

**RULES OF THE  
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT  
CHAPTER 40D-8  
WATER LEVELS AND RATES OF FLOW**

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**40D-8.011 Policy and Purpose.**

(1) The purpose of Chapter 40D-8, F.A.C., is to establish Minimum Flows and Levels at specific locations throughout the District pursuant to Sections 373.042 and 373.0421, F.S., to describe Guidance Levels for lakes, and to describe how the Minimum Flows and Levels will be used by the District. Minimum Flows and Levels are intended to prevent significant harm to the water resources or ecology of the area as provided in Section 373.042, F.S. In those areas where the Long-term flow or water level is below the Minimum Flow or Level the District will implement a recovery strategy which will be contained within the District's Water Management Plan and, if required by law, portions or all shall be adopted by rule.

(2) Where appropriate, Minimum Flows and Levels may reflect seasonal variations and may include a schedule of variations and other measures appropriate for the protection of non-consumptive uses and the water resources.

(3) A further purpose of Chapter 40D-8, F.A.C., is to establish Guidance Levels for surface waters which are anticipated to occur on a somewhat regular basis, and which shall serve as a precautionary warning to all persons who would propose to construct facilities which may be damaged by periodic high or low water levels.

(4) Minimum Flows and Levels prescribed in Chapter 40D-8, F.A.C., are used in water resource planning as one of the criteria in evaluating applications for water use permits under Chapter 40D-2, F.A.C., and in the design, construction and management of surface water management systems as specified in Rule 40D-8.031(3), F.A.C. The existence of a Minimum Flow or Level for a water body, where that water body is proposed to be impacted by an activity that requires a permit under Chapter 40D-2, F.A.C., Consumptive Use Permitting, or Chapter 40D-4, F.A.C., Environmental Resource Permits, does not override the applicability of all other permitting criteria nor alter the manner in which the District evaluates compliance with permitting criteria, except to the extent that the MFL criteria is supplemental to all other criteria.

(5) The Minimum Flows and Levels established in this Chapter 40D-8, F.A.C., are based on the best information available at the time the Flow or Level was established. The best available information in any particular case will vary in type, scope, duration, quantity and quality and may be less than optimally desired. In addition, in many instances the establishment of a Minimum Flow or Level requires development of methodologies that previously did not exist and so are applied for the first time in establishing the Minimum Flow or Level. The District has many ongoing environmental monitoring and data collection and analysis programs, and will develop additional programs over time. The District intends to coordinate with local governments, Tampa Bay Water, government-owned and privately-owned utilities, environmental regulation agencies, Tampa Bay Estuary Program, public interest groups and other affected and interested parties to design, create, and implement the program. Together with all the parties' designated experts, a long-term independent scientific peer review shall be included in the programs. These programs will supplement the District's available information upon which Minimum Flows and Levels can be established and reviewed. These programs collectively provide information to assist in 1) characterizing water regimes in wetland systems, and the relationships between and among surficial features, the surficial aquifer, and the Floridan aquifer; and 2) evaluating the measures available to prevent significant harm to the water resources and ecology, in addition to withdrawal management, and the effectiveness of those measures.

Therefore, to apprise the Governing Board of advancements made under those programs, the District shall annually update the Governing Board regarding:

- (a) The status of the water levels for those water bodies for which Minimum Flows or Levels have been established; and
- (b) Any additional information or methodologies, as appropriate, that could be applied to:
  1. Assess established Minimum Flows or Levels; or,
  2. Establish Minimum Flows or Levels for additional water bodies; or
  3. Determine compliance with Minimum Flows or Levels.

Specific Authority 373.044, 373.113, 373.171, FS. Laws Implemented, 373.042, 373.0421, 373.216, 373.219, 373.223, 373.413, 373.414, 373.416, FS. History – New 6-7-78, Amended 1-22-79, Formerly 16J-8.01, Amended 8-7-00.

#### **40D-8.021 Definitions.**

The terms set forth herein shall have the meanings ascribed to them unless the context clearly indicates otherwise, and such meanings shall apply throughout these rules. The terms defined in Rule 40D-1.102, F.A.C., shall also apply throughout Chapter 40D-8, F.A.C., and the terms defined in this 40D-8.021, F.A.C., apply throughout the District rules except that where there is a conflict or a difference between 40D-1.102, F.A.C., and this 40D-8.021, F.A.C., the definition in this Chapter 40D-8, F.A.C., will control.

- (1) “Control Point Elevation” means the elevation of the highest stable point along the outlet profile of a surface water conveyance system that principally controls lake water level fluctuations.
- (2) “Current” means a recent Long-term period during which Structural Alterations and hydrologic stresses are stable.
- (3) “Guidance Levels” means Levels, determined by the District using the best available information and expressed in feet relative to National Geodetic Vertical Datum (of 1929), or in feet relative to the North American Vertical Datum (of 1988), used as advisory information for the District, lake shore residents and local governments, or to aid in the management or control of adjustable structures. For lakes with levels adopted during or after August 7, 2000, Guidance Levels include: High Guidance Level, and Low Guidance Level as explained in Rule 40D-8.624, F.A.C. For lakes with levels adopted before August 7, 2000, Guidance Levels are the High Level, the Low Level, and, if adopted for the lake, the Extreme Low Level.
- (4) “Historic” means a Long-term period when there are no measurable impacts due to withdrawals and Structural Alterations are similar to current conditions.
- (5) “Hydrologic Indicators” means those biological and physical features, which are representative of previous water levels as listed in Section 373.4211(20), F.S.
- (6) “Long-term” means an evaluation period utilized to establish Minimum Flows and Levels, to determine compliance with established Minimum Levels and to assess withdrawal impacts on established Minimum Flows and Levels that represents a period which spans the range of hydrologic conditions which can be expected to occur based upon historical records, ranging from high water levels to low water levels. In the context of a predictive model simulation, a Long-term simulation will be insensitive to temporal fluctuations in withdrawal rates and hydrologic conditions, so as to simulate steady-state average conditions. In the context of an average water level, the average will be based upon the historic expected range and frequency of levels. Relative to Minimum Flow establishment and Minimum Level establishment and compliance, where there are six years or more of competent data, a minimum of a six year evaluation period will be used, but the available data and reasonable scientific judgment will dictate whether a longer period is used. Where there are less than six years of competent data, the period used will be dictated by the available data and a determination, based on reasonable scientific judgment, that the period is sufficiently representative of Long-term conditions.
- (7) “Minimum Flow” means the flow for a surface watercourse at which further withdrawals would be significantly harmful to the water resources or ecology of the area and which may provide for the protection of non-consumptive uses (e.g., recreational, aesthetic, and navigation).
- (8) “Minimum Lake Level” means the Long-term level of surface water, water table, or potentiometric surface at which further withdrawals would be significantly harmful to the water resources of the area and which may provide for the protection of non-consumptive uses (e.g., recreational, aesthetic, and navigation). Such level shall be expressed as an elevation, in feet relative to National Geodetic Vertical Datum (1929) or in feet relative to the North American Vertical Datum (1988) and includes Minimum Wetland Levels, High Minimum Lake Levels, Minimum Lake Levels, and Salt Water Intrusion Minimum Aquifer Levels.

(9) "Management Range" means, for those lakes with levels adopted during or after August 7, 2000, the difference between the applicable Low Guidance Level and High Guidance Level which are explained in Rule 40D-8.624, F.A.C. For lakes with levels adopted prior to August 7, 2000, Management Range means the difference between the High Level and Low Level, or Extreme Low Level, if adopted for the lake.

(10) "P10" means the percentile ranking represented by the elevation of the water surface of a lake or wetland that is equaled or exceeded 10 percent of the time as determined from a Long-term stage frequency analysis.

(11) "P50" means the percentile ranking represented by the elevation of the water surface of a lake or wetland that is equaled or exceeded 50 percent of the time as determined from a Long-term stage frequency analysis.

(12) "P90" means the percentile ranking represented by the elevation of the water surface of a lake or wetland that is equaled or exceeded 90 percent of the time as determined from a Long-term stage frequency analysis.

(13) "Reference Lake Water Regime 50" (RLWR 50) means the median value of the difference between the P10 and P50 lake stages for all lakes with Historic data with similar hydrogeologic condition as the lake of concern.

(14) "Reference Lake Water Regime 5090" (RLWR 5090) means the median value of the difference between the P50 and P90 lake stages for all lakes with Historic data with similar hydrogeologic conditions as the lake of concern.

(15) "Reference Lake Water Regime 90" (RLWR 90) means the median value of the difference between P10 and P90 lake stages for all lakes with Historic data with similar hydrogeologic conditions as the lake of concern.

(16) "Structural Alteration" means man's physical alteration of the control point of a lake or wetland that affects water levels.

(17) "Structurally Altered" means a lake or wetland where the control point has been physically altered by man such that water levels are affected.

Specific Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.036, 373.0361, 373.042, 373.0421, 373.086, 373.216, 373.219, 373.223, 373.229, 373.413, 373.414, 373.416, FS. History – New 6-7-78, Amended 1-22-79, Formerly 16J-8.02, Amended 8-7-00, 1-8-04, 2-18-08.

#### **40D-8.031 Implementation.**

(1) No Guidance Levels shall be prescribed for any reservoir or other artificial structure which is located entirely within lands owned, leased, or otherwise controlled by the user, and which require water only for filling, replenishing, and maintaining of the water level thereof, provided however:

(a) That Chapter 40D-2, F.A.C., shall apply to the use of water for such filling, replenishing, and maintaining of the water level and

(b) That the High Guidance Level, determined pursuant to the procedures set forth in Rule 40D-8.624, F.A.C., may be established for any lake determined by the Board to be in the public interest.

(2) No Guidance Levels shall be prescribed for Lake Manatee in Manatee County, Evers Reservoir in Manatee County, the City of Tampa Reservoir on the Hillsborough River in Hillsborough County, and the Peace River/Manasota Regional Water Supply Authority Reservoir in DeSoto County.

(3) New water use or surface water management activity shall not cause an existing water level or flow to be reduced or suppressed below an established Minimum Flow or Level. The manner in which the Minimum Flows and Levels established in this Chapter 40D-8, F.A.C., are implemented in the District's Consumptive Use and Environmental Resource Permitting Programs is described in Rule 40D-2.301, F.A.C., and Section 4.3 of the Basis of Review described in Rule 40D-2.091, F.A.C., and Sections 3.2.2.4, 4.6.1 and 4.6.2 of the Basis of Review described in Rule 40D-4.091, F.A.C.

(4) Where the actual flow or level of a water body is below the Minimum Flow or Level, pursuant to Section 373.0421(2), F.S., the District shall expeditiously implement a recovery strategy with the intent to achieve recovery to the established Minimum Flow and Level as soon as practicable. Where required by law, the portion of the recovery strategy containing criteria that must be met by permittees and applicants under Chapters 40D-2 and 40D-4, F.A.C., shall be adopted by rule. The entire recovery strategy shall be contained in the District's applicable Regional Water Supply Plan for the area, and the District's Water Management Plan.

(5) Establishment of a Minimum Flow or Level shall not be deemed to supercede or replace any other permitting criteria unless specifically provided for by such permitting criteria nor to be a determination by the Governing Board that any quantity above the established Minimum Flow or Level is available for allocation to consumptive uses. For example, the District may by regulation or order reserve such quantities as it deems necessary pursuant to Section 373.223(3), F.S.

Specific Authority 373.044, 373.113, 373.171, FS. Law Implemented 373.042, 373.0421, 373.216, 373.219, 373.223, 373.413, 373.414, 373.416, FS. History – New 6-7-78, Amended 10-16-78, 1-22-79, Formerly 16J-8.03, Amended 3-23-81, 8-7-00, 2-18-08.

**40D-8.041 Minimum Flows.**

(1) Minimum Flows for the Lower Hillsborough River.

(a) For the purposes of Minimum Flows, the Lower Hillsborough River is defined as the River downstream of Fletcher Avenue. A tributary of the Lower Hillsborough River is Sulphur Springs, an artesian spring which enters the River via a short spring run at a point 2.2 miles downstream of the City's dam.

(b) The Minimum Flows for the Lower Hillsborough River are based on extending a salinity range less than 5 ppt from the Hillsborough River Dam toward Sulphur Springs. The Minimum Flows for the Lower Hillsborough River are 20 cubic feet per second (cfs) freshwater equivalent from July 1 through March 31 and 24 cfs fresh water equivalent from April 1 through June 30 at the base of the dam as adjusted based on a proportionate amount that flow at the United States Geological Survey Gauge No. 0203000 near Zephyrhills, Florida (Gauge) is below 58 cfs. The adjustment is that for each one cfs that Hillsborough River flow at the Gauge is below 58 cfs, when 20 cfs freshwater equivalent is otherwise required, the Minimum Flow is adjusted by reducing it by 0.35 cfs; when 24 cfs freshwater equivalent is otherwise required, the Minimum Flow is adjusted by reducing it by 0.40 cfs. For purposes of this paragraph 40D-8.041(1)(b), F.A.C., freshwater equivalent means water that has a salinity concentration of 0.0 ppt for modeling purposes.

(2) Minimum Flows for the upper Hillsborough River.

(a) The Minimum Flows are to ensure that the minimum hydrologic requirements of the water resources or ecology of the natural systems associated with the river are met.

(b) Minimum Flows for the upper Hillsborough River at the USGS Hillsborough River near Morris Bridge Gage USGS # 02303330 (Morris Bridge Gage) are set forth in Table 8-12 below. The long-term compliance standards set forth in Table 8-13 are established based on the application of the Minimum Flows to the lowest anticipated natural flow conditions. Minimum Flows for the upper Hillsborough River are both seasonal and flow dependent. Two standards are flow based and applied continuously regardless of season. The first is a Minimum Low Flow threshold of 52 cfs at the Morris Bridge Gage. The second is a Minimum High Flow threshold of 470 cfs at the Morris Bridge Gage. The Minimum High Flow is based on changes in the number of days of inundation of floodplain features. There are also three seasonally dependent or Block specific Minimum Flows. The Block 1 and Block 2 Minimum Flows are based on potential changes in habitat availability for fish species and macroinvertebrate diversity. The Block 3 Minimum Flow is based on changes in the number of days of connection with floodplain features.

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**Table 8-12 Minimum Flow for Upper Hillsborough River at USGS Hillsborough River near Morris Bridge Gage**

Period	Effective Dates	Where Flow on Previous Day Equals:	Minimum Flow Is
Annually	January 1 to December 31	≤52 cfs	52 cfs
		>52cfs and <470 cfs	Seasonally dependent – see Blocks below
		≥470 cfs	Previous day flow minus 8%
Block 1	April 20 to June 24	≤52	52 cfs
		>52cfs and <470 cfs	previous day flow minus 10%
		≥470 cfs	Previous day flow minus 8%
Block 2	October 28 to April 19	≤52	52 cfs
		>52cfs and <470 cfs	previous day flow minus 11%
		≥470 cfs	previous day flow minus 8%
Block 3	June 25 to October 27	≤52 cfs	52 cfs
		>52 cfs and <470cfs	previous day flow minus 13%
		≥470 cfs	previous day flow minus 8%

(c) Compliance - The Minimum Flows are met when the flows in Table 8-13 are achieved.

**Table 8-13 Compliance Standards for the Hillsborough River near Morris Bridge Gage**

Minimum Flow	Hydrologic Statistic	Flow (cfs)
Annual Flow	10-Year Mean	190
	10-Year Median	96
	5-Year Mean	149
	5-Year Median	74
Block 1	10-Year Mean	74
	10-Year Median	62
	5-Year Mean	57
	5-Year Median	52
Block 2	10-Year Mean	153
	10-Year Median	89
	5-Year Mean	105
	5-Year Median	72
Block 3	10-Year Mean	287
	10-Year Median	150
	5-Year Mean	235
	5-Year Median	107

(3) Minimum Flow for Sulphur Springs - The Minimum Flow for Sulphur Springs is based on minimization of salinity incursions into the Upper Sulphur Springs Run (Upper Run) from the Lower Hillsborough River (LHR) and to moderate temperature levels within the manatee protection zone of the LHR.

(a) As of October 1, 2012, the City of Tampa shall maintain a Minimum Flow for Sulphur Springs of:

1. 18 cfs, as measured at the United States Geological Survey Sulphur Springs Gauge No. 02306000 at Sulphur Springs, Florida, or;
2. 13 cfs when water levels in the Hillsborough River reservoir fall below 19 feet NGVD; and
3. 10 cfs during low tide stages in the LHR, provided that salinity incursions from the LHR into the upper spring run do not occur. Salinity incursions shall be defined as when salinity values in the upper spring run as measured at the United States Geological Survey Gauge Sulphur Springs Run at Sulphur Springs, Florida (#023060003) are greater than 1 ppt than the concurrent salinity value in the spring pool as measured at the United States Geological Survey Gauge Sulphur Springs Run at Sulphur Springs, Florida (#023060000) for a period of greater than 1 hour.

(b) Notwithstanding paragraph 40D-8.041(2)(a), F.A.C., above, and beginning the effective date of this rule, when spring flow is available, a Minimum Flow of 18 cfs shall be required if the temperature of either surface or bottom waters in the LHR near the Spring Run's outlet is below 15° C.

(c) The City of Tampa may propose to the District modifications to the weirs and gates located within the upper and lower spring run that affect the flow rates and salinity levels in the Upper Run and the LHR. The District shall evaluate the modifications to determine whether the flow resulting from the operating capabilities of the modifications and modeling simulations of the resulting salinity incursions into the Upper Spring Run achieve the salinity goal of the Minimum Flow for Sulphur Springs. If the District determines that flows different from the Minimum Flows (Different Flows) will achieve the salinity goal and otherwise protect the resources of the Upper Spring Run, the District, upon request by the City, will recommend to the Governing Board revision of the Minimum Flow to reflect the Different Flow.

(4) The Minimum Flow for the Tampa Bypass Canal at structure 160 shall be 0 cfs.

(5) Minimum Flows for Middle Peace River.

(a) The Minimum Flows are to ensure that the minimum hydrologic requirements of the water resources or ecology of the natural systems associated with the river are met.

(b) Minimum Flows for the Middle Peace River at the USGS Peace River Arcadia Gage (Arcadia Gage) are set forth in Table 8-6 below. The long-term compliance standards set forth in Table 8-7 are established based on the application of the Minimum Flows to the lowest anticipated natural flow conditions. Minimum Flows for the Middle Peace River are both seasonal and flow-dependent. Two standards are flow-based and applied continuously regardless of season. The first is a Minimum Low Flow threshold of 67 cfs at the Arcadia Gage. The second is a Minimum High Flow threshold of 1,362 cfs at the Arcadia Gage. The Minimum High Flow is based on changes in the number of days of inundation of floodplain features. There are also three seasonally dependent or Block-specific Minimum Flows. The Block 1 and Block 2 Minimum Flows are based on potential changes in habitat availability for fish species and macroinvertebrate diversity. The Block 3 Minimum Flow is based on changes in the number of days of connection with floodplain features.

<b>Table 8-6 Minimum Flow for Middle Peace River at USGS Peace River at Arcadia Gage</b>			
<b>Period</b>	<b>Effective Dates</b>	<b>Where Flow on Previous Day Equals:</b>	<b>Minimum Flow Is:</b>
Annually	January 1 to December 31	≤67 cfs	67 cfs
		>67cfs and <1,362 cfs	Seasonally dependent – see Blocks below
		>1,362 cfs	Previous day flow minus 8%
Block 1	April 20 to June 25	≤67 cfs	67 cfs
		>67 cfs and <75cfs	67 cfs
		>75 cfs and <1,362 cfs	previous day flow minus 10%
		>1,362 cfs	previous day flow minus 8%
Block 2	October 27 to April 19	≤67 cfs	67 cfs

Period	Effective Dates	Where Flow on Previous Day Equals:	Minimum Flow Is:
		>67 cfs and <82 cfs	67 cfs
		>82 cfs and <1,362 cfs	previous day flow minus 18%
		>1,362 cfs	previous day flow minus 8%
Block 3	June 26 to October 26	≤67 cfs	67 cfs
		>67 cfs and <73 cfs	67 cfs
		>73 cfs and <1,362 cfs	previous day flow minus 13%
		>1,362 cfs	previous day flow minus 8%

(c) Compliance - The Minimum Flows are met when the flows in Table 8-7 are achieved.

Minimum Flow	Hydrologic Statistic	Flow (cfs)
Annual Flow (January 1 through December 31)	10-Year Mean	547
	10-Year Median	243
	5-Year Mean	534
	5-Year Median	196
Block 1 (April 20 through June 25)	10-Year Mean	219
	10-Year Median	121
	5-Year Mean	160
	5-Year Median	64
Block 2 (October 27 through April 19)	10-Year Mean	359
	10-Year Median	182
	5-Year Mean	300
	5-Year Median	122
Block 3 (June 26 through October 26)	10-Year Mean	977
	10-Year Median	631
	5-Year Mean	790
	5-Year Median	382

(6) Minimum Flows for Myakka River.

(a) The Minimum Flows are to ensure that the minimum hydrologic requirements of the water resources or ecology of the natural systems associated with the river are met.

(b) Minimum Flows for the Myakka River at the USGS Myakka River near Sarasota Gage USGS # 02298830 (Sarasota Gage) are set forth in Table 8-10 below. The long-term compliance standards set forth in Table 8-B are established based on the application of the Minimum Flows to the lowest anticipated natural flow conditions. Minimum Flows for the Myakka River are both seasonal and flow dependent. Two standards are flow-based and applied continuously regardless of season. The first is a Minimum Low Flow threshold of 0 cfs at the Sarasota Gage. The second is a Minimum High Flow threshold of 577 cfs at the Sarasota Gage. The Minimum High Flow is based on changes in the number of days of inundation of floodplain features. There are also three seasonally dependent or Block specific Minimum Flows. The Block 1 and Block 2 Minimum Flows are based on potential changes in habitat availability for fish species and macroinvertebrate diversity. The Block 3 Minimum Flow is based on changes in the number of days of connection with floodplain features.

<b>Period</b>	<b>Effective Dates</b>	<b>Where Flow on Previous Day Equals:</b>	<b>Minimum Flow Is</b>
Annually	January 1 to December 31	0 cfs	0 cfs
		>0 cfs	Seasonally dependent – see Blocks below
Block 1	April 20 to June 25	0 cfs	0 cfs
		>0 cfs	previous day flow minus 15%
Block 2	October 27 to April 19	0 cfs	0 cfs
		>0 cfs	previous day flow minus 5%
Block 3	June 26 to October 26	0 cfs	0 cfs
		>0 cfs and <577 cfs	previous day flow minus 16%
		>577 cfs	previous day flow minus 7%

(c) Compliance - The Minimum Flows are met when the flows in Table 8-11 are achieved.

<b>Minimum Flow</b>	<b>Hydrologic Statistic</b>	<b>Flow (cfs)</b>
Annual Flow	10-Year Mean	172
	10-Year Median	12
	5-Year Mean	149
	5-Year Median	5
Block 1	10-Year Mean	23
	10-Year Median	0
	5-Year Mean	4
	5-Year Median	0
Block 2	10-Year Mean	28
	10-Year Median	4
	5-Year Mean	15
	5-Year Median	3
Block 3	10-Year Mean	324
	10-Year Median	181
	5-Year Mean	241
	5-Year Median	133

(7) Minimum Flows for upper Peace River.

(a) Over the last several decades there has been a significant decline in flow in the Upper Peace River, especially during the dry season. One of the major contributing factors is the elimination of baseflow as a result of ground water withdrawals that have lowered the potentiometric surface of the upper Floridan aquifer. In addition,



surface-water drainage alterations, reduction in surface storage, long-term cyclical declines in rainfall and karst openings in the riverbed have played significant roles in reducing flow in the upper Peace River.

(b) The minimum flows are to ensure that the minimum hydrologic requirements of fish and natural systems associated with the river are met and not jeopardized by withdrawals. At this time only Minimum Low Flows are being established. It is anticipated that mid- and high-minimum flows will be established once the controlling factors that affect those flows are better understood.

(c) The Minimum Low Flows for the upper Peace River are set forth in Table 8-8 below. The Minimum Low Flows are established based on the lowest acceptable flow under the lowest anticipated flow conditions. This is determined by providing for the hydrologic requirements of biological communities associated with the upper Peace River system, as well as considering non-consumptive uses including fishing, wildlife observation, general recreation, aesthetic enjoyment, canoeing and boating. This determination uses professional experience and judgment to identify key habitats and hydrologic requirements for specific biotic assemblages. This approach results in establishing Minimum Low Flows for the upper Peace River based on maintaining the higher of the water elevations needed for fish passage (0.6 feet or 7.2 inches) or the lowest wetted perimeter inflection point (as much stream bed coverage as possible for the least amount of flow) as set forth below. A ninety-five percent annual exceedance occurs when the flow is greater than the Minimum Low Flow at least ninety-five percent of the days, or 350 days, of a calendar year.

<b>Location/Gage</b>	<b>Minimum Flow (cubic feet per second)</b>
Bartow / USGS Bartow River Gage No. 02294650	Annual 95% exceedance flow of 17 cfs
Ft. Meade / USGS Ft. Meade River Gage No. 02294898	Annual 95% exceedance flow of 27 cfs
Zolfo Springs / USGS Zolfo Springs River Gage No. 02295637	Annual 95% exceedance flow of 45 cfs

(d) Compliance - The Minimum Low Flow is achieved when the measured flow rate is at or above the Minimum Low Flow for three consecutive years. Once the Minimum Low Flow has been achieved for three consecutive years, the Minimum Low Flow is not met when the measured flow rate is below the Minimum Low Flow for two out of ten years commencing the year after achievement. If the two years below the minimum flow occur anytime before the ten year period is complete, the upper Peace River is deemed below its Minimum Low Flow and the three consecutive years above the Minimum Low Flow is again required for compliance. Once the ten-year period is complete, the period will roll forward one year each year.

(8) Minimum Flows for the Braden River.

(a) The Minimum Flows are to ensure that the minimum hydrologic requirements of the water resources or ecology of the natural systems associated with the river are met.

(b) Minimum Flows for the Braden River at the USGS Braden River near Lorraine Gage USGS # 02300032 (near Lorraine Gage) are set forth in Table 8-14 below. The long-term compliance standards set forth in Table 8-15 are established based on the application of the Minimum Flows to the lowest anticipated natural flow conditions. Minimum Flows for the Braden River are both seasonal and flow dependent. Two standards are flow based and applied continuously regardless of season. The first is a Minimum Low Flow threshold of 7 cfs at the near Lorraine Gage. The second is a Minimum High Flow threshold of 54 cfs at the near Lorraine Gage. The Minimum High Flow is based on changes in the number of days of inundation of floodplain features. There are also three seasonally dependent or Block specific Minimum Flows. The Block 1 and Block 2 Minimum Flows are based on potential changes in habitat availability for fish species and macroinvertebrate diversity. The Block 3 Minimum Flow is based on changes in the number of days of connection with floodplain features.

<b>Period</b>	<b>Effective Dates</b>	<b>Where Flow on Previous Day Equals:</b>	<b>Minimum Flow Is</b>
Annually	January 1 to December 31	≤7 cfs	7 cfs
		>7cfs and <54 cfs	Seasonally dependent – see Blocks

<b>Period</b>	<b>Effective Dates</b>	<b>Where Flow on Previous Day Equals:</b>	<b>Minimum Flow Is</b>
			below
		≥54 cfs	Previous day flow minus 10%
Block 1	May 7 to June 19	≤7	7 cfs
		>7 cfs	previous day flow minus 10%
Block 2	October 25 to May 6	≤7	7 cfs
		>7 cfs and <54 cfs	previous day flow minus 11%
		≥54 cfs	previous day flow minus 10%
Block 3	June 20 to October 24	≤7 cfs	7 cfs
		>7 cfs and <54 cfs	previous day flow minus 19%
		≥54 cfs	previous day flow minus 10%

(c) Compliance - The Minimum Flows are met when the flows in Table 8-15 are achieved.

<b>Minimum Flow</b>	<b>Hydrologic Statistic</b>	<b>Flow (cfs)</b>
Annual Flow	10-Year Mean	31
	10-Year Median	3
	5-Year Mean	26
	5-Year Median	2
Block 1	10-Year Mean	5
	10-Year Median	1
	5-Year Mean	2
	5-Year Median	0
Block 2	10-Year Mean	20
	10-Year Median	3
	5-Year Mean	10
	5-Year Median	1
Block 3	10-Year Mean	65
	10-Year Median	23
	5-Year Mean	43
	5-Year Median	7

(9) Minimum Flows for Crystal Springs Located Within the Hillsborough River Basin, Hillsborough County, Florida

(a) The Minimum Flows are to ensure that the minimum hydrologic requirements of the water resources or ecology of the natural systems associated with the upper Hillsborough River are met.

(b) The Minimum Flow for Crystal Springs is stated as the flow measured by USGS physical measurements. Flows from Crystal Springs are calculated as the difference between upstream flow measurements at USGS Gage No. 02301990 – Hillsborough River Above Crystal Springs near Zephyrhills, FL and downstream flow measurements at USGS Gage No. 02302010 – Hillsborough River Below Crystal Springs near Zephyrhills, FL

measurements and constitute the combined flow of the main spring vent and numerous smaller vents in the river channel. The minimum flow for the Crystal Springs complex is 46 cfs based on a 5-year running mean and median.

(10) Minimum Flows for Alafia River-Freshwater Segment.

(a) The Minimum Flows are to ensure that the minimum hydrologic requirements of the water resources or ecology of the natural systems associated with the river are met.

(b) Minimum Flows for the Alafia River at the USGS Alafia River at Lithia Gage USGS # 02301500 (Lithia Gage) are set forth in Table 8-16 below. The long-term compliance standards set forth in Table 8-17 are established based on the application of the Minimum Flows to the lowest anticipated natural flow conditions. Minimum Flows for the Alafia River are both seasonal and flow dependent. Two standards are flow-based and applied continuously regardless of season. The first is a Minimum Low Flow threshold of 59 cfs at the Lithia Gage. The second is a Minimum High Flow threshold of 375 cfs at the Lithia Gage. The Minimum High Flow is based on changes in the number of days of inundation of floodplain features. There are also three seasonally dependent or Block specific Minimum Flows. The Block 1 and Block 2 Minimum Flows are based on potential changes in habitat availability for fish species and macroinvertebrate diversity. The Block 3 Minimum Flow is based on changes in the number of days of connection with floodplain features.

<b>Table 8-16 Minimum Flow for Alafia River at USGS Alafia River at Lithia Gage</b>			
<b>Period</b>	<b>Effective Dates</b>	<b>Where Flow on Previous Day Equals:</b>	<b>Minimum Flow Is</b>
Annually	January 1 to December 31	≤59 cfs >59 cfs and <374 cfs >374 cfs	59 cfs Seasonally dependent – see Blocks below Previous day flow minus 8%
Block 1	April 20 to June 25	≤57 cfs >57 cfs and <66 cfs >66 cfs and <374 cfs >374 cfs	59 cfs 67 cfs previous day flow minus 10% previous day flow minus 8%
Block 2	October 27 to April 19	≤59 cfs >59 cfs and <69 cfs >69 cfs and <374 cfs >374 cfs	59 cfs 67 cfs previous day flow minus 15% previous day flow minus 8%
Block 3	June 26 to October 26	≤59 cfs >59 cfs and <64 cfs >64 cfs and <374 cfs >374 cfs	59 cfs 67 cfs previous day flow minus 13% previous day flow minus 8%

(c) Compliance - The Minimum Flows are met when the flows in Table 8-17 are achieved.

<b>Table 8-17 Compliance Standards for Alafia River at Lithia Gage</b>		
<b>Minimum Flow</b>	<b>Hydrologic Statistic</b>	<b>Flow (cfs)</b>
Annual Flow	10-Year Mean	192
	10-Year Median	101
	5-Year Mean	163
	5-Year Median	86
Block 1	10-Year Mean	85
	10-Year Median	35
	5-Year Mean	53
	5-Year Median	27
Block 2	10-Year Mean	137
	10-Year Median	82

<b>Minimum Flow</b>	<b>Hydrologic Statistic</b>	<b>Flow (cfs)</b>
	5-Year Mean	110
	5-Year Median	66
Block 3	10-Year Mean	318
	10-Year Median	179
	5-Year Mean	276
	5-Year Median	163

(11) Minimum Flow for Lower Alafia River System.

(a) For purposes of this rule, the Lower Alafia River System includes the watercourse downstream of the USGS Gage No. 02301500 Alafia River at Lithia, FL (the Alafia River at Lithia Gage) including Lithia Springs, Buckhorn Spring, and their associated spring runs.

(b) The Minimum Flow is to ensure that the minimum hydrologic requirements of the water resources or ecology of the natural systems associated with the Lower Alafia River System are met. Daily flows to the Lower Alafia River System are calculated by multiplying mean daily flow values at the Alafia River at Lithia Gage by a factor of 1.117, then adding the mean daily flows from Lithia Spring Major and Buckhorn Spring. Flows are calculated in the absence of withdrawals and are based on mean flows at the Alafia River at Lithia Gage from the previous day and the most recently recorded periodic values from Lithia Spring Major and Buckhorn Spring. The Minimum Flow for the Lower Alafia River System is intended to preserve 81% of the natural flow to the Lower Alafia River System when flows exceed a low-flow threshold of 120 cfs.

(c) The Minimum Flow is 81% of the daily flow to the Lower Alafia River System that is above 120 cfs.

(d) Minimum five-year and ten-year moving average values are set forth in Table 8-19 as a tool to assess whether flows to the Lower Alafia River remain above flow rates that are expected to occur with implementation of the Minimum Flow. These values represent minimum values of the averages of yearly mean and median flows to the Lower Alafia River System calculated over moving five-year and ten-year periods. These values were calculated by applying the potential maximum withdrawals that do not violate the Minimum Flow to historic flow records. It is, therefore, expected that flows to the Lower Alafia River System will not go below these values if compliance with the Minimum Flow is maintained. However, future climatic conditions or structural alterations in the watershed of the Lower Alafia River System could potentially affect surface water or ground contributions to the Lower Alafia River System’s flow regime. The District will, therefore, periodically evaluate whether these minimum moving average values expected with application of the Minimum Flow, or other factors, have possibly caused flows in the Lower Alafia River System to decline.

<b>Value</b>	<b>Flow (cfs)</b>
Minimum 10-Year Moving Average (Based On Yearly Mean Flows)	247
Minimum 10-Year Moving Average Median (Based On Yearly Median Flows)	150
Minimum 5-Yearly Mean Flows (Based on Yearly Mean Flows)	217
Minimum 5 Year Moving Average (Based On Yearly Median Flows)	120

Flows to the Lower Alafia River System were estimated for the period of record at the Alafia River at Lithia Gage. The period from 1987 to 2003 was used to create a relationship between daily flows at the Gage and total flows to the Lower Alafia River System. Five-year and ten-year moving average statistics were then calculated for estimated long-term flows to the Lower Alafia River System that were derived from the Alafia River at Lithia Gage.

(12) Minimum Flows for Weeki Wachee River System located within Hernando County, Florida.

(a) The Minimum Flows are to ensure that the minimum hydrologic requirements of the water resources or ecology of the natural systems associated with the Weeki Wachee River System are met. The Minimum Flow for the Weeki Wachee River System is intended to maintain 90% of the natural flow of the Weeki Wachee River

System. For purposes of this rule, the Weeki Wachee River System includes the watercourse from the Weeki Wachee Spring to the Gulf of Mexico including Twin Dees Spring, Mud River (including Salt Spring) from Mud Spring to the confluence with the Weeki Wachee River and Jenkins Springs and associated spring run.

(b) The Minimum Flow for the Weeki Wachee River System is 90% of its natural flow. This Minimum Flow is inclusive of spring flow, the freshwater and the estuarine portion of the Weeki Wachee River.

(c) The Minimum Flow applies upstream of the USGS Gage No. 02310525 at Weeki Wachee River near Brooksville (Brooksville Gage) to the Weeki Wachee Spring vent and downstream of the Brooksville Gage to the Gulf of Mexico. The Minimum Flow shall be met continuously and is evaluated on a daily basis.

(d) Because climatic variation can influence river flow regimes, five and ten year mean and median standards have been developed and are set forth in Table 8-18 (Means and Medians) as a tool to assess whether compliance with the Minimum Flow maintains 90% of the natural flow of the Weeki Wachee River System. The Means and Medians are hydrologic statistics that represent flows expected to occur during long-term periods when the Minimum Flows are being met. The Means and Medians are generated from flow records that are representative of a period devoid of significant anthropogenic impacts. The District will periodically evaluate the Means and Medians. These are evaluated as the mean and medians of annual means and medians, evaluated from January 1 through December 31 of each year. The evaluation is for both the flow at the Brooksville Gage and at the USGS Weeki Wachee Well No. 283201082315601. The flow at the Brooksville Gage is evaluated directly against Table 8-18. The well data is converted to flow with the relation  $Q \text{ (cfs)} = 47.487 + 12.38 \text{ (well level) (ft)}$  and then evaluated against Table 8-18. The Means and Medians were developed using the Minimum Flow and the presumed historic flow records. Therefore, it is expected that the Means and Medians will be met if compliance with the Minimum Flow is maintained. However, since future structural alterations could potentially affect surface water or groundwater flow characteristics within the watershed and additional information pertaining to Minimum Flows development may become available, the District is committed to periodic review and revision of the Minimum Flows, as necessary.

<b>Table 8-18 Five and Ten Year Means and Medians for the Weeki Wachee River System</b>	
<b>Criterion</b>	<b>Flow (cfs)</b>
Minimum 10 Year Moving Average (Based On Annual Average Flows)	141
Minimum 10 Year Moving Average (Based On Annual Median Flows)	131
Minimum 5 Year Moving Average (Based On Annual Average Flows)	136
Minimum 5 Year Moving Average (Based On Annual Median Flows)	128

(e) Water Use Permits issued after May 10, 2009, that authorize surface water withdrawals from, or ground water withdrawals that impact Mud Spring, Salt Spring or Jenkins Spring, shall gauge the flow of the applicable spring and report the flow to the District as provided in the Water Use Permit.

(13) Minimum Flows for the Dona Bay/Shakett Creek System below Cow Pen Slough located within the Manasota Basin, Sarasota County, Florida.

(a) The Minimum Flows are to ensure that the minimum hydrologic requirements of the water resources and ecology of the natural systems associated with the Dona Bay/Shakett Creek System are met. For purposes of this rule, the Dona Bay/Shakett Creek System includes the watercourse and its tributaries from the most downstream control structure on Cow Pen Slough, known as CPS-2 and operated by Sarasota County (hereinafter referred to as "CPS-2") to the Gulf of Mexico including Shakett Creek, Salt Creek, Fox Creek and Dona Bay.

(b) The Minimum Flow for the Dona Bay/Shakett Creek System is 100% of the natural flow of the system contributed by the watershed below CPS-2. This Minimum Flow is exclusive of flow, which is generated from the channelized watershed above CPS-2. Flow generated from the channelized watershed above CPS-2 shall be based on the flow records from CPS-2.

Rulemaking Authority 373.044, 373.113, 373.171, FS. Law Implemented 373.036, 373.0361, 373.042, 373.0421, FS. History - Readopted 10-5-74, Amended 12-31-74, Formerly 16J-0.15, 40D-1.601, Amended 10-1-84, 8-7-00, 2-6-06, 4-6-06, 1-1-07, 11-25-07, 2-18-08, 3-2-08, 5-12-08, 5-10-09, 3-23-2010, 3-28-2010.

**40D-8.603 Management Levels for Lakes and Other Impoundments.**

Specific Authority 373.016, 373.023, 373.044, 373.103, FS. Law Implemented 373.016, 373.042, 373.044, FS. History – New 6-7-78, Formerly 16J-8.67, Repealed.

**40D-8.605 Cyclic Variations for Minimum Water Level.**

Specific Authority 373.016, 373.023, 373.044, 373.103, FS. Law Implemented 373.016, 373.042, 373.044, FS. History – New 6-7-78, Formerly 16J-8.671, Repealed.

**40D-8.611 Minimum Flood Levels.**

Specific Authority 373.016, 373.023, 373.044, 373.103, FS. Law Implemented 373.016, 373.042, 373.044, FS. History – New 6-7-78, Formerly 16J-8.672, Repealed.

**40D-8.613 Ten Year Flood Warning Levels.**

Specific Authority 373.016, 373.023, 373.044, 373.103, FS. Law Implemented 373.016, 373.042, 373.044, FS. History – New 1-22-79, Formerly 16J-8.6721, Repealed.

**40D-8.616 Posted Notice.**

Specific Authority 373.016, 373.023, 373.044, 373.103, FS. Law Implemented 373.016, 373.042, 373.044, FS. History – New 6-7-78, Formerly 16J-8.673, Repealed.

**40D-8.621 Operating Levels for Lakes with District-Owned Management Structures.**

(1) Schedules, levels, and procedures for operation of lakes with a District-owned management structure shall be established by the Board.

(2) The operating range for a structure of a lake shall be prescribed as that between the high operating level and the low operating level.

(a) High operating level shall be established by the Board in consideration of the Guidance Levels, any applicable established High Minimum Lake Level, public testimony and in keeping with the best lake management practices.

(b) Low operating level shall be established by the Board in consideration of Guidance Levels, any applicable Minimum Lake Level, public testimony and in keeping with the best lake management practices.

(3) Best lake management practices in the design, construction, operation, and maintenance of structures or devices requires a consideration and evaluation of both Long-term and short-term effects of the activity upon the water resources of the District, and mandatory compliance with any High Minimum Lake Level and Minimum Lake Level established for the lake. Factors to be considered include the following:

- (a) Conservation and proper utilization of surface water;
- (b) Prevention of damage from floods, soil erosion, and excessive drainage;
- (c) Protection of natural resources, fish and wildlife;
- (d) Storage for aquifer recharge; and
- (e) Non-consumptive uses, including but not limited to, navigation, recreation, and aesthetics.

Specific Authority 373.044, 373.113, 373.171, FS. Law Implemented 373.042, 373.0421, 373.086, FS. History – New 6-7-78, Formerly 16J-8.677, Amended 8-7-00.

**40D-8.623 Minimum Wetland Levels.**

(1) (a) Minimum Wetland Levels for certain isolated, cypress dominated wetlands are established and incorporated into the table at subsection 40D-8.623(3), F.A.C., below. For such wetlands, the Minimum Wetland Level shall be that level which is 1.8 feet below a reference elevation referred to as the normal pool elevation.

(b) The normal pool elevation shall be determined based on a consideration, utilizing reasonable scientific judgment, of Hydrologic Indicators of sustained inundation including:

1. The lower limit of epiphytic mosses and liverworts intolerant of sustained inundation;
2. The upper limit of the root crown on *Lyonia lucida* growing on tree tussocks;
3. The upper limit of adventitious roots on *Hypericum fasciculatum* and other species which exhibit this morphologic response to sustained inundation;
4. Other indicators which can be demonstrated to represent a similar period of sustained inundation.

(2) The Governing Board may consider information relating to protection of nonconsumptive uses when establishing Minimum Wetland Levels. This information includes potentiometric surface maps, information on surface-water features and ecology of the area, water withdrawal data, geologic or hydrologic information, recreation, navigation and aesthetics, and information relating to the wetland and surrounding land uses.

(3) Minimum Wetland Levels are hereby established as set forth in the following table. Wetland water levels are deemed to be below the Minimum Wetland Level when the Long-term Current P50 is below the Minimum Wetland Level. If insufficient data exists to determine if a wetland is below its Minimum Wetland Level, the wetland can be determined to be below the Minimum Wetland Level based on a comparison with wetlands that are hydrologically or hydrogeologically similar or, located in close proximity or, in the same drainage basin or, by use of aerial photographs or evaluation of hydrologic data or Hydrologic Indicators in the subject wetland.

**TABLE 8-1 Minimum Wetland Levels Adopted August 7, 2000**

Wetland Site	Minimum Level (feet NGVD)	Latitude	Longitude
(a) CC W-41	73.1	28 18 44	82 22 25
(b) CC W-11	67.5	28 17 46	82 23 06
(c) CC W-12	62.1	28 17 33	82 23 39
(d) CC W-17	63.1	28 17 08	82 23 41
(e) CC Site G	62.7	28 16 21	82 24 18
(f) STWF D	29.1	28 15 19	82 38 05
(g) STWF Central Recorder	43.3	28 14 40	82 35 45
(h) STWF Z	40.0	28 14 10	82 35 07
(i) STWF Eastern Recorder	44.6	28 14 45	82 33 56
(j) STWF S-75	45.4	28 15 01	82 33 46
(k) STWF M	43.0	28 14 34	82 34 24
(l) STWF N	45.1	28 14 33	82 33 08
(m) MBWF Entry Dome	33.7	28 06 55	82 18 24
(n) MBWF X-4	40.6	28 07 26	82 20 14
(o) MBWF Clay Gully Cypress	39.8	28 07 21	82 20 45
(p) MBWF Unnamed	32.2	28 06 20	82 20 33
(q) EWWF NW-44	36.7	28 10 05	82 37 52
(r) EWWF Salls Property Wetland 10S/10D	19.8	28 10 03	82 40 58
(s) SPWF NW-49	57.4	28 11 00	82 30 27
(t) SPWF South Cypress	57.5	28 10 53	82 30 29
(u) SPWF NW-50 South Pasco	57.3	28 11 17	82 30 28
(v) S21 WF NW-53 East	51.5	28 07 16	82 30 51
(w) Cosme WF Wetland	39.5	28 06 02	82 35 27
(x) CBRWF #16	57.9	28 12 30	82 22 18
(y) CBRWF A	56.9	28 12 24	82 22 28
(z) CBRWF #25	70.4	28 13 59	82 21 31
(aa) CBRWF #32	48.7	28 10 03	82 22 02
(bb) CBRWF #4	69.2	28 13 44	82 21 55
(cc) CBRWF #20	60.4	28 12 14	82 21 19

<b>Wetland Site</b>	<b>Minimum Level (feet NGVD)</b>	<b>Latitude</b>	<b>Longitude</b>
(dd) CBARWF TQ-1 West	73.2	28 20 37	82 29 11
(ee) CBARWF T-3	68.8	28 20 52	82 29 44
(ff) CBARWF Stop #7	72.3	28 20 37	82 28 28
(gg) CBARWF Q-1	72.7	28 20 46	82 28 11
(hh) CR1	86.9	28 07 57	82 07 16
(ii) CR 2	90.5	28 07 14	82 07 11
(jj) CR 3	95.4	28 06 39	82 07 14
(kk) CR 4	99.0	28 06 50	82 05 54
(ll) CR 5	105.2	28 05 53	82 04 56
(mm) CR 6	96.0	28 07 32	82 05 57
(nn) NPWF #3	44.4	28 19 00	82 34 32
(oo) NPWF #21	44.5	28 17 23	82 34 30

Specific Authority 373.044, 373.113, 373.171, FS. Law Implemented 373.036, 373.0361, 373.042, 373.0421, FS. History – New 8-7-00.

**40D-8.624 Guidance and Minimum Levels for Lakes.**

(1) Levels for lakes adopted during or after August 7, 2000, are set forth in Table 8-2 in subsection 40D-8.624(12), F.A.C. There are two Guidance Levels for lakes, the High Guidance Level and the Low Guidance Level. There are two Minimum Levels for lakes, the High Minimum Lake Level and the Minimum Lake Level. After the High Minimum Lake Level and Minimum Lake Level for each lake is a designation indicating which of the categories described below applied and, therefore, which method was used to determine the High Minimum Lake Level and the Minimum Lake Level.

(2) Levels for lakes adopted prior to August 7, 2000, are set forth in the table in subsection 40D-8.624(13), F.A.C.

(3) Renaming of Levels.

(a) Lake levels adopted prior to August 7, 2000, were referred to in the District's rules as management levels and alternatively as minimum levels. These levels were the Minimum Flood Level, the Low Management Level and, for some lakes, Extreme Low Management Level. As of August 7, 2000, these levels are now referred to as Guidance Levels. For those lakes with levels adopted prior to August 7, 2000, the Minimum Flood is now named the High Level, the Low Management Level is now named the Low Level and the Extreme Low Management Level is now named the Extreme Low Level.

(b) For lakes with levels adopted before August 7, 2000, a reference within the District's rules to the applicable minimum level or to established minimum water levels shall refer to the Low Level, or, if adopted for the lake, the Extreme Low Level. Such Low Level or Extreme Low Level shall not be deemed a minimum level pursuant to Section 373.042, F.S.

(c) For lakes with levels adopted during or after August 7, 2000, a reference in the District's rules to the applicable minimum level or to established minimum water levels shall refer to the adopted High Minimum Lake Level and Minimum Lake Level described in this Rule 40D-8.624, F.A.C.

(4) The High Guidance Level (HGL).

(a) The High Guidance Level (HGL) is provided as an advisory guideline for construction of lake shore development, water dependent structures, and operation of water management structures. Figure 8-2 depicts the method described below for calculating the HGL. The High Guidance Level is the expected Historic P10 of the lake. For Category 2 lakes as described in paragraph 40D-8.624(8)(b), F.A.C., below, the HGL and the High Minimum Lake Level may be calculated to be the same elevation.

(b) The HGL is established using best available information, including:

1. Hydrologic data;
2. Hydrologic Indicators;
3. Where the lake has been Structurally Altered, the apparent effectiveness of the Structural Alterations in controlling water levels; and
4. Other information indicative of previous water levels.



(c) Unless the best available information indicates that a different elevation more accurately approximates the Historic P10 of the lake, the HGL shall be established using the following procedure:

1. The HGL shall be established at the Historic P10, if competent Historic data are available.
2. For a Structurally Altered lake with no Historic data, but with Current data, the HGL shall be the higher of the Current P10 or the Control Point Elevation.
3. For a Structurally Altered lake without Historic or Current data, the HGL shall be the Control Point Elevation.
4. For a lake that is not Structurally Altered without Historic or Current data, the HGL is equal to the higher of the Current P10 or the Hydrologic Indicators.
5. For a lake that is not Structurally Altered with no Historic data, but with Current data the HGLs shall be the higher of the Hydrologic Indicators of normal pool or the Current P10.

(5) Historic P50.

(a) The Historic P50 is derived to support development of minimum lake levels. Figure 8-3 depicts the method described below for calculating the Historic P50.

(b) The Historic P50 shall be established using competent Historic data, if it is available.

(c) In those cases where competent Historic data are unavailable, but Current data are available, the Historic P50 is determined by first calculating the difference between the Current P10 and the Current P50 (P10-P50) and comparing this to the region-specific Reference Lake Water Regime 50 (RLWR 50), then:

1. If the Current lake specific P10-P50 difference is greater than the RLWR 50, it is assumed the lake is impacted by water withdrawals, therefore, the Historic P50 is estimated by subtracting the RLWR 50 from the HGL.
2. If the Current lake specific P10-P50 difference is less than the RLWR 50 then the Historic P50 is estimated by subtracting the Current lake specific P10-P50 difference from the HGL.
3. If Current data does not exist for the lake, the Historic P50 is estimated by subtracting the RLWR 50 from the HGL.

(6) (a) The High Minimum Lake Level (HML) is the elevation that a lake's water levels are required to equal or exceed ten percent of the time (P10) on a Long-term basis. This level is used in the evaluation of compliance with Chapter 40D-2, F.A.C., Consumptive Use of Water, and Chapter 40D-4, F.A.C., Environmental Resource Permits. The High Minimum Lake Level is established to ensure that a lake reaches higher levels on a periodic basis.

(b) Lake levels are deemed to be below the High Minimum Lake Level when the Long-term P10 of the lake fails to equal or exceed the High Minimum Lake Level. If insufficient data exists to determine if the lake level is below the High Minimum Lake Level, the lake level can be determined to be below the High Minimum Lake Level based on a comparison with lakes that are hydrologically or hydrogeologically similar, or located in close proximity or in the same drainage basin, or by use of aerial photographs or by evaluation of hydrologic data of Hydrologic Indicators.

(7) (a) The Minimum Lake Level is the elevation that the lake's water levels are required to equal or exceed fifty percent of the time on a Long-term basis. This level is used in the evaluation of applications for water use permits pursuant to Chapter 40D-2, F.A.C., and Environmental Resource Permits pursuant to Chapter 40D-4, F.A.C.

(b) Lake levels are deemed to be below the Minimum Lake Level when the Long-term P50 lake elevation is below the Minimum Lake Level. If insufficient data exists to determine if the lake level is below the Minimum Lake Level, the lake level can be determined to be below the Minimum Lake Level based on a comparison with lakes that are hydrologically or hydrogeologically similar or, located in close proximity or in the same drainage basin or, by use of aerial photographs or evaluation of Hydrologic data or Hydrologic Indicators.

(8) The method for establishing the High Minimum Lake Level and the Minimum Lake Level pursuant to subsections 40D-8.624(6) and (7), F.A.C., above, will depend on the category within which the subject lake falls, as follows:

(a) Category 1 Lakes – Those lakes with lake-fringing cypress swamp(s) greater than 0.5 acres in size where Structural Alterations have not prevented the Historic P50 from equaling or rising above an elevation that is 1.8 feet below the normal pool of the cypress swamp(s). Figure 8-3 depicts the method for calculating the Historic P50.

1. The High Minimum Lake Level for Category 1 lakes is established 0.4 feet below the normal pool elevation in the cypress swamp(s) contiguous with the lake.

2. The Minimum Lake Level for Category 1 lakes shall be 1.8 feet below the normal pool elevation in the cypress swamps contiguous with the lake. Figure 8-1 depicts the method for calculating the minimum lake levels for Category 1 lakes.

(b) Category 2 Lakes – Those lakes with lake-fringing cypress swamp(s) greater than 0.5 acres in size where Structural Alterations have prevented the Historic P50 from equaling or rising above an elevation that is equal to an elevation that is 1.8 feet below normal pool and the lake-fringing cypress swamp(s) remain viable and perform functions beneficial to the lake in spite of the Structural Alterations. Figure 8-3 depicts the method for calculating the Historic P50.

1. The High Minimum Lake Level shall be established at the HGL.

2. The Minimum Lake Level shall be established at the Historic P50 elevation. Figure 8-3 depicts the method for calculating the Historic P50. Figure 8-1 depicts the method for calculating the Minimum Lake Level for Category 2 lakes.

(c) Category 3 Lakes – Those lakes where there are no lake-fringing cypress swamp(s) greater than 0.5 acre in size.

1. High Minimum Lake Level. Once the Minimum Lake Level is identified as described in subparagraph 40D-8.624(8)(c)2., F.A.C., below, the High Minimum Lake Level may be established, using the region-specific reference lake water regime statistic, or Historic hydrologic data. If Historic data are available, the High Minimum Lake Level may be established at the elevation corresponding to the Minimum Lake Level plus the difference between the Historic P10 and the Historic P50. If Historic data are not available, the High Minimum Lake Level may be established at the elevation corresponding to the Minimum Lake Level plus the region-specific RLWR50 value.

2. The Minimum Lake Level for Category 3 lakes is established utilizing a process that considers, applying professional experience and judgment, multiple parameters including changes in lake mixing and susceptibility to sediment resuspension, changes in water depth associated with docks, change in basin connectivity, changes in species richness, change in coverage of herbaceous wetland vegetation, change in coverage of aquatic macrophytes, and change in cultural (aesthetic and recreational) values as described below.

a. Lake Mixing Standard and Information for Consideration.

(I) Step 1.

(A) Establish stage specific dynamic ratio values (square root of the lake surface area in square kilometers divided by the mean depth in meters).

(B) Establish the Mixing Standard at the highest elevation at or below the Historic P50 elevation where the dynamic ratio shifts from a value of  $<0.8$  to a value  $>0.8$  or from a value of  $>0.8$  to a value of  $<0.8$ .

(II) Step 2. Develop water column depth profiles of water temperature, and dissolved oxygen concentration during summer months.

(III) Step 3. Based on professional experience and judgment, review all relevant information pertaining to water column mixing and stratification in the lake (including the Mixing Standard and stability of water column thermal stratification) for development of minimum levels.

b. Dock-Use Standard and Information for Consideration.

(I) Step 1. If boats or other watercraft are used on the lake, determine the elevation of sediments at the end of existing docks, and establish the elevation exceeded by ten percent of the sediment elevation values.

(II) Step 2.

(A) If Historic data are available, derive the Dock-Use Standard by adding 2 feet and the difference (in feet) between the Historic P50 and Historic P90 elevation to the elevation exceeded by ten percent of the sediment elevations at the end of existing docks.

(B) If Historic data are not available, derive the Dock-Use Standard by adding 2 feet and the region-specific RLWR5090 value (in feet) to the elevation exceeded by ten percent of the sediment elevations at the end of existing docks.

(III) Step 3. Based on professional experience and judgment, review relevant information pertaining to dock use and dock elevations at the lake (including the Dock-Use Standard) for development of minimum levels.

c. Basin Connectivity Standard and Information for Consideration.

(I) Step 1. Determine elevations for areas of potential surface water connectivity among sub-basins within the lake basin or between the lake and other lakes.

(II) Step 2. Identify the highest elevation (or other appropriate elevation in the areas of connectivity) as the critical high-spot elevation.

(III) Step 3.

(A) If powerboats are used at the lake and Historic data are available, derive the Basin Connectivity Standard by adding 2 feet and the difference (in feet) between the Historic P50 and Historic P90 elevations to the critical high spot elevation.

(B) If powerboats are used at the lake, and Historic data are not available, derive the Basin Connectivity Standard by adding 2 feet and the region-specific RLWR5090 value (in feet) to the critical high spot elevation.

(C) If powerboats are not used at the lake and Historic data are available, derive the Basin Connectivity Standard by adding 1 foot and the difference (in feet) between the Historic P50 and Historic P90 elevations to the critical high spot elevation.

(D) If powerboats are not used at the lake, and Historic data are not available, derive the Basin Connectivity Standard by adding 1 foot and the region-specific RLWR5090 value (in feet) to the critical high spot elevation.

(IV) Step 4. Based on professional experience and judgment, review relevant information pertaining to inter- and intra-basin connections for the lake basin (including the Basin Connectivity Standard) for development of minimum levels.

d. Species Richness Standard and Information for Consideration.

(I) Step 1. Determine the lake surface area associated with the Historic P50 elevation.

(II) Step 2. Establish the Species Richness Standard at an elevation corresponding to the lowest elevation associated with less than a 15% reduction in lake surface area relative to the area at the Historic P50 elevation.

(III) Step 3. Based on professional experience and judgment, review relevant information pertaining to biological diversity within the lake basin (including the Species Richness Standard) for development of minimum levels.

e. Herbaceous Wetland Information for Consideration.

(I) Step 1. Determine stage-specific potential wetland area values (i.e., lake area with a water depth less than or equal to 4 feet) for the lake basin.

(II) Step 2. Identify elevations at which change in lake stage would result in substantial change in potential wetland area within the lake basin.

(III) Step 3. Based on professional experience and judgment, review relevant information pertaining to herbaceous wetlands in the lake basin (including elevations at which change in lake stage would result in substantial change in potential wetland area, and elevations of connections between the lake basin and contiguous wetland areas) for development of minimum levels.

f. Submersed Aquatic Macrophyte Information for Consideration.

(I) Step 1. Determine lake-specific maximum depth of colonization values for submersed aquatic macrophytes using a representative, lake-specific Secchi Disk depth value and an empirically-derived relationship between Secchi Disk depth and maximum depth of macrophyte colonization.

(II) Step 2. Determine stage-specific lake area available for submersed aquatic macrophyte colonization using the lake-specific maximum depth of colonization value.

(III) Step 3. Identify elevations at which change in lake stage would result in substantial change in the area available for colonization by submersed aquatic macrophytes.

(IV) Step 4. Based on professional experience and judgment, review relevant information pertaining to aquatic macrophyte coverage in the lake basin (including elevations at which change in lake stage would result in substantial change in the area available for colonization by submersed aquatic macrophytes, and coverage that could hinder navigation) for development of minimum levels.

g. Aesthetics Standard and Information for Consideration.

(I) Step 1. Establish the Aesthetics Standard at the Low Guidance Level.

(II) Step 2. Based on professional experience and judgment, review relevant information pertaining to aesthetic values associated with the lake basin (including the Aesthetics Standard) for development of minimum levels.

h. Recreation/Ski Standard and Information for Consideration.

(I) Step 1. Determine whether the lake basin can contain a ski corridor delineated as a circular area with a radius of 418 feet or a rectangular or polygonal area 200 ft. in width and 2,000 feet in length.

(II) Step 2. If the lake basin can contain a ski corridor, identify the minimum elevation at which the lake basin can contain a ski corridor with a depth of five feet (Ski Elevation) by adding five feet to the elevation at which the basin can contain the ski corridor.

(III) Step 3.

(A) If Historic data are available, derive the Recreation/Ski Standard by adding the difference (in feet) between the Historic P50 and Historic P90 elevations to the Ski Elevation.

(B) If Historic data are not available, derive the Recreation/Ski Standard by adding the region specific RLWR5090 value (in feet) to the Ski Elevation.

(IV) Step 4.

(A) Compare the Recreation/Ski Standard to the Historic P50 elevation.

(B) If the Recreation/Ski Standard is less than or equal to the Historic P50 elevation, use of the standard for development of the Minimum Lake Level is appropriate.

(C) If the Recreation/Ski Standard is greater than the Historic P50 elevation, use of the standard for development of the Minimum Lake Level is not appropriate.

(V) Step 5. Based on professional experience and judgment, review relevant information pertaining to skiing and other recreational activities within the lake basin (including the Recreation/Ski Standard) for development of minimum levels.

i. Establish Minimum Lake Level - Following development of lake-specific standards (Mixing Standard, Dock-Use Standard, Basin Connectivity Standard, Species Richness Standard, Recreation/Ski Standard, Aesthetics Standard) and compilation of other relevant information, the Minimum Lake Level for Category 3 lakes shall be established at the elevation corresponding to the most conservative, i.e., the highest standard, except where that result is an elevation above the Historic P50, in which case the Minimum Lake Level shall be established at the Historic P50 elevation.

(9) Where the Governing Board determines that there are unique factors to be addressed at a particular lake such that the Minimum Lake Level that would be established based upon subsection 40D-8.624(8), F.A.C., above is inappropriate, the Governing Board shall determine the High Minimum Lake Level and the Minimum Lake Level, as applicable, considering the appropriate category standards described above, and the lake's unique factors. Unique factors include:

(a) Elevations associated with residential dwellings, roads or other structures,

(b) Substantial changes in the coverage of herbaceous wetland vegetation or submersed aquatic macrophytes,

(c) Frequent submergence of dock platforms, and

(d) Information relating to protection of nonconsumptive uses, including lake vegetation maps, faunal surveys, bathymetric maps, aerial photographs, elevations of docks, seawalls, house slabs, other structures, typical uses of a lake (e.g., recreation, aesthetics, navigation, irrigation, and surrounding land uses), socio-economic effects of the minimum level and public health, safety and welfare matters.

(10)(a) Low Guidance Level – The Low Guidance Level is provided as an advisory guideline for water dependent structures, information for lake shore residents and operation of water management structures. The Low Guidance Level is the elevation that a lake's water levels are expected to equal or exceed ninety percent of the time on a Long-term basis. Therefore, this is also the elevation that a lake's water levels are expected to be below 10 percent of the time on a Long-term basis.

(b) The Low Guidance Level (LGL) is established as:

1. The Historic P90 elevation, if competent Historic data is available.

2. In those cases where competent Historic data are unavailable, but Current data are available, the Low Guidance Level is determined by first calculating the difference between the Current P10 and the Current P90 and comparing this to the region-specific Reference Lake Water Regime 90 (RLWR90), then:

a. If the Current lake specific P10-P90 difference is greater than the RLWR 90, it is assumed the lake is impacted by water withdrawals, therefore, the Low Guidance Level is estimated by subtracting the RLWR 90 from the HGL.

b. If the Current lake specific P10-P90 difference is less than the RLWR 90, then the Low Guidance Level is estimated by subtracting the Current lake specific P10-P90 difference from the HGL.

3. The HGL minus the region-specific RLWR 90 value if competent Historic or Current data are not available.

(11) Posted Notice.

(a) Staff gauges will be installed in prominent locations on each lake for which Guidance Levels or Minimum Levels have been established. A notice shall be posted in the immediate proximity of the staff gauge indicating that Levels have been established.

(b) The notice shall indicate the elevations of the Guidance Level(s) and the established Minimum Level(s).

(12) Levels for lakes established during or after August 7, 2000, are set forth in the following table. After the High Minimum Lake Level and Minimum Lake Level elevation for each lake is a designation indicating the Method used, as described in subsection 40D-8.624(8), F.A.C., to establish the level. Compliance with the High Minimum and Minimum Lake Levels is determined pursuant to paragraphs (6)(b) and (7)(b) above. Guidance Levels established prior to August 7, 2000, are set forth in Table 8-3 in subsection 40D-8.624(13), F.A.C., below.

<b>Table 8-2 Minimum and Guidance Levels Established During or After August 7, 2000. Levels are elevations, in feet above the National Geodetic Vertical Datum of 1929.</b>					
<b>Location by County and Basin</b>	<b>Name of Lake and Section, Township and Range Information</b>	<b>High Guidance Level</b>	<b>High Minimum Lake Level</b>	<b>Minimum Lake Level</b>	<b>Low Guidance Level</b>
(a) In Charlotte County Within the Peace River Basin RESERVED					
(b) In Citrus County Within the Coastal Rivers Basin RESERVED					
(c) In Citrus County Within the Withlacoochee River Basin	Fort Cooper, Lake S-27, T-19S, R-20E	30.9'	30.1' (CAT 3)	28.7' (CAT 3)	26.7'
	Tsala Apopka, Lake (Lakes and wetlands comprising the Floral City Pool), S-14, T-20S, R-20E	41.8'	41.2' (CAT 1)	39.8' (CAT 1)	39.6'
	Tsala Apopka, Lake (Lakes and wetlands comprising the Hernando Pool), S-26, T-18S, R-19E	39.0'	38.7' (CAT 1)	37.3' (CAT 1)	35.9'
	Tsala Apopka, Lake (Lakes and wetlands comprising the Inverness Pool), S-08, T-19S, R-20E	40.3'	40.1' (CAT 1)	38.7' (CAT 1)	37.8'
(d) In DeSoto County Within the Peace River Basin RESERVED					
(e) In Hardee County Within the Peace River Basin RESERVED					
(f) In Hernando County Within the Coastal Rivers Basin	Hunters, Lake S-32, T-23S, R-17E	19.3'	19.3' (CAT 3)	17.1' (CAT 3)	13.7'

<b>Table 8-2 Minimum and Guidance Levels Established During or After August 7, 2000. Levels are elevations, in feet above the National Geodetic Vertical Datum of 1929.</b>					
<b>Location by County and Basin</b>	<b>Name of Lake and Section, Township and Range Information</b>	<b>High Guidance Level</b>	<b>High Minimum Lake Level</b>	<b>Minimum Lake Level</b>	<b>Low Guidance Level</b>
	Weekiwachee Prairie, Lake (Lake Theresa) S-23, T-23S, R-17E	22.6'	21.4' (CAT 3)	18.3' (CAT 3)	17.5'
(g) In Hernando County Within the Hillsborough River Basin <b>RESERVED</b>					
(h) In Hernando County Within the Withlacoochee River Basin	Lindsey, Lake S-25, T-21S, R-19E	68.5'	68.5' (CAT 2)	66.1' (CAT 2)	63.9'
	Mountain, Lake S-16, T-23S, R-20E	102.8'	102.8' (CAT 3)	99.5' (CAT 3)	96.3'
	Neff, Lake S-20, T-23S, R-20E	102.2'	102.2' (CAT 3)	94.5' (CAT 3)	87.4'
	Spring, Lake S-15, T-23S, R-20E	181.6'	180.1' (CAT 3)	179.0' (CAT 3)	179.0'
(i) In Highlands County Within the Peace River Basin	Angelo, Lake S-25, T-33S, R-28E	102.1'	101.3' (CAT 3)	100.0' (CAT 3)	99.6'
	Anoka, Lake S-27, T-33S, R-28E	123.6'	122.8' (CAT 3)	121.7' (CAT 3)	121.2'
	Denton, Lake S-02, T-34S, R-28E	114.9'	114.1' (CAT 3)	112.8' (CAT 3)	112.4'
	Jackson, Lake S-30, T-34S, R-29E	102.6'	102.4' (CAT 3)	101.3' (CAT 3)	100.2'
	June-In-Winter, Lake S-34, T-36S, R-29E	74.7'	74.5' (CAT 3)	74.0' (CAT 3)	73.2'
	Letta, Lake S-31, T-33S, R-29E	99.5'	99.5' (CAT 3)	98.4' (CAT 3)	97.1'
	Little Jackson, Lake S-06, T-35S, R-29E	102.6'	102.4' (CAT 3)	101.3' (CAT 3)	100.2'
	Lotela, Lake S-26, T-33S, R-28E	107.5'	106.8' (CAT 3)	105.7' (CAT 3)	105.0'
	Placid, Lake S-24, T-37S, R-29E	93.4'	92.6' (CAT 3)	91.4' (CAT 3)	90.9'
	Tulane, Lake S-27, T-33S, R-28E	118.7'	117.9' (CAT 3)	116.6' (CAT 3)	116.2'
	Verona, Lake S-23, T-33S, R-28E	118.2'	117.4' (CAT 3)	115.8' (CAT 3)	115.1'

<b>Table 8-2 Minimum and Guidance Levels Established During or After August 7, 2000. Levels are elevations, in feet above the National Geodetic Vertical Datum of 1929.</b>					
<b>Location by County and Basin</b>	<b>Name of Lake and Section, Township and Range Information</b>	<b>High Guidance Level</b>	<b>High Minimum Lake Level</b>	<b>Minimum Lake Level</b>	<b>Low Guidance Level</b>
(j) In Hillsborough County Within the Alafia River Basin RESERVED					
(k) In Hillsborough County Within the Hillsborough River Basin	Stemper, Lake S-13, T-27, R-18 (Levels in feet NGVD)	61.2'	60.8' (CAT 1)	59.4' (CAT 1)	59.1'
(l) In Hillsborough County Within the Northwest Hillsborough Basin	Alice, Lake S-16, T-27, R-17	40.9'	40.9' (CAT 2)	39.9' (CAT 2)	38.8'
	Allen, Lake S-10, T-27S, R-18E	61.8'	61.8' (CAT 1)	60.7' (CAT 1)	59.7'
	Barbara, Lake S-19, T-27, R-18	53.15'	53.15' (CAT 3)	52.15' (CAT 3)	51.05'
	Bird, Lake S-26, T-27, R-18	49.6'	49.6' (CAT 2)	48.6' (CAT 2)	47.5'
	Brant, Lake S-23, T-27, R-18	58.0'	58.0' (CAT 2)	57.0' (CAT 2)	55.9'
	Calm, Lake S-14, T-27, R-17	49.41'	49.41' (CAT 3)	48.41' (CAT 3)	47.31'
	Charles, Lake S-23, T-27, R-18	54.2'	53.8' (CAT 1)	52.4' (CAT 1)	52.1'
	Church, Lake S-28, T-27, R-17	35.64'	35.64' (CAT 3)	34.64' (CAT 3)	33.54'
	Crenshaw, Lake S-22, T-27, R-18	55.5'	54.45' (CAT 3)	53.45' (CAT 3)	53.4'
	Crescent, Lake S-10, T-27S, R-17E	41.9'	41.3' (CAT 3)	40.3' (CAT 3)	39.8'
	Crystal, Lake S-14, T-27, R-18	59.8'	59.8' (CAT 2)	58.8' (CAT 2)	57.7'
	Cypress, Lake S-24, T-27, R-17	48.89'	48.89' (CAT 3)	47.89' (CAT 3)	46.79'
	Dan, Lake S-6, T-27, R-17	32.5'	31.9' (CAT 3)	30.9' (CAT 3)	30.4'
	Deer, Lake S-1, T-27, R-18	66.5'	66.5' (CAT 2)	65.5' (CAT 2)	64.4'
	Dosson, Lake S-20, T-27, R-18	53.4'	53.4' (CAT 2)	52.4' (CAT 2)	51.3'
	Echo, Lake S-28, T-27, R-17	35.64'	35.64' (CAT 3)	34.64' (CAT 3)	33.54'

<b>Table 8-2 Minimum and Guidance Levels Established During or After August 7, 2000. Levels are elevations, in feet above the National Geodetic Vertical Datum of 1929.</b>					
<b>Location by County and Basin</b>	<b>Name of Lake and Section, Township and Range Information</b>	<b>High Guidance Level</b>	<b>High Minimum Lake Level</b>	<b>Minimum Lake Level</b>	<b>Low Guidance Level</b>
	Ellen, Lake S-19, T-27, R-18	53.15'	53.15' (CAT 3)	52.15' (CAT 3)	51.05'
	Fairy (Maurine), Lake S-34, T-27, R-17	33.41'	33.41' (CAT 3)	32.41' (CAT 3)	31.31'
	Garden, Lake S-17, T-27, R-17	31.5'	30.5' (CAT 3)	29.5' (CAT 3)	29.4'
	Halfmoon, Lake S-31, T-27, R-18	43.3'	43.3' (CAT 2)	42.3' (CAT 2)	41.2'
	Harvey, Lake S-3, T-27S, R-18E	61.8'	61.8' (CAT 1)	60.7' (CAT 1)	59.7'
	Helen, Lake S-19, T-27, R-18	53.15'	53.15' (CAT 3)	52.15' (CAT 3)	51.05'
	Hobbs, Lake S-1, T-27, R-18	65.46'	65.46' (CAT 2)	64.46' (CAT 2)	63.36'
	Horse, Lake S-26, T-27, R-17	46.9'	45.8' (CAT 3)	44.8' (CAT 3)	44.8'
	Jackson, Lake S-17, T-27, R-17	33.0'	33.0' (CAT 2)	32.0' (CAT 2)	30.9'
	Juanita, Lake S-22, T-27, R-17	41.7'	41.7' (CAT 2)	40.7' (CAT 2)	39.6'
	Little Moon, Lake S-28, T-27, R-17	39.1'	39.1' (CAT 2)	38.1' (CAT 2)	37.0'
	Merrywater, Lake S-22, T-27, R-18	55.8'	55.8' (CAT 2)	54.8' (CAT 2)	53.7'
	Mound, Lake S-11, T-27, R-17	50.2'	50.7' (CAT 1)	49.3' (CAT 1)	48.3'
	Platt, Lake S-35, T-27, R-18	49.7'	49.5' (CAT 1)	48.1' (CAT 1)	45.5'
	Pretty, Lake S-26, T-27S, R-17E	44.3'	43.9' (CAT 1)	42.5' (CAT 1)	42.2'
	Rainbow, Lake S-22, T-27, R-17	39.1'	39.1' (CAT 2)	38.1' (CAT 2)	37.0'
	Raleigh, Lake S-27, T-27, R-17	RESERVED	RESERVED (CAT 3)	RESERVED (CAT 3)	RESERVED
	Reinheimer, Lake S-15, T-27, R-18	58.6'	58.9' (CAT 1)	57.5' (CAT 1)	56.5'
	Rogers, Lake S-27, T-27, R-17	RESERVED	RESERVED (CAT 3)	RESERVED (CAT 3)	RESERVED
	Round, Lake S-22, T-27, R-18	55.6'	54.5' (CAT 3)	53.5' (CAT 3)	53.5'
	Saddleback, Lake S-22, T-27, R-18	54.58'	54.58' (CAT 2)	53.58' (CAT 2)	52.48'
	Sapphire, Lake S-14, T-27, R-18	63.4'	63.0' (CAT 1)	61.6' (CAT 1)	61.3'



<b>Table 8-2 Minimum and Guidance Levels Established During or After August 7, 2000. Levels are elevations, in feet above the National Geodetic Vertical Datum of 1929.</b>					
<b>Location by County and Basin</b>	<b>Name of Lake and Section, Township and Range Information</b>	<b>High Guidance Level</b>	<b>High Minimum Lake Level</b>	<b>Minimum Lake Level</b>	<b>Low Guidance Level</b>
	Starvation, Lake S-21, T-27, R-18	RESERVED	RESERVED (CAT 3)	RESERVED (CAT 3)	RESERVED
	Strawberry (North Crystal), Lake S-14, T-27, R-18	60.1'	60.1' (CAT 3)	59.1' (CAT 3)	58.0'
	Sunset, Lake S-17, T-27, R-17	34.8'	34.4' (CAT 1)	33.0' (CAT 1)	32.7'
	Sunshine, Lake S-20, T-27, R-18	53.4'	53.4' (CAT 2)	52.4' (CAT 2)	51.3'
	Taylor, Lake S-16, T-27S, R-17E	38.2'	38.2' (CAT 2)	37.2' (CAT 2)	36.1'
	Virginia, Lake S-3, T-27S, R-18E	61.8'	61.8' (CAT 1)	60.7' (CAT 1)	59.7'
(m) In Lake County Within the Green Swamp Basin RESERVED					
(n) In Levy County Within the Withlacochee River Basin	Marion, Lake S-02, T-14S, R-17E	55.3'	54.6' (CAT 3)	50.7' (CAT 3)	47.7'
(o) In Manatee County Within the Manasota River Basin RESERVED					
(p) In Marion County Within the Withlacochee River Basin RESERVED					
(q) In Pasco County Within the Coastal Rivers Basin	Big Fish, Lake S-21, T-24, R-19	76.05'	75.65' (CAT 3)	73.05' (CAT 3)	71.75'
	Green, Lake S-16, T-26, R-18	74.4'	74.2' (CAT 2)	71.9' (CAT 2)	70.0'
	Moon, Lake S-28, T-25, R-17	39.9'	39.9' (CAT 3)	38.3' (CAT 3)	36.2'
	Pasco Lake S-22, T-24S, R-18E	66.1'	65.3' (CAT 3)	61.8' (CAT 3)	59.7'

<b>Table 8-2 Minimum and Guidance Levels Established During or After August 7, 2000. Levels are elevations, in feet above the National Geodetic Vertical Datum of 1929.</b>					
<b>Location by County and Basin</b>	<b>Name of Lake and Section, Township and Range Information</b>	<b>High Guidance Level</b>	<b>High Minimum Lake Level</b>	<b>Minimum Lake Level</b>	<b>Low Guidance Level</b>
	Pierce Lake S-9, T-25S, R-18E	72.7'	72.2' (CAT 3)	70.5' (CAT 3)	68.9'
	Unnamed Lake No. 22 S-27, T-24S, R-18E	60.1'	59.3' (CAT 3)	55.8' (CAT 3)	53.7'
(r) In Pasco County Within the Green Swamp Basin RESERVED					
(s) In Pasco County Within the Hillsborough County Basin	Bell, Lake S-13, T-26, R-18	71.6'	70.8' (CAT 1)	69.4' (CAT 1)	69.2'
	Bird, Lake S-36, T-26, R-18	66.8'	66.6' (CAT 1)	65.2' (CAT 1)	64.3'
	Buddy, Lake S-17, T-25S, R-21E	93.7'	93.7' (CAT 3)	87.3' (CAT 3)	83.9'
	Hancock, Lake S-5, T-24S, R-20E	102.5'	102.5' (CAT 3)	100.2' (CAT 3)	97.7'
	Iola, Lake S-15, T-24S, R-20E	147.3'	146.5' (CAT 3)	141.9' (CAT 3)	138.6'
	Jessamine Lake S-11, T-24S, R-20E	141.1'	140.3' (CAT 3)	133.3' (CAT 3)	127.1'
	King Lake S-7, T-26S, R-19E	73.1'	72.4' (CAT 1)	70.8' (CAT 1)	69.7'
	King Lake (East) S-22, T-25S, R-20E	105.7'	105.1' (CAT 3)	102.7' (CAT 3)	101.4'
	Middle, Lake S-4, T-24S, R-20E	103.1'	102.5' (CAT 3)	100.2' (CAT 3)	99.2'
	Padgett, Lake S-24, T-26, R-18	70.5'	70.5' (CAT 1)	69.5' (CAT 1)	68.4'
	Pasadena, Lake S-16, T-25S, R-21E	93.7'	93.7' (CAT 3)	87.3' (CAT 3)	83.9'
(t) In Pasco County Within the Pinellas-Anclote River Basin	Camp, Lake S-34, T-26, R-18	63.8'	63.4' (CAT 1)	62.0' (CAT 1)	61.3'
	Linda, Lake S-26, T-26S, R-18E	66.3'	66.2' (CAT 3)	64.7' (CAT 3)	63.6'
	Parker (Ann), Lake S-35, T-26, R-17	48.3'	48.1' (CAT 1)	46.7' (CAT 1)	46.2'

<b>Table 8-2 Minimum and Guidance Levels Established During or After August 7, 2000. Levels are elevations, in feet above the National Geodetic Vertical Datum of 1929.</b>					
<b>Location by County and Basin</b>	<b>Name of Lake and Section, Township and Range Information</b>	<b>High Guidance Level</b>	<b>High Minimum Lake Level</b>	<b>Minimum Lake Level</b>	<b>Low Guidance Level</b>
(u) In Pasco County Within the Withlacoochee River Basin	Clear, Lake S-1, T-25S, R-20E	127.0'	127.0' (CAT 3)	125.7' (CAT 3)	123.7'
(v) In Pinellas County Within the Pinellas-Anclote River Basin RESERVED					
(w) In Polk County Within the Alafia River Basin RESERVED					
(x) In Polk County Within the Green Swamp Basin RESERVED					
(y) In Polk County Within the Hillsborough River Basin RESERVED					
(z) In Polk County Within the Peace River Basin	Annie, Lake S-3, T-29S, R-27E	116.0'	115.2' (CAT 3)	112.8' (CAT 3)	111.7'
	Bonnie, Lake S-31, T-29S, R-28E	105.9'	105.8' (CAT 3)	102.1' (CAT 3)	99.8'
	Clinch Lake S-31, T-31S, R-28E	105.5'	105.5' (CAT 3)	104.4' (CAT 3)	103.1'
	Crooked, Lake S-01, T-31S, R-27E	121.2'	120.8' (CAT 3)	117.9' (CAT 3)	116.4'
	Dinner Lake S-15, T-29S, R-27E	114.4'	113.6' (CAT 3)	110.6' (CAT 3)	109.1'
	Eagle Lake S-01, T-29S, R-25E	129.6'	129.0' (CAT 3)	127.9' (CAT 3)	127.2'
	Lee, Lake S-10, T-29S, R-27E	116.8'	116.0' (CAT 3)	113.9' (CAT 3)	113.1'
	Mabel, Lake S-11, T-29S, R-27E	107.5'	106.7' (CAT 3)	103.9' (CAT 3)	102.5'
	McLeod Lake S-07, T-29S, R-26E	129.4'	129.4' (CAT 3)	128.3' (CAT 3)	127.0'
	Parker, Lake S-8, T-28S, R-24E	130.6'	130.6' (CAT 3)	129.6' (CAT 3)	129.0'

<b>Table 8-2 Minimum and Guidance Levels Established During or After August 7, 2000. Levels are elevations, in feet above the National Geodetic Vertical Datum of 1929.</b>					
<b>Location by County and Basin</b>	<b>Name of Lake and Section, Township and Range Information</b>	<b>High Guidance Level</b>	<b>High Minimum Lake Level</b>	<b>Minimum Lake Level</b>	<b>Low Guidance Level</b>
	Starr, Lake S-14, T-29S, R-27E	105.8'	105.0' (CAT 3)	102.1' (CAT 3)	100.7'
	Venus Lake S-9, T-29S, R-27E	121.2'	120.4' (CAT 3)	118.2' (CAT 3)	117.4'
	Wales Lake S-01, T-30S, R-27E	ND	107.7' (CAT 3)	106.6' (CAT 3)	ND
(aa) In Sarasota County Within the Manasota Basin RESERVED					
(bb) In Sumter County Within the Green Swamp Basin RESERVED					
(cc) In Sumter County Within the Withlacoochee River Basin	Big Gant, Lake S-14, T-22S, R-22E	76.1'	76.3' (CAT 1)	74.9' (CAT 1)	73.4'
	Black, Lake S-23, T-18S, R-23E	54.7'	53.9' (CAT 3)	51.3' (CAT 3)	49.6'
	Deaton, Lake S-14, T-19S, R-23E	65.2'	64.8' (CAT 3)	63.2' (CAT 3)	62.2'
	Miona, Lake S-27, T-18S, R-23E	54.7'	53.9' (CAT 3)	51.3' (CAT 3)	49.6'
	Okahumpka, Lake S-21, T-19S, R-23E	58.1'	58.1' (CAT 1)	56.7' (CAT 1)	55.0'
	Panasoffkee, Lake S-29, T-19S, R-22E	40.5'	40.8' (CAT 1)	39.4' (CAT 1)	38.9'

(13) Guidance Levels established for lakes prior to August 7, 2000, are set forth in the following table:

<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
<b>Location of Impoundment by County and Basin</b>	<b>High Level in Feet Above Mean Sea Level (msl)</b>	<b>Low Level in Feet Above Mean Sea Level (msl)</b>	<b>Extreme Low Level in Feet Above Mean Sea Level (msl)</b>
(a) In Charlotte County Within the Peace River Basin			
(b) In Citrus County Within the Coastal Rivers Basin			
(c) In Citrus County Within the Withlacoochee River Basin			
Bradley, Lake S23, T20S, R20E	42.50'	40.25'	38.25'

<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
<b>Location of Impoundment by County and Basin</b>	<b>High Level in Feet Above Mean Sea Level (msl)</b>	<b>Low Level in Feet Above Mean Sea Level (msl)</b>	<b>Extreme Low Level in Feet Above Mean Sea Level (msl)</b>
Cato, Lake S5, T19, R20	38.00'	35.50'	34.00'
Connell, Lake S6, T19, R20	35.50'	32.00'	30.00'
Cooter, Lake S17, T19, R20	40.50'	38.25'	36.25'
Hog Pond, Lake (Nina) S2, T19, R19	34.50'	32.00'	30.00'
Holden, Lake (Inverness) S32, T19, R20	32.00'	29.50'	28.00'
Magnolia, Lake S3, T20, R20	31.00'	28.50'	27.00'
Rush, Lake (Williams) S03, T17, R18	35.75'	33.25'	31.25'
Little, Lake (Consuella) S15, T20S, R20E	41.50'	39.00'	37.25'
Twin, Lake S6, T19, R20	37.00'	35.00'	33.00'
(d) In DeSoto County Within the Peace River Basin			
(e) In Hardee County Within the Peace River Basin			
(f) In Hernando County Within the Coastal Rivers Basin			
(g) In Hernando County Within the Hillsborough River Basin LAKES			
Nicks, Lake S29, T23S, R20E	113.00'	110.50'	108.50'
St. Clair, Lake S33, T23S, R20E	113.00'	110.50'	108.50'
(h) In Hernando County Within the Withlacoochee River Basin LAKES			
Elizabeth, Lake S11, T23S, R21E	60.25'	57.00'	55.50'
Francis, Lake 11, 23S, 21E	60.25'	57.00'	55.50'
Geneva, Lake 11, 23S, 21E	60.25'	57.00'	55.50'
Sparkman, Lake 24, 23S, 19E	91.50'	89.00'	88.00'
(i) In Highlands County Within the Peace River Basin LAKES Sec. Twsp. Rng.			

<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
<b>Location of Impoundment by County and Basin</b>	<b>High Level in Feet Above Mean Sea Level (msl)</b>	<b>Low Level in Feet Above Mean Sea Level (msl)</b>	<b>Extreme Low Level in Feet Above Mean Sea Level (msl)</b>
Adelaide, Lake 5, 33S, 28E	106.50'	104.00'	102.50'
Apthhorpe, Lake 18, 36S, 30E	71.50'	68.00'	66.00'
Blue, Lake 30, 36S, 30E	77.50'	75.00'	73.50'
Bonnet, Lake 8, 34S, 29E	90.75'	88.00'	86.00'
Brentwood, Lake 10, 33S, 28E	102.75'	99.50'	98.00'
Buck, Lake 29, 37S, 30E	94.00'	91.50'	89.50'
Byrd, Lake 9, 33S, 28E	108.25'	105.50'	104.00'
Carrie, Lake 21, 36S, 29E	75.50'	73.00'	72.50'
Charlotte, Lake 17, 35S, 29E	93.75'	91.25'	89.75'
Chilton, Lake 7, 33S, 28E	114.00'	111.00'	109.50'
Clay, Lake 29, 36S, 30E	78.75'	76.00'	75.00'
Crews, Lake 32, 36S, 29E	119.50'	117.00'	115.50'
Damon, Lake 3, 33S, 28E	101.00'	98.00'	95.00'
Dinner, Lake 17, 34S, 29E	102.50'	98.50'	97.00'
Francis, Lake 22, 36S, 29E	70.50'	67.50'	66.50'
Glenada, Lake 34, 33S, 28E	120.00'	117.00'	115.50'
Grassy, Lake 17, 37S, 30E	91.50'	88.50'	87.50'
Harry, Lake 1, 36S, 29E	67.50'	63.00'	62.00'
Henry, Lake 25, 36S, 29E	75.50'	73.00'	72.50'
Hill, Lake 17, 36S, 29E	99.25'	96.00'	94.50'
Huckleberry, Lake 7, 35S, 29E	104.50'	102.00'	101.00'
Huntley, Lake 5, 37S, 30E	83.75'	81.00'	79.50'
Josephine, Lake 32, 35S, 29E	72.50'	69.00'	68.50'

<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
<b>Location of Impoundment by County and Basin</b>	<b>High Level in Feet Above Mean Sea Level (msl)</b>	<b>Low Level in Feet Above Mean Sea Level (msl)</b>	<b>Extreme Low Level in Feet Above Mean Sea Level (msl)</b>
Lake Lachard 36, 36S, 29E	78.50'	76.00'	74.00'
Lelia, Lake 34, 33S, 29E	114.50'	112.50'	110.50'
Little Bonnet, Lake 36, 33S, 28E	100.00'	97.00'	96.00'
Little Red Water, Lake 14, 36S, 29E	103.25'	100.50'	98.50'
Lost, Lake 12, 37S, 29E	88.00'	84.00'	82.75'
McCoy, Lake 6, 37S, 30E	87.00'	84.00'	82.00'
Mirror, Lake 7, 37S, 30E	93.50'	90.00'	88.00'
Center Nellie 13, 36S, 29E	71.50'	67.00'	65.00'
Nellie N.W., Lake 13, 36S, 29E	71.50'	67.00'	65.00'
Nellie S.E., Lake 13, 36S, 29E	71.50'	67.00'	65.00'
Olivia, Lake 6, 33S, 28E	117.50'	114.50'	113.00'
Pearl, Lake 6, 37S, 30E	87.00'	84.00'	82.00'
Persimmon, Lake 10, 36S, 29E	68.25'	65.00'	63.50'
Pioneer, Lake 11, 33S, 28E	108.00'	104.50'	103.00'
Pythias, Lake 2, 33S, 28E	101.00'	98.00'	95.00'
Red Beach Lake 15, 35S, 29E	76.50'	73.75'	72.75'
Red Water Lake 14, 36S, 29E	70.50'	67.50'	66.50'
Ruth, Lake 18, 35S, 29E	94.00'	91.50'	90.00'
Saddlebags, Lake 6, 37S, 30E	84.00'	81.00'	79.00'
Sebring, Lake 14, 34S, 28E	107.25'	104.50'	103.00'
Simmons, Lake 24, 36S, 29E	72.50'	68.00'	66.50'
Sirena, Lake 1, 37S, 29E	87.00'	84.00'	82.00'
Trout, Lake 34, 32S, 28E	101.00'	98.00'	95.00'

<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
<b>Location of Impoundment by County and Basin</b>	<b>High Level in Feet Above Mean Sea Level (msl)</b>	<b>Low Level in Feet Above Mean Sea Level (msl)</b>	<b>Extreme Low Level in Feet Above Mean Sea Level (msl)</b>
Unnamed Lake (B) 20, 37S, 30E	91.50'	88.50'	87.50'
Unnamed Lake (F) 24, 36S, 29E	78.00'	74.00'	72.00'
Viola, Lake 14, 33S, 28E	109.50'	105.75'	104.00'
Wolf Lake 24, 35S, 28E	92.50'	90.00'	88.00'
(j) In Hillsborough County Within the Alafia River Basin LAKES			
Carlton, Lake	93.50'	90.50'	88.00'
Edward Medard Reservoir	62.75'	57.50'	56.00'
Grady, Lake	39.00'	36.00'	34.00'
Hickory Hammock, Lake	32.25'	30.50'	29.00'
Unnamed Lake #2	56.00'	NO RECOMMENDATION	
Wimauma, Lake	86.75'	83.00'	81.00'
(k) In Hillsborough County Within the Hillsborough River Basin LAKES			
Bellows, Lake (East Lake)	23.75'	21.50'	19.00'
Burrell, Lake	50.00'	47.50'	45.00'
Commiston, Lake	63.00'	60.50'	59.00'
Eckles, Lake	32.50'	30.00'	28.00'
Egypt, Lake	37.50'	35.00'	32.50'
Gornto, Lake	38.50'	36.00'	34.00'
Hanna, Lake	62.50'	59.50'	58.25'
Hart, Lake	66.00'	64.00'	63.00'
Hog Island, Lake	66.00'	64.00'	61.00'
Hooker, Lake	45.00'	43.00'	42.00'
Kathy, Lake	43.50'	42.50'	42.00'
Keene, Lake	63.00'	60.50'	59.00'
Kell, Lake	66.00'	63.50'	62.50'
Long, Lake	50.25'	48.00'	46.00'
Long Pond	46.50'	44.00'	42.00'
Mud, Lake (Lake Walden)	115.00'	112.50'	110.50'
Thonotosassa, Lake	37.00'	34.50'	33.00'
Unnamed Lake	63.00'	60.50'	59.00'
Unnamed Lake	61.00'	58.50'	57.00'
Valrico, Lake	45.00'	42.50'	41.00'
Weeks, Lake	43.25'	41.00'	39.50'
(l) In Hillsborough County Within the Northwest Hillsborough Basin LAKES Sec. Twsp. Rng.			



<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
<b>Location of Impoundment by County and Basin</b>	<b>High Level in Feet Above Mean Sea Level (msl)</b>	<b>Low Level in Feet Above Mean Sea Level (msl)</b>	<b>Extreme Low Level in Feet Above Mean Sea Level (msl)</b>
<b>SWEETWATER CREEK WATERSHED</b>			
Avis, Lake 15, 28S, 18E	37.00'	34.50'	32.50'
Bay, Lake	46.75'	44.00'	42.50'
Boat, Lake	35.50'	33.75'	31.25'
Brooker, Lake	64.25'	61.00'	59.00'
Carroll, Lake	37.00'	34.50'	32.50'
Chapman, Lake	52.25'	49.50'	48.00'
Cooper, Lake	61.75'	59.75'	57.00'
Elaine, Lake 15, 28S, 18E	37.00'	34.50'	32.50'
Gass, Lake	49.50'	46.25'	44.50'
George, Lake	48.00'	45.00'	42.00'
Geraci, Lake	63.50'	61.50'	59.50'
Halls, Lake 3, 28S, 18E	50.00'	47.50'	46.00'
Lipsey, Lake	41.50'	39.00'	37.00'
Magdalene, Lake	50.00'	47.50'	46.00'
Thomas, Lake	63.50'	61.25'	59.25'
Twin, Lake	32.00'	30.00'	27.75'
White Trout, Lake	36.50'	34.00'	32.50'
<b>ROCKY CREEK WATERSHED</b>			
Armistead, Lake	44.00'	40.50'	39.00'
Browns, Lake	63.50'	60.75'	59.00'
Josephine, Lake	46.00'	42.75'	40.00'
LeClare, Lake	52.00'	49.50'	47.00'
Rock, Lake	46.00'	42.75'	40.00'
Starvation, Lake	53.00'	50.00'	48.00'
Turkey Ford, Lake	54.00'	51.50'	50.00'
<b>DOUBLEBRANCH CREEK WATERSHED</b>			
Hixon, Lake	36.50'	33.25'	31.00'
Unnamed Lake #1 2, 28S, 17E	37.50'	35.00'	34.50'
Unnamed Lake #2 2, 28S, 17E	37.50'	35.00'	34.50'
<b>BROOKER CREEK WATERSHED</b>			
Artillery, Lake 3, 27S, 17E	44.00'	40.50'	39.00'
Buck, Lake	35.00'	32.00'	29.50'
Elizabeth, Lake	53.00'	51.00'	49.00'
Fern, Lake	46.00'	43.00'	41.50'

<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
<b>Location of Impoundment by County and Basin</b>	<b>High Level in Feet Above Mean Sea Level (msl)</b>	<b>Low Level in Feet Above Mean Sea Level (msl)</b>	<b>Extreme Low Level in Feet Above Mean Sea Level (msl)</b>
Frances, Lake	40.50'	38.00'	36.00'
Island Ford, Lake	41.50'	39.00'	37.00'
James, Lake 23, 27S, 17E	46.50'	43.50'	42.00'
Keystone, Lake	42.00'	39.75'	39.00'
Little, Lake 23, 27S, 17E	46.50'	43.50'	42.00'
Raleigh, Lake	42.50'	38.00'	35.00'
Rogers, Lake	NO LEVELS RECOMMENDED		
Velburton, Lake	40.00'	37.25'	35.00'
<b>ANCLOTE RIVER WATERSHED</b>			
Hiawatha, Lake	50.50'	48.00'	45.00'
Osceola, Lake	46.50'	44.50'	42.50'
(m) In Lake County Within the Green Swamp Basin			
(n) In Levy County Within the Withlacoochee River Basin			
(o) In Manatee County Within the Manasota Basin			
(p) In Marion County Within the Withlacoochee River Basin			
Bonable, Lake S31, T15, R18	64.00'	61.50'	59.50'
Little Bonable, Lake S30, T15, R18	58.00'	55.50'	53.50'
Tiger, Lake S32, T15, R18	64.00'	61.50'	59.50'
(q) In Pasco County Within the Coastal Rivers Basin LAKES			
Crews, Lake S16, 24S, R18E	55.00'	52.00'	50.00'
Garden, Lake S16, T25S, R16E	19.00'	16.25'	15.75'
Richey, Lake S3, T26S, R16E	13.00'	10.00'	8.00'
Worrell, Lake (Bass Lake) S26, T25S, R16E	19.00'	16.25'	15.75'
(r) In Pasco County Within the Green Swamp Basin			
(s) In Pasco County Within the Hillsborough River Basin LAKES			
Catfish, Lake S30, T25, R19	68.00'	65.50'	63.50'

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Cow (East), Lake S19, T26S, R19E	78.50'	76.00'	75.00'
Floyd, Lake S36, T26, R19	68.50'	66.00'	64.00'
Gooseneck, Lake S29, T26, R19	73.50'	71.00'	69.00'
Hog (Joyce), Lake S19, T26S, R19E	76.50'	73.50'	72.50'
JoAnn, Lake S30, T26, R19	68.00'	65.50'	63.50'
Moody, Lake S10, T24S, R20E	110.00'	107.50'	105.50'
Myrtle, Lake S30, T26, R19	68.00'	65.50'	63.50'
Saxon, Lake S30, T26S, R19E	71.25'	69.00'	67.50'
Tampa (Turtle), Lake S32, T26, R19	65.50'	63.00'	61.00'
Toni, Lake S30, T26, R19	68.00'	65.50'	63.50'
Twin, Lake S28, T26, R19	67.50'	65.00'	63.00'
Unnamed Lake #26 S25, T26, R18	68.00'	65.50'	63.50'
(t) In Pasco County Within the Pinellas-Anclote River Basin LAKES			
Bass, Lake (Holiday) S34, T26E, R17S	48.75'	45.75'	45.00'
Big Lake Vienna 23, 26, 18	70.25'	67.00'	65.00'
Fishing, Lake S34, T26E, R17S	48.75'	45.75'	45.00'
Geneva, Lake (Mud) S26, T26E, R17S	50.00'	48.00'	46.00'
Little Moss (Como), Lake 35, 26, 18	66.00'	63.00'	62.00'
Minniola, Lake S34, T26E, R17S	50.00'	48.00'	46.00'
Moss, Lake 35, 26, 18	64.00'	61.50'	59.00'
Seminole, Lake S35, T26E, R17S	48.75'	46.00'	45.00'
Thomas, Lake 11, 26, 18	75.00'	72.50'	71.50'

<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
<b>Location of Impoundment by County and Basin</b>	<b>High Level in Feet Above Mean Sea Level (msl)</b>	<b>Low Level in Feet Above Mean Sea Level (msl)</b>	<b>Extreme Low Level in Feet Above Mean Sea Level (msl)</b>
Wistaria, Lake 2, 26, 18	74.00'	71.00'	69.00'
(u) In Pasco County Within the Withlacoochee River Basin LAKES			
(v) In Pinellas County Within the Pinellas-Anclote River Basin LAKES			
Lake Tarpon Sec.Twsp.Rng. 7, 27S, 16E 8, 27S, 16E 16, 27S, 16E 17, 27S, 16E 18, 27S, 16E 19, 27S, 16E 20, 27S, 16E 21, 27S, 16E 28, 27S, 16E 29, 27S, 16E 30, 27S, 16E 32, 27S, 16E 33, 27S, 16E 4, 28S, 16E	3.80'	2.20'	1.00'
(w) In Polk County Within the Alafia River Basin LAKES			
Scott, Lake	168.00'	165.00'	164.25'
(x) In Polk County Within the Green Swamp Basin LAKES			
Agnes, Lake	135.75'	134.75'	130.75'
Alfred, Lake S30, T27S, R26	130.75'	128.25'	126.25'
Arietta, Lake	144.00'	141.00'	138.00'
Camp, Lake	134.50'	132.00'	130.00'
Clearwater Lake	143.50'	141.00'	139.00'
Cummings, Lake S31, T27, R26	131.00'	127.50'	125.50'
Eva, Lake S29, T27, R26	131.50'	129.00'	127.00'
Grassy, Lake (Big Glades)	132.00'	129.50'	128.00'
Griffin, Lake S30, T27, R26	131.50'	129.00'	127.00'
Gum, Lake	131.00'	128.50'	126.00'
Haines, Lake	128.75'	126.50'	124.50'

<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
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Helene, Lake	144.00'	141.00'	139.00'
Juliana, Lake	132.50'	130.00'	127.50'
Little Lake Agnes	136.00'	133.00'	131.00'
Little Van, Lake	139.00'	136.50'	135.50'
Mattie, Lake	132.50'	130.00'	127.50'
Mud, Lake	141.50'	137.75'	136.00'
Myrtle, Lake	141.00'	138.50'	136.50'
Swoope, Lake	132.50'	130.00'	128.00'
Tennessee, Lake	134.00'	130.00'	128.00'
Van, Lake	132.75'	130.00'	128.00'
Whistle, Lake	137.50'	135.00'	133.75'
(y) In Polk County Within the Hillsborough River Basin LAKES			
Bonnet, Lake	148.00'	145.00'	142.50'
Hunter, Lake	162.75'	160.25'	159.00'
(z) In Polk County Within the Peace River Basin			
Ada, Lake S33, T28, R27	123.00'	120.00'	118.00'
Altamaha, Lake S11, T30, R27	122.50'	120.00'	118.00'
Amoret, Lake 24, 30, 27	115.25'	113.00'	111.00'
Ariana, Lake 3, 28, 25E	137.00'	134.50'	132.50'
Aurora, Lake 13, 30, 28	100.00'	97.00'	95.00'
Banana, Lake 10, 29, 24E	106.50'	103.50'	102.00'
Belle, Lake 11, 30, 27	120.00'	117.00'	115.00'
Bess, Lake 18, 29S, 27E	125.25'	123.00'	121.00'
Big Gum, Lake 26, 29, R28	95.00'	92.00'	89.00'
Blue, Lake S13, T28, R25	149.00'	146.50'	144.50'
Blue Lake 24, 30S, 27E	117.00'	114.00'	--
Bonny, Lake 20, 28S, 24E	130.50'	128.00'	126.00'
Buckeye, Lake S22, T28S, R26E	129.00'	126.00'	124.50'

<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
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Buffum, Lake 12, 31S, 26E	132.25'	129.25'	--
Cannon, Lake 19, 28S, 26E	132.00'	129.50'	127.00'
Connie, Lake 9, 28S, 26E	128.75'	126.50'	124.50'
Cooper (Worth) S02, T30, R27	123.50'	121.00'	119.00'
Crystal, Lake S02, T30, R27	121.25'	118.00'	115.00'
Crystal, Lake S21, T28, R27	122.00'	119.00'	117.00'
Crystal, Lake 23, 29S, 26E	129.50'	127.00'	125.00'
Cypress, Lake 36, 29, 28E	98.50'	95.00'	93.00'
Lake Daisy S6, T29, R27	130.00'	127.00'	126.00'
Lake Deer 25, 28, 25E	140.75'	138.50'	136.50'
Dell, Lake S28, T28, R27	123.75'	121.50'	119.50'
Lake Dexter S2, T29, R26	132.00'	129.00'	127.50'
Easy, Lake 19, 30, 28	115.25'	113.00'	111.00'
Echo, Lake S05, T28, R26	131.00'	128.00'	126.00'
Effie, Lake 3, 30, 27	118.00'	115.00'	113.00'
Elbert, Lake S22, T28, R26	135.50'	133.00'	131.50'
Eloise, Lake 3, 29S, 26E	132.00'	129.50'	127.00'
Fannie, Lake 11, 28S, 26E	125.75'	123.50'	120.00'
Lake Florence S35, T28, R26	128.75'	127.00'	125.00'
Lake Fox S6, T29, R27	135.00'	132.00'	131.00'
Garfield, Lake 5, 30, 26E	104.75'	101.00'	100.00'
Gator, Lake 26, 30S, 26E	133.00'	130.75'	128.50'
George, Lake S06, T28, R26	130.00'	127.50'	125.50'

<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
<b>Location of Impoundment by County and Basin</b>	<b>High Level in Feet Above Mean Sea Level (msl)</b>	<b>Low Level in Feet Above Mean Sea Level (msl)</b>	<b>Extreme Low Level in Feet Above Mean Sea Level (msl)</b>
Gibson, Lake 25, 27S, 23E	143.50'	141.50'	141.50'
Gordon, Lake S16, T28, R27	119.00'	116.00'	114.00'
Lake Grassy 2, 29, 25E	129.00'	126.50'	125.50'
Lake Gross (Grassy) S14, T29, R26	136.00'	133.50'	132.00'
Hamilton, Lake 18, 28S, 27E	121.50'	119.00'	117.25'
Hancock, Lake 8, 29S, 25E	99.00'	96.00'	94.00'
Hart, Lake 24, 29S, 26E	124.50'	122.00'	120.00'
Hartridge, Lake 8, 28S, 26E	132.00'	129.50'	127.00'
Henry, Lake 16, 31S, 26E	159.00'	156.00'	154.00'
Henry, Lake 36, 27S, 26E	126.50'	124.50'	122.50'
Hickory, Lake 17, 32S, 28E	98.50'	96.00'	94.00'
Howard, Lake 30, 28S, 26E	132.00'	129.50'	127.00'
Ida, Lake 28, 31S, 28E	79.00'	76.50'	75.00'
Ida, Lake S17, T28, R26	135.25'	132.00'	130.50'
Idyl, Lake S16, T28, R26	134.00'	131.50'	130.00'
Idylwild, Lake 18, 28S, 26E	132.00'	129.50'	127.00'
Jessie, Lake 12, 28S, 25E	132.00'	129.50'	127.00'
Josephine, Lake 13, 30, 27	120.00'	116.50'	114.50'
Josephine, Lake S27, T28, R27	121.50'	118.00'	116.50'
Lee, Lake S16, T28, R27	123.50'	121.50'	120.00'
Lena, Lake 9, 28S, 25E	137.00'	134.50'	132.50'
Leonore, Lake 10, 31S, 28E	87.00'	84.50'	83.00'
Link, Lake 27, 28S, 26E	128.00'	125.00'	123.00'

<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
<b>Location of Impoundment by County and Basin</b>	<b>High Level in Feet Above Mean Sea Level (msl)</b>	<b>Low Level in Feet Above Mean Sea Level (msl)</b>	<b>Extreme Low Level in Feet Above Mean Sea Level (msl)</b>
Little Aurora	100.50'	98.00'	96.00'
Little Gum, Lake 35, 29S, 28E	96.50'	94.00'	92.00'
Little Lake Hamilton 5, 28S, 27E	121.50'	119.00'	117.25'
LuLu, Lake 4, 29S, 26E	132.00'	129.50'	127.00'
Mariam, Lake 27, 28S, 26E	124.75'	122.75'	121.00'
Marie, Lake S27, T28, R27	121.00'	118.00'	116.00'
Martha, Lake S21, T28, R26	142.00'	139.00'	137.00'
Maude, Lake S21, T28, R26	140.50'	137.50'	136.00'
May, Lake 29, 28S, 26E	132.00'	129.50'	127.00'
Medora, Lake S36, T27, R25	138.00'	134.50'	133.00'
Menzie, Lake S28, T28, R27	122.00'	120.00'	118.00'
Middle Lake Hamilton 7, 28S, 27E	121.50'	119.00'	117.25'
Lake Millsite 11, 29, 25E	123.50'	121.00'	119.00'
Mirror, Lake 20, 28S, 27E	132.00'	129.50'	127.00'
Moody, Lake 17, 31S, R28E	93.50'	91.00'	89.00'
Myrtle, Lake 19, 29S, 27E	118.50'	116.50'	114.50'
Lake Ned S1, T29S, R26	128.50'	126.00'	124.00'
North Lake Wales S01, T30, R27	115.00'	112.00'	110.00'
Otis, Lake 28, 28S, 25E	128.00'	125.00'	123.00'
Pansy, Lake S08, T28, R26	129.00'	126.50'	124.50'
Parker, Lake 32, 29S, 27E	122.00'	119.50'	117.50'
Parks, Lake 36, 29S, 28E	102.50'	100.00'	98.00'
Polecat, Lake 27, 30S, 26E	142.00'	139.50'	137.50'



<b>Table 8-3 Guidance Water Levels adopted prior to August 7, 2000</b>			
<b>Location of Impoundment by County and Basin</b>	<b>High Level in Feet Above Mean Sea Level (msl)</b>	<b>Low Level in Feet Above Mean Sea Level (msl)</b>	<b>Extreme Low Level in Feet Above Mean Sea Level (msl)</b>
Reedy, Lake 35, 31S, 28E	79.75'	77.25'	75.25'
Reeves, Lake 13, 29S, 26E	124.50'	122.00'	120.00'
Lake River S1, T29, R26	139.50'	136.00'	134.00'
Rochelle, Lake 4, 28S, 26E	128.75'	126.50'	124.50'
Round, Lake 13, 29S, 26E	129.25'	126.50'	124.50'
Roy, Lake 34, 28S, 26E	132.00'	129.50'	127.00'
Ruby, Lake 12, 29S, 26E	125.25'	123.00'	121.00'
Ruth, Lake S28, T28, R27	121.50'	117.50'	115.50'
Saddlebag, Lake 6, 30S, 29E	105.00'	102.00'	100.00'
Saint Anne Lake 14, 30, 28	96.00'	93.00'	91.00'
Sanitary (Mariana), Lake S01, T28, R25	137.50'	135.00'	133.00'
Sara, Lake S17, T28, R27	121.50'	119.00'	117.25'
Scott, Lake 18, 29S, 24E	168.00'	165.00'	164.25'
Lake Sears 36, 28, 25E	141.00'	138.00'	136.00'
Serena, Lake S12, T30, R27	118.00'	115.00'	113.00'
Shipp, Lake 32, 28S, 26E	132.00'	129.50'	127.00'
Silver, Lake 5, 32S, 28E	103.00'	100.50'	98.50'
Silver, Lake S20, T28, R26	146.50'	144.00'	142.00'
Smart, Lake 9, 28S, 26E	128.75'	126.50'	124.50'
Lake Spirit 35, 28, 25E	131.50'	129.00'	127.00'
Spring, Lake 20, 28S, 27E	132.00'	129.50'	127.00'
Streety, Lake 24, 32S, 27E	105.50'	102.50'	101.00'
Summit, Lake 34, 28S, 26E	132.00'	129.50'	127.00'

**Table 8-3 Guidance Water Levels adopted prior to August 7, 2000**

<b>Location of Impoundment by County and Basin</b>	<b>High Level in Feet Above Mean Sea Level (msl)</b>	<b>Low Level in Feet Above Mean Sea Level (msl)</b>	<b>Extreme Low Level in Feet Above Mean Sea Level (msl)</b>
Sunset, Lake 10, 30, 28	98.00'	95.50'	93.50'
Surveyors, Lake 26, 30S, 26E	133.00'	130.75'	128.50'
Thomas, Lake 1, 30E, 28E	99.50'	97.00'	95.00'
Lake Thomas 35, 28, 25E	132.00'	128.00'	126.00'
Tractor, Lake 14, 30, 27	123.25'	121.00'	119.00'
Trask, Lake S22, T28, R27	113.00'	108.00'	106.00'
Trout, Lake 34, 32S, 28E	101.00'	98.00'	95.00'
Twin, Lakes S11, T30, R27	123.75'	120.00'	118.00'
Walker, Lake 21, 30S, 26E	141.00'	137.00'	135.00'
Warren, Lake S11, T30, R27	123.50'	121.00'	119.00'
Weader (Weaver), Lake S03, T30, R27	121.75'	119.00'	117.00'
Winterset, Lake 11, 29S, 26E	132.00'	129.50'	127.00'
(aa) In Sarasota County Within the Manasota Basin			
(bb) In Sumter County Within the Green Swamp Basin			
(cc) In Sumter County Within the Withlacoochee River Basin <b>LAKES</b>			
Cherry, Lake S24, T18S, R23E	55.00'	53.00'	51.00'

Rulemaking Authority 373.044, 373.113, 373.171, FS. Law Implemented 373.036, 373.0361, 373.042, 373.0421, 373.086, FS. History – New 6-7-78, Amended 1-22-79, 4-27-80, 10-21-80, 12-22-80, 3-23-81, 4-14-81, 6-4-81, 10-15-81, 11-23-81, 1-5-82, 3-11-82, 5-10-82, 7-4-82, 9-2-82, 11-8-82, 1-10-83, 4-3-83, 7-5-83, 9-5-83, 10-16-83, 12-12-83, 5-8-84, 7-8-84, 12-16-84, 2-7-85, 5-13-85, 6-26-85, 11-3-85, 3-5-86, 6-16-86, Formerly 16J-8.678, Amended 9-7-86, 2-12-87, 9-2-87, 2-18-88, 6-27-88, 2-22-89, 3-23-89, 9-26-89, 7-26-90, 10-30-90, 3-3-91, 9-30-91, 10-7-91, 7-26-92, 3-1-93, 5-11-94, 6-6-96, 2-23-97, 8-7-00, 1-8-04, 12-21-04 (13), 12-21-04 (13), 6-5-05, 5-2-06, 1-1-07, 2-12-07, 1-10-08, 2-18-08, 4-7-08, 5-20-08, 5-10-09.

#### **40D-8.626 Minimum Aquifer Levels.**

(1) Hillsborough County North of State Road 60, and Pasco and Pinellas Counties.

Salt Water Intrusion within this area has not been regional in nature, but is of localized concern in some coastal areas. The District has chosen the North Pinellas, Southwest Pasco and Northwest Hillsborough Counties region as the priority area for the establishment of Salt Water Intrusion Minimum Aquifer Levels (SWIMAL) to prevent

regional seawater intrusion because of the availability of data and the potential for future intrusion. The SWIMALs for the Upper Floridan aquifer shall be established as follows:

- (a) The location of the SWIMAL sites serves to monitor the area where early signs of regional salt water intrusion can best be detected.
- (b) The SWIMALs shall be established by setting levels in coastward transects of wells whose potentiometric levels define the Long-term average hydraulic gradient of the Upper Floridan aquifer potentiometric surface.
- (c) The Salt Water Intrusion Minimum Aquifer Levels are as set forth in the following table. Aquifer levels are deemed to be below the SWIMAL when the Long-term average elevation is below the SWIMAL.

<b>TABLE 8-4 SALT WATER INTRUSION MINIMUM AQUIFER LEVELS</b>	
<b>Well Name</b>	<b>Saltwater Intrusion Minimum Aquifer Level (feet NGVD)</b>
Sheldon Road Deep (RMP-16D)	7.7
RMP-13D	16.4
RMP-8D1	26.8
Tarpon Rd Deep	9.9
SWI-18S	14.8
201-M	13.7
EW 2S Deep	10.3

(2) SWUCA Salt Water Intrusion Minimum Aquifer Level

(a) The District has determined that ground water withdrawals in the SWUCA have contributed to water level declines that advance saltwater intrusion. The coastal portion of the SWUCA in southern Hillsborough, Manatee and northern Sarasota counties (the Most Impacted Area or MIA) is a priority area for the establishment of minimum aquifer levels because of its proximity to the saltwater interface and the large effect on interface movement caused by lowering of the potentiometric surface in this area. The Salt Water Intrusion Minimum Aquifer Level (SWIMAL) is established to stabilize regional water level declines so that long-term management efforts can slow the rate of regional saltwater intrusion in the MIA. This is based on an average value to address the regional nature of the problem and avoids the potential for localized lowering of a minimum level.

(b) The SWIMAL over the surface of the MIA is 13.1 feet (National Geodetic Vertical Datum of 1929 or NGVD 1929). The SWIMAL is derived using the method set forth in (2)(c) below.

(c) The reference period for which the SWIMAL is calculated is the period 1990 through 1999. Ten wells from within or adjacent to the MIA (Table 8-5), are used to determine the minimum level. The annual average elevation for each of the years 1990 through 1999 is established utilizing monthly water level data for each of the wells. The annual averages over the period are then used to calculate the decadal average for the period. The 1990-99 average Upper Floridan aquifer potentiometric surface of the MIA is constructed by calculating the average of these annual average values weighted spatially using the Thiessen polygon methodology. The resulting Minimum Level over the surface of the MIA is 13.1 feet (National Geodetic Vertical Datum of 1929).

Table 8-5: Wells utilized to determine the Salt Water Intrusion Minimum Aquifer Level.

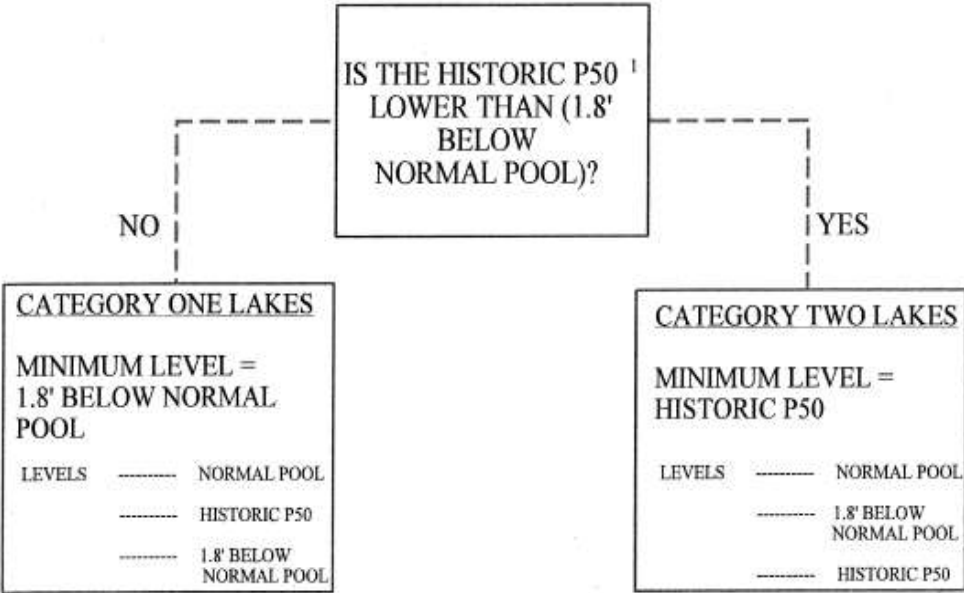
Site Number	Sequence Number	Site Name
564	0	KIBLER DEEP
87		ROMP 123 Hawthorn/Ocala HAWTHORN/OCALA
10914	0	ROMP 50 TAMPA/OCALA
10883	0	ROMP TR 10-2 TAMPA
287	0	ROMP TR 7-1 TAMPA
10926	0	ROMP TR 7-4 Suwannee/Ocala SUWANNEE/OCALA
10920	0	ROMP TR 8-1 Upper Avon Park PARK
10909	1	ROMP TR 9-3 Ocala/Avon Park
561	0	SARASOTA 9 DEEP
456	0	VERNA T 0-4

(d) Implementation of The SWUCA Salt Water Intrusion Minimum Aquifer Level - The SWIMAL shall be used to gauge the status of the ground water resource with respect to saltwater intrusion in the region. Determining the status of the rate of movement of the saltwater interface shall be based on comparison of the average Floridan aquifer water level over the MIA with the Floridan aquifer minimum level over ten year moving windows of time. The ten year average water level for a particular year shall be calculated as the average water level for that year and the previous nine years. The process of calculating the ten year average is the same as described in section (c) above for calculating the minimum level.

(e) Compliance - The objective of the District's management efforts is for the ten year moving annual average water level to fluctuate in a range at or above the minimum level. The minimum level is achieved if the ten year moving annual average water level has fluctuated at or above the minimum level for a minimum of five consecutive years. Once the minimum level is achieved, the minimum level is no longer met when the ten year moving annual average water level falls below the minimum level for more than two consecutive years. Then, the five consecutive years above the minimum level is again required for compliance.

Specific Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.036, 373.0361, 373.042, 373.0421, FS. History - New 8-7-00, Amended 1-1-07.

FIGURE 8-1: METHOD FOR CALCULATION MINIMUM LAKE LEVEL



<sup>1</sup> SEE FIGURE 3 FOR CALCULATING HISTORIC P50

FIGURE 8-2: METHOD FOR CALCULATION OF THE HIGH GUIDANCE LEVEL (HGL)

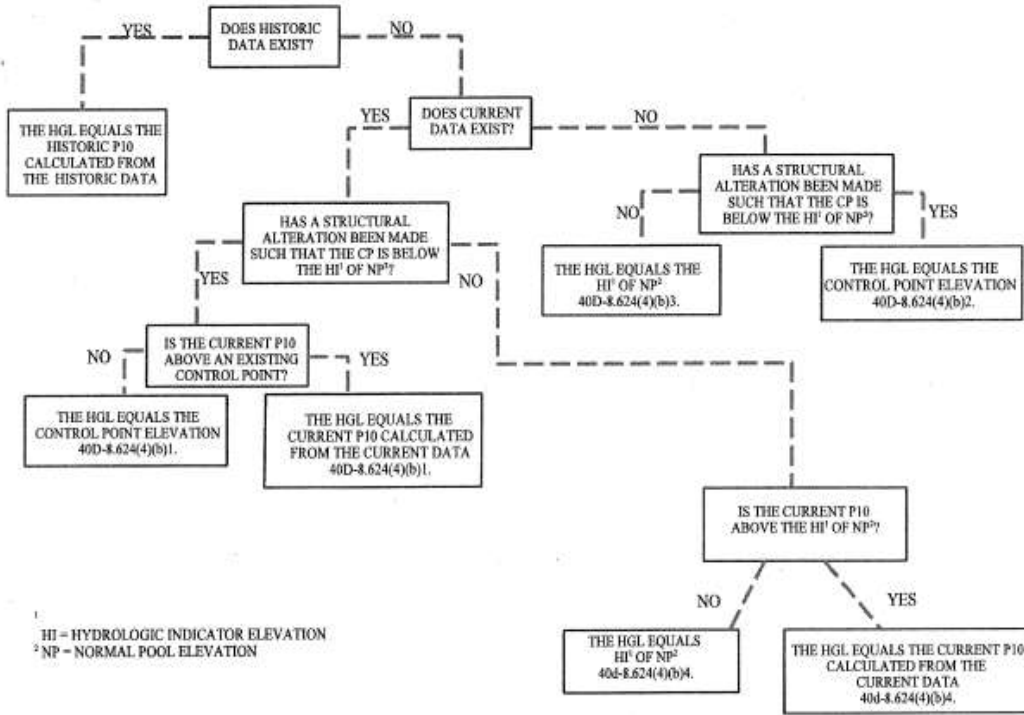
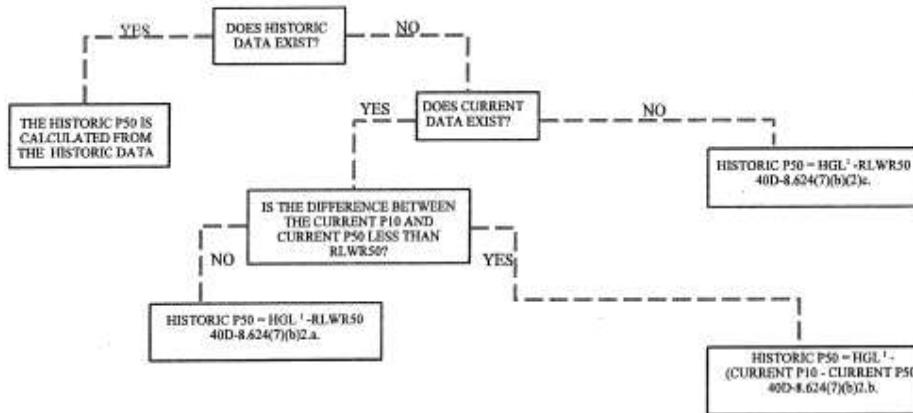


FIGURE 8-3: METHOD FOR CALCULATION OF THE HISTORIC P50



SEE FIGURE 2 FOR METHOD FOR CALCULATION OF HIGH GUIDANCE LEVEL (HGL)