



ECOSUMMARY

A SWAMP Ecosystem
Management Report

CEDAR HEAD RUN ABOVE ICHETUCKNEE RIVER

A BioRecon Assessment

February 6, 1996

Purpose

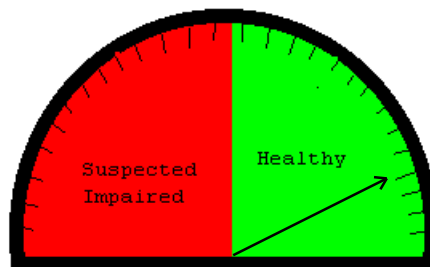
A BioRecon was performed at this site in order to document the clean water indicator organisms that normally inhabit a small spring run in this geographical area. This is important because Class III standards are based upon established background levels of organism species diversity. In order to establish levels required to indicate impact, the natural organism diversity should be established from investigations of unimpacted areas.



Cedar Head Run near its entrance into Blue Hole.

Basin Characteristics

The drainage basin for Cedar Head Run is located entirely within the boundaries of Ichetucknee Springs State Park. Since the site is located away from the recreational areas of the park, the stream receives very little effect from surface non-point source impacts. However, past water quality



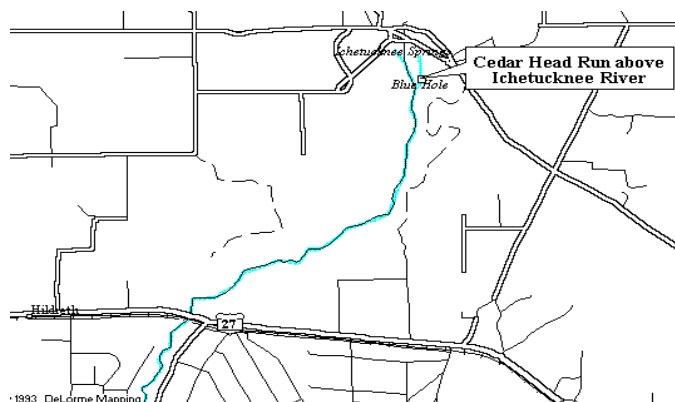
Stream Health

analyses have indicated elevated levels of nitrogen and phosphorus, which may indicate effects on the ground water from surface sources.

Results



The BioRecon indicated that Cedar Head Run is an unimpacted clear water stream with habitats and macroinvertebrate species that are normally found in this type of stream. The site is located in a heavily forested natural area with an unaltered riparian (streambank) zone. The habitat consisted mainly of sand/silt (70%), but with a good amount (25%) of aquatic vegetation and root systems. Flow is continuous at 0.5-1.0 foot per second with a year-round water temperature near 70° F. There was a high number of species (31), a high Florida Index (13) of pollution sensitive species, and a marginal number of mayfly, stonefly, and caddisfly species (4).



Significance

These results confirm that this stream is relatively unimpacted from human activities. The marginal number of mayflies and caddisflies is probably the result of the run's length (1/4 mile from source to sample site) not being sufficient enough to attract many of these relatively rare species.

Land in the immediate drainage area is mostly natural. However, the potential exists for impacts to the stream from recreational use in the immediate area as well as from groundwater contamination from upstream land use.

Suggestions



Maintain a monitoring program to establish BioRecon thresholds for spring runs; document seasonal variations in unimpacted streams; and trace the source of any impacts to the groundwater. These actions will help to ensure that the natural character of this area is preserved.

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