

STRUCTURE G-339

Structures G-339 is situated in the Supply Canal of STA-2 at the intersection with the existing L-6 Borrow Canal. During extreme storm events, G-339 will serve to facilitate flow diversion from Pump Station S-6 and G-328 to WCA-2A via the L-6 Borrow Canal.

G-339 consists of a two-bay reinforced concrete U-shaped spillway provided with two 16 foot-wide vertical lift gates installed on the crest of an ogee-shaped weir. Structure G-334 will be operated in either manual or remote mode.

This structure is located in Palm Beach County and situated north of the STA and near the S-6 Pumping Station immediately west of Water Conservation Area 2A.

PURPOSE

G-339 provides flow diversion from Pump Station S-6 and G-328 to WCA-2A via the L-6 Borrow Canal.

OPERATION

G-339 can be operated manually or remotely via telemetry from the District's Operations Control Center in West Palm Beach. In automatic operation, G-339 will operate to within its capacity to maintain water surface elevations in the Supply Canal upstream (north) of the structure at or below elevation 17.4 ft. NGVD.

FLOOD DISCHARGE CHARACTERISTICS

Discharge Rate:	<u>Design</u>
Std. Proj. Storm:	795 cfs
Headwater Elevation:	17.74 ft. NGVD
Tailwater Elevation:	17.60 ft. NGVD
Prob. Max. Storm:	1,970 cfs
Headwater Elevation:	17.92 ft. NGVD
Tailwater Elevation:	17.89 ft. NGVD
Type Discharge:	controlled submerged

DESCRIPTION OF STRUCTURE

Crest Shape: Ogee

Weir Crest Elevation: 8.00 ft. NGVD

Design Head: 9.30 ft.

Net Length: 52.0 feet

Number of gates: 2

Gate Width x Height: 18.0 ft. x 11.5 ft.

Clearance Elevation: 19.5 ft.

Service Road elevation: 21.00 ft. NGVD

Date Acceptance into Service: June 1999

ACCESS: Access to G-339 from S-6 is along the East levee of the Supply Canal. The structure is just south of S-6.

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level: Telemetry available for headwater/tailwater and calculated flow. Headwater/tailwater staff gauges are available for local monitoring.

Gate Position Recorder: YES

DEWATERING FACILITIES (per gate): Needles and needle beams will be used upstream and downstream of the vertical lift gates to permit dewatering for both maintenance and for an emergency temporary closure should it be necessary to remove a gate.