

STRUCTURE OPERATIONS
Southwest Florida Water Management District

Title: **OPERATIONAL GUIDELINES
FOR THE NORTH WINTER HAVEN CHAIN OF LAKES:
P-5, P-6, P-7, and P-8 WATER CONSERVATION STRUCTURES**

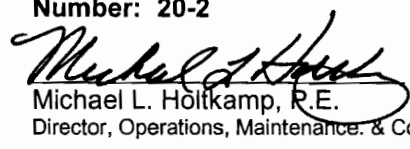
Bureau: **OPERATIONS & LAND MANAGEMENT**

Number: 20-2

Page 1 of 2

Approved By:


Roy A. Mazur, P.E.
Chief, Operations & Land Management Bureau


Michael L. Holtkamp, P.E.
Director, Operations, Maintenance, & Construction Division

Effective Date: January 1, 2013

PURPOSE: To provide guidelines for the operation of the water conservation structures for Lakes Henry (P-5), Smart (P-6), Fannie (P-7) and Hamilton (P-8) in Polk County, Florida. Lakes Haines, Rochelle, and Conine are included in this system, but do not have structures. This document serves as a general guideline for the routine operation of the structures and may be modified, as necessary, to ensure the environmental health, recreational and aesthetic value of the lakes, or in response to specific weather events or conditions.

General Statement of Intent

During non-flooding conditions the structures will be operated to maintain the lakes within their Normal Operating Ranges (see Table 1). The operational goal is to allow each lake to fluctuate between its established Low Level and Target Water Conservation Level without causing flooding or damages to lake front properties. The filling of the lakes to their respective Normal Operating Levels will typically begin in June, with the goal of "topping off" each lake at its Target Water Conservation Level by the end of September to conserve water going into the dry season. Lake levels may increase above the Target Water Conservation Level and possibly reach the High Level for short durations in response to rainfall events; however, these higher levels will not be intentionally sustained.

Low Water Conditions – Water Levels Below Low Level

Low Water Conditions typically occur during the dry season (November through May). At the end of the rainy season (June through September) water levels will naturally decline over the dry season months. During Low Water Conditions the structures will remain closed.

Normal Operating Range – Water Levels Between Low Level and Target Water Conservation Level

The Normal Operating Range will typically occur during the rainy season. The structures will remain closed until each lake reaches its Target Conservation Level. Once each lake has reached its Target Conservation Level, water may be released to maintain this level through mid-September.

In mid-September when the probability of significant rainfall is reduced, the structure at each lake may be operated to allow water levels to rise above its Target Water Conservation Levels in anticipation of the approaching dry season (October through May). Water levels will be allowed to temporarily stage above the Target Water Conservation Level on a lake(s) in response to a rainfall event; however, should a lake reach its High Level, the water control structure for the lake will be operated so as not to exceed the High Level. The High Level is a peaking level and is not to be sustained. If it becomes necessary to create flood storage in one or more of the lakes in anticipation of a high rainfall event,

Title:

**OPERATIONAL GUIDELINES
NORTH WINTER HAVEN CHAIN OF LAKES:
P-5, P-6, P-7, and P-8 WATER CONSERVATION STRUCTURES**

Bureau:

OPERATIONS & LAND MANAGEMENT

Number: 20-2

Page 2 of 2

such as a tropical storm or hurricane, structures will be operated to lower water levels to increase available storage below the High Level in advance of the event. The amount the lakes will be lowered will be based on predicted rainfall amounts by the National Weather Service, engineering judgment, and the discharge capacity of the system. Recommended lake management levels for storage optimization for flood protection are being developed in connection with the Peace Creek Canal Watershed Management Plan (H034). Once the recommendations have been finalized, this Operating Guideline will be updated accordingly.

High Water Conditions - Water Levels Greater than the Target Water Conservation Level

Given the limited capacity of the Peace Creek Canal to pass high flows, during sustained high water conditions lake levels will be lowered to Target Conservation Level Levels through operation of structures, as conditions allow. Structures on the four lakes will be operated to minimize the impact and duration of flooding conditions to the adjacent properties. Once the potential for flooding has subsided, lakes will be "topped off" at their Target Water Conservation Level.

Table 1 – Normal Operating Ranges for the North Winter Haven Chain of Lakes

Operating Level	Elevation (ft, NGVD) ¹			
	Henry P-5	Smart P-6	Fannie P-7	Hamilton P-8
High Level ²	126.50	128.75	125.75	121.50
Target Water Conservation Level ³	126.00	128.50	125.50	121.25
Low Level	124.00	126.50	123.50	119.00

¹NGVD = National Geodetic Vertical Datum of 1929

²Formerly termed "Minimum Flood Level"

³Maximum Desirable Level

Normal Operating Range