

## Sandy Point Creek below Sandy Point Road Santa Rosa County March 14, 2000

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

### Purpose

A bioassessment was performed on Sandy Point Creek in an effort to document the environmental health of streams flowing into the Yellow River Aquatic Preserve (YRAP). The BioRecon was conducted in partnership with the YRAP staff.

### Background

Sandy Point Creek at the bioassessment site is a first order stream originating in a large wetland north of I-10. The creek is located about 3 miles south of Milton in Santa Rosa County (Lat. 30° 34' 5.0" Long. 87° 01' 24"). This stream is part of the Pensacola Bay system and flows into Blackwater Bay between Bay and Robinson Points. This site drains the Gulf Coast Flatwoods subcoregion (75a).

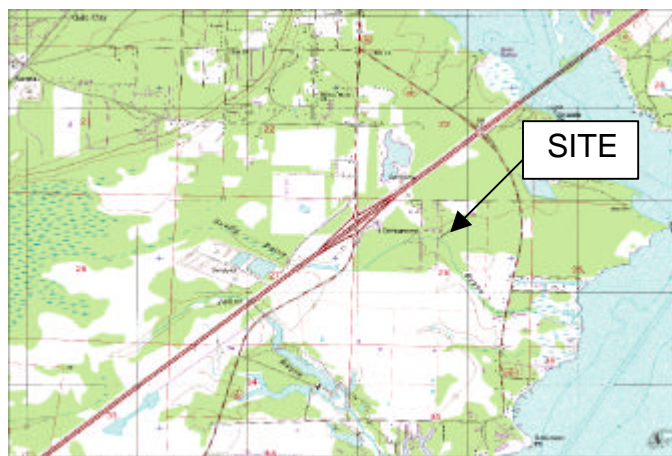


### Results

The BioRecon indicated a severely impaired biological community. All 3 biological indicators failed thresholds established for a healthy aquatic wildlife community:

Biometrics	Value	Thresholds
Taxa Richness	18	≥24
Florida Index	1	≥22
EPT	0	≥17

Sandy Point Creek site was dominated by pollution tolerant aquatic wildlife. Fine anaerobic organic sediment smothered the stream habitat. Dissolved oxygen concentrations would be expected to be below State Water Quality during warmer periods. Hydrogen sulfide odor emanated from the anaerobic sediments. The stream habitat assessment score was rated poor at 36%. Silvicultural activities, range cattle, and some development affected the watershed. Silviculture operations had leveled the land, and dredged the creek to drop the area's water table in order to plant pines in the former wetland riparian zones. Upstream of CR 191, the stream was impounded for cattle utilization. A former sandpit, now a residential



development with water skiing impoundments, and the interstate highway affected the stream in the upper watershed. The creek also was impounded in the lower watershed at CR 191C by a culvert crossing.

### Significance

This Sandy Point Creek site did not meet 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. The organic sediment loading, coliform bacteria contamination from cattle waste, altered habitats from dams and culverts, and probable low dissolved oxygen concentrations negatively affect the Yellow River Aquatic Preserve's fish and wildlife in the middle portion of Blackwater Bay. Bacteria sources from cattle waste may affect the Class II shellfish harvesting areas of Blackwater and East Bays. Low dissolved oxygen concentrations, bacterial infections, and habitat destruction from dams and canals could affect the federally endangered Gulf of Mexico sturgeon.

### Suggestions

Preservation and protection of the wetland forests above I-10 would benefit the Aquatic Preserve's fish and wildlife community. Use of best management practices for agriculture to keep cattle out of State Water is important to protect the area waters from bacterial contamination. Dam removal and restoration of the watershed's natural hydrological patterns could re-establish Sandy Point Bayou as a nursery area for aquatic wildlife in the Pensacola Bay basin. Also, sturgeon access and migration routes to the Bayou would be restored. **For more information, contact Donald Ray, FDEP Northwest District, 160 Governmental Center, Pensacola, FL 32501 (850) 595-8300 x1126 or SC 695-8300**