

LAKE MARIAN CONTROL STRUCTURE

G-113

This structure is a triple-barreled corrugated metal pipe culvert with discharge controlled by stop logs in risers. The structure is located at the outlet of Lake Marian in the Prairie Lakes State Preserve managed by the Florida Department of Natural Resources.

PURPOSE

The structure is to prevent overdraining Lake Marian and maintaining lake stage within the optimum range of 58.0 to 60.5 feet.

OPERATION

The structure will be operated by Florida Game and Fresh Water Fish Commission according to Memorandum of Understanding between the District and the Commission signed on June 30, 1993.

The stop log will set at elevation 59.0 feet under normal conditions. Adjust the number of boards in the risers to regulate the lake stage within the optimum range. At stage 59.0 feet, Lake Marian starts to overflow into Lake Kissimmee through Fodderstack Slough.

FLOOD DISCHARGE CHARACTERISTICS

Design Frequency	<u>N/A</u> (estimated 100 yr +)
Discharge Rate	<u>290</u> cfs (inlet control with boards at 58.5)
Headwater Elevation	<u>60.8</u> feet
Tailwater Elevation	<u>N/A</u>

DESCRIPTION OF STRUCTURE

Type	<u>corrugated metal pipe culvert with upstream control</u>
Number of barrels	<u>3</u>
Size of barrels	<u>72</u> inches
Length of barrels	<u>68</u> feet
Flow line elevation	<u>52</u> feet
Top of the road	<u>63.5</u> feet

Riser Pipes

Diameter of riser 96 inches
Top of riser elevation 62.0 feet (Reference Point)

Stop Logs

Number of sets 3
Number per set 24
Size of logs 2½ inches X 7¼ inches X 4 feet long
Water level which will bypass structure 63.5 feet

ACCESS Via SR 523 from Kenansville to Prairie Lakes State Preserve and follow the entrance road to the structure. The numbers for gate combination locks are "3019" and "4744".

HYDROLOGIC AND HYDRAULIC MEASUREMENTS

Staff gauge at upstream and downstream of the structure

Digital recorder for upstream stage (recorder shelter combination lock number is "0000").