

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

CHAPTER 40C-8, F.A.C.

MINIMUM FLOWS AND LEVELS

**Revised
May 24, 2007**



ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
MINIMUM FLOWS AND LEVELS

- 40C-8.011 Policy and Purpose.
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and Groundwater Levels

40C-8.011 Policy and Purpose.

(1) This chapter establishes minimum flows and levels for surface watercourses and minimum levels for groundwater at specific locations within the St. Johns River Water Management District.

(2) Where appropriate, minimum flows and levels may reflect seasonal and long term variations and may include a schedule of variations and other measures appropriate for the protection of nonconsumptive uses of a water resource.

(3) In establishing minimum flows and levels, the Governing Board shall use the best information and methods available to establish limits which prevent significant harm to the water resources or ecology. The Governing Board will also consider, and at its discretion provide for, the protection of nonconsumptive uses, including navigation, recreation, fish and wildlife habitat, and other natural resources.

(4) Where a minimum flow has been established for a specific watercourse or a minimum level has been established for a specific surface water body, the flow or level is expressed as a fluctuation regime which will include a series of minimum flows or levels reflecting a temporal hydrologic regime that will prevent significant harm to water resources or ecology.

(5) Minimum flows and levels prescribed in this chapter are used as a basis for imposing limitations on withdrawals of groundwater and surface water, for reviewing proposed surface water management and storage systems and stormwater management systems, and for imposing water shortage restrictions. The limitations and review criteria which relate to these minimum flows and levels are prescribed in other rule chapters of the District.

Specific Authority: 373.044, 373.113 FS. Law Implemented: 373.042, 373.415 FS. History--New 9-16-92. Amended 8-17-94.

40C-8.021 Definitions. Unless the context indicates otherwise, the following terms shall have the following meanings.

(1) "Blackwater Creek" means that watercourse designated Blackwater Creek within the Wekiva River Hydrologic Basin as defined by Rule 40C- 41.023, F.A.C.

(2) "Determined minimum surface water flow" means a flow, expressed in cubic feet per second combined with a temporal element. The temporal element may be specifically expressed as a duration and return interval or may be generally expressed as a hydroperiod category.

(3) "Determined minimum surface water level" means an elevation in feet NGVD combined with a temporal element. The temporal element, for purposes of this chapter may be specifically expressed as a duration and return interval or may be generally expressed as a hydroperiod category.

(4) "Intermittently exposed" means a hydroperiod category where surface water is present throughout the year except in years of extreme drought. In most lakes this category does not typically support emergent vegetation and would be characterized as open water or floating-leaved deep marsh. Water levels causing inundation are expected to occur more than ninety per cent of the time over a long term period of record.

(5) "Intermittently flooded" means a hydroperiod category where the substrate is usually exposed, but surface water is present with variable frequency and duration. Water levels causing inundation are expected to occur on average approximately once every ten years or more. Years may intervene between periods of inundation. On recharge lakes (sandhill type lakes), the dominant vegetation growing at this elevation can change as soil moisture conditions change, from a dominance of upland species to wetland species or the reverse. Duration of inundation is on the order of several months. Water levels are expected to inundate less than two per cent of the time over a long term period of record.

(6) "Long term or "long term period of record" means at least a 30 year continuous period.

(7) "Minimum frequent high" means a chronically high surface water level or flow with an associated frequency and duration that allows for inundation of the floodplain at a depth and duration sufficient to maintain wetland functions.

(8) "Minimum infrequent high" means an acutely high surface water level or flow with an associated frequency and duration that is expected to be reached or exceeded during or immediately after periods of high rainfall so as to allow for inundation of a floodplain at a depth and duration sufficient to maintain biota and the exchange of nutrients and detrital material.

(9) "Minimum average" means the surface water level or flow necessary over a long period to maintain the integrity of hydric soils and wetland plant communities.

(10) "Minimum frequent low" means a chronically low surface water level or flow that generally occurs only during periods of reduced rainfall. This level is intended to prevent deleterious effects to the composition and structure of floodplain soils, the species composition and structure of floodplain and instream biotic communities, and the linkage of aquatic and floodplain food webs.

(11) "Minimum infrequent low" means an acutely low surface water level or flow with an associated frequency and duration which may occur during periods of extreme drought below which there will be a significant negative impact on the biota of the surface water which includes associated wetlands.

(12) "NGVD" means National Geodetic Vertical Datum of 1929.

(13) "Permanently flooded" means a hydroperiod category where water covers the land surface throughout the year in all years. Vegetation, if present, is composed of aquatic macrophytes.

(14) "Phased Restriction" means the level or flow (based on the past 30 consecutive day average level or flow) at which a water use shortage phase (Phase I - IV as defined by 40C-21.251, F.A.C.), is declared and its associated restrictions imposed.

(15) "Seasonally flooded" means a hydroperiod category where surface water is typically present for extended periods (30 days or more) during the growing season, resulting in a predominance of submerged or submerged and transitional wetland species. During extended periods of normal or above normal rainfall, lake levels causing inundation are expected to occur several weeks to several months every one to two years.

(16) "Semi-permanently flooded" means a hydroperiod category where surface water inundation persists in most years. When surface water is absent the water table is usually near the

land surface. In many lakes with emergent marshes this water level is near the lower elevation that supports emergent marsh or floating vegetation and peat substrates, or other highly organic hydric substrates. This characterization may not be true for herbaceous wetlands around sandhill type lakes, which often have emergent vegetation that follows declining water levels to below the lower elevation of peat substrate. Water levels causing inundation are expected to occur approximately eighty percent of the time over a long term period of record. Exposure of these ground elevations are expected to re-occur, on average, about every five to ten years for extended periods (several or more months) during moderate droughts.

(17) "Temporarily Flooded" means a hydroperiod category where surface water is present or the substrate is flooded for brief periods (up to several weeks) approximately every five years. Plants of upland and wetland species are characteristic. The composition of the vegetation at this water level is dependent upon whether the flooding predominantly occurs in the growing season, whether seepage from higher elevations is pronounced, and the nature of the soil. Lake water levels are expected to equal or exceed this elevation five per cent of the time or less over a long term period of record.

(18) "Typically saturated" means a hydroperiod category where for extended periods of the year the water level should saturate or inundate. This results in saturated substrates for periods of one-half year or more during non-flooding periods of typical years. Water levels causing inundation are expected to occur fifty to sixty per cent of the time over a long term period of record. This water level is expected to have a recurrence interval, on the average, of one or two years over a long term period of record. Obligate wetland plant species are expected to be predominate near this water level.

(19) "Wekiva River" means that watercourse designated Wekiva River within the Wekiva River Hydrologic Basin as defined by Rule 40C-41.023, F.A.C.

Specific Authority: 373.044, 373.113 FS. Law Implemented: 373.042, 373.415 FS. History--New 9-16-92. Amended 8-17-94, 6-8-95, 3-19-02.

40C-8.031 Minimum Surface Water Levels and Flows and Groundwater Levels.

(1) The following minimum surface water levels and flows and minimum groundwater levels are established:

(a) Wekiva River at the SR 46 Bridge.

	Level (ft NGVD)	Flow (cfs)	Duration (days)	Return Interval (years)
Minimum Infrequent High	9.0	880	≥7	≤5
Minimum Frequent High	8.0	410	≥30	≤2
Minimum Average	7.6	240	≤180	≥1.7
Minimum Frequent Low	7.2	200	≤90	≥3
Phase 1 Restriction	7.0	190	NA	NA
Phase 2 Restriction	6.9	180	NA	NA
Phase 3 Restriction	6.7	160	NA	NA
Phase 4 Restriction	6.5	150	NA	NA
Minimum Infrequent Low	6.1	120	≤7	≥100

(b) Wekiva River Minimum Groundwater Levels and Spring Flows

	Head (ft NGVD)	Discharge (cfs)
Messant Spring	32	12
Seminole Spring	34	34
Rock Spring	31	53
Wekiva Spring	24	62
Miami Spring	27	4
Sanlando Spring	28	15
Starbuck Spring	31	13
Palm Spring	27	7

(c) Black Water Creek at the SR 44 Bridge

	Level (ft NGVD)	Flow (cfs)	Duration (days)	Return Interval (years)
Minimum Infrequent High	27.0	340	≥7	≤5
Minimum Frequent High	25.8	145	≥30	≤2
Minimum Average	24.3	33	≤180	≥1.7
Minimum Frequent Low	22.8	2.5	≤90	≥15
Phase 1 Restriction	22.7	2	NA	NA
Phase 2 Restriction	22.5	1	NA	NA
Phase 3 Restriction	22.4	0.6	NA	NA
Phase 4 Restriction	22.3	0.3	NA	NA
Minimum Infrequent Low	21.9	0	≤7	≥100

(d) St. Johns River 1.5 miles downstream of Lake Washington weir

	Level (ft NGVD)	Flow (cfs)	Hydroperiod Category
Minimum Frequent High	15.3	1,450	Seasonally flooded
Minimum Average	12.7	240	Typically saturated
Minimum Frequent Low	11.3	28	Semipermanently flooded

(e) Taylor Creek 1.7 miles downstream of structure S-164

	Flow (cfs)	Hydroperiod Category
Minimum Frequent High	95	Seasonally flooded
Minimum Average	17	Typically saturated
Minimum Frequent Low	0.5	Semipermanently flooded

(f) St. Johns River at SR 44 near DeLand, Volusia County.

	Level (ft NGVD)	Flow (cfs)	Duration	Return Interval
Minimum Frequent High	1.9	4600	≥30 days	≤3 years
Minimum Average	0.8	2050	≤180 days	≥1.5 years
Minimum Frequent Low	0.3	1100	≤120 days	≥5 years

(g) Blue Spring, Volusia County

Minimum Long Term Mean	Flow Cfs
December 3, 2006 through March 31, 2009	133
April 1, 2009 through March 31, 2014	137
April 1, 2014 through March 31, 2019	142
April 1, 2019 through March 31, 2024	148
After March 31, 2024	157

(h) St. Johns River at SR50 in Orange and Brevard Counties.

	Level (ft NGVD)	Flow (cfs)	Duration (days)	Return Interval (years)
Minimum Frequent High	8.1	1950	30	2
Minimum Average	5.9	580	180	1.5
Minimum Frequent Low	4.2	140	120	5
Minimum Infrequent Low	2.7	43	60	50

(i) St. Johns River at Lake Monroe in Seminole and Volusia Counties.

	Level (ft NGVD)	Duration (days)	Return Interval (years)
Minimum Frequent High	2.8	30	2
Minimum Average	1.2	180	1.5
Minimum Frequent Low	0.5	120	5

(2) The following minimum surface water levels are established:

LAKE NAME	COUNTY	HYDROPERIOD CATEGORY	MINIMUM INFREQUENT HIGH	MINIMUM FREQUENT HIGH	MINIMUM AVERAGE LEVEL	MINIMUM FREQUENT LOW	MINIMUM INFREQUENT LOW
(a) APSHAWA NORTH	Lake	Seasonally Flooded Typically Saturated Semipermanently Flooded		85.0	83.3	81.3	
(b) APSHAWA SOUTH	Lake	Seasonally Flooded Typically Saturated Semipermanently Flooded		86.0	84.7	83.2	
(c) ARGENTA	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		50.1	47.7	46.3	
(d) ASHBY	Volusia	Seasonally Flooded Semipermanently Flooded		13.8		11.1	
(e) BANANA	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		38.0	36.2	34.4	
(f) BELL	Putnam	Temporarily Flooded Typically Saturated Semipermanently Flooded		42.5	40.5	38.7	
(g) BIG	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		26.1	25.0	23.7	
(h) BIRD POND	Putnam	Temporarily Flooded Typically Saturated Semipermanently Flooded		41.8	39.5	38.1	
(i) BLUE POND	Clay	Temporarily Flooded Typically Saturated Semipermanently Flooded		174.1	173.3	171.7	
(j) BOGGY MARSH	Lake	Seasonally Flooded Typically Saturated Semipermanently Flooded		117.3	115.9	114.5	
(k) BOWERS	Marion	Temporarily Flooded Typically Saturated Semipermanently Flooded		57.1	54.0	52.7	
(l) BRANTLEY	Seminole	Seasonally Flooded Typically Saturated Semipermanently Flooded		46.3	45.6	44.1	
(m) BROOKLYN	Clay	Temporarily Flooded Typically Saturated Semipermanently Flooded		114.6	108.0	101.0	
(n) BROWARD	Putnam	Temporarily Flooded Typically Saturated Semipermanently Flooded		40.0	38.25	36.5	

LAKE NAME	COUNTY	HYDROPERIOD CATEGORY	MINIMUM INFREQUENT HIGH	MINIMUM FREQUENT HIGH	MINIMUM AVERAGE LEVEL	MINIMUM FREQUENT LOW	MINIMUM INFREQUENT LOW
(o) BURKETT	Orange	Seasonally Flooded Typically Saturated Semipermanently Flooded		53.5	52.6	51.2	
(p) CHARLES	Marion	Seasonally Flooded Typically Saturated Semipermanently Flooded		40.2	39.3	37.9	
(q) CHERRY	Lake	Seasonally Flooded Typically Saturated Semipermanently Flooded		96.0	94.9	93.4	
(r) CLEAR	Putnam	Temporarily Flooded Typically Saturated Semipermanently Flooded		37.4	36.4	34.9	
(s) COLBY	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		28.3	26.6	25.2	
(t) COMO	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		38.0	36.2	34.4	
(u) COMO, LITTLE LAKE	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		38.0	36.6	35.2	
(v) COWPEN	Putnam	Temporarily Flooded Typically Saturated Semipermanently Flooded		89.1	85.7	84.2	
(w) COW POND	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		40.5	39.8	37.6	
(x) COON POND	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		35.7	34.6	33.1	
(y) CRYSTAL/ BAKER	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		35.5	33.9	33.0	
(z) DAUGHARTY	Volusia	Temporarily Flooded Typically Flooded Semipermanently Flooded		44.8	42.6	41.2	
(aa) DAVIS	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		36.2	35.4	34.0	
(bb) DEEP	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		35.0	33.1	32.2	
(cc) DIAS	Volusia	Seasonally Flooded Typically Flooded Semipermanently Flooded		34.6	33.5	32.2	
(dd) DISSTON	Flagler	Seasonally Flooded Typically Flooded Semipermanently Flooded		13.8	13.2	12.5	

LAKE NAME	COUNTY	HYDROPERIOD CATEGORY	MINIMUM INFREQUENT HIGH	MINIMUM FREQUENT HIGH	MINIMUM AVERAGE LEVEL	MINIMUM FREQUENT LOW	MINIMUM INFREQUENT LOW
(ee) DORR	Lake	Seasonally Flooded Typically Saturated Semipermanently Flooded		43.5	43.1	42.1	
(ff) DREAM POND	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		49.0	47.5	46.0	
(gg) DRUDY	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		42.1	40.6	39.1	
(hh) ECHO	Putnam	Seasonally Flooded Typically Flooded Semipermanently Flooded		38.8	36.7	35.2	
(ii) EMMA	Lake	Seasonally Flooded Typically Saturated Semipermanently Flooded		94.1	92.5	91.1	
(jj) EMPORIA	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		38.9	35.8	34.3	
(kk) ESTELLA	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		38.6	37.2	36.5	
(ll) FOX	Brevard	Temporarily Flooded Typically Saturated Semipermanently Flooded		16.7	15.3	13.8	
(mm) GENEVA	Clay	Seasonally Flooded Typically Saturated Semipermanently Flooded		103.0	101.0	98.5	
(nn) GEORGES LAKE	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		98.4	97.8	97.0	
(oo) GERTIE	Volusia	Temporarily Flooded Typically Saturated Semipermanently Flooded		27.5	25.6	23.3	
(pp) GORE	Flagler	Seasonally Flooded Typically Saturated Semipermanently Flooded		21.1	20.6	19.2	
(qq) GRANDIN	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		81.8	81.3	80.1	
(rr) HALFMOON	Marion	Seasonally Flooded Typically Saturated Semipermanently Flooded		49.7	47.9	46.5	
(ss) HELEN	Volusia	Temporarily Flooded Typically Saturated Semipermanently Flooded		46.1	44.2	43.6	
(tt) HIRES	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		41.0	39.5	38.0	

LAKE NAME	COUNTY	HYDROPERIOD CATEGORY	MINIMUM INFREQUENT HIGH	MINIMUM FREQUENT HIGH	MINIMUM AVERAGE LEVEL	MINIMUM FREQUENT LOW	MINIMUM INFREQUENT LOW
(uu) HOKEY	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		35.4	33.7	32.3	
(vv) HOPKINS PRAIRIE	Marion	Seasonally Flooded Typically Saturated Semipermanently Flooded		25.8	23.4	22.0	
(ww) HOWELL	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		34.5	33.6	31.8	
(xx) HOWELL	Seminole	Seasonally Flooded Typically Saturated Semipermanently Flooded		53.7	52.9	51.5	
(yy) INDIAN	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		37.0	36.1	34.4	
(zz) IRMA	Orange	Seasonally Flooded Typically Saturated Semipermanently Flooded		55.1	54.8	53.4	
(aaa) KERR	Marion	Seasonally Flooded Typically Saturated Semipermanently Flooded		24.4	22.9	21.5	
(bbb) LIZZIE	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		43.9	42.7	41.7	
(ccc) LOUISA	Lake	Seasonally Flooded Typically Saturated Semipermanently Flooded		96.5	95.4	94.0	
(ddd) LOWER LAKE LOUISE	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		31.8	31.2	29.7	
(eee) LOWERY	Polk	Temporarily Flooded Typically Saturated Semipermanently Flooded		130.0	128.0	126.5	
(fff) LUCY	Lake	Seasonally Flooded Typically Saturated Semipermanently Flooded		94.1	92.5	91.1	
(ggg) MAGNOLIA	Clay	Seasonally Flooded Typically Saturated Semipermanently Flooded		124.7	124.2	121.4	
(hhh) MALL, LITTLE LAKE	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		38.7	36.8	35.2	
(iii) MARGARET	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		35.2	34.5	32.5	
(jjj) MARTHA	Orange	Seasonally Flooded Typically Saturated Semipermanently Flooded		53.5	52.6	51.2	

LAKE NAME	COUNTY	HYDROPERIOD CATEGORY	MINIMUM INFREQUENT HIGH	MINIMUM FREQUENT HIGH	MINIMUM AVERAGE LEVEL	MINIMUM FREQUENT LOW	MINIMUM INFREQUENT LOW
(kkk) MARVIN	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		38.6	37.3	36.3	
(lll) MCGRADY	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		41.5	39.9	37.8	
(mmm) MCKASEL	Putnam	Temporarily Flooded Typically Saturated Semipermanently Flooded		36.7	35.5	34.1	
(nnn) MELROSE	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		105.2	104.2	102.8	
(ooo) MILLS	Seminole	Temporarily Flooded Typically Saturated Semipermanently Flooded		42.5	41.4	39.9	
(ppp) MINNEOLA	Lake	Seasonally Flooded Typically Saturated Semipermanently Flooded		96.0	95.3	93.9	
(qqq) MONROE and Volusia	Seminole	N/A N/A N/A		2.8	1.2	0.5	
(rrr) NETTLES/ ENGLISH	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		44.3	42.7	41.7	
(sss) NICOTOON	Marion	Seasonally Flooded Typically Saturated Semipermanently Flooded		54.7	53.3	51.9	
(ttt) NORRIS	Lake	Seasonally Flooded Typically Saturated Semipermanently Flooded		30.5	29.7	29.1	
(uuu) NORTH COMO PARK	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		41.3	39.7	38.5	
(vvv) NORTH TALMADGE	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		55.6	54.4	52.9	
(www) OMEGA	Putnam	Temporarily Flooded Typically Saturated Semipermanently Flooded		57.4	56.1	54.0	
(xxx) ORIO	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		37.1	35.6	34.7	
(yyy) PAM	Putnam	Temporarily Flooded Typically Saturated Semipermanently Flooded		39.3	37.5	36.1	

LAKE NAME	COUNTY	HYDROPERIOD CATEGORY	MINIMUM INFREQUENT HIGH	MINIMUM FREQUENT HIGH	MINIMUM AVERAGE LEVEL	MINIMUM FREQUENT LOW	MINIMUM INFREQUENT LOW
(zzz) PEARL	Orange	Seasonally Flooded Typically Saturated Semipermanently Flooded		53.5	52.6	51.2	
(aaaa) PIERSON	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		34.4	33.8	32.4	
(bbbb) PINE ISLAND	Lake	Seasonally Flooded Typically Saturated Semipermanently Flooded		107.7	106.8	105.4	
(cccc) PREVATT	Orange	Seasonally Flooded Typically Saturated Semipermanently Flooded		56.0	53.0	50.9	
(dddd) PRIOR	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		42.3	40.0	39.0	
(eeee) PURDOM	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		37.0	36.4	35.0	
(ffff) SAND	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		40.9	39.0	36.6	
(gggg) SAND HILL	Clay	Seasonally Flooded Typically Saturated Semipermanently Flooded		132.0	131.65	129.5	
(hhhh) SAVANNAH	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		31.1	29.5	28.0	
(iiii) SCOGGIN	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		35.0	34.1	32.7	
(jjjj) SHAW	Volusia	N/A N/A N/A N/A N/A	38.5	36.9	36.2	34.0	32.0
(kkkk) SILVER	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		36.8	35.1	33.7	
(lll) SMITH	Marion	Temporarily Flooded Typically Saturated Semipermanently Flooded		54.6	51.4	50.0	
(mmmm) SOUTH	Brevard	Temporarily Flooded Typically Saturated Semipermanently Flooded		16.7	15.3	13.8	

LAKE NAME	COUNTY	HYDROPERIOD CATEGORY	MINIMUM INFREQUENT HIGH	MINIMUM FREQUENT HIGH	MINIMUM AVERAGE LEVEL	MINIMUM FREQUENT LOW	MINIMUM INFREQUENT LOW
(nnnn) SOUTH COMO PARK	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		38.1	36.7	35.3	
(oooo) STAR	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		77.5	75.4	74.0	
(pppp) STELLA	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		39.4	38.6	37.2	
(qqqq) MONROE and Volusia	Seminole	N/A N/A N/A		2.8	1.2	0.5	
(rrrr) SUNSET	Lake	Seasonally Flooded Typically Saturated Semipermanently Flooded		85.9	83.5	81.0	
(ssss) SWAN	Putnam	Temporarily Flooded Typically Saturated		93.0	90.3		
(tttt) SYLVAN	Seminole	Seasonally Flooded Typically Saturated Semipermanently Flooded		40.4	38.9	37.5	
(uuuu) TARHOE	Putnam	Seasonally Flooded Typically Saturated Semipermanently Flooded		37.0	36.0	35.2	
(vvvv) THREE ISLAND LAKES	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		23.4	21.8	18.8	
(wwww) TRONE	Putnam	Seasonally Flooded Typically Flooded Semipermanently Flooded		37.5	35.7	34.3	
(xxxx) TROUT	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		23.3	20.9	17.7	
(yyyy) TUSCAWILLA	Alachua	Seasonally Flooded Typically Saturated Semipermanently Flooded		77.6	74.6	73.2	
(xxxx) UPPER LAKE LOUISE	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		35.3	34.6	33.2	
(aaaa) WASHINGTON	Brevard	Seasonally Flooded Typically Saturated Semipermanently Flooded		15.6	14.2	12.8	
(bbbb) WAUBERG	Alachua	Seasonally Flooded Typically Saturated Semipermanently Flooded		67.4	67.1	65.6	

LAKE NAME	COUNTY	HYDROPERIOD CATEGORY	MINIMUM INFREQUENT HIGH	MINIMUM FREQUENT HIGH	MINIMUM AVERAGE LEVEL	MINIMUM FREQUENT LOW	MINIMUM INFREQUENT LOW
(ccccc) WEIR	Marion	Seasonally Flooded Typically Saturated Semipermanently Flooded		57.2	56.4	54.9	
(eeee) WINNEMISSETT	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		59.5	57.8	56.0	
(ffff) WINONA	Volusia	Seasonally Flooded Typically Saturated Semipermanently Flooded		36.1	33.5	32.0	

(3) The following minimum levels are established for Blue Cypress Water Management Area (BCWMA):

(a) The minimum average level, calculated as the long term mean of BCWMA water levels, is 24 feet NGVD. Water levels shall be at or above this level at least 75% of time over the long term.

(b) The minimum frequent low is 23.0 feet NGVD. The daily BCWMA water level shall not fall to this level or below more often than once every 2.5 years over the long term.

(c) The minimum infrequent low is 22.5 feet NGVD. The BCWMA water level shall not fall to this level or below for 60 continuous days more frequently than once every 10 years over the long term.

(4) Ground or surface water withdrawals or surface water works must not cause the infrequent high or frequent high surface water flows and levels to occur less frequently or for at lesser duration than stated. Ground or surface water withdrawals or surface water works must not cause the minimum average, frequent low, or infrequent low surface water levels and flows to occur more frequently or for longer durations than stated.

Specific Authority: 373.044, 373.113 FS. Law Implemented: 373.042, 373.0421 373.103, 373.415 FS. History--New 9-16-92. Amended 8-17-94, 6-8-95, 1-17-96, 8-20-96, 10-20-96, 11-4-98, 6-27-00, 2-13-01, 3-19-02, 5-11-03, 11-10-03, 01-12-04, 2-1-06, 12-03-06, 5-10-07, 5-24-07.