Appendix 2A-3: Comparison Between Current Class III Standard and Proposed Site-Specific Alternative Criterion for Dissolved Oxygen

Florida Department of Environmental Protection

Table 1. Comparison between dissolved oxygen (DO) excursion rates using the Florida Class III standard (5.0 mg/L) and the proposed DO site-specific alternative criterion (SSAC) for WY2003 results. The SSAC assessment is based on a comparison between the mean annual measured DO and the annual SSAC limit. Sites are classified according to whether they are a structure (pump, culvert, gate, etc.), interior marsh station, or canal station. Excursion categories for the proposed DO SSAC are expressed in terms of "Pass" or "Fail".

Class	Site	N	Min. Annual DO (mg/L)	Max. Annual DO (mg/L)	Mean Annual DO (mg/L)	Annual SSAC Limit (mg/L)	SSAC Excursion Category	Number <5.0 mg/L
Canal	3AE0	12	4.65	9.15	7.49	2.96	Pass	1
Interior	3AE05	4	0.95	1.99	1.47	3.31	Fail	4
Interior	3AE10	10	0.26	1.75	0.94	3.74	Fail	10
Interior	3AE15	10	0.36	3.17	1.24	3.13	Fail	10
Interior	3AE20	12	1.57	6.27	3.56	2.83	Pass	10
Interior	3AE40	9	1.82	7.10	4.54	2.97	Pass	5
Interior	3ANMESO	10	0.37	4.22	2.12	2.76	Fail	10
Interior	3ASMESO	11	0.35	4.99	2.26	2.76	Fail	11
Interior	3AW0	13	5.64	9.58	7.60	2.83	Pass	0
Interior	3AW05	8	0.27	2.28	1.27	3.59	Fail	8
Interior	3AW10	9	0.19	5.47	2.02	3.44	Fail	8
Interior	3AW15	11	0.20	3.78	1.21	3.18	Fail	11
Interior	3AW20	11	0.45	4.21	1.74	3.22	Fail	11
Interior	3AW40	9	2.58	8.78	5.60	2.99	Pass	5
Structure	ACME1DS	11	3.38	8.90	6.34	2.85	Pass	3
Structure	C123SR84	12	0.90	8.05	4.03	3.39	Pass	7
Interior	CA215	22	1.05	6.69	3.86	2.39	Pass	15
Interior	CA27	22	0.60	8.81	3.53	2.29	Pass	16
Interior	CA28	22	0.20	5.06	1.68	2.13	Fail	21

Class	Site	N	Min. Annual DO (mg/L)	Max. Annual DO (mg/L)	Mean Annual DO (mg/L)	Annual SSAC Limit (mg/L)	SSAC Excursion Category	Number <5.0 mg/L
Interior	CA29	22	1.63	7.23	4.30	2.29	Pass	17
Interior	CA311	23	1.56	7.45	3.56	2.31	Pass	20
Interior	CA315	22	1.06	7.87	3.30	2.21	Pass	19
Interior	CA316	22	0.51	5.06	1.73	2.10	Fail	21
Interior	CA317	25	1.08	8.58	3.55	2.08	Pass	21
Interior	CA318	24	0.27	7.00	2.38	2.10	Pass	22
Interior	CA32	19	1.21	7.32	3.55	2.27	Pass	14
Interior	CA33	19	0.45	8.30	2.45	2.41	Pass	18
Interior	CA34	18	0.95	7.54	3.09	2.45	Pass	16
Interior	CA35	15	1.08	5.88	3.50	2.11	Pass	10
Interior	CA36	11	0.24	3.76	1.42	2.05	Fail	11
Interior	CA38	21	1.10	7.85	3.36	2.44	Pass	17
Canal	E0	12	2.42	7.30	4.47	3.02	Pass	10
Interior	E1	10	0.44	4.86	1.46	2.68	Fail	10
Interior	E2	8	0.50	5.48	1.89	2.84	Fail	7
Interior	E3	10	0.61	5.51	2.51	3.07	Fail	8
Interior	E4	12	0.39	6.76	2.37	2.75	Fail	11
Interior	E5	11	3.20	7.25	5.08	2.46	Pass	5
Interior	EP	4	7.58	9.07	8.32	3.20	Pass	0
Interior	F0	12	0.64	6.82	2.90	2.64	Pass	11
Interior	F1	24	0.25	5.38	1.79	2.64	Fail	23
Interior	F2	30	0.45	5.29	1.79	2.85	Fail	29
Interior	F3	10	0.86	6.05	2.50	3.00	Fail	9
Interior	F4	32	0.46	7.27	2.86	2.68	Pass	28
Interior	F5	13	1.50	6.56	3.48	2.69	Pass	11
Structure	G123	29	0.94	10.69	5.64	3.27	Pass	9
Structure	G204	2	2.29	7.12	4.71	1.68	Pass	1
Structure	G205	4	4.56	6.13	5.26	2.20	Pass	2
Structure	G206	4	1.86	6.22	3.81	2.14	Pass	3
Structure	G251	51	0.13	7.06	2.70	2.53	Pass	45
Structure	G300	1	1.40	1.40	1.40	1.94	Fail	1
Structure	G301	1	1.25	1.25	1.25	1.86	Fail	1
Structure	G310	51	0.42	9.50	3.73	2.25	Pass	35
Structure	G335	52	2.27	9.00	4.77	2.07	Pass	31
Structure	G339	1	1.91	1.91	1.91	2.43	Fail	1
Structure	G94B	12	1.61	6.50	3.57	2.79	Pass	10
Structure	G94D	12	3.46	10.20	6.21	2.66	Pass	5
Interior	LOX10	7	2.49	8.28	3.94	2.43	Pass	6
Interior	LOX11	11	0.69	8.73	2.80	2.11	Pass	10

Class	Site	N	Min. Annual DO (mg/L)	Max. Annual DO (mg/L)	Mean Annual DO (mg/L)	Annual SSAC Limit (mg/L)	SSAC Excursion Category	Number <5.0 mg/L
Interior	LOX12	12	1.17	8.37	3.38	2.01	Pass	11
Interior	LOX13	8	1.87	8.89	4.76	2.29	Pass	5
Interior	LOX14	12	0.57	6.20	2.74	2.05	Pass	10
Interior	LOX15	12	1.75	8.38	3.69	1.94	Pass	9
Interior	LOX16	11	0.50	5.39	2.14	2.09	Pass	10
Interior	LOX3	5	1.85	8.24	5.43	2.84	Pass	2
Interior	LOX4	8	1.65	7.83	3.28	2.48	Pass	7
Interior	LOX5	6	1.69	8.04	3.95	2.48	Pass	4
Interior	LOX6	11	1.41	8.52	3.60	2.05	Pass	8
Interior	LOX7	11	2.27	9.33	4.59	2.25	Pass	7
Interior	LOX8	11	3.16	10.03	4.91	2.17	Pass	8
Interior	LOX9	9	1.13	10.05	3.75	2.37	Pass	7
Interior	NE1	11	0.95	6.52	3.78	2.28	Pass	8
Interior	NP201	10	3.04	7.80	5.39	2.34	Pass	5
Interior	P33	10	2.80	9.10	5.09	2.06	Pass	6
Interior	P34	6	5.68	7.96	6.85	2.45	Pass	0
Interior	P35	6	3.58	5.61	4.48	2.82	Pass	5
Interior	P36	10	3.29	7.86	4.83	2.53	Pass	7
Interior	P37	6	6.29	9.25	7.80	3.54	Pass	0
Structure	S10A	7	2.48	9.51	5.98	2.53	Pass	3
Structure	S10C	4	3.34	9.88	5.83	2.51	Pass	2
Structure	S10D	13	1.74	9.02	5.14	2.34	Pass	6
Structure	S10E	11	2.19	8.63	4.99	2.50	Pass	5
Structure	S11A	13	3.04	8.84	6.39	2.72	Pass	3
Structure	S11B	4	4.54	6.45	5.43	3.05	Pass	2
Structure	S11C	13	1.40	7.59	4.01	2.67	Pass	9
Structure	S12A	24	1.45	7.68	3.63	2.13	Pass	20
Structure	S12B	24	1.34	8.45	3.45	2.30	Pass	19
Structure	S12C	24	0.44	7.66	3.04	2.53	Pass	21
Structure	S12D	24	0.40	6.82	2.74	2.64	Pass	23
Structure	S140	32	1.08	10.00	5.63	2.98	Pass	11
Structure	S142	13	0.70	7.79	4.74	3.31	Pass	7
Structure	S145	14	2.26	7.78	4.53	2.76	Pass	11
Structure	S150	29	1.80	9.66	6.38	3.46	Pass	8
Structure	S151	15	0.90	11.61	3.64	2.81	Pass	10
Structure	S175	25	0.75	6.01	3.25	2.09	Pass	21
Structure	S18C	34	1.62	8.90	5.44	2.09	Pass	14
Structure	S190	16	2.24	9.24	6.02	2.83	Pass	6
Structure	S31	4	1.03	3.36	1.90	1.81	Pass	4

Class	Site	N	Min. Annual DO (mg/L)	Max. Annual DO (mg/L)	Mean Annual DO (mg/L)	Annual SSAC Limit (mg/L)	SSAC Excursion Category	Number <5.0 mg/L
Structure	S332	24	0.89	4.91	2.92	2.15	Pass	24
Structure	S332D	49	0.17	7.72	2.42	2.67	Fail	43
Structure	S333	30	0.62	7.07	3.27	2.95	Pass	26
Structure	S334	15	0.63	7.60	3.89	3.01	Pass	10
Structure	S34	14	0.91	7.71	5.45	2.74	Pass	3
Structure	S344	3	2.14	5.03	3.19	1.72	Pass	2
Structure	S355A	11	3.98	6.81	5.33	2.99	Pass	4
Structure	S355B	11	1.61	5.39	4.07	3.18	Pass	9
Structure	S38	6	1.16	10.31	3.78	2.76	Pass	5
Structure	S38B	2	5.10	7.09	6.10	4.63	Pass	0
Structure	S39	19	2.49	9.11	6.12	2.29	Pass	6
Structure	S5AD	12	1.27	9.00	4.62	1.96	Pass	8
Structure	S7	30	1.54	9.51	6.25	3.14	Pass	8
Structure	S8	54	0.18	13.53	4.83	2.00	Pass	27
Structure	S9	48	0.71	7.21	3.62	3.11	Pass	40
Interior	TSB	8	1.56	5.79	3.38	1.81	Pass	7
Interior	U1	10	1.02	6.13	3.22	2.55	Pass	9
Interior	U2	9	3.27	7.75	5.91	2.91	Pass	2
Interior	U3	11	1.90	6.63	4.31	2.92	Pass	7
Structure	US41-25	24	1.35	5.52	2.87	2.05	Pass	23
Canal	X0	12	1.26	5.45	3.31	2.03	Pass	10
Interior	X1	12	0.20	1.73	0.74	2.39	Fail	12
Interior	X2	13	0.85	4.41	1.67	2.16	Fail	13
Interior	X3	12	0.70	5.95	1.96	2.17	Fail	11
Interior	X4	13	1.29	6.46	2.85	2.13	Pass	11
Interior	Y4	12	0.52	2.69	1.60	2.47	Fail	12
Canal	Z0	11	1.32	5.65	3.41	2.16	Pass	9
Interior	Z1	14	0.19	1.34	0.59	2.58	Fail	14
Interior	Z2	13	0.19	2.94	1.33	2.61	Fail	13
Interior	Z3	13	1.39	5.86	3.33	2.50	Pass	10
Interior	Z4	13	1.28	5.61	3.10	2.59	Pass	11