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

EcoSummary

Faka Union Canal @ Collier County CR 858

March 20, 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 at this site in order to examine the water quality in the canal and document the organisms that inhabit a potentially impacted canal in this geographical area. This is important because waters 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 Faka Union Canal's drainage basin is fairly undeveloped at present, and includes pine flatwoods, a variety of natural wetlands, row crops, borrow pits, and improved pasture. The canal flows into the Gulf of Mexico in the Ten Thousand Islands.

Results

The SCI indicated that the Faka Union Canal has very good water quality and supports a healthy aquatic insect community. **The canal scored 31 points out of 33 possible, and was rated "Excellent". Water chemistry met Class 3 standards for all parameters tested**. Nutrient concentrations were very low. The riparian (canal

bank) zone was covered by a mixture of low vegetation, grasses, and shrubs. Pines were the dominant trees, but were well back from the edge of the canal. The in-stream habitat consisted of sand (80%), with rock (17%) and undercut bank/roots (3%). Flow was slow (less than 0.1 m/sec). The habitat score was 91 out of 160 possible points.

Significance

These results indicate that this canal has adequate water quality and supports a healthy aquatic community, despite the relatively poor habitat.

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.

For more information, please contact
Albert S. Walton
South District Branch Office
7451 Golf Course Blvd., Punta Gorda, FL 33982
(941) 575-5814 (Suncom 765-5814)
E-mail: Albert.Walton@dep.state.fl.us

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

Faka Union Canal @ Collier County CR 858

