

STRUCTURE G-410

This pump station has two (2) 48-inch diameter vertical axial flow pumps with 200-Hp electric powered engines with trash rack, located on the western perimeter levee of the Rotenberger Wildlife Management Area (Rotenberger). Each pump has a nominal discharge capacity of 120 cfs (subject to headwater and tailwater stages), for a combined capacity of 240 cfs. The factory test report, including performance curves, for these pumps are contained in the project files.

PURPOSE

The G-410 pump station is the primary inflow control structure to withdraw treated water from the STA-5 Discharge Canal for routing into Rotenberger.

OPERATION

The G-410 pump station can be operated in one of the following two modes: remotely via telemetry from the District's Operations Control Center in West Palm Beach, or locally. Headwater and tailwater staff gauges are available for local operation, while headwater and tailwater data are also available to remote operators via telemetry. Discharges from the G-410 pump station shall be distributed into the Rotenberger through a 2-1/2 miles long spreader canal. No water quality sampling is required at this structure. Pumps are operated when water is available in STA-5 as evidenced by flow through G-344A, B, C, or G-344D and concurrent water demands in the Rotenberger. Water demand is defined on an interim basis as average water depths between 0.2 and 1.4 foot depending on time of year. Pumps can also be operated to control wildfires in the Rotenberger.

This structure is operated in accordance with the Florida Department of Environmental Protection's Everglades Forever Act permit. In accordance with the permit, G-410 will be operated, along with other Rotenberger hydropattern structures and components (G-402 A-D structures), to achieve an interim hydropattern restoration target based on a 31-year average interior stage as predicted by the Natural Systems Model. The permit recognizes that these interim operations shall generate data to be used by a team of

STATION POWER

Normal	<u>Commercial electricity</u>
Emergency	None

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Staff gauges: Stage upstream and downstream of structure.

Telemetry system: Two electric pumps on telemetry control - pumps monitored for status.

Headwater and tailwater digital recorder.

Date Acceptance into Service: October 2000

ACCESS: This structure is located on the western perimeter levee of Rotenberger. Access is from the southeast corner of STA-5, around the south terminus of the discharge canal, then north 0.25 miles along the Rotenberger western perimeter levee.

MONITORING: Flow and Water Quality compliance monitoring required by FDEP Permit Number 0131842 (EFA).

Revised 4/21/03