STRUCTURE G-302
(STA-1W Inflow Structure)

Inflow structure G-302 is a concrete gated spillway with two vertical lift gates located at the head of the STA-1W Inflow Canal. The design flow rate is 3,250 cfs at a headwater elevation of 18.0 ft NGVD and tailwater elevation of 15.8 ft NGVD. This structure provides the only external inflow source to STA-1W with the exception of direct rainfall and seepage from WCA-1. An 84-inch diameter pipe is integrated into G-302 and located below the weir crest to allow the conveyance of the north perimeter seepage canal to pump station G-250S and has a peak flow rate of approximately 100 cfs.

PURPOSE

G-302 controls all inflows to STA-1W (Cells 1-5) and contains a small section of the seepage return system, but all seepage flows are returned to the treatment area via pump station G-250S. This structure works in concert with pump station S-5A to bring EAA stormwater to each of the treatment cells in STA-1W. G-302 is located at the southwest corner of the 350-acre Inflow and Distribution reservoir and lies 70 meters west of diversion structure G-301.

OPERATION

G-302 can be operated remotely or manually as required to provide water to the treatment cells or prevent inflow to the STA-1W if stages are too high. This structure moves stormwater or Lake Okeechobee water from the I&D reservoir into the STA-1W supply canal. The structure is controlled by Operations staff in response to upstream/downstream stages, environmental conditions (storms, drought, etc.), and Operation Plan guidelines. Diversion of untreated stormwater around STA-1W is discouraged according to the Settlement Agreement but may be necessary following severe storm events. Additional information is contained in the STA-1W Operation Plan which is revised on a regular basis.

FLOOD DISCHARGE CHARACTERISITICS

	Design	Standard Project Flood
Discharge Rate	3,250 cfs	1,110 cfs*
Headwater Elevation	18.0 ft	19.4 ft
Tailwater Elevation	15.8 ft	16.3 ft
Type Discharge	uncontrolled free	submerged controlled

*****Standard project flood requires diversion of flow through G-300, G-301

DESCRIPTION OF STRUCTURE

Type:	Reinforced concrete gated spillway
Gates:	Vertical lift
Number	2
Size	8.4 ft high x 20 ft wide
Weir Crest	
Net Length	40 ft
Elevation	9.4 ft NGVD
Service Bridge Elevation:	23.75 ft NGVD

STATION POWER

Normal:	Commercial electricity
Emergency:	Diesel Generator

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Telemetry:	Gate position from 0.00 to 8.00' (2 gates), stilling wells (HW & TW)
Staff gauges:	HW and TW
Water Quality Monitoring:	Samples collected biweekly on HW side

DATE OF ACCEPTANCE INTO SERVICE

January, 1999

ACCESS*

From S-5A, south along Levee-7 approximately 0.75 mile.

*Must have Area-1 key to access this structure.