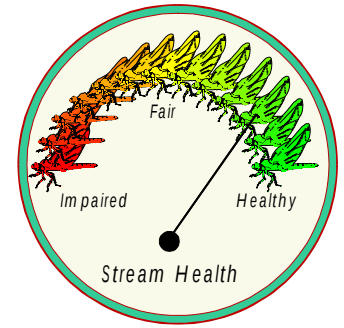


EcoSummary

BioRecon Report



Popash Creek at Triplett Road, North Ft. Myers August 14, 1996

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

Purpose

A single BioRecon sampling was performed at this site in order to investigate the water quality in the stream and document the organisms that inhabit a potentially impacted stream in this geographical area. This is important because impacted streams may still have good water quality, and the biological indicator thresholds upon which BioRecon is based require further refinement.

Basin Characteristics

The drainage basin for Popash Creek includes pine flatwoods and grassland. Major land uses in the area include low and medium density residential, some light cattle grazing, and open land for future development.

Results

The BioRecon indicated that Popash Creek supports a healthy aquatic community. The site is located on the upstream side of a trailer campground, with low-density residential areas upstream. One bank was natural forest, the other was bare soil and pavement. The stream habitat consisted of sand (82%), with some limestone and shell rubble (10%) and a few exposed roots (5%),

and snags(3%). Flow was strong (0.4 to 0.6 m/sec). Popash Creek passed all three BioRecon thresholds for a healthy stream. There were 26 different taxa (minimum threshold = 18), a Florida Index score of 14 (threshold = 10), and 6 types of caddisfly or mayfly (threshold = 4). Water chemistry indicated that dissolved oxygen was 4.4 parts per million, below the Class III standard of 5 ppm.

Significance

These results confirm that this stream has adequate water quality, despite some potential problems. Low dissolved oxygen is not uncommon during the summer rainy season, but it can be made worse by excessive stormwater runoff.

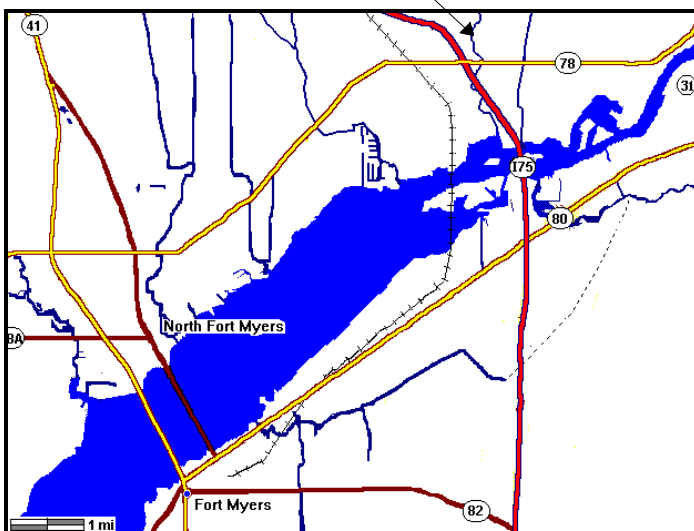
Land in the immediate drainage area is mostly pine/oak/palmetto flatwoods with sparse residential use. However, the potential exists for increased stormwater runoff and higher nutrient flow to the stream from more intensive residential development.

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.



Popash Creek



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