

STRUCTURE 30

This structure is a three-barreled, reinforced concrete pipe culvert, located in Canal 9 at U.S. Highway #27. Control is effected by manually operated sluice gates on a concrete head structure.

PURPOSE

This structure, together with S-32 and S-9XS, controls water stored between L-33 and U.S. Highway #27. Such stage reduces the seepage under Levee 33 from Conservation Area #3B.

OPERATION

The criteria which govern the operation of this structure are a function of either the flood or low water conditions, which are as follows:

Flood Condition

When releases from this structure would aggravate downstream flood conditions, the gates shall be closed. Such aggravated flood conditions are defined by the existence of a tailwater stage above 3.0 feet. In the absence of the above conditions, the gates shall be opened when the design headwater stage of 6.0 is exceeded at S-32 or S-30. Land affected by flood condition operation has been purchased by the District. The District can have more flexibility to maintain headwater stage above 6.0.

Low-water Conditions

When flood conditions do not exist, releases shall be made, as necessary, subject to water availability, to meet downstream water use requirements. Again, need for releases to meet such water requirements is indicated by the existence of below scheduled stages at S-29.

FLOOD DISCHARGE CHARACTERISTICS

Discharge Rate	Design <u>560</u> c.f.s. * <u> </u> % SPF
Headwater Elevation	<u>unknown</u> feet
Tailwater Elevation	<u>unknown</u> feet
Type Discharge	<u>unknown</u>

*Design flow not related to Standard Project Flood

DESCRIPTION OF STRUCTURE

Type reinforced concrete pipe culvert with upstream control

Number of barrels 3

Size of barrels 84 inch

Length of barrels 288 feet

Flow line elevation -5.0 feet

Service bridge elevation 12.5 feet

Water level which will by-pass structure 10 feet

Control Structure Discharge is controlled by gates mounted on a concrete headwall on upstream end of culvert.

Gates

Number 3

Type sluice gate

Size 84 inch X 84 inch square gate

Control manual

Lifting Mechanism Manually operated wheel on screw stem

Date of Transfer: November 23, 1960

ACCESS Structure located on U.S. Highway #27

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level Upstream and downstream Communications & Control System sensors and staff gauges

Gate Position Recorder Remote digital recorder

Rainfall Communications and Control System sensor

DEWATERING FACILITIES

Upstream and downstream stop logs 6" X 6" X 11'-2" long.

When using stop logs, limit water surface elevation to 4.0 feet.