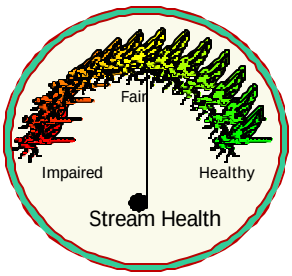


EcoSummary

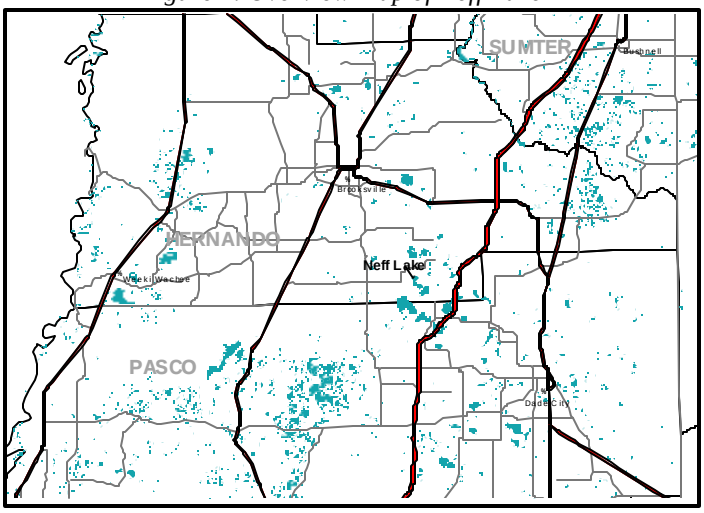
Neff Lake
08/09/99



Background

Neff Lake is located in Hernando County, southeast of Brooksville (see Figure 1). Neff 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 Neff 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 Neff Lake were in the fair or fair-to-good range, based on comparisons with concentrations found in other Florida lakes. Ammonia concentration (0.031 mg/L) was lower than the values in 60% of state lakes; the nitrate-nitrite value (0.01 mg/L) was less than is found in 60% of Florida lakes. (See Figure 2.) Total Kjeldahl nitrogen (1.2 mg/L) concentration was higher than is found in 40% of state lakes. The total phosphorus value (0.084 mg/L) was higher than is found in 50% of Florida lakes. The turbidity level (2.8 NTU) was also in the fair range, higher than is found in 40% of other Florida lakes. Fecal (15 colonies/100 ml) and total (50 colonies/100 ml) coliform counts were within the acceptable range. No Ephemeroptera, Trichoptera, or Odonate taxa (ETO) were found. The total number of invertebrate taxa found in Neff Lake (8 taxa) was higher than the values seen in 30% of Florida lakes, just within the fair 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)
Neff Lake	08/09/99	5.6	55	0.5	2.8	5	0.031	0.01	1.2	0.084	17

Storet Code	Date	# ETO Taxa	# Macro-benthos Taxa	Chloro-phyll-*a* (mg/L)	AGP	Fecal coliforms (col/100 mL)	Total coliforms (col/100mL)
99LAKES08	08/09/99	0	8	26.3	3	15	50

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