#### STRUCTURE OPERATIONS Southwest Florida Water Management District

## Title:OPERATIONAL GUIDELINES FOR THE ROCKY CREEK SYSTEM:LAKE ARMISTEAD AND LAKE PRETTY WATER CONSERVATION STRUCTURES

Bureau: **OPERATIONS & LAND MANAGEMENT** Version: **3** Effective Date: **1/10/2017** 

**PURPOSE:** To provide guidelines for the operation of the water conservation structures for Lake Armistead and Lake Pretty in northwest Hillsborough County, Florida. 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. Guidelines in general are designed to ensure that the Guidance Levels are met according to Florida Administrative Code (Chapter 40D-8 F.A.C.).

#### General Statement of Intent

During non-flooding conditions the Lake Armistead and Lake Pretty structures will be operated within their Normal Operating Ranges (tables 1 and 2). The operational goal is to allow Lake Armistead and Lake Pretty to fluctuate between the Low Level and High level of their respective Normal Operating Range. Structure Operations in general will follow the decision-making matrices (Figure 1 and 2).

### <u>Datum</u>

Elevations are given in National Geodetic Vertical Datum of 1929 (NGVD29) to remain consistent with the elevations provided in Chapter 40D-8 F.A.C. To convert the elevations in this document to North American Vertical Datum of 1988 (NAVD88) subtract 0.80 feet from the Lake Armistead level and 0.82 feet from the Lake Pretty levels.

#### **Operation during the Dry Season**

Low water conditions typically occur during the dry season (November through May). At the beginning of the dry season Lake Armistead and Lake Pretty water levels will be allowed to naturally decline over the dry season months. When unseasonably high rainfall occurs during the dry season, structures may be operated to maintain the Normal Level and allowed to continue to naturally decline.

#### **Operation during the Rainy Season**

The Normal Level for Lake Armistead and Lake Pretty and will typically occur during the rainy season (June through October). The structures will remain closed until each lake reaches its respective Normal Level. The structures will be operated in coordination with each other to maintain their Normal Level through mid-September, allowing excess water to be discharged downstream to Rocky Creek. In advance of a high rainfall event the structures may be operated to lower water levels below the lakes Normal Level to increase available storage.

### **Operation in preparation for the Dry Season**

In mid-September when the probability of significant rainfall is reduced, the water levels in the lakes will be allowed to rise to their High Level or above prior to entering the dry season. Should it become necessary to create storage in the lakes in anticipation of a high rainfall event, the structures may be operated to lower water levels to increase available storage below the High Level in advance of the event. Timing and levels to obtain prior to dry season will vary depending on the long term rain forecast.

#### **Guideline Review Periods**

Three (3) years from the effective date listed above, this guideline will be evaluated to ensure it is achieving the desired results as stated in the Purpose section above. If a change is deemed appropriate, a public meeting will be held to allow residents to provide input for modifying the guidelines.

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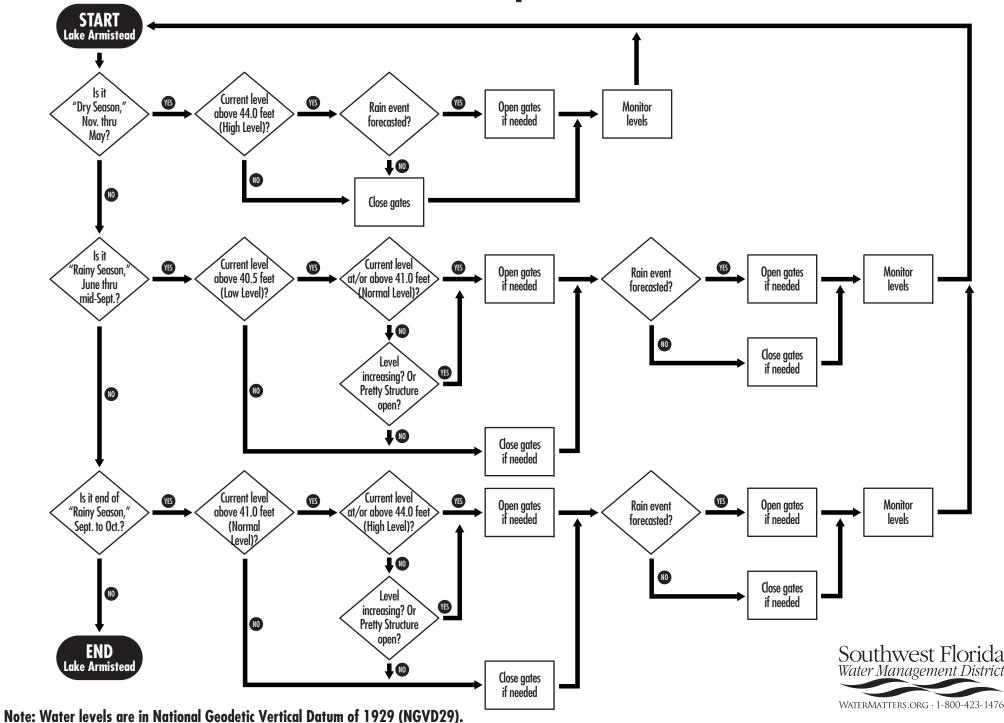
Table 1

Lake Armistead Structure Operations Guidance Levels (NGVD29)			
44.0 ft. (High Level)	Ν	Nov. î	
	0	Oct.	
	R	Sept.	
	Μ	Aug.	
	А	Jul.	
41.00 ft. (Normal Level)	L	Jun. 🛛	
		Dec.	
	R	Jan.	
	А	Feb.	
	Ν	Mar.	
	G	Apr.	
40.50 ft. (Low Level)	Е	May 🔱	

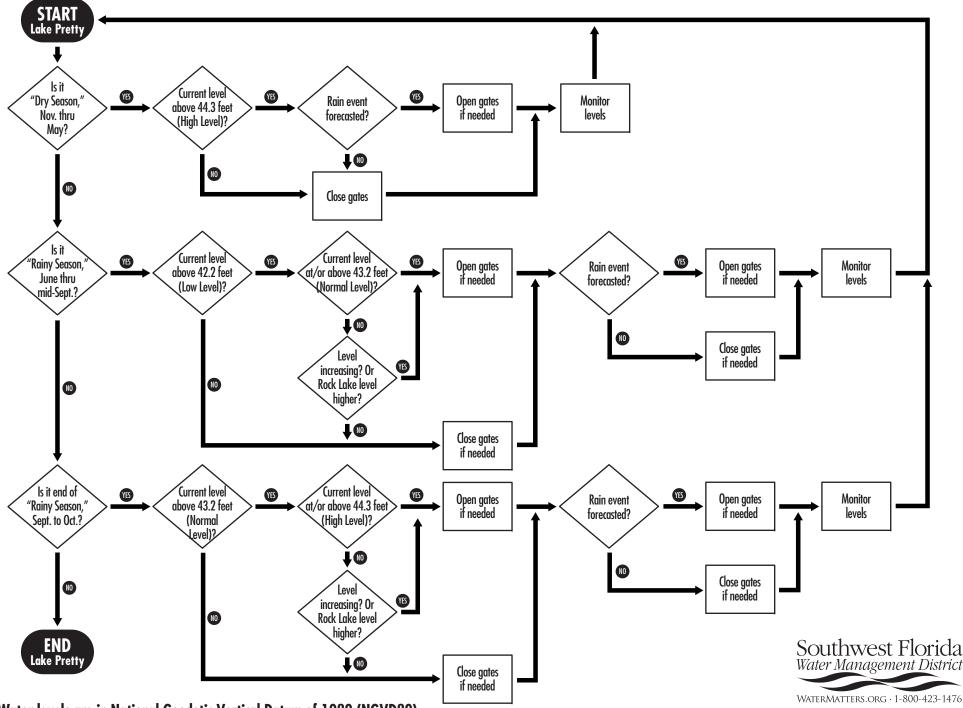
#### Table 2

Lake Pretty Structure Operations Guidance Levels (NGVD29)			
44.3 ft. (High Level)	Ν	Nov. î	
	0	Oct.	
	R	Sept.	
	Μ	Aug.	
	А	Jul.	
43.2 ft. (Normal Level)	L	Jun. 🛛	
		Dec. 🛛	
	R	Jan.	
	А	Feb.	
	Ν	Mar.	
	G	Apr.	
42.2 ft. (Low Level)	E	May 🔱	

# **Lake Armistead Structure Operations Decision Matrix**



# **Lake Pretty Structure Operations Decision Matrix**



Note: Water levels are in National Geodetic Vertical Datum of 1929 (NGVD29).