

STRUCTURE 14

This structure is a double-barreled reinforced concrete box culvert, located in Levee 29, about 42 miles west of Miami. Control is effected by two manually operated sluice gates mounted on a reinforced concrete head structure.

PURPOSE

Structure 14 provides an outlet for runoff reaching the Tamiami Canal west of S-12A. It attempts to maintain stages in the area west of Levee 28 no higher than they would have been under natural conditions, and at the same time provides a means of discharging runoff from that area to the Everglades National Park.

OPERATION

This structure is manually operated only under flood conditions. The gates of this structure are opened whenever the headwater elevation reaches 7.0 feet. However, S-14 never functioned as intended due to tailwater conditions which were higher than designed.

FLOOD DISCHARGE CHARACTERISTICS

	Design
Discharge Rate	<u>500</u> cfs
	* <u> </u> % of SPF
Headwater Elevation	<u>7.0</u> feet
Tailwater Elevation	<u>6.0</u> feet
Type Discharge	<u>controlled submerged</u>

* Design not related to Standard Project Flood

DESCRIPTION OF STRUCTURE

Type reinforced concrete box culverts with upstream control

Number of barrels 2

Size of barrels 7' X 7'

Length of barrels 65" feet each

Flow line elevation 0.0

Service bridge elevation 17.0 feet

Water level which will by-pass structure 15 feet

Gates

Number 2

Type Hydraflow Model 14-12

Size 7' X 7'

Control Manual

Lifting Mechanism - Type hoist pedestal mounted, screw type,
hand wheel operated

Date Acceptance into Service: January 31, 1963

ACCESS: This structure is located on U.S. Highway 41

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level: On-site staff gauges only, upstream and downstream

Gate Position Recorder: None

DEWATERING FACILITIES (per gate) None