

## Appendix 10. Mitigation and Monitoring for Marine Mammals and Sea Turtles

The USMC and NMFS' Permits and Conservation Division have proposed the following mitigation and monitoring measures designed to avoid take of marine mammals and sea turtles during its training activities. NMFS' ESA, Interagency Cooperation Division's concurrence with a may affect, not likely to adversely affect determination is contingent on the following measures being implemented:

- Compliance with MCB Camp Lejeune 's Integrated Natural Resources Management Plan
- N-1/BT-3 Impact Area Monitoring — Monitoring of the N-1/BT-3 Impact Area will be conducted by Protected Species Observers (PSOs) with binoculars stationed in two towers (Bear and North Onslow) positioned at the land based targets, as described in MCB Camp Lejeune's Standard Operating Procedures. These towers allow for monitoring of waters surrounding the target. When operations are conducted at night, PSOs will monitor the N-1/BT-3 impact area with the use of night-vision goggles. Should a marine mammal or sea turtle be sighted within a firing area, operations will be suspended until the animals have left the area or have not been resighted within 15 minutes.

Firing of any small arms up to 50 cal and 40 mm inert practice rounds, direct fire 155 mm HE and Stinger missiles will be delayed should a marine mammal be sighted within the N- 1/BT-3 impact area. Additionally, firing from small vessels to land would be delayed should a marine mammal be present in a 500 m wide area between the vessel and the land housing the targets.

- Aerial Sweep — Prior to commencing live fire exercises in the N-1/BT-3 impact area and H-Range, an air sweep will be conducted to ensure there are no marine mammals or sea turtles in the impact area. Flyovers will be flown at 227 m (750 ft) and consist of at least two survey lines 2 nautical miles apart and parallel to the coast, with the first line 1.6-3.2 km (1-2 miles) off the beach, and the second 4.8-6.4 km (3-4 miles) off the beach. If a marine mammal or sea turtle is spotted in the N-1/BT-3 impact area, the Environmental Management Division must be notified and firing cannot commence until the animal clears the impact area. All aircrew that conduct range sweeps shall receive training on identification of marine mammals and procedures for collecting and reporting data.

All marine mammal and sea turtle sightings associated with range sweeps shall be documented by noting date, time, number, species, location, and direction. Any action taken related to suspension of training activities will be noted. If no marine mammal or

other protected species (e.g., sea turtles) are sighted, a negative report shall be submitted with all of the above information except species data.

- ICWW and New River Monitoring — The USMC will include monitoring for marine mammals in the ICWW and New River during vessel surveys designed to detect non-military vessels or citizens within water restricted areas. The Marine Corps blocks north and south bound vessel traffic in the ICWW during training events. Vessels stationed at these closure points will also monitor for marine mammals and relay any sightings to the commanding officer in charge of implementing training delay mitigation measures.

In addition to vessel-based PSOs, PSOs would be present in two towers positioned at the land based targets, as described in MCB Camp Lejeune's Standard Operating Procedures. These towers allow for monitoring of waters surrounding the target. Should a marine mammal or sea turtle be sighted within a firing area, operations will be suspended until the animals have left the area or have not been resighted within 15 minutes.

- Special Measures to Protect Right Whales — From 1 November through 30 April, when North Atlantic right whales may be present along the North Carolina coast, Range Control will issue the following daily warning order to training personnel:

Endangered North Atlantic right whales migrate along the North Carolina coast enroute to and from New England areas. Primarily Spring through Fall, and Georgia/Florida calving areas used during winter. Right whales, including mother/calf pairs, can be found 1/4 mile or more off Onslow Beach from 1 November to 30 April. Range Control requires range sweeps during this period in conjunction with live firing exercises into the BT-3 impact area.

- Coordination and Reporting — MCB Camp Lejeune will coordinate with the local NMFS Stranding Coordinator in the event of any unusual marine mammal behavior and any stranding, beached live/dead, or floating marine mammals.

The PSOs will record and document the dates, times, locations, species, number, distance, and behavior of marine mammals sighted during monitoring activities, as well as mitigation measures implemented.

- Vessel Operations — To avoid take during vessel operations, all USMC vessels shall abide by the following NMFS' Southeast Regional Viewing Guidelines (<http://www.nmfs.noaa.gov/pr/education/southeast/guidelines.htm>):
  - While in transit, vessels will be alert at all times, use caution, and proceed at a "safe speed" so that the vessel can take proper and effective action to avoid a collision with any marine animal and can be stopped within a distance appropriate to the prevailing circumstances and conditions.

- When whales have been sighted in the area, vessels will increase vigilance and take reasonable and practicable actions to avoid collisions and activities that might result in close interaction of Navy/Marine Corps assets and marine mammals. Actions include changing speed and/or direction and are dictated by environmental and other conditions (e.g., safety, weather).
- Vessels will maneuver to remain at least 460 m (1,500 ft) from any observed whale and avoid approaching whales head-on. This condition does not apply if a vessel's safety is threatened, such as when change of course will create an imminent and serious threat to a person, vessel, or aircraft, and to the extent vessels are restricted in their ability to maneuver. Where feasible and consistent with mission and safety, vessels will avoid closing to within 183 m (200 yd) of marine mammals other than whales.
- Floating weeds, algal mats, Sargassum rafts, clusters of seabirds, and jellyfish are good indicators of marine mammals; therefore, increased vigilance in watching for marine mammals will be taken when these are present.

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