated that materials left in place are not expected to result in any significant degradation of the environment. Please provide MSDS sheets on all materials expected to be expendable and references to support the statement."	The Navy is making every effort to minimize waste materials during installation and operation of the range (refer to Subchapter 4.1), and will adhere to all relevant regulatory requirements regarding mitigation of impacts. Material Safety Data Sheets (MSDSs) are documents containing information on the potential effects on human health from exposure to chemicals. MSDSs describe possible hazards involved with the chemicals/products, how to use them safely, what to do when accidents occur, and how to recognize symptoms of overexposure. This information is not relevant to Subchapter 4.1.2 of the FEIS, which discusses potential releases of toxic materials to the ocean environment and potential effects on marine organisms. The analysis provided in the FEIS indicates that expended materials pose negligible risks to marine organisms.

Commentor	Comments	Navy's Response
Florida DEP - general	"Although the material left in place may not pose a hazard as it decomposes, could accidental ingestion occur? What is the likely hood that these materials may resemble food sources for ESA species?"	Please refer to Subchapter 4.2.4.5. Parachutes used are large in comparison with turtles' normal food items, and would be very difficult to ingest.
Florida DEP - general	"Please explain why part of the proposed project is located in international waters? Why was the Exclusive Economic Zone (EEZ) not included in the analysis of the proposed project's boundaries? The next to last paragraph stated the Navy could issue notice to mariners, advising of potentially hazardous operations, but the next paragraph states that the USWTR operations would have to avoid shipping vessels transiting through the range. Please explain. How many notices to mariners would be issued each year? At the open house, it was suggested that recreational and commercial fishing does occur in the proposed project area. Would this notice exclude recreational and commercial fishermen from using the area?"	USWTR is located within the U.S. EEZ and not international waters, as incorrectly reported in portions of the DEIS. Please refer to Subchapter 1.5 for a discussion of how Executive Order 12114 applies to the analysis of USWTR. In addition, refer to Subchapter 4.4.2.2 regarding Notices to Mariners, which would only be used if deemed necessary. No restricted areas of navigation are proposed to be implemented for the USWTR, so the Navy would be required to wait for recreational and commercial vessels to clear the range area prior to commencement of training exercises.
Florida DEP - general	"Please explain the determination that some impacts are outside US territory? Why was the Exclusive Economic Zone (EEZ) not included in analyzing the location of impacts? Please explain why NEPA analysis is not applied to waters out from the state-federal boundary to the EEZ."	Please refer to the discussion of the EEZ issues in Chapter 1, section 1.5.1 of the DEIS. The USWTR site is located within the exclusive economic zone of the U.S. and the environmental impacts are analyzed in the EIS under EO 12114. The Proposed Action that occurs within the U.S. territorial seas and on the shore is evaluated under the National Environmental Policy Act (NEPA).
Florida DEP - general	"Please completely describe the construction methods that will be used to bring the trunk cable onshore at Mayport Naval Station? When will the decision be made that the trunk cable or interconnect cables should be buried or not? If it is to be buried, and the local bottom type is too hard to cut, what burial alternatives are available?"	The text for Chapter 2 of the FEIS has been revised and can help address this comment. See subchapter 4.2.3 of the FEIS for a description of construction impacts.

Commentor	Comments	Navy's Response
Florida DEP - general	"This section states that directional drilling techniques will be used to bring the trunk cable on shore. Please describe the directional drilling process, in detail. Where exit/entrance pits will be located; how drilling fluids will be handled; the possibility frac outs including the procedures that will be used to minimize and respond to frac outs."	Please refer to revised Subchapter 4.1.1.1 for a description of the anticipated impacts associated with the installation of the cables and nodes. Additional information regarding installation can be found in the revised Chapter 2. Engineering design on the cable installation will be undertaken once true bottom conditions are documented through the bottom mapping effort. Once the bottom mapping is complete, definitive plans (including best management practices) will be developed specific to the surveyed site conditions.
Florida DEP - general	Please explain the term deadman anchor.	A deadman anchor is an object fixed in the ground to anchor a line or cable. This definition has been added to Subchapter 2.5.
Florida DEP - general	"Please provide a more detailed description including diagrams of the remotely operated cable burial vehicle. Please provide a more detailed description of the anticipated impacts to benthic habitats due to using the cable burial vehicle. Since the burial vehicle is approximately 16 ft in width, how will impacts to possible sensitive benthic habitat be avoided during construction of the proposed project? Please discuss if there are any other alternative construction methods to the cable burial vehicle."	The text for Chapter 2 and Subchapter 4.2.3.1 of the FEIS has been revised and can help address this comment. At this time, Navy engineers have not decided on the exact type of cable laying vehicle to be used for the construction of the USWTR, so a diagram is not able to be provided. After the completion of the bottom mapping of the range site, more definitive engineering decisions will be reached and a cable laying vehicle will be chosen.
Florida DEP - general	"The information presented represents only about 20% of the proposed site A. In meetings with the DoN, it was relayed to the state that surveys of the area were being planned. The methodology, data, and analysis from those surveys should be included in the Final EIS. Along with the sonar range, the entire run of the trunk cable should also be surveyed and analyzed."	The Navy performed data collection for the benthic studies of the trunk cable corridor in December of 2008. The results of the survey will not be available to the Navy until June of 2009, after the publication of the Final EIS. The survey of the range area itself is not slated to begin until mid to late 2009, so it likely that the results of that survey will not be available until calendar year 2010. We will share the survey data with Florida DEP once the final report is ready.
Florida DEP - general	"Please provide the state with copies of the reference DoN 2007d (Marine Resource Assessment for the Charleston/Jacksonville Operating Area)."	This reference is available on the USWTR web site at http://projects.earthtech.com/uswtr/USWTR_library/PDF_library/MRAs/MRA_CHASJAX.pdf .
Florida DEP - general	"The state recommends adjusting the boundaries of the proposed range, so the recently designated MPA would not be within the proposed range."	Please refer to Subchapter 4.2.3.1 of the FEIS. The Navy has initiated EFH consultation with the NMFS, which will include discussions regarding actions that could be taken to avoid or minimize potential impacts of the construction or operation of the USWTR on the MPA.

Commentor	Comments	Navy's Response
Florida DEP - general	"Bottom habitats in the entire range and corridor at Site A should be surveyed and analyzed for habitat types. Information collected should be forwarded to the state for review and should include maps and figures showing the designated habitats overlaid with the proposed project alignment (cable placement, sonar node placement, and impacts expected from construction and usage)."	The Navy performed data collection for the benthic studies of the trunk cable corridor in December of 2008. The results of the survey will not be available to the Navy until June of 2009, after the publication of the Final EIS. The survey of the range area itself is not slated to begin until mid to late 2009, so it likely that the results of that survey will not be available until calendar year 2010. We will share the results of the survey with Florida DEP once the final report is ready.
Florida DEP - general	"Information presented here in incorrect and should be updated. The Florida Coastal Management Program (FCMP) is coordinated by the Florida Department of Environmental Protection (DEP) and is the lead coastal agency pursuant to Sections 380.22(1) and 403.061(40), <i>Florida Statutes</i> . The FCMP was moved from Florida Department of Community Affairs to DEP in 2002. The state's federal consistency review is specified in Section 380.23, <i>Florida Statutes</i> ."	The corrected information was included in Subchapter 3.7.1 of the FEIS.
Florida DEP - general	"The third paragraph states that hard bottom ledges and biogenic reef mounds are unlikely to be impacted because of difficulty of using burial equipment in areas where those resources occur. Will these areas be avoided when laying the grid? If so, please explain how these areas will be avoided. If avoidance is not possible, please describe how impacts will be minimized. If the transmission cable cannot be buried, how will it be secured to the substrate to ensure no movement will occur?"	Data from the 2009 bathymetric survey will identify bottom ledges and biogenic reefs to be avoided to the maximum extent possible. Please refer to Subchapter 4.1.1.1: if transducer nodes or trenched cables were to be installed in biogenic reefs, permanent localized damage may occur. Subchapter 4.2.3.1: During installation, transducer nodes and cables would be placed to avoid hard bottom substrate to the maximum extent practical. Due to installation constraints, only small habitat areas and features can be avoided. The Navy is consulting with NMFS as to the impact on benthic resources, including biogenic reefs, and will implement any required mitigation measures. See Subchapter 2.2.1 for information on the placement of cable on bottom ledges. The cable will not be secured, but with 3-5% of slack, and the weight of the cable, it is not expected to be affected by the current.
Florida DEP - general	"If the ocean bottom burial equipment cannot cut the hard bottom, what other alternative methods of installation will be used?"	The text for Chapter 2 of the FEIS has been revised and can help address this comment.

Commentor	Comments	Navy's Response
Florida DEP - general	"What type of turbidity plumes are expected with the use of the bottom burial equipment? How long will the plumes last, what resources could be affected from the burial equipment?"	Please refer to the revised text in Chapter 2. In addition, revised text in Subchapter 4.1.1.1 states "Expected turbidity plumes typically would last for a few hours and occur in the area near the ocean bottom. Without currents, the effects would be confined to the immediate vicinity of the cable, i.e. within about 10 m (33 ft) from the trench. Water currents would distribute the plume over a larger area but also dilute it..."
Florida DEP - general	"Should surveys reveal deepwater corals present in the area of the proposed project, please describe what procedures that will be used to avoid and minimize impact to these resources. Deep water corals and livebottom habitats are a valuable resource providing habitats including EFH that are slow to recover from impacts."	Please refer to Subchapter 4.2.3.1. During installation, transducer nodes would be placed to avoid hard bottom substrate to the maximum extent practical. The Navy is conducting bottom mapping surveys at Site A in 2009. Data from these surveys would be used to characterize potential biological habitats and hard bottom, and minimize impacts to these habitats.
Florida DEP - general	"Deepwater corals tend grow very slowly and inhabit areas with specific requirements. Please provide references supporting the idea deepwater corals would recolonize the disturbed area created by the construction of the sonar range."	Revised text in Subchapter 4.1.1.1 states "Growth rates of branching deepwater coral species, such as <i>Lophelia</i> and <i>Oculina</i> , are relatively low, ranging from about 10. to 2.5 cm/yr (0.4 to 1 in/yr)." (This information was obtained from NOAA, NOAA Coral Reef Information System - Deepwater Corals. http://www.coris.noaa.gov/about/deep/). The Navy recognizes that the installation of the USWTR may adversely affect biogenic reef community (see Subchapter 4.2.3.1) and is currently undertaking Essential Fish Habitat (EFH) consultation with the Southeast Regional Office of the National Marine Fisheries Service.
Florida DEP - general	"What impact will the expendable materials from torpedoes that do not degrade have on the surrounding habitat? Is there possibility for entanglement or ingestion by fish, mammals, or turtles? Please provide reference that the non-inert materials would degrade, corrode, and become incorporated into the sediments. What is the timeframe for incorporation into the sediments?"	Please refer to the revised text for Subchapter 4.1.1.2. Reference is made in the revisions to information obtained from the Dabob Bay Range Complex study and the Nanoose study (both found on the attached CD). Both of these studies demonstrated that long term effects of marine expended materials, such as those to be utilized on the proposed USWTR, would have negligible long-term effects.
Florida DEP - general	"Please provide references that the sonobuoys would degrade, corrode, and become incorporated into the sediments. What is the timeframe for incorporation into the sediments?"	Please refer to the revised text for Subchapter 4.1.1.2. Reference is made in the revisions to information obtained from the Dabob Bay Range Complex study and the Nanoose study (both found on the attached CD). Both of these studies demonstrated that long term effects of marine expended materials, such as those to be utilized on the proposed USWTR, would have negligible long-term

Commentor	Comments	Navy's Response
		effects.
Florida DEP - general	"Please provide references that the targets or EMATTs would degrade, corrode and become incorporated into the sediments. How many years would this process take?"	Please refer to the revised text for Subchapter 4.1.1.2. Reference is made in the revisions to information obtained from the Dabob Bay Range Complex study and the Nanoose study (both found on the attached CD). Both of these studies demonstrated that long term effects of marine expended materials, such as those to be utilized on the proposed USWTR, would have negligible long-term effects.
Florida DEP - general	"Please provide references for the battery study of the Aid to Navigation sites in California. Please provide references for the prototype investigations."	Please refer to the referenced USEPA, 2001. In addition, the National Plan For ATON Battery Recovery and Disposal can be found at http://www.uscg.mil/directives/ci/16000-16999/CI_16478_12.pdf .
Florida DEP - general	"Please provide tables detailing the impacts to resources."	Please refer to table ES-3 in the Executive Summary. In addition, please refer to table 4.8-5.
Florida DEP - general	"While unburied transducers may provide substrate for some organisms, artificial hard substrate does not have the same replacement value as natural hardbottom."	Comment noted.
Florida DEP - general	"Are seagrasses expected in the nearshore area of the proposed project? If so, will surveys be done to determine the extent of the resource? Describe how impacts will be avoided."	All available seagrass mapping information indicates that no seagrass is present at the trunk cable site. If it is later discovered that seagrass beds are present within the proposed trunk cable route, all efforts would be made to avoid the beds by installation of the trunk cable in conduit from the shore by directional drilling. Directional drilling would begin on land and tunnel for a distance of 2,000 to 4,000 ft. If the conduit's termination point (i.e., location where the conduit exits the sea floor) cannot be positioned to avoid a sea grass bed, the impacts to the bed would be minimal. It is anticipated that the termination point impact area would be less than 10 square feet.

Commentor	Comments	Navy's Response
Florida DEP - general	"Please provide the state with a copy of the reference DoN, 2008a (EIS/OEIS Undersea Warfare Training Range, Essential Fish Habitat. Technical Report. [2008 Revision of (Department of the Navy 2007a)])."	This report is updated and is now titled "Essential Fish Habitat Assessment for the Environmental Impact Statement/Overseas Environmental Impact Statement, Undersea Warfare Training Range." It has been included on the attached CD.
Florida DEP - general	"The state recommends shifting the boundaries of the proposed project so that the North Florida MPA would not be within the proposed project site A."	Please refer to Subchapter 4.2.3.1 of the FEIS. The Navy has initiated EFH consultation with the NMFS, which will include discussions regarding actions that could be taken to avoid or minimize potential impacts of the construction or operation of the USWTR on the MPA.
Florida DEP - general	"Artificial hard substrate does not replace the value or function of a natural hardbottom."	Comment noted.
Florida DEP - general	"Please discuss if expendable materials such as wires could potentially physically impact benthic resources found within the biogenic reef community including deepwater corals. Is there a potential for the wires to wrap around organisms/benthic habitat and cause abrasion damage?"	The EIS analysis (within Subchapters 4.1 and 4.2) determined that no significant impact from expended materials will occur. The best available science is used to assess impact of expended materials on the marine environment.
Florida DEP - general	"The DEIS should include a discussion of the impact parachutes that are considered expendable and will not be recovered on benthic resources. Please discuss the impact these parachutes will have on benthic resources (smothering, entangling, etc.). What sizes are the parachutes that will be used in the project area? How long are these parachutes expected to be present before degrading? Could these parachutes be constructed of biodegradable material, so as to minimize possible impacts?"	Impacts to turtles in association with parachutes are highly unlikely due to the relatively large geographic area involved coupled with the relatively small number of sonobuoys used in each of the exercises. The best available science is used to assess impact of expended materials on the marine environment.
Florida DEP - general	"Are there any anticipated impacts from ingestion of any of the materials that are considered expendable. The only discussion of ingestion concerned the parachutes. Is there a possibility of accidental ingestion of the other expendable materials (wires, flex hoses, ect) by sea turtles and/or marine mammals?"	Due to the large size of both the flex hoses (250 ft. in length) and torpedo control wires (which vary in length, but can be miles long), ingestion of these items was not anticipated or analyzed in the EIS. Aside from their large size, these items are not likely to be mistaken for prey items for marine organisms.

Commentor	Comments	Navy's Response
Florida DEP - general	"How long will the control wires from the Mk 48 EXTORP? What is the entanglement possibility for EFH and corals from the control wires?"	Please refer to Subchapter 4.2.4.2. Due to the stiffness of torpedo control wires and flex hoses, these expended materials would not tend to form loops and entangle EFH and corals.
Florida DEP - general	"Please discuss if expendable flex hoses could pose either an entanglement issue or a continuous impact problem for EFH and/or corals present in the proposed project area."	Please refer to Subchapter 4.2.4.2. Due to the stiffness of torpedo control wires and flex hoses, these expended materials would not tend to form loops and entangle EFH and corals.
Florida DEP - general	"This section should be updated to include the two LNG projects off of Ft. Lauderdale, FL: proposed Calypso Deepwater Port and AES LNG Pipeline."	This information has been added to Subchapter 4.8.
Florida DEP - general	"Once habitat surveys are concluded cumulative effects should be reanalyzed. There is such limited data on the benthic habitat of the proposed area that a valid conclusion may not be possible without the additional data being included. In order to properly evaluate cumulative impacts, complete data for benthic resource impacts is needed."	All significant new information will be considered. The best available and most applicable science has been, and will continue to be, used. The data from the benthic survey will not be available in time for the publication of the FEIS.
Florida DEP - general	"There is no discussion of mitigation measures for impacts to benthic resources. Please detail measures that will be utilized to mitigate impacts to benthic resources."	The need for mitigation is being coordinated with the National Marine Fisheries Service in association with the Navy's EFH consultation. The Navy is conducting bottom mapping to avoid impacts to bottom habitat to the maximum extent possible.
Florida DEP - general	"Please describe avoidance and mitigation procedures to be used when training exercises are conducted in low-visibility or at night? Could the night training be curtailed or altered if it is determined that marine mammals are present in the range during certain times of the year?"	Please refer to Subchapter 6.1.2.2. Lookouts will use different techniques, including Night Lookout Techniques, during periods of low light. Lookouts will have night vision apparatuses. The Navy needs to train in all conditions to support worldwide deployment schedules. Please refer to Subchapter 1.2 for the need to train.
Florida DEP - general	"According to previous text, if a marine mammal is spotted in the area of the exercises there are procedures in place to offset any potential impact to the animal. Would this information be noted in a record for the training maneuvers? If so, could the information regarding the animal(s) be relayed to the scientific community after the maneuvers are completed and analyzed?"	The Navy has developed a monitoring program that will provide results that will be shared with the scientific community, although lookouts are not trained in the identification of specific marine mammal species.

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	"We recognize and support the need for the proposed training for national security; however, based on the endangered status of the right whale and the importance of protecting their habitat along the U.S. eastern coast, our preferred alternative for this project is the 'No Action' alternative."	Comment noted. The Navy needs to train as it fights (see Chapter 1). Potential impacts to North Atlantic right whale are analyzed in depth in Chapter 4 (concluding no injurious takes due to USWTR). Additional mitigation measures, specific to right whales, are discussed in Subchapter 6.2.
Florida FWC - Mary Ann Poole	"Should the USWTR project move forward and one of the four proposed sites is selected, we strongly recommend against Site A (offshore Jacksonville) because of its proximity to the right whale calving grounds and possible negative impacts, including an anticipated increase in traffic through critical habitat."	Comment noted. The Navy needs to train as it fights (see Chapter 1). No additional traffic (over current levels) through critical habitat is anticipated. Potential impacts to North Atlantic right whale are analyzed in depth in Chapter 4 (concluding no injurious takes due to USWTR). Additional mitigation measures, specific to right whales, are discussed in Subchapter 6.2.
Florida FWC - Mary Ann Poole	"If Site A is ultimately chosen, we recommend that the Navy follows both the proposed Site A mitigation measures specified in the DEIS as well as the additional mitigation measures recommended below."	Please refer to the individual responses to each mitigation measure, below.
Florida FWC - Mary Ann Poole	"During the project activities, should there be any cetacean stranding that are temporally and spatially coincident with Navy training events, the activity should cease and the Navy should fund a thorough investigation to determine the cause of the strandings. Activities should not resume until the identified cause can be appropriately addressed."	The Navy has developed their stranding response plan in coordination with the National Marine Fisheries Service, a cooperating agency on the EIS.

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	"All proposed sites should receive an NMFS Section 7 review for potential impacts to right whales as all sites are along the migratory path of right whales moving from their feeding grounds to their calving grounds. Knowledge of spatial and temporal extent of offshore migratory paths is limited, as noted above, although evidence indicates that at least some right whales are found at a distance from shore consistent with USWTR placement. The distance from shore of any of the proposed sites (Charleston OPAREA at 74 km, VACAPES OPAREA at 63 km offshore, Cherry Point OPAREA at 86 km, and Jacksonville OPAREA at 96 km offshore) does not preclude the presence of right whales; therefore, section 7 consultation is prudent for any of the proposed locations of the USWTR."	The Navy has initiated Section 7 consultation for the preferred alternative. Should the preferred alternative change, the new site would be the focus of the consultation.
Florida FWC - Mary Ann Poole	"We recommend that any mitigation measures should not be limited solely to the confines of the designated federal critical habitat boundaries, as large concentrations of right whales have been documented outside of the defined critical habitat boundary."	The Navy has developed their stranding response plan in coordination with the National Marine Fisheries Service, a cooperating agency on the EIS.
Florida FWC - Mary Ann Poole	"We recommend that the Navy make seasonal adjustments to the types and number of training scenarios. Exercises could be limited during the peak of calving season (December through March). At a minimum, the number of surface ships that must transit between Mayport and Site A should be reduced during this critical four-month period."	The Navy needs to train year-round to support worldwide deployment schedules. Please refer to Subchapter 1.2 for the need to train. In addition, Chapter 6 addresses additional mitigation measures to protect calving right whales.

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	"We recommend that all Navy vessels transiting to or from Mayport and Site A should reduce speeds below the 15 to 17 knots reported as typical Navy ship transit speeds to reduce the risk of fatal collisions with right whales. The NMFS recently issues a ship speed rule (NMFS 2008) establishing a limit of 10 knots for non-exempt vessels and asking Federal vessels to voluntarily observe the rule when and where their missions would not be compromised."	Navy vessels travel at a slow, safe speed in accordance with the U.S. Coast Guard "Rules of the Road," found at http://www.navcen.uscg.gov/mwv/navrules/rotr_online.htm . NMFS exempts military vessels from these speed restrictions due to mitigation measures previously negotiated, such as those identified in Chapter 6 of the USWTR EIS. In addition, the Navy supports the Early Warning System (EWS) for the North Atlantic right whale during the calving season in the Southeast as part of the Section 7 consultation with NOAA completed in 1997. The EWS consists of a communication network and aerial surveys that assist afloat commands to avoid North Atlantic right whale strikes in the Jacksonville/Charleston Operating Areas.
Florida FWC - Mary Ann Poole	"Navy aircraft transiting between shore and Site A (and passing over critical habitat) should maintain a maximum feasible altitude to reduce potential impacts to right whales. Non-exempted civilian aircraft are prohibited from intentionally approaching within 460 m of any right whale (NMFS 2004) and we suggest transiting Navy aircraft maintain a distance of 460 m (500 yards) whenever possible. When they occur, right whale sightings and any observed behavioral reactions to passing aircraft should be documented and reported to the Early Warning System (EWS) network."	Mitigation was developed through Section 7 consultation with NMFS and the regulations at 50 C.F.R. § 224.103(c)(3)(i), "Special Prohibitions for Marine Mammals" (please refer to Subchapter 4.3.10, "Aircraft Noise"). In addition, all sightings of right whales during calving season are reported to the Early Warning System, as detailed in Subchapter 3.2.6.1.
Florida FWC - Mary Ann Poole	"We recommend that the Navy assist in funding research on satellite tag technology that would improve the knowledge base of the migratory patterns and behaviors of right whales along the eastern U.S. seaboard. As noted previously, timing of migration is variable among years and is influenced by a number of environmental factors. The offshore extent of right whale migration, and influencing factors, are also poorly known. Satellite tagging of right whales would provide valuable information on migratory behavior that is difficult to obtain through traditional means, such as vessel or aerial studies, and would reduce uncertainty of right whale presence at the proposed USWTR."	The National Marine Fisheries Service does not generally allow the tagging of endangered species due to the possibility of injury. The Navy takes part in the Right Whale Early Warning System, a collaborative effort to track right whales through comprehensive aerial surveys conducted during the right whale calving season, with the goal of reducing the likelihood of ship strikes (please refer to Subchapter 3.2.6.1).

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	"Navy protocols for detecting right whales and other cetaceans call for shipboard and/or aerial observers and passive listening for detecting right whales and other marine mammals. The amount of dive time in conjunction with weather/visibility issues, however, will limit the ability of observers to detect marine mammals. From a ship, right whales can be more difficult to identify than other cetaceans because they lack a dorsal fin. Aural detection requires that animals are vocalizing. Little is currently known about the vocalization of diving behavior of right whales on migration or on the calving grounds; therefore the existing Navy protocols offer essential but not optimal protections."	The Navy has developed their mitigation measures in coordination with the National Marine Fisheries Service, a cooperating agency on the EIS. Mitigation effectiveness is discussed in Chapter 6 of the DEIS.
Florida FWC - Mary Ann Poole	"In addition, the DEIS did not provide specifications, such as altitude, spatial or temporal extent, etc., for the aerial surveys that they propose to conduct prior to commencement of warfare exercises. The efficacy of aerial surveys for detecting all cetaceans in an area is fair at best and is dependent upon flight specifications as well as environmental factors (visibility, Beaufort Sea State levels, winds, etc.). Detectability of mom/calf pairs for standardized aerial surveys in the southeast has been estimated to be as low as 33% (Hain <i>et al.</i> 1999)."	Text in Subchapter 6.1.2.3 has been revised for the FEIS to add that helicopters would observe the vicinity of the planned antisubmarine warfare (ASW) exercises ten minutes prior to the dipping of sonobuoys. Other methods for aerial surveillance prior to and during ASW activities are listed in Subchapter 6.1.2.3 of the DEIS.
Florida FWC - Mary Ann Poole	"Because of the limitations of the proposed detection methods, we recommend that the Navy use additional methods for detecting the presence of marine mammals. Passive acoustic monitoring (e.g., using hydrophone arrays) provides greater detectability of vocalizing mammals than passive listening. Passive acoustic monitoring has been used previously by the Navy (Jarvis <i>et al.</i> 2002) and other researchers (i.e., Clark <i>et al.</i> 1996), and should be employed routinely in naval exercises."	Please refer to Subchapter 6.1.2.6. The Navy is working to develop the capability to detect and localize vocalizing marine mammals using the installed sensor nodes (hydrophones) on the USWTR. The Navy is not yet capable of using the system nodes as a mitigation measure, however, as this science develops, it will be incorporated into the USWTR mitigation plan.

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	"Additionally, the commonly publicized distance for recognizing human divers using sonar is a minimum of 700 m (i.e., http://www.arstech.de/diver_detection/diver_detection.html). Given that cetacean lungs are larger than human lungs, a cetacean should be detectable at a greater range than the customary 700 m for recognizing humans."	The Navy would use a different sonar system on USWTR (mid-frequency active sonar) than is used to detect human divers. Per operating procedures presented in revised Chapter 6, when a marine mammal is detected within 914 m of the sonar dome, sonar transmission is powered down (this distance was misprinted in the DEIS and has been corrected in the FEIS).
Florida FWC - Mary Ann Poole	"We recommend that the Navy take advantage of current detection methods, and assist with funding additional research to develop and improve methods of detecting cetaceans and recording their behavioral responses to noise exposure, such as: (a) Deploy satellite and time-depth recorders to record behavioral responses, such as diving patterns and directional changes of right whales to proposed activities, including ship transit and exposure to sonar. (b) Explore the use of low-power active sonar for detecting right whales and recording their behavioral responses to active sonar. (c) Develop a model of the propagation of sound in the shallow water environment of the chosen USWTR site for evaluating received sound levels if a marine mammal is inadvertently exposed during Navy exercises."	The Navy will implement a monitoring plan designed to investigate these issues during USWTR operation. The Navy's propagation model is appropriate for shallow water propagation.

Commentor	Comments	Navy's Response
<p>Florida FWC - Mary Ann Poole</p>	<p>"Provide funding for research on the auditory characteristics of baleen whales, particularly right whales, as well as the physiological and behavioral responses to sounds. Estimates of thresholds for Temporary Threshold Shifts (TTS) and Permanent Threshold Shift (PTS) in the DEIS were largely conjecture because auditory characteristics of cetaceans, especially whales, are poorly studied. Further, behavioral responses of cetaceans to sound described in the DEIS were mainly derived from studies on captive animals (Schlundt <i>et al.</i> 2000, Finneran <i>et al.</i> 2001). Cetacean behavioral responses in the wild likely differ from those in captivity and additional studies of behavior in the wild, such as Nowacek <i>et al.</i> (2004), are needed. If any cetacean is inadvertently exposed to sonar during exercises, however, a full and thorough investigation should be conducted to evaluate impacts to the animal(s), contributing to the pool of information regarding TTS/PTS and behavioral responses of cetaceans."</p>	<p>The Navy will implement a monitoring plan that would monitor potential effects to marine mammals and will provide a means of assessing mitigation effectiveness. The Navy supports a number of research efforts that are investigating potential effects of sonar on marine mammals. Please refer to Subchapter 6.1.3 in the EIS.</p>

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	<p>"Although the Navy is proposing to reduce or cease active transmission levels when a whale or dolphin is detected within certain distances of the associated equipment (with reductions starting at 1,828 m and ceasing at 183 m), a marine mammal just outside of a 320-m detection limit could potentially receive > 181 dB re 1 μPa (based on a nominal source of 235 dB re 1 μPa @ 1 m of the SQS-53 sonar and the standard 6 dB decrease in SPL with a doubling of distance). Cetacean strandings in the Bahamas in March 2000, spatially and temporally coincident with naval exercises that were also using these mid-frequency sonars, could have been exposed to Sound Pressure Levels (SPL) of 160 dB re 1 μPa according to complex sound propagation models (International Council for the Exploration of the Sea [ICES] 2005). Likewise, strandings in the Canary Islands in September 2002 began soon after the start of naval exercises involving mid-frequency sonar (ICES 2005). The strandings mainly involved beaked whale species; however, effects of sound levels on other cetaceans, such as right whales females with calves, are largely unknown."</p>	<p>The risk function was developed to account for potential responses down to 120 dB SPL specifically to encompass uncertainty and the potential for behavioral reactions in marine mammal species that may be affected by sounds perceived at levels just above ambient. The Navy research continues to look into the causal mechanisms of marine mammal strandings related to sonar. Please refer to Appendix D for a discussion of specific stranding events that have been putatively linked to potential sonar operations.</p>
Florida FWC - Mary Ann Poole	<p>"Refined information on auditory and behavioral characteristics of cetaceans in response to sound, together with a good model of sound propagation and detection of marine mammal locations would greatly improve the ability to understand and mitigate potential impacts of these types of Navy activities."</p>	<p>The Navy will implement a monitoring plan that would monitor potential effects to marine mammals and will provide a means of assessing mitigation effectiveness. The Navy supports a number of research efforts that are investigating potential effects of sonar on marine mammals. Please refer to Subchapter 6.1.3 in the EIS.</p>

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	"We commend the Navy's support of the EWS aerial surveys and recognize the important role Fleet Area Control and Surveillance Facility Jacksonville plays in the dissemination of right whale sightings. The EWS aerial surveys serve a vital role in right whale research and management in the Southeast U.S. (e.g., ship strike mitigation, photo-identification data, detection of entangled or dead whales). The Navy should continue to support the EWS and ensure that increases in Navy training exercises do not interfere with EWS aerial surveys or hinder survey efforts as a result of airspace closures."	The Navy provides about \$175,000 per year in support of EWS surveys. The USWTR training will not interfere with EWS aerial surveys.
Florida FWC - Mary Ann Poole	"The seabed within the proposed USWTR area and the trunk cable from the USWTR to the cable termination facility contains some habitats that are classified as essential fish habitat (EFH) pursuant to South Atlantic Fishery Management Council regulations, including live/hardbottom habitat, existing artificial/manmade artificial reef materials, and locations proposed for future artificial reef materials. Placement of cables within the proposed USWTR may impact existing live/hardbottom habitat, existing artificial/manmade artificial reef materials, and the placement of proposed for future artificial reef materials."	The Navy is undertaking ongoing efforts to conduct hydrographic and bottom mapping surveys of the Jacksonville site and trunk cable corridor. The data obtained from these surveys will be used to identify and avoid, to the extent possible, artificial reefs and critical fish habitat areas. Furthermore, the Navy is in consultation with NMFS regarding impacts to EFH. The surveys and their corresponding reports, however, will not be complete prior to the release of the FEIS.

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	<p>"<u>Concern #1</u>: Fact Sheet No. Seven on the project website (http://projects.earthtech.com/USWTR/Public_Involvement/Public_Involvement_2008/PDF_fact_sheets_2008/FS7_Effects-on-Fishing-2008.pdf) illustrates the approximate locations of some of the existing artificial reef and natural areas in the vicinity of Site A, but the trunk cable location is not shown, and the illustration is not at a scale with enough detail to identify the artificial reef areas that may be effected by the proposed project. <u>Recommendation #1</u>: Please include figures within the EIS at appropriate scales to illustrate the location of the proposed trunk cable, the locations of the existing artificial reef permitted areas, and the existing artificial reef materials within 500 feet of the proposed trunk cable."</p>	<p>The trunk cable route will be planned to minimize impacts and will be addressed as part of the U.S. Army Corps of Engineers permit review. Locations of existing and permitted artificial reefs in the Jacksonville OPAREA are shown on the revised Figure 3.5-1. Information obtained as a result of the bottom mapping surveys previously mentioned will assist the Navy in engineering the cable path to avoid artificial reefs, hardbottom, shipwrecks, and other obstructions to the maximum extent practicable.</p>
Florida FWC - Mary Ann Poole	<p>"<u>Concern #2</u>: There are 25 past and present permitted artificial reef areas located offshore in Jacksonville in the Atlantic Ocean between approximately 7 and 30 nautical miles from the St. Johns River Entrance Channel (Figure 1). Most of the sites are roughly rectangular in shape, with an average area of 2.4 square miles each. We are concerned that the proposed trunk cable placement may cross some of these sites, preventing future development of some of the existing artificial reef areas. <u>Recommendation #2</u>: Please include in the EIS a description of the proposed route of the trunk cable, and how the existing charted artificial reef areas will be avoided."</p>	<p>The trunk cable route will be planned to minimize impacts and will be addressed as part of the U.S. Army Corps of Engineers permit review. Locations of existing and permitted artificial reefs in the Jacksonville OPAREA are shown on the revised Figure 3.5-1. Information obtained as a result of the bottom mapping surveys previously mentioned will assist the Navy in engineering the cable path to avoid artificial reefs, hardbottom, shipwrecks, and other obstructions to the maximum extent practicable.</p>

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	<p>"<u>Concern #3</u>: In addition to the 25 existing artificial reef permitted areas which are illustrated on NOAA nautical chart #11488, there are some charted artificial reef materials and shipwrecks identified outside of the artificial reef 'Fish Haven' areas, charted as 'obstructions.' We are concerned that some of those sites may be impacted by the trunk cable placement. <u>Recommendation #3</u>: Please include in the EIS a description of the proposed route of the trunk cable, and how the existing artificial reef and shipwreck materials located outside the charted 'Fish Haven' areas will be avoided."</p>	<p>Fish havens will be evaluated and added if significantly different than the artificial reefs and live/hard bottom areas already included. The Navy is conducting ongoing hydrographic and bottom mapping surveys at the Jacksonville site. These data will be used to identify and avoid, to the extent possible, critical fish habitat areas, although the results of these surveys will not be available prior to the release of the FEIS.</p>
Florida FWC - Mary Ann Poole	<p>"<u>Concern #4</u>: During the City of Jacksonville's recent reauthorization of the existing artificial reef permitted areas, existing charted telecommunications cables were identified and avoided. The DEIS for the USWTR does not provide any information describing existing telecommunication or other transmission cables in the vicinity of the trunk cable corridor and/or USWTR and how those existing cables will be avoided. <u>Recommendation #4</u>: Please provide information in the EIS describing existing telecommunication or other transmission cables in the vicinity of the trunk cable corridor and/or USWTR and describe how those existing cables will be avoided."</p>	<p>This will be conducted as part of range development and design.</p>

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	<p>"<u>Concern #5</u>: To date, the deepest artificial reef site off of Jacksonville has a maximum depth of -110 feet MLLW. The City of Jacksonville is interested in acquiring a large military ship in the future for artificial reefing, but none of the existing artificial reef site depths are deep enough to accommodate a large military ship artificial reef...Unfortunately, the location of the proposed USWTR encompasses the areas that the City of Jacksonville has been considering for a future deepwater artificial reef site. While the DEIS mentions that anchoring and trawling may be prohibited within the boundaries of the proposed USWTR, the DEIS does not specifically state whether or not future artificial reef development would be prohibited...<u>Recommendation #5</u>: Please include in the EIS a discussion on the possibility of permitting a future artificial reef permitted area within the boundaries of the USWTR, measuring 0.25 nm on a side, around the 150-170 ft depth contour."</p>	<p>The Navy has contacted the City of Jacksonville about plans for future artificial reefs and have not found that any future reefs exist within the USWTR site (see revised Figure 3.5-1). Placement of artificial reefs within the USWTR range after installation would interfere with range equipment.</p>
Florida FWC - Mary Ann Poole	<p>"<u>Concern #6</u>: The last paragraph on page 3.2-20 states 'Within Site A, hard bottom areas comprise about 97% of the surveyed area in the range (1,026 km² [299 NM²]) and 97% of the surveyed area in the corridor (1,540 km² [449 NM²]).' However, figure 3.2-3 clearly does not illustrate that 97% of the surveyed area is hardbottom. <u>Recommendation #6</u>: Please review and correct the '97%' percent hard bottom coverage references in the last paragraph of page 3.2-20."</p>	<p>Please refer to the revised text in Subchapter 3.2.4.1 and the EFH Assessment regarding impacts to hard bottom. These figures have been revised.</p>
Florida FWC - Mary Ann Poole	<p>"<u>Concern #7</u>: The first paragraph on page 3.2-21 provides a citation to 'FFWCC, 2005c),' but the reference list does not contain a citation for 'FFWCC, 2005c.' <u>Recommendation #7</u>: Please describe and add the citation for '(FFWCC, 2005c)' to the reference list."</p>	<p>The reference discrepancy has been addressed in Chapter 8 of the FEIS. The citation now reads "(FFWCC, 2006, 2008b)." The references are to two FFWCC web sites: http://myfwc.com/marine/ar/arOverview.html and http://myfwc.com/marine/ar/index.asp.</p>

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	<p>"<u>Concern #8</u>: The DEIS references the deepwater Marine Protected Area (MPA) off North Florida that is intended to protect the habitat and stocks of deepwater overexploited fishes of the grouper-snapper complex...This is to be a Type II MPA - no anchoring or bottom fishing, no use of shark bottom longlines...The area is intended to protect species and habitat of snowy, yellowedge, and misty grouper, speckled hind and blueline tilefish all of which are longlived and experiencing overfishing. Since the USWTR encompasses the North Florida MPA in its entirety, we presume that the USWTR was intentionally sited to encompass the North Florida MPA because of the existing MPA fishing gear restrictions. The DEIS does not specifically state what sort of bottom modifications will be created by the cable within the MPA. <u>Recommendation #8</u>: Please provide additional description of the location of proposed cables and manner of construction that is intended to occur specifically within the boundaries of the North Florida MPA."</p>	<p>The text for Chapter 2 of the FEIS has been revised and can help address this comment. See subchapter 4.2.3 of the FEIS for a description of construction impacts.</p>
Florida FWC - Mary Ann Poole	<p>"<u>Concern #9</u>: While the SEAMAP mapping data provides a broad overview of the benthic habitat distribution in each region, the SEAMAP data does not provide 100% coverage of the entire proposed USWTR. The DEIS does not state whether or not the Navy intends to conduct a more detailed mapping of the seafloor prior to trenching and/or cable placement to avoid impacts to existing hardbottom resources and artificial reefs. <u>Recommendation #9</u>: Please provide more detailed mapping within the specific cable placement areas once those areas are chosen. Describe the methods that will be used to map, classify, and report the findings within each survey area."</p>	<p>Hard bottom data from the South Atlantic Fishery Management Council's Habitat and Ecosystem Interactive Map have been added to the mapping of hardbottom in the EIS. In addition, the Navy in undertaking ongoing efforts to conduct hydrographic and bottom mapping surveys of the Jacksonville site and trunk cable corridor. The data obtained from these surveys will be used to identify and avoid, to the extent possible, artificial reefs and critical fish habitat areas. Furthermore, the Navy is in consultation with NMFS regarding impacts to EFH. The surveys and their corresponding reports, however, will not be complete prior to the release of the FEIS.</p>

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	<p>"<u>Concern #10</u>: The DEIS states that anchoring and trawling is proposed to be prohibited within the boundaries of USWTR Site A, but it is not clear if certain hook and line or other fishing gear types (other than bottom trawls) will be prohibited, such as shark bottom long lines, already prohibited in the North Florida MPA. <u>Recommendation #10</u>: Please provide additional information in the EIS on the types of fishing gears that would be prohibited or permitted within the boundaries of the proposed USWTR."</p>	<p>Please refer to Subchapter 4.4.2.3 of the EIS. Anchoring and trawling in USWTR will not be prohibited, nor will hook and line fishing.</p>
Florida FWC - Mary Ann Poole	<p>"<u>Concern #11</u>: The DEIS presents a weak case for predicting no significant behavioral effects on deepwater grouper-snapper complexes. If the acoustic sounds drive fish away or otherwise behaviorally impair them as in forming spawning aggregations, etc, that would be problematic especially for a special area specifically set aside as a designated marine protected area. All aspects of their deep reef natural ecology should be protected to the extent possible. Section 4.3.11 of this DEIS does not make that case for deepwater grouper-snapper complexes. <u>Recommendation #11</u>: The EIS should include a discussion with greater emphasis on the acoustic effects of the proposed USWTR on deepwater grouper-snapper complexes. More research is needed on the subject in order to definitely support the italic statement at the conclusion of Section 4.3.11."</p>	<p>The Navy is currently undertaking Essential Fish Habitat (EFH) consultation with the Southeast Regional Office of the National Marine Fisheries Service. The best available science was used in the development of the EIS and the analysis of potential impacts to fishes.</p>

Commentor	Comments	Navy's Response
Florida FWC - Mary Ann Poole	<p>"<u>Concern #12</u>: Section 6.4 of the DEIS does not state whether any mitigation measures are planned for impacts to hard bottom resources. <u>Recommendation #12</u>: The EIS should include a discussion of the Navy's intentions for how impacts to hard bottom resources will be offset in the event that loss of hard bottom habitat occurs during trenching and placement of offshore cables. While the preferred option is avoidance of impacts, where appropriate, construction of artificial reefs (boulder reefs, concrete modules, etc.) have been successfully constructed as mitigation for similar projects that have impacted offshore hard bottom resources."</p>	<p>The Navy is currently undertaking Essential Fish Habitat (EFH) consultation with the Southeast Regional Office of the National Marine Fisheries Service. The document will be modified to address any changes that come as a result of that consultation prior to the publication of the FEIS. If additional concerns are voiced by NMFS after the publication of the FEIS, those concerns will be addressed in the Navy's Record of Decision (ROD).</p>