Appendix 3A-1: Water Year 2013 Water Quality Monitoring Results

Paul Julian II[1]

Table 1 within this appendix provides statistical summaries and excursion criteria (where applicable) for alkalinity, pH, specific conductivity, total iron, turbidity, un-ionized ammonia, and sulfate for each area and class during Water Year 2013 (WY2013) (May 1, 2012–April 30, 2013) within the Everglades Protection Area (EPA). The EPA includes the Arthur R. Marshall Loxahatchee National Wildlife Refuge [Refuge, also known as Water Conservation Area 1 (WCA-1)], Water Conservation Areas 2 and 3 (WCA-2 and WCA-3, respectively), and Everglades National Park (ENP).

Major findings for these parameters during WY2013 are as follows:

- Alkalinity: Excursion occurred within the Refuge interior at several sampling stations; however, alkalinity in the Refuge interior historically is very low due to its rainfall-driven hydrology. Therefore, the Florida Department of Environmental Protection does not consider this to be a violation of state water quality standards (Chapter 62-302, Florida Administrative Code) of Class III water bodies.
- pH: Minimal concern for Refuge inflow and interior and WCA-3 inflow.
- Specific Conductance: Concern for Refuge inflow; minimal concern for WCA-2 inflow and interior.
- No exceedances of total iron, turbidity, or un-ionized ammonia were observed throughout the EPA during WY2013.

Due to changes in the naming convention for monitoring locations within the EPA, **Table 2** within this appendix provides all known alternative names for both active and inactive monitoring locations used in this chapter. While the changes in naming mostly occurred for marsh monitoring locations, a few Rim Canal and inflow/outflow monitoring locations have alternative identities.

[1] Florida Department of Environmental Protection, Office of Ecosystem Projects, Tallahassee, FL

Table 1. Summary of water quality monitoring results from Water Year 2013 (May 1, 2012–April 30, 2013). Only water quality variables analyzed during the water year for a given region and site class are included. Excursion categories of concern, potential concern, minimal concern, and no concern are denoted by "C," "PC," "MC," and "NC," respectively. For sulfate, the excursion category is given as "NA" because no numeric criterion applies.

Parameter	Units	Area	Class	Arithmetic Mean	Standard Deviation	25th Percentile	Median	75th Percentile	Minimum	Maximum	N	Percent Exceed ± 90%CI	Exceed Category
pH	---	ENP	Inflow	7.33	0.27	7.20	7.30	7.40	6.00	8.20	322	40 ± 0	NC
pH	---	ENP	Interior	7.43	0.21	7.30	7.40	7.60	6.70	7.90	98	15 ± 0	NC
pH	---	Refuge	Inflow	7.63	0.24	7.40	7.60	7.80	7.10	8.60	178	24 ± 0	MC
pH	---	Refuge	Interior	6.67	0.36	6.40	6.70	6.90	5.70	8.20	278	35 ± 0	MC
pH	---	Refuge	Outflow	7.50	0.38	7.20	7.50	7.80	6.70	8.50	88	13 ± 0	NC
pH	---	Refuge	Rim	7.55	0.33	7.30	7.60	7.80	6.80	8.10	32	6 ± 0	NC
pH	---	WCA-2	Inflow	7.62	0.23	7.50	7.60	7.80	6.70	8.30	181	24 ± 0	NC
pH	---	WCA-2	Interior	7.47	0.17	7.40	7.50	7.60	7.10	8.00	209	28 ± 0	NC
pH	---	WCA-2	Outflow	7.50	0.27	7.30	7.50	7.70	6.90	8.10	107	16 ± 0	NC
pH	---	WCA-3	Inflow	7.54	0.29	7.33	7.50	7.70	5.90	8.40	660	77 ± 0	MC
pH	---	WCA-3	Interior	7.32	0.21	7.20	7.30	7.40	6.90	7.80	107	16 ± 0	NC
pH	---	WCA-3	Outflow	7.29	0.22	7.20	7.30	7.40	6.00	8.00	270	34 ± 0	NC
Specific Conductance	µS/cm	ENP	Inflow	476.07	123.90	366.75	514.50	552.00	218.60	825.00	322	40 ± 0	NC
Specific Conductance	µS/cm	ENP	Interior	474.63	135.15	388.25	459.00	551.00	178.00	844.00	96	14 ± 0	NC
Specific Conductance	µS/cm	Refuge	Inflow	970.68	263.61	792.25	1009.50	1154.50	214.00	1564.00	178	24 ± 0	C
Specific Conductance	µS/cm	Refuge	Interior	197.12	121.20	117.00	155.00	254.00	47.50	785.00	296	37 ± 0	NC
Specific Conductance	µS/cm	Refuge	Outflow	424.24	151.98	289.25	413.50	531.25	100.00	766.70	88	13 ± 0	NC
Specific Conductance	µS/cm	Refuge	Rim	753.44	205.25	585.00	746.00	932.75	376.00	1116.00	32	6 ± 0	NC
Specific Conductance	µS/cm	WCA-2	Inflow	854.15	312.73	653.05	870.00	1089.50	100.00	1599.00	181	24 ± 0	MC
Specific Conductance	µS/cm	WCA-2	Interior	959.44	239.10	837.00	999.00	1114.50	278.00	1761.00	209	28 ± 0	MC
Specific Conductance	µS/cm	WCA-2	Outflow	684.36	230.10	513.00	707.00	842.00	236.00	1186.00	107	16 ± 0	NC
Specific Conductance	µS/cm	WCA-3	Inflow	662.95	128.42	580.00	657.00	753.00	178.00	1186.00	659	77 ± 0	NC
Specific Conductance	µS/cm	WCA-3	Interior	539.86	182.84	416.00	517.00	685.00	167.00	1019.00	107	16 ± 0	NC
Specific Conductance	µS/cm	WCA-3	Outflow	465.73	162.37	337.15	421.55	571.25	212.30	1092.00	270	34 ± 0	NC
Sulfate	mg/L	ENP	Inflow	3.53	5.44	0.05	0.80	5.80	0.05	18.90	244	NA	NA

Parameter	Units	Area	Class	Arithmetic Mean	Standard Deviation	25th Percentile	Median	75th Percentile	Minimum	Maximum	N	Percent Exceed ± 90%CI	Exceed Category
Sulfate	mg/L	ENP	Interior	4.72	26.30	0.05	0.60	2.65	0.05	236.00	80	NA	NA
Sulfate	mg/L	Refuge	Inflow	50.85	17.43	39.75	52.05	62.93	6.20	89.50	168	NA	NA
Sulfate	mg/L	Refuge	Interior	1.20	3.32	0.05	0.05	0.83	0.05	28.90	226	NA	NA
Sulfate	mg/L	Refuge	Outflow	18.12	13.02	8.55	14.65	26.70	1.40	52.00	78	NA	NA
Sulfate	mg/L	Refuge	Rim	37.11	14.39	24.53	36.40	44.50	14.30	61.70	16	NA	NA
Sulfate	mg/L	WCA-2	Inflow	34.13	16.37	23.10	36.30	45.10	1.40	70.30	136	NA	NA
Sulfate	mg/L	WCA-2	Interior	37.91	15.66	26.65	39.55	49.08	4.00	69.60	188	NA	NA
Sulfate	mg/L	WCA-2	Outflow	23.79	15.88	7.75	25.40	36.65	3.20	68.80	85	NA	NA
Sulfate	mg/L	WCA-3	Inflow	21.51	17.92	3.53	18.70	37.75	0.05	68.80	201	NA	NA
Sulfate	mg/L	WCA-3	Interior	10.58	13.00	0.40	4.00	20.80	0.05	49.40	87	NA	NA
Sulfate	mg/L	WCA-3	Outflow	7.07	11.91	0.05	0.35	11.30	0.05	41.30	186	NA	NA
Total Alkalinity as $CaCO_3$	mg/L	ENP	Interior	145.66	30.94	131.25	139.50	163.50	75.00	233.00	80	13 ± 0	NC
Total Alkalinity as $CaCO_3$	mg/L	Refuge	Inflow	221.83	73.20	162.50	216.50	289.00	72.00	372.00	112	16 ± 0	NC
Total Alkalinity as $CaCO_3$	mg/L	Refuge	Interior	25.70	18.25	12.00	21.00	32.00	5.00	97.00	135	19 ± 0	C
Total Alkalinity as $CaCO_3$	mg/L	Refuge	Outflow	93.81	29.68	71.00	92.00	116.00	23.00	153.00	64	11 ± 0	NC
Total Alkalinity as $CaCO_3$	mg/L	WCA-2	Inflow	187.99	79.06	122.25	187.00	246.00	23.00	329.00	124	18 ± 0	NC
Total Alkalinity as $CaCO_3$	mg/L	WCA-2	Interior	180.79	54.83	141.25	180.00	217.75	58.00	293.00	76	12 ± 0	NC
Total Alkalinity as $CaCO_3$	mg/L	WCA-2	Outflow	161.70	54.84	121.50	162.50	207.00	67.00	292.00	82	13 ± 0	NC
Total Alkalinity as $CaCO_3$	mg/L	WCA-3	Inflow	196.59	39.16	167.25	203.50	227.50	104.00	292.00	168	23 ± 0	NC
Total Alkalinity as $CaCO_3$	mg/L	WCA-3	Interior	154.99	40.68	125.75	156.50	173.75	63.00	284.00	88	13 ± 0	NC
Total Alkalinity as $CaCO_3$	mg/L	WCA-3	Outflow	155.00	---	---	155.00	---	155.00	155.00	1	1 ± 0	NC
Total Iron	µg/L	Refuge	Inflow	27.20	5.63	21.50	28.00	32.50	21.00	34.00	5	2 ± 0	NC
Total Iron	µg/L	Refuge	Interior	57.52	43.80	25.75	45.00	81.50	5.00	180.00	48	9 ± 0	NC
Total Iron	µg/L	Refuge	Outflow	18.58	18.06	7.00	15.00	20.00	6.00	74.00	19	5 ± 0	NC
Total Iron	µg/L	WCA-2	Inflow	16.32	15.03	7.00	15.00	18.00	6.00	74.00	19	5 ± 0	NC
Total Iron	µg/L	WCA-2	Interior	16.12	26.56	6.50	10.00	15.00	4.00	140.00	25	5 ± 0	NC
Total Iron	µg/L	WCA-2	Outflow	19.76	9.92	11.50	18.00	28.50	5.00	37.00	17	4 ± 0	NC
Total Iron	µg/L	WCA-3	Inflow	45.92	63.08	18.00	28.00	52.50	5.00	327.00	25	5 ± 0	NC
Total Iron	µg/L	WCA-3	Interior	108.60	115.95	22.50	52.50	155.25	6.00	414.00	30	6 ± 0	NC
Turbidity	NTU	ENP	Inflow	1.45	1.72	0.70	0.90	1.20	0.40	7.40	23	5 ± 0	NC
Turbidity	NTU	ENP	Interior	1.74	1.34	0.90	1.40	2.10	0.30	6.70	80	13 ± 0	NC

Parameter	Units	Area	Class	Arithmetic Mean	Standard Deviation	25th Percentile	Median	75th Percentile	Minimum	Maximum	N	Percent Exceed ± 90%CI	Exceed Category
Turbidity	NTU	Refuge	Inflow	3.80	---	---	3.80	---	3.80	3.80	1	1 ± 0	NC
Turbidity	NTU	Refuge	Interior	0.77	0.30	0.60	0.70	0.90	0.40	2.70	135	19 ± 0	NC
Turbidity	NTU	Refuge	Outflow	1.19	1.19	0.78	0.90	1.30	0.50	8.00	38	7 ± 0	NC
Turbidity	NTU	WCA-2	Inflow	1.81	1.03	1.00	1.45	2.08	0.60	4.90	30	6 ± 0	NC
Turbidity	NTU	WCA-2	Interior	1.09	1.09	0.60	0.80	1.10	0.40	8.60	76	12 ± 0	NC
Turbidity	NTU	WCA-2	Outflow	1.58	0.73	1.00	1.50	2.00	0.40	4.60	90	14 ± 0	NC
Turbidity	NTU	WCA-3	Inflow	2.09	1.07	1.40	1.80	2.60	0.60	9.80	208	27 ± 0	NC
Turbidity	NTU	WCA-3	Interior	0.81	0.39	0.60	0.70	0.90	0.30	2.60	88	13 ± 0	NC
Turbidity	NTU	WCA-3	Outflow	1.51	1.29	0.80	1.10	1.60	0.40	7.40	51	9 ± 0	NC
Unionized Ammonia	µg/L	ENP	Inflow	---	---	---	---	---	---	---	0	N/A	N/A
Unionized Ammonia	µg/L	ENP	Interior	0.0006	0.0008	0.0002	0.0003	0.0006	0.0000	0.0055	59	0 ± 0	NC
Unionized Ammonia	µg/L	Refuge	Inflow	0.0046	0.0024	0.0026	0.0046	0.0060	0.0004	0.0124	63	0 ± 0	NC
Unionized Ammonia	µg/L	Refuge	Interior	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	110	0 ± 0	NC
Unionized Ammonia	µg/L	Refuge	Outflow	0.0005	0.0004	0.0002	0.0004	0.0006	0.0000	0.0019	64	0 ± 0	NC
Unionized Ammonia	µg/L	Refuge	Rim	---	---	---	---	---	---	---	0	N/A	N/A
Unionized Ammonia	µg/L	WCA-2	Inflow	0.0016	0.0013	0.0006	0.0013	0.0022	0.0000	0.0058	123	0 ± 0	NC
Unionized Ammonia	µg/L	WCA-2	Interior	0.0006	0.0008	0.0002	0.0003	0.0007	0.0000	0.0052	69	0 ± 0	NC
Unionized Ammonia	µg/L	WCA-2	Outflow	0.0006	0.0005	0.0002	0.0004	0.0007	0.0000	0.0033	82	0 ± 0	NC
Unionized Ammonia	µg/L	WCA-3	Inflow	0.0020	0.0024	0.0005	0.0012	0.0026	0.0001	0.0149	171	0 ± 0	NC
Unionized Ammonia	µg/L	WCA-3	Interior	0.0002	0.0001	0.0001	0.0001	0.0003	0.0000	0.0006	83	0 ± 0	NC
Unionized Ammonia	µg/L	WCA-3	Outflow	0.0017	0.0000	0.0000	0.0017	0.0000	0.0017	0.0017	1	0 ± 0	NC
Sulfate	mg/L	ENP	Inflow	3.53	5.44	0.05	0.80	5.80	0.05	18.90	244	NA	NA
Sulfate	mg/L	ENP	Interior	4.72	26.30	0.05	0.60	2.65	0.05	236.00	80	NA	NA
Sulfate	mg/L	Refuge	Inflow	50.85	17.43	39.75	52.05	62.93	6.20	89.50	168	NA	NA
Sulfate	mg/L	Refuge	Interior	1.20	3.32	0.05	0.05	0.83	0.05	28.90	226	NA	NA
Sulfate	mg/L	Refuge	Outflow	18.12	13.02	8.55	14.65	26.70	1.40	52.00	78	NA	NA
Sulfate	mg/L	Refuge	Rim	37.11	14.39	24.53	36.40	44.50	14.30	61.70	16	NA	NA
Sulfate	mg/L	WCA-2	Inflow	34.13	16.37	23.10	36.30	45.10	1.40	70.30	136	NA	NA
Sulfate	mg/L	WCA-2	Interior	37.91	15.66	26.65	39.55	49.08	4.00	69.60	188	NA	NA
Sulfate	mg/L	WCA-2	Outflow	23.79	15.88	7.75	25.40	36.65	3.20	68.80	85	NA	NA

Parameter	Units	Area	Class	Arithmetic Mean	Standard Deviation	25th Percentile	Median	75th Percentile	Minimum	Maximum	N	Percent Exceed ± 90%CI	Exceed Category
Sulfate	mg/L	WCA-3	Inflow	21.51	17.92	3.53	18.70	37.75	0.05	68.80	201	NA	NA
Sulfate	mg/L	WCA-3	Interior	10.58	13.00	0.40	4.00	20.80	0.05	49.40	87	NA	NA
Sulfate	mg/L	WCA-3	Outflow	7.07	11.91	0.05	0.35	11.30	0.05	41.30	186	NA	NA

Refuge – Arthur R. Marshall Loxahatchee National Wildlife Refuge

WCA-2 – Water Conservation Area 2

WCA-3 – Water Conservation Area 3

ENP – Everglades National Park

µg/L – micrograms per liter

mg/L – milligrams per liter

$CaCO_3$ – calcium carbonate

NTU – nephelometric turbidity unit

µS/cm – microSiemens per centimeter

Table 2. Crosswalk table detailing the area, classification, status, alias, and alternative names for stations used in the analysis presented within this chapter. This list also includes monitoring locations used to assess historical water quality conditions.

Area	Classification	Status	Alias	Alternative Name
Refuge	Inflow	Active	ACME1DS	ACME1DS
Refuge	Inflow	Active	ENR012	ENR012
Refuge	Inflow	Inactive	G251	G251
Refuge	Inflow	Inactive	G-251	G-251
Refuge	Inflow	Active	G300	G300
Refuge	Inflow	Active	G301	G301
Refuge	Inflow	Active	G310	G310, G-310
Refuge	Inflow	Active	G338	G338
Refuge	Inflow	Active	G94D	G94D
Refuge	Inflow	Inactive	L401	L401, L40-1
Refuge	Inflow	Inactive	L402	L402, L40-2
Refuge	Inflow	Inactive	L7	L7
Refuge	Inflow	Active	S362	S362
Refuge	Inflow	Inactive	S5A	S5A
Refuge	Inflow	Inactive	S5AS	S5AS
Refuge	Inflow	Inactive	S6	S6
Refuge	Interior	Inactive	1-8T	1-8T
Refuge	Interior	Inactive	A-1	A-1
Refuge	Interior	Inactive	A2	A2
Refuge	Interior	Inactive	A3	A3
Refuge	Interior	Inactive	A5	A5
Refuge	Interior	Inactive	A6	A6
Refuge	Interior	Inactive	A7	A7
Refuge	Interior	Inactive	CA11	CA11
Refuge	Interior	Inactive	CA110	CA110
Refuge	Interior	Inactive	CA111	CA111
Refuge	Interior	Inactive	CA112	CA112
Refuge	Interior	Inactive	CA113	CA113
Refuge	Interior	Inactive	CA114	CA114
Refuge	Interior	Inactive	CA115	CA115
Refuge	Interior	Inactive	CA116	CA116
Refuge	Interior	Inactive	CA12	CA12
Refuge	Interior	Inactive	CA13	CA13
Refuge	Interior	Inactive	CA14	CA14
Refuge	Interior	Inactive	CA15	CA15
Refuge	Interior	Inactive	CA16	CA16
Refuge	Interior	Inactive	CA17	CA17
Refuge	Interior	Inactive	CA18	CA18
Refuge	Interior	Inactive	CA19	CA19
Refuge	Interior	Active	LOX10	LOX10

Area	Classification	Status	Alias	Alternative Name
Refuge	Interior	Active	LOX11	LOX11
Refuge	Interior	Active	LOX12	LOX12
Refuge	Interior	Active	LOX13	LOX13
Refuge	Interior	Active	LOX14	LOX14
Refuge	Interior	Active	LOX15	LOX15
Refuge	Interior	Active	LOX16	LOX16
Refuge	Interior	Active	LOX3	LOX3
Refuge	Interior	Active	LOX4	LOX4
Refuge	Interior	Active	LOX5	LOX5
Refuge	Interior	Active	LOX6	LOX6
Refuge	Interior	Active	LOX7	LOX7
Refuge	Interior	Active	LOX8	LOX8
Refuge	Interior	Active	LOX9	LOX9
Refuge	Interior	Active	LOXA101	LOXA101
Refuge	Interior	Inactive	LOXA102	LOXA102
Refuge	Interior	Inactive	LOXA103	LOXA103
Refuge	Interior	Active	LOXA104.5	LOXA104.5
Refuge	Interior	Active	LOXA105	LOXA105
Refuge	Interior	Active	LOXA106	LOXA106
Refuge	Interior	Active	LOXA107	LOXA107
Refuge	Interior	Active	LOXA107U	LOXA107U
Refuge	Interior	Active	LOXA108	LOXA108
Refuge	Interior	Inactive	LOXA109	LOXA109
Refuge	Interior	Inactive	LOXA110	LOXA110
Refuge	Interior	Inactive	LOXA111	LOXA111
Refuge	Interior	Inactive	LOXA112	LOXA112
Refuge	Interior	Inactive	LOXA113	LOXA113
Refuge	Interior	Inactive	LOXA114	LOXA114
Refuge	Interior	Inactive	LOXA116	LOXA116
Refuge	Interior	Inactive	LOXA117	LOXA117
Refuge	Interior	Inactive	LOXA118	LOXA118
Refuge	Interior	Inactive	LOXA119	LOXA119
Refuge	Interior	Inactive	LOXA120	LOXA120
Refuge	Interior	Inactive	LOXA121	LOXA121
Refuge	Interior	Inactive	LOXA122	LOXA122
Refuge	Interior	Inactive	LOXA123	LOXA123
Refuge	Interior	Active	LOXA124	LOXA124
Refuge	Interior	Inactive	LOXA126	LOXA126
Refuge	Interior	Inactive	LOXA127	LOXA127
Refuge	Interior	Inactive	LOXA128	LOXA128

Area	Classification	Status	Alias	Alternative Name
Refuge	Interior	Inactive	LOXA129	LOXA129
Refuge	Interior	Active	LOXA130	LOXA130
Refuge	Interior	Inactive	LOXA131	LOXA131
Refuge	Interior	Inactive	LOXA132	LOXA132
Refuge	Interior	Inactive	LOXA133	LOXA133
Refuge	Interior	Inactive	LOXA134	LOXA134
Refuge	Interior	Active	LOXA136	LOXA136
Refuge	Interior	Active	LOXA137	LOXA137
Refuge	Interior	Active	LOXA138	LOXA138
Refuge	Interior	Active	LOXA139	LOXA139
Refuge	Interior	Active	LOXA140	LOXA140
Refuge	Interior	Inactive	WCA1MESO	WCA1MESO
Refuge	Interior	Active	X1	X1
Refuge	Interior	Inactive	X2	X2
Refuge	Interior	Inactive	X3	X3
Refuge	Interior	Active	X4	X4
Refuge	Interior	Inactive	Y4	Y4
Refuge	Interior	Inactive	Y433	Y433
Refuge	Interior	Active	Z1	Z1, LOXAZ1
Refuge	Interior	Active	Z2	Z2, LOXAZ2
Refuge	Interior	Active	Z3	Z3, LOXAZ3
Refuge	Interior	Active	Z4	Z4, LOXAZ4
Refuge	Outflow	Active	G94B	G94B
Refuge	Outflow	Active	S10A	S10A
Refuge	Outflow	Active	S10C	S10C
Refuge	Outflow	Active	S10D	S10D
Refuge	Outflow	Inactive	S10E	S10E
Refuge	Outflow	Active	S39	S39
Refuge	Rim	Inactive	CA103.0	CA103.0
Refuge	Rim	Inactive	CA106.0	CA106.0
Refuge	Rim	Inactive	CA120.0	CA120.0
Refuge	Rim	Inactive	CA123.0	CA123.0
Refuge	Rim	Inactive	CA126.7	CA126.7
Refuge	Rim	Inactive	CA127.2	CA127.2
Refuge	Rim	Inactive	CA127.7	CA127.7
Refuge	Rim	Inactive	CA129.0	CA129.0
Refuge	Rim	Inactive	CA134.0	CA134.0
Refuge	Rim	Inactive	CA139.0	CA139.0
Refuge	Rim	Inactive	CA142.0	CA142.0
Refuge	Rim	Inactive	CA147.7	CA147.7
Refuge	Rim	Inactive	CA155.0	CA155.0
Refuge	Rim	Inactive	ENR004	ENR004
Refuge	Rim	Active	LOXA104	LOXA104
Refuge	Rim	Inactive	LOXA115	LOXA115
Refuge	Rim	Inactive	LOXA129	LOXA129

Area	Classification	Status	Alias	Alternative Name
Refuge	Rim	Active	LOXA135	LOXA135
Refuge	Rim	Inactive	S5AD	S5AD
Refuge	Rim	Inactive	S6D	S6D
Refuge	Rim	Inactive	X0	X0
Refuge	Rim	Active	Z0	Z0, LOXAZ0
WCA-2	Inflow	Active	G335	G335
WCA-2	Inflow	Inactive	G339	G339
WCA-2	Inflow	Active	G436	G436
WCA-2	Inflow	Active	NSIDSP01	NSIDSP01
WCA-2	Inflow	Active	S10A	S10A
WCA-2	Inflow	Active	S10C	S10C
WCA-2	Inflow	Active	S10D	S10D
WCA-2	Inflow	Inactive	S10E	S10E
WCA-2	Inflow	Inactive	S38B	S38B
WCA-2	Inflow	Active	S7	S7
WCA-2	Interior	Inactive	217	217
WCA-2	Interior	Active	2AC2	2AC2, 404C2
WCA-2	Interior	Active	2AN.25	2AN.25
WCA-2	Interior	Inactive	2AN.5	2AN.5
WCA-2	Interior	Active	2AN1	2AN1, N1
WCA-2	Interior	Active	2AN2	2AN2
WCA-2	Interior	Inactive	2AN3.5	2AN3.5
WCA-2	Interior	Active	2AN4	2AN4, N4
WCA-2	Interior	Inactive	2AN4.5	2AN4.5
WCA-2	Interior	Active	2AN6	2AN6, N6
WCA-2	Interior	Inactive	2AN6.4	2AN6.4
WCA-2	Interior	Inactive	2AS.25	2AS.25
WCA-2	Interior	Inactive	2AS.5	2AS.5
WCA-2	Interior	Inactive	2AS1	2AS1
WCA-2	Interior	Inactive	2AS2	2AS2
WCA-2	Interior	Inactive	2AS4	2AS4
WCA-2	Interior	Inactive	404Y.5	404Y.5
WCA-2	Interior	Inactive	404Y1	404Y1
WCA-2	Interior	Inactive	404Y2	404Y2
WCA-2	Interior	Inactive	404Y4	404Y4
WCA-2	Interior	Inactive	404Z.5	404Z.5
WCA-2	Interior	Active	404Z1	404Z1
WCA-2	Interior	Inactive	404Z2	404Z2
WCA-2	Interior	Inactive	404Z4	404Z4
WCA-2	Interior	Inactive	A	A
WCA-2	Interior	Inactive	B	B
WCA-2	Interior	Inactive	B1	B1
WCA-2	Interior	Inactive	B2	B2, B-2
WCA-2	Interior	Inactive	B3	B3, B-3
WCA-2	Interior	Inactive	B4	B4, B-4

Area	Classification	Status	Alias	Alternative Name
WCA-2	Interior	Inactive	B5	B5, B-5
WCA-2	Interior	Inactive	B5B	B5B, B-5B
WCA-2	Interior	Inactive	B5C	B5C, B-5C
WCA-2	Interior	Inactive	B5D	B5D, B-5D
WCA-2	Interior	Inactive	B5E	B5E, B-5E
WCA-2	Interior	Inactive	B5F	B5F, B-5F
WCA-2	Interior	Inactive	B6	B6, B-6
WCA-2	Interior	Inactive	B7	B7, B-7
WCA-2	Interior	Inactive	C	C
WCA-2	Interior	Active	C0.25	C0.25
WCA-2	Interior	Inactive	CA21	CA21
WCA-2	Interior	Inactive	CA210	CA210
WCA-2	Interior	Inactive	CA211	CA211
WCA-2	Interior	Inactive	CA212	CA212
WCA-2	Interior	Inactive	CA213	CA213
WCA-2	Interior	Inactive	CA214	CA214
WCA-2	Interior	Inactive	CA215	CA215, CA2-15
WCA-2	Interior	Inactive	CA216	CA216
WCA-2	Interior	Active	CA217	CA217, CA2-17
WCA-2	Interior	Inactive	CA218	CA218
WCA-2	Interior	Inactive	CA219	CA219
WCA-2	Interior	Inactive	CA22	CA22
WCA-2	Interior	Inactive	CA220	CA220
WCA-2	Interior	Inactive	CA221	CA221
WCA-2	Interior	Active	CA222	CA222
WCA-2	Interior	Active	CA223	CA223
WCA-2	Interior	Active	CA224	CA224
WCA-2	Interior	Inactive	CA23	CA23
WCA-2	Interior	Inactive	CA24	CA24
WCA-2	Interior	Inactive	CA25	CA25
WCA-2	Interior	Active	CA26	CA26, CA2-6
WCA-2	Interior	Active	CA27	CA27, CA2-6
WCA-2	Interior	Active	CA28	CA28, CA2-8
WCA-2	Interior	Active	CA29	CA29, CA2-9
WCA-2	Interior	Inactive	D	D
WCA-2	Interior	Inactive	E	E
WCA-2	Interior	Inactive	E1	E1, WCA2E1
WCA-2	Interior	Inactive	E2	E2, WCA2E2
WCA-2	Interior	Inactive	E3	E3, WCA2E3
WCA-2	Interior	Inactive	E333	E333
WCA-2	Interior	Inactive	E367	E367
WCA-2	Interior	Inactive	E4	E4
WCA-2	Interior	Inactive	E425	E425
WCA-2	Interior	Inactive	E430	E430
WCA-2	Interior	Inactive	E450	E450

Area	Classification	Status	Alias	Alternative Name
WCA-2	Interior	Inactive	E475	E475
WCA-2	Interior	Inactive	E485	E485
WCA-2	Interior	Inactive	E5	E5, WCA2E5
WCA-2	Interior	Inactive	F333	F333
WCA-2	Interior	Inactive	F367	F367
WCA-2	Interior	Inactive	F425	F425
WCA-2	Interior	Inactive	F430	F430
WCA-2	Interior	Inactive	F450	F450
WCA-2	Interior	Inactive	F475	F475
WCA-2	Interior	Inactive	F520	F520
WCA-2	Interior	Active	FS0.25	FS0.25
WCA-2	Interior	Active	FS1	FS1
WCA-2	Interior	Inactive	FS2	FS2
WCA-2	Interior	Inactive	H3	H3
WCA-2	Interior	Inactive	H333	H333
WCA-2	Interior	Inactive	H367	H367
WCA-2	Interior	Inactive	H4	H4
WCA-2	Interior	Inactive	H425	H425
WCA-2	Interior	Inactive	H450	H450
WCA-2	Interior	Inactive	H475	H475
WCA-2	Interior	Inactive	H5	H5
WCA-2	Interior	Inactive	S0.25	S0.25
WCA-2	Interior	Active	S144	S144
WCA-2	Interior	Active	S145	S145
WCA-2	Interior	Active	S146	S146
WCA-2	Interior	Inactive	SITE-D	SITE-D
WCA-2	Interior	Inactive	SL	SL, FRYPUMP
WCA-2	Interior	Inactive	T	T
WCA-2	Interior	Active	U1	U1, WCA2U1
WCA-2	Interior	Inactive	U2	U2
WCA-2	Interior	Active	U3	U3, WCA2U3
WCA-2	Interior	Active	WCA2C4	WCA2C4
WCA-2	Interior	Active	WCA2C5	WCA2C5
WCA-2	Interior	Inactive	WCA2E4	WCA2E4
WCA-2	Interior	Active	WCA2F1	WCA2F1, F1
WCA-2	Interior	Active	WCA2F2	WCA2F2, F2
WCA-2	Interior	Active	WCA2F4	WCA2F4
WCA-2	Interior	Active	WCA2F5	F5, WCAF5
WCA-2	Interior	Inactive	WCA2U2	WCA2U2
WCA-2	Interior	Inactive	WCAF3	WCAF3, F3
WCA-2	Interior	Inactive	WCAF4	WCAF4, F4
WCA-2	Outflow	Inactive	E0	E0, WCA2E0
WCA-2	Outflow	Inactive	F0	F0, WCA2F0
WCA-2	Outflow	Active	S11A	S11A
WCA-2	Outflow	Active	S11B	S11B

Area	Classification	Status	Alias	Alternative Name
WCA-2	Outflow	Active	S11C	S11C
WCA-2	Outflow	Active	S34	S34
WCA-2	Outflow	Active	S38	S38
WCA-3	Inflow	Active	G123	G123
WCA-3	Inflow	Active	G204	G204
WCA-3	Inflow	Active	G205	G205
WCA-3	Inflow	Active	G206	G206
WCA-3	Inflow	Active	G344E	G344E
WCA-3	Inflow	Active	G344F	G344F
WCA-3	Inflow	Active	G344G	G344G
WCA-3	Inflow	Active	G344H	G344H
WCA-3	Inflow	Active	G344I	G344I
WCA-3	Inflow	Active	G344J	G344J
WCA-3	Inflow	Active	G344K	G344K
WCA-3	Inflow	Active	G352B	G352B
WCA-3	Inflow	Active	G354C	G354C
WCA-3	Inflow	Active	G393B	G393B
WCA-3	Inflow	Active	G407	G407
WCA-3	Inflow	Inactive	G606	G606
WCA3	Inflow	Inactive	L3	L3
WCA-3	Inflow	Active	L3BRS	L3BRS
WCA-3	Inflow	Active	S11A	S11A
WCA-3	Inflow	Active	S11B	S11B
WCA-3	Inflow	Active	S11C	S11C
WCA-3	Inflow	Active	S140	S140
WCA-3	Inflow	Active	S150	S150
WCA-3	Inflow	Active	S190	S190
WCA-3	Inflow	Active	S8	S8
WCA-3	Inflow	Active	S9	S9
WCA-3	Inflow	Active	S9A	S9A
WCA-3	Interior	Inactive	3AE05	3AE05
WCA-3	Interior	Inactive	3AE10	3AE10
WCA-3	Interior	Inactive	3AE15	3AE15
WCA-3	Interior	Inactive	3AE20	3AE20
WCA-3	Interior	Inactive	3AE40	3AE40
WCA-3	Interior	Inactive	3ANMESO	3ANMESO
WCA-3	Interior	Inactive	3AS3-SW1	3AS3-SW1
WCA-3	Interior	Inactive	3AS3-SW2	3AS3-SW2
WCA-3	Interior	Inactive	3AS3-SW3	3AS3-SW3
WCA-3	Interior	Inactive	3AS3-SW4	3AS3-SW4
WCA-3	Interior	Active	3ASMESO	3ASMESO
WCA-3	Interior	Inactive	3AW05	3AW05
WCA-3	Interior	Inactive	3AW10	3AW10
WCA-3	Interior	Inactive	3AW15	3AW15
WCA-3	Interior	Inactive	3AW20	3AW20

Area	Classification	Status	Alias	Alternative Name
WCA-3	Interior	Inactive	3AW30	3AW30
WCA-3	Interior	Inactive	3AW40	3AW40
WCA-3	Interior	Inactive	3B2	3B2
WCA-3	Interior	Inactive	3B3	3B3
WCA-3	Interior	Inactive	3B5	3B5
WCA-3	Interior	Inactive	3B6	3B6
WCA-3	Interior	Inactive	3B7	3B7
WCA-3	Interior	Inactive	3BS1-SW1	3BS1-SW1
WCA-3	Interior	Inactive	3BS1-SW2	3BS1-SW2
WCA-3	Interior	Inactive	3BS1-SW3	3BS1-SW3
WCA-3	Interior	Inactive	3BS1-SW4	3BS1-SW4
WCA-3	Interior	Inactive	AE1	AE1
WCA-3	Interior	Inactive	AE10	AE10
WCA-3	Interior	Inactive	AE2	AE2
WCA-3	Interior	Inactive	A-E3	A-E3
WCA-3	Interior	Inactive	AE4	AE4
WCA-3	Interior	Inactive	AE5	AE5
WCA-3	Interior	Inactive	AE6	AE6
WCA-3	Interior	Inactive	AE7	AE7
WCA-3	Interior	Inactive	AE8	AE8
WCA-3	Interior	Inactive	AE9	AE9
WCA-3	Interior	Inactive	AW1	AW1
WCA-3	Interior	Inactive	AW10	AW10
WCA-3	Interior	Inactive	AW11	AW11
WCA-3	Interior	Inactive	AW2	AW2
WCA-3	Interior	Inactive	AW3	AW3
WCA-3	Interior	Inactive	AW4	AW4
WCA-3	Interior	Inactive	AW5	AW5
WCA3	Interior	Inactive	AW6	AW6
WCA-3	Interior	Inactive	AW7	AW7
WCA-3	Interior	Inactive	AW8	AW8
WCA-3	Interior	Inactive	AW9	AW9
WCA-3	Interior	Inactive	BE1	BE1
WCA-3	Interior	Inactive	BE2	BE2
WCA-3	Interior	Inactive	BE3	BE3
WCA-3	Interior	Inactive	BW1	BW1
WCA-3	Interior	Inactive	BW2	BW2
WCA-3	Interior	Inactive	BW3	BW3
WCA-3	Interior	Inactive	C1	C1
WCA-3	Interior	Inactive	C11W02	C11W02
WCA-3	Interior	Inactive	C11W06	C11W06
WCA-3	Interior	Inactive	C11W09	C11W09
WCA-3	Interior	Inactive	C11W10	C11W10
WCA-3	Interior	Inactive	C11W13	C11W13
WCA-3	Interior	Inactive	C11W15	C11W15

Area	Classification	Status	Alias	Alternative Name
WCA-3	Interior	Inactive	C11W18	C11W18
WCA-3	Interior	Inactive	C11W19	C11W19
WCA-3	Interior	Inactive	C11W21	C11W21
WCA-3	Interior	Inactive	C2	C2
WCA-3	Interior	Inactive	C3A	C3A
WCA-3	Interior	Inactive	C3B	C3B
WCA-3	Interior	Inactive	C6	C6
WCA-3	Interior	Inactive	C7	C7
WCA-3	Interior	Inactive	C8	C8
WCA-3	Interior	Inactive	C9	C9
WCA-3	Interior	Inactive	CA31	CA31
WCA-3	Interior	Inactive	CA310	CA310
WCA-3	Interior	Active	CA311	CA311, CA3-11
WCA-3	Interior	Inactive	CA312	CA312
WCA-3	Interior	Inactive	CA313	CA313
WCA-3	Interior	Active	CA314	CA314, CA3-14
WCA-3	Interior	Active	CA315	CA315, CA3-15
WCA-3	Interior	Active	CA316	CA316, CA3-16
WCA-3	Interior	Active	CA317	CA317, CA3-17
WCA-3	Interior	Active	CA318	CA318, CA3-18
WCA-3	Interior	Active	CA319	CA319, CA3-19
WCA-3	Interior	Active	CA32	CA32, CA3-2
WCA-3	Interior	Inactive	CA320	CA320
WCA-3	Interior	Inactive	CA321	CA321
WCA-3	Interior	Active	CA324	CA324
WCA-3	Interior	Active	CA325	CA325
WCA-3	Interior	Active	CA33	CA33
WCA-3	Interior	Active	CA34	CA34, CA3-4
WCA-3	Interior	Active	CA35	CA35, CA3-5
WCA-3	Interior	Active	CA36	CA36, CA3-6
WCA-3	Interior	Inactive	CA37	CA37
WCA-3	Interior	Active	CA38	CA38, CA3-8
WCA-3	Interior	Active	CA39	CA39, CA3-9
WCA-3	Interior	Active	CA3B1	CA3B1
WCA-3	Interior	Active	CA3B2	CA3B2
WCA-3	Interior	Inactive	DS1	DS1
WCA-3	Interior	Inactive	DS2	DS2
WCA-3	Interior	Inactive	DS3	DS3
WCA-3	Interior	Inactive	DS4	DS4
WCA-3	Interior	Inactive	DS5	DS5
WCA-3	Interior	Inactive	DS6	DS6
WCA-3	Interior	Inactive	DS7	DS7
WCA-3	Interior	Inactive	DS8	DS8
WCA-3	Interior	Inactive	DS9	DS9
WCA-3	Interior	Inactive	L381	L-38-1, L38-1
WCA-3	Interior	Inactive	L382	L382
WCA-3	Interior	Inactive	MARSH-2	MARSH-2
WCA-3	Interior	Inactive	MC1	MC1
WCA-3	Interior	Inactive	S345B2	S345B2
WCA-3	Interior	Active	S345B6	S345B6
WCA-3	Interior	Inactive	S345C2	S345C2
WCA-3	Interior	Inactive	S345C6	S345C6
WCA-3	Interior	Inactive	WCA3C4	WCA3C4
WCA-3	Interior	Inactive	WCA3C5	WCA3C5
WCA-3	Outflow	Active	S12A	S12A
WCA-3	Outflow	Active	S12B	S12B
WCA-3	Outflow	Active	S12C	S12C
WCA-3	Outflow	Active	S12D	S12D
WCA-3	Outflow	Inactive	S14	S14
WCA-3	Outflow	Active	S142	S142
WCA-3	Outflow	Active	S31	S31
WCA-3	Outflow	Active	S333	S333
WCA-3	Outflow	Active	S334	S334
WCA-3	Outflow	Active	S344	S344
WCA-3	Outflow	Active	S355A	S355A
WCA-3	Outflow	Active	S355B	S355B
WCA-3	Outflow	Active	US41-25	US41-25
ENP	Inflow	Active	S12A	S12A
ENP	Inflow	Active	S12B	S12B
ENP	Inflow	Active	S12C	S12C
ENP	Inflow	Active	S12D	S12D
ENP	Inflow	Inactive	S175	S175
ENP	Inflow	Inactive	S176	S176
ENP	Inflow	Active	S18C	S18C
ENP	Inflow	Inactive	S332	S332
ENP	Inflow	Inactive	S332DAS	S332DAS
ENP	Inflow	Inactive	S332D	S332D
ENP	Inflow	Active	S332DX	S332DX
ENP	Inflow	Active	S333	S333
ENP	Inflow	Active	S355A	S355A
ENP	Inflow	Active	S355B	S355B
ENP	Inflow	Inactive	T0E	T0E
ENP	Inflow	Inactive	T0W	T0W
ENP	Interior	Active	CR2	CR2
ENP	Interior	Inactive	DS332	DS332
ENP	Interior	Active	EP	EP
ENP	Interior	Active	G-3273	G-3273
ENP	Interior	Active	NE1	NE1
ENP	Interior	Active	NP201	NP201
ENP	Interior	Inactive	NP206	NP206

Area	Classification	Status	Alias	Alternative Name
ENP	Interior	Active	P33	P33
ENP	Interior	Active	P34	P34
ENP	Interior	Active	P35	P35
ENP	Interior	Active	P36	P36
ENP	Interior	Active	P37	P37
ENP	Interior	Active	RG1	RG1
ENP	Interior	Inactive	S12A10	S12A10
ENP	Interior	Inactive	S12A2	S12A2
ENP	Interior	Inactive	S12A6	S12A6
ENP	Interior	Inactive	S12C10	S12C10
ENP	Interior	Inactive	S12C2	S12C2
ENP	Interior	Inactive	S12C6	S12C6
ENP	Interior	Inactive	S12D1.0	S12D1.0
ENP	Interior	Inactive	S12D3.0	S12D3.0
ENP	Interior	Inactive	S355A10	S355A10
ENP	Interior	Inactive	S355A2	S355A2
ENP	Interior	Inactive	S355A6	S355A6
ENP	Interior	Inactive	S355B10	S355B10
ENP	Interior	Inactive	S355B2	S355B2
ENP	Interior	Inactive	S355B6	S355B6
ENP	Interior	Active	SRS1C	SRS1C
ENP	Interior	Active	SRS2	SRS2
ENP	Interior	Inactive	T05E	T05E
ENP	Interior	Inactive	T05W	T05W
ENP	Interior	Inactive	T10E	T10E
ENP	Interior	Inactive	T10W	T10W
ENP	Interior	Inactive	T11	T11
ENP	Interior	Inactive	T1-1	T1-1
ENP	Interior	Inactive	T12	T12
ENP	Interior	Inactive	T1-2	T1-2
ENP	Interior	Inactive	T13	T13
ENP	Interior	Inactive	T1-3	T1-3
ENP	Interior	Inactive	T15E	T15E
ENP	Interior	Inactive	T15W	T15W
ENP	Interior	Inactive	T21	T21
ENP	Interior	Inactive	T22	T22
ENP	Interior	Inactive	T23	T23
ENP	Interior	Inactive	T2-3	T2-3
ENP	Interior	Inactive	T24	T24
ENP	Interior	Inactive	T2-4	T2-4
ENP	Interior	Inactive	T25	T25
ENP	Interior	Inactive	T2-5	T2-5
ENP	Interior	Inactive	T26	T26
ENP	Interior	Inactive	T2-6	T2-6
ENP	Interior	Inactive	T31	T31

Area	Classification	Status	Alias	Alternative Name
ENP	Interior	Inactive	T3-1	T3-1
ENP	Interior	Inactive	T32	T32
ENP	Interior	Inactive	T3-2	T3-2
ENP	Interior	Inactive	T33	T33
ENP	Interior	Inactive	T3-3	T3-3
ENP	Interior	Inactive	T34	T34
ENP	Interior	Inactive	T3-4	T3-4
ENP	Interior	Inactive	T35	T35
ENP	Interior	Inactive	T3-5	T3-5
ENP	Interior	Inactive	T36	T36
ENP	Interior	Inactive	T3-6	T3-6
ENP	Interior	Inactive	T51	T51
ENP	Interior	Inactive	T5-1	T5-1
ENP	Interior	Inactive	T52	T52
ENP	Interior	Inactive	T5-2	T5-2
ENP	Interior	Inactive	T53	T53
ENP	Interior	Inactive	T5-3	T5-3
ENP	Interior	Inactive	T61	T61
ENP	Interior	Inactive	T62	T62
ENP	Interior	Inactive	T63	T63
ENP	Interior	Inactive	T64	T64
ENP	Interior	Inactive	T71	T71
ENP	Interior	Inactive	T7-1	T7-1
ENP	Interior	Inactive	T72	T72
ENP	Interior	Inactive	T7-2	T7-2
ENP	Interior	Inactive	T73	T73
ENP	Interior	Inactive	T7-3	T7-3
ENP	Interior	Inactive	T74	T74
ENP	Interior	Inactive	T7-4	T7-4
ENP	Interior	Inactive	T75	T75
ENP	Interior	Inactive	T7-5	T7-5
ENP	Interior	Inactive	T76	T76
ENP	Interior	Inactive	T7-6	T7-6
ENP	Interior	Inactive	TNMESO	TNMESO
ENP	Interior	Active	TSB	TSB
ENP	Interior	Inactive	TSMESO	TSMESO
ENP	Interior	Inactive	TSPH2A	TSPH2A