

CHAPTER 10

SOIL CONSERVATION/LAND MANAGEMENT

10 Introduction

Increasing limitations caused by external and internal factors combined with increasing operational tempo, additional mission requirements and the introduction of advanced weapon systems now, more than ever, requires long range planning in order to ensure training area lands are maintained and managed for compatible uses.

Constant use of the land for military training combined with sometimes significant weather-related events can result in erosion problems that affect the quality of training and reduce the land's ability to recover naturally. Neglect will: (1) allow eroded sediment to escape into adjacent streams and wetlands, (2) create impassable roads used for training and natural resources management, (3) permit eroded shorelines to encroach into military lands and threaten buildings and infrastructure, and (4) force trainers to abandon unsuitable areas causing them to exceed the training capacity of other lands which leads to new erosion problems.

10.1 Training Areas/Mission Support Openings

Camp Lejeune has expended substantial time, effort and funds in an attempt to adequately address land management/erosion problems base-wide. These efforts directly benefit training and natural resources by: (1) recovering training areas previously not suited for training due to erosion (i.e., tactical landing and drop zones with unsafe, eroded surfaces), (2) reducing soil erosion and subsequent sedimentation in sensitive riparian habitats, streams and estuaries, and (3) enhanced vegetative recovery on site by planting native warm season grasses where feasible.

Fig. 10-1. Before and after photos of soil conservation and restoration work at TLZ Hawk



10.2 Onslow Beach

Beachfront training areas on Onslow Beach are a critical component of military training on the base. Onslow Beach supports specialized amphibious operations that can be performed on a scale not feasible anywhere else on the east coast. Intense and continuous use of the training beach

area for amphibious training has the potential to accelerate natural erosion. The loss of beach area could limit military training and other compatible uses like recreation. Stabilization and protection of primary coastal dunes by planting dune grasses and installing sand fences to encourage new dune formation is performed annually on designated portions of the training beach.

Fig. 10-2. Rows of planted sea oats (*Uniola paniculata*) on Onslow Beach dunes.



The Clean Water Act limits non-point sources of pollution such as soil and debris from entering waterways resulting from sedimentation. The North Carolina Sedimentation Pollution Control Act of 1973 requires landowners to plan and implement sufficient control measures to prevent accelerated erosion and sedimentation. The Soil Conservation Act of 1938 (U.S.C. 5901 *et seq.*) provides for the application of soil conservation practices on federal lands.

OBJECTIVE SOI1: Integrate training and other mission requirements for land use with sound natural resources management.

- **Action 10-01:** *Monitor training effects on soils and coastal dunes.*
- **Action 10-02:** *Close selected areas to training use for restoration and recovery of eroded sites.*

- **Action 7-12:** *Use Best Management Practices for all forestry-related activities.*

OBJECTIVE SOI2: Restore eroded sites.

- **Action 10-03:** *Use native warm season grasses where practical in restoring eroded sites*
- **Action 10-04:** *Implement soil conservation, restoration and maintenance projects.*
- **Action 10-05:** *Implement shoreline stabilization projects along New River.*

OBJECTIVE SOI3: Stabilize coastal dunes for training and natural resources.

- **Action 10-06:** *Stabilize, enhance, protect and restore coastal dunes using native vegetation and other approved methods within the training section of the beach.*