EcoSummary

BioRecon Report

"Point Baker" Branch above Pine Lake Circle west of SR 89
January 30, 2002

BioRecon: A rapid, cost-effective screening mechanism for identification of biological impairment

Purpose

A bioassessment was performed on "Point Baker" Branch for a background site documenting the environmental health of the small streams in the Milton/Pace area. The BioRecon was conducted for FDEP General Counsel and RCRA staff projects.

Basin Characteristics

"Point Baker" Branch at the bioassessment site is a first order stream originating along hillside of the SR 89 and SR 87 intersection. The creek is located about 2.5 miles north of Milton in Santa Rosa County (Lat. 30° 42' 13.3" Long. 87° 03' 16.3"). This stream flows to flows to Pensacola Bay via Clear Creek, Blackwater River and Bay. This site drains the southern pine plains and hills of subecoregion 65F.

Results

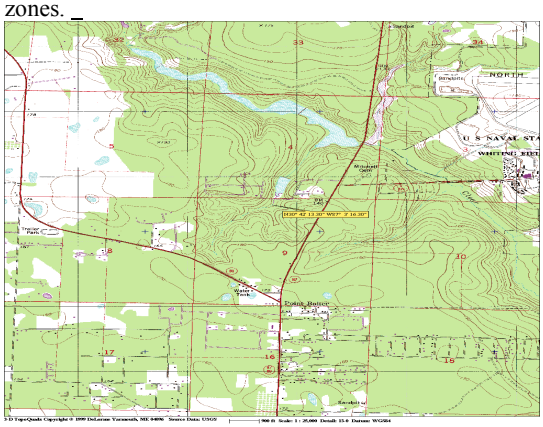
The BioRecon indicated a healthy biological community. All 3 biological indicators surpassed thresholds established for healthy aquatic ecosystems:

Biometrics	Value	Thresholds
Taxa Richness	46	≥24
Florida Index	30	≥22
EPT	24	≥17

This "Point Baker" Branch site had a diverse and productive fish and wildlife community. Bream, pickerel, and shiners were common. The stream habitat assessment score was rated optimal at 88%. Only bank stability rated suboptimal, probably because accelerated watershed runoff from logging clear-cuts during the past 25 to 40 years. An Atlantic white cedar forest was the former riparian zone climax community. Numerous stumps from historical logging were observed along the stream. The area was experiencing a 4-year drought. The January rainfall recorded at nearby Whiting Field was only 2.29 inches with the normal average of 6.39 inches.

Significance

This "Point Baker" Branch site met Class III State Water Quality Standards 62-302 for recreation and the propagation and maintenance of a healthy, well-balanced population of fish and wildlife. This site's forest management is protecting the native riparian and transitional zone vegetation, enhancing the stream's fish/wildlife diversity and productivity. In many other rural Northwest Florida streams, silviculture, agriculture, and or residential development activity has reduced the riparian buffer zones.



Suggestions

Maintain the18 meters or more of riparian buffer zones. The buffer zones provide the necessary shade, food and habitat (woody debris/leaf fall) and filter fertilizers and pesticides to protect "Point Baker" Branch's fish and wildlife. Preservation of the stream's natural hydrology (i.e. flow, depth) and riparian wetland forests buffer zones benefits the watershed's fish and wildlife. Examples of watershed problems, which were observed in other segments of Point Baker Branch, included road culverts on Pine Lake Circle damming the stream just downstream of the sample area, road sediment filling wetlands and stream channel, and a dam for a residential development that destroyed wetland and stream habitat. **For more information, contact Donald Ray, FDEP Northwest District, 160 Governmental Center, Pensacola, FL 32501 (850) 595-8300 or SC 695-8300**