

STRUCTURE S-340

This structure is a sheet pile barrier dam on C-123 (the Miami Canal) about 2.7 miles south of Alligator Alley (SR 84). Control is effected by three manually operated slide gates.

PURPOSE

This structure prevents overdrainage of the central portion of Conservation Area 3A by forcing flows from C-123 out into the marsh. It also provides the ability to transfer water to the Everglades National Park, the Metropolitan Miami, and the South Dade County areas.

OPERATING CRITERIA

The structure is closed most of the time, but it is opened fully in accordance with the operations schedule. This schedule is governed primarily by the stage at Gauge 62 (Gauge 3-2 or the Deer Gauge). The operation is also governed by the pumping at S-8, water deliveries to Dade County and the Everglades National Park. The optimum headwater elevation is 9.3.

FLOOD DISCHARGE CHARACTERISTICS

| | |
|-----------------------------------------|-------------------------------|
| | <u>Design</u> |
| Discharge rate | <u>1100</u> cfs |
| (Not related to Standard Project Flood) | |
| Head Differential | <u>0.2</u> feet |
| Type Discharge | <u>Uncontrolled submerged</u> |

DESCRIPTION OF STRUCTURE

| | |
|------------------------------------------|-------------------------------------|
| Type | <u>Steel sheet pile barrier dam</u> |
| Service bridge elevation | <u>24.5</u> feet |
| Water Level which will by-pass structure | <u>13.5</u> feet |
| Gates: | |
| Number | <u>3</u> |
| Type: | <u>Cast iron slide gates</u> |
| Size: | <u>12 feet by 12 feet</u> |
| Sill Elevation: | <u>-4.3</u> feet |
| Control: | <u>manual</u> |

Lifting Mechanism:

Type hoist Hand crank operated gear lift

Normal Power Source: Manual or air wrench

ACCESS: By air-boat via Miami Canal from Alligator Alley

HYDRAULIC & HYDROLOGIC MEASUREMENTS

Water Level: Upstream and downstream water stage recorder

Gate Position Recorder: None

DEWATERING FACILITIES

None