

EcoSummary

BioRecon Report

Naval Air Station (NAS) Cecil Field March 5 & 6, 1996

BioReconnaissance (BioRecon): A rapid, cost effective screening mechanism for identification of biological impairment.

Purpose

This study was initiated to help meet DEP's goals of ecosystem management and to determine any nonpoint source impacts from NAS Cecil Field. To meet this objective five stations were sampled in three interconnected streams. The stations were located south and west of NAS Cecil Field (see map for locations).

Basin Characteristics

This 55 square mile watershed lies in the southwest quadrant of Duval County, Florida. The basin is approximately bordered by Interstate 10 to the north, US 301 to the west, the Duval/Clay county line to the south and the Ortega River watershed to the east. Land use in the drainage basin consists of silviculture (57% for pine tree plantations), natural wetlands (20%), maintained grass monocultures (10% for lawns surrounding residences and aviation support facilities), industrial (5% for the NAS Cecil Field jet airport, with 168 acres of runways and additional aviation support facilities), agricultural (4% for cattle grazing), residential (3%), and natural mixed hardwood forest (1%).

Results

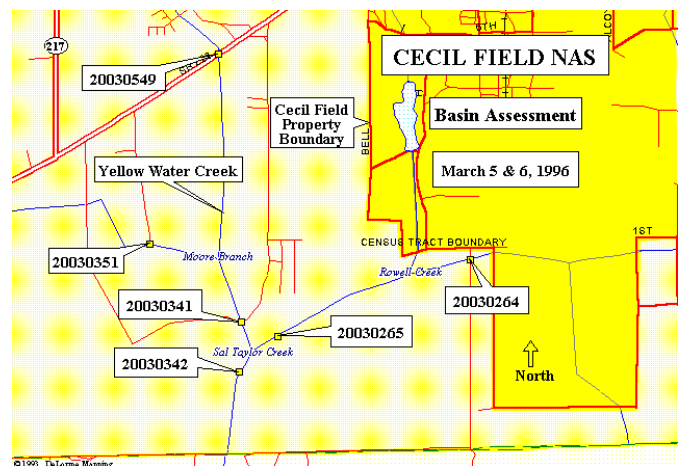
The BioRecons passed all three metrics at all sites. Total taxa richness ranged from 23 to 33; total Florida Index from 11 to 17; and EPT from 8 to 11. There was no evidence of habitat degradation.

Habitat assessments were within the optimal range at all stations.



Significance

The BioRecon results coupled with good habitat assessments reflect a healthy stream system in this drainage basin. There was no significant difference between sites above or below NAS Cecil Field. The October 1995 survey at the same sites also showed a healthy stream system.



Suggestions

BioRecon is a screening tool. The Stream Condition Index (SCI), a more extensive sampling protocol, was done at each site. SCI results should be used for final judgments.

NAS Cecil Field will be closing in 1998. Future land use in the basin is not known. Yearly monitoring should be continued to assess any impact the base closure or future land use may have in the basin.



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