EcoSummary

Coon Camp Branch below North River Road

August 5, 1999

NPS BIOASSESSMENTS

SUSPECT

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

For samples collected before June 8, 2004
All field and laboratory methods followed FDEP Standard Operating Procedures and met FDEP quality assurance/quality control standards. **For samples collected on or after June 8, 2004**
All field and laboratory methods followed FDEP Standard Operating Procedures (SOPs) and met DEP quality assurance/quality control standards.

Introduction



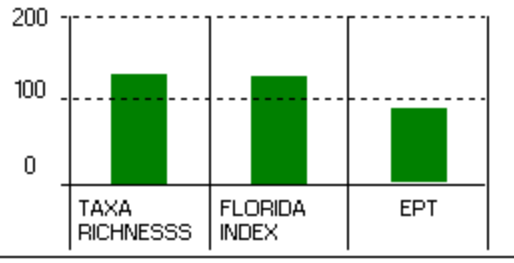
A BioRecon was performed at this site to assess the impacts to its biota and wildlife habitat from a dirt road ford crossing Coon Camp Branch. This bioassessment was a partnership with the Blackwater River State Forest (BRSF), United States Geologic Survey, and the Gulf Plain Ecosystem Partnership (GCPEP). The BRSF had planned to close this section of North River Road because of severe erosion caused by four-wheel drive recreational vehicles. A bioassessment was planned after the closed road was re-vegetated to monitor expected improvement to stream health. Because of extenuating circumstances (see Conclusions), a follow-up bioassesment has not yet been conducted. Coon Camp Branch (STORET 33030105) at the bioassessment site (N30 42 50.5 W86 51 8.2) is a second order tributary to the Blackwater River, which is classified as Outstanding Florida Waters (OFW) under the State Water Quality Standards. The Blackwater River flows into Pensacola Bay via The Blackwater and East Bays. The Yellow River Marsh along Blackwater Bay is a State Aquatic Preserve and also listed as an OFW. The Blackwater River State Park is about 1 mile downstream. Coon Camp Branch drains the southern pine plains and hills of subecoregion 65f.

Results and Discussion

The BioRecon indicated some impairment to the biological community. The stream biota failed to meet one out of three biometrics thresholds (EPT) established for healthy stream

ecosystems. EPT (mayflies, stoneflies, caddisflies) is the strongest measure of stream health and declines in relation with human disturbance.

Biometrics	Value	Threshold
TAXA RICHNESS	31	>= 24
FLORIDA INDEX	28	>= 22
EPT	15	>= 17



Values and Percent Threshold Attained for Panhandle West BioRecon Metrics

Macroinvertebrate (fish food) productivity was low below the North River Road ford. Only 3 of 31 taxa were categorized as abundant, 8 as common and 19 as rare because sediment smothered 93% of aquatic wildlife habitats. The habitat assessment rated marginal with a score of only 45% because of poor conditions for Habitat Smothering and Riparian Buffer Zone Width; marginal conditions for Substrate Diversity, Substrate Availability, Bank Stability, and Riparian Zone Vegetation Quality. Water Velocity rated suboptimal and Artificial Channelization rated optimal. Although impacts from the dirt road were the main cause of the low score, the Riparian Buffer Zone Width and Riparian Zone Vegetation Quality scores were poor and marginal because of the silviculture practices. These practices included burning the riparian zone's forested wetland in order to replace it with planted pine.

Conclusions

Because of habitat smothering from North River Road runoff, this Coon Camp Branch site did not meet Class III State Water Quality Standards 62-302 for recreation and propagation and maintenance of a healthy well-balanced population of fish and wildlife. Coon Camp Branch's biological health should rapidly improve once vehicular traffic through the stream is prevented. Coon Camp Branch's location in the Blackwater River State Forest has the potential to afford managerial riparian forest protection. Stream corridor management should include maintaining an undisturbed riparian buffer zone width of at least 18-meters that prevents burning, logging, and vehicles from driving in the stream. These management activities would facilitate the restoration and preservation of Coon Camp Branch.
Closing North River Road at this site would enhance the stream reach's fish and wildlife population, in addition to improving recreational opportunities just downstream at the Blackwater River State Park. Road closing would also help reduce the sediment load to the Blackwater River. Recreation activities downstream in Blackwater River have been limited by sediment filling the river channel. In the past few years, canoe livery businesses and recreational boaters had complained of sediment impeding navigation below the Blackwater River State Park. The post-road closure bioassessment has been not performed as of July 2005. Continued erosion caused by four-wheel drive vehicles ignoring signs and bypassing or

removing/destroying road closure devices had defeated restoration efforts as of July 2005.

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