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

EcoSummary

Telegraph Creek at Babcock Ranch

April 17, 2002

ECOREG REF STREAMS

EXCELLENT

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 Stream Condition Index sampling was performed at this site in order to examine the water quality in the stream and document the organisms that inhabit an unimpacted stream in this geographical area. This is important because information from streams that are relatively unaffected by human activities is needed as a standard to compare with other streams, and determine whether human activities are having an adverse effect on those streams. The biological standards on which the SCI is based also require further refinement. Telegraph Creek was used as a reference stream during the development of the Stream Condition Index, but has not been sampled recently.

Watershed Characteristics

The drainage basin for Telegraph Creek includes pine flatwoods, scrub, and

palmetto prairies. Major land uses in the area include cattle grazing, hunting, nature tours, and hay fields. Babcock Ranch is one of the major landowners in the basin. Big Island Canal, which dates from the 1930's, also drains Telegraph Swamp and reduces the flow in Telegraph Creek. The creek flows into the Caloosahatchee River.

Results

The SCI indicated that Telegraph Creek has excellent water quality and supports a very healthy aquatic insect community. **The stream scored 31 points out of 31 possible, and was rated "Excellant". Water chemistry met Class 3 standards for all parameters tested**. Nutrient concentrations (nitrogen and phosphorus) were low, with nitrite/nitrate and total phosphorus among the lowest 5 percent of Florida streams. The sample site is located in a forested natural area with an unaltered riparian (stream bank) zone. The habitat consisted of leaf mat (50%), roots/undercut banks (37%), aquatic vegetation (2%), and snags(9%). Flow was slow (less than 0.1 m/sec). The habitat score was 126 out of 160 possible points.

Significance

These results indicate that this stream still has excellent water quality and supports 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 for streams 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
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