### APPENDIX E

# MINIMUM FLOWS AND MINIMUM WATER LEVELS – ADOPTED AND PRIORITY LIST

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#### **Adopted Minimum Flows and Minimum Water Levels**

Minimum Flows and Minimum Water Levels (MFLs) are the minimum water flows and/or minimum water levels adopted by water management district governing boards or the Florida Department of Environmental Protection (FDEP) to prevent significant harm to the water resources or the ecological structure and function of an area resulting from groundwater or surface water withdrawals. MFLs characterize water resource values (WRVs) for individual water bodies and define the duration and frequency of critical flooding and drying events necessary to protect these WRVs from significant harm. MFLs provide information that assist in decision making regarding consumptive use permitting, water shortages, assessments of water supply sources, and development of water resource and water supply projects.

Establishing MFLs is required pursuant to section (s.) 373.042(2), *Florida Statutes* (F.S.). Adoption is typically a four- to six-month process that involves public workshops, review by FDEP, and publication in the Florida Administrative Weekly. MFLs are to be reviewed periodically and revised as necessary under s. 373.0421(3), F.S.

As of September 2020, the St. Johns River Water Management District (SJRWMD) had established 54 MFLs in the Central Springs/East Coast (CSEC) Regional Water Supply Plan (RWSP) area; 42 lakes, two rivers (three reaches), eight springs, and one water management area (Table E-1). The full list of SJRWMD-adopted MFLs can be found in chapter 40C-8, *Florida Administrative Code*. Adopted MFLs located outside of the CSEC RWSP area are listed in Table E-2.

#### **MFL Lakes**

Although there are 42 lakes with adopted MFLs in the CSEC RWSP area, only 25 were assessed in the CSEC RWSP. The SJRWMD lake MFL assessment methodology only applies to lakes that have a significant connection to the Floridan aquifer. Lakes without such a connection (12 total within the CSEC RWSP area), along with the Blue Cypress Water Management Area, are noted in Table E-1 as having "no significant Floridan aquifer connection" (NSFAC). SJRWMD staff is in the process of evaluating the entire list of MFLs to determine optimal coverage within SJRWMD and the appropriateness of each water body as a groundwater supply indicator. Lake Gertie is one of the MFL lakes that may be replaced with a more suitable water body. Since replacement is being considered, the Lake Gertie MFLs were not assessed in the CSEC RWSP. Lake Weir was also not assessed as it is

scheduled for re-evaluation in 2024 via the 2020 SJRWMD MFLs Priority List and Schedule discussed below. The remaining non-assessed lakes (Hokey, Sunset, and Trout) lacked sufficient data for assessment at the time of analysis. For the Hokey and Sunset lake systems, surface water models have not yet been developed to assess whether MFLs are being met. For Trout Lake, recent peer review recommendations include surface water model redevelopment, which will not be complete in time for inclusion in the CSEC RWSP. The SJRWMD is working expeditiously to develop surface water models for all MFL systems that currently lack them.

#### **MFL Rivers**

One of the three MFL river reaches in the CSEC RWSP area was not assessed in this version of the CSEC RWSP. At the time of plan development, the Wekiva River Basin surface water model was being expanded and updated. The expansion includes the Black Water Creek watershed and will be essential in determining current compliance of the existing Black Water Creek MFLs. Results from this effort will be utilized in future versions of the CSEC RWSP.

#### **MFL Springs**

Of the eight MFL springs within the planning area, two were not assessed in the CSEC RWSP. Messant and Seminole springs, both in North Lake County<sup>1</sup>, are located on private property. Due to access issues negatively impacting SJRWMD's ability to obtain monitoring data, SJRWMD staff are currently evaluating the possible repeal of these MFLs.

#### **MFLs Priority List**

Each year, the SJRWMD Governing Board approves and submits to FDEP an updated MFLs Priority List and Schedule. This list identifies the water bodies and year in which MFLs will be developed or re-evaluated. The Priority List is updated and resubmitted to FDEP annually. On October 13, 2020, the Governing Board approved the 2020 MFLs Priority List and Schedule, summarized in Table E-3, which identifies new MFLs and MFL re-evaluations scheduled for 2020 through 2024.

<sup>&</sup>lt;sup>1</sup> Within the CSEC RWSP, North Lake County is defined as that portion of Lake County that is not included in the Central Florida Water Initiative.

Table E-1: SJRWMD Adopted MFLs within the CSEC RWSP Area

Water Body Type	Water Body Name	County	Assessed in CSEC RWSP	
Lake	Ashby	Volusia	No – NSFAC	
Lake	Big	Volusia	Yes	
Lake	Bowers	Marion	Yes	
Lake	Butler	Volusia	Yes	
Lake	Charles	Marion	No - NSFAC	
Lake	Colby	Volusia	Yes	
Lake	Coon Pond	Volusia	Yes	
Lake	Cow Pond	Volusia	No – NSFAC	
Lake	Daugharty	Volusia	Yes	
Lake	Davis	Volusia	Yes	
Lake	Dias	Volusia	No – NSFAC	
Lake	Dorr	Lake	No – NSFAC	
Lake	Drudy	Volusia	No – NSFAC	
Lake	Emporia	Volusia	Yes	
Lake	Fox	Brevard	Yes	
Lake	Gertie	Volusia	No – Possible replacement	
Lake	Halfmoon	Marion	Yes	
Lake	Helen	Volusia	Yes	
Lake	Hires	Volusia	Yes	
Lake	Hokey	Volusia	No – Insufficient data	
Lake	Hopkins Prairie	Marion	Yes	
Lake	Indian	Volusia	Yes	
Lake	Kerr	Marion	Yes	
Lake	Lower Louise	Volusia	Yes	
Lake	Nicotoon	Marion	Yes	
Lake	Norris	Lake	No – NSFAC	
Lake	North Talmadge	Volusia	No – NSFAC	
Lake	Pierson	Volusia	No – NSFAC	
Lake	Purdom	Volusia	No – NSFAC	
Lake	Savannah	Volusia	No – NSFAC	
Lake	Scoggin	Volusia	Yes	
Lake	Shaw	Volusia	Yes	

Water Body Type	Water Body Name	County	Assessed in CSEC RWSP	
Lake	Smith	Marion	Yes	
Lake	South	Brevard	Yes	
Lake	Sunset	Lake	No – Insufficient data	
Lake	Three Island	Volusia	Yes	
Lake	Trout	Volusia	No – Insufficient data	
Lake	Upper Louise	Volusia	Yes	
Lake	Washington	Brevard	No – NSFAC	
Lake	Weir	Marion	No – Priority List for 2024 <sup>1</sup>	
Lake	Winnemisett	Volusia	Yes	
Lake	Winona	Volusia	Yes	
River	Black Water Creek @ the SR 44 bridge	Lake	No – Insufficient data	
River	St. Johns @ SR 44 near DeLand	Volusia	Yes	
River	St. Johns 1.5 miles downstream of Lake Washington weir	Brevard	Yes	
Spring	Alexander	Lake	Yes	
Spring	Blue	Volusia	Yes	
Spring	De Leon	Volusia	Yes	
Spring	Gemini	Volusia	Yes	
Spring	Messant	Lake	No – Private property	
Spring	Seminole	Lake	No – Private property	
Spring	Silver	Marion	Yes	
Spring	Silver Glen	Marion	Yes	
Water Management Area	Blue Cypress WMA	Indian River	No – NSFAC	

Note: NSFAC = No significant Floridan aquifer connection

¹ The 2020 MFLs Priority List and Schedule shows the re-evaluation of Lake Weir MFLs in 2024.

Table E-2: SJRWMD Adopted MFLs Outside the CSEC RWSP Area

Water Body Type	Water Body Name	County
Lake	Apshawa North	Lake (CFWI)
Lake	Apshawa South	Lake (CFWI)
Lake	Argenta	Putnam
Lake	Banana	Putnam
Lake	Bell	Putnam
Lake	Bird Pond	Putnam
Lake	Blue Pond	Clay
Lake	Boggy Marsh	Lake (CFWI)
Lake	Brantley	Seminole
Lake	Brooklyn	Clay
Lake	Broward	Putnam
Lake	Burkett	Orange
Lake	Cherry	Lake (CFWI)
Lake	Clear	Putnam
Lake	Como	Putnam
Lake	Cowpen	Putnam
Lake	Crystal/Baker/Ida	Putnam
Lake	Deep	Putnam
Lake	Disston	Flagler
Lake	Dream Pond	Putnam
Lake	Echo	Putnam
Lake	Emma	Lake (CFWI)
Lake	English/Nettles	Putnam
Lake	Estella	Putnam
Lake	Geneva	Clay
Lake	Georges	Putnam
Lake	Gore	Flagler
Lake	Grandin	Putnam
Lake	Howell	Putnam
Lake	Howell	Seminole
Lake	Irma	Orange
Lake	Little Como	Putnam
Lake	Little Mall	Putnam

Water Body Type	Water Body Name	County
Lake	Lizzie	Putnam
Lake	Lochloosa	Alachua
Lake	Louisa	Lake (CFWI)
Lake	Lowry/Sand Hill	Clay
Lake	Lucy	Lake (CFWI)
Lake	Magnolia	Clay
Lake	Margaret	Putnam
Lake	Martha	Orange
Lake	Marvin	Putnam
Lake	McGrady	Putnam
Lake	McKasel	Putnam
Lake	Melrose	Putnam
Lake	Mills	Seminole
Lake	Minneola	Lake (CFWI)
Lake	Monroe	Seminole/Volusia
Lake	North Como Park	Putnam
Lake	Omega	Putnam
Lake	Orio	Putnam
Lake	Pam	Putnam
Lake	Pearl	Orange
Lake	Pine Island	Lake (CFWI)
Lake	Prevatt	Orange
Lake	Prior	Putnam
Lake	Sand	Putnam
Lake	Silver	Putnam
Lake	South Como Park	Putnam
Lake	Star	Putnam
Lake	Stella	Putnam
Lake	Swan	Putnam
Lake	Sylvan	Seminole
Lake	Tarhoe	Putnam
Lake	Trone	Putnam
Lake	Tuscawilla	Alachua

Water Body Type	Water Body Name	County
Lake	Wauberg	Alachua
River	Taylor Creek 1.7 miles downstream of S-164	Orange
River	St. Johns @ SR 50	Orange/Brevard
River	Wekiva @ SR 46	Seminole/Lake (CFWI)
Spring	Miami	Seminole
Spring	Palm	Seminole
Spring	Rock	Orange
Spring	Sanlando	Seminole
Spring	Starbuck	Seminole
Spring	Wekiwa	Orange

Table E-3: SIRWMD 2020 MFLs Priority List and Schedule

Year	Water Body Type	Water Body Name	County	Within CSEC RWSP Area
2020	Lake	Brooklyn (re-eval)	Clay	No
2020	Lake	Geneva (re-eval)	Clay	No
2021	Lake	Sylvan (re-eval)	Seminole	No
2021	Lake	Apshawa South (re-eval)	Lake (CFWI)	No
2021	River, Spring	Little Wekiva and associated springs	Seminole, Orange	No
2021	River	Wekiva at SR46 (re-eval)	Seminole, Orange	No
2021	Spring	Wekiwa (re-eval)	Seminole, Orange	No
2021	Spring	Rock (re-eval)	Orange	No
2022	Lake	Johns/Avalon/Apopka	Orange/Lake (CFWI)	No
2022	Lake	Prevatt (re-eval)	Orange	No
2022	Lake	Red Bug	Seminole	No
2022	Lake	Griffin	Lake	Yes
2022	Lake	Burrell Basin Lakes (Beauclair, Dora, Eustis, Harris)	Lake	Yes
2023	Lake	East Crystal	Seminole	No
2024	Lake	Weir (re-eval)	Marion	Yes

Note: Re-eval = re-evaluation of adopted MFLs