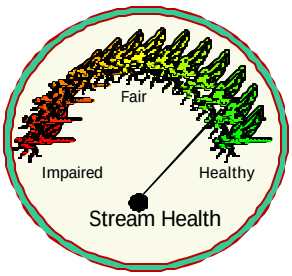


EcoSummary

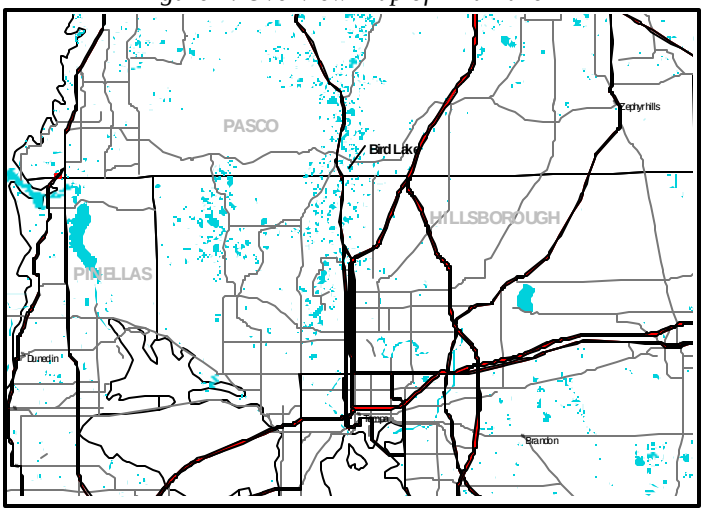
Bird Lake
08/10/99



Background

Bird Lake is located in Pasco County, between Interstate 75 and US 41, south of SR 54 (see Figure 1). Bird Lake is in the Southwestern Florida Flatwoods Subecoregion (75b). This area is characterized by Gulf coastal lowlands and valleys, with areas of pasture and rangeland, spreading urbanization, disturbed lands from phosphate mining, and citrus groves. Lakes in this region are generally clear and are characterized by low nutrient concentrations.

Figure 1: Overview Map of Bird Lake



Results

Physical/chemical parameters and nutrients were sampled in August of 1999. Surface water samples were taken and analyzed for total ammonia, nitrite-nitrate, total Kjeldahl nitrogen (TKN), and total phosphorus. Samples were also analyzed for turbidity, total suspended solids (TSS), total organic carbon (TOC), algal growth potential (AGP), chlorophyll-*a*, and fecal and total coliform levels. Macroinvertebrates were sampled using petite ponar dredges.

All nutrient values for Bird Lake were in the good range, defined as being at concentrations lower than those found in 70% of Florida lakes. Ammonia concentration was lower than the values in 95% of state lakes; the nitrate-nitrite value was less than is found in 90% of Florida lakes. (See Figure 2.) Total Kjeldahl nitrogen (0.73 mg/L) and total phosphorus (0.026 mg/L) levels were lower than are found in 70% of state lakes. The turbidity level (1.8 NTU) was also good, lower than is found in 70% of other Florida lakes. Fecal (16 colonies/100 ml) and total (40 colonies/100 ml) coliform counts were well within the acceptable range. The total number of Ephemeroptera, Trichoptera, and Odonate taxa (ETO) found was 2. The total number of invertebrate taxa found in Bird Lake (27 taxa) was higher than the values seen in 95% of Florida lakes, well within the good range.

Figure 2: Data for Selected Parameters

Station	Date	pH (Std Units)	Cond. (umhos/cm^2)	Secchi depth (m)	Turbidity (NTU)	TSS (mg/L)	NH_3 (mg/L)	NOx (mg/L)	TKN (mg/L)	TP (mg/L)	TOC (mg/L)
Bird Lake	08/10/99	5.8	130	2	1.8	4	0.01 (BDL)	0 (BDL)	0.73	0.026	11

Storet Code	Date	# ETO Taxa	# Macro-benthos Taxa	Chloro-phyll-*a* (mg/L)	Fecal coliforms (col/100 ml)	Total coliforms (col/100 ml)	AGP
99LAKES05	08/10/99	2	27	1.12 (BDL)	16	40	0.3

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