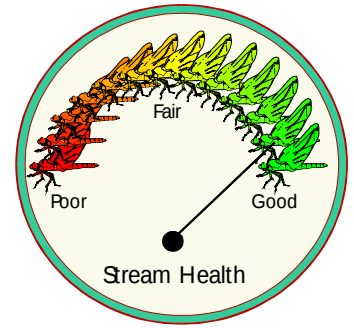


EcoSummary

BioRecon Report



Falling Creek @ CR131, Columbia County 15 July 1997

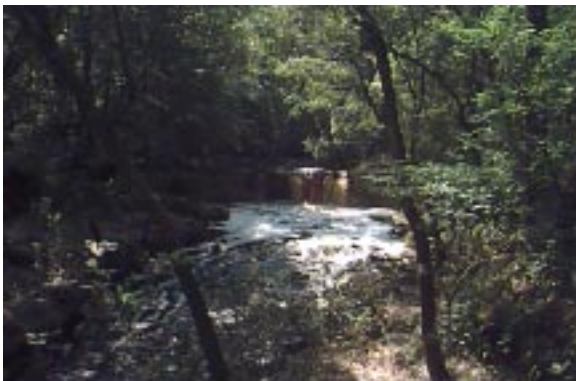
BioReconnaissance (BioRecon): A rapid, cost effective screening mechanism for identification of biological impairment.

Purpose

A Stream Condition Index (SCI) and a BioRecon were performed at this site. Results from this survey will be used two ways, to help with the calibration of the metrics for the two protocols and to determine the health of the macroinvertebrate community..

Basin Characteristics

Falling Creek, a tributary to the Suwannee River, is located in the subcoregion Okefenokee Swamps and Plains (75e) in Columbia County north of Lake City. Streams in this area are naturally low in pH and dissolved oxygen (DO) and high in color. The drainage basin is approximately 35 square miles. Landuse consists of silviculture (50%), field/pasture (20%), forest/natural (15%), row crop (10%) and residential (5%). Most of the in stream habitat consist of algae covered rock (80%) with some undercut banks (10%). The riparian zone is wide and has a variety of native plants. Falling Creek is unusual for a Florida stream because of its 10 to 15 ft. waterfall. Sampling is done upstream from the falls.



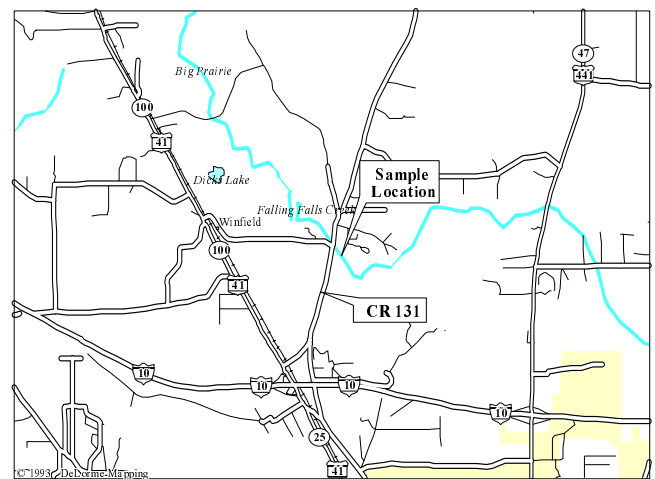
Results

Results from this survey showed a healthy macroinvertebrate community. The BioRecon passed all three thresholds. The values for the three metrics are as follows (threshold values are in parentheses):
 Total Taxa Richness 21 (c17)
 Total Florida Index 15 (c6)
 Total EPT 8 (c3)
 The physical/chemical values were temperature 24.2 C, pH 4.63, DO 6.1

mg/L, conductivity 49 and secchi 0.3 M. These are typical for the black water streams in the area. The habitat assessment was in the optimal range. SCI values from previous samples have been in the good category.

Significance

Falling Creek continues to support a healthy macroinvertebrate community. This is important because this creek discharges into Outstanding Florida Waters.



Suggestions

Continued sampling at this site is needed to ensure that current and future land use practices in the basin do not impact the system.

For more information, contact E. Lee Banks, DEP South District, 7825 Baymeadows Way Suite B200, Jacksonville, FL 32256 (904)448-4330

Published by the Florida Department of Environmental Protection, Tallahassee, FL, 1997.