



Southeast District
Assessment and Monitoring Program
Ecosummary

Myrtle Slough

Martin County

September 1999

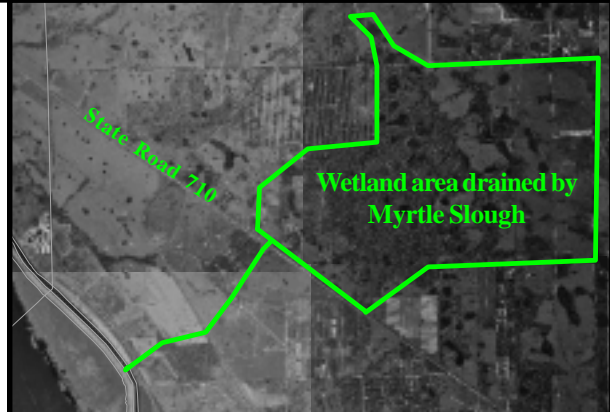


Summary: Myrtle Slough is a shallow, nutrient-laden stream discharging to Lake Okeechobee. Current water quality status: **IMPAIRED**.

Myrtle Slough drains into Lake Okeechobee by way of the lake's rim canal. The slough is but one part of a network of interconnecting small canals constructed to drain this low-lying area so that it may be used for agricultural purposes. Drainage basin landuses are dominated by pasture for both dairy and beef cattle; however, there are also small citrus groves, rowcrop farms, and some woodlands. The slough connects with Boar Hammock to the east.

Historical water quality data in Myrtle Slough is limited to data from 1978 to 1989, and indicated high concentrations of nutrients. Average total phosphorus and total inorganic nitrogen was 0.27 and 0.20 mg/l respectively. Average dissolved oxygen

About the Lake: Human impacts particularly in the latter part of this century have resulted in the deterioration of the Lake Okeechobee ecosystem. Excess nutrient loading has caused an increase in the frequency and intensity of algal blooms, an indicator of lake "hypereutrophication". This trend is attributed to increased total phosphorus inputs and a reduction in the lake's ability to assimilate phosphorus. Total phosphorus concentration in the lake has approximately doubled since 1973 when the lake phosphorus concentration was 0.049 mg/l.



Myrtle Slough is located on the lower northeast side of Lake Okeechobee, southwest of the city of Okeechobee and north of Port Myaca.

was 0.8 mg/l. There are no apparent trends in the historical data. A recent FDEP sampling indicates continued poor water quality conditions.

Recent FDEP sample results for May 18, 1999

Dissolved Oxygen - 3.4 mg/l (violation)

Total Phosphorus - 0.164 mg-P/l

Inorganic Nitrogen - **1.18 mg-N/l**



Myrtle Slough drainage basin landuse is mostly pasture. High levels of inorganic nitrogen are indicative of runoff containing animal waste.

For more information: Contact the Southeast District Surface Water Quality section in Port St. Lucie at 561/871-7662, or by email: GREG.GRAVES@.DEP.STATE.FL.US

