



Conserving The Nature of America

Wetland Restoration Partnership to Benefit Water Quality and Wildlife in Eastern North Carolina

The North Carolina Department of Environment and Natural Resources (NCDENR) and the U.S. Fish and Wildlife Service have committed to the restoration of 6,000 acres of degraded pocosin wetlands in Washington and Beaufort Counties. Restoration will return the lands to a more natural state and sequester tons of nutrients, including nitrogen, which are a source of local water quality problems.



Healthy pocosin wetlands, like these at Pocosin Lakes National Wildlife Refuge, have important wildlife habitat, nutrient storage and water quality functions.
Photo: Dale Suiter

Overview: Pocosins are unique wetlands, also known as southeastern shrub bogs; they are characterized by a very dense growth of mostly broadleaf evergreen shrubs with scattered pond pine. The typically thick layer of peat soils underlying pocosins are nutrient sponges over geologic time, locking-up nitrogen, phosphorus and carbon in vegetation and the ever deepening soil layer. When pocosins southeast of Lake Phelps were drained for now defunct farming and peat mining plans, their nutrient retention functions were lost and some of the nutrients they held were released to adjacent waters. Once these lands became part of Pocosin Lakes National Wildlife Refuge (NWR) in 1990, managers began restoring natural water levels. The new partnership with NCDENR accelerates the refuge staff's on-going restoration efforts.

Excess nitrogen from many sources causes water quality impairment in the Pamlico River and Pamlico Sound. The NCDENR has successfully worked with stakeholders in the basin for over a decade to reduce nitrogen loads to these waters. Mutual concern about potential impacts from large new nutrient sources to the watershed near Pocosin Lakes NWR prompted a joint venture between NCDENR and the Service to restore wetland functions to about 6,000 acres of previously-drained pocosins with the goal of water quality improvement. This approach of off-setting new nitrogen loading in the watershed with an equivalent amount of local nitrogen reduction was recommended by the Service's Environmental Contaminants Program to minimize the potential for water quality degradation where nutrient enrichment is a recognized problem. The new partnership will return lands to a saturated condition, re-establishing their function as natural nutrient sponges. In addition to sequestering nutrients in the local airshed and watershed, restoration will enhance habitat for wildlife. The work, to be completed collaboratively by Pocosin Lakes NWR and Alligator River NWR, will begin this year and run through 2008. For more information, please contact Sara Ward (sara_ward@fws.gov or 919/856-4520 x30) or Pocosin Lakes NWR (252/796-3004).