A site map can be viewed by clicking on the report site name.

EcoSummary

North Prong of Alligator Creek at CR 768

February 27, 2002

EXCELLENT

NPS BIOASSESSMENTS

Stream Condition Index (SCI): The standardized biological assessment tool used by FDEP biologist to indicate ecosystem health and identify impairment as compared to reference (natural) conditions of streams within the various ecoregions of Florida

For samples collected before June 8, 2004
All field and laboratory methods followed FDEP Standard Operating Procedures and met FDEP quality assurance/quality control standards.
For samples collected on or after June 8, 2004
All field and laboratory methods followed FDEP Standard Operating Procedures (SOPs) and met DEP quality assurance/quality control standards.

Purpose



A single Stream Condition Index sampling was performed on the North Prong of Alligator Creek in order to examine the water quality in the stream and document the organisms that inhabit a potentially impacted stream in this geographical area. This is important because streams that are affected by human activities do not necessarily have poor water quality, and the biological standards on which the SCI is based require further refinement.

Watershed Characteristics

The North Prong of Alligator Creek?s drainage basin includes mainly pine flatwoods with some associated wetlands. A ditch system drains sparse residential development on fairly large lots. The main part of the stream comes from the Babcock-Webb Wildlife Management Area. The area around the sample site is mainly residential on large lots. The creek flows directly into Charlotte Harbor.

Results

The SCI indicated that the North Prong has adequate water quality to support a healthy aquatic insect community. **The stream scored 33 points out of 33 possible,**

and was rated "Excellent". Water chemistry met Class 3 standards for all parameters tested. The sample site is located in a wooded area, below some residential development. The riparian (stream bank) zone on both sides was well vegetated, but there were some exotic nuisance plants mixed with the native vegetation along the edge of the creek. Farther upstream the creek has been channelized. The in-stream habitat consisted of rock and shell (48%), with patches of leaf mat (26%), undercut bank, vegetation, and snags. Flow was good (more than 0.25 m/sec). The habitat score was 139 out of 160 possible points.

Significance

These results indicate that the present low level of development has not significantly affected this stream's ability to support a healthy aquatic community.

Suggestions

Encourage good land use practices in the basin, and maintain a monitoring program to further refine Stream Condition Index standards and to detect effects of changes in local land use.

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Published by the Florida Department of Environmental Protection
Tallahassee, Florida
For more information on the DEP Bioassessment programs, please visit
our web site at http://www.dep.state.fl.us/water/bioassess

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