

STRUCTURE 143

This structure is a double-barreled corrugated metal pipe culvert, located at the point where L-35B crosses the North New River, about 20 miles west of Fort Lauderdale, at Andytown. Control is effected by two manually operated sluice gates mounted on a reinforced concrete head structure.

PURPOSE

This structure permits release of water from Conservation Area 2A to supply water needs along the North New River Canal during the dry season. It also can be used to discharge excess water from Conservation Area 2A when capacity is available in the North New River Canal and when the water is not needed in Conservation Area 3A and stage at downstream S-34 is not above 6.0 feet.

OPERATION

This structure is manually operated under either flood or normal conditions.

Flood Conditions

The gates of this structure are opened whenever:

1. Excess storage is present in the Conservation Area 2A prior to hurricane season; that is, when the stage in Conservation Area 2A is in Area A on the Regulation Schedule as measured at gauge 112 or S-11B headwater.
2. The excess water in Conservation Area 2A is not needed in Conservation Area 3.
3. The tailwater elevation will not exceed 10.0 feet.

Normal Conditions

When operations are not required under Flood Conditions, releases shall be made in conjunction with releases from S-141 and 142, as necessary, to supply downstream water requirements so as to maintain an optimum stage at G-54, between elevation 3.5 and 4.5.

FLOOD DISCHARGE CHARACTERISTICS

	Design	Critical Design Conditions
Discharge Rate	<u>500</u> cfs	<u> </u> cfs
	* <u> </u> % SPF	* <u> </u> % SPF
Headwater Elevation	<u>13.0</u> feet	<u>14.5</u> feet
Tailwater Elevation	<u>10.0</u> feet	<u>8.0</u>
Type Discharge	controlled <u>submerged</u>	<u> </u>

*Designed for Normal Conditions. Discharge of Conservation Area 2 for Standard Project Flood designed to be passed through S-11 alone.

DESCRIPTION OF STRUCTURE

Type Corrugated metal pipe culverts with upstream control

Number of barrels 2

Size of barrels 72 inches

Length of barrels 70 " feet each

Flow line elevation 2.0 feet

Service bridge elevation 19.0 feet

Gates

Number 2

Type Hardisty Model 30-05C

Size 72 inch diameter

Control Manual

Lifting Mechanism -

Type Hoist Pedestal mounted, type U, manually operated

ACCESS: Structure located adjacent to U.S. Highway 27 and Sawgrass Fish Camp Park

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level Staff gauge only at site, upstream reading gauge at S-11A (upstream), downstream reading gauge at S-34 (upstream)

Gate Position Recorder None

DEWATERING FACILITIES (per gate) None