

Appendix 3A-3: Summary of Water Year 2010 Attainment of the Everglades Dissolved Oxygen Site-Specific Alternative Criteria at Individual Everglades Monitoring Stations

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Table 1. Summary of the attainment of the Everglades dissolved oxygen (DO) site-specific alternative criterion (SSAC) at individual monitoring stations in the Arthur R. Marshall Loxahatchee National Wildlife Refuge (Refuge), Water Conservation Areas 2 and 3 (WCA-2 and WCA-3), and Everglades National Park (ENP) during Water Year 2010 (April 1, 2009–May 30, 2010). The SSAC assessment is based on a comparison between the mean annual measured DO [in milligrams per liter (mg/L)] and the annual calculated SSAC limit. Excursion categories are expressed in terms of "Pass" or "Fail."

Area	Class	Station	Mean Annual DO	Sample Size (n)	Standard Deviation	Minimum DO	Maximum DO	Annual SSAC Limit	SSAC Pass/Fail
ENP	Inflow	S12A	4.32	51	1.45	1.69	8.64	2.11	Pass
ENP	Inflow	S12B	4.02	22	0.97	2.48	5.96	1.84	Pass
ENP	Inflow	S12C	3.71	25	1.46	1.70	7.17	2.17	Pass
ENP	Inflow	S12D	4.37	43	1.51	2.08	8.09	2.30	Pass
ENP	Inflow	S18C	5.63	49	2.22	2.24	9.46	3.27	Pass
ENP	Inflow	S333	4.13	51	1.44	1.74	8.30	2.44	Pass
ENP	Inflow	S355A	6.14	13	1.38	4.70	8.32	2.52	Pass
ENP	Inflow	S355B	5.14	13	1.78	3.04	8.57	2.71	Pass
ENP	Inflow	US41-25	3.89	16	1.97	1.80	8.57	2.64	Pass
ENP	Interior	EP	7.02	11	1.28	5.05	8.69	3.11	Pass
ENP	Interior	NE1	3.28	11	1.16	1.57	4.86	2.81	Pass
ENP	Interior	NP201	5.19	11	1.32	2.22	7.10	2.65	Pass
ENP	Interior	P33	3.66	11	1.05	2.12	4.84	2.43	Pass
ENP	Interior	P34	6.18	9	1.23	3.98	7.46	2.45	Pass
ENP	Interior	P35	3.81	8	0.85	2.62	5.18	2.76	Pass
ENP	Interior	P36	3.98	11	0.82	2.88	5.17	2.70	Pass

Table 1. Continued.

Area	Class	Station	Mean Annual DO	Sample Size (n)	Standard Deviation	Minimum DO	Maximum DO	Annual SSAC Limit	SSAC Pass/Fail
ENP	Interior	P37	6.30	9	2.18	2.85	9.28	3.07	Pass
ENP	Interior	S12C10	2.70	2	0.45	2.38	3.02	1.30	Pass
ENP	Interior	S12C2	3.48	1	NA	3.48	3.48	1.35	Pass
ENP	Interior	S12C6	3.29	1	NA	3.29	3.29	1.32	Pass
ENP	Interior	T24	5.24	2	1.59	4.11	6.36	1.69	Pass
ENP	Interior	T33	3.69	2	1.11	2.90	4.47	1.68	Pass
ENP	Interior	TSB	3.76	9	1.80	1.68	6.84	2.54	Pass
Refuge	Inflow	ENR012	2.51	52	1.67	0.26	7.19	2.36	Pass
Refuge	Inflow	G300	4.83	52	2.62	0.84	11.70	2.91	Pass
Refuge	Inflow	G301	4.39	52	2.53	0.68	10.10	2.70	Pass
Refuge	Inflow	G310	4.35	52	1.90	0.95	8.35	2.23	Pass
Refuge	Inflow	S362	5.77	51	2.16	1.33	12.00	3.14	Pass
Refuge	Interior	LOX10	4.84	10	2.88	1.33	10.60	2.76	Pass
Refuge	Interior	LOX11	4.20	11	2.84	0.89	9.14	2.37	Pass
Refuge	Interior	LOX12	4.78	12	2.18	1.92	9.22	2.63	Pass
Refuge	Interior	LOX13	4.98	11	2.07	2.75	8.75	2.31	Pass

Table 1. Continued.

Area	Class	Station	Mean Annual DO	Sample Size (n)	Standard Deviation	Minimum DO	Maximum DO	Annual SSAC Limit	SSAC Pass/Fail
Refuge	Interior	LOX14	5.21	11	1.87	2.25	8.59	2.37	Pass
Refuge	Interior	LOX15	4.41	11	2.47	1.83	9.80	2.61	Pass
Refuge	Interior	LOX16	3.03	11	1.82	1.16	6.56	2.50	Pass
Refuge	Interior	LOX3	5.11	8	2.45	2.70	9.18	2.80	Pass
Refuge	Interior	LOX4	4.82	10	2.31	1.27	9.12	3.02	Pass
Refuge	Interior	LOX5	5.19	8	2.19	3.37	8.84	2.77	Pass
Refuge	Interior	LOX6	4.01	11	1.95	1.71	8.43	2.40	Pass
Refuge	Interior	LOX7	4.56	10	2.69	1.74	10.70	2.80	Pass
Refuge	Interior	LOX8	4.60	10	2.93	1.33	10.60	2.75	Pass
Refuge	Interior	LOX9	5.01	10	2.62	1.56	8.88	2.79	Pass
Refuge	Interior	LOXA105	2.43	11	1.51	1.03	5.45	2.73	Fail
Refuge	Interior	LOXA106	3.06	11	2.03	0.69	7.12	2.73	Pass
Refuge	Interior	LOXA107	2.72	6	1.56	1.30	5.43	2.43	Pass
Refuge	Interior	LOXA136	2.54	11	1.59	0.22	5.10	2.98	Fail
Refuge	Interior	LOXA137	3.88	11	2.59	0.43	9.10	2.92	Pass
Refuge	Interior	LOXA138	4.99	9	3.09	1.59	9.70	2.39	Pass

Table 1. Continued.

Area	Class	Station	Mean Annual DO	Sample Size (n)	Standard Deviation	Minimum DO	Maximum DO	Annual SSAC Limit	SSAC Pass/Fail
Refuge	Interior	LOXA139	4.82	8	2.56	1.16	9.67	2.37	Pass
Refuge	Interior	WCA1MESO	4.43	4	0.68	3.83	5.36	2.09	Pass
Refuge	Interior	X1	0.81	4	0.77	0.09	1.57	2.19	Fail
Refuge	Interior	X2	0.95	4	0.35	0.53	1.39	2.24	Fail
Refuge	Interior	X3	2.49	4	1.60	1.07	4.17	2.31	Pass
Refuge	Interior	X4	3.01	5	1.47	1.42	5.37	2.17	Pass
Refuge	Interior	Y4	1.74	4	0.95	0.80	3.00	1.67	Pass
Refuge	Interior	Z1	1.07	5	1.43	0.14	3.57	2.04	Fail
Refuge	Interior	Z2	1.56	4	0.45	0.94	1.91	1.73	Fail
Refuge	Interior	Z3	1.96	4	0.35	1.58	2.34	1.65	Pass
Refuge	Interior	Z4	2.60	5	0.36	1.98	2.92	1.81	Pass
Refuge	Outflow	G94B	3.94	13	1.86	1.81	7.30	3.26	Pass
Refuge	Outflow	S10A	5.49	14	2.15	2.17	8.84	2.52	Pass
Refuge	Outflow	S10C	5.34	15	2.04	2.18	8.72	2.32	Pass
Refuge	Outflow	S10D	4.16	17	1.67	1.64	7.05	2.19	Pass
Refuge	Outflow	S39	4.33	16	2.55	0.90	9.02	2.80	Pass

Table 1. Continued.

Area	Class	Station	Mean Annual DO	Sample Size (n)	Standard Deviation	Minimum DO	Maximum DO	Annual SSAC Limit	SSAC Pass/Fail
Refuge	Rim	LOXA104	4.65	12	2.11	0.52	7.24	2.11	Pass
Refuge	Rim	LOXA135	3.78	11	1.87	1.76	7.25	2.52	Pass
Refuge	Rim	X0	3.62	4	2.07	2.05	6.64	2.11	Pass
Refuge	Rim	Z0	3.55	4	2.09	1.91	6.54	2.03	Pass
WCA-2	Inflow	E0	2.91	5	1.53	1.94	5.61	1.48	Pass
WCA-2	Inflow	F0	2.89	5	1.02	1.99	4.52	1.43	Pass
WCA-2	Inflow	G335	4.13	50	2.28	0.78	8.69	2.44	Pass
WCA-2	Inflow	S10A	5.49	14	2.15	2.17	8.84	2.52	Pass
WCA-2	Inflow	S10C	5.34	15	2.04	2.18	8.72	2.32	Pass
WCA-2	Inflow	S10D	4.16	17	1.67	1.64	7.05	2.19	Pass
WCA-2	Inflow	S7	4.90	50	2.38	0.42	9.62	2.76	Pass
WCA-2	Interior	404C2	3.77	8	2.34	1.26	8.04	3.13	Pass
WCA-2	Interior	404Z1	6.72	1	NA	6.72	6.72	4.22	Pass
WCA-2	Interior	CA27	3.46	11	2.63	0.82	8.36	2.68	Pass
WCA-2	Interior	CA28	3.80	11	2.85	0.49	9.78	2.60	Pass
WCA-2	Interior	CA29	5.26	11	2.35	2.83	9.46	2.75	Pass

Table 1. Continued.

Area	Class	Station	Mean Annual DO	Sample Size (n)	Standard Deviation	Minimum DO	Maximum DO	Annual SSAC Limit	SSAC Pass/Fail
WCA-2	Interior	E1	0.47	4	0.19	0.33	0.74	1.62	Fail
WCA-2	Interior	E2	0.36	4	0.21	0.08	0.53	1.64	Fail
WCA-2	Interior	E3	0.28	4	0.08	0.15	0.33	1.66	Fail
WCA-2	Interior	E4	0.56	4	0.15	0.43	0.73	1.65	Fail
WCA-2	Interior	E5	2.12	4	1.25	0.67	3.36	1.41	Pass
WCA-2	Interior	F1	2.22	14	2.05	0.57	7.57	3.13	Fail
WCA-2	Interior	F2	2.55	14	2.41	0.06	6.34	3.13	Fail
WCA-2	Interior	F3	0.64	4	0.58	0.33	1.50	2.35	Fail
WCA-2	Interior	F4	2.38	15	2.37	0.30	7.72	2.78	Fail
WCA-2	Interior	F5	1.88	4	1.27	0.73	3.40	1.75	Pass
WCA-2	Interior	N1	2.62	10	2.43	0.51	8.20	3.12	Fail
WCA-2	Interior	S145	4.28	22	1.68	1.71	8.61	2.74	Pass
WCA-2	Interior	U1	1.73	4	0.31	1.30	2.03	1.48	Pass
WCA-2	Interior	U2	2.95	4	0.23	2.70	3.23	1.54	Pass
WCA-2	Interior	U3	4.54	15	1.97	2.34	8.80	2.45	Pass
WCA-2	Outflow	S11A	5.57	24	1.45	2.08	8.16	2.24	Pass

Table 1. Continued.

Area	Class	Station	Mean Annual DO	Sample Size (n)	Standard Deviation	Minimum DO	Maximum DO	Annual SSAC Limit	SSAC Pass/Fail
WCA-2	Outflow	S11B	4.93	12	1.77	2.81	8.11	2.17	Pass
WCA-2	Outflow	S11C	3.82	15	1.76	1.38	7.23	2.07	Pass
WCA-2	Outflow	S34	4.86	21	2.42	0.69	9.03	2.49	Pass
WCA-2	Outflow	S38	3.11	22	1.71	1.03	6.78	2.85	Pass
WCA-3	Inflow	3AW0	4.35	5	2.49	0.94	7.28	1.53	Pass
WCA-3	Inflow	C123SR84	4.54	12	2.85	1.54	9.72	3.11	Pass
WCA-3	Inflow	G123	2.72	12	1.42	1.01	5.68	2.21	Pass
WCA-3	Inflow	S11A	5.57	24	1.45	2.08	8.16	2.24	Pass
WCA-3	Inflow	S11B	4.93	12	1.77	2.81	8.11	2.17	Pass
WCA-3	Inflow	S11C	3.82	15	1.76	1.38	7.23	2.07	Pass
WCA-3	Inflow	S140	4.22	52	2.35	1.30	9.84	2.80	Pass
WCA-3	Inflow	S142	4.40	12	2.17	1.44	8.93	2.47	Pass
WCA-3	Inflow	S150	5.97	30	2.51	0.68	9.72	3.46	Pass
WCA-3	Inflow	S151	3.94	20	1.87	1.95	8.48	2.60	Pass
WCA-3	Inflow	S190	5.76	50	2.69	1.21	10.70	3.42	Pass
WCA-3	Inflow	S8	4.75	50	1.99	0.93	7.79	2.23	Pass

Table 1. Continued.

Area	Class	Station	Mean Annual DO	Sample Size (n)	Standard Deviation	Minimum DO	Maximum DO	Annual SSAC Limit	SSAC Pass/Fail
WCA-3	Inflow	S9	2.43	51	1.23	0.47	5.42	2.19	Pass
WCA-3	Interior	3ANMESO	1.80	4	0.72	1.23	2.82	1.38	Pass
WCA-3	Interior	3ASMESO	2.61	5	2.29	0.95	6.60	1.79	Pass
WCA-3	Interior	CA311	5.28	10	1.99	3.28	10.30	2.69	Pass
WCA-3	Interior	CA314	8.37	1	NA	8.37	8.37	4.12	Pass
WCA-3	Interior	CA315	3.47	10	2.99	1.19	11.30	2.75	Pass
WCA-3	Interior	CA316	2.80	10	2.32	0.68	7.76	2.73	Pass
WCA-3	Interior	CA317	4.82	11	2.46	2.37	9.40	2.57	Pass
WCA-3	Interior	CA318	2.92	10	2.96	0.83	10.20	2.75	Pass
WCA-3	Interior	CA319	7.04	1	NA	7.04	7.04	3.43	Pass
WCA-3	Interior	CA32	5.06	11	2.19	2.66	9.90	2.82	Pass
WCA-3	Interior	CA325	5.60	1	NA	5.60	5.60	3.28	Pass
WCA-3	Interior	CA33	2.89	8	1.82	1.09	6.39	2.29	Pass
WCA-3	Interior	CA34	3.59	10	2.37	1.00	9.44	2.85	Pass
WCA-3	Interior	CA35	2.84	5	1.13	1.75	4.53	1.73	Pass
WCA-3	Interior	CA36	3.34	8	2.94	0.65	10.00	2.33	Pass

Table 1. Continued.

Area	Class	Station	Mean Annual DO	Sample Size (n)	Standard Deviation	Minimum DO	Maximum DO	Annual SSAC Limit	SSAC Pass/Fail
WCA-3	Interior	CA38	3.47	9	1.42	1.68	5.67	2.36	Pass
WCA-3	Interior	CA3B1	8.52	1	NA	8.52	8.52	4.05	Pass
WCA-3	Interior	CA3B2	5.42	1	NA	5.42	5.42	3.93	Pass
WCA-3	Interior	S345B6	5.49	3	2.45	3.52	8.24	2.79	Pass
WCA-3	Outflow	S12A	4.32	51	1.45	1.69	8.64	2.11	Pass
WCA-3	Outflow	S12B	4.02	22	0.97	2.48	5.96	1.84	Pass
WCA-3	Outflow	S12C	3.71	25	1.46	1.70	7.17	2.17	Pass
WCA-3	Outflow	S12D	4.37	43	1.51	2.08	8.09	2.30	Pass
WCA-3	Outflow	S197	6.31	7	2.00	4.11	9.36	3.25	Pass
WCA-3	Outflow	S31	3.73	16	2.17	0.71	8.99	2.79	Pass
WCA-3	Outflow	S333	4.13	51	1.44	1.74	8.30	2.44	Pass
WCA-3	Outflow	S344	4.13	3	2.11	2.04	6.26	1.93	Pass
WCA-3	Outflow	S355A	6.14	13	1.38	4.70	8.32	2.52	Pass
WCA-3	Outflow	S355B	5.14	13	1.78	3.04	8.57	2.71	Pass
WCA-3	Outflow	US41-25	3.89	16	1.97	1.80	8.57	2.64	Pass