



STATE OF FLORIDA

GAME AND FRESH WATER FISH COMMISSION

TALLAHASSEE

32304

O. E. Frye, Jr., EXEC. DIRECTOR

545 North Woodland
Winter Garden, Florida
October 21, 1965

Mr. John W. Woods, Chief of Fisheries
Game and Fresh Water Fish Commission
Tallahassee, Florida

Dear Bill:

My observations concerning current re-growth of submerged and emergent aquatic vegetation in Lake Apopka are as follows:

1. There is a very moderate increase in vegetation along the edge of the shore. Submerged vegetation which is increasing includes "eel grass" (Vallisneria americana), southern naiad (Najas guadalupensis) and smaller quantities of pondweed (Potamogeton illinoensis).

It was the latter species, pondweed, which formerly (in 1946) extended across the entire lake except in waters more than eight feet in depth, and which had practically disappeared from the lake by 1950.

2. The large stand of great bullrush (Scirpus validus), known as Hog Island, which formerly existed on the north side of the lake has nearly disappeared.

There is, however, a modest increase in the amount of pickerel weed (Pontederia cordata) and cattails (Typha sp.) at the water's edge.

3. Although the reappearance of patches of pondweed may seem an encouraging sign there is no likelihood of this species again becoming the dominant submergent plant of Lake Apopka. Its occurrence, as well as that of eel grass and southern naiad, is limited to areas where sufficient light for growth can penetrate to the bottom of the water.

Lake Apopka has enjoyed more abundant and frequent rainfalls than usual this year. The lake water thus received substantial dilutions through these rains. Water management practices have continued to hold

the lake at low levels. The water level of Lake Apopka today, for example, stands at 66.2 feet.

The constant dilution and discharge of water from Lake Apopka this summer has resulted in a lessening of its algal content, an increase in its qualities for light penetration, and perhaps a certain mitigation of the enriched and polluted condition of its water as well.

It can be seen therefore, that the situation in Lake Apopka has undergone merely a temporary, and not a real improvement. Permanent improvement can come about only when the pollutional aspects contributing to the lakes deterioration are eliminated.

Sincerely,

Harold L. Moody, Project Leader
River Fisheries Projects

HLM/sc

cc: Dr. O. E. Frye

Mr. Charles Harris

Mr. George Horel

Dr. Mark Anthony