

Appendix D: INRMP Benefits to Federally Listed Species and Species at Risk Aboard Marine Corps Base Camp Lejeune

Red-cockaded Woodpecker (*Picoides borealis*):

- Protection of nesting sites through training restricted buffers
- Prescribed burning program to enhance current and future habitat
- Partition management to benefit current and future habitat
- Long-term habitat benefits of converting off-site loblolly to longleaf
- Continued monitoring of population dynamics, including impacts from military training
- Mechanical removal of midstory hardwoods in cluster sites and current or future habitat
- Mechanical removal of canopy hardwoods in habitat via silvicultural prescriptions
- Thinning mature pine stands to 60 sq ft
- Retain residual canopy trees when harvesting.
- Cluster management to include: at least 4 cavities per cluster, clearing areas around cavity trees to guard against forest fires, and restrictor plates for cavities
- Artificial cavity provisioning
- Translocation
- Ecosystem Management Model to predict RCW habitat quantity and quality

Sea Turtles - Loggerhead (*Caretta caretta*), Green (*Chelonia mydas*), & Leatherback (*Dermochelys coriacea*):

- Protection of nest sites with cages and restrictive signage
- Continued monitoring program
- Movement of nest sites that are in the amphibious training beach
- Driving restrictions on Onslow Beach during nesting season, including restrictions to protect sensitive habitat south of Onslow South Tower
- Nightly or morning surveys during nesting season
- Monitoring of Brown's Island by air
- If ruts are present, rake in front of nests that will hatch
- Reduce sources of artificial lighting on Onslow Beach
- Monitor recreational or training impacts to Onslow Beach during sea turtle nesting season

Bald Eagle (*Haliaeetus leucocephalus*):

- Ground access and airspace restricted around nest site
- Unauthorized human entry is avoided during the nesting season
- The nest is monitored to determine fledgling success
- Annual surveys for nests will be conducted along the New River

Piping Plover (*Charadrius melodus*):

- If piping plovers are spotted during the nesting season, they will be observed for signs of nesting behavior
- Bi-weekly surveys
- In April, high quality potential nesting habitat is posted as protected
- Outside military portion of beach: if a nest is located, or nesting behavior observed, areas will be protected from military impacts, vehicles, pedestrians, and pets.
- Recreational traffic on beach is restricted during breeding season.
- Beach is monitored daily during breeding season.

Rough-leaved Loosestrife (*Lysimachia asperulaefolia*):

- Protection of population sites through training restricted buffers
- Prescribed burning applied to sites and surrounding habitats
- Continued monitoring of all loosestrife sites.
- Mechanical removal of midstory in and near population sites if needed
- Thinning of canopies over population sites through forestry management
- Prohibition of activities such as skid trails, mechanical site prep and mechanical treatments to control competition
- Surveys of high-probability habitat areas that may be affected by management or development
- Prohibition of any hydrology altering actions with the exception of fire breaks that must be put in due to a danger to life and/or property

Seabeach Amaranth (*Amaranthus pumilus*):

- Annual foot surveys to locate populations
- Annual data collection to record number of plants and population sizes
- Monitoring of plants for herbivory or other causes of mortality
- Sites are marked as restricted, once they are found, to exclude pedestrians, off road recreational vehicles, or military traffic
- Potential habitat in overwash areas is protected year round with restrictive poles and signs
- Recreation beach traffic is restricted during growing season

Coastal Goldenrod (*Solidago villosicarpa*):

- Annual surveys determining population growth and germination rates
- Protection from training impacts by use of conservation areas.

Hirsts' Panic Grass (*Panicum hirstii*):

- Population monitoring
- Protection from training impacts by use of conservation areas