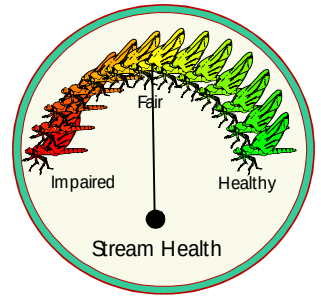


EcoSummary

BioRecon Report



Popash Creek @ Triplett Road 25 February 1998

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

Purpose

A repeat BioRecon was performed at this site in order to examine the water quality in the stream, document the organisms that inhabit a potentially impacted stream in this geographical area, and estimate the variability of BioRecon results. This is important because streams in areas with many human activities may have good water quality, and the biological thresholds on which BioRecon is based require further refinement.

Basin Characteristics

The drainage basin for Popash Creek includes pine flatwoods and improved pasture. Major land uses in the area include low and medium density residential. The creek flows into the Caloosahatchee River.



Results

The BioRecon indicated that Popash Creek has barely adequate water quality to support a healthy aquatic insect community. **Popash Creek barely passed two of three BioRecon thresholds for a healthy stream.** There were 29 different taxa (minimum threshold = 18), a Florida Index score of 9 (threshold = 10), and 4 caddisflies or mayflies (threshold = 4). **Water chemistry indicated that the creek met Class III standards for all parameters tested.** The site is located in a trailer campground, with a highly altered riparian (stream bank) zone on one side and a fairly natural one on the other. The habitat consisted of sand (89%), but with a small amount of aquatic vegetation (4%)

and leaf mats and packs (4%) Flow was adequate (0.3 m/sec). The overall habitat score was 126 of 160 possible points. The area had been recently flooded.



Significance

These results indicate that this stream has marginal water quality, and some potential problems. Part of the low BioRecon score may be due to recent flooding and poor habitat. A 1996 BioRecon showed fair results.

Land in the immediate drainage area is mostly pine/palmetto flatwoods and improved pasture, with sparse but increasing residential use. The potential exists for more impacts to the stream from more intensive residential development.

Suggestions

Encourage good land use practices in the basin, and maintain a monitoring program to further refine BioRecon thresholds for streams and detect effects of changes in local land use.

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