

## STRUCTURE 334

This structure is a reinforced concrete, gated spillway with discharge controlled by a cable operated, vertical lift gate. Operation of the gate is manually controlled and the gate is operated in accordance with the operational criteria. The structure is located at the east end of the L-29 borrow canal about 20 miles west of Miami. This structure was modified in 1995.

### PURPOSE

This structure functions principally to make supplemental water deliveries to South and East Dade County. It can also be used when regulatory releases from Conservation Area 3A are being made.

### OPERATING CRITERIA

This structure is operated in conjunction with S-335 to make supplemental deliveries to South and East Dade County.

When supplemental deliveries are not being made, this structure is closed.

When regulatory releases are being made from CA 3A, this structure is operated in conjunction with S-333.

### FLOOD DISCHARGE CHARACTERISTICS

|                     |                                  |
|---------------------|----------------------------------|
|                     | Design                           |
| Discharge Rate      | <u>1230</u> cfs                  |
|                     | * <u>    </u> % SPF              |
| Headwater Elevation | <u>5.0</u> feet                  |
| Tailwater Elevation | <u>4.7</u> feet                  |
| Type Discharge      | uncontrolled<br><u>submerged</u> |

\*Design not related to Standard Project Flood

## DESCRIPTION OF STRUCTURE

Type reinforced concrete, gated spillway

Weir Crest

Net Length 29.0 feet

Elevation -6.9 feet

Service bridge elevation 14.0

Water level which will bypass structure 14.0 feet

Gates

Number 1

Size 17 ft. high by 29.0 ft. wide

Type vertical lift gate

Bottom elevation of gates, full open 6.2 feet

Top elevation of gates, full closed 10.1 feet

Control manual and remote computer control

Lifting mechanism

Normal power source Commercial electricity

Emergency power source LP gas engine driven generator

Type Hoist Hydraulic cylinder activated by electric motor driven pumps with emergency hand pump, connected to gate by steel cables.

**ACCESS:** Located on U.S. 41 at junction L-29 and L-30

## HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level Remote digital headwater and tailwater recorders

Gate Position Recorder Remote digital recorder

## DEWATERING FACILITIES

Storage

Type Steel needle beams and aluminum needles

Size and Number (per bay) Upstream and downstream

Beams 24WF130, with 18" end section, 30' -11" long

Needles 5 @ 4', 1 @ 3', 1 @ 2' wide