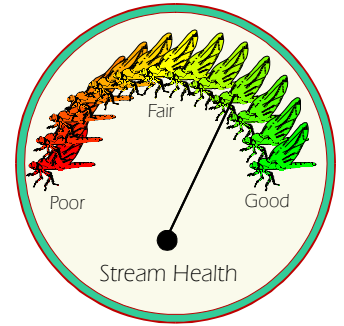


EcoSummary

SCI Report



Elder Springs Run @ Myrtle Avenue Sanford, Seminole County 25 August 1997

Stream Condition Index (SCI): The standardized biological assessment tool used by FDEP biologists to indicate ecosystem health and identify impairment as compared to reference (natural) conditions of streams within the various ecoregions of the State of Florida

Purpose

This site was chosen for the dual purposes of providing information to persons and agencies involved in restoration efforts being undertaken on Lake Jesup (spearheaded by St. Johns River Water Management District) and for the continuing development of FDEP stream bioassessment methodology.



Basin Characteristics

This watershed is made up of two forks. The western fork receives input from several small springs in the Elder Springs area south of Sanford. The eastern fork originates at Lake Ada just west of US Hwy 17/92 and flows south to where it joins Elder Springs Run proper about a mile above Lake Jesup. At several points in the eastern portion of the watershed, the stream is canalized, serving as a roadside drainage ditch. The combined stream flows into the lake at Seminole County's Lake Jesup Park. One-half of the land use in the Elder Springs Run watershed is urban. Roughly 15% is devoted to agriculture. Most of the remainder is undeveloped land.

Results

Elder Springs Run received a "good" rating on the SCI. There were 24 macroinvertebrate taxa collected, which included three from the EPT group. The Florida index score was nine. The dominant invertebrate taxon present was *Microcylopeus pusillus*, the riffle beetle. Water chemistry results suggest fairly good water quality.

Percentile rankings for these parameters ranged from the 46th to the 71st. The concentration of fecal coliform bacteria in the water samples was very high (510 colonies/mL), but not above the level allowed by current Florida rules. At the sampling site, the habitat evaluation produced good results. Out of a possible 145 points, the site scored 121, placing it in the mid-range of the "optimal" category. A narrow buffer zone and suboptimal riparian plant community kept Elder Springs Run from receiving a very high habitat assessment.

Significance

The results suggest that Elder Springs Run is in fairly good ecological health. As a contributor to Lake Jesup, and thus the St. Johns River, the water quality of this stream is important. Hopefully, water quality will remain good as development increases in the upper watershed.



Suggestions

Suggestions for maintenance or improvement in water quality in this area include the establishment of adequate stormwater retention systems as development in the area increases and the use of best management practices by area landowners.



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