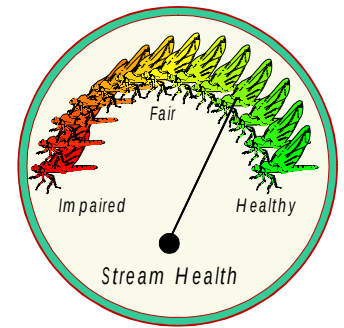


EcoSummary

BioRecon Report



Fisher Creek at Springhill Road, SR 373, Leon County October 30, 1996

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

Purpose

A BioRecon was performed at this site for multiple purposes. One was to collect information for the St. Marks Basin Pilot Project that is compiling and collating basin characteristics for the Ecosystem Management Area (EMA). Another purpose was BioRecon training and quality assurance for the assembled district biologist using this Bioassessment tool.

Basin Characteristics

Fisher Creek appears to drain to the Wakulla River (Outstanding Florida Waters) through the Floridian aquifer near the Riversink spring area. The Wakulla River flows into Apalachee Bay via St. Marks River (an OFW). All the above water bodies are located in the Ochlockonee/St.Marks Ecosystem Management Area. The



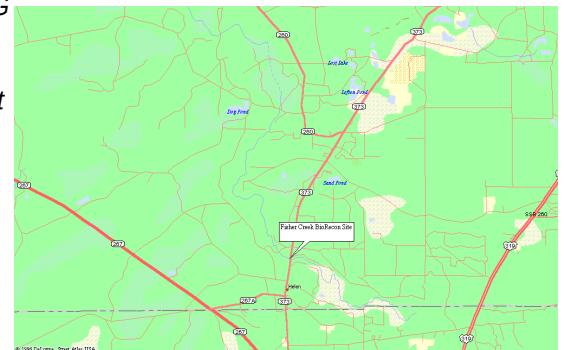
Fisher Creek watershed drains primarily silviculture and forest in the Apalachicola National Forest. The creek is located in

subecoregion 75A (Gulf Coast Flatwoods). The underlying geologic formation (Jackson Formation) consists of clays, carbonaceous sands, and sandy shell marl. USGS topographic maps indicated much of the watershed consisted of wetland. Fisher Creek's source elevation is 100 feet above mean sea level with a length of 12.5 miles and 12.5 feet average fall per mile. (Florida Stream Gazetteer). At sampling, stream depth was 0.25 to 0.6 meters, stream width 4 meters, and velocity ranged from 0.05 to 0.15 m/sec.

Results

The BioRecon monitoring indicated the Fisher Creek watershed was near the borderline of healthy. Three teams evaluated 3 different 100 meter reaches near state road 373. The Pensacola team sample reach passed all metric target values for both east and west panhandle areas. The Orlando reach passed 2 of 3 east target values and the Punta Gorda reach passed 1 of 3 east thresholds. The species collected by the 3

teams at the different reaches were very similar. Substrate type was 70-80% sand at all 3 sites. Water velocity ranged from the top of marginal at PG reach, to the bottom of suboptimal at ORL reach to mid suboptimal at the PEN reach. Substrate types & availability rated suboptimal at all reaches.



Significance

It appeared the Fisher Creek biota was improving from disturbances caused by historical landuse practices. Tram roads historically crossed the watershed wetlands for lumbering access. Fisher Creek had been channelized during the last century. The area is reportedly last clear cut ~ 30 years ago and now the National Forest follows the latest Best Management Practice's. Left untouched, this young riparian zone buffer width and vegetation will improve naturally as it matures, thereby improving substrate type & availability.

Suggestions

Continue the use of Forestry BMP's with the emphasis on riparian zone protection. This action should aid the restoration of flow conditions and natural sinuosity, enhancing conditions in the Fisher Creek ecosystem.



For more information, contact Donald Ray, FDEP Northwest District, 160 Governmental Center, Pensacola, FL 32501 (850)444-8300 or SC 693-8300

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