FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Environmental Assessment and Restoration, Bureau of Watershed Restoration

SOUTH DISTRICT • CALOOSAHATCHEE BASIN

FINAL TMDL Report

APPENDICES

Nutrient TMDL for the Caloosahatchee Estuary (WBIDs 3240A, 3240B, and 3240C)

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Appendix B: Responses to Comments

NOTE: **Appendix B** can be found at the end of the main TMDL report.

Appendix C: Table Statistical Summaries of WBID Sample Station Data

NOTE: Of the stations with 6 or more samples and containing the most samples, the values highlighted in yellow represent values at or above the 75th percentile level for stations' median TN concentrations in that WBID. Those highlighted in red are above the 90th percentile level.

Appendix C.1. Station Summary of Total Nitrogen

WBID	SAMPLE STATION		Results				
		Number of Samples	Median	Minimum	25 Percentile	75 Percentile	Maximum
3236	21FLGW 30439	1	3.20	3.20	3.20	3.20	3.20
3236A	21FLA 28020041	5	0.99	0.83	0.92	1.13	1.31
	21FLFTM 28020221	4	0.57	0.54	0.55	0.78	1.33
	21FLWQSPLEE638GS	5	1.00	0.86	0.90	1.10	1.26
	21FLEECO29-8GR	121	0.82	0.01	0.61	1.03	4.25
	21FLFTM 28020041	1	1.38	1.38	1.38	1.38	1.38
	21FLFTM CALUSA0019FTN	1	0.76	0.76	0.76	0.76	0.76
3240A	21FLSFWMHB04	2	0.90	0.51	0.70	1.10	1.30
	21FLSFWMHB03	3	0.93	0.64	0.78	1.04	1.14
	21FLSFWMHB05	2	0.74	0.64	0.69	0.79	0.84
	21FLA 28020185	5	0.89	0.66	0.66	0.99	1.41
	21FLSFWMGR13	5	0.72	0.12	0.19	0.75	0.88
	21FLSFWMGR5	6	0.67	0.22	0.36	0.74	0.77
	21FLSFWMN6	5	0.70	0.32	0.47	0.77	0.81
	21FLSFWMRD8	5	0.61	0.19	0.48	0.62	0.79
	21FLSCCFMARKER 94	14	0.45	0.35	0.39	0.54	0.90
	21FLSFWMCES05	**40**	**1.00**	0.06	0.58	1.23	2.69
	21FLSFWMCES07	40	0.49	0.06	0.27	0.88	2.47
	21FLSFWMCES08	38	0.25	0.06	0.10	0.43	1.44
	CHNEPTCR339	1	0.27	0.27	0.27	0.27	0.27
	CHNEPTCR386	2	1.27	1.11	1.19	1.34	1.42
	CHNEPTCR436	2	1.10	0.96	1.03	1.17	1.24
	CHNEPTCR418	4	1.37	0.90	1.00	1.77	1.96
	CHNEPTCR394	3	0.90	0.53	0.72	1.17	1.44
	CHNEPTCR387	1	0.51	0.51	0.51	0.51	0.51
	CHNEPTCR393	1	0.48	0.48	0.48	0.48	0.48
	CHNEPTCR395	2	1.24	0.96	1.10	1.38	1.52
	CHNEPTCR403	4	1.21	0.60	0.87	1.72	2.48
	21FLSFWMROOK474	48	0.37	0.10	0.29	0.50	1.10
	CHNEPTCR413	5	0.78	0.59	0.68	0.89	1.40
	CHNEPTCR434	4	1.16	1.06	1.11	1.21	1.29
	CHNEPTCR414	1	0.68	0.68	0.68	0.68	0.68
	CHNEPTCR396	2	1.15	0.90	1.03	1.28	1.40
	CHNEPTCR419	5	1.47	0.48	0.63	1.59	1.60
	CHNEPTCR423	5	0.94	0.66	0.87	0.95	1.41
	CHNEPTCR392	2	0.78	0.68	0.73	0.83	0.88
	CHNEPTCR412	4	1.41	0.84	1.26	1.48	1.67
	CHNEPTCR417	2	1.45	1.40	1.43	1.48	1.50
	CHNEPTCR427	4	1.11	0.72	0.95	1.24	1.35
	CHNEPTCR429	5	0.97	0.92	0.96	1.05	1.60
	CHNEPTCR389	6	0.72	0.46	0.58	1.47	1.92
	CHNEPTCR391	3	0.87	0.62	0.75	1.39	1.90
	CHNEPTCR411	4	1.41	0.72	0.94	1.83	1.90
	CHNEPTCR424	5	0.92	0.58	0.91	1.80	2.66
	CHNEPTCR437	3	1.18	1.00	1.09	1.37	1.55
	CHNEPTCR428	3	0.96	0.86	0.91	1.23	1.50
	CHNEPTCR464	3	1.04	0.78	0.91	1.05	1.07
	CHNEPTCR388	3	0.99	0.76	0.88	1.27	1.55
	CHNEPTCR430	5	1.30	0.75	1.13	1.40	1.60
	CHNEPTCR422	**6**	**1.15**	0.68	1.06	1.23	1.73
	CHNEPTCR435	9	1.31	0.87	1.10	1.40	1.60
	21FLWQSPLEE670CA	4	0.53	0.38	0.48	0.55	0.59
	21FLSFWMCES06	87	0.89	0.06	0.62	1.24	2.30
	21FLGW 30436	1	0.53	0.53	0.53	0.53	0.53
	21FLGW 30445	1	0.59	0.59	0.59	0.59	0.59
	CAPECRD 350	133	0.47	0.07	0.32	0.62	1.20
	CAPECRD 242	131	0.76	0.07	0.51	1.04	2.78

WBID	SAMPLE STATION	Number of Samples	Results				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
3240A1	CAPECRD 400	133	0.51	0.04	0.35	0.63	1.05
	CAPECRD 470	130	0.48	0.12	0.36	0.57	1.02
	CAPECRD 315	132	0.65	0.11	0.46	0.81	2.45
	CAPECRD 430	132	0.40	0.09	0.30	0.51	1.99
	CAPECRD 510	132	0.54	0.12	0.40	0.70	1.14
	CAPECRD 540	134	0.33	0.04	0.27	0.46	1.25
	CAPECRD 600	132	0.31	0.05	0.21	0.45	0.77
3240A2	21FLFTM 28020285FTM	2	0.80	0.70	0.75	0.86	0.91
	21FLWQSPLEE650CA	4	0.55	0.46	0.48	0.65	0.78
	21FLWQSPLEE658CA	4	0.52	0.47	0.49	0.59	0.73
	21FLWQSPLEE660CA	4	0.51	0.38	0.48	0.53	0.57
	CAPECRD 210	131	0.34	0.11	0.27	0.42	1.54
	CAPECRD 243	130	0.51	0.06	0.37	0.70	4.86
	CAPECRD 262	131	0.49	0.16	0.37	0.60	0.85
	CAPECRD 300	130	0.36	0.16	0.30	0.47	0.72
	CAPECRD 275	129	0.55	0.10	0.40	0.71	2.31
	CAPECRD 295	131	0.32	0.12	0.26	0.39	0.64
	CAPECRD 280	130	0.36	0.14	0.31	0.44	0.81
	CAPECRD 290	131	0.39	0.09	0.34	0.44	0.71
	CAPECRD 310	132	0.46	0.16	0.35	0.55	1.11
	CAPECRD 355	130	0.60	0.10	0.41	0.81	1.81
	CAPECRD 390	130	0.44	0.07	0.32	0.54	1.11
3240A4	21FLEECODEEPGR10	**135**	**0.98**	0.01	0.79	1.17	2.33
	21FLEECODEEPGR50	**135**	**1.25**	0.01	1.00	1.50	3.48
	21FLEECODEEPGR90	**128**	**1.52**	0.01	1.21	1.85	4.56
3240B	21FLSFWMHB01	3	1.33	0.73	1.03	1.39	1.45
	21FLSFWMHB02	2	0.89	0.86	0.87	0.90	0.92
	CHNEPTCR451	3	1.03	0.97	1.00	1.18	1.32
	CHNEPTCR461	2	1.23	1.21	1.22	1.23	1.24
	CHNEPTCR444	3	1.05	0.70	0.87	1.09	1.14
	CHNEPTCR447	2	0.74	0.72	0.73	0.75	0.76
	CHNEPTCR454	2	1.16	1.15	1.15	1.16	1.17
	CHNEPTCR452	4	1.14	0.99	1.00	1.28	1.29
	CHNEPTCR442	6	1.18	0.60	0.99	1.50	1.70
	CHNEPTCR450	2	1.52	1.10	1.31	1.73	1.94
	CHNEPTCR448	3	1.20	0.80	1.00	1.36	1.52
	CHNEPTCR453	5	1.05	0.76	0.89	1.20	1.85
	CHNEPTCR449	3	1.18	0.94	1.06	1.19	1.20
	CHNEPTCR443	5	1.30	0.91	0.94	1.60	2.03
	21FLSFWMCES04	**87**	**1.13**	0.16	0.89	1.46	2.54
	21FLEECO18-6GR	119	0.72	0.01	0.55	0.95	2.31
3240B1	21FLGW 30420	1	1.11	1.11	1.11	1.11	1.11
	21FLEECO22-18GR	103	0.88	0.01	0.61	1.12	1.97
	21FLEECO22-7GR	108	0.84	0.01	0.56	1.04	2.31
	21FLEECO21-7GR	**95**	**0.94**	0.01	0.77	1.20	2.31
3240B2	21FLGW 10154	1	1.60	1.60	1.60	1.60	1.60

WBID	SAMPLE STATION	Results					
		Number of Samples	Median	Minimum	25 Percentile	75 Percentile	Maximum
3240C	21FLSFWMCES02	40	1.24	0.41	0.89	1.59	2.17
	CHNEPTCR473	3	1.42	1.21	1.31	1.64	1.86
	CHNEPTCR472	2	1.48	1.36	1.42	1.53	1.59
	CHNEPTCR463	1	0.99	0.99	0.99	0.99	0.99
	CHNEPTCR467	2	1.04	0.92	0.98	1.09	1.15
	CHNEPTCR456	2	1.00	0.69	0.85	1.16	1.31
	CHNEPTCR462	4	1.34	1.02	1.25	1.36	1.37
	CHNEPTCR469	2	1.08	0.85	0.96	1.19	1.30
	CHNEPTCR468	3	1.60	1.06	1.33	1.75	1.90
	CHNEPTCR471	5	1.34	1.15	1.21	1.60	1.77
	CHNEPTCR457	5	1.25	0.63	0.99	1.30	1.50
	CHNEPTCR470	6	1.25	0.79	1.07	1.62	2.10
	21FLSFWMCES03	87	1.28	0.36	1.05	1.50	2.11
	21FLEECO28-5GR	103	0.86	0.01	0.62	1.26	2.30
	21FLEECO26-GR20	117	1.11	0.01	0.90	1.43	10.30
3240C1	21FLEECO25-GR20	109	0.87	0.01	0.65	1.18	2.26
3240E	21FLA 28020035	1	0.52	0.52	0.52	0.52	0.52
	21FLFTM 28020330FTM	2	1.07	1.01	1.04	1.10	1.13
	21FLFTM 28020005	3	0.43	0.37	0.40	0.47	0.51
	21FLFTM 28020339FTM	1	0.90	0.90	0.90	0.90	0.90
	21FLGW 30422	1	0.88	0.88	0.88	0.88	0.88
	21FLEECO16-18GR	121	0.72	0.01	0.45	1.10	3.85
	21FLEECOYFC-CI	117	0.80	0.01	0.56	0.99	2.15
	21FLFTM 28020337FTM	1	0.78	0.78	0.78	0.78	0.78
	21FLFTM 28020035	15	0.71	0.55	0.67	0.86	1.43
3240E1	21FLEECO16-3GR	123	0.88	0.01	0.64	1.04	2.39
3240F	21FLA 28020231	1	1.02	1.02	1.02	1.02	1.02
	21FLGW 10148	1	0.90	0.90	0.90	0.90	0.90
	21FLFTM 28020231	2	1.01	0.67	0.84	1.18	1.35
	21FLWQSPLEE634US	4	1.03	0.90	0.91	1.24	1.50
	21FLEECO20A-19GR	107	0.97	0.01	0.76	1.34	3.24
	21FLEECO20-29GR	121	0.85	0.01	0.58	1.20	2.51
	21FLEECO20-9GR	121	0.72	0.01	0.44	1.03	1.92
	21FLEECO20A-11GR	89	0.88	0.01	0.59	1.03	2.59
3240G	21FLA 28020040	1	1.28	1.28	1.28	1.28	1.28
	21FLEECO27-6GR	122	0.85	0.01	0.64	1.11	3.26
3240H	21FLFTM 28020294FTM	1	0.72	0.72	0.72	0.72	0.72
	21FLFTM 28020295FTM	1	0.57	0.57	0.57	0.57	0.57
	21FLFTM 28020296FTM	1	1.06	1.06	1.06	1.06	1.06
	21FLFTM 28020297FTM	1	0.44	0.44	0.44	0.44	0.44
	21FLWQSPLEE672CA	5	0.45	0.41	0.42	0.51	0.54
	21FLEECOWHISGR10	123	0.54	0.01	0.39	0.76	2.55
	21FLEECOWHISGR50	122	0.56	0.01	0.39	0.76	3.73

WBID	SAMPLE STATION		Results				
		Number of Samples	Median	Minimum	25 Percentile	75 Percentile	Maximum
3240I	21FLA 28020225	1	1.35	1.35	1.35	1.35	1.35
	21FLFTM 28020225	**9**	**1.02**	0.72	0.80	1.17	2.83
	21FLFTM 28020025	**19**	**1.07**	0.62	0.90	1.28	1.61
	21FLFTM 28020286FTM	5	0.84	0.67	0.80	0.85	0.91
	21FLFTM 28020287FTM	5	0.84	0.68	0.81	0.86	0.95
	21FLFTM 28020288FTM	5	0.85	0.80	0.82	0.91	1.12
	21FLFTM 28020289FTM	5	1.00	0.67	0.92	1.03	1.26
	21FLWQSPLEE668CA	4	0.96	0.91	0.93	1.03	1.19
	21FLWQSPLEE664US	5	0.81	0.52	0.78	0.87	1.24
	21FLFTM 28020249FTM	30	0.99	0.56	0.73	1.11	1.61
3240J	21FLA 28020233	1	0.93	0.93	0.93	0.93	0.93
	21FLFTM 28020233	2	1.37	1.12	1.24	1.50	1.63
	21FLFTM 28020338FTM	2	1.39	1.38	1.39	1.40	1.41
	21FLWQSPLEE654CA	4	1.32	1.23	1.28	1.44	1.72
	21FLGW 30421	1	1.00	1.00	1.00	1.00	1.00
	21FLGW 30432	1	1.70	1.70	1.70	1.70	1.70
	21FLGW 30444	1	1.01	1.01	1.01	1.01	1.01
	21FLEECOBILLGR20	125	0.86	0.01	0.60	1.13	3.04
	21FLEECOBILLGR60	**123**	**1.32**	0.01	0.95	1.79	3.06
3240K	21FLA 28020148	1	0.66	0.66	0.66	0.66	0.66
	21FLFTM 28020011	1	0.38	0.38	0.38	0.38	0.38
	21FLFTM 28020148	3	0.55	0.54	0.54	0.58	0.62
	21FLWQSPLEE656GS	4	0.56	0.48	0.53	0.59	0.64
	21FLGW 30431	1	0.65	0.65	0.65	0.65	0.65
	21FLGW 30434	1	0.74	0.74	0.74	0.74	0.74
	21FLEECO40-18GR	124	0.59	0.01	0.42	0.72	2.54
	21FLEECO40-32GR	123	0.56	0.01	0.41	0.68	2.58
3240L	21FLA 28020036	1	0.63	0.63	0.63	0.63	0.63
	21FLFTM 28020332FTM	1	1.08	1.08	1.08	1.08	1.08
	21FLEECOPOWLGR20	116	0.63	0.02	0.42	0.80	2.26
	21FLFTM POWLGR20	**11**	**1.06**	0.89	0.96	1.16	1.66
3240M	21FLA 28020039	1	0.75	0.75	0.75	0.75	0.75
	21FLFTM 24-19GR	3	0.92	0.85	0.89	0.93	0.93
	21FLEECO24-19GR	120	0.86	0.01	0.58	1.10	2.50
	21FLEECO24-7GR	116	0.85	0.01	0.63	1.10	3.00
	21FLFTM 28020039	**16**	**1.35**	0.83	1.20	1.55	1.85
3240N	21FLEECO27O-GR20	121	0.60	0.01	0.38	0.99	3.42
	21FLFTM 270-GR20	**9**	**1.16**	0.80	0.92	1.45	1.63
3240Q	21FLA 28020232	1	0.58	0.58	0.58	0.58	0.58
	21FLFTM 28020232	1	0.88	0.88	0.88	0.88	0.88
	21FLEECO23-27GR	**122**	**0.94**	0.01	0.64	1.26	3.81
	21FLEECO23-5GR	**127**	**0.91**	0.01	0.75	1.10	2.17
	21FLFTM CALUSA0020FTM	1	0.97	0.97	0.97	0.97	0.97
	21FLFTM 28020038	2	1.11	1.08	1.10	1.13	1.14

Appendix C.2. Station Summary of Total Phosphorus

WBID	SAMPLE STATION	Number of Samples	Results, mg/L				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
3236	21FLGW 30439	1	1.1	1.1	1.1	1.1	1.1
3236A	21FLA 28020041	5	0.045	0.023	0.044	0.084	1.1
	21FLFTM 28020221	2	0.022	0.019	0.0205	0.0235	0.025
	21FLWQSPLEE638GS	5	0.06	0.04	0.04	0.1	0.11
	21FLEECO29-8GR	114	0.06	0.01	0.04325	0.09	0.45
	21FLFTM 28020041	1	0.21	0.21	0.21	0.21	0.21
	21FLFTM CALUSA0019FTN	1	0.036	0.036	0.036	0.036	0.036
3240A	21FLSFWMHB03	3	0.089	0.088	0.0885	0.091	0.093
	21FLSFWMHB04	3	0.069	0.062	0.0655	0.0735	0.078
	21FLSFWMHB05	5	0.049	0.04	0.045	0.058	0.059
	21FLA 28020185	5	0.09	0.065	0.081	0.11	0.13
	21FLSFWMGR13	5	0.032	0.006	0.031	0.044	0.057
	21FLSFWMGR5	6	0.0085	0.004	0.00725	0.02325	0.045
	21FLSFWMN6	5	0.014	0.005	0.007	0.051	0.056
	21FLSFWMRD8	5	0.013	0.004	0.006	0.03	0.047
	21FLSCCFMARKER 94	14	0.052	0.036	0.046	0.06675	0.146
	21FLSFWMCES05	40	0.1075	0.044	0.058	0.13875	0.285
	21FLSFWMCES07	40	0.09	0.011	0.05	0.13125	1.035
	21FLSFWMCES08	38	0.0675	0.016	0.05	0.09	0.545
	CHNEPTCR339	1	0.0190556	0.01905556	0.019055556	0.019055556	0.019055556
	CHNEPTCR386	2	0.1075	0.09	0.09875	0.11625	0.125
	CHNEPTCR436	2	0.1005	0.087	0.09375	0.10725	0.114
	CHNEPTCR418	4	0.0575	0.03	0.048	0.0945	0.195
	CHNEPTCR394	3	0.071	0.047	0.059	0.143	0.215
	CHNEPTCR387	1	0.0305667	0.03056667	0.030566667	0.030566667	0.030566667
	CHNEPTCR393	1	0.0262056	0.02620556	0.026205556	0.026205556	0.026205556
	CHNEPTCR395	2	0.059	0.055	0.057	0.061	0.063
	CHNEPTCR403	4	0.09675	0.059	0.07475	0.120875	0.143
	21FLSFWMROOK474	71	0.0573	0.0293	0.0431	0.08275	0.1731
	CHNEPTCR413	5	0.08	0.057	0.07	0.125	0.181
	CHNEPTCR434	4	0.1075	0.058	0.08425	0.1365	0.18
	CHNEPTCR414	1	0.056	0.056	0.056	0.056	0.056
	CHNEPTCR396	2	0.0675	0.059	0.06325	0.07175	0.076
	CHNEPTCR419	5	0.063	0.036	0.05	0.07	0.076
	CHNEPTCR423	5	0.062	0.04	0.054	0.1	0.105
	CHNEPTCR392	2	0.06	0.03	0.045	0.075	0.09
	CHNEPTCR412	4	0.1105	0.066	0.08775	0.1295	0.14
	CHNEPTCR417	2	0.135	0.13	0.1325	0.1375	0.14
	CHNEPTCR427	4	0.1065	0.061	0.088	0.127	0.16
	CHNEPTCR429	5	0.118	0.03	0.0685	0.12	0.21
	CHNEPTCR389	6	0.05975	0.03	0.047125	0.09075	0.101
	CHNEPTCR391	3	0.087	0.072	0.0795	0.0885	0.09
	CHNEPTCR411	4	0.073	0.05	0.05825	0.09375	0.12
	CHNEPTCR424	5	0.065	0.05	0.063	0.09	0.197
	CHNEPTCR437	3	0.07	0.06	0.065	0.085	0.1
	CHNEPTCR428	3	0.11	0.09	0.1	0.135	0.16
	CHNEPTCR464	3	0.066	0.03	0.048	0.098	0.13
	CHNEPTCR388	3	0.1	0.02	0.06	0.125	0.15
	CHNEPTCR430	5	0.066	0.06	0.062	0.09	0.1
	CHNEPTCR422	6	0.1	0.094	0.09925	0.10225	0.12
	CHNEPTCR435	9	0.119	0.03	0.1	0.127	0.21
	21FLWQSPLEE670CA	4	0.07	0.03	0.06	0.0725	0.08
	21FLSFWMCES06	87	0.09	0.004	0.055	0.127	0.63
	21FLGW 30436	1	0.023	0.023	0.023	0.023	0.023
	21FLGW 30445	1	0.042	0.042	0.042	0.042	0.042

WBID	SAMPLE STATION	Number of Samples	Results, mg/L				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
3240A2	21FLFTM 28020285FTM	1	0.034	0.034	0.034	0.034	0.034
	21FLWQSPLEE650CA	4	0.015	0.01	0.01	0.02	0.02
	21FLWQSPLEE658CA	4	0.015	0.01	0.01	0.025	0.04
	21FLWQSPLEE660CA	4	0.01	0.009	0.00975	0.0125	0.02
3240A4	21FLEECODEEPGR10	130	0.1	0.01	0.06	0.14	0.69
	21FLEECODEEPGR50	134	0.14	0.04	0.1	0.22	1.03
	21FLEECODEEPGR90	127	0.14	0.01	0.0715	0.25	1.37
3240B	21FLSFWMHB01	3	0.106	0.0915	0.09875	0.1125	0.119
	21FLSFWMHB02	3	0.095	0.091	0.093	0.1155	0.136
	CHNEPTCR451	3	0.1	0.07	0.085	0.145	0.19
	CHNEPTCR461	2	0.2485	0.067	0.15775	0.33925	0.43
	CHNEPTCR444	3	0.08	0.042	0.061	0.084	0.088
	CHNEPTCR447	2	0.088	0.075	0.0815	0.0945	0.101
	CHNEPTCR454	2	0.1465	0.095	0.12075	0.17225	0.198
	CHNEPTCR452	4	0.1455	0.084	0.11175	0.17125	0.175
	CHNEPTCR442	6	0.092	0.05	0.07825	0.11475	0.136
	CHNEPTCR450	2	0.1775	0.135	0.15625	0.19875	0.22
	CHNEPTCR448	3	0.098	0.097	0.0975	0.109	0.12
	CHNEPTCR453	5	0.106	0.09	0.1035	0.109	0.12
	CHNEPTCR449	3	0.094	0.069	0.0815	0.0945	0.095
	CHNEPTCR443	5	0.12	0.08	0.09	0.13	0.213
	21FLSFWMCES04	87	0.11	0.04	0.08	0.1455	0.445
	21FLEECO18-6GR	118	0.142	0.03	0.1	0.21	0.815
3240B1	21FLGW 30420	1	0.079	0.079	0.079	0.079	0.079
	21FLEECO22-18GR	97	0.05	0.01	0.05	0.1	0.91
	21FLEECO22-7GR	104	0.0965	0.005	0.06	0.14375	0.593
	21FLEECO21-7GR	88	0.07	0.01	0.05	0.13	3.02
3240B2	21FLGW 10154	1	0.23	0.23	0.23	0.23	0.23
	21FLSFWMCES02	40	0.1325	0.05	0.0745	0.18575	0.515
	CHNEPTCR473	3	0.17	0.105	0.1375	0.2175	0.265
	CHNEPTCR472	2	0.1345	0.089	0.11175	0.15725	0.18
	CHNEPTCR463	1	0.084	0.084	0.084	0.084	0.084
	CHNEPTCR467	2	0.05175	0.047	0.049375	0.054125	0.0565
	CHNEPTCR456	2	0.1405	0.137	0.13875	0.14225	0.144
	CHNEPTCR462	4	0.13125	0.062	0.069875	0.19275	0.201
	CHNEPTCR469	2	0.0915	0.089	0.09025	0.09275	0.094
	CHNEPTCR468	3	0.09	0.061	0.0755	0.1	0.11
	CHNEPTCR471	5	0.11	0.0835	0.09	0.1675	0.2
	CHNEPTCR457	5	0.094	0.066	0.09	0.115	0.13
	CHNEPTCR470	6	0.093	0.0555	0.06475	0.13025	0.19
	21FLSFWMCES03	87	0.115	0.032	0.08	0.162	0.52
	21FLEECO28-5GR	100	0.16	0.01	0.08	0.2625	0.981
	21FLEECO26-GR20	115	0.145	0.01	0.092	0.22	0.61
3240C1	21FLEECO25-GR20	98	0.08	0.005	0.05	0.13	0.71
3240E	21FLA 28020035	1	0.11	0.11	0.11	0.11	0.11
	21FLFTM 28020330FTM	2	0.25	0.14	0.195	0.305	0.36
	21FLFTM 28020005	3	0.11	0.067	0.0885	0.115	0.12
	21FLFTM 28020339FTM	1	0.094	0.094	0.094	0.094	0.094
	21FLGW 30422	1	0.088	0.088	0.088	0.088	0.088
	21FLEECO16-18GR	122	0.1725	0.01	0.11	0.24375	1.19
	21FLEECOYFC-CI	116	0.16	0.01	0.1175	0.2525	0.78
	21FLFTM 28020337FTM	1	0.26	0.26	0.26	0.26	0.26
	21FLFTM 28020035	10	0.12	0.11	0.1125	0.165	0.26
3240E1	21FLEECO16-3GR	121	0.15	0.04	0.1	0.19	1.07

WBID	SAMPLE STATION	Number of Samples	Results, mg/L				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
3240F	21FLA 28020231	1	0.082	0.082	0.082	0.082	0.082
	21FLGW 10148	1	0.033	0.033	0.033	0.033	0.033
	21FLFTM 28020231	2	0.0475	0.037	0.04225	0.05275	0.058
	21FLWQSPLEE634US	4	0.03	0.02	0.0275	0.035	0.05
	21FLEECO20A-19GR	97	0.06	0.01	0.05	0.108	0.5
	21FLEECO20-29GR	119	0.05	0.01	0.03	0.06	0.65
	21FLEECO20-9GR	108	0.094	0.005	0.06	0.16	0.45
	21FLEECO20A-11GR	85	0.11	0.005	0.08	0.196	1.62
3240G	21FLA 28020040	1	0.05	0.05	0.05	0.05	0.05
	21FLEECO27-6GR	112	0.05	0.01	0.04	0.08	0.96
3240H	21FLWQSPLEE672CA	5	0.02	0.01	0.01	0.03	0.04
	21FLEECOWHISGR10	118	0.05	0.01	0.0215	0.057	0.61
	21FLEECOWHISGR50	117	0.05	0.01	0.03	0.05	0.46
3240I	21FLA 28020225	1	0.14	0.14	0.14	0.14	0.14
	21FLFTM 28020286FTM	1	0.17	0.17	0.17	0.17	0.17
	21FLFTM 28020287FTM	1	0.17	0.17	0.17	0.17	0.17
	21FLFTM 28020288FTM	1	0.11	0.11	0.11	0.11	0.11
	21FLWQSPLEE668CA	4	0.09	0.04	0.0625	0.115	0.13
	21FLWQSPLEE664US	5	0.16	0.11	0.16	0.27	0.33
	21FLFTM 28020249FTM	9	0.15	0.13	0.15	0.18	0.24
3240J	21FLA 28020233	1	0.52	0.52	0.52	0.52	0.52
	21FLFTM 28020338FTM	2	0.22	0.19	0.205	0.235	0.25
	21FLWQSPLEE654CA	4	0.14	0.12	0.1275	0.17	0.23
	21FLGW 30421	1	0.44	0.44	0.44	0.44	0.44
	21FLGW 30432	1	0.092	0.092	0.092	0.092	0.092
	21FLGW 30444	1	0.15	0.15	0.15	0.15	0.15
	21FLEECOBILLGR20	124	0.19	0.01	0.09	0.26	0.95
	21FLEECOBILLGR60	122	0.19	0.02	0.14	0.3	0.517
3240K	21FLA 28020148	1	0.026	0.026	0.026	0.026	0.026
	21FLFTM 28020148	1	0.043	0.043	0.043	0.043	0.043
	21FLWQSPLEE656GS	4	0.0275	0.02	0.02375	0.03	0.03
	21FLGW 30431	1	0.016	0.016	0.016	0.016	0.016
	21FLGW 30434	1	0.023	0.023	0.023	0.023	0.023
	21FLEECO40-18GR	118	0.05	0.01	0.03	0.06	0.24
	21FLEECO40-32GR	116	0.06	0.01	0.05	0.09475	0.89
3240L	21FLA 28020036	1	0.054	0.054	0.054	0.054	0.054
	21FLFTM 28020332FTM	1	0.12	0.12	0.12	0.12	0.12
	21FLEECOPOWLGR20	108	0.1	0.005	0.0575	0.18	0.83
	21FLFTM POWLGR20	11	0.11	0.095	0.11	0.125	0.28
3240M	21FLA 28020039	1	0.066	0.066	0.066	0.066	0.066
	21FLFTM 24-19GR	4	0.0235	0.02	0.02	0.028	0.031
	21FLEECO24-19GR	118	0.05	0.01	0.026	0.06	0.44
	21FLEECO24-7GR	105	0.058	0.005	0.04	0.1	0.68
	21FLFTM 28020039	16	0.064	0.035	0.05975	0.08	0.15
3240N	21FLEECO27O-GR20	114	0.05075	0.01	0.05	0.108	1.19
	21FLFTM 270-GR20	9	0.11	0.072	0.1	0.12	0.14
3240Q	21FLA 28020232	1	0.06	0.06	0.06	0.06	0.06
	21FLFTM 28020232	1	0.22	0.22	0.22	0.22	0.22
	21FLEECO23-27GR	117	0.05	0.01	0.03	0.07	0.53
	21FLEECO23-5GR	125	0.14	0.01	0.095	0.19	0.99
	21FLFTM CALUSA0020FTM	1	0.029	0.029	0.029	0.029	0.029
	21FLFTM 28020038	2	0.15	0.15	0.15	0.15	0.15

Appendix C.3. Station Summary of BOD5

WBID	SAMPLE STATION	Number of Samples	BOD Results, mg/L				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
3236A	21FLA 28020041	4	1.45	1	1.15	1.825	2.2
	21FLFTM 28020221	2	1.4	1	1.2	1.6	1.8
	21FLEECO29-8GR	121	1.5	0.3	1.2	1.8	5.9
	21FLFTM 28020041	1	1.1	1.1	1.1	1.1	1.1
	21FLFTM CALUSA0019FTN	1	0.84	0.84	0.84	0.84	0.84
3240A	21FLA 28020185	5	3.7	1	3	5.5	6
	CHNEPTCR339	1	1.5	1.5	1.5	1.5	1.5
	CHNEPTCR386	2	2.025	1.5	1.7625	2.2875	2.55
	CHNEPTCR436	2	1	1	1	1	1
	CHNEPTCR418	4	1.55	1.1	1.325	1.875	2.4
	CHNEPTCR394	3	1.5	1.4	1.45	1.75	2
	CHNEPTCR387	1	3.1	3.1	3.1	3.1	3.1
	CHNEPTCR393	1	0.3	0.3	0.3	0.3	0.3
	CHNEPTCR395	2	0.9	0.3	0.6	1.2	1.5
	CHNEPTCR403	4	1.65	0.3	0.825	3.1	5.5
	CHNEPTCR413	5	1.8	1.3	1.5	2.3	3.1
	CHNEPTCR434	4	1.5	1	1.075	2.275	3.4
	CHNEPTCR414	1	1.4	1.4	1.4	1.4	1.4
	CHNEPTCR396	2	2.1	2.1	2.1	2.1	2.1
	CHNEPTCR419	5	1.4	1.1	1.3	2.5	2.9
	CHNEPTCR423	5	1.8	0.3	1.5	2.3	2.4
	CHNEPTCR392	2	1.5	1.2	1.35	1.65	1.8
	CHNEPTCR412	4	1.2	0.3	0.675	1.775	2.3
	CHNEPTCR417	2	1.7	1	1.35	2.05	2.4
	CHNEPTCR427	4	1.9	1.8	1.8	3.025	6.1
	CHNEPTCR429	5	1.7	1	1.6	1.8	1.8
	CHNEPTCR389	6	1.325	0.3	0.725	2.4875	4.1
	CHNEPTCR391	3	1	0.7	0.85	1.1	1.2
	CHNEPTCR411	4	1.4	1	1.15	1.7	2
	CHNEPTCR424	5	2	0.3	0.8	2.5	6.6
	CHNEPTCR437	3	1.5	0.4	0.95	1.5	1.5
	CHNEPTCR428	3	1.3	1.1	1.2	1.9	2.5
	CHNEPTCR464	3	2	0.9	1.45	2.15	2.3
	CHNEPTCR388	3	0.5	0.3	0.4	2	3.5
	CHNEPTCR430	5	1.5	0.6	0.7	1.5	1.9
	CHNEPTCR422	6	1.6	1.2	1.2	2.075	2.5
	CHNEPTCR435	9	1.4	0.6	0.8	1.8	2.5
	CAPECRD 350	206	1.5583333	0.13333333	1	1.65	2.95
	CAPECRD 242	167	1.6	0.5	1.375	2.1	8
3240A1	CAPECRD 400	143	1.5666667	0.31666667	1.133333333	2.016666667	3.85
	CAPECRD 470	141	1.6	0.28333333	1.1	1.85	3.85
	CAPECRD 315	131	2.4	0.6	2	2.4	5.4
	CAPECRD 430	137	1.6	0.66666667	1.116666667	2.033333333	2.883333333
	CAPECRD 510	143	1.65	0.41666667	1.158333333	2.316666667	4.733333333
	CAPECRD 540	206	1.275	0.21666667	0.833333333	1.6	2.716666667
	CAPECRD 600	207	1.1833333	0.13333333	0.783333333	1.6	2.983333333
3240A2	CAPECRD 210	137	1.4666667	0.53333333	1.1	1.616666667	3.45
	CAPECRD 243	130	2.4	0.7	2	2.4	4.8
	CAPECRD 262	137	1.8833333	1.05	1.6	2.366666667	3.916666667
	CAPECRD 300	137	1.6	0.6	1.35	1.933333333	3.833333333
	CAPECRD 275	128	2.4	0.4	2	2.4	4.8
	CAPECRD 295	137	1.3333333	0.13333333	0.816666667	1.6	2.45
	CAPECRD 280	137	1.3333333	0.06666667	1.066666667	1.6	2.4
	CAPECRD 290	137	1.4166667	0.06666667	1.033333333	1.633333333	2.4
	CAPECRD 310	206	1.8	0.2	1.433333333	2.2125	3.4
	CAPECRD 355	133	2.4	0.3	2	2.4	5.1
	CAPECRD 390	139	1.7166667	0.08333333	1.333333333	2.066666667	2.75

WBID	SAMPLE STATION	Number of Samples	BOD Results, mg/L				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
3240A4	21FLEECODEEPGR10	133	2.2	0.3	1.7	2.9	7.9
	21FLEECODEEPGR50	132	2.5	0.3	1.5	3.8	7.9
	21FLEECODEEPGR90	126	3.3	0.5	2.3	5.575	8.3
3240B	CHNEPTCR451	3	1.5	1.5	1.5	1.6	1.7
	CHNEPTCR461	2	1.55	1.5	1.525	1.575	1.6
	CHNEPTCR444	3	1.2	1.2	1.2	1.675	2.15
	CHNEPTCR447	2	2.1	1	1.55	2.65	3.2
	CHNEPTCR454	2	1.45	1.15	1.3	1.6	1.75
	CHNEPTCR452	4	1.8	1	1.525	2.575	4.6
	CHNEPTCR442	6	1.6	1.2	1.525	1.675	2.2
	CHNEPTCR450	2	1.35	1	1.175	1.525	1.7
	CHNEPTCR448	3	1.7	0.9	1.3	1.95	2.2
	CHNEPTCR453	5	1.15	0.7	1	1.5	1.8
	CHNEPTCR449	3	1.05	1	1.025	1.075	1.1
	CHNEPTCR443	5	1.5	0.8	0.8	1.5	4.8
	21FLEECO18-6GR	119	1.5	0.3	1	2.15	8.3
3240B1	21FLEECO22-18GR	104	1.7	0.5	1.475	2.3	6.3
	21FLEECO22-7GR	108	1.6	0.1	1	2.025	7.5
	21FLEECO21-7GR	95	1.5	0.6	1.2	2.2	7.3
3240C	CHNEPTCR473	3	1.7	1.5	1.6	1.875	2.05
	CHNEPTCR472	2	1.4	1.3	1.35	1.45	1.5
	CHNEPTCR463	1	1	1	1	1	1
	CHNEPTCR467	2	1.9	1	1.45	2.35	2.8
	CHNEPTCR456	2	1.3	1	1.15	1.45	1.6
	CHNEPTCR462	4	1.7	1	1.45	2	2.6
	CHNEPTCR469	2	2.5	1.1	1.8	3.2	3.9
	CHNEPTCR468	3	1.7	1.5	1.6	1.75	1.8
	CHNEPTCR471	5	1.5	0.3	1.5	1.7	2.35
	CHNEPTCR457	5	1.4	0.75	1	1.5	2.9
	CHNEPTCR470	6	1.525	1	1.25	1.8	1.9
	21FLEECO28-5GR	103	1.8	0.3	1.25	2.65	7.9
	21FLEECO26-GR20	117	2.1	0.3	1.5	3.1	7.6
3240C1	21FLEECO25-GR20	109	1.5	0	1.1	1.8	7.1
3240E	21FLFTM 28020005	2	0.855	0.51	0.6825	1.0275	1.2
	21FLFTM 28020339FTM	3	0.91	0.52	0.715	1.005	1.1
	21FLEECO16-18GR	122	1.6	0.3	1.125	2.775	6.6
	21FLEECOYFC-CI	118	1.5	0.3	1	1.6	3.8
	21FLFTM 28020337FTM	1	0.91	0.91	0.91	0.91	0.91
	21FLFTM 28020035	9	1	0.51	0.68	1.1	1.7
3240E1	21FLEECO16-3GR	122	2	0.3	1.4	2.85	8.8
3240F	21FLFTM 28020231	1	1.2	1.2	1.2	1.2	1.2
	21FLEECO20A-19GR	106	1.6	0.3	1.4	2.1	7.4
	21FLEECO20-29GR	122	1.7	0.3	1.5	2.3	4.8
	21FLEECO20-9GR	121	1.5	0.4	1.1	2	5.1
	21FLEECO20A-11GR	89	1.5	0.5	1	2.1	7.4
3240G	21FLEECO27-6GR	121	1.5	0.4	1	1.6	7.4
3240H	21FLEECOWHISGR10	124	1.5	0.3	1.4	2.2	6.3
	21FLEECOWHISGR50	124	1.5	0.3	1	1.5	7.8
3240I	21FLFTM 28020249FTM	8	1.25	1.1	1.2	1.625	2.6

WBID	SAMPLE STATION	Number of Samples	BOD Results, mg/L				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
3240J	21FLFTM 28020338FTM	1	1.2	1.2	1.2	1.2	1.2
	21FLEECOBILLGR20	125	1.5	0.3	1.1	1.9	5.7
	21FLEECOBILLGR60	122	2.3	0.6	1.525	3.7	8
3240K	21FLEECO40-18GR	125	1.3	0.3	1	1.5	2.6
	21FLEECO40-32GR	125	1.5	0.3	1	1.6	8.1
3240L	21FLFTM 28020332FTM	1	0.98	0.98	0.98	0.98	0.98
	21FLEECOPOWLGR20	117	1.5	0.3	1	1.6	7.6
	21FLFTM POWLGR20	10	0.845	0.56	0.6525	1.075	1.5
3240M	21FLFTM 24-19GR	2	0.815	0.8	0.8075	0.8225	0.83
	21FLEECO24-19GR	120	1.7	0.3	1.3	2.425	7.4
	21FLEECO24-7GR	116	1.4	0.3	1	2.05	7.1
	21FLFTM 28020039	13	1.1	0.8	0.96	1.7	2.1
3240N	21FLEECO27O-GR20	121	1.5	0.4	1	2	7.3
	21FLFTM 270-GR20	9	1.2	0.68	1.1	1.3	1.8
3240Q	21FLFTM 28020232	1	0.62	0.62	0.62	0.62	0.62
	21FLEECO23-27GR	121	2.3	0.7	1.7	3.5	7.2
	21FLEECO23-5GR	126	1.5	0.3	1.2	2.1	7.6
	21FLFTM CALUSA0020FTM	1	0.86	0.86	0.86	0.86	0.86
	21FLFTM 28020038	2	0.59	0.53	0.56	0.62	0.65

Appendix C.3. Station Summary of Dissolved Oxygen (Supplement to Table 2.7)

WBID	SAMPLE STATION	Dissolved Oxygen Results, mg/L					
		Number of Samples	Median	Minimum	25 Percentile	75 Percentile	Maximum
3236	21FLGW 30439	1	2.06	2.06	2.06	2.06	2.06
3240E	21FLEECO16-18GR	123	3	0.2	2	4.1	8.4
	21FLEECOYFC-CI	118	3.7	0.1	2.85	4.4	13.1
	21FLFTM 28020005	4	4.75	4.3	4.525	4.95	5.1
	21FLFTM 28020035	19	2.55	1.5	2.155	3.065	8.19
	21FLFTM 28020330FTM	2	1.5	1.2	1.35	1.65	1.8
	21FLFTM 28020337FTM	2	3.995	3.39	3.6925	4.2975	4.6
	21FLFTM 28020339FTM	3	3.6	2.7	3.15	3.8	4
	21FLGW 30422	1	7.955	7.955	7.955	7.955	7.955
3240F	21FLEECO20-29GR	122	4.05	1	3.2	5.2	10.23
	21FLEECO20-9GR	121	4.6	1.4	3.76	5.8	9.8
	21FLEECO20A-11GR	88	4.6	1.4	3.8	5.725	11.57
	21FLEECO20A-19GR	106	2.4	0.1	1.6	3.6	5.8
	21FLFTM 28020231	2	5.75	4.2	4.975	6.525	7.3
	21FLGW 10148	1	4.18	4.18	4.18	4.18	4.18
	21FLWQSPLEE634US	8	3.915	2.005	3.1575	5.085	6.28
3240G	21FLEECO27-6GR	120	4.59	1.7	3.75	5.5	10.3
3240H	21FLEECOWHISGR10	124	4.535	1	2.5075	6.425	10.6
	21FLEECOWHISGR50	192	3.6	0.4	2.4	5	9.2
	21FLFTM 28020294FTM	1	10.51	10.51	10.51	10.51	10.51
	21FLFTM 28020295FTM	1	8.56	8.56	8.56	8.56	8.56
	21FLFTM 28020296FTM	1	6.04	6.04	6.04	6.04	6.04
	21FLFTM 28020297FTM	1	6.54	6.54	6.54	6.54	6.54
	21FLWQSPLEE672CA	8	6.58	4.28	5.2975	8.99625	16.12
3240I	21FLFTM 28020025	18	4.035	1.38	2.8925	5.915	8
	21FLFTM 28020225	8	4.06	1.4	2.845	5.45	6.38
	21FLFTM 28020249FTM	35	5.15	0.97	4.385	6.1425	8.74
	21FLFTM 28020286FTM	6	5.415	2.47	3.155	6.6025	6.95
	21FLFTM 28020287FTM	6	3.75	0.95	1.6125	4.305	5.97
	21FLFTM 28020288FTM	6	5.42	0.98	2.6925	5.6425	6.33
	21FLFTM 28020289FTM	6	6.46	4.62	5.6425	8.38	10.35
	21FLWQSPLEE664US	9	5.55	4.69	5.38	6.26	6.9
	21FLWQSPLEE668CA	8	6.0183333	3.97	5.535	8.4975	17.67
3240J	21FLEECOBILLGR20	125	3.8	0.5	2.69	4.8	12
	21FLEECOBILLGR60	123	4.3	0.66	3.2	5.55	8.1
	21FLFTM 28020087	1	4.6	4.6	4.6	4.6	4.6
	21FLFTM 28020233	3	6.55	3.95	5.25	6.825	7.1
	21FLFTM 28020338FTM	2	8.765	8.1	8.4325	9.0975	9.43
	21FLGW 30421	1	3.535	3.535	3.535	3.535	3.535
	21FLGW 30432	1	6.28	6.28	6.28	6.28	6.28
	21FLGW 30444	1	4.25	4.25	4.25	4.25	4.25
	21FLWQSPLEE654CA	8	4.355	3.14	3.8275	4.6975	4.8
3240K	21FLEECO40-18GR	125	4.73	0.99	3.9	6.3	8.9
	21FLEECO40-32GR	125	5.2	0.9	4	7.1	11.5
	21FLFTM 28020011	1	6.33	6.33	6.33	6.33	6.33
	21FLFTM 28020085	1	5.1	5.1	5.1	5.1	5.1
	21FLFTM 28020148	3	6.4	3.62	5.01	6.6	6.8
	21FLGW 30431	1	2.89	2.89	2.89	2.89	2.89
	21FLGW 30434	1	1.275	1.275	1.275	1.275	1.275
	21FLWQSPLEE656GS	11	5.33	1.72791667	2.651666667	6.52	8.87
3240N	21FLEECO27O-GR20	120	4.2	0.7	3.2	5	8.3
	21FLFTM 27O-GR20	13	3.94	2.17	3.41	4.41	5.31

Appendix D: Bar Graph Overview of WBID Water Quality Ranges

Appendix D.1. Dissolved Oxygen

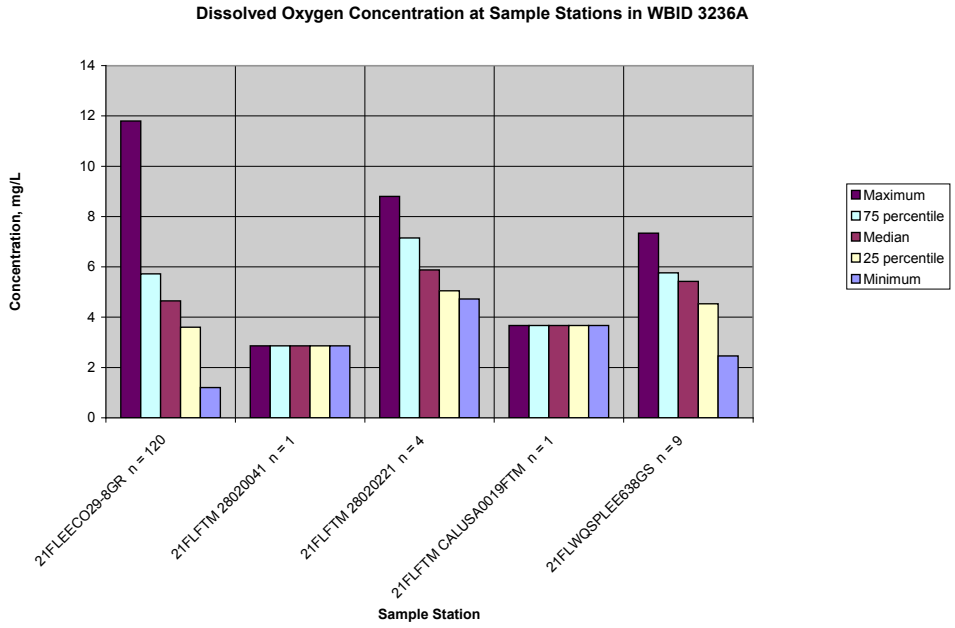


Figure D.1.1: Dissolved Oxygen, Sample Stations of WBID 3236A

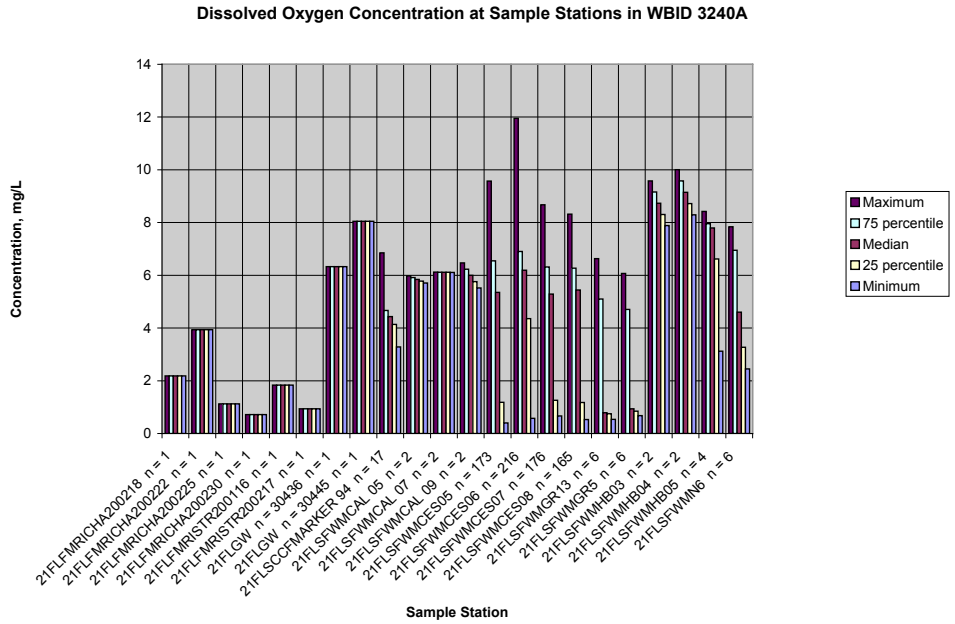


Figure D.1.2: Dissolved Oxygen, Sample Stations of WBID 3240A

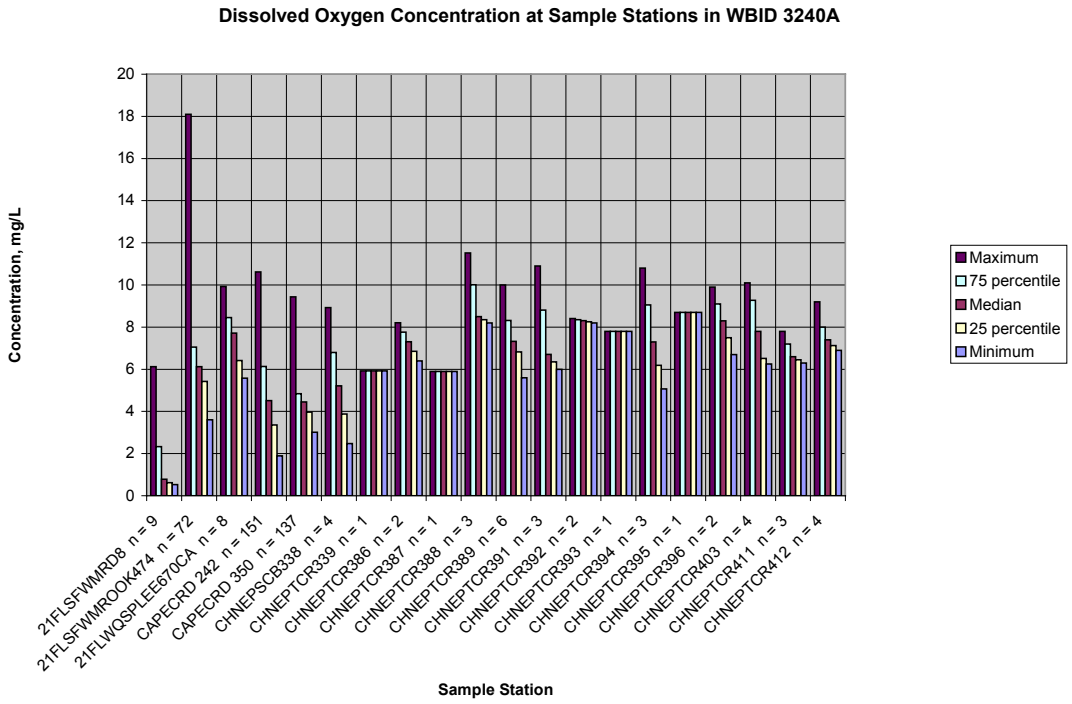


Figure D.1.3: Dissolved Oxygen, Sample Stations of WBID 3240A

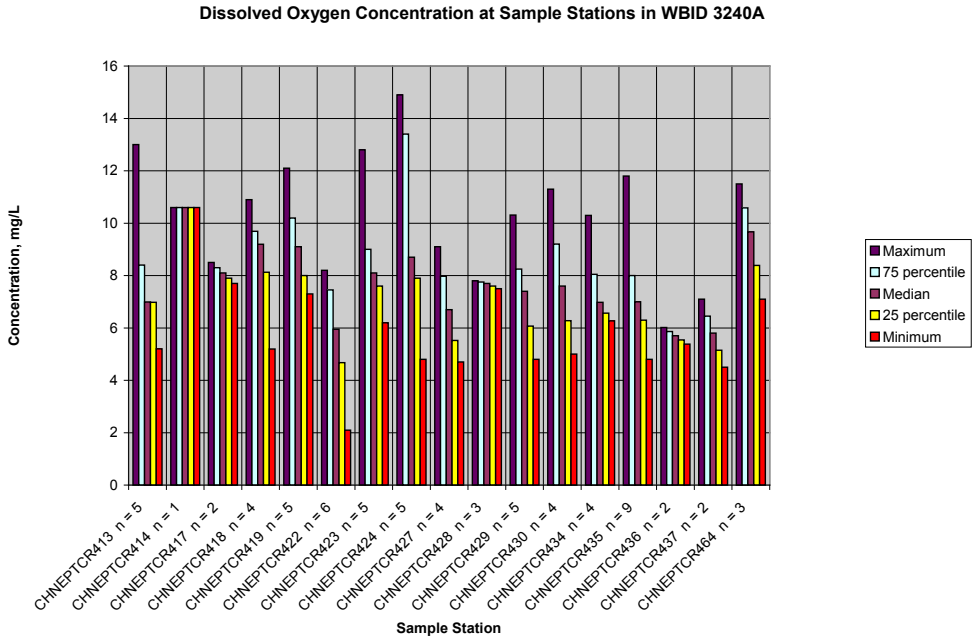


Figure D.1.4: Dissolved Oxygen, Sample Stations of WBID 3240A

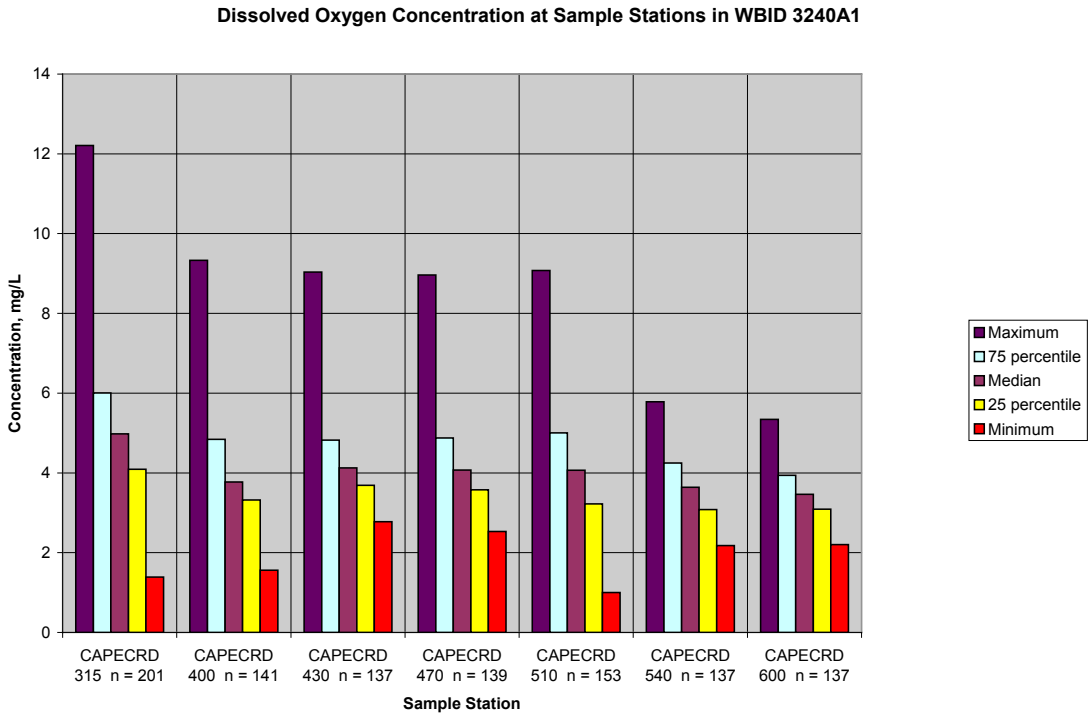


Figure D.1.5: Dissolved Oxygen, Sample Stations of WBID 3240A1

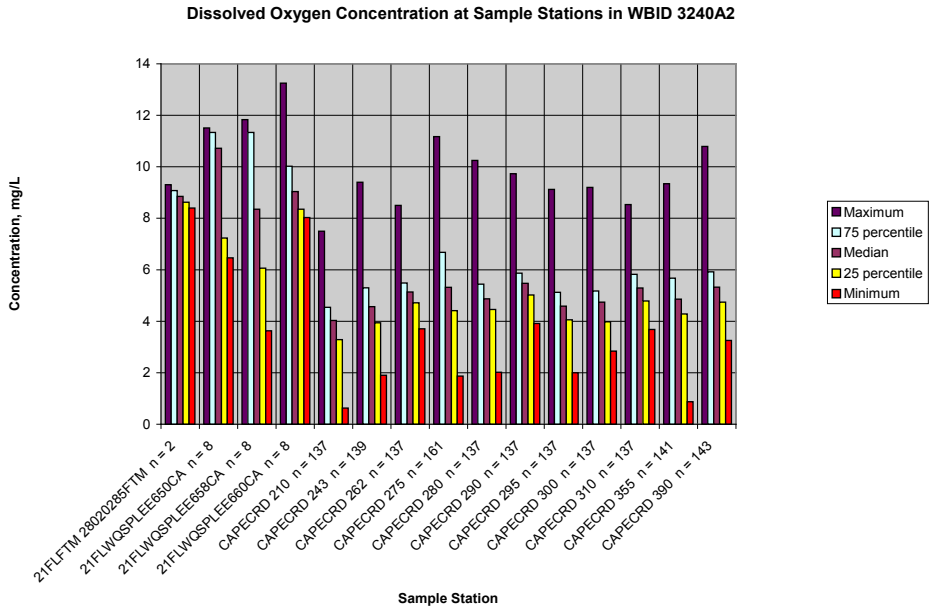


Figure D.1.6: Dissolved Oxygen, Sample Stations of WBID 3240A2

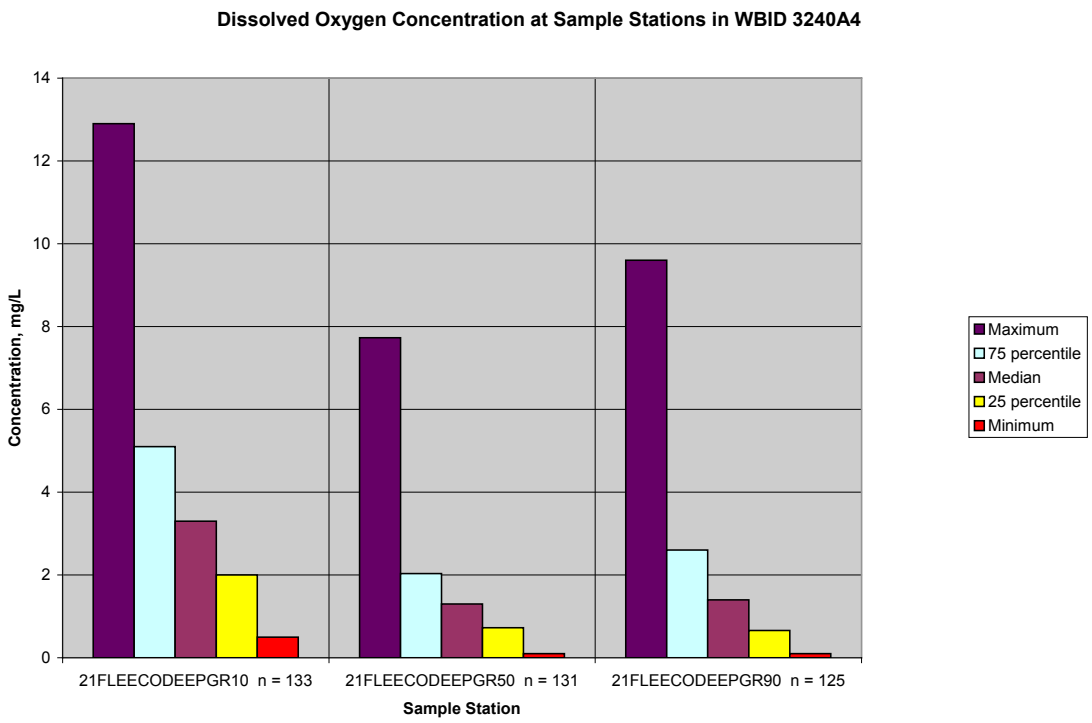


Figure D.1.7: Dissolved Oxygen, Sample Stations of WBID 3240A4

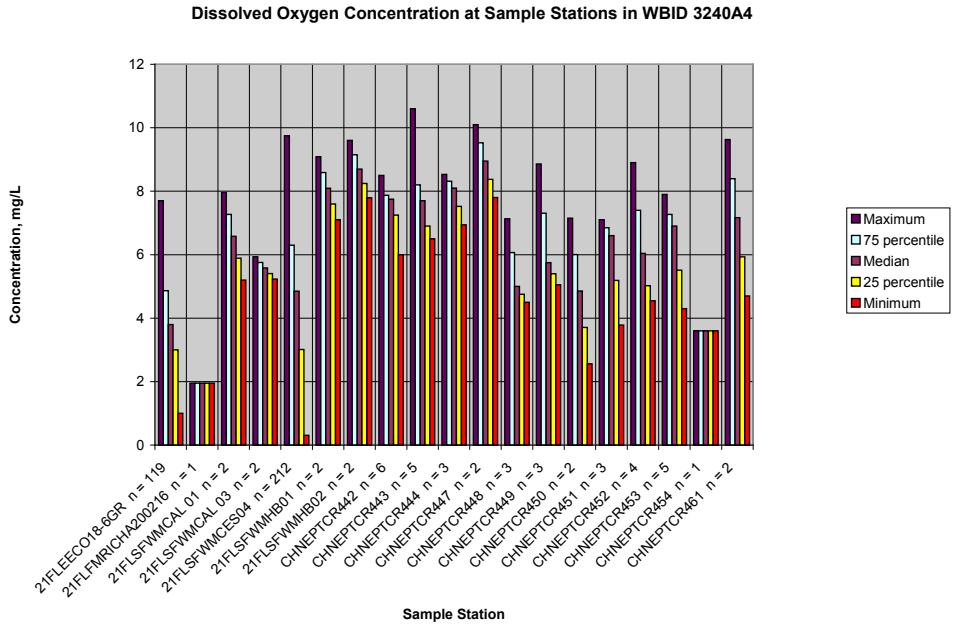


Figure D.1.8: Dissolved Oxygen, Sample Stations of WBID 3240A4

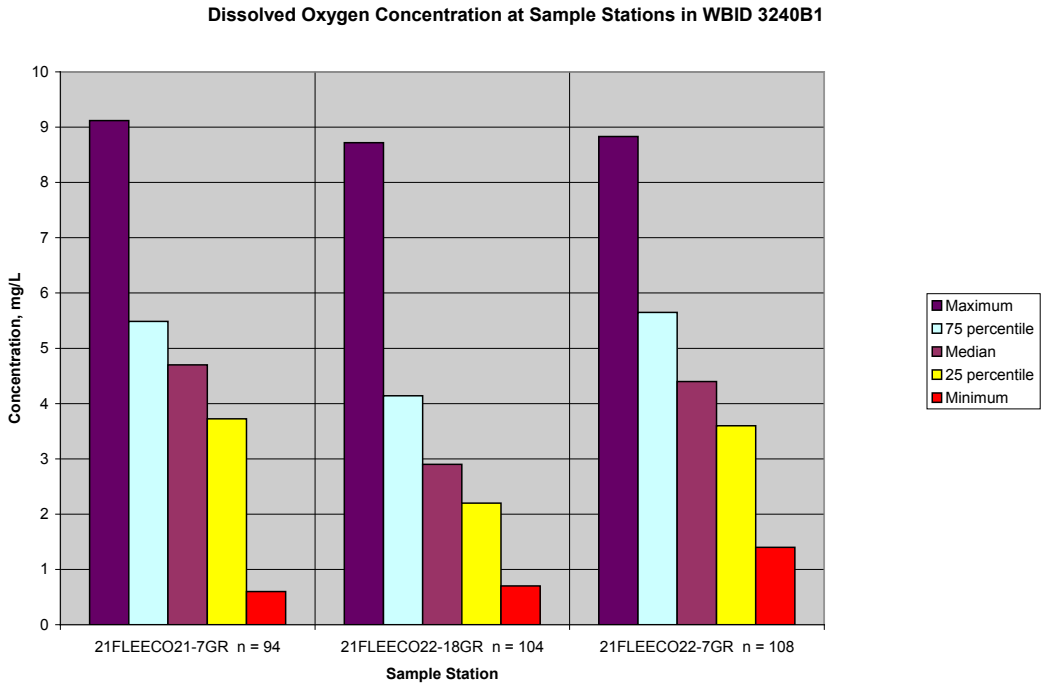


Figure D.1.9: Dissolved Oxygen, Sample Stations of WBID 3240B1

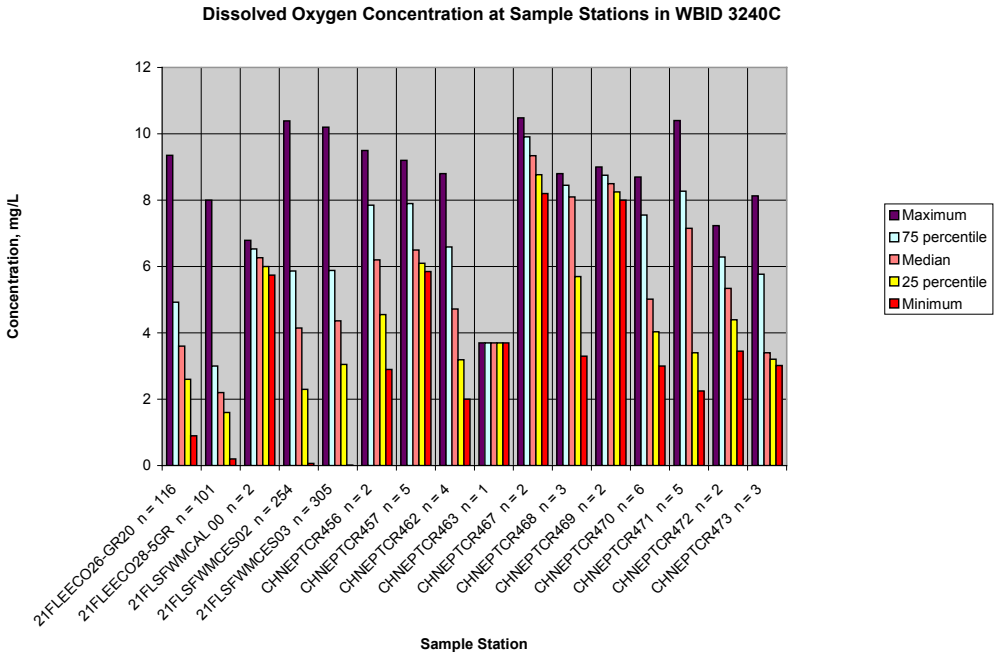


Figure D.1.10: Dissolved Oxygen, Sample Stations of WBID 3240C

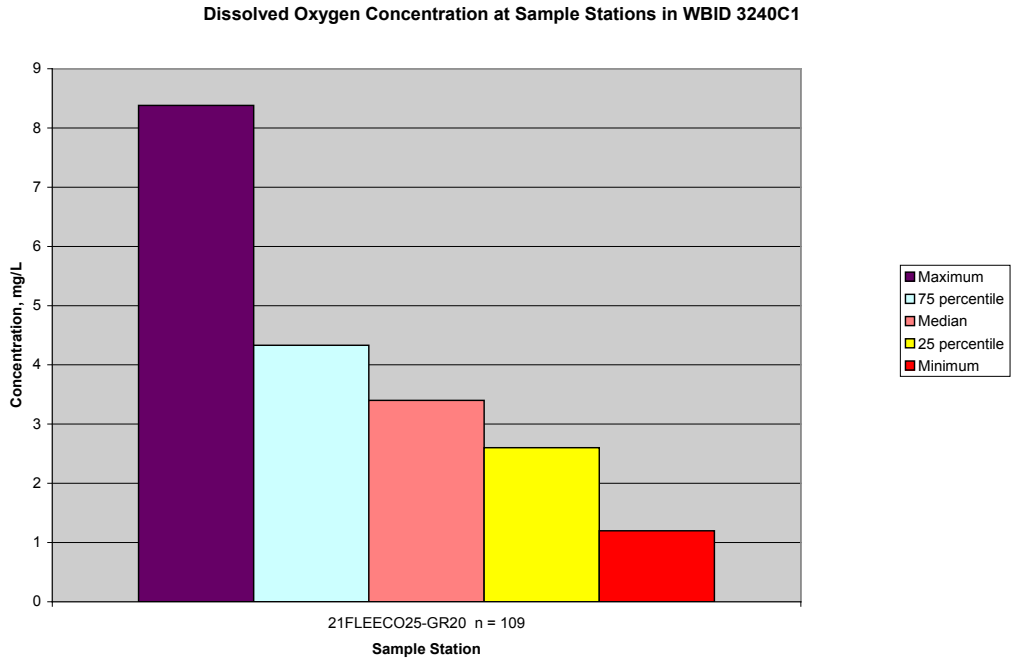


Figure D.1.11: Dissolved Oxygen, Sample Stations of WBID 3240A

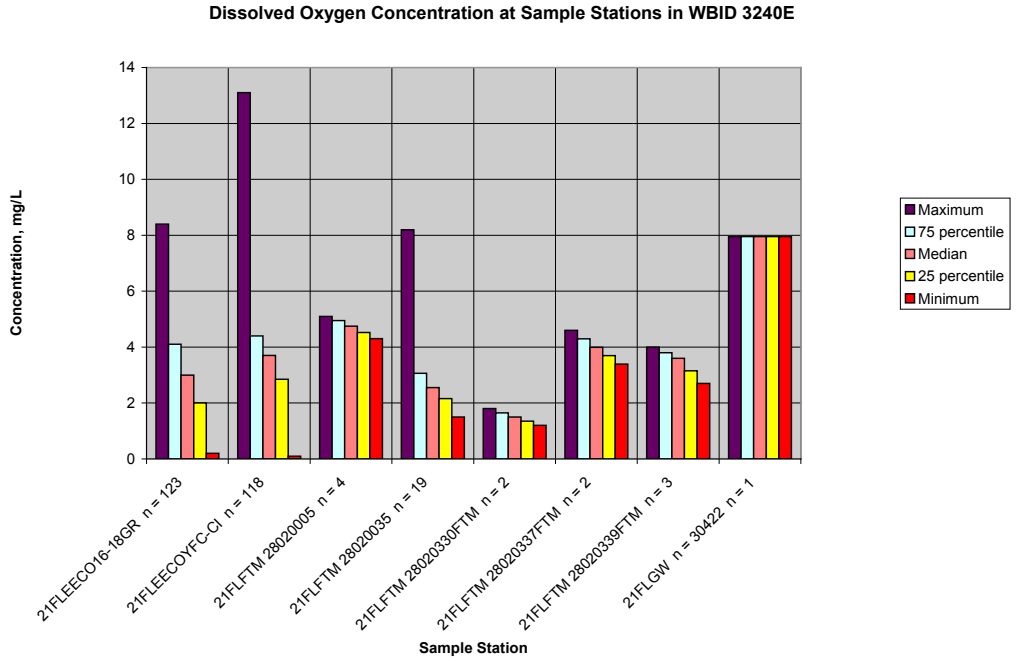


Figure D.1.12: Dissolved Oxygen, Sample Stations of WBID 3240A

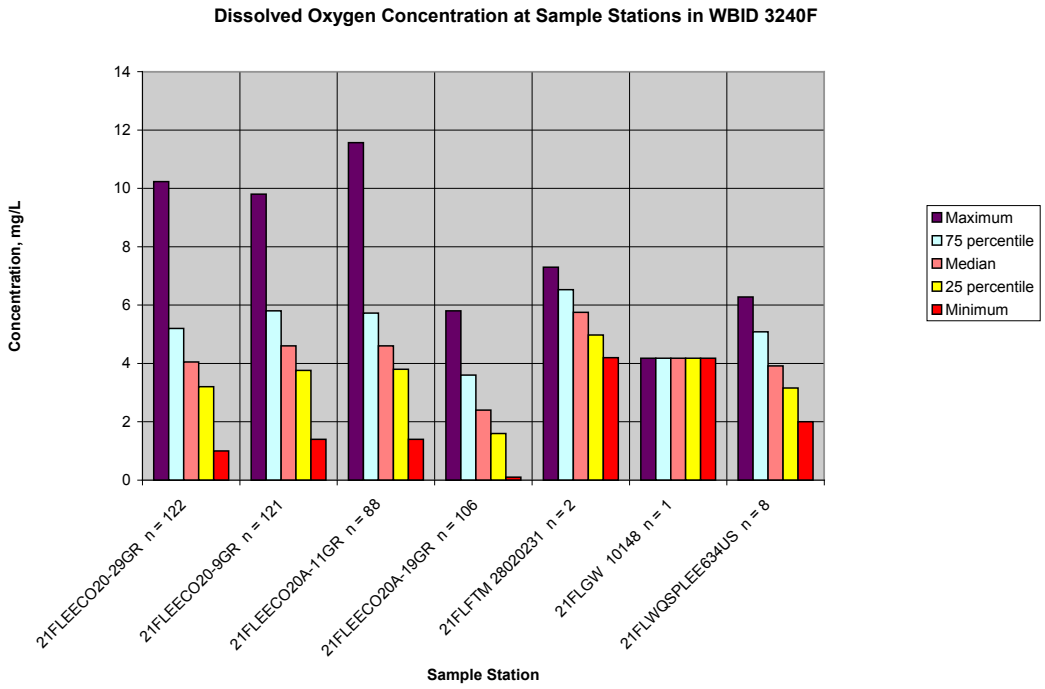


Figure D.1.13: Dissolved Oxygen, Sample Stations of WBID 3240F

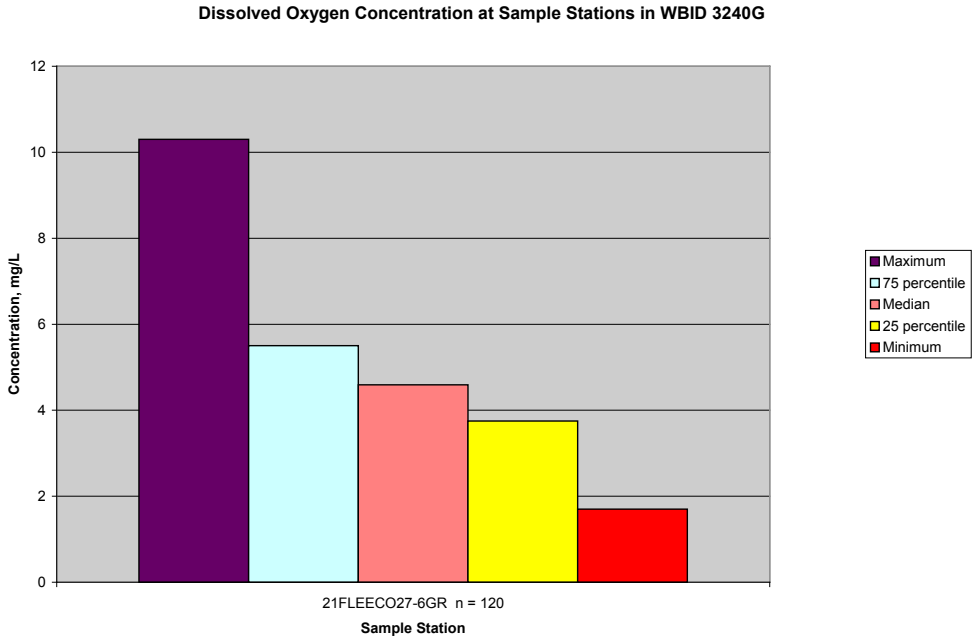


Figure D.1.14: Dissolved Oxygen, Sample Stations of WBID 3240G

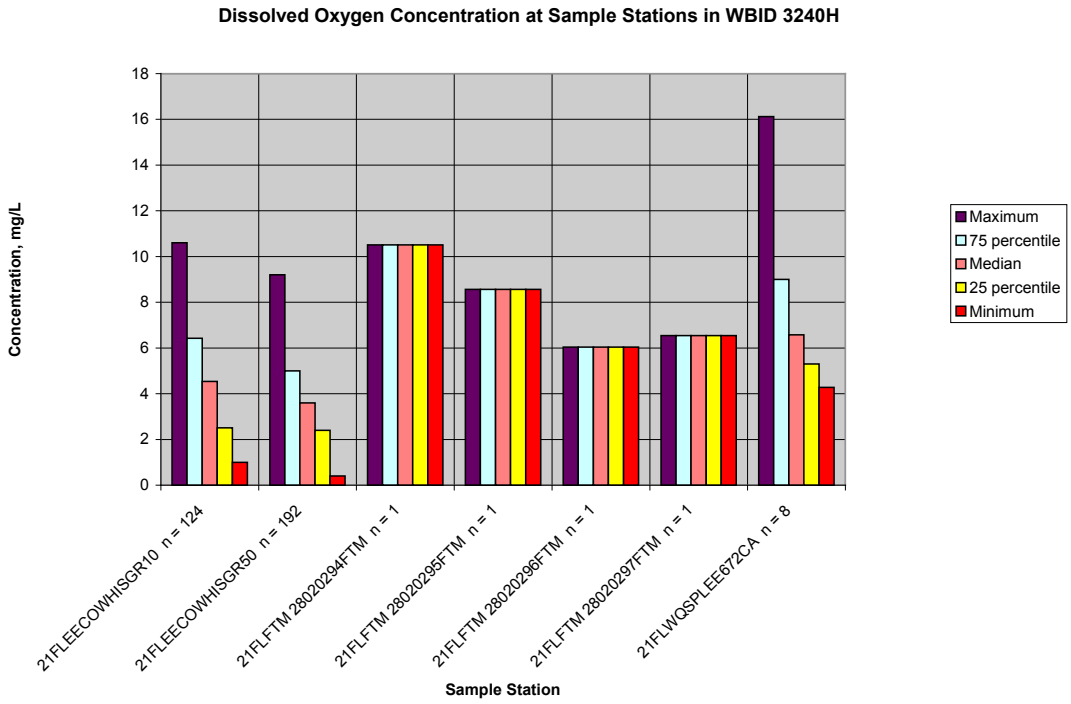


Figure D.1.15: Dissolved Oxygen, Sample Stations of WBID 3240H

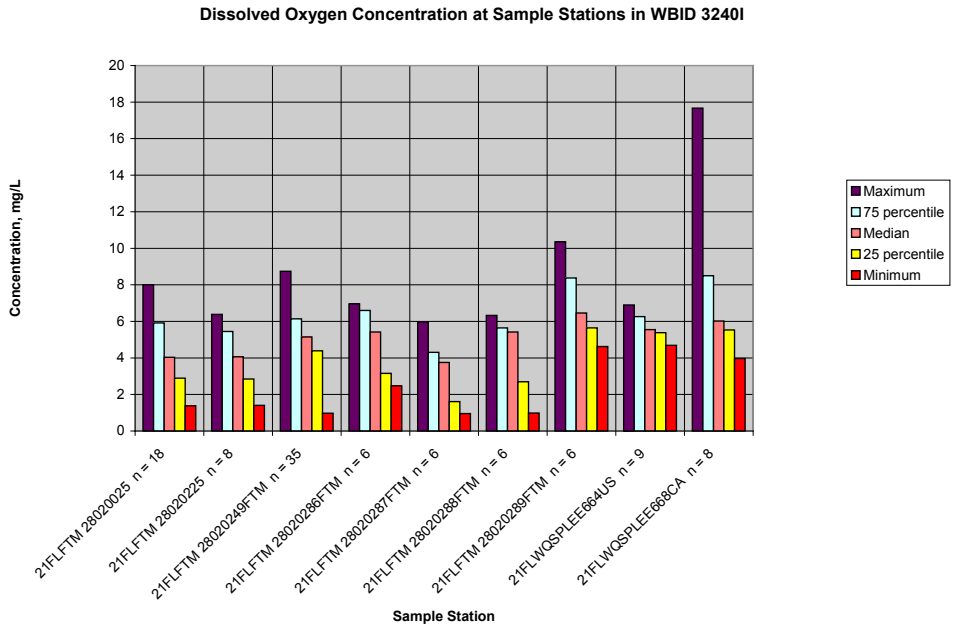


Figure D.1.16: Dissolved Oxygen, Sample Stations of WBID 3240I

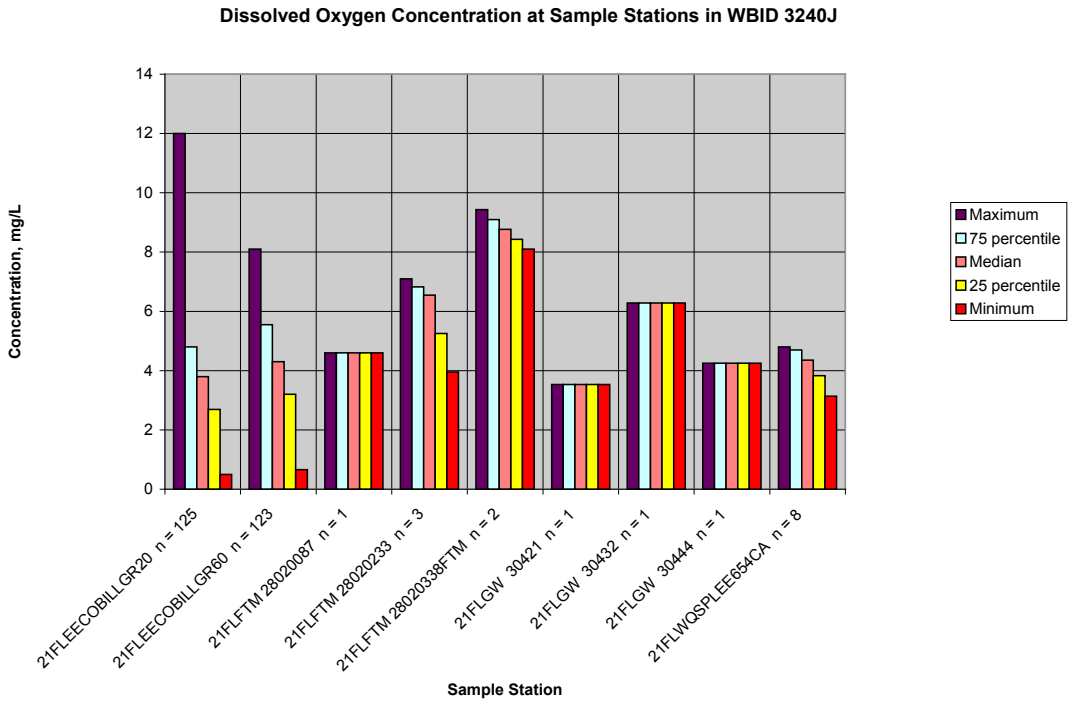


Figure D.1.17: Dissolved Oxygen, Sample Stations of WBID 3240J

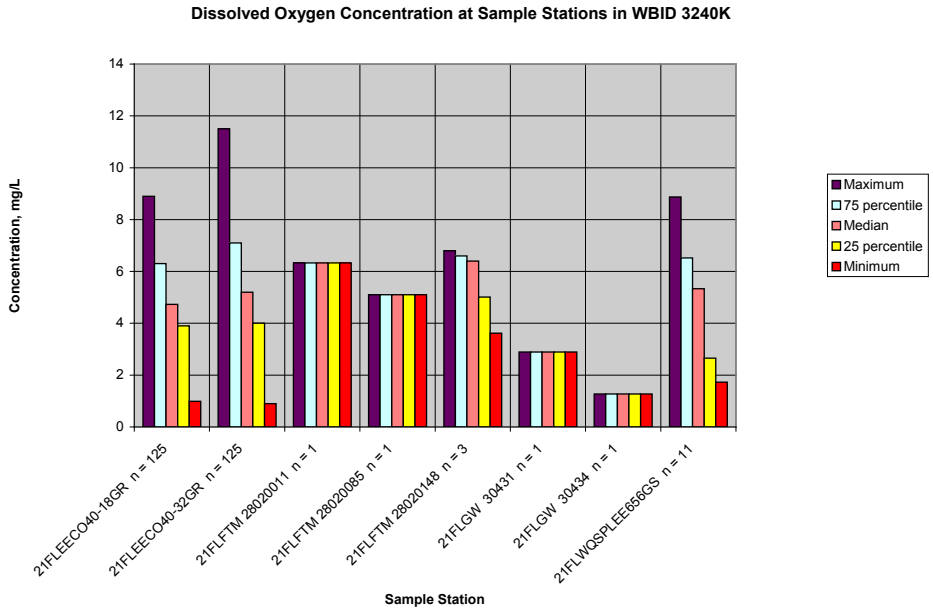


Figure D.1.18: Dissolved Oxygen, Sample Stations of WBID 3240K

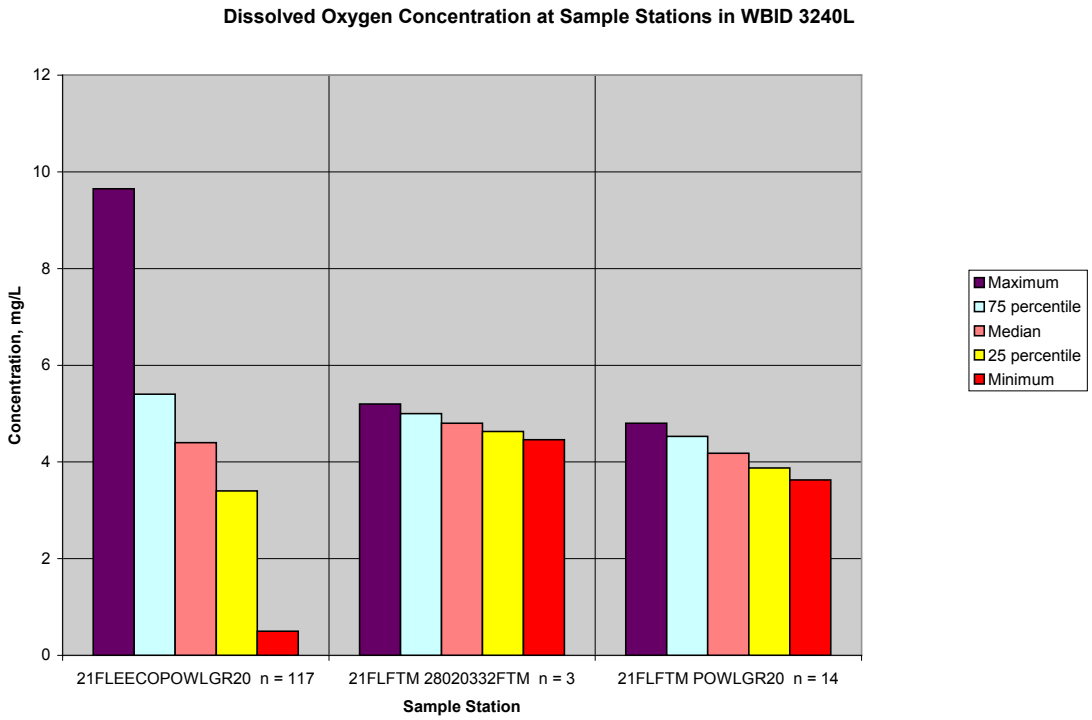


Figure D.1.19: Dissolved Oxygen, Sample Stations of WBID 3240L

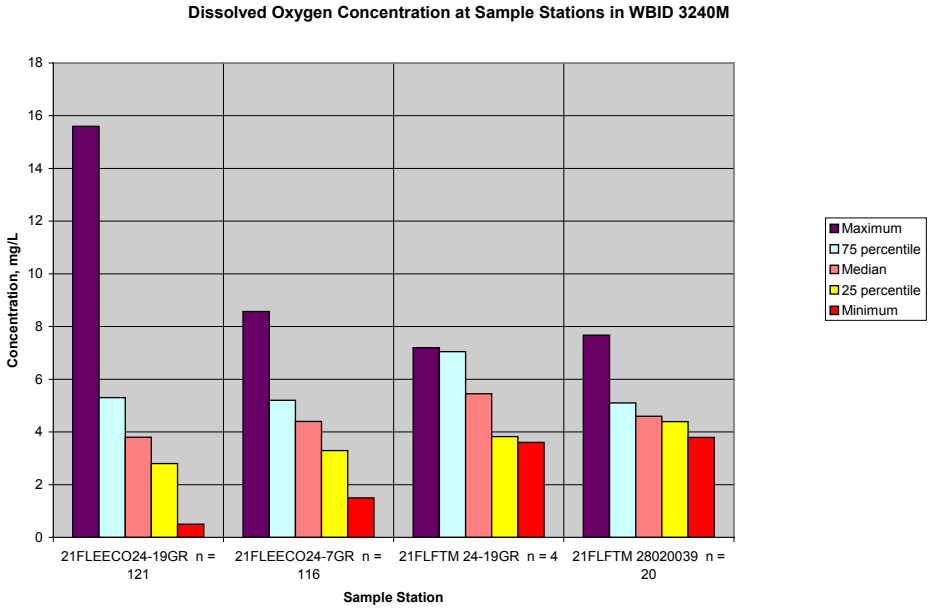


Figure D.1.20: Dissolved Oxygen, Sample Stations of WBID 3240H

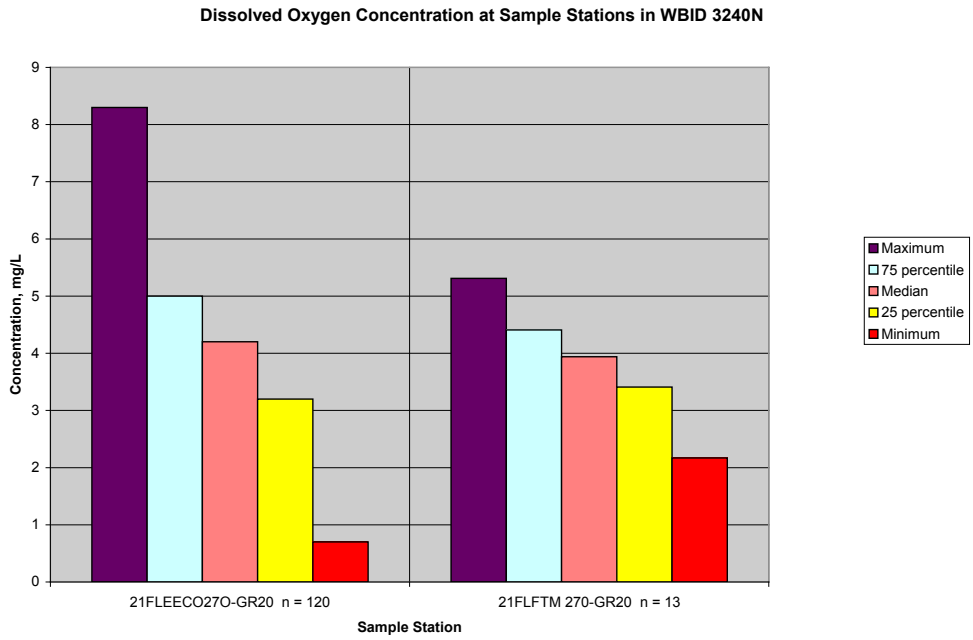


Figure D.1.21: Dissolved Oxygen, Sample Stations of WBID 3240N

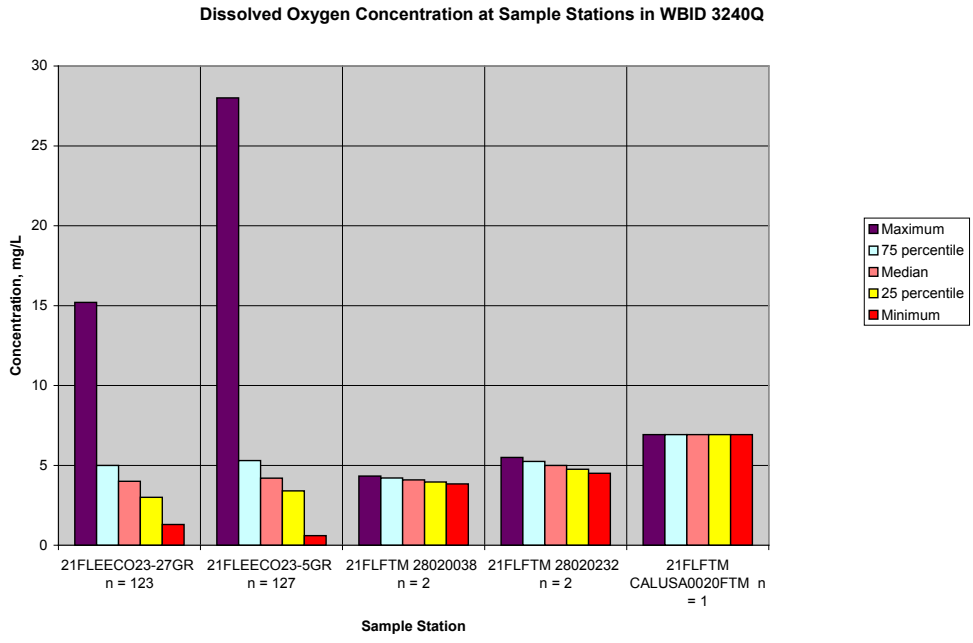


Figure D.1.22: Dissolved Oxygen, Sample Stations of WBID 3240Q

Appendix D.2. Total Nitrogen

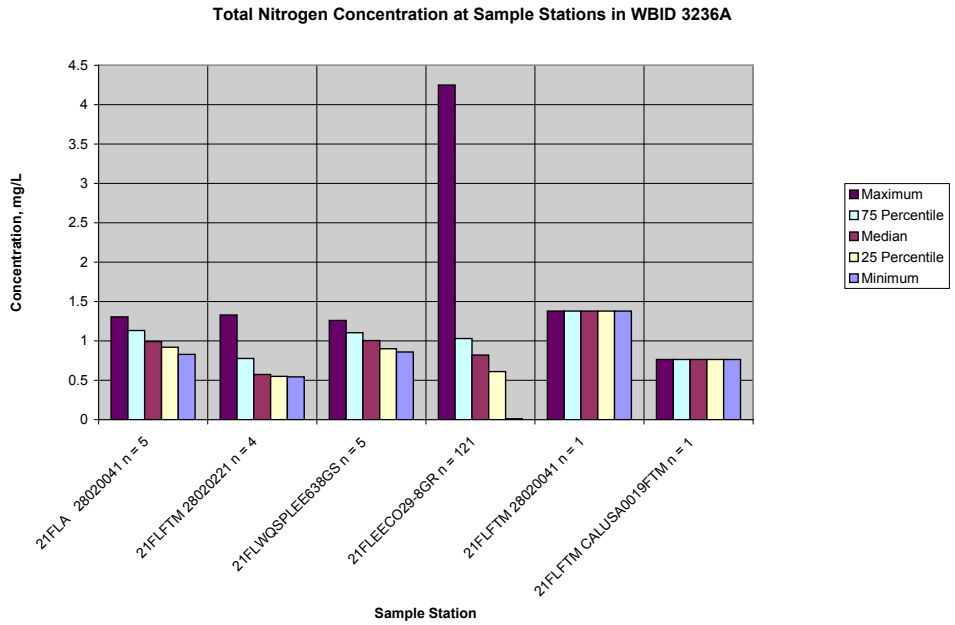


Figure D.2.1: Total Nitrogen, Sample Stations of WBID 3236A

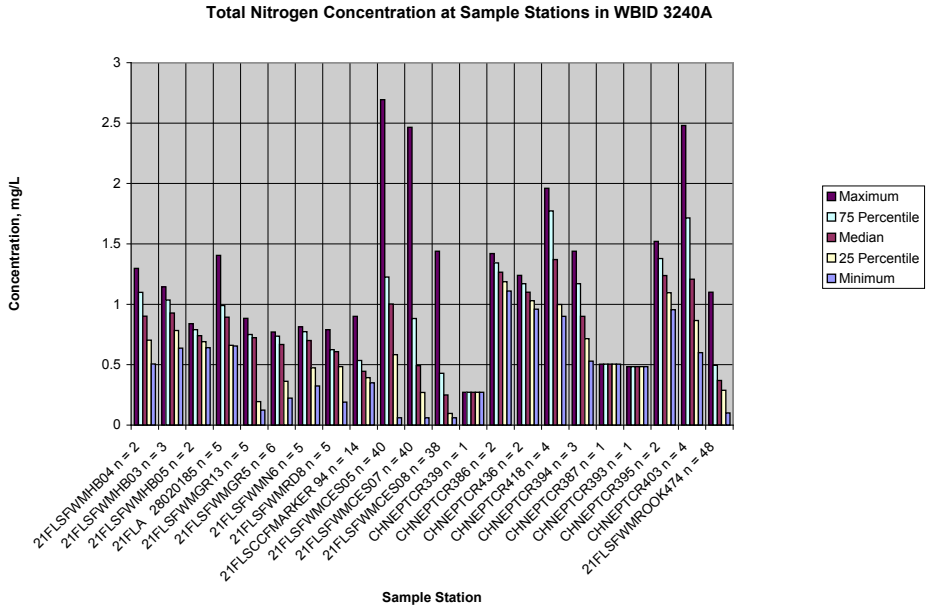


Figure D.2.2: Total Nitrogen, Sample Stations of WBID 3240A

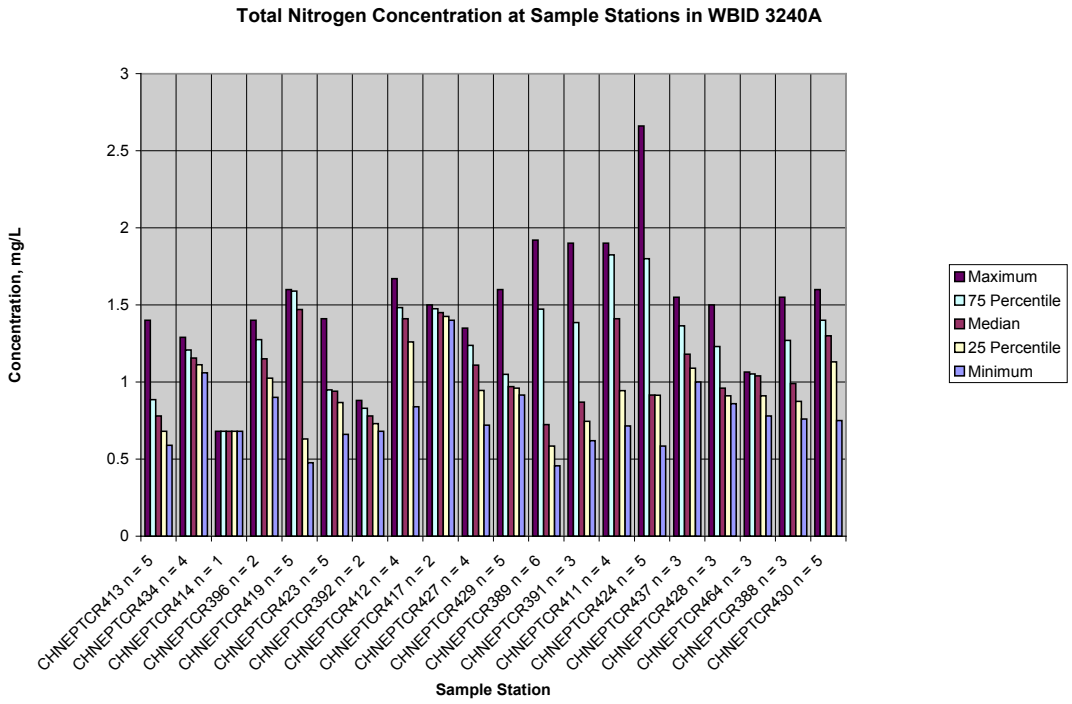


Figure D.2.3: Total Nitrogen, Sample Stations of WBID 3240A

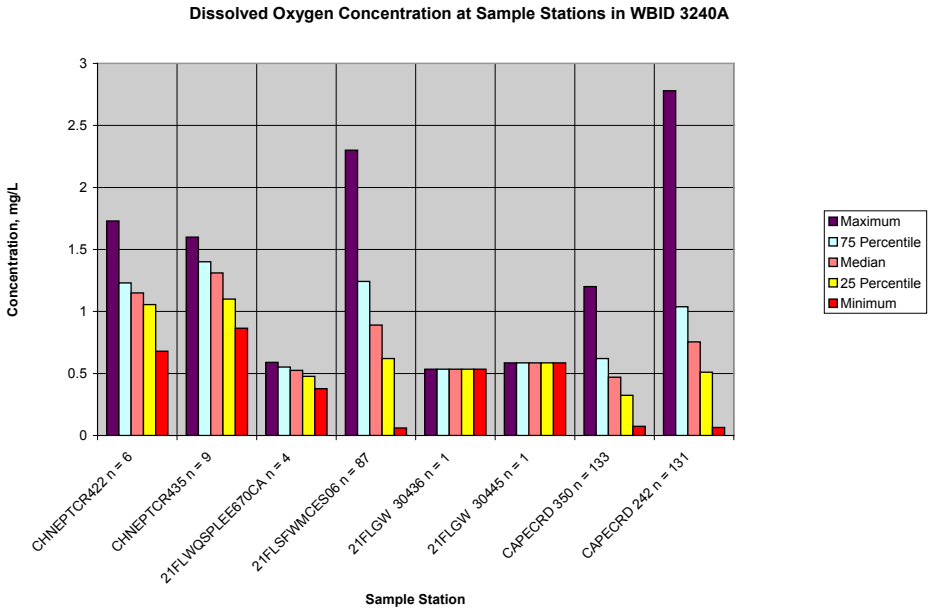


Figure D.2.4: Total Nitrogen, Sample Stations of WBID 3240A

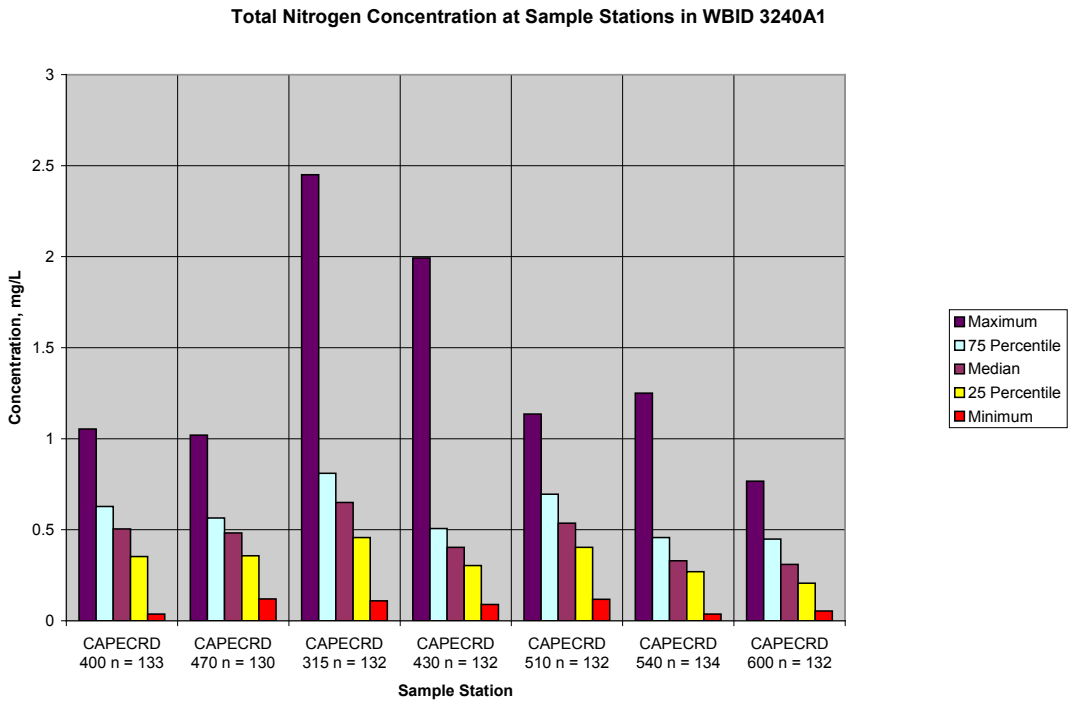


Figure D.2.5: Total Nitrogen, Sample Stations of WBID 3240A1

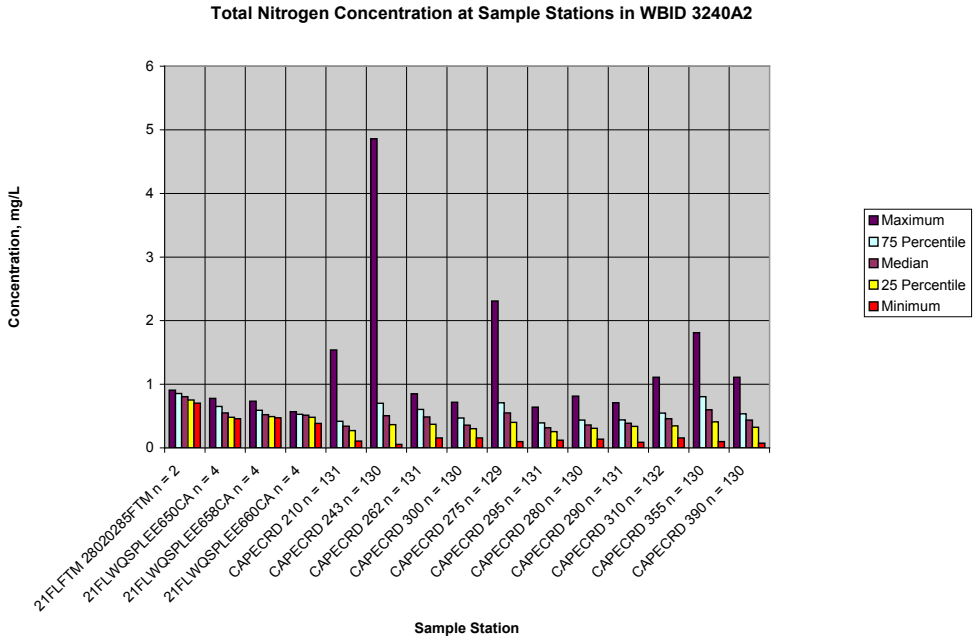


Figure D.2.6: Total Nitrogen, Sample Stations of WBID 3240A2

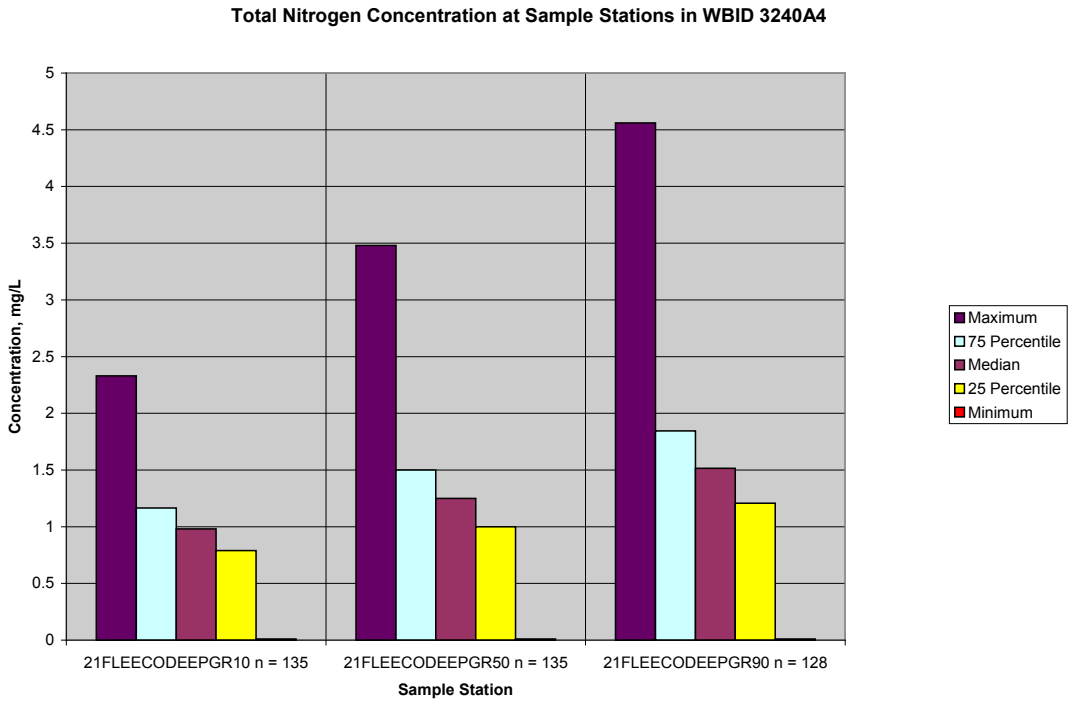


Figure D.2.7: Total Nitrogen, Sample Stations of WBID 3240A4

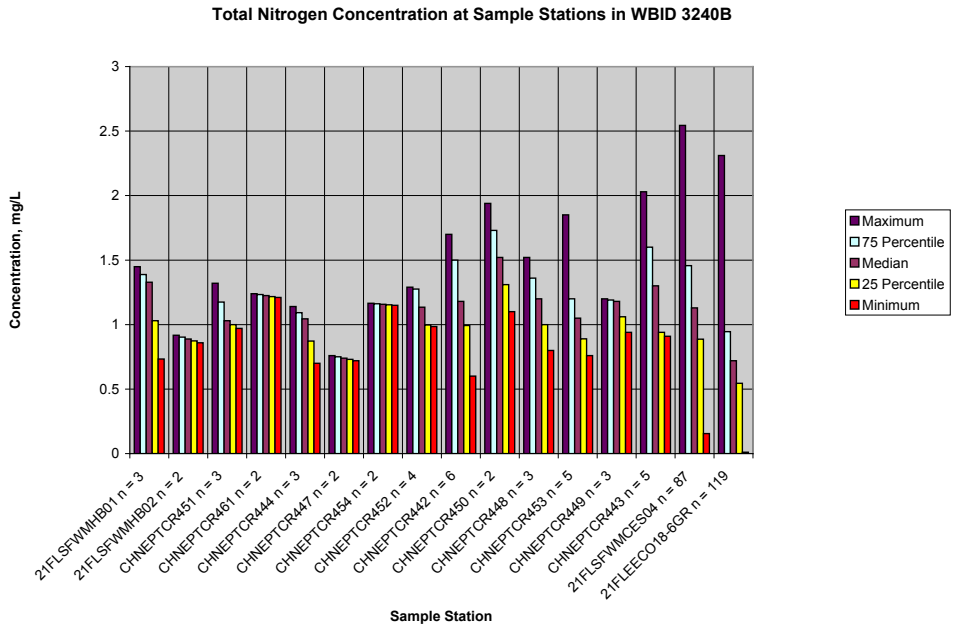


Figure D.2.8: Total Nitrogen, Sample Stations of WBID 3240B

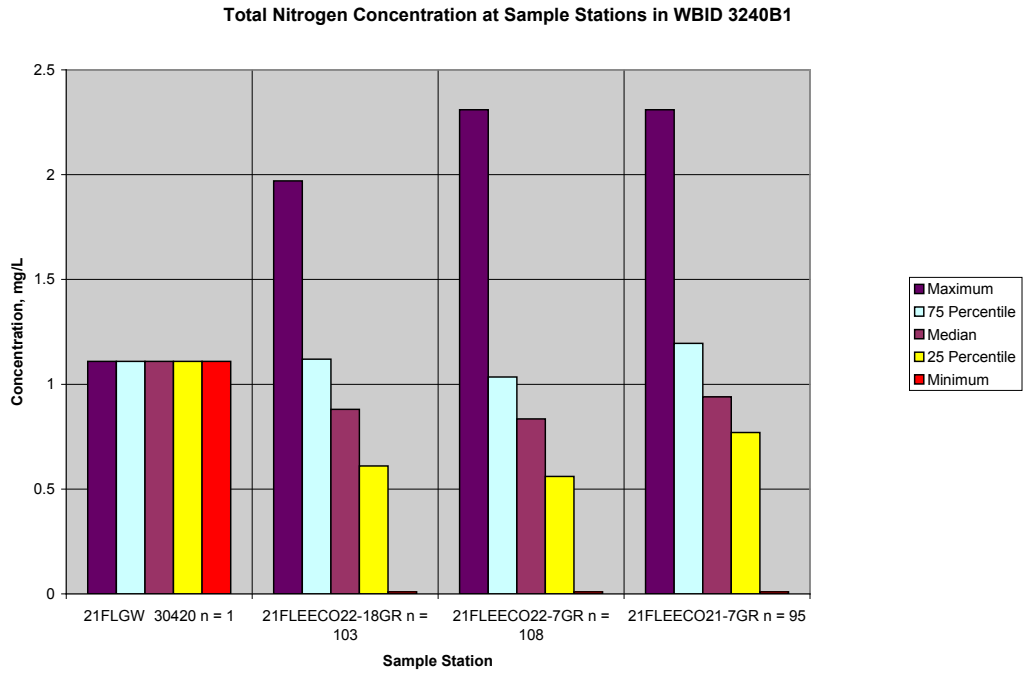


Figure D.2.9: Total Nitrogen, Sample Stations of WBID 3240B1

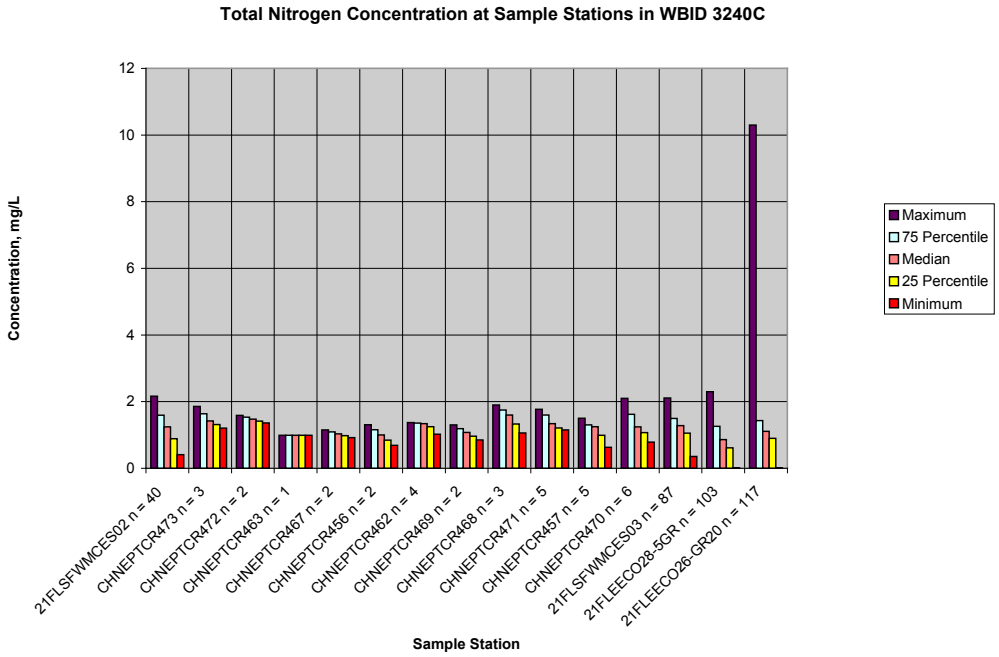


Figure D.2.10: Total Nitrogen, Sample Stations of WBID 3240C

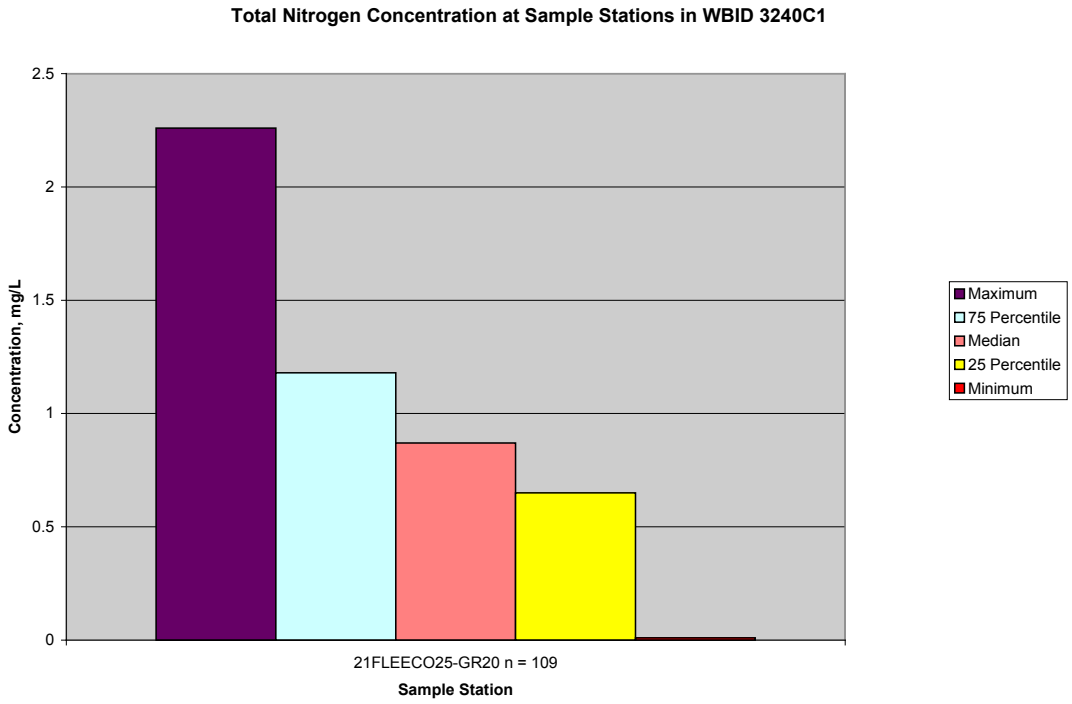


Figure D.2.11: Total Nitrogen, Sample Stations of WBID 3240C1

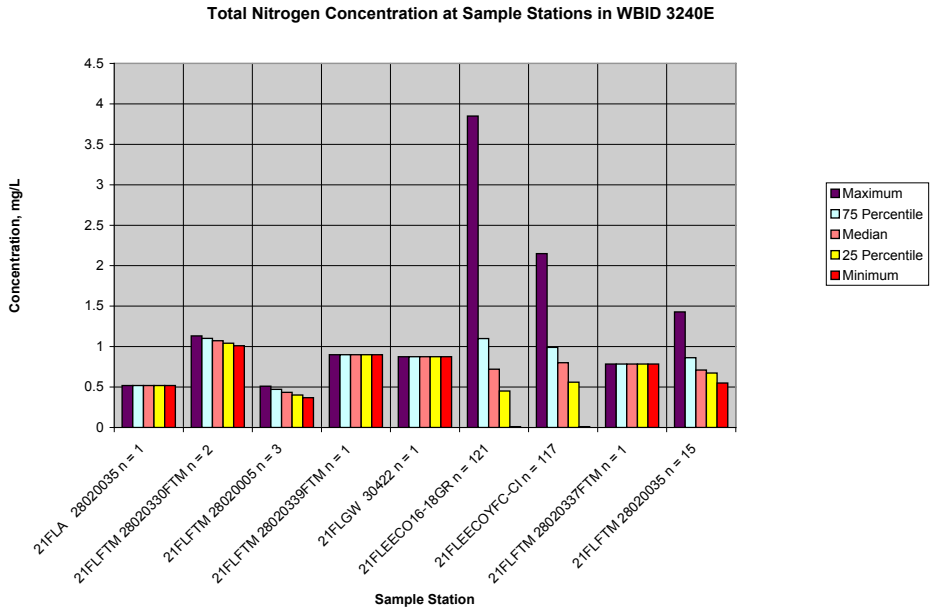


Figure D.2.12: Total Nitrogen, Sample Stations of WBID 3240E

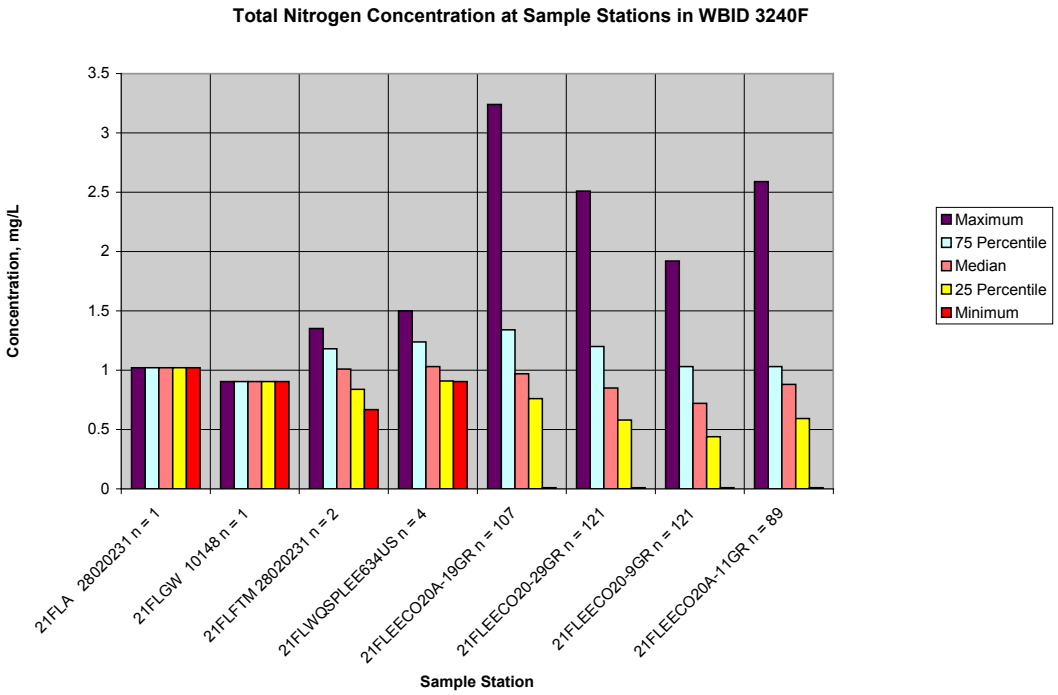


Figure D.2.13: Total Nitrogen, Sample Stations of WBID 3240F

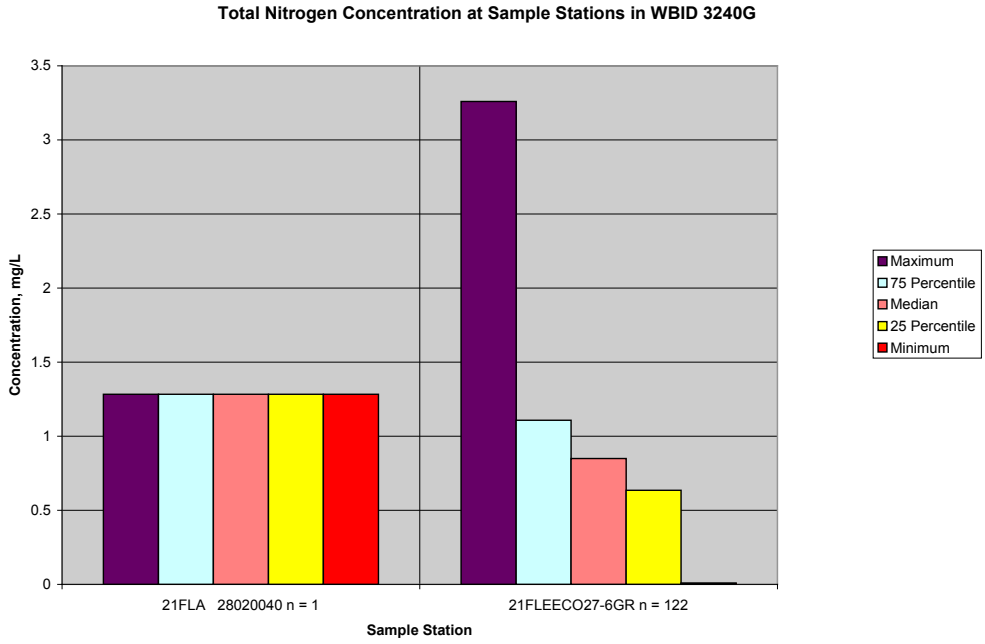


Figure D.2.14: Total Nitrogen, Sample Stations of WBID 3240G

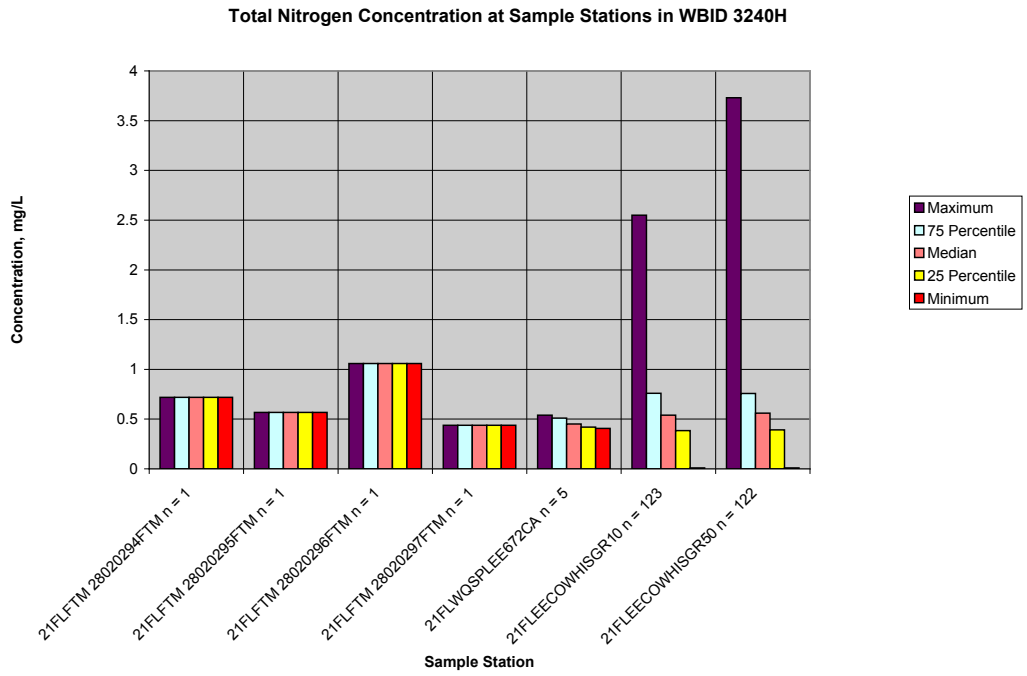


Figure D.2.15: Total Nitrogen, Sample Stations of WBID 3240H

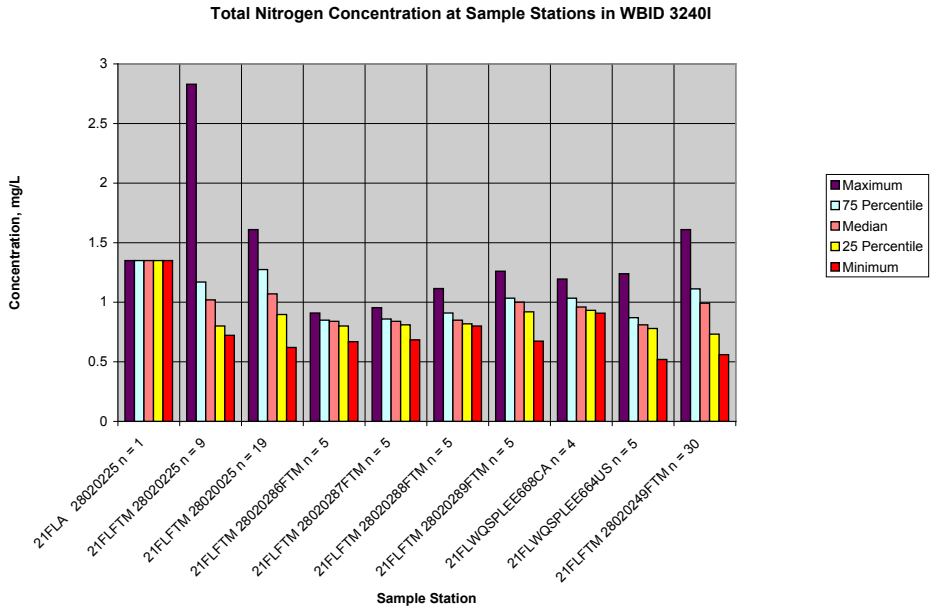


Figure D.2.16: Total Nitrogen, Sample Stations of WBID 3240I

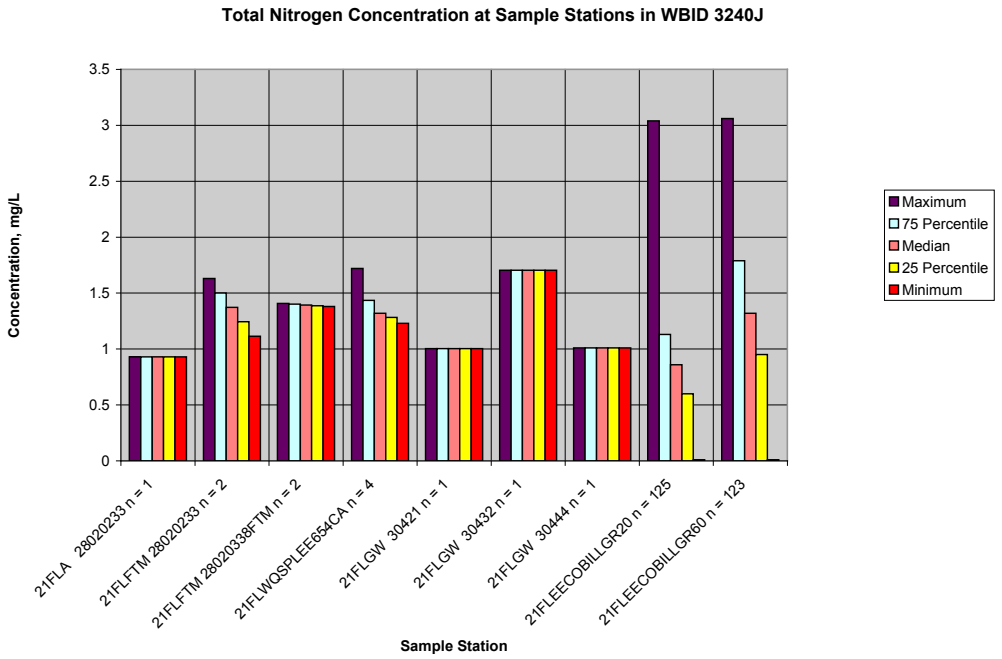


Figure D.2.17: Total Nitrogen, Sample Stations of WBID 3240J

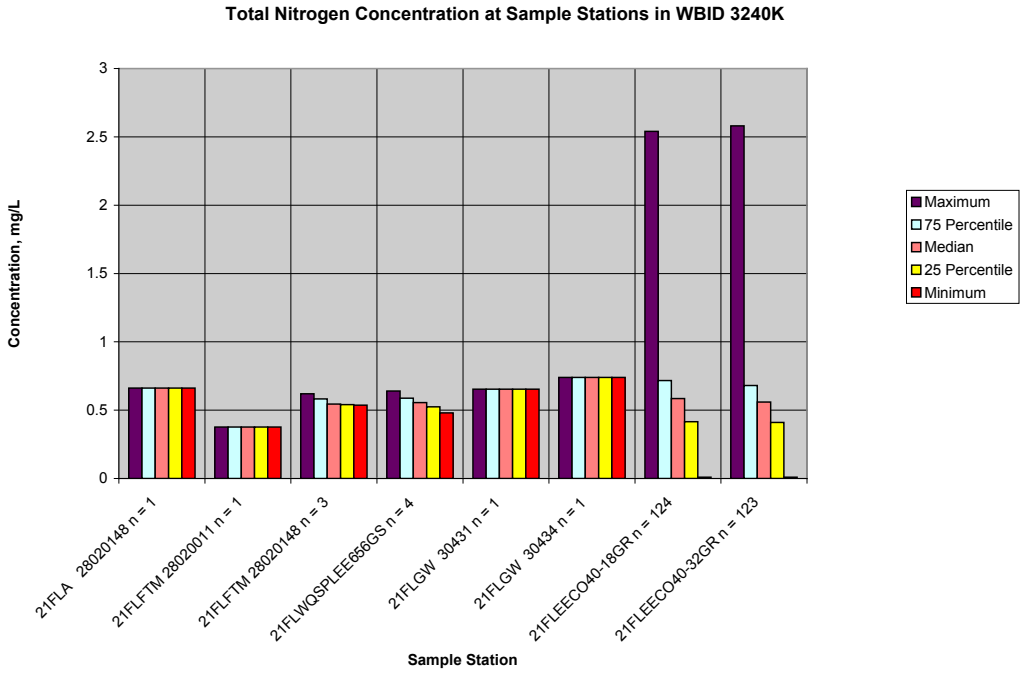


Figure D.2.18: Total Nitrogen, Sample Stations of WBID 3240K

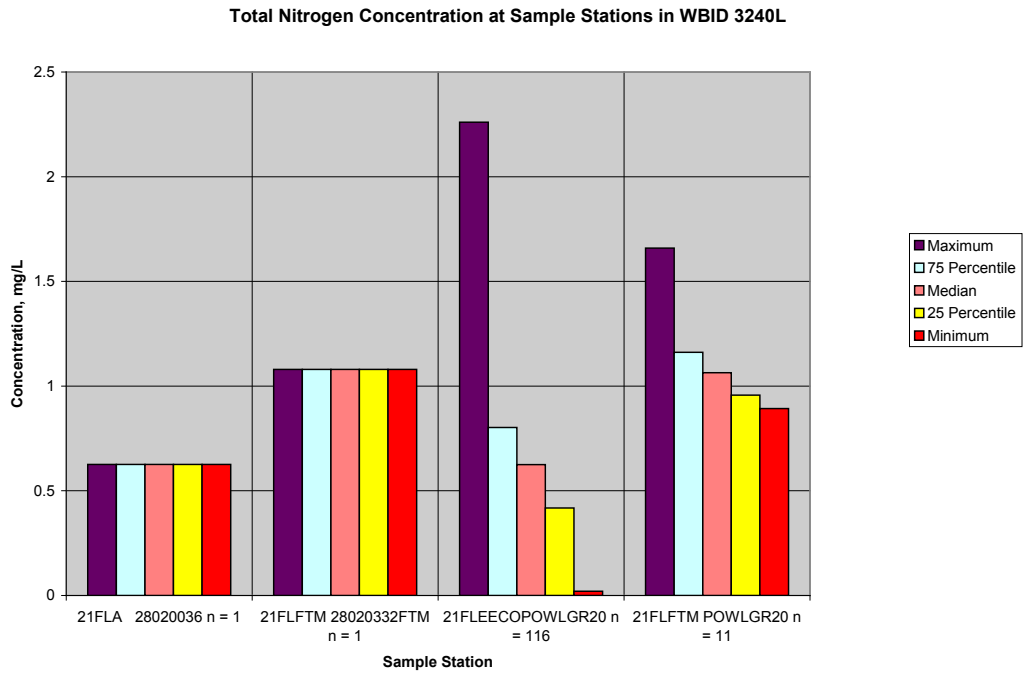


Figure D.2.19: Total Nitrogen, Sample Stations of WBID 3240L

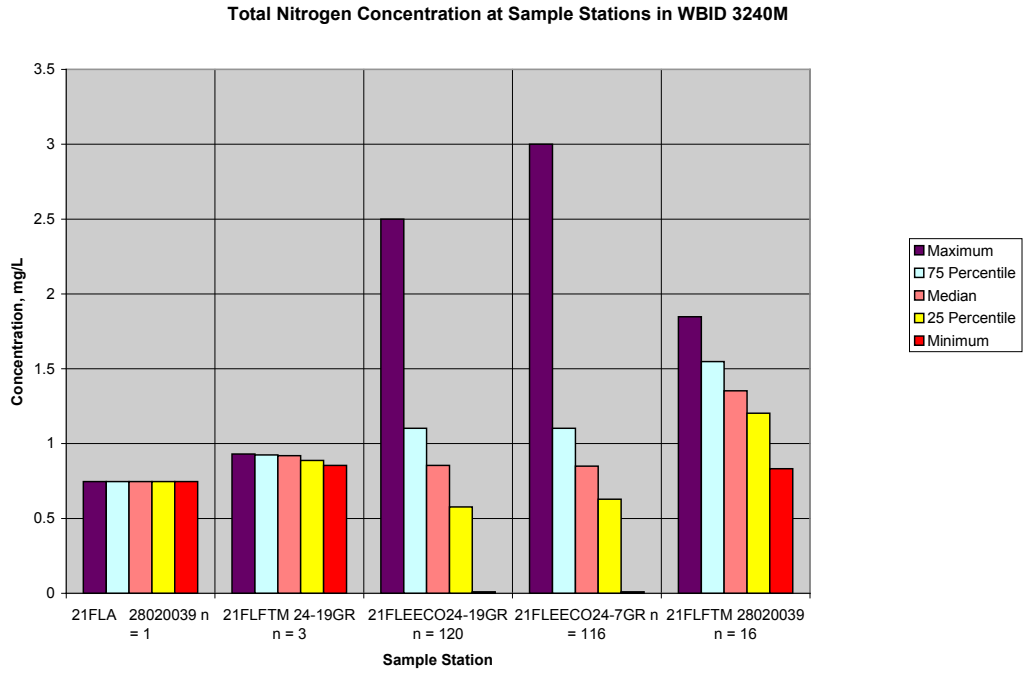


Figure D.2.20: Total Nitrogen, Sample Stations of WBID 3240M

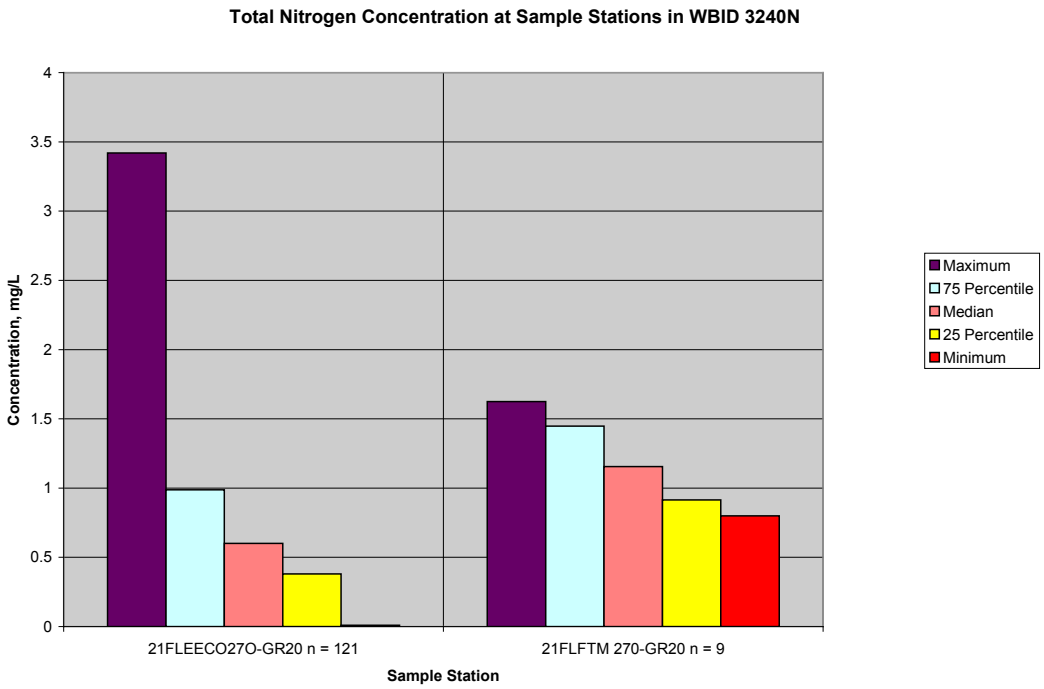


Figure D.2.21: Total Nitrogen, Sample Stations of WBID 3240N

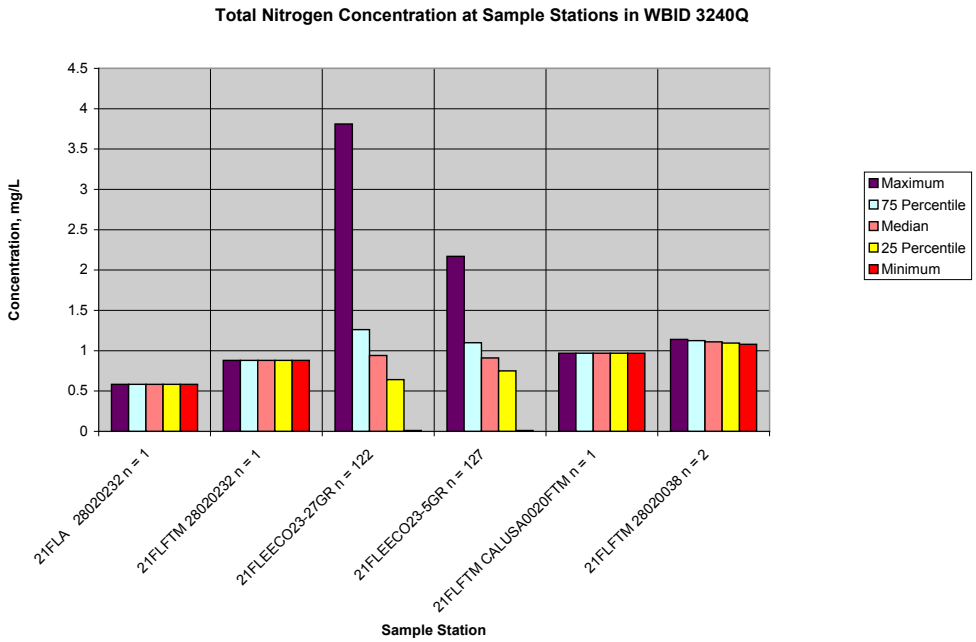


Figure D.2.22: Total Nitrogen, Sample Stations of WBID 3240Q

Appendix D.3. Total Phosphorus

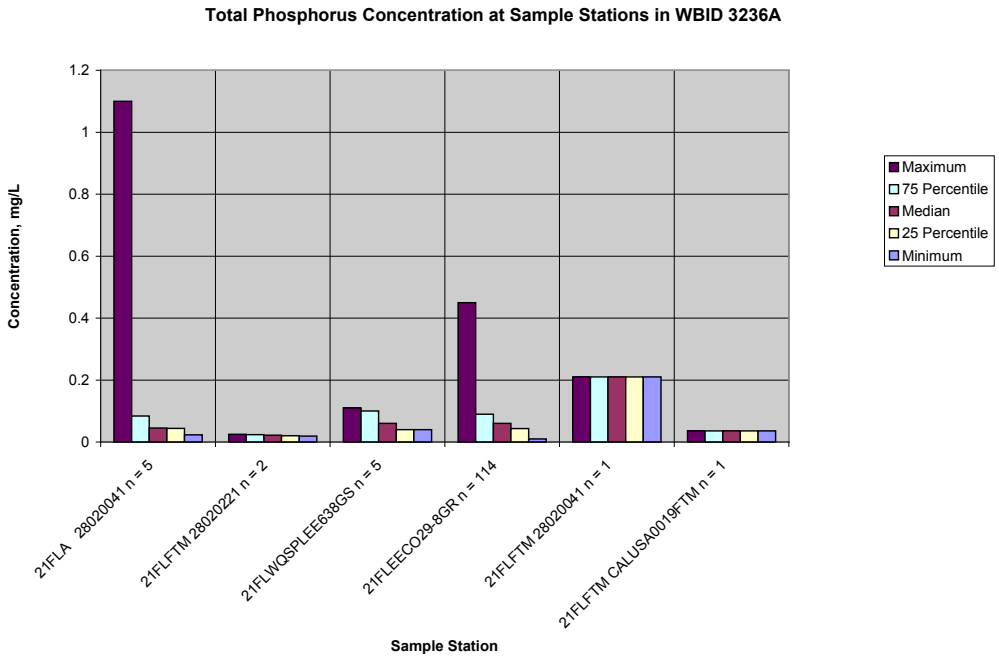


Figure D.3.1: Total Phosphorus, Sample Stations of WBID 3236A

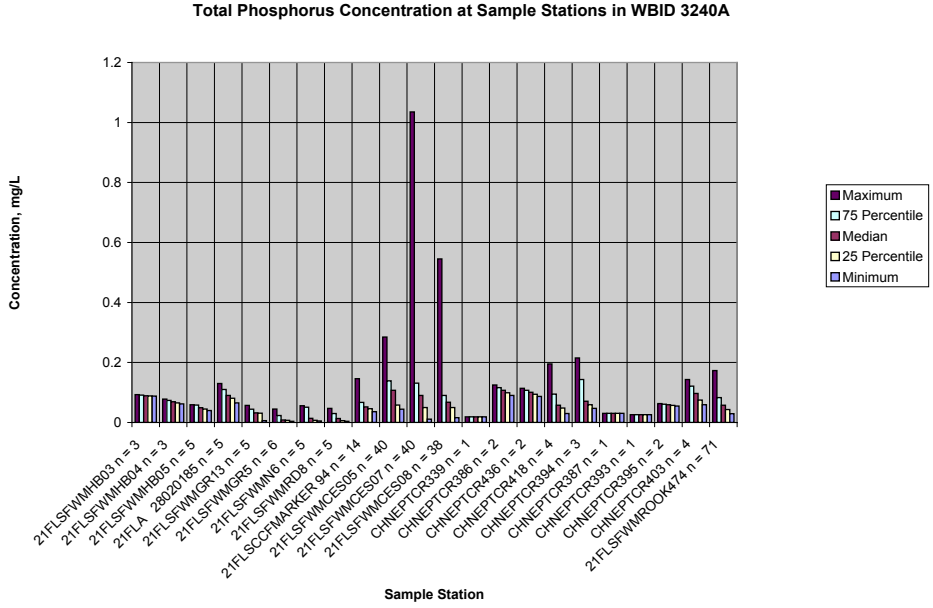


Figure D.3.2: Total Phosphorus, Sample Stations of WBID 3240A

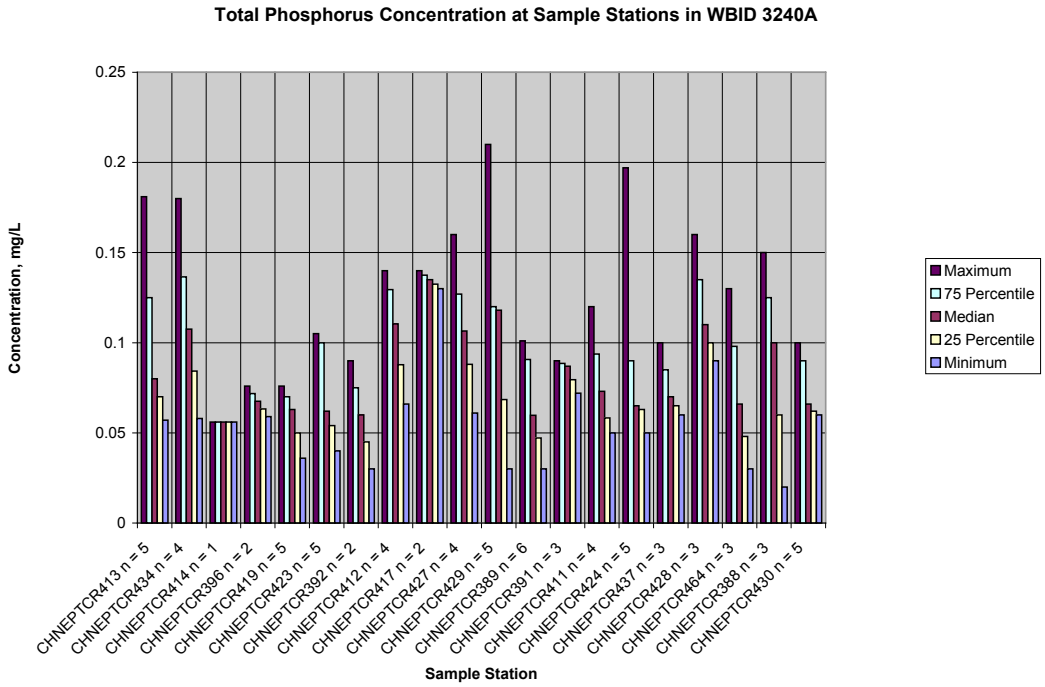


Figure D.3.3: Total Phosphorus, Sample Stations of WBID 3240A

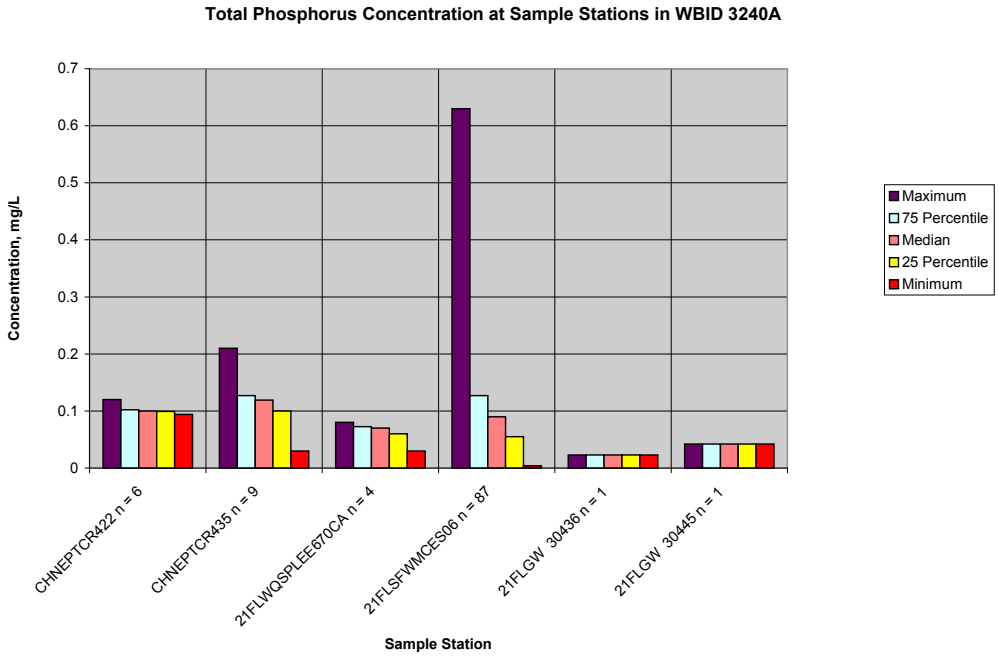


Figure D.3.4: Total Phosphorus, Sample Stations of WBID 3240A

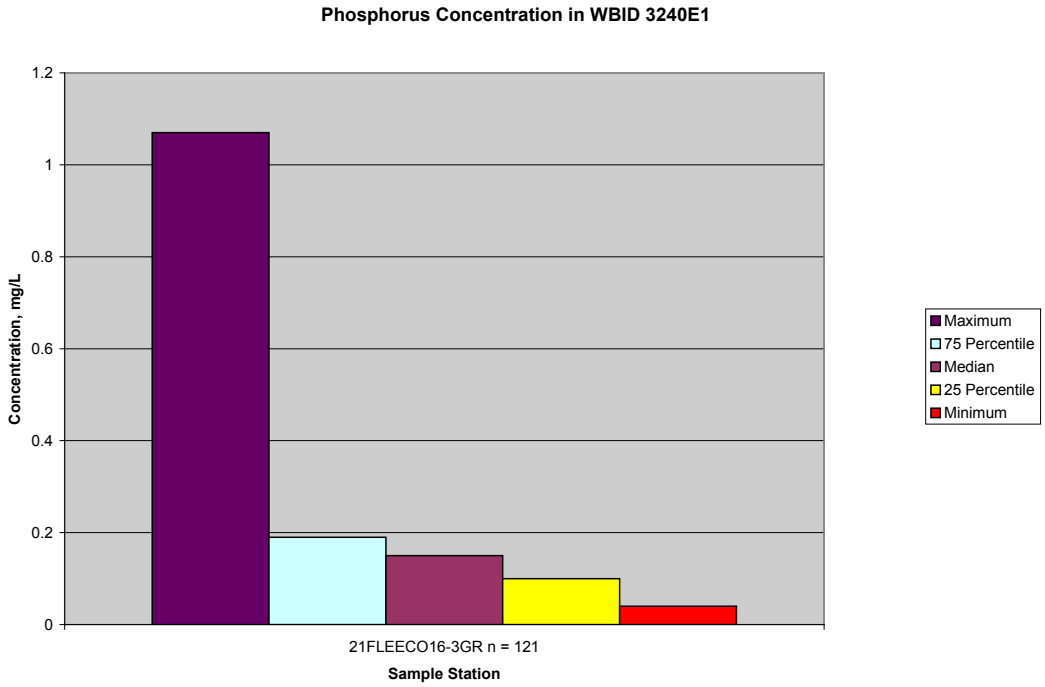


Figure D.3.5: Total Phosphorus, Sample Stations of WBID 3240E1

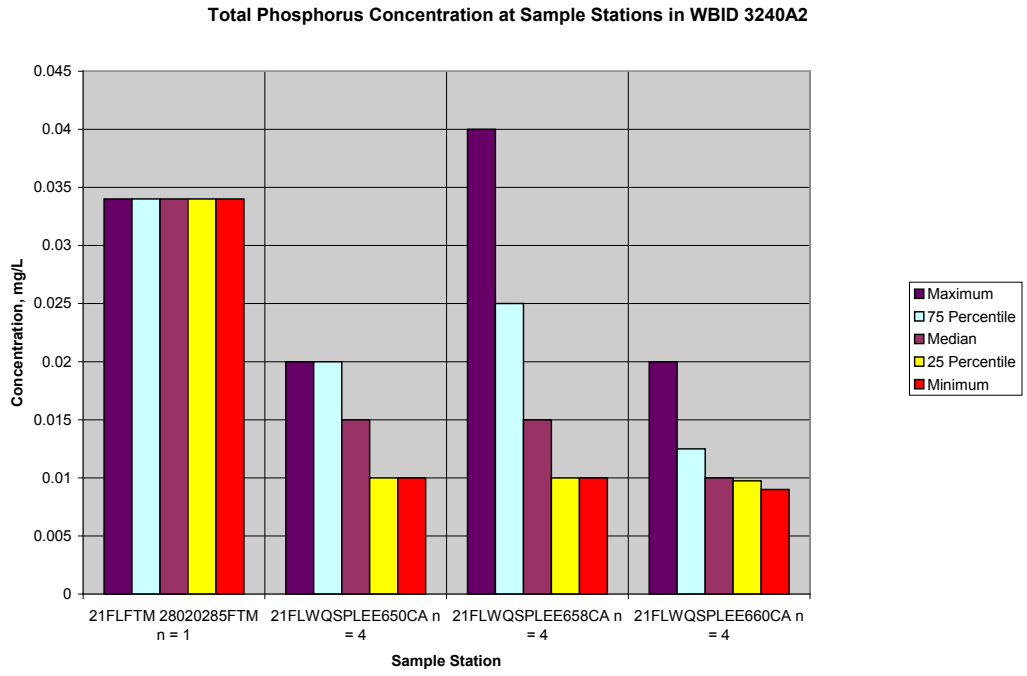


Figure D.3.6: Total Phosphorus, Sample Stations of WBID 3240A2

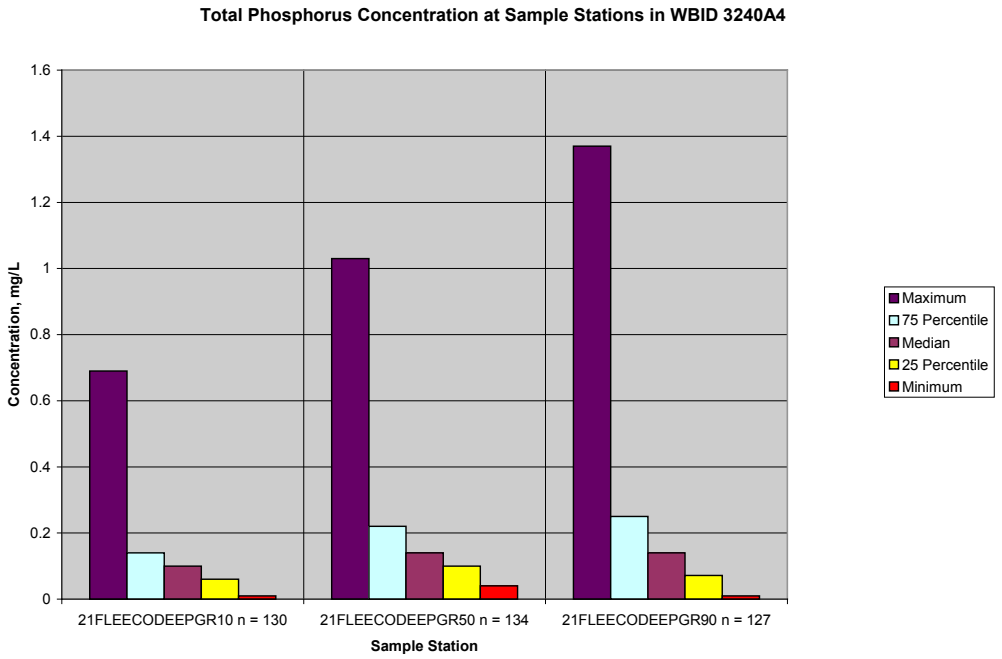


Figure D.3.7: Total Phosphorus, Sample Stations of WBID 3240A4

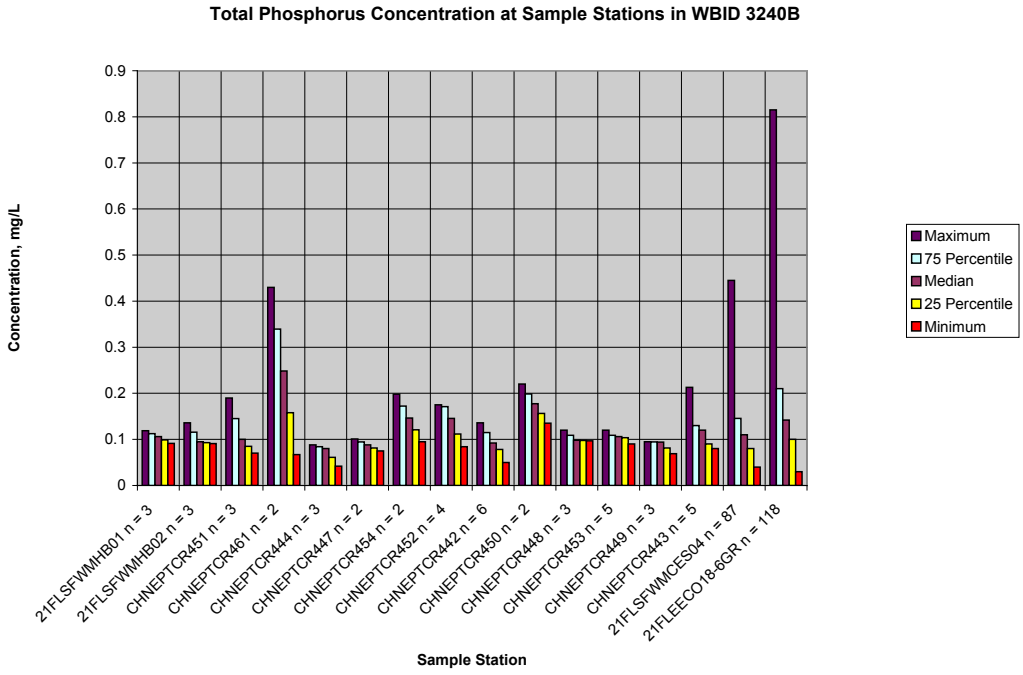


Figure D.3.8: Total Phosphorus, Sample Stations of WBID 3240B

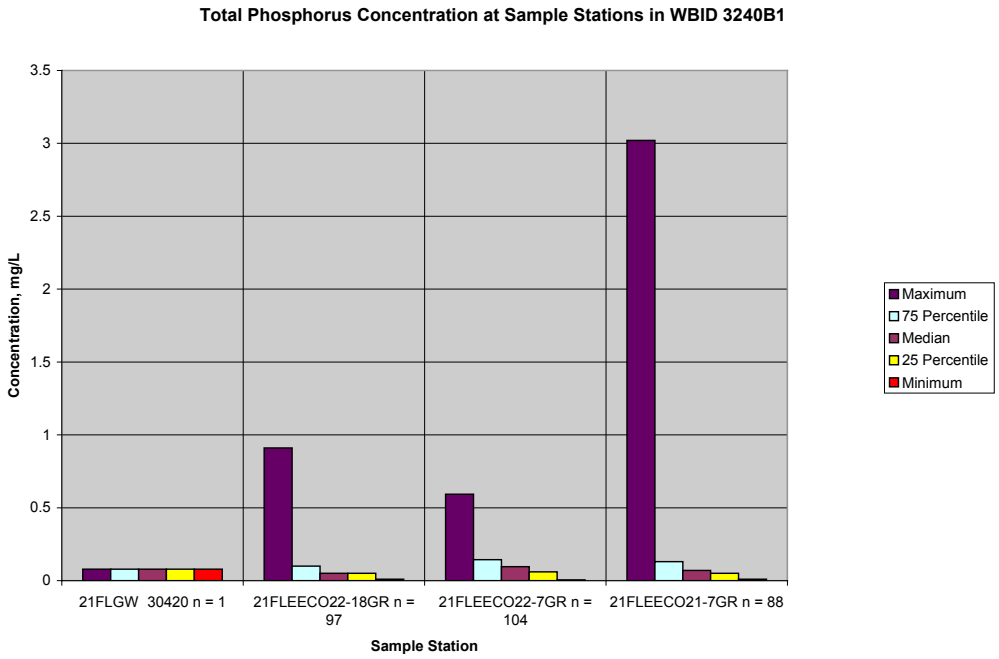


Figure D.3.9: Total Phosphorus, Sample Stations of WBID 3240B1

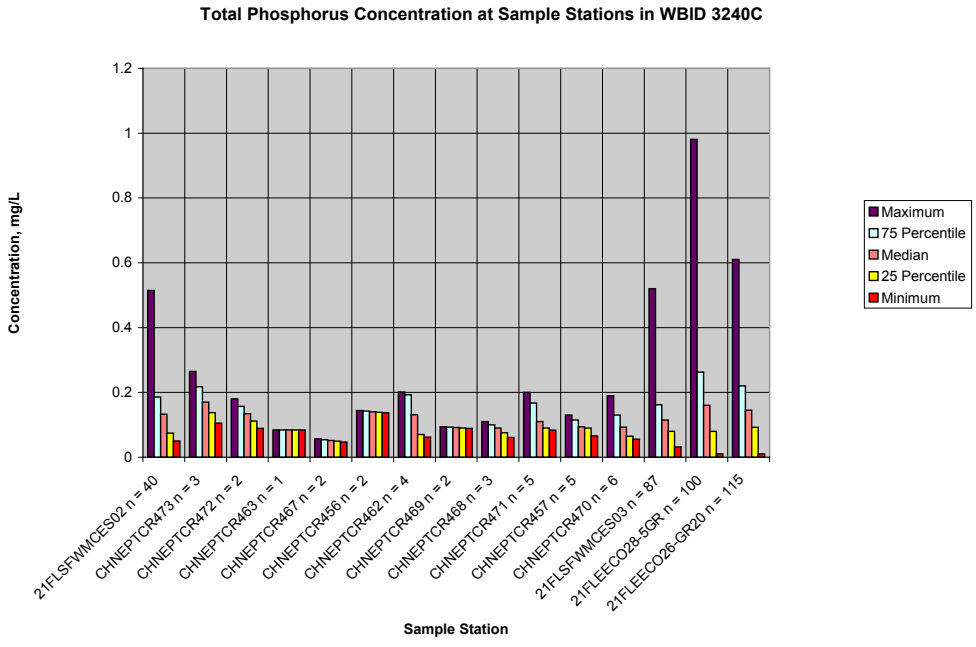


Figure D.3.10: Total Phosphorus, Sample Stations of WBID 3236A

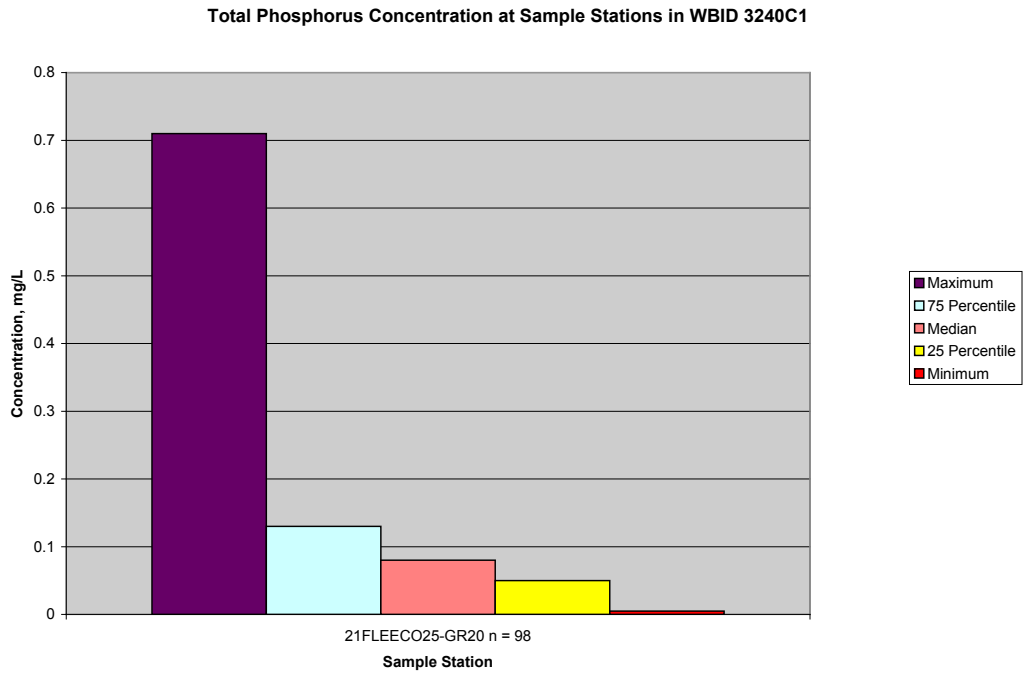


Figure D.3.11: Total Phosphorus, Sample Stations of WBID 3236A

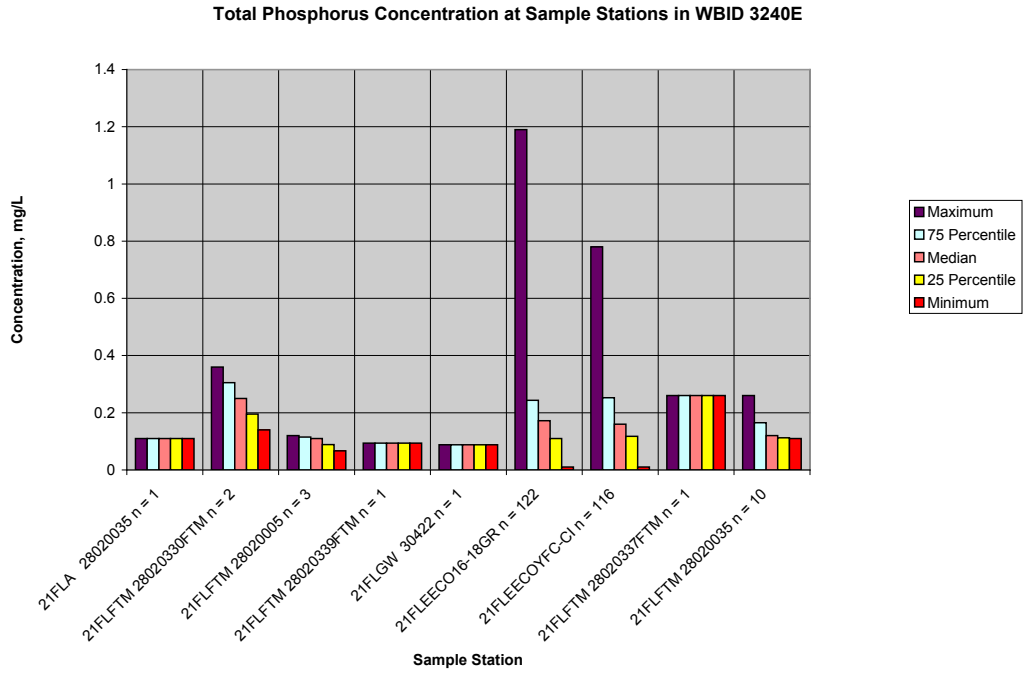


Figure D.3.12: Total Phosphorus, Sample Stations of WBID 3236A

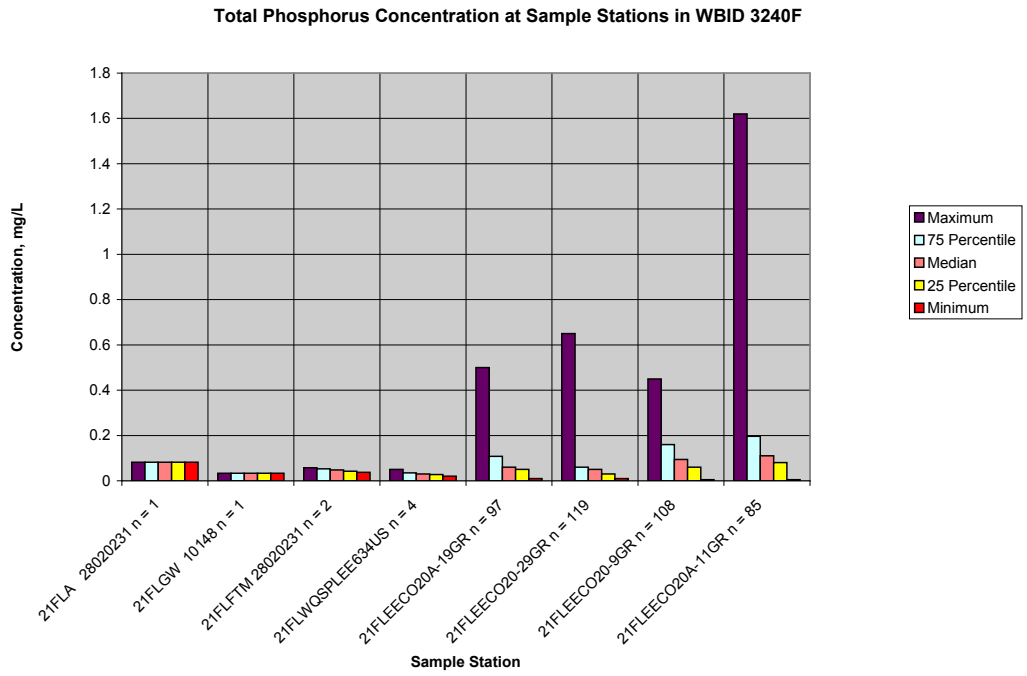


Figure D.3.13: Total Phosphorus, Sample Stations of WBID 3240F

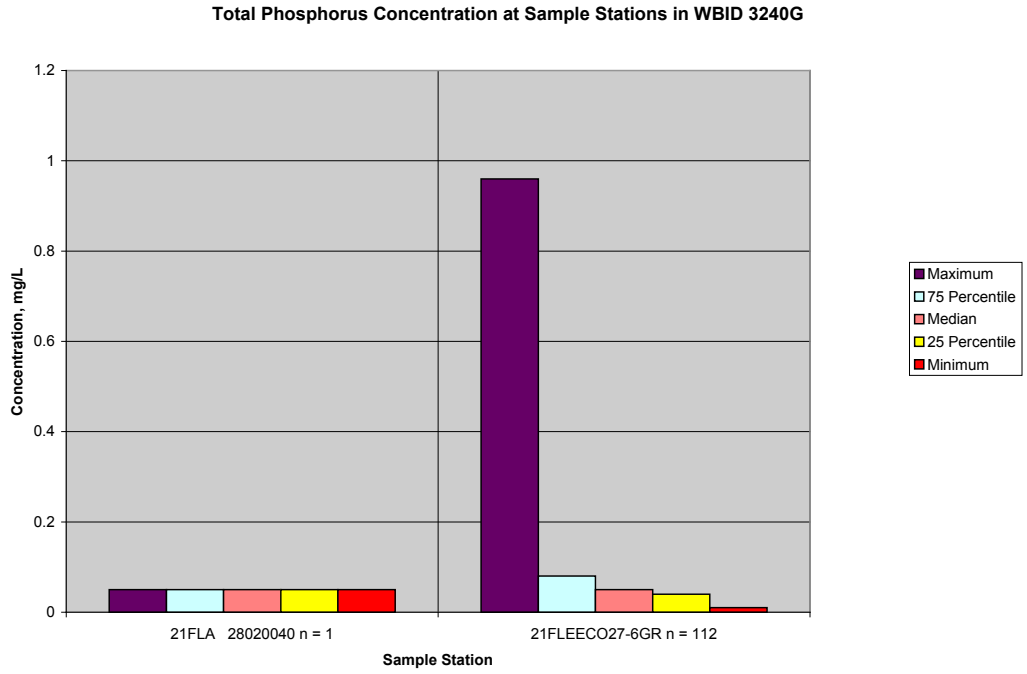


Figure D.3.14: Total Phosphorus, Sample Stations of WBID 3236A

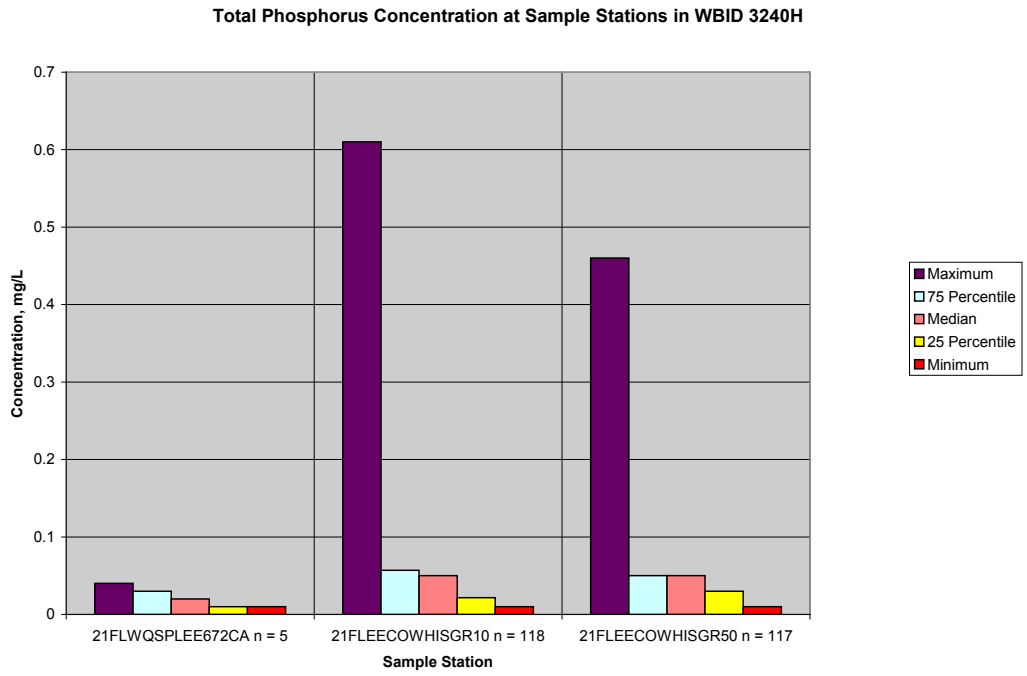


Figure D.3.15: Total Phosphorus, Sample Stations of WBID 3240H

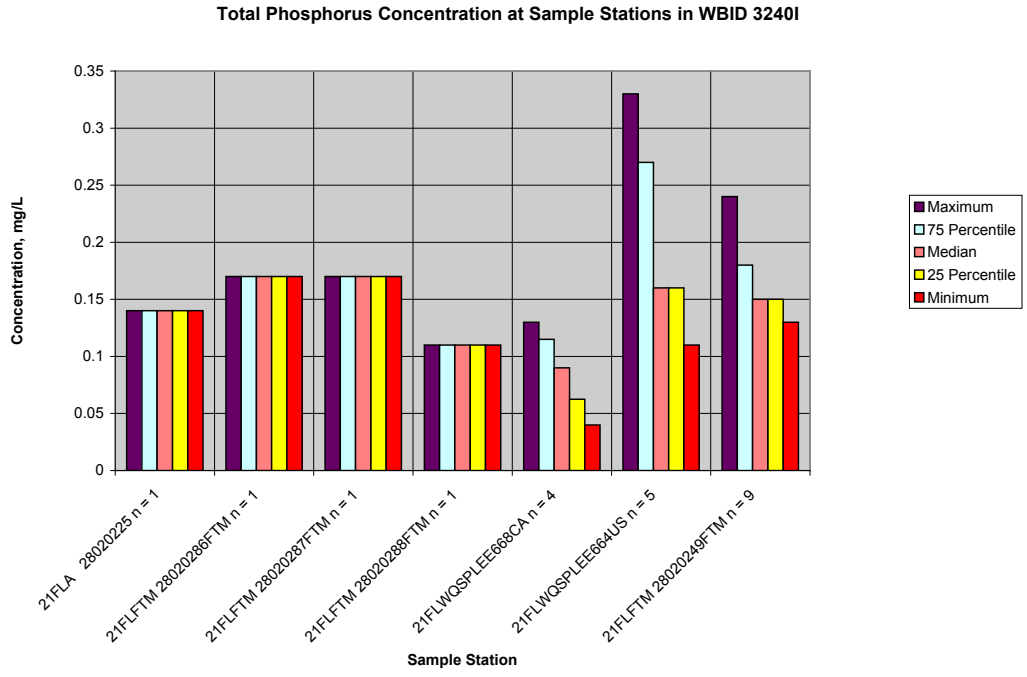


Figure D.3.16: Total Phosphorus, Sample Stations of WBID 3240I

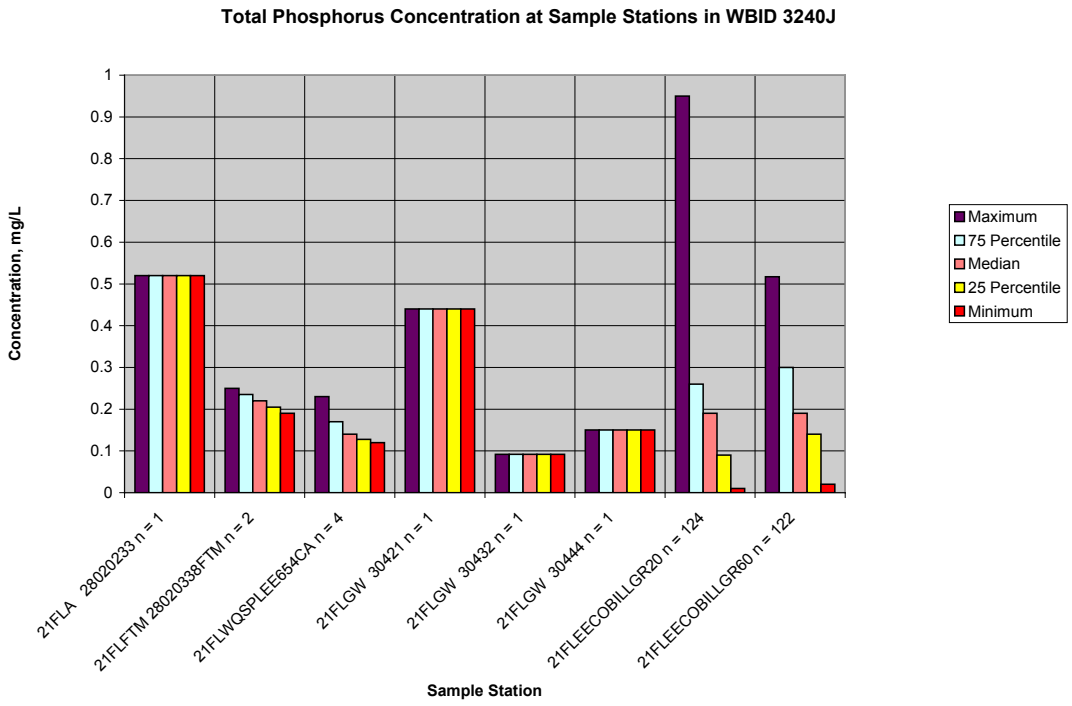


Figure D.3.17: Total Phosphorus, Sample Stations of WBID 3240J

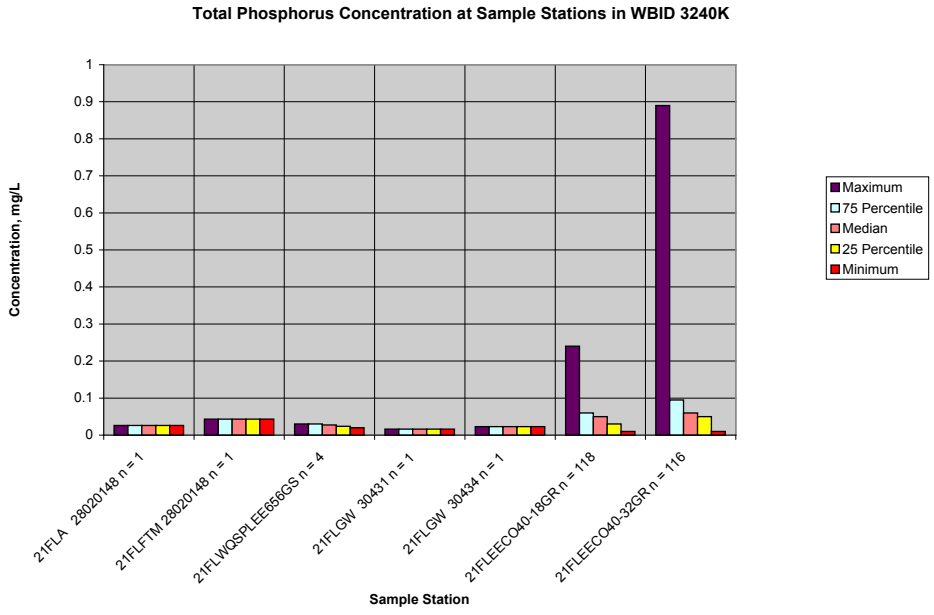


Figure D.3.18: Total Phosphorus, Sample Stations of WBID 3240K

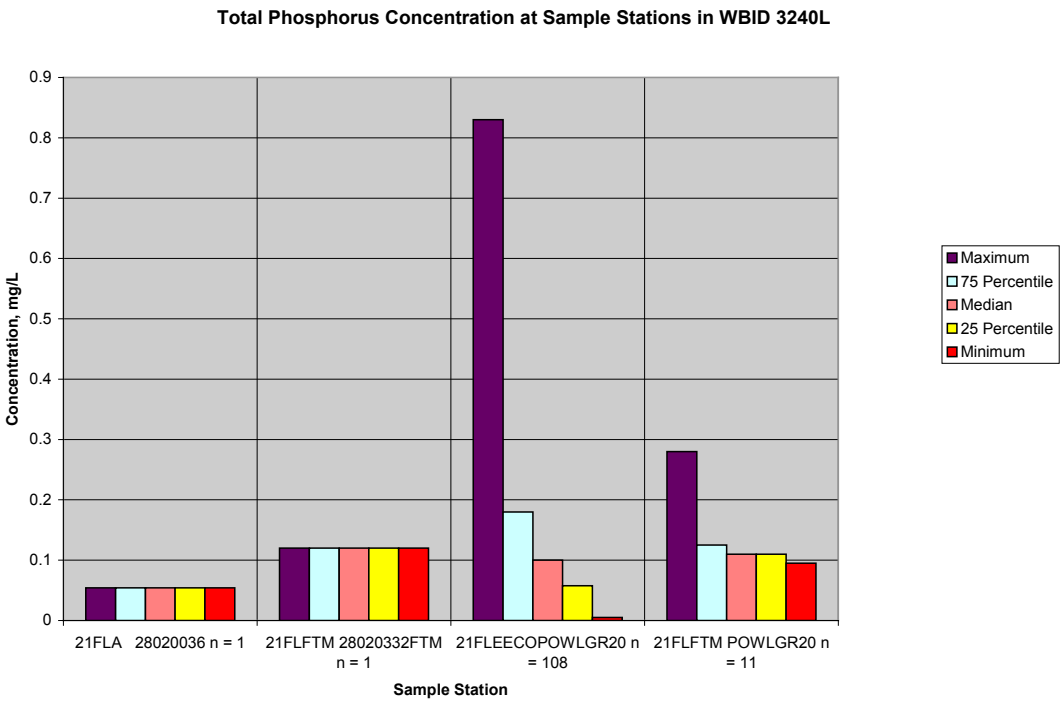


Figure D.3.19: Total Phosphorus, Sample Stations of WBID 3240L

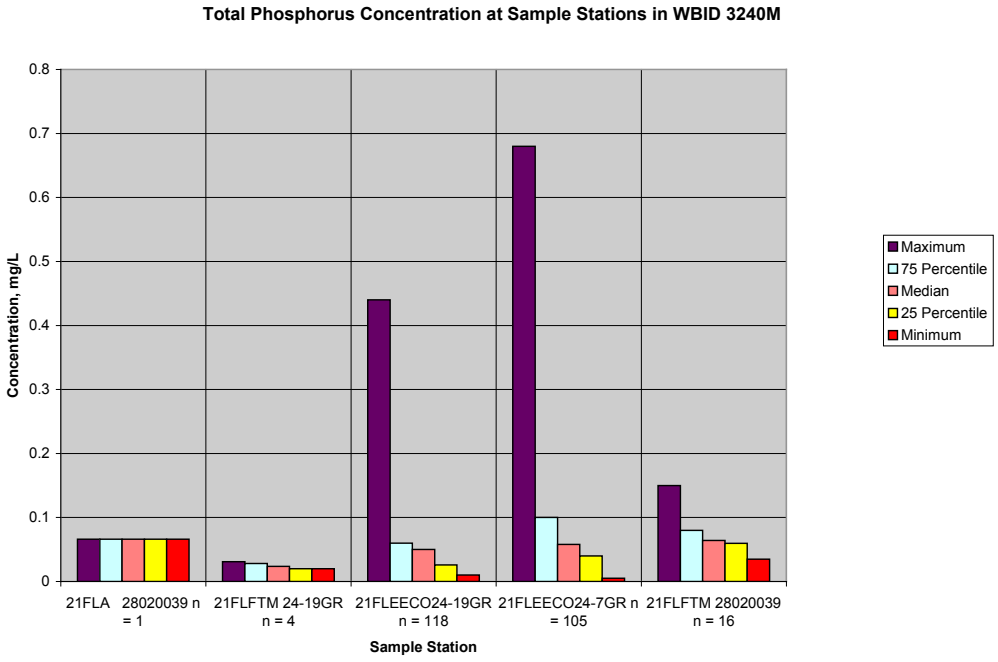


Figure D.3.20: Total Phosphorus, Sample Stations of WBID 3240M

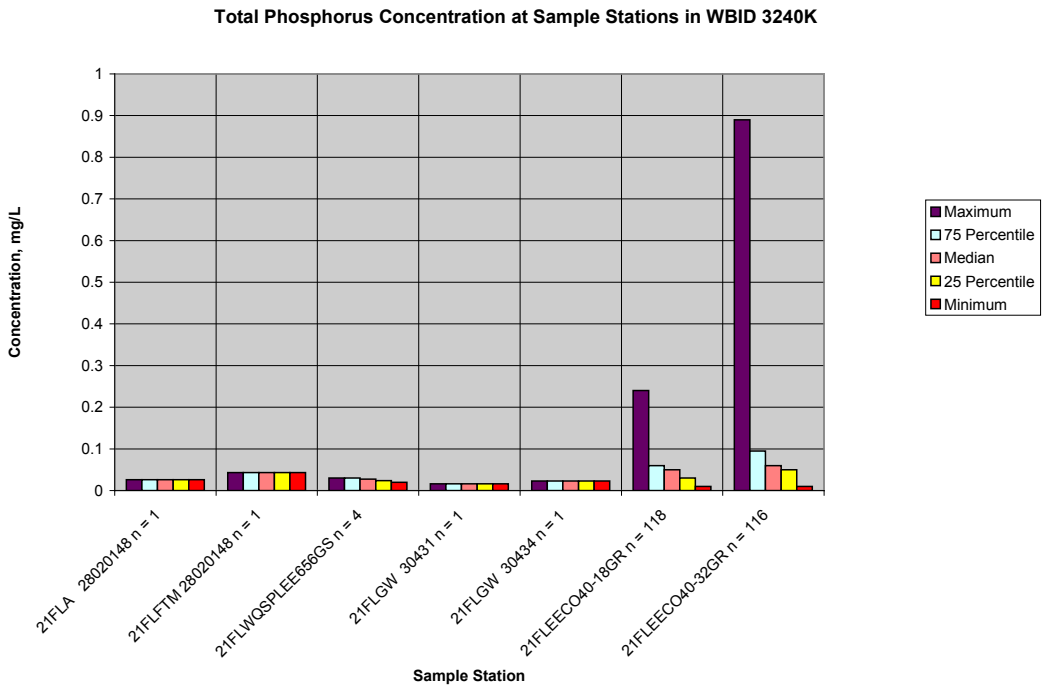


Figure D.3.21: Total Phosphorus, Sample Stations of WBID 3240K

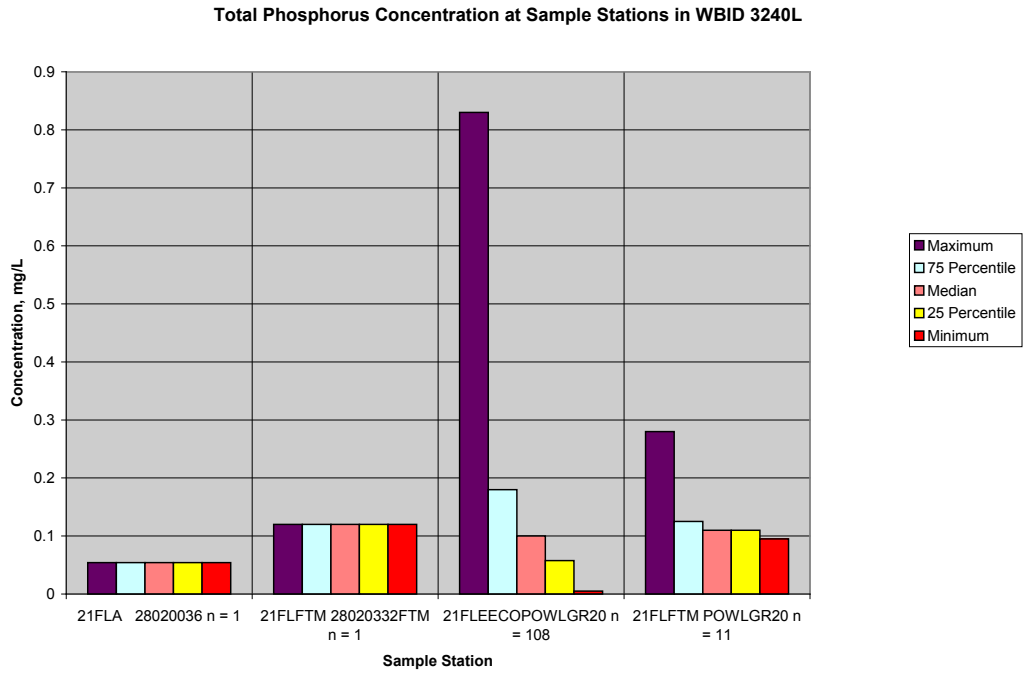


Figure D.3.22: Total Phosphorus, Sample Stations of WBID 3240L

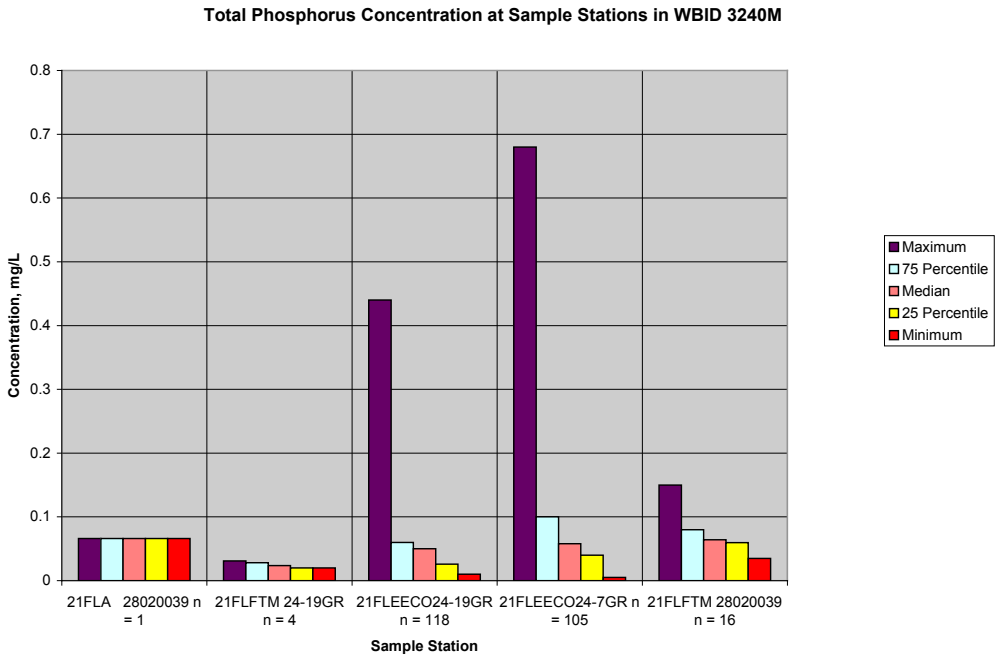


Figure D.3.23: Total Phosphorus, Sample Stations of WBID 3240M

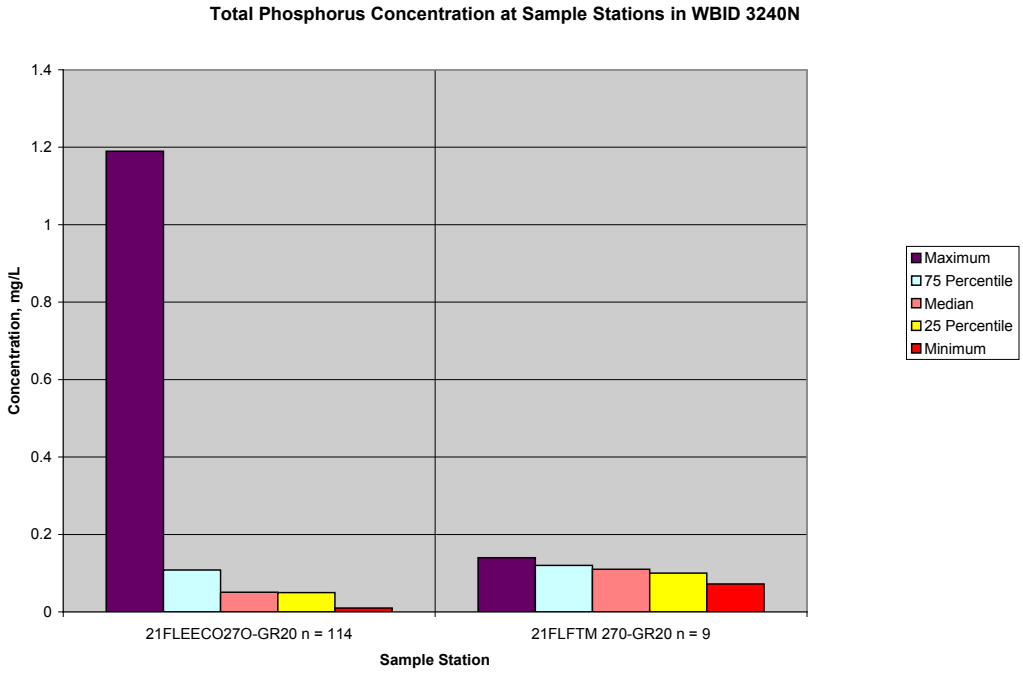


Figure D.3.24: Total Phosphorus, Sample Stations of WBID 3240N

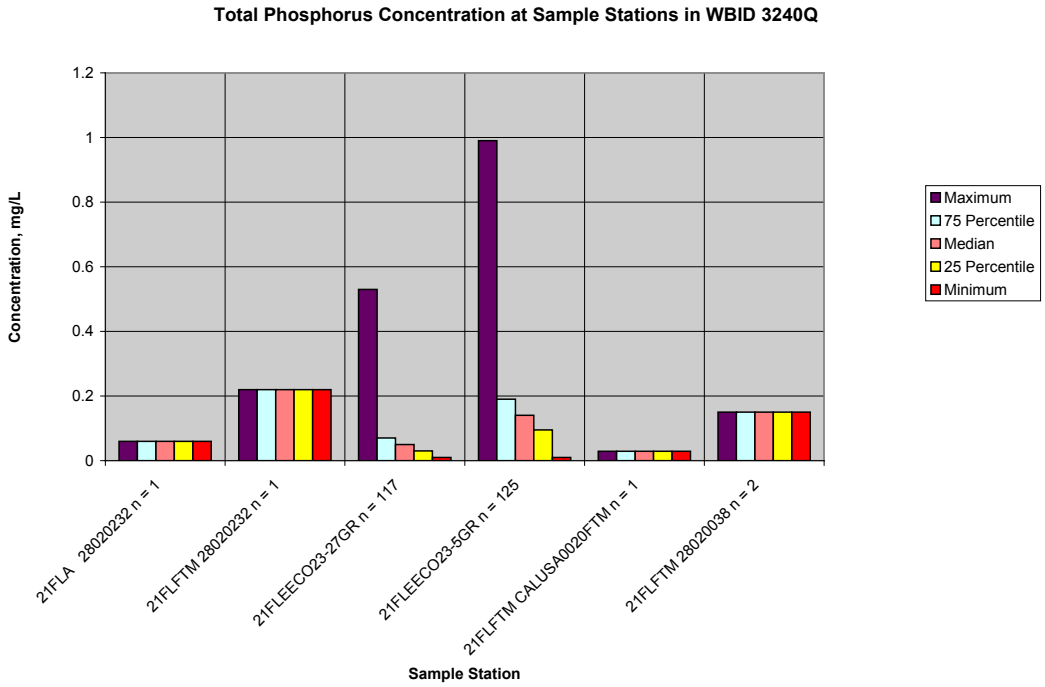


Figure D.3.25: Total Phosphorus, Sample Stations of WBID 3240Q

Appendix D.4. Chlorophyll a Corrected

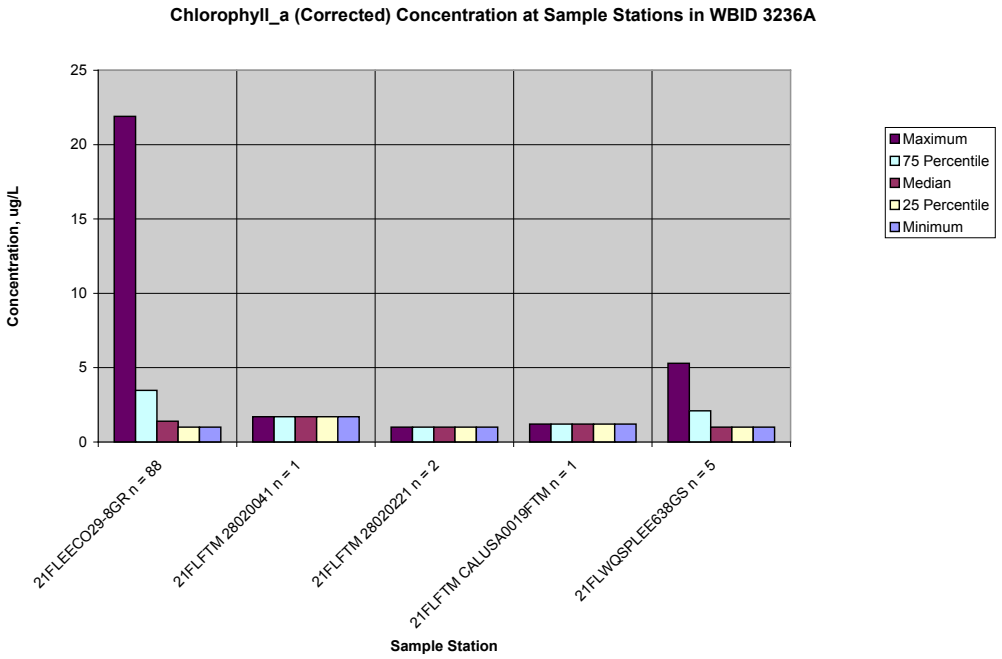


Figure D.4.1: Chlorophyll a, Sample Stations of WBID 3236A

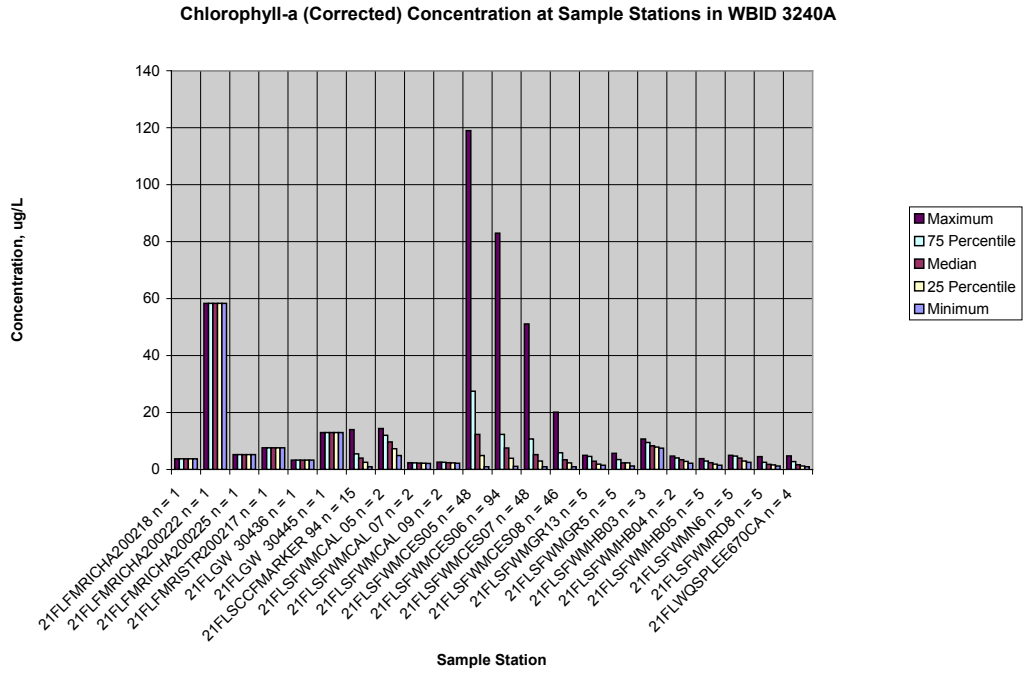


Figure D.4.2: Chlorophyll a, Sample Stations of WBID 3240A

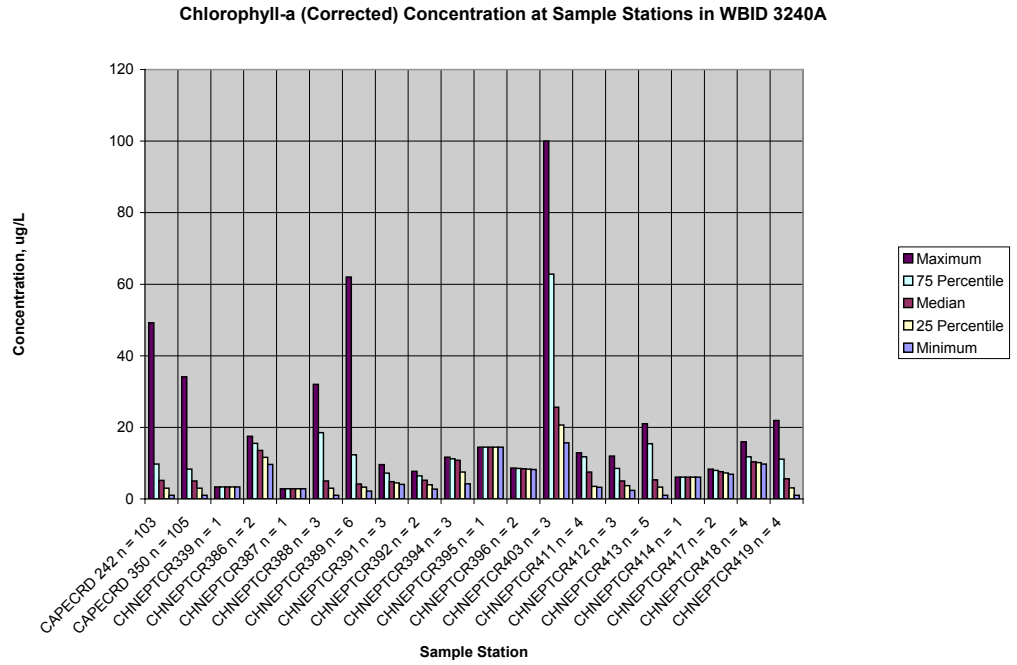


Figure D.4.3: Chlorophyll a, Sample Stations of WBID 3240A

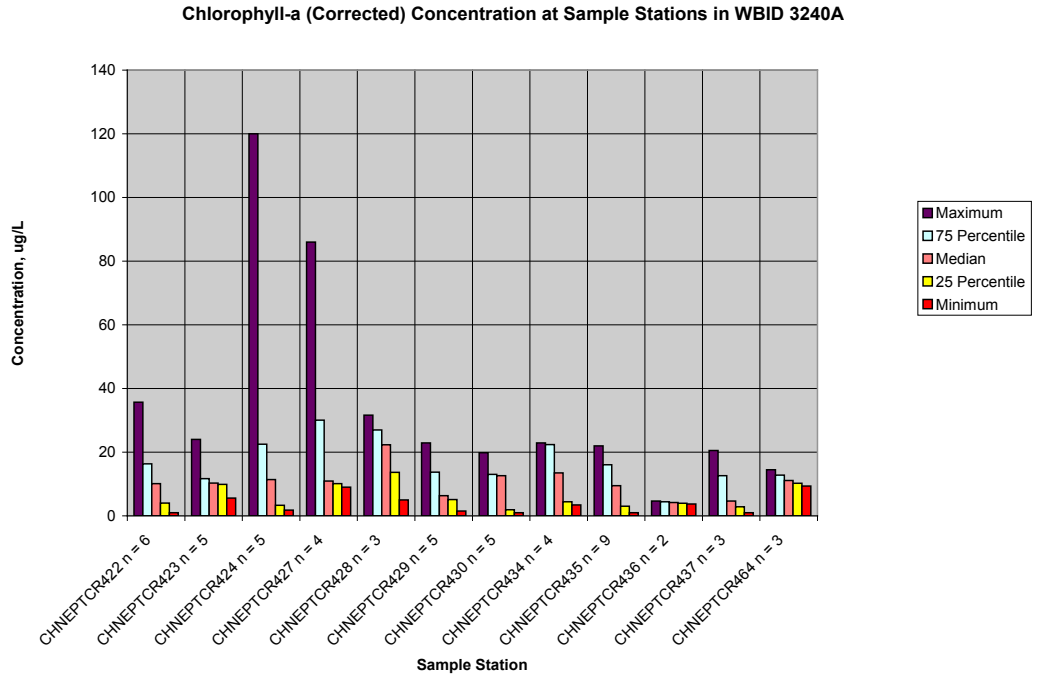


Figure D.4.4: Chlorophyll a, Sample Stations of WBID 3240A

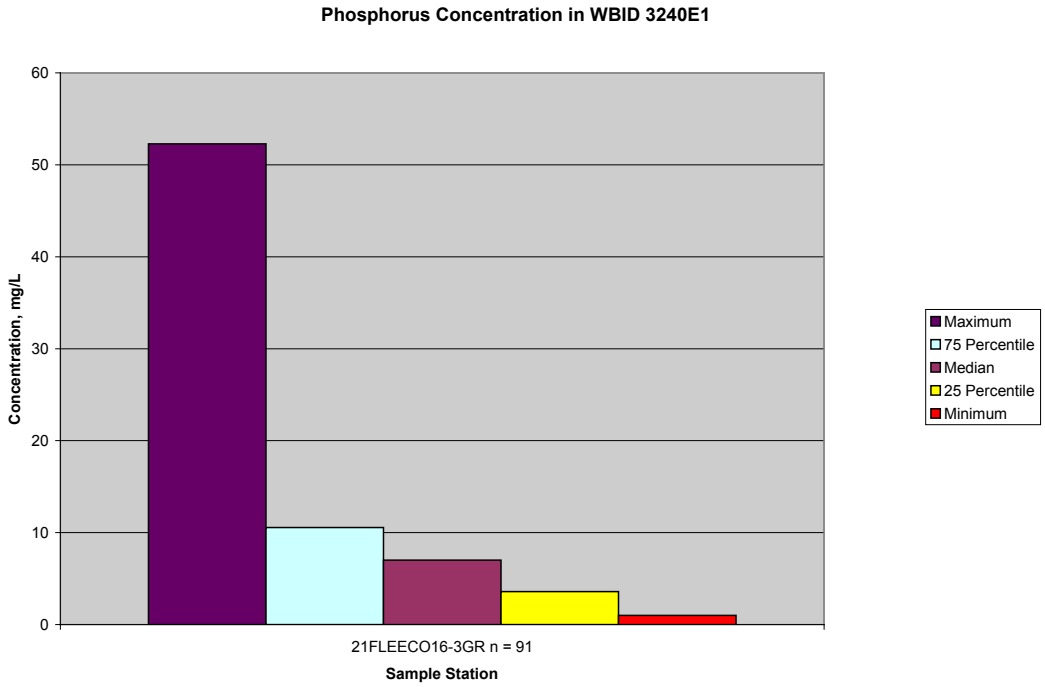


Figure D.4.5: Chlorophyll a, Sample Stations of WBID 3240E1

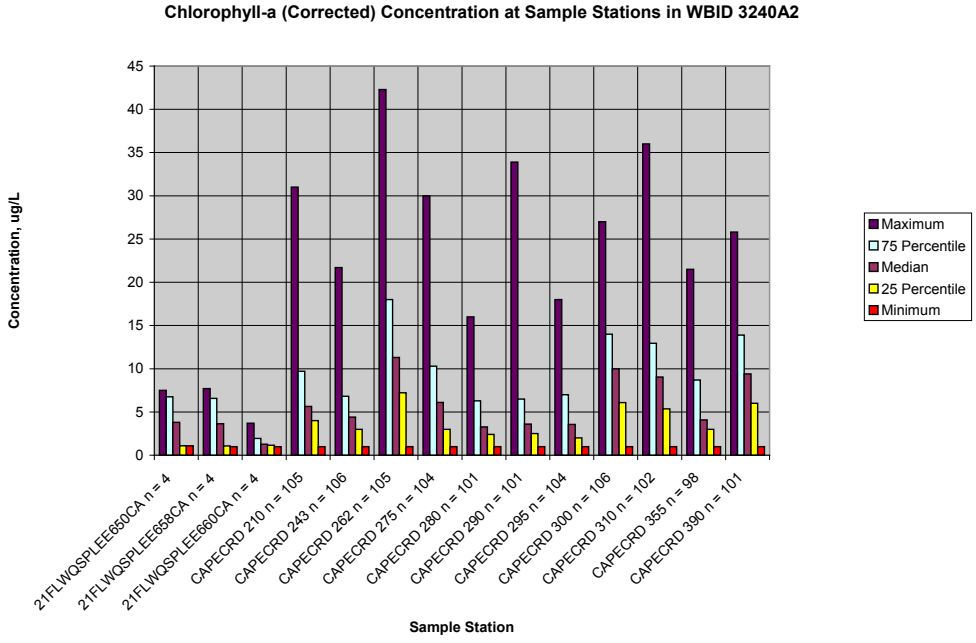


Figure D.4.6: Chlorophyll a, Sample Stations of WBID 3240A2

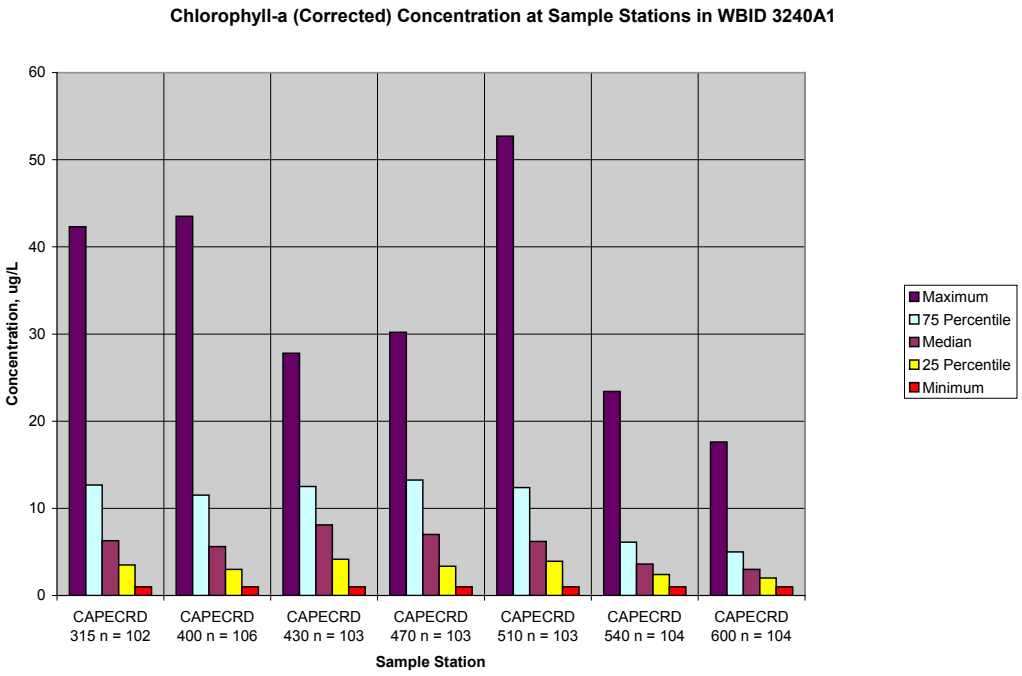


Figure D.4.7: Chlorophyll a, Sample Stations of WBID 3240A1

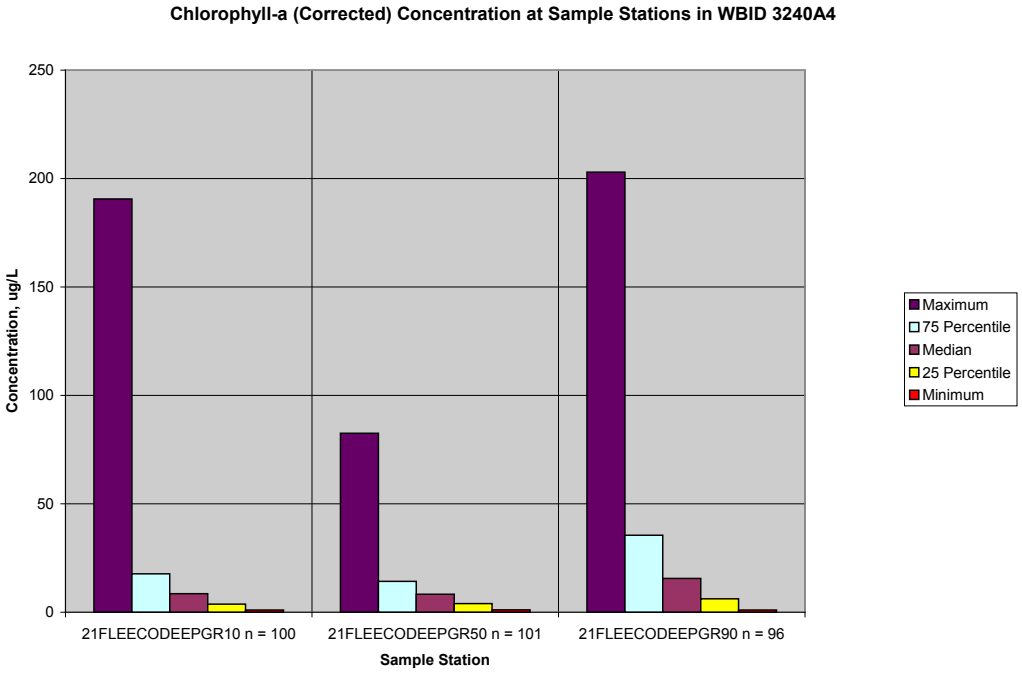


Figure D.4.8: Chlorophyll a, Sample Stations of WBID 3240A4

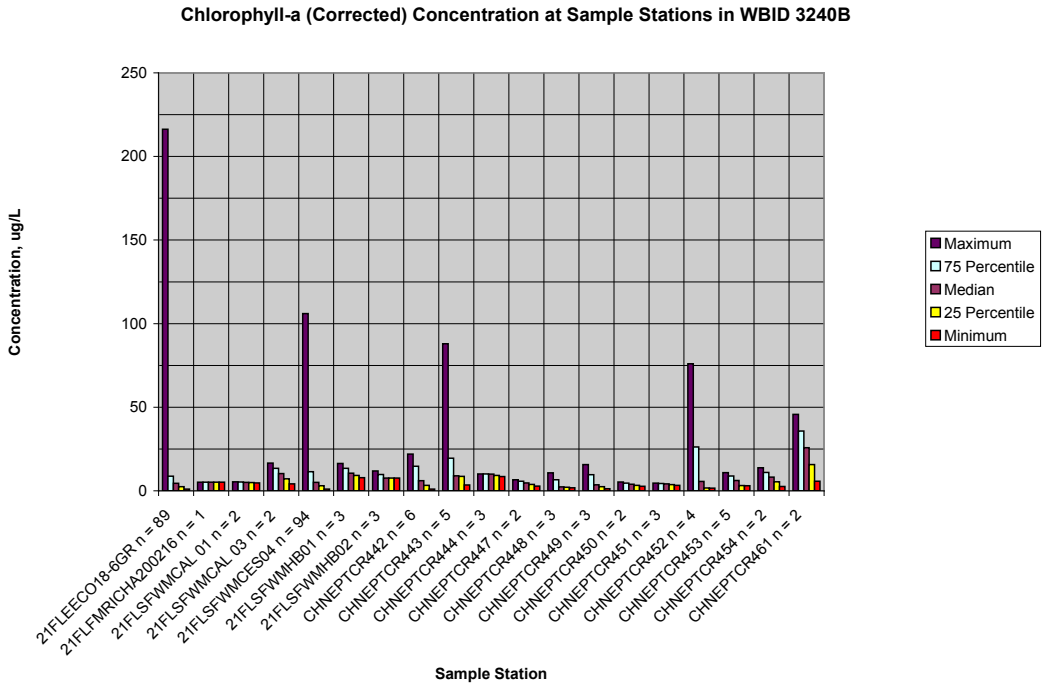


Figure D.4.9: Chlorophyll a, Sample Stations of WBID 3240B

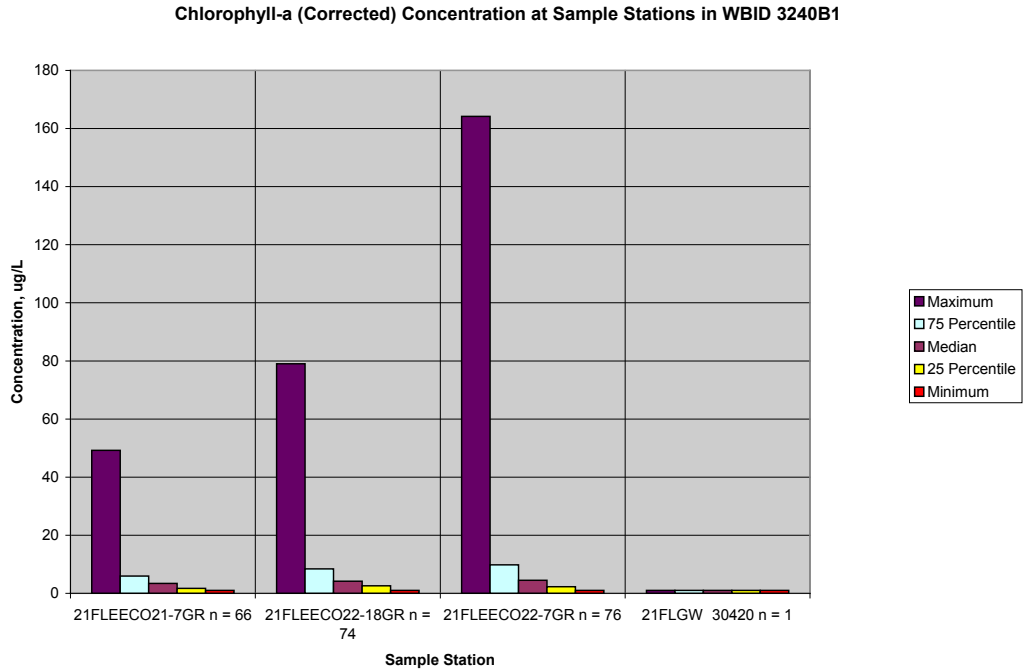


Figure D.4.10: Chlorophyll a, Sample Stations of WBID 3240B1

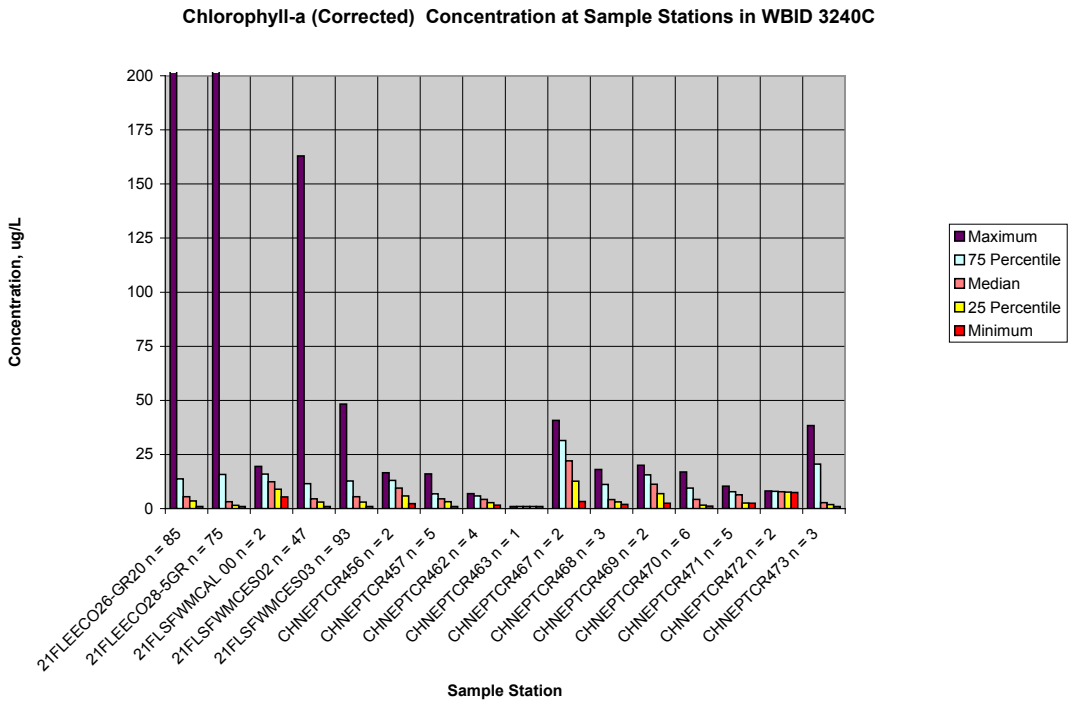


Figure D.4.11: Chlorophyll a, Sample Stations of WBID 3240C

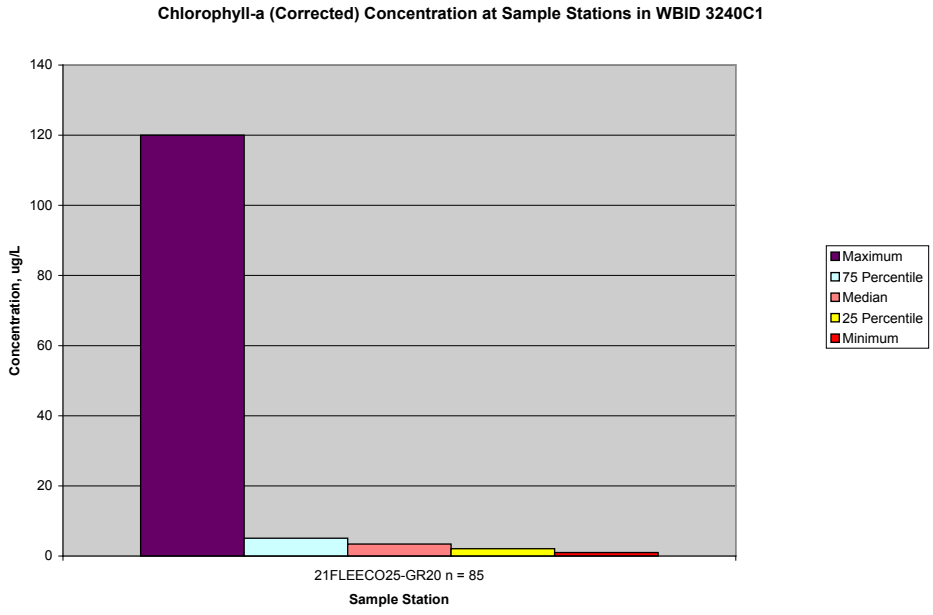


Figure D.4.12: Chlorophyll a, Sample Stations of WBID 3240c1

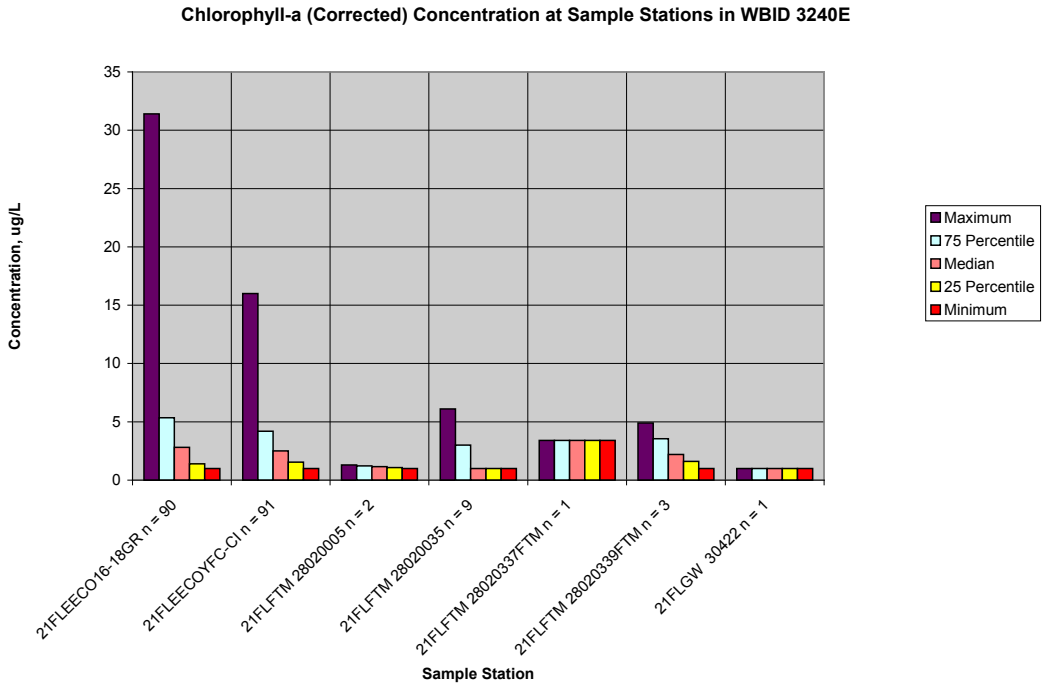


Figure D.4.13: Chlorophyll a, Sample Stations of WBID 3240E

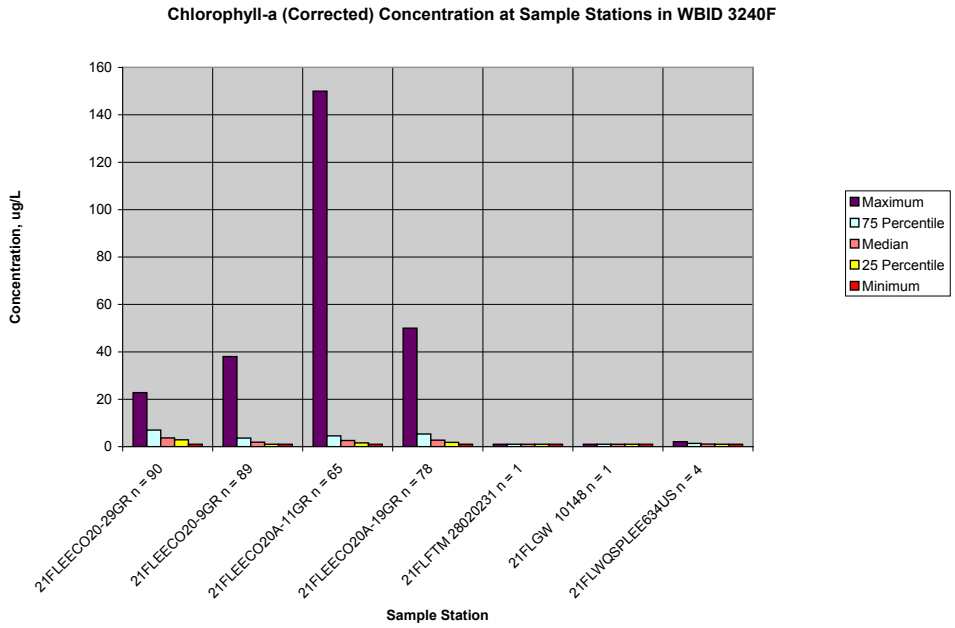


Figure D.4.14: Chlorophyll a, Sample Stations of WBID 3240F

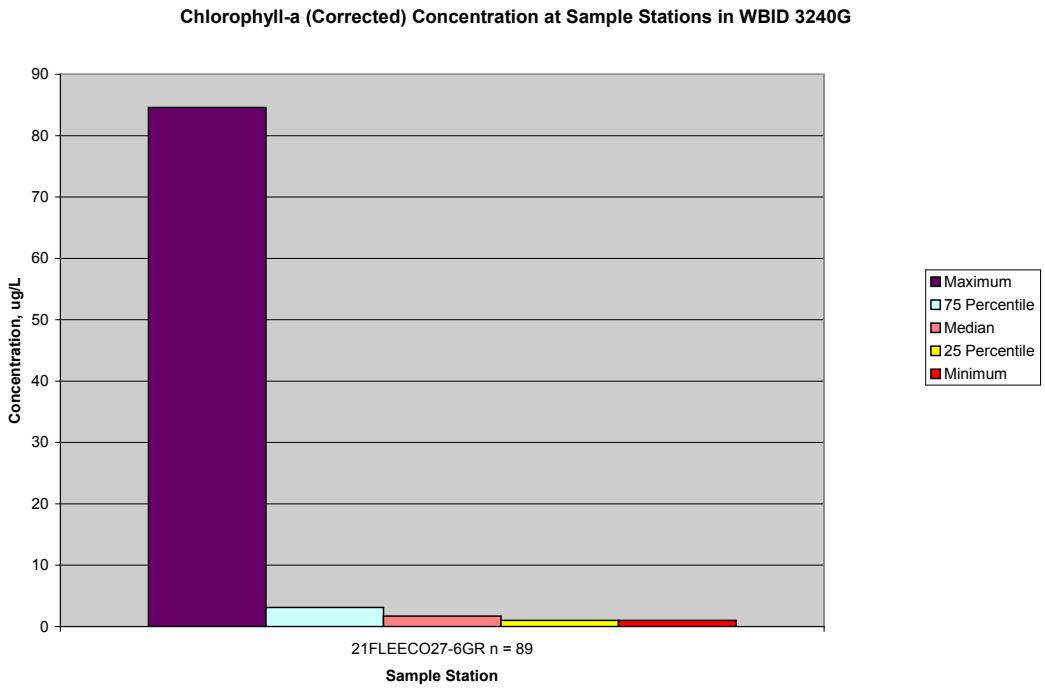


Figure D.4.15: Chlorophyll a, Sample Stations of WBID 3240G

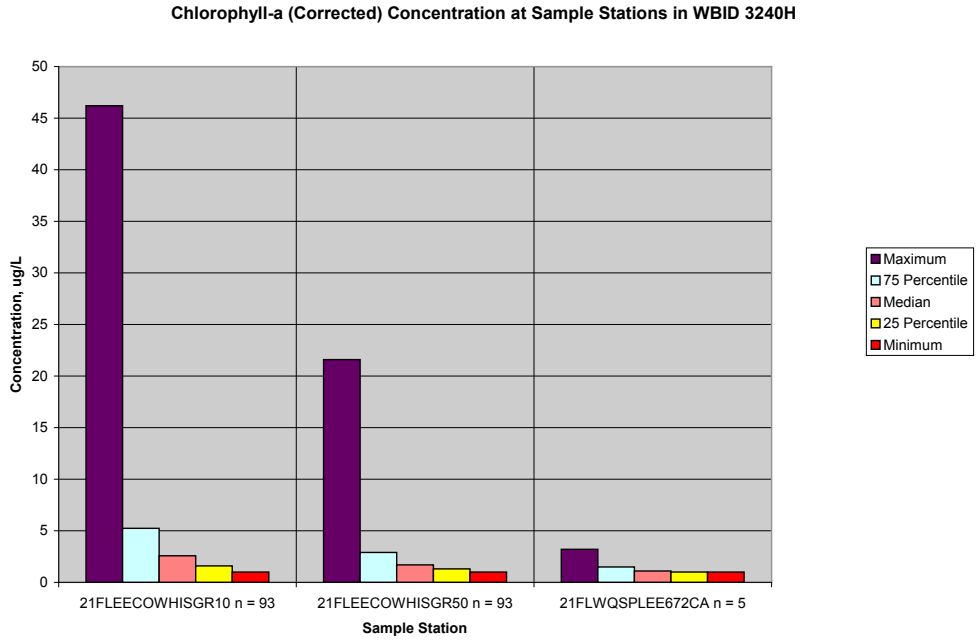


Figure D.4.16: Chlorophyll a, Sample Stations of WBID 3240H

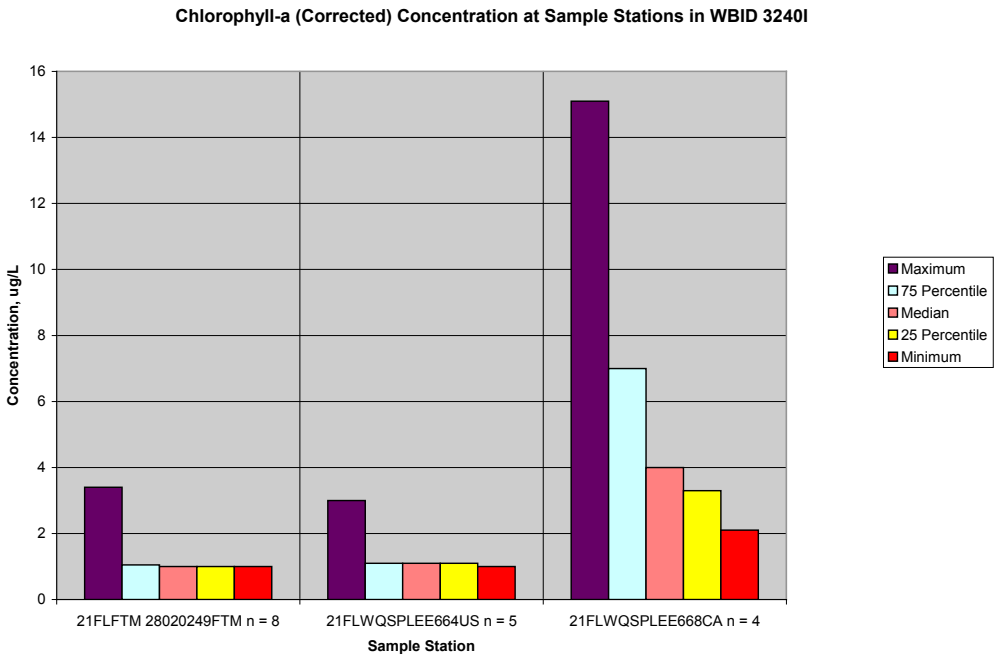


Figure D.4.17: Chlorophyll a, Sample Stations of WBID 3240I

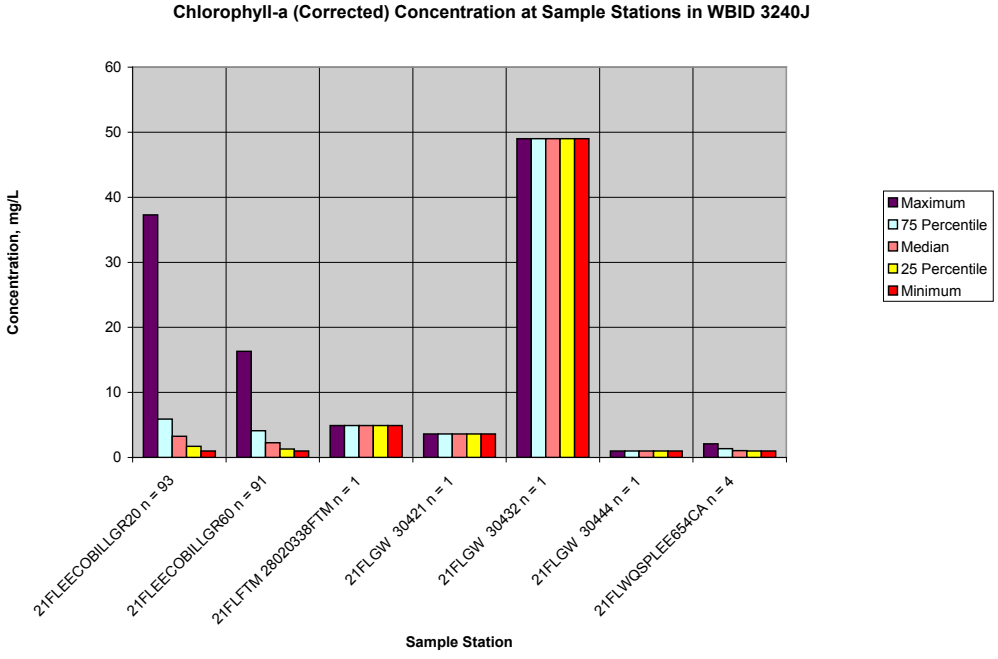


Figure D.4.18: Chlorophyll a, Sample Stations of WBID 3240J

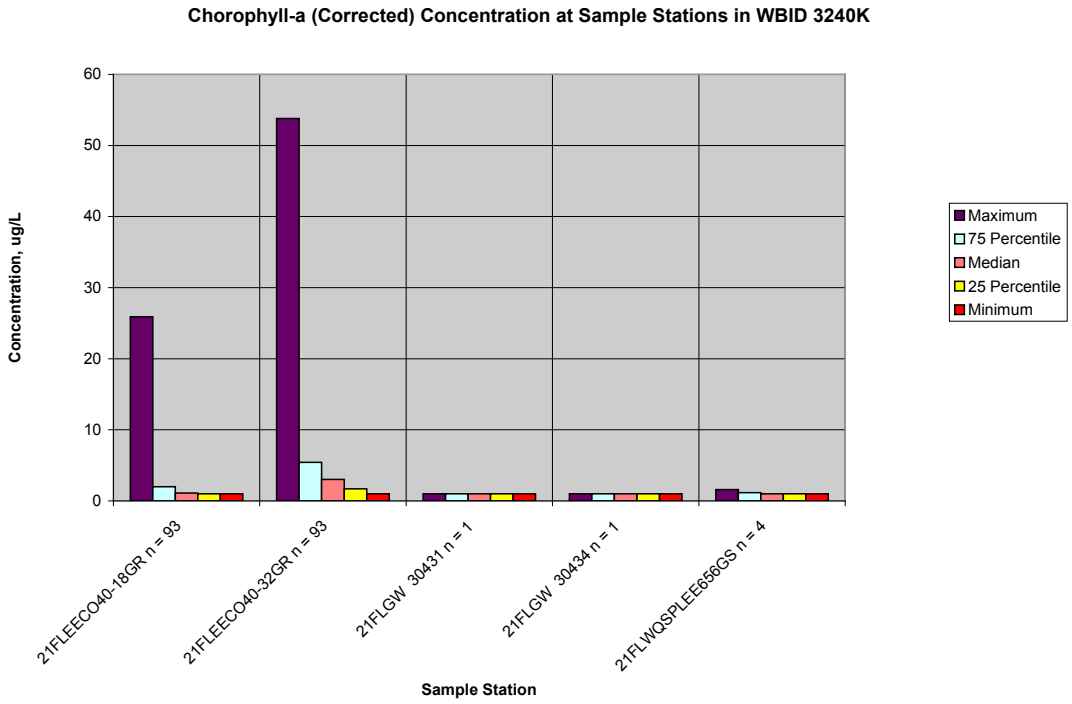


Figure D.4.19: Chlorophyll a, Sample Stations of WBID 3240K

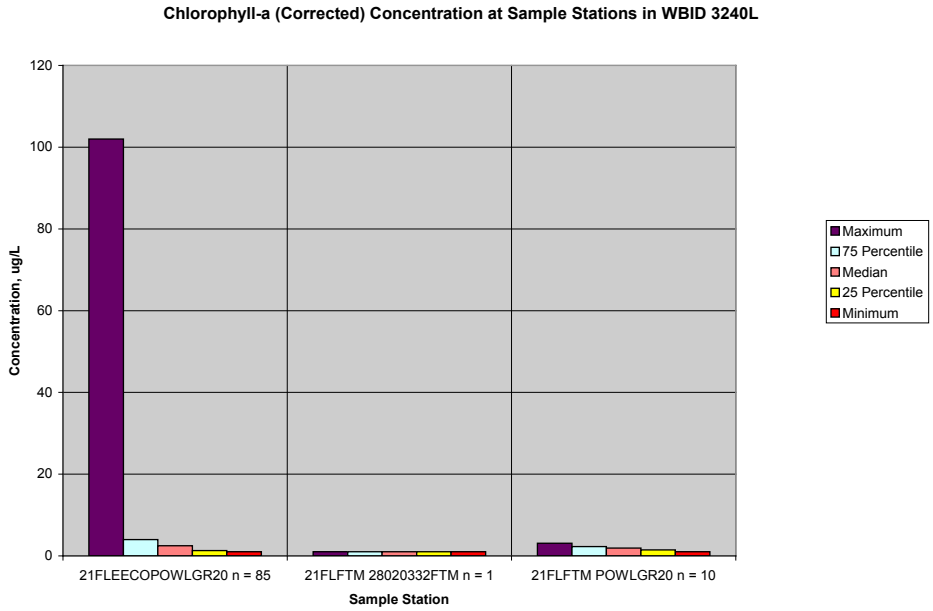


Figure D.4.20: Chlorophyll a, Sample Stations of WBID 3240L

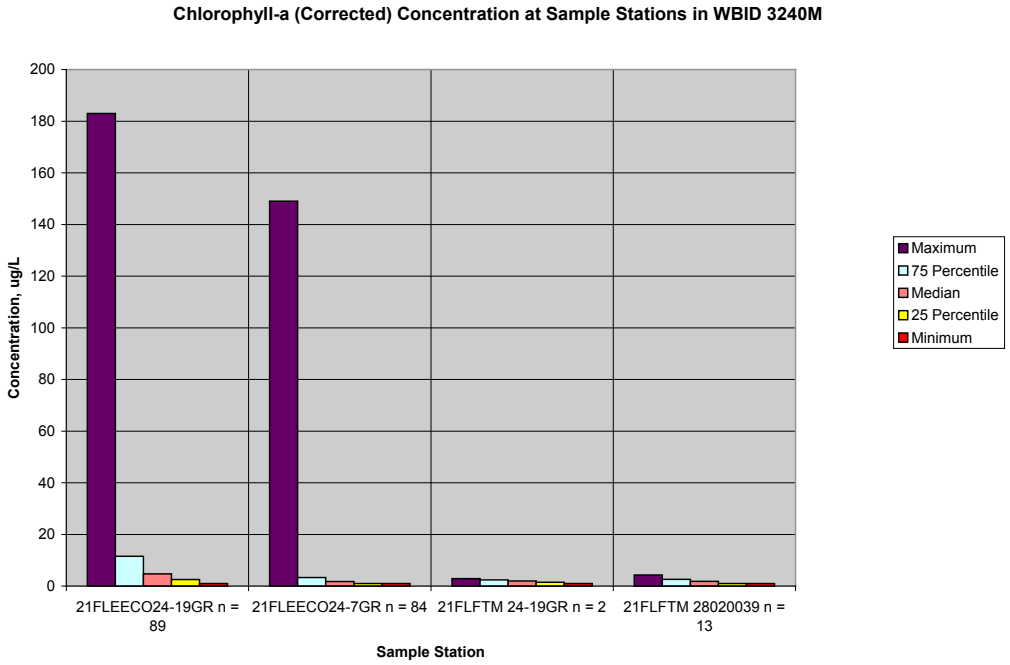


Figure D.4.21: Chlorophyll a, Sample Stations of WBID 3240M

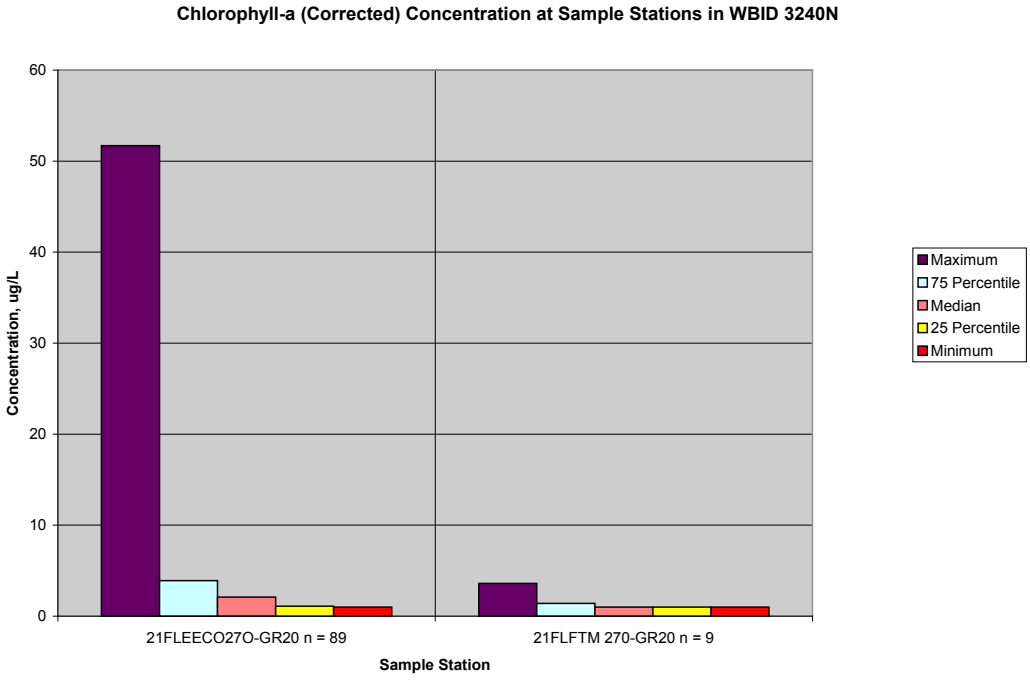


Figure D.4.22: Chlorophyll a, Sample Stations of WBID 3240N

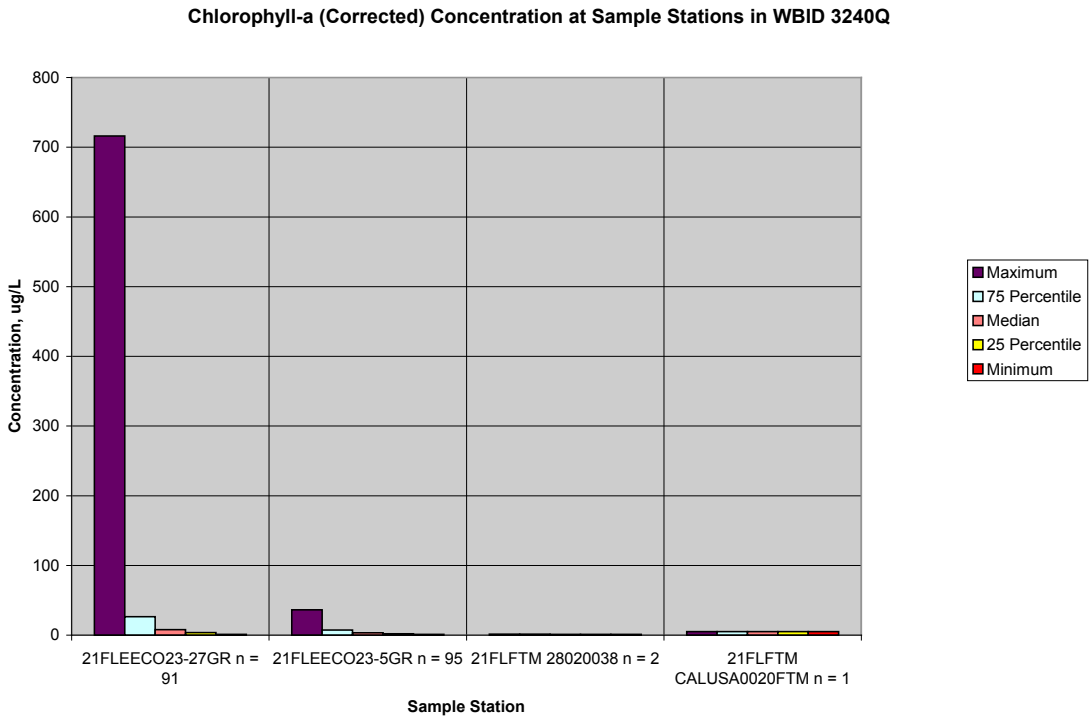


Figure D.4.23: Chlorophyll a, Sample Stations of WBID 3240Q

Appendix E: Statistical Summaries of Color and Conductivity

Appendix E.1. Statistical Summary of Color in Tidal Caloosahatchee Basin WBIDs

WBID	SAMPLE STATION	Number of Samples	Color Results				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
3236	21FLGW 30439	1	500	500	500	500	500
3240E1	21FLEECO16-3GR	73	60.5	22	52.1	87.6	226
	21FLA 28020041	5	60	40	50	120	120
	21FLEECO29-8GR	72	108.5	25.8	58.5	170	310
	21FLFTM 28020221	2	75	50	62.5	87.5	100
3236A	21FLWQSPLEE638GS	5	150	60	100	250	300
	21FLA 28020185	5	40	20	30	100	160
	21FLFMRICHA200218	1	273.8	273.8	273.8	273.8	273.8
	21FLFMRICHA200222	1	219.7	219.7	219.7	219.7	219.7
	21FLFMRICHA200225	1	82.7	82.7	82.7	82.7	82.7
	21FLFMRISTR200116	1	54.71	54.71	54.71	54.71	54.71
	21FLFMRISTR200217	1	194.7	194.7	194.7	194.7	194.7
	21FLGW 30436	1	20	20	20	20	20
	21FLGW 30445	1	30	30	30	30	30
	21FLSFWMCAL 05	2	31	27	29	33	35
	21FLSFWMCAL 07	2	22	18	20	24	26
	21FLSFWMCAL 09	2	12.5	10	11.25	13.75	15
	21FLSFWMCES05	40	52.666667	26.5	41	98.25	235.5
	21FLSFWMCES06	87	56.15	10.17	37.75	110.75	256.5
	21FLSFWMCES07	40	33.166667	9.35	21.375	55.375	206
	21FLSFWMCES08	38	26.25	6	13.25	31.875	140
	21FLSFWMGR13	6	7	4	4.5	9.5	23
	21FLSFWMGR5	6	6	3	4.25	8.5	13
	21FLSFWMHB03	3	24	24	24	26.5	29
	21FLSFWMHB04	3	20	16	18	20.5	21
	21FLSFWMHB05	5	14	10	10	15	16
	21FLSFWMN6	6	11	4	8.5	13.5	20
	21FLSFWMRD8	5	5	2	4	6	6
	21FLWQSPLEE670CA	4	30	20	27.5	31.25	35
	CHNEPSCB338	3	0	0	0	0	0
	CHNEPTCR339	1	34.35	34.35	34.35	34.35	34.35
	CHNEPTCR386	2	111.975	104.95	108.4625	115.4875	119
	CHNEPTCR387	1	18.15	18.15	18.15	18.15	18.15
	CHNEPTCR388	3	84.5	18.8	51.65	120.75	157
	CHNEPTCR389	6	27.15	20.1	23.1	32.775	166.8
	CHNEPTCR391	3	66	18.9	42.45	94.85	123.7
	CHNEPTCR392	2	45.6	41.4	43.5	47.7	49.8
	CHNEPTCR393	1	78	78	78	78	78
	CHNEPTCR394	3	34.8	32.4	33.6	152.65	270.5
	CHNEPTCR395	2	88.35	81.7	85.025	91.675	95
	CHNEPTCR396	2	35.2	33.8	34.5	35.9	36.6
	CHNEPTCR403	4	78.5	25.2	53.55	105.75	141
	CHNEPTCR411	4	105.05	30.55	74.6125	133.1	170
	CHNEPTCR412	4	76.65	28	46.975	110	140
	CHNEPTCR413	5	39.5	33.1	33.3	66.7	150
	CHNEPTCR414	1	41.9	41.9	41.9	41.9	41.9
	CHNEPTCR417	2	60.6	52.6	56.6	64.6	68.6
	CHNEPTCR418	4	62.5	43.7	47.15	103.525	184
	CHNEPTCR419	5	60.5	39.2	42.5	97	100
	CHNEPTCR422	6	110.85	29	63.575	130.75	150
	CHNEPTCR423	5	43.8	40	42.3	73.2	179
	CHNEPTCR424	5	45	31.4	38.6	70.3	167.3
	CHNEPTCR427	4	66.65	38.7	48.375	101.275	160
	CHNEPTCR428	3	101.4	54.2	77.8	104.7	108
	CHNEPTCR429	5	126	50.8	81.9	137	177.6
	CHNEPTCR430	5	98.4	41.8	49.1	102	170
	CHNEPTCR434	4	119.5	75	96	163.25	245
	CHNEPTCR435	9	93.2	36.5	60.3	106.2	223.5
	CHNEPTCR436	2	120	108	114	126	132
	CHNEPTCR437	3	102	96	99	132.475	162.95
3240A	CHNEPTCR464	3	76.7	52	64.35	84.8	92.9

WBID	SAMPLE STATION	Number of Samples	Color Results				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
	21FLWQSPLEE650CA	4	27.5	20	23.75	32.5	40
	21FLWQSPLEE658CA	4	20	20	20	25	40
3240A2	21FLWQSPLEE660CA	4	22.5	15	18.75	26.25	30
	21FLEECODEEPGR10	88	64.05	39.6	53.85	77.95	160
	21FLEECODEEPGR50	88	124.85	38.7	93.325	168.25	380
3240A4	21FLEECODEEPGR90	83	150	40.7	116.1	192	377
	21FLEECO18-6GR	72	52.9	14.6	45.4	75.875	273
	21FLFMRICHA200216	1	269	269	269	269	269
	21FLSFWMCAL 01	2	44.5	37	40.75	48.25	52
	21FLSFWMCAL 03	2	46	36	41	51	56
	21FLSFWMCES04	87	81.05	25.05	55.525	129.95	251.5
	21FLSFWMHB01	3	37	28	32.5	37	37
	21FLSFWMHB02	3	30	27	28.5	31	32
	CHNEPTCR442	6	80.9	41	62.2	132.75	162
	CHNEPTCR443	5	74	36.9	63.1	81	89.8
	CHNEPTCR444	3	58.4	49.4	53.9	83.7	109
	CHNEPTCR447	2	46.3	39	42.65	49.95	53.6
	CHNEPTCR448	3	108.7	63.4	86.05	134.35	160
	CHNEPTCR449	3	96.9	63.9	80.4	102.95	109
	CHNEPTCR450	2	133.3	75.6	104.45	162.15	191
	CHNEPTCR451	3	89	88.95	88.975	147.5	206
	CHNEPTCR452	4	123.5	42	90.75	156.5	206
	CHNEPTCR453	5	89	61.2	71.1	109.7	130
	CHNEPTCR454	2	68.7	36.15	52.425	84.975	101.25
3240B	CHNEPTCR461	2	105.3	63.6	84.45	126.15	147
	21FLEECO21-7GR	61	108	16.5	87.9	154	235
	21FLEECO22-18GR	61	91.7	26.6	50.6	147	264
	21FLEECO22-7GR	63	74.6	32.8	63.5	132.5	296
3240B1	21FLGW 30420	1	100	100	100	100	100
3240B2	21FLGW 10154	1	50	50	50	50	50
	21FLEECO26-GR20	68	80.575	28.8	50.675	155.75	305
	21FLEECO28-5GR	59	93.9	39.6	66.1	154.35	798
	21FLSFWMCAL 00	2	52	50	51	53	54
	21FLSFWMCES02	40	72.075	35	58.5	112.375	386.5
	21FLSFWMCES03	87	78.25	27.65	59.825	128.725	278
	CHNEPTCR456	2	132.45	54.9	93.675	171.225	210
	CHNEPTCR457	5	57.95	38.9	52.1	69.3	72.25
	CHNEPTCR462	4	152.925	59.5	81.5125	225.25	250
	CHNEPTCR463	1	109	109	109	109	109
	CHNEPTCR467	2	65.275	64.05	64.6625	65.8875	66.5
	CHNEPTCR468	3	80.2	61.5	70.85	134.6	189
	CHNEPTCR469	2	56.25	40.5	48.375	64.125	72
	CHNEPTCR470	6	70.116667	61.5	63.2	145.7083333	233.6
	CHNEPTCR471	5	78.1	55.2	66.2	188	250
	CHNEPTCR472	2	119.3	77.6	98.45	140.15	161
3240C	CHNEPTCR473	3	155	122.05	138.525	179.75	204.5
3240C1	21FLEECO25-GR20	69	108.5	26.8	78.7	186	404
	21FLA 28020035	1	70	70	70	70	70
	21FLEECO16-18GR	73	45.1	16.9	32	79.4	234
	21FLEECOYFC-CI	73	79.4	23.1	62.9	96.6	169.6
	21FLFTM 28020035	1	40	40	40	40	40
3240E	21FLGW 30422	1	60	60	60	60	60

WBID	SAMPLE STATION	Number of Samples	Color Results				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
	21FLA 28020231	1	80	80	80	80	80
	21FLEECO20-29GR	73	63	16	42.4	95.3	197
	21FLEECO20-9GR	71	51.8	17.3	38	81.05	271
	21FLEECO20A-11GR	60	86.05	30.1	55.525	152.25	392
	21FLEECO20A-19GR	64	56.6	8.4	38.65	102.5	276
	21FLGW 10148	1	30	30	30	30	30
3240F	21FLWQSPLEE634US	4	130	50	57.5	230	320
	21FLA 28020040	1	80	80	80	80	80
3240G	21FLEECO27-6GR	71	50.3	14.5	25.95	120.65	303
	21FLEECOWHISGR10	78	35	23.1	30.625	46.6625	96.4
	21FLEECOWHISGR50	78	34.8	22.5	31.6	53.075	102
	21FLFTM 28020294FTM	1	40	40	40	40	40
	21FLFTM 28020295FTM	1	40	40	40	40	40
	21FLFTM 28020296FTM	1	30	30	30	30	30
	21FLFTM 28020297FTM	1	20	20	20	20	20
3240H	21FLWQSPLEE672CA	5	30	30	30	35	40
	21FLA 28020225	1	80	80	80	80	80
	21FLFTM 28020025	19	60	30	45	75	100
	21FLFTM 28020225	9	70	50	60	80	100
	21FLFTM 28020249FTM	15	50	30	50	60	90
	21FLFTM 28020286FTM	2	55	30	42.5	67.5	80
	21FLFTM 28020287FTM	2	55	30	42.5	67.5	80
	21FLFTM 28020288FTM	2	55	30	42.5	67.5	80
	21FLFTM 28020289FTM	2	55	30	42.5	67.5	80
	21FLWQSPLEE664US	5	70	50	60	70	80
3240I	21FLWQSPLEE668CA	4	65	60	60	72.5	80
	21FLA 28020233	1	100	100	100	100	100
	21FLEECOBILLGR20	78	72.7	29.7	61.775	84.55	190
	21FLEECOBILLGR60	76	106.5	28.4	85.475	134.5	341.7
	21FLFTM 28020233	2	85	70	77.5	92.5	100
	21FLGW 30421	1	100	100	100	100	100
	21FLGW 30432	1	120	120	120	120	120
	21FLGW 30444	1	80	80	80	80	80
3240J	21FLWQSPLEE654CA	4	132.5	25	100	145	160
	21FLA 28020148	1	80	80	80	80	80
	21FLEECO40-18GR	78	45.3	21.1	36.425	56.675	98
	21FLEECO40-32GR	77	40	18.9	29	54.4	97.7
	21FLFTM 28020148	2	62.5	45	53.75	71.25	80
	21FLGW 30431	1	60	60	60	60	60
	21FLGW 30434	1	100	100	100	100	100
3240K	21FLWQSPLEE656GS	4	60	50	57.5	65	80
	21FLA 28020036	1	80	80	80	80	80
3240L	21FLEECOPOWLGR20	71	49.3	2.38	43.5	76.35	204
	21FLA 28020039	1	70	70	70	70	70
	21FLEECO24-19GR	72	63.6	19.8	41.025	102.5	276
3240M	21FLEECO24-7GR	71	74.2	27.6	54.5	138	329
3240N	21FLEECO27O-GR20	72	79.975	6.8	46.55	140.25	447
	21FLA 28020232	1	100	100	100	100	100
	21FLEECO23-27GR	73	68.7	17.3	36.7	112	258
3240Q	21FLEECO23-5GR	77	69.1	38.6	50.4	109	256

Appendix E.2. Statistical Summary of Specific Conductance in Tidal Caloosahatchee Basin WBIDs

WBID	SAMPLE STATION	Number of Samples	Specific Conductance Results				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
3236	21FLGW 30439	1	128	128	128	128	128
3240E1	21FLEECO16-3GR	122	5400	333	936.25	16972	38500
3236A	21FLA 28020041	4	269	207	211.5	1177.75	3736
	21FLEECO29-8GR	122	375	94	197	1246.5	24400
	21FLFTM 28020041	1	5288	5288	5288	5288	5288
	21FLFTM 28020221	4	541.5	161	442.25	561.25	604
	21FLFTM CALUSA0019FTN	1	1064	1064	1064	1064	1064
	21FLWQSPLEE638GS	9	344	131	168	391	1840
3240A	21FLA 28020185	5	23767	1184	19875	33886	37899
	21FLFMRICHA200218	1	0.16	0.16	0.16	0.16	0.16
	21FLFMRICHA200222	1	0.29	0.29	0.29	0.29	0.29
	21FLFMRICHA200225	1	8.54	8.54	8.54	8.54	8.54
	21FLFMRICHA200230	1	4.42	4.42	4.42	4.42	4.42
	21FLFMRISTR200116	1	25	25	25	25	25
	21FLFMRISTR200217	1	6.32	6.32	6.32	6.32	6.32
	21FLGW 30436	1	530.5	530.5	530.5	530.5	530.5
	21FLGW 30445	1	488	488	488	488	488
	21FLSCCFMARKER 94	15	30856.667	18668.3333	26323.33333	35770	51510
	21FLSFWMCAL 05	2	26538.5	21261	23899.75	29177.25	31816
	21FLSFWMCAL 07	2	34088	29507	31797.5	36378.5	38669
	21FLSFWMCAL 09	2	44514	41323	42918.5	46109.5	47705
	21FLSFWMCES05	177	5081.5278	57.4641975	404.2	21313.5	43637
	21FLSFWMCES06	216	10708.333	54.706474	1398.0625	24988.75	47165.5
	21FLSFWMCES07	176	20981.5	88.2154936	5939.5	36842	54657
	21FLSFWMCES08	168	41144.75	512.957242	9659.2	48682.875	57334
	21FLSFWMGR13	6	7243.4632	5175.4264	6644.848111	32376.12041	49204
	21FLSFWMGR5	6	8900.9878	7627.12798	8532.107788	37662.22421	51911
	21FLSFWMHB03	3	27150	23674	25412	28675	30200
	21FLSFWMHB04	3	32907	31865	32386	33640	34373
	21FLSFWMHB05	5	40834	20537.5	36938	41904	44150
	21FLSFWMN6	6	30299.25	20708.3333	27864.375	37330	42125
	21FLSFWMRD8	9	8014.7968	5839.98647	6658.830285	21376.58333	50998
	21FLWQSPLEE670CA	8	823.5	518	708.5	873	898
	CAPECRD 242	151	6080	169.5	564	15466.66667	29700
	CAPECRD 350	137	9783.3333	253.333333	2818.333333	16033.33333	30400
	CHNEPSCB338	4	28.915417	0.04	14.631925	40.44625	46.78
	CHNEPTCR339	1	49975	49975	49975	49975	49975
	CHNEPTCR386	2	12227.5	5470	8848.75	15606.25	18985
	CHNEPTCR387	1	39550	39550	39550	39550	39550
	CHNEPTCR388	3	5310	4220	4765	17705	30100
	CHNEPTCR389	6	25956.25	359	23053.125	31925	39620
	CHNEPTCR391	3	20800	11500	16150	31304	41808
	CHNEPTCR392	2	21293.5	17300	19296.75	23290.25	25287
	CHNEPTCR393	1	13250	13250	13250	13250	13250
	CHNEPTCR394	3	17521	4322.5	10921.75	18318	19115
	CHNEPTCR395	1	8600	8600	8600	8600	8600
	CHNEPTCR396	2	23550	22700	23125	23975	24400
	CHNEPTCR403	4	5720	4705	4956.25	12800	32000
	CHNEPTCR411	3	679	622	650.5	12814.5	24950
	CHNEPTCR412	4	1498.5	640	885.25	7191.25	22675
	CHNEPTCR413	5	21800	560	11100	23099	32600
	CHNEPTCR414	1	15400	15400	15400	15400	15400
	CHNEPTCR417	2	1610	890	1250	1970	2330
	CHNEPTCR418	4	5825	717.5	3441.875	8268.75	11175
	CHNEPTCR419	5	9600	2290	4180	18315	19200
	CHNEPTCR422	6	1235	494	812.5	3030	22700
	CHNEPTCR423	5	8825	392	6480	13700	17770
	CHNEPTCR424	5	8640	327	6675	18430	21980
	CHNEPTCR427	4	2007.5	475	531.25	7023.75	17700
	CHNEPTCR428	3	480	355	417.5	990	1500
	CHNEPTCR429	5	692	347	419	1399	7178.5
	CHNEPTCR430	4	6067.5	399	426	11725	11800
	CHNEPTCR434	4	482.5	412	434.5	1537.25	4580
	CHNEPTCR435	9	487	341	443	552	14447.5
	CHNEPTCR436	2	414.5	406	410.25	418.75	423
	CHNEPTCR437	2	1239.5	339	789.25	1689.75	2140
	CHNEPTCR464	3	17900	466.5	9183.25	18062.5	18225

WBID	SAMPLE STATION	Number of Samples	Specific Conductance Results				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
3240A1	CAPECRD 315	201	3030	129	586	11930	32800
	CAPECRD 400	141	9368.3333	415.333333	1295	16350	38550
	CAPECRD 430	139	10733.333	472.166667	3836.666667	19750	33700
	CAPECRD 470	139	10163.333	506.666667	3015	18758.33333	37100
	CAPECRD 510	153	11633.333	814.833333	3815	19393.33333	43550
	CAPECRD 540	137	18283.333	848.333333	10610	24716.66667	40600
	CAPECRD 600	137	21400	6358.33333	14566.66667	27350	44300
3240A2	21FLFTM 28020285FTM	2	446.5	413	429.75	463.25	480
	21FLWQSPLEE650CA	8	481.5	404	459.5	498.25	514
	21FLWQSPLEE658CA	8	426.5	393	405.75	446.5	450
	21FLWQSPLEE660CA	8	387.5	366	376	401	425
	CAPECRD 210	137	383.16667	253.333333	339.1666667	416.5	619
	CAPECRD 243	139	334	135.166667	307.8333333	361.5	522
	CAPECRD 262	137	344.16667	275.666667	314.8333333	373.6666667	594
	CAPECRD 275	161	324.33333	173.5	264.3333333	453	660.5
	CAPECRD 280	137	298.83333	130	269.6666667	329.3333333	490
	CAPECRD 290	137	290.16667	201	256.6666667	319.6666667	455
	CAPECRD 295	137	298.33333	188.166667	266	315	467
	CAPECRD 300	137	365.83333	293.666667	349.8333333	400.6666667	632
	CAPECRD 310	137	323.66667	215	293.3333333	348.6666667	471.5
	CAPECRD 355	141	272.5	144.5	239.3333333	315	517.5
	CAPECRD 390	143	298	165.166667	269.25	339.8333333	544.5
3240A4	21FLEECODEEPGR10	135	1867	511	1105	8180	34700
	21FLEECODEEPGR50	135	2401	602	1725	3715	43500
	21FLEECODEEPGR90	128	2595	589	1700	3712.5	15200
3240B	21FLEECO18-6GR	119	693	7.5	605	1023	18000
	21FLFMRICHA200216	1	0.16	0.16	0.16	0.16	0.16
	21FLSFWMCAL 01	2	11689	3898	7793.5	15584.5	19480
	21FLSFWMCAL 03	2	17351	10817	14084	20618	23885
	21FLSFWMCES04	212	1405.5	71.9822222	406.8	12126.5	37601
	21FLSFWMHB01	3	21731	17964	19847.5	22165.5	22600
	21FLSFWMHB02	3	22400	20183	21291.5	24593.5	26787
	CHNEPTCR442	6	1042	436.5	450.25	3091	12840
	CHNEPTCR443	5	930	432	478	2040	18043
	CHNEPTCR444	3	8300	7680	7990	14455	20610
	CHNEPTCR447	2	10275	2800	6537.5	14012.5	17750
	CHNEPTCR448	3	438	331	384.5	3418.5	6399
	CHNEPTCR449	3	404	380	392	2565	4726
	CHNEPTCR450	2	509.25	427.5	468.375	550.125	591
	CHNEPTCR451	3	501	457	479	666	831
	CHNEPTCR452	4	448	387	432.75	2598.5	9050
	CHNEPTCR453	5	470	324	404	3025	4995
	CHNEPTCR454	1	8126.5	8126.5	8126.5	8126.5	8126.5
	CHNEPTCR461	2	910.5	485	697.75	1123.25	1336

WBID	SAMPLE STATION	Number of Samples	Specific Conductance Results				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
3240B1	21FLEECO21-7GR	95	606	50	522.5	679.5	1094
	21FLEECO22-18GR	104	424	58	204.5	580.25	818
	21FLEECO22-7GR	108	570	60	400.25	676.25	2190
	21FLGW 30420	1	808.5	808.5	808.5	808.5	808.5
3240B2	21FLGW 10154	1	35457	35457	35457	35457	35457
	CHNEPTCR455	1	425	425	425	425	425
3240C	21FLEECO26-GR20	117	716	240	474	3370	27100
	21FLEECO28-5GR	103	1058	221	792	2345	20700
	21FLSFWMCAL 00	2	1038.5	751	894.75	1182.25	1326
	21FLSFWMCES02	254	493	32.5759318	286.1625	10173.5	32994
	21FLSFWMCES03	305	994.5	35.1047882	401.7	7630.5	34091.5
	CHNEPTCR456	2	1414	328	871	1957	2500
	CHNEPTCR457	5	1540	441	470	2250	13230
	CHNEPTCR462	4	464	332	412.25	554.75	752
	CHNEPTCR463	1	410	410	410	410	410
	CHNEPTCR467	2	631.75	482.5	557.125	706.375	781
	CHNEPTCR468	3	453	373	413	856.5	1260
	CHNEPTCR469	2	6777.5	995	3886.25	9668.75	12560
	CHNEPTCR470	6	423.5	264.333333	334	457.875	1090
	CHNEPTCR471	5	444	301	398	482	14640
	CHNEPTCR472	2	1129.5	454	791.75	1467.25	1805
	CHNEPTCR473	3	466	447	456.5	7280.5	14095
3240C1	21FLEECO25-GR20	109	523	156	460	576	6770
3240E	21FLA 28020035	1	504	504	504	504	504
	21FLEECO16-18GR	123	1010	247	714.5	1890	10600
	21FLEECOYFC-CI	118	614.5	256	531	718	4320
	21FLFTM 28020005	4	654.5	242	500	751	835
	21FLFTM 28020035	19	736	108	618	834	10990
	21FLFTM 28020330FTM	2	699	698	698.5	699.5	700
	21FLFTM 28020337FTM	2	868.5	836	852.25	884.75	901
	21FLFTM 28020339FTM	3	524	300	412	579	634
	21FLGW 30422	1	651.5	651.5	651.5	651.5	651.5
3240F	21FLA 28020231	1	762	762	762	762	762
	21FLEECO20-29GR	122	311.5	92	168.5	1017.5	1720
	21FLEECO20-9GR	120	679	136	336.75	1052.5	18300
	21FLEECO20A-11GR	89	587	151	372	841	10300
	21FLEECO20A-19GR	107	525	191	348.5	636.5	3510
	21FLFTM 28020231	2	699	276	487.5	910.5	1122
	21FLGW 10148	1	1100	1100	1100	1100	1100
	21FLWQSPLEE634US	8	312	160	263.5	365.75	535
3240G	21FLA 28020040	1	205	205	205	205	205
	21FLEECO27-6GR	122	650	62	367	849	8020
3240H	21FLEECOWHISGR10	124	814.5	434	732.5	894.5	4580
	21FLEECOWHISGR50	192	891	175	706	1177.75	2740
	21FLFTM 28020294FTM	1	987	987	987	987	987
	21FLFTM 28020295FTM	1	808	808	808	808	808
	21FLFTM 28020296FTM	1	688	688	688	688	688
	21FLFTM 28020297FTM	1	1083	1083	1083	1083	1083
	21FLWQSPLEE672CA	8	782.5	224	729.625	811.5	852

WBID	SAMPLE STATION	Number of Samples	Specific Conductance Results				
			Median	Minimum	25 Percentile	75 Percentile	Maximum
3240I	21FLA 28020225	1	416	416	416	416	416
	21FLFTM 28020025	19	746	304	660.5	6105	26100
	21FLFTM 28020225	9	2510	611	628	6730	17000
	21FLFTM 28020249FTM	35	675	155	640	717	13170
	21FLFTM 28020286FTM	6	668.5	243	625	687.25	693
	21FLFTM 28020287FTM	6	633	226	536.75	655	683
	21FLFTM 28020288FTM	6	620.5	251	575	636	655
	21FLFTM 28020289FTM	6	663.5	318	442	724.5	802
	21FLWQSPLEE664US	9	663	628	660	701	919
	21FLWQSPLEE668CA	8	611.5	471.333333	526.75	654.75	670
3240J	21FLA 28020233	1	953	953	953	953	953
	21FLEECOBILLGR20	125	803	354	670	1110	15500
	21FLEECOBILLGR60	122	656	290	578.5	735.25	1560
	21FLFTM 28020087	1	530	530	530	530	530
	21FLFTM 28020233	3	782	663	722.5	875.5	969
	21FLFTM 28020338FTM	2	827	786	806.5	847.5	868
	21FLGW 30421	1	589.5	589.5	589.5	589.5	589.5
	21FLGW 30432	1	1040	1040	1040	1040	1040
	21FLGW 30444	1	635	635	635	635	635
	21FLWQSPLEE654CA	8	627.5	380	476.25	669.75	681
3240K	21FLA 28020148	1	435	435	435	435	435
	21FLEECO40-18GR	125	502	275	452	545	1680
	21FLEECO40-32GR	125	555	239	457	609	1270
	21FLFTM 28020011	1	709	709	709	709	709
	21FLFTM 28020085	1	539	539	539	539	539
	21FLFTM 28020148	3	444	391	417.5	459.5	475
	21FLGW 30431	1	695.5	695.5	695.5	695.5	695.5
	21FLGW 30434	1	330.5	330.5	330.5	330.5	330.5
	21FLWQSPLEE656GS	11	492	177.541667	315.5	526.5	551
3240L	21FLA 28020036	1	241	241	241	241	241
	21FLEECOPOWLGR20	117	586	167	451	672	1310
	21FLFTM 28020332FTM	3	583	378	480.5	641	699
	21FLFTM POWLGR20	14	509	482	503.5	627	753
3240M	21FLA 28020039	1	796	796	796	796	796
	21FLEECO24-19GR	121	361	80	187	492	823
	21FLEECO24-7GR	116	719	143	359.5	1085	15400
	21FLFTM 24-19GR	4	351.5	144	178.5	514	517
	21FLFTM 28020039	20	572	175	307.75	763.75	8266
3240N	21FLEECO27O-GR20	122	485.5	104	356.75	578.5	2210
	21FLFTM 270-GR20	13	590	369	519	657	787
3240Q	21FLA 28020232	1	130	130	130	130	130
	21FLEECO23-27GR	123	300	56	175	412	655
	21FLEECO23-5GR	127	710	105	343.5	982	9220
	21FLFTM 28020038	2	806	796	801	811	816
	21FLFTM 28020232	2	524.5	272	398.25	650.75	777
	21FLFTM CALUSA0020FTN	1	644	644	644	644	644

Appendix F: Land Uses in Tidal Caloosahatchee WBIDs

Appendix F.1. Level 1 and 2 Land Uses, WBIDs 3240A and 3240A2

3240A	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
5000: Water	11,924.9	88.12%
1000: Urban and Built up	1,331.8	9.84%
6000: Wetland	219.6	1.62%
8000: Transportation, Communication, & Utilities	44.3	0.33%
4000: Upland Forests	11.3	0.08%
Total	**13,531.9**	**100.00%**

3240A	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
5100: Streams and Waterways	11,342.9	83.82%
1200: Residential, Medium Density	675.8	4.99%
5400: Bays and Estruaries	561.4	4.15%
1400: Commercial	369.9	2.73%
6100: Wetland hardwood forests	207.5	1.53%
1300: Residential, High Density	142.8	1.06%
1800: Recreation	61.7	0.46%
1700: Institutional	36.7	0.27%
1900: Openland	36.3	0.27%
8100: Transportation	33.1	0.24%
5300: Reservoirs	20.7	0.15%
4200: Upland Hardwood	11.3	0.08%
8300: Utilities	11.1	0.08%
6500: Non Vegetated Wetlands	8.0	0.06%
1100: Residential, Low Density	4.7	0.03%
6400: Vegetated Nonforested Wetlands	4.2	0.03%
1500: Industrial	3.9	0.03%
Total	**13,531.9**	**100.00%**

3240A1	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	11,856.5	76.58%
5000: Water	2,025.1	13.08%
6000: Wetland	1,145.1	7.40%
8000: Transportation, Communication, & Utilities	195.6	1.26%
4000: Upland Forests	136.0	0.88%
2000: Agriculture	112.1	0.72%
3000: Rangeland	12.2	0.08%
Total	**15,482.6**	**100.00%**

3240A1	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1200: Residential, Medium Density	8,208.6	53.02%
5100: Streams and Waterways	1,940.4	12.53%
1300: Residential, High Density	1,149.4	7.42%
6100: Wetland hardwood forests	942.4	6.09%
1100: Residential, Low Density	834.0	5.39%
1400: Commercial	753.9	4.87%
1800: Recreation	428.8	2.77%
1900: Openland	340.3	2.20%
6400: Vegetated Nonforested Wetlands	199.5	1.29%
8100: Transportation	167.3	1.08%
1700: Institutional	125.5	0.81%
2100: Cropland and Pastureland	112.1	0.72%
5300: Reservoirs	78.9	0.51%
4300: Upland Mixed Forest	72.7	0.47%
4100: Upland Coniferous	35.9	0.23%
8300: Utilities	28.3	0.18%
4200: Upland Hardwood	27.4	0.18%
1500: Industrial	16.0	0.10%
3200: Shrub and Brushland	12.2	0.08%
5400: Bays and Estruaries	5.8	0.04%
6300: Wetland Forest Mixed	2.6	0.02%
6500: Non Vegetated Wetlands	0.5	0.00%
Total	**15,482.6**	**100.00%**

Appendix F.2. Level 1 and 2 Land Uses, WBIDs 3240A2 and 3240A3

3240A2	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	9,966.6	88.83%
5000: Water	937.3	8.35%
4000: Upland Forests	171.2	1.53%
8000: Transportation, Communication, & Utilities	142.2	1.27%
6000: Wetland	2.1	0.02%
Total	**11,219.4**	**100.00%**

3240A2	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1100: Residential, Low Density	4,055.2	36.14%
1200: Residential, Medium Density	3,058.2	27.26%
1900: Openland	1,265.6	11.28%
5100: Streams and Waterways	924.1	8.24%
1300: Residential, High Density	516.9	4.61%
1400: Commercial	389.0	3.47%
1700: Institutional	356.1	3.17%
1800: Recreation	278.2	2.48%
8100: Transportation	142.2	1.27%
4300: Upland Mixed Forest	120.2	1.07%
1500: Industrial	47.4	0.42%
4100: Upland Coniferous	31.7	0.28%
4200: Upland Hardwood	19.3	0.17%
5300: Reservoirs	13.2	0.12%
6400: Vegetated Nonforested Wetlands	2.1	0.02%
Total	**11,219.4**	**100.00%**

3240A3	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	14,936.2	86.25%
5000: Water	1,058.9	6.11%
4000: Upland Forests	600.5	3.47%
6000: Wetland	311.1	1.80%
8000: Transportation, Communication, & Utilities	147.5	0.85%
3000: Rangeland	132.5	0.77%
7000: Barren Land	131.2	0.76%
Total	**17,318.0**	**100.00%**

3240A3	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1100: Residential, Low Density	12,312.4	71.10%
1900: Openland	1,803.9	10.42%
5100: Streams and Waterways	795.2	4.59%
4100: Upland Coniferous	462.8	2.67%
1800: Recreation	285.6	1.65%
5300: Reservoirs	263.7	1.52%
6200: Wetland Coniferous Forests	235.1	1.36%
1400: Commercial	234.2	1.35%
1700: Institutional	153.8	0.89%
1300: Residential, High Density	134.8	0.78%
7400: Disturbed land	131.2	0.76%
8100: Transportation	129.8	0.75%
3200: Shrub and Brushland	127.7	0.74%
4200: Upland Hardwood	83.0	0.48%
6400: Vegetated Nonforested Wetlands	63.0	0.36%
4300: Upland Mixed Forest	54.7	0.32%
8300: Utilities	17.7	0.10%
1500: Industrial	11.6	0.07%
6100: Wetland hardwood forests	8.0	0.05%
6300: Wetland Forest Mixed	5.0	0.03%
3100: Herbaceous	4.8	0.03%
1200: Residential, Medium Density	0.0	0.00%
Total	**17,318.0**	**100.00%**

Appendix F.3. Level 1 and 2 Land Uses, WBIDs 3240A4 and 3240B

3240A4	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	5,654.8	67.27%
5000: Water	884.7	10.52%
6000: Wetland	774.9	9.22%
4000: Upland Forests	531.7	6.32%
2000: Agriculture	310.9	3.70%
8000: Transportation, Communication, & Utilities	183.6	2.18%
3000: Rangeland	53.0	0.63%
7000: Barren Land	12.7	0.15%
Total	**8,406.3**	**100.00%**

3240A4	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1300: Residential, High Density	1,916.5	22.80%
1200: Residential, Medium Density	1,730.7	20.59%
5300: Reservoirs	785.3	9.34%
6100: Wetland hardwood forests	677.0	8.05%
1800: Recreation	644.6	7.67%
4200: Upland Hardwood	409.6	4.87%
1400: Commercial	406.9	4.84%
1100: Residential, Low Density	391.6	4.66%
1900: Openland	355.9	4.23%
2100: Cropland and Pastureland	251.8	3.00%
8100: Transportation	164.9	1.96%
1700: Institutional	136.4	1.62%
4100: Upland Coniferous	88.3	1.05%
5100: Streams and Waterways	82.3	0.98%
6400: Vegetated Nonforested Wetlands	80.8	0.96%
1500: Industrial	72.3	0.86%
2400: Nurseries and Vineyards	49.0	0.58%
4300: Upland Mixed Forest	33.8	0.40%
3200: Shrub and Brushland	29.3	0.35%
3100: Herbaceous	19.1	0.23%
8300: Utilities	13.6	0.16%
7400: Disturbed land	12.7	0.15%
5400: Bays and Estruaries	11.0	0.13%
2600: Other Open Lands	10.1	0.12%
6500: Non Vegetated Wetlands	9.3	0.11%
6200: Wetland Coniferous Forests	7.8	0.09%
5200: Lakes	6.1	0.07%
8200: Communication	5.0	0.06%
3300: Mixed Rangeland	4.6	0.05%
Total	**8,406.3**	**100.00%**

3240B	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
5000: Water	4,115.1	53.02%
1000: Urban and Built up	2,861.2	36.86%
6000: Wetland	386.0	4.97%
4000: Upland Forests	225.1	2.90%
8000: Transportation, Communication, & Utilities	105.7	1.36%
3000: Rangeland	68.4	0.88%
Total	**7,761.6**	**100.00%**

3240B	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
5100: Streams and Waterways	4,087.7	52.67%
1200: Residential, Medium Density	1,282.9	16.53%
1100: Residential, Low Density	704.8	9.08%
1300: Residential, High Density	479.1	6.17%
6100: Wetland hardwood forests	317.0	4.08%
1400: Commercial	239.9	3.09%
8100: Transportation	93.9	1.21%
4300: Upland Mixed Forest	81.3	1.05%
4100: Upland Coniferous	77.8	1.00%
4200: Upland Hardwood	66.1	0.85%
1800: Recreation	65.9	0.85%
1900: Openland	53.0	0.68%
3200: Shrub and Brushland	50.4	0.65%
1700: Institutional	35.5	0.46%
6200: Wetland Coniferous Forests	28.6	0.37%
5300: Reservoirs	27.4	0.35%
6400: Vegetated Nonforested Wetlands	22.2	0.29%
3100: Herbaceous	18.0	0.23%
8300: Utilities	11.8	0.15%
6500: Non Vegetated Wetlands	11.1	0.14%
6300: Wetland Forest Mixed	7.1	0.09%
Total	**7,761.6**	**100.00%**

Appendix F.4. Level 1 and 2 Land Uses, WBIDs 3240B1 and 3240B2

3240B1	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	1,372.1	44.26%
2000: Agriculture	855.2	27.58%
4000: Upland Forests	343.7	11.09%
6000: Wetland	272.2	8.78%
3000: Rangeland	94.8	3.06%
8000: Transportation, Communication, & Utilities	82.1	2.65%
5000: Water	72.8	2.35%
7000: Barren Land	7.3	0.23%
Total	**3,100.1**	**100.00%**

3240B1	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1100: Residential, Low Density	1,133.4	36.56%
2100: Cropland and Pastureland	846.9	27.32%
4100: Upland Coniferous	187.1	6.04%
6100: Wetland hardwood forests	131.0	4.22%
6400: Vegetated Nonforested Wetlands	121.5	3.92%
4300: Upland Mixed Forest	120.6	3.89%
1400: Commercial	94.4	3.04%
1300: Residential, High Density	80.2	2.59%
5300: Reservoirs	72.8	2.35%
1900: Openland	63.9	2.06%
3200: Shrub and Brushland	62.5	2.02%
8100: Transportation	62.1	2.00%
4200: Upland Hardwood	36.0	1.16%
3100: Herbaceous	22.9	0.74%
8300: Utilities	20.0	0.65%
6200: Wetland Coniferous Forests	19.7	0.64%
3300: Mixed Rangeland	9.5	0.31%
7400: Disturbed land	7.3	0.23%
2400: Nurseries and Vineyards	4.6	0.15%
2500: Specialty Farms	3.2	0.10%
2200: Treecrops	0.4	0.01%
1200: Residential, Medium Density	0.2	0.01%
Total	**3,100.1**	**100.00%**

3240B2	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
6000: Wetland	285.9	40.11%
4000: Upland Forests	234.3	32.87%
3000: Rangeland	142.7	20.02%
1000: Urban and Built up	25.4	3.56%
5000: Water	24.6	3.45%
Total	**712.8**	**100.00%**

3240B2	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
4200: Upland Hardwood	182.7	25.64%
6100: Wetland hardwood forests	179.6	25.20%
3200: Shrub and Brushland	142.7	20.02%
6400: Vegetated Nonforested Wetlands	104.6	14.68%
4100: Upland Coniferous	27.7	3.89%
4300: Upland Mixed Forest	23.8	3.34%
5100: Streams and Waterways	23.3	3.26%
1200: Residential, Medium Density	15.5	2.17%
1300: Residential, High Density	6.3	0.88%
1100: Residential, Low Density	3.6	0.51%
6500: Non Vegetated Wetlands	1.6	0.23%
5200: Lakes	1.3	0.18%
Total	**712.8**	**100.00%**

Appendix F.5. Level 1 and 2 Land Uses, WBIDs 3240C and 3240C1

3240C	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
2000: Agriculture	1,844.7	27.07%
1000: Urban and Built up	1,750.9	25.69%
5000: Water	1,137.3	16.69%
6000: Wetland	1,026.2	15.06%
3000: Rangeland	467.3	6.86%
4000: Upland Forests	418.9	6.15%
8000: Transportation, Communication, & Utilities	168.1	2.47%
7000: Barren Land	2.3	0.03%
Total	**6,815.5**	**100.00%**

3240C	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
2100: Cropland and Pastureland	1,698.7	24.92%
5100: Streams and Waterways	1,096.2	16.08%
1200: Residential, Medium Density	925.0	13.57%
6100: Wetland hardwood forests	618.3	9.07%
1100: Residential, Low Density	531.4	7.80%
3200: Shrub and Brushland	404.3	5.93%
4200: Upland Hardwood	207.0	3.04%
6400: Vegetated Nonforested Wetlands	190.7	2.80%
6200: Wetland Coniferous Forests	188.5	2.77%
2200: Treecrops	146.0	2.14%
8300: Utilities	127.3	1.87%
1300: Residential, High Density	115.9	1.70%
4300: Upland Mixed Forest	109.0	1.60%
4100: Upland Coniferous	102.8	1.51%
1400: Commercial	84.3	1.24%
3100: Herbaceous	62.9	0.92%
1900: Openland	61.5	0.90%
5300: Reservoirs	41.1	0.60%
8100: Transportation	40.8	0.60%
6300: Wetland Forest Mixed	28.8	0.42%
1800: Recreation	24.0	0.35%
1700: Institutional	8.8	0.13%
7400: Disturbed land	2.3	0.03%
Total	**6,815.5**	**100.00%**

3240C1	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	1,089.3	42.17%
2000: Agriculture	599.0	23.19%
4000: Upland Forests	485.2	18.78%
6000: Wetland	210.2	8.14%
3000: Rangeland	116.6	4.51%
5000: Water	45.9	1.78%
8000: Transportation, Communication, & Utilities	29.2	1.13%
7000: Barren Land	7.8	0.30%
Total	**2,583.1**	**100.00%**

3240C1	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1100: Residential, Low Density	916.8	35.49%
4100: Upland Coniferous	397.7	15.40%
2100: Cropland and Pastureland	290.1	11.23%
2200: Treecrops	170.9	6.62%
3200: Shrub and Brushland	96.0	3.72%
1800: Recreation	88.3	3.42%
6400: Vegetated Nonforested Wetlands	65.8	2.55%
2600: Other Open Lands	65.3	2.53%
1200: Residential, Medium Density	61.6	2.38%
6200: Wetland Coniferous Forests	59.2	2.29%
6100: Wetland hardwood forests	49.3	1.91%
4300: Upland Mixed Forest	44.8	1.73%
4200: Upland Hardwood	42.7	1.65%
5300: Reservoirs	42.6	1.65%
2400: Nurseries and Vineyards	37.4	1.45%
2500: Specialty Farms	35.3	1.37%
6300: Wetland Forest Mixed	34.1	1.32%
8300: Utilities	29.2	1.13%
3100: Herbaceous	20.6	0.80%
1700: Institutional	14.0	0.54%
7400: Disturbed land	7.8	0.30%
1400: Commercial	6.9	0.27%
5200: Lakes	3.3	0.13%
6500: Non Vegetated Wetlands	1.7	0.07%
1900: Openland	1.4	0.05%
1300: Residential, High Density	0.4	0.01%
Total	**2,583.1**	**100.00%**

Appendix F.6. Level 1 and 2 Land Uses, WBIDs 3240E and 3240E1

3240E	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	1,327.0	42.31%
4000: Upland Forests	705.1	22.48%
6000: Wetland	568.1	18.11%
3000: Rangeland	274.9	8.76%
8000: Transportation, Communication, & Utilities	108.5	3.46%
2000: Agriculture	84.6	2.70%
5000: Water	68.2	2.18%
7000: Barren Land	0.1	0.00%
Total	**3,136.5**	**100.00%**

3240E	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1300: Residential, High Density	715.7	22.82%
4100: Upland Coniferous	619.5	19.75%
6200: Wetland Coniferous Forests	386.2	12.31%
3200: Shrub and Brushland	266.8	8.51%
1400: Commercial	229.8	7.33%
1900: Openland	139.6	4.45%
1100: Residential, Low Density	123.3	3.93%
6400: Vegetated Nonforested Wetlands	103.1	3.29%
8100: Transportation	97.3	3.10%
2100: Cropland and Pastureland	84.6	2.70%
1800: Recreation	82.8	2.64%
6100: Wetland hardwood forests	69.4	2.21%
5300: Reservoirs	68.0	2.17%
4200: Upland Hardwood	58.1	1.85%
1700: Institutional	30.6	0.98%
4300: Upland Mixed Forest	27.5	0.88%
8300: Utilities	11.2	0.36%
6300: Wetland Forest Mixed	9.4	0.30%
3100: Herbaceous	8.1	0.26%
1200: Residential, Medium Density	5.2	0.17%
5100: Streams and Waterways	0.2	0.01%
7400: Disturbed land	0.1	0.00%
Total	**3,136.5**	**100.00%**

3240E1	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	2,077.4	61.54%
4000: Upland Forests	662.0	19.61%
6000: Wetland	199.5	5.91%
3000: Rangeland	185.9	5.51%
5000: Water	116.3	3.45%
8000: Transportation, Communication, & Utilities	71.9	2.13%
2000: Agriculture	47.0	1.39%
7000: Barren Land	15.4	0.46%
Total	**3,375.4**	**100.00%**

3240E1	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1200: Residential, Medium Density	752.7	22.30%
1300: Residential, High Density	317.7	9.41%
4100: Upland Coniferous	298.5	8.84%
1400: Commercial	296.8	8.79%
1100: Residential, Low Density	286.0	8.47%
1900: Openland	278.0	8.24%
4200: Upland Hardwood	199.3	5.90%
6100: Wetland hardwood forests	172.6	5.11%
4300: Upland Mixed Forest	164.2	4.87%
3200: Shrub and Brushland	148.6	4.40%
1700: Institutional	113.5	3.36%
5100: Streams and Waterways	93.4	2.77%
8100: Transportation	71.9	2.13%
2100: Cropland and Pastureland	47.0	1.39%
3100: Herbaceous	37.3	1.10%
1800: Recreation	32.6	0.97%
5300: Reservoirs	22.9	0.68%
6400: Vegetated Nonforested Wetlands	15.5	0.46%
7400: Disturbed land	15.4	0.46%
6200: Wetland Coniferous Forests	11.4	0.34%
6300: Wetland Forest Mixed	0.0	0.00%
Total	**3,375.4**	**100.00%**

Appendix F.7. Level 1 and 2 Land Uses, WBIDs 3240F and 3240G

3240F	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
6000: Wetland	5,598.3	29.74%
2000: Agriculture	3,885.0	20.64%
3000: Rangeland	3,327.7	17.68%
4000: Upland Forests	3,031.5	16.10%
1000: Urban and Built up	2,327.9	12.36%
5000: Water	452.4	2.40%
8000: Transportation, Communication, & Utilities	166.8	0.89%
7000: Barren Land	37.3	0.20%
Total	**18,827.1**	**100.00%**

3240F	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
6400: Vegetated Nonforested Wetlands	3,559.5	18.91%
2100: Cropland and Pastureland	3,505.3	18.62%
3200: Shrub and Brushland	2,616.5	13.90%
4100: Upland Coniferous	2,521.8	13.39%
1100: Residential, Low Density	1,974.2	10.49%
6200: Wetland Coniferous Forests	1,259.4	6.69%
6100: Wetland hardwood forests	778.1	4.13%
3100: Herbaceous	534.8	2.84%
4200: Upland Hardwood	395.9	2.10%
5200: Lakes	266.9	1.42%
2200: Treecrops	241.4	1.28%
3300: Mixed Rangeland	176.4	0.94%
1200: Residential, Medium Density	151.9	0.81%
5300: Reservoirs	150.8	0.80%
8100: Transportation	130.3	0.69%
4300: Upland Mixed Forest	96.3	0.51%
1300: Residential, High Density	76.4	0.41%
2500: Specialty Farms	76.1	0.40%
2400: Nurseries and Vineyards	62.2	0.33%
1900: Openland	53.7	0.29%
1400: Commercial	39.1	0.21%
7400: Disturbed land	37.3	0.20%
8300: Utilities	36.5	0.19%
5100: Streams and Waterways	34.8	0.18%
1700: Institutional	32.6	0.17%
4400: Tree Plantations	17.5	0.09%
6300: Wetland Forest Mixed	1.3	0.01%
Total	**18,827.1**	**100.00%**

3240G	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
2000: Agriculture	5,128.4	39.17%
4000: Upland Forests	4,099.3	31.31%
6000: Wetland	1,941.2	14.83%
3000: Rangeland	1,411.6	10.78%
1000: Urban and Built up	482.4	3.69%
5000: Water	28.8	0.22%
Total	**13,091.8**	**100.00%**

3240G	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
2100: Cropland and Pastureland	4,866.7	37.17%
4100: Upland Coniferous	4,005.9	30.60%
3200: Shrub and Brushland	1,163.5	8.89%
6400: Vegetated Nonforested Wetlands	1,150.6	8.79%
6100: Wetland hardwood forests	545.6	4.17%
1600: Extractive (Mining)	357.5	2.73%
6200: Wetland Coniferous Forests	209.6	1.60%
3300: Mixed Rangeland	172.6	1.32%
2600: Other Open Lands	130.9	1.00%
2200: Treecrops	130.8	1.00%
1100: Residential, Low Density	121.8	0.93%
3100: Herbaceous	75.5	0.58%
4300: Upland Mixed Forest	50.2	0.38%
4200: Upland Hardwood	43.2	0.33%
6300: Wetland Forest Mixed	35.3	0.27%
5100: Streams and Waterways	22.5	0.17%
5300: Reservoirs	6.3	0.05%
1800: Recreation	3.2	0.02%
Total	**13,091.8**	**100.00%**

Appendix F.8. Level 1 and 2 Land Uses, WBIDs 3240H and 3240I

3240H	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	6,285.9	81.20%
8000: Transportation, Communication, & Utilities	833.3	10.76%
5000: Water	369.5	4.77%
4000: Upland Forests	145.9	1.88%
2000: Agriculture	52.8	0.68%
6000: Wetland	38.9	0.50%
7000: Barren Land	8.9	0.12%
3000: Rangeland	6.1	0.08%
Total	**7,741.3**	**100.00%**

3240H	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1200: Residential, Medium Density	2,293.7	29.63%
1300: Residential, High Density	1,725.1	22.28%
1400: Commercial	1,096.0	14.16%
8100: Transportation	801.6	10.36%
1800: Recreation	431.1	5.57%
1700: Institutional	395.7	5.11%
5300: Reservoirs	210.4	2.72%
1100: Residential, Low Density	173.3	2.24%
5100: Streams and Waterways	159.1	2.06%
1900: Openland	120.3	1.55%
4200: Upland Hardwood	81.9	1.06%
1500: Industrial	50.7	0.65%
4100: Upland Coniferous	41.0	0.53%
6100: Wetland hardwood forests	31.7	0.41%
8300: Utilities	31.6	0.41%
2400: Nurseries and Vineyards	28.1	0.36%
2100: Cropland and Pastureland	24.8	0.32%
4300: Upland Mixed Forest	23.0	0.30%
7400: Disturbed land	8.9	0.12%
6400: Vegetated Nonforested Wetlands	7.2	0.09%
3100: Herbaceous	6.1	0.08%
Total	**7,741.3**	**100.00%**

3240I	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	2,331.1	95.24%
2000: Agriculture	43.7	1.78%
8000: Transportation, Communication, & Utilities	41.2	1.68%
5000: Water	26.3	1.08%
4000: Upland Forests	5.4	0.22%
Total	**2,447.6**	**100.00%**

3240I	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1200: Residential, Medium Density	1,147.1	46.87%
1400: Commercial	463.7	18.94%
1700: Institutional	216.2	8.83%
1300: Residential, High Density	170.5	6.97%
1800: Recreation	153.6	6.27%
1500: Industrial	129.2	5.28%
2100: Cropland and Pastureland	43.7	1.78%
8100: Transportation	30.2	1.23%
1900: Openland	30.1	1.23%
5100: Streams and Waterways	23.6	0.97%
1100: Residential, Low Density	20.8	0.85%
8300: Utilities	6.0	0.25%
4200: Upland Hardwood	5.4	0.22%
8200: Communication	5.0	0.20%
5300: Reservoirs	2.7	0.11%
Total	**2,447.6**	**100.00%**

Appendix F.9. Level 1 and 2 Land Uses, WBIDs 3240J and 3240K

3240J	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	8,749.4	66.27%
6000: Wetland	1,297.0	9.82%
4000: Upland Forests	1,260.8	9.55%
2000: Agriculture	977.0	7.40%
8000: Transportation, Communication, & Utilities	427.3	3.24%
5000: Water	260.7	1.97%
3000: Rangeland	212.1	1.61%
7000: Barren Land	18.0	0.14%
Total	**13,202.3**	**100.00%**

3240J	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1100: Residential, Low Density	2,452.7	18.58%
1200: Residential, Medium Density	2,074.4	15.71%
1400: Commercial	1,617.8	12.25%
1900: Openland	951.7	7.21%
4100: Upland Coniferous	833.9	6.32%
2100: Cropland and Pastureland	822.0	6.23%
6200: Wetland Coniferous Forests	804.0	6.09%
1300: Residential, High Density	684.9	5.19%
4200: Upland Hardwood	389.7	2.95%
1700: Institutional	352.2	2.67%
1500: Industrial	321.7	2.44%
1800: Recreation	280.2	2.12%
6100: Wetland hardwood forests	253.4	1.92%
8100: Transportation	241.0	1.83%
5300: Reservoirs	221.5	1.68%
8300: Utilities	186.4	1.41%
6400: Vegetated Nonforested Wetlands	135.0	1.02%
3100: Herbaceous	130.8	0.99%
2400: Nurseries and Vineyards	125.8	0.95%
6300: Wetland Forest Mixed	104.6	0.79%
3200: Shrub and Brushland	81.3	0.62%
5100: Streams and Waterways	39.2	0.30%
4300: Upland Mixed Forest	37.2	0.28%
2500: Specialty Farms	29.3	0.22%
7400: Disturbed land	18.0	0.14%
1600: Extractive (Mining)	13.7	0.10%
Total	**13,202.3**	**100.00%**

3240K	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	39,201.4	73.10%
2000: Agriculture	5,313.9	9.91%
6000: Wetland	3,865.3	7.21%
4000: Upland Forests	1,830.0	3.41%
3000: Rangeland	1,423.1	2.65%
5000: Water	1,156.2	2.16%
8000: Transportation, Communication, & Utilities	490.9	0.92%
7000: Barren Land	346.8	0.65%
Total	**53,627.5**	**100.00%**

3240K	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1900: Openland	17,876.9	33.34%
1100: Residential, Low Density	14,641.9	27.30%
2100: Cropland and Pastureland	4,075.3	7.60%
1200: Residential, Medium Density	4,052.1	7.56%
6100: Wetland hardwood forests	1,738.4	3.24%
4100: Upland Coniferous	1,018.5	1.90%
6200: Wetland Coniferous Forests	1,005.6	1.88%
6400: Vegetated Nonforested Wetlands	991.5	1.85%
1800: Recreation	879.0	1.64%
2600: Other Open Lands	877.1	1.64%
3200: Shrub and Brushland	843.8	1.57%
1700: Institutional	627.4	1.17%
1300: Residential, High Density	619.4	1.15%
5300: Reservoirs	590.4	1.10%
5100: Streams and Waterways	548.5	1.02%
1400: Commercial	487.3	0.91%
3100: Herbaceous	484.0	0.90%
4200: Upland Hardwood	433.8	0.81%
8100: Transportation	373.5	0.70%
4300: Upland Mixed Forest	360.9	0.67%
7400: Disturbed land	346.8	0.65%
2200: Treecrops	229.7	0.43%
6300: Wetland Forest Mixed	129.8	0.24%
2400: Nurseries and Vineyards	111.7	0.21%
8300: Utilities	107.9	0.20%
3300: Mixed Rangeland	95.3	0.18%
2500: Specialty Farms	20.1	0.04%
5200: Lakes	17.3	0.03%
4400: Tree Plantations	16.7	0.03%
1600: Extractive (Mining)	11.8	0.02%
8200: Communication	9.5	0.02%
1500: Industrial	5.7	0.01%
Total	**53,627.5**	**100.00%**

Appendix F.10. Level 1 and 2 Land Uses, WBIDs 3240L and 3240M

3240L	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
1000: Urban and Built up	3,266.3	43.86%
6000: Wetland	1,948.6	26.17%
4000: Upland Forests	1,091.6	14.66%
3000: Rangeland	422.2	5.67%
2000: Agriculture	321.4	4.32%
8000: Transportation, Communication, & Utilities	242.4	3.25%
5000: Water	132.4	1.78%
7000: Barren Land	21.9	0.29%
Total	7,446.9	100.00%

3240L	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1100: Residential, Low Density	1,124.6	15.10%
6200: Wetland Coniferous Forests	1,118.8	15.02%
4100: Upland Coniferous	952.6	12.79%
1200: Residential, Medium Density	691.1	9.28%
1300: Residential, High Density	688.4	9.24%
6400: Vegetated Nonforested Wetlands	517.0	6.94%
1900: Openland	402.6	5.41%
3200: Shrub and Brushland	390.6	5.25%
6100: Wetland hardwood forests	299.4	4.02%
2100: Cropland and Pastureland	297.1	3.99%
1400: Commercial	267.8	3.60%
8100: Transportation	156.7	2.10%
5300: Reservoirs	98.6	1.32%
4200: Upland Hardwood	92.6	1.24%
8300: Utilities	85.7	1.15%
1700: Institutional	75.7	1.02%
4300: Upland Mixed Forest	46.4	0.62%
3100: Herbaceous	31.6	0.42%
2500: Specialty Farms	24.3	0.33%
5100: Streams and Waterways	24.3	0.33%
7400: Disturbed land	21.9	0.29%
1800: Recreation	16.1	0.22%
6300: Wetland Forest Mixed	13.4	0.18%
5200: Lakes	9.5	0.13%
Total	7,446.9	100.00%

3240M	Level 1 Analysis	
Landuse Code and Description	Acres	% Total
6000: Wetland	1,675.0	25.91%
1000: Urban and Built up	1,633.6	25.27%
2000: Agriculture	1,277.6	19.76%
4000: Upland Forests	904.0	13.98%
3000: Rangeland	754.3	11.67%
5000: Water	111.3	1.72%
8000: Transportation, Communication, & Utilities	73.5	1.14%
7000: Barren Land	35.7	0.55%
Total	6,465.1	100.00%

3240M	Level 2 Analysis	
Landuse Code and Description	Acres	% Total
1100: Residential, Low Density	1,255.4	19.42%
6400: Vegetated Nonforested Wetlands	1,117.2	17.28%
2100: Cropland and Pastureland	812.4	12.57%
4100: Upland Coniferous	768.8	11.89%
3100: Herbaceous	429.3	6.64%
2600: Other Open Lands	375.0	5.80%
1600: Extractive (Mining)	344.2	5.32%
6200: Wetland Coniferous Forests	328.3	5.08%
3200: Shrub and Brushland	247.3	3.83%
6100: Wetland hardwood forests	229.5	3.55%
4200: Upland Hardwood	95.6	1.48%
3300: Mixed Rangeland	77.7	1.20%
2400: Nurseries and Vineyards	66.3	1.03%
8300: Utilities	60.3	0.93%
5300: Reservoirs	59.9	0.93%
5200: Lakes	43.3	0.67%
4300: Upland Mixed Forest	39.6	0.61%
7400: Disturbed land	35.7	0.55%
2200: Treecrops	21.0	0.32%
1900: Openland	14.8	0.23%
1400: Commercial	12.6	0.20%
8200: Communication	9.2	0.14%
5100: Streams and Waterways	8.2	0.13%
1200: Residential, Medium Density	6.5	0.10%
8100: Transportation	3.9	0.06%
2500: Specialty Farms	3.0	0.05%
Total	6,465.1	100.00%

Appendix F.11. Level 1 and 2 Land Uses, WBIDs 3240N and 3240Q

3240N	Level 1 Analysis		3240N	Level 2 Analysis	
Landuse Code and Description	Acres	% Total	Landuse Code and Description	Acres	% Total
2000: Agriculture	2,532.7	44.80%	2100: Cropland and Pastureland	2,279.0	40.31%
1000: Urban and Built up	1,131.6	20.02%	6400: Vegetated Nonforested Wetlands	665.4	11.77%
6000: Wetland	1,106.8	19.58%	1600: Extractive (Mining)	564.6	9.99%
4000: Upland Forests	576.6	10.20%	1100: Residential, Low Density	513.4	9.08%
3000: Rangeland	236.8	4.19%	4100: Upland Coniferous	474.3	8.39%
7000: Barren Land	38.8	0.69%	6100: Wetland hardwood forests	245.1	4.34%
8000: Transportation, Communication, & Utilities	17.5	0.31%	6200: Wetland Coniferous Forests	175.3	3.10%
5000: Water	12.5	0.22%	2600: Other Open Lands	142.0	2.51%
			3200: Shrub and Brushland	121.3	2.15%
Total	**5,653.1**	**100.00%**	4200: Upland Hardwood	73.9	1.31%
			2200: Treecrops	73.6	1.30%
			3300: Mixed Rangeland	70.6	1.25%
			3100: Herbaceous	44.9	0.79%
			7400: Disturbed land	38.8	0.69%
			1400: Commercial	38.2	0.68%
			2400: Nurseries and Vineyards	38.1	0.67%
			4300: Upland Mixed Forest	28.4	0.50%
			6300: Wetland Forest Mixed	21.0	0.37%
			8200: Communication	17.5	0.31%
			5300: Reservoirs	11.3	0.20%
			1700: Institutional	6.5	0.12%
			1300: Residential, High Density	5.7	0.10%
			1800: Recreation	3.2	0.06%
			5200: Lakes	1.2	0.02%
			5100: Streams and Waterways	0.0	0.00%
			Total	**5,653.1**	**100.00%**

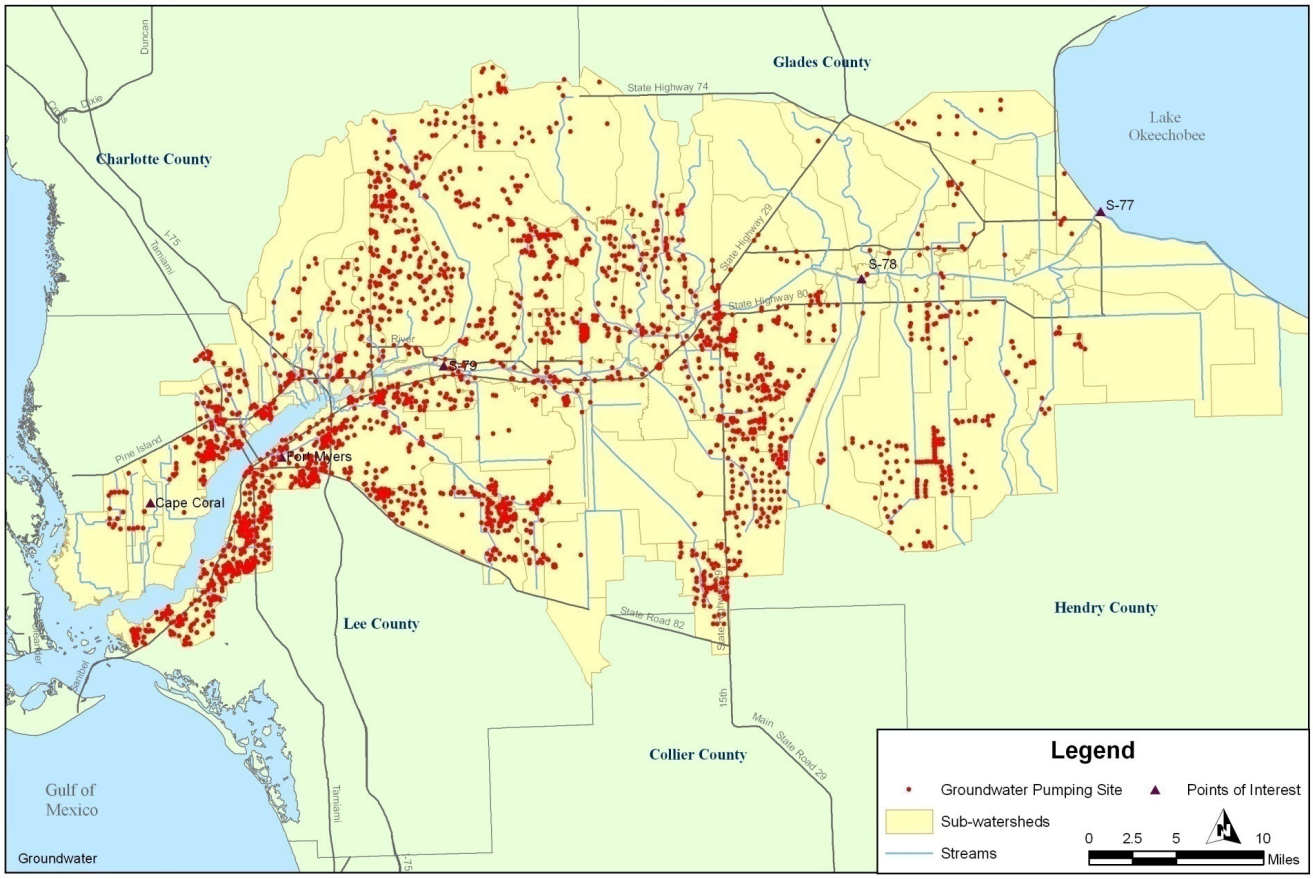
3240Q	Level 1 Analysis		3240Q	Level 2 Analysis	
Landuse Code and Description	Acres	% Total	Landuse Code and Description	Acres	% Total
6000: Wetland	4,054.9	30.92%	6400: Vegetated Nonforested Wetlands	2,738.7	20.88%
3000: Rangeland	3,184.9	24.29%	3200: Shrub and Brushland	2,579.7	19.67%
4000: Upland Forests	2,526.1	19.26%	4100: Upland Coniferous	2,445.7	18.65%
2000: Agriculture	1,490.0	11.36%	2100: Cropland and Pastureland	1,386.4	10.57%
1000: Urban and Built up	1,117.3	8.52%	1100: Residential, Low Density	1,070.4	8.16%
5000: Water	641.8	4.89%	6200: Wetland Coniferous Forests	912.2	6.96%
8000: Transportation, Communication, & Utilities	98.5	0.75%	5200: Lakes	584.0	4.45%
7000: Barren Land	0.9	0.01%	3100: Herbaceous	534.6	4.08%
			6100: Wetland hardwood forests	387.9	2.96%
Total	**13,114.4**	**100.00%**	8100: Transportation	81.6	0.62%
			3300: Mixed Rangeland	70.6	0.54%
			2600: Other Open Lands	59.4	0.45%
			5300: Reservoirs	42.0	0.32%
			4300: Upland Mixed Forest	40.8	0.31%
			4200: Upland Hardwood	39.5	0.30%
			1200: Residential, Medium Density	38.9	0.30%
			2500: Specialty Farms	36.6	0.28%
			6300: Wetland Forest Mixed	16.1	0.12%
			5100: Streams and Waterways	15.8	0.12%
			8300: Utilities	15.4	0.12%
			1900: Openland	8.0	0.06%
			2400: Nurseries and Vineyards	7.5	0.06%
			8200: Communication	1.5	0.01%
			7400: Disturbed land	0.9	0.01%
			Total	**13,114.4**	**100.00%**

Appendix F.12. Level 1 and 2 Land Uses, WBIDs 3236 and 3236A

3236	Level 1 Analysis		3236	Level 2 Analysis	
Landuse Code and Description	Acres	% Total	Landuse Code and Description	Acres	% Total
4000: Upland Forests	17,330.4	32.37%	4100: Upland Coniferous	16,193.1	30.24%
2000: Agriculture	15,608.7	29.15%	2100: Cropland and Pastureland	14,426.5	26.94%
6000: Wetland	14,925.2	27.88%	6200: Wetland Coniferous Forests	9,586.5	17.90%
3000: Rangeland	5,621.8	10.50%	3200: Shrub and Brushland	4,190.4	7.83%
5000: Water	56.3	0.11%	6400: Vegetated Nonforested Wetlands	3,858.1	7.21%
			6100: Wetland hardwood forests	1,351.3	2.52%
Total	**53,542.5**	**100.00%**	3100: Herbaceous	1,207.2	2.25%
			2200: Treecrops	1,179.7	2.20%
			4400: Tree Plantations	1,077.5	2.01%
			3300: Mixed Rangeland	224.2	0.42%
			6300: Wetland Forest Mixed	129.3	0.24%
			4300: Upland Mixed Forest	57.9	0.11%
			5200: Lakes	34.9	0.07%
			5300: Reservoirs	11.5	0.02%
			5100: Streams and Waterways	9.9	0.02%
			2600: Other Open Lands	2.6	0.00%
			4200: Upland Hardwood	1.9	0.00%
			Total	**53,542.5**	**100.00%**

3236A	Level 1 Analysis		3236A	Level 2 Analysis	
Landuse Code and Description	Acres	% Total	Landuse Code and Description	Acres	% Total
2000: Agriculture	1,260.1	30.58%	2100: Cropland and Pastureland	1,260.1	30.58%
4000: Upland Forests	1,235.4	29.98%	4100: Upland Coniferous	1,087.4	26.39%
6000: Wetland	866.8	21.03%	6200: Wetland Coniferous Forests	683.3	16.58%
3000: Rangeland	574.8	13.95%	3200: Shrub and Brushland	507.9	12.32%
1000: Urban and Built up	169.3	4.11%	1100: Residential, Low Density	169.3	4.11%
5000: Water	8.6	0.21%	4200: Upland Hardwood	113.4	2.75%
8000: Transportation, Communication, & Utilities	6.1	0.15%	6400: Vegetated Nonforested Wetlands	93.2	2.26%
			6100: Wetland hardwood forests	77.2	1.87%
Total	**4,121.1**	**100.00%**	3300: Mixed Rangeland	58.3	1.41%
			4300: Upland Mixed Forest	34.6	0.84%
			6300: Wetland Forest Mixed	13.1	0.32%
			3100: Herbaceous	8.6	0.21%
			5100: Streams and Waterways	7.5	0.18%
			8100: Transportation	6.1	0.15%
			5300: Reservoirs	1.1	0.03%
			Total	**4,121.1**	**100.00%**

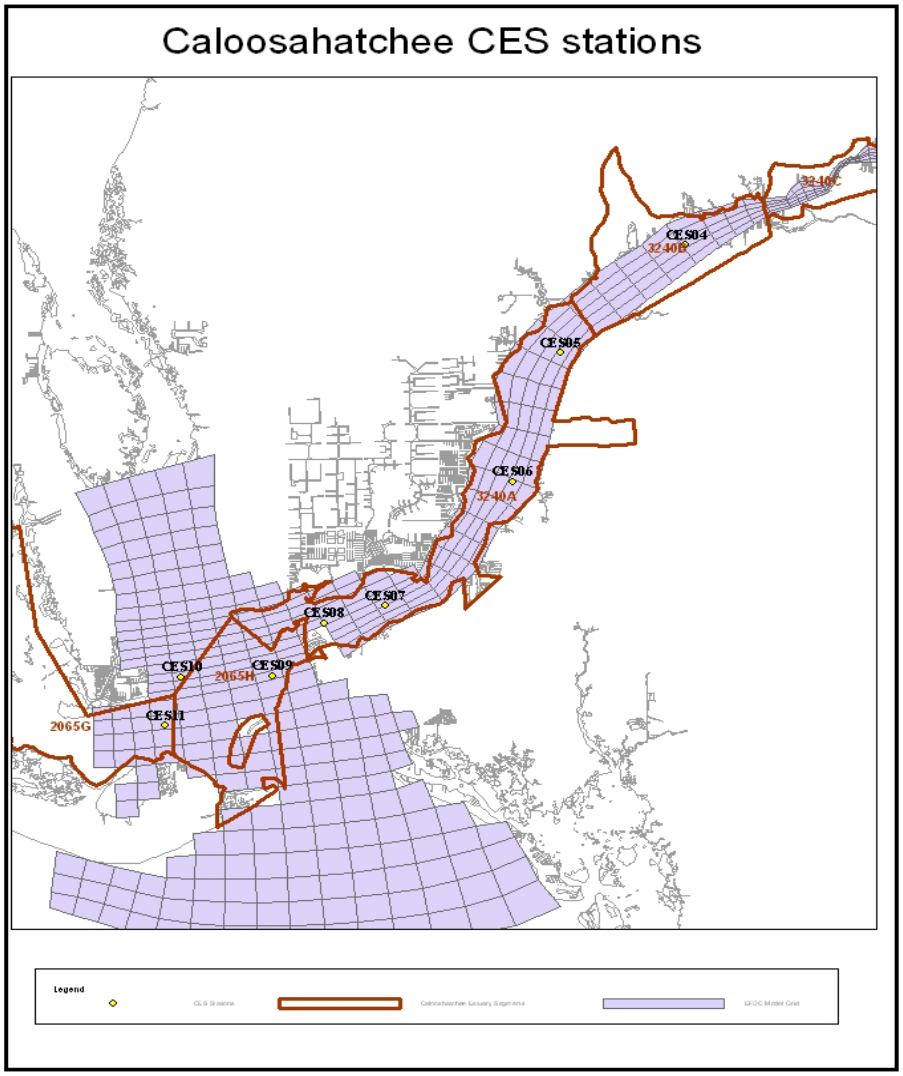
Appendix G. Location of Ground Water Withdrawals in the Caloosahatchee Basin



Appendix H: Comparison of DO from Model Simulations

Introduction

As part of the June 2005 adopted Caloosahatchee Basin Verified List, Tidal Caloosahatchee segments (WBIDs W240A, 3240B, and 3240C) were identified as impaired for nutrients based on chlorophyll *a* concentrations and dissolved oxygen (DO) based on nutrients. Since these segments were not on the 1998 303(d) for DO or nutrients, a projected year of 2009 was identified for TMDL development. The state legislature subsequently required that the nutrient TMDLs for these segments be proposed by the end of 2008.



The following sections discuss DO concentrations based on model predictions for two scenarios. The first scenario considers existing conditions (Existing Conditions). In the second scenario, the phosphorus TMDL for Lake Okeechobee (40 μg/L TP) is presumed to be met and anthropogenic land uses are set to natural conditions (Baseline-Plus). Comparisons between both scenarios are based on model predictions from a three-year simulation following a three-year "spin-up" simulation period.

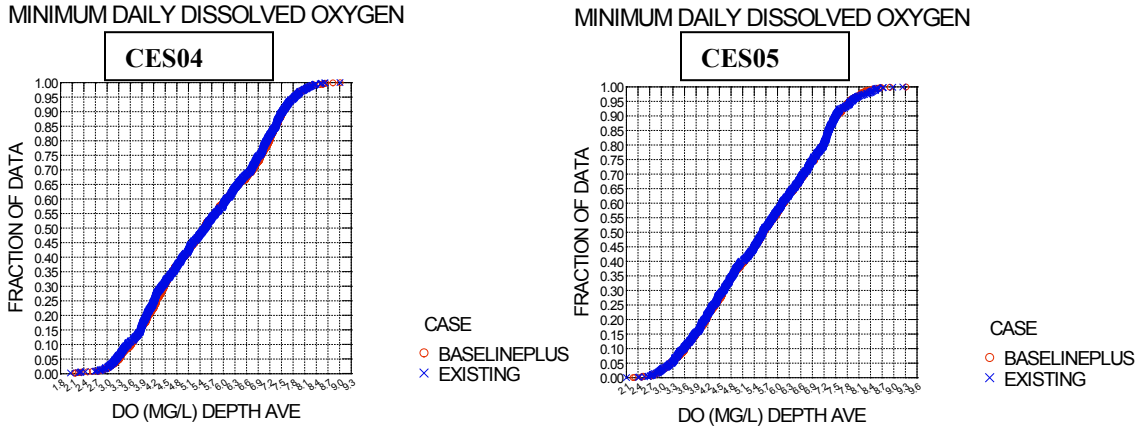
Hourly DO values for cells associated with Station CES04 – CES11 (see figure below) were extracted from the Existing Conditions and Baseline-Plus simulations. These stations are located in or proximal to WBIDs 2065H (San Carlos Bay), 3240A (Caloosahatchee Estuary Tidal), and 3240B (Caloosahatchee Estuary Tidal), to which the Class III marine DO criterion applies. SYSTAT Version 11 was used to process the hourly values at each station to determine a daily minimum and daily average concentration. Cumulative frequency plots of DO were prepared. Individual layers as well as the depth averaged values for each station were compared.

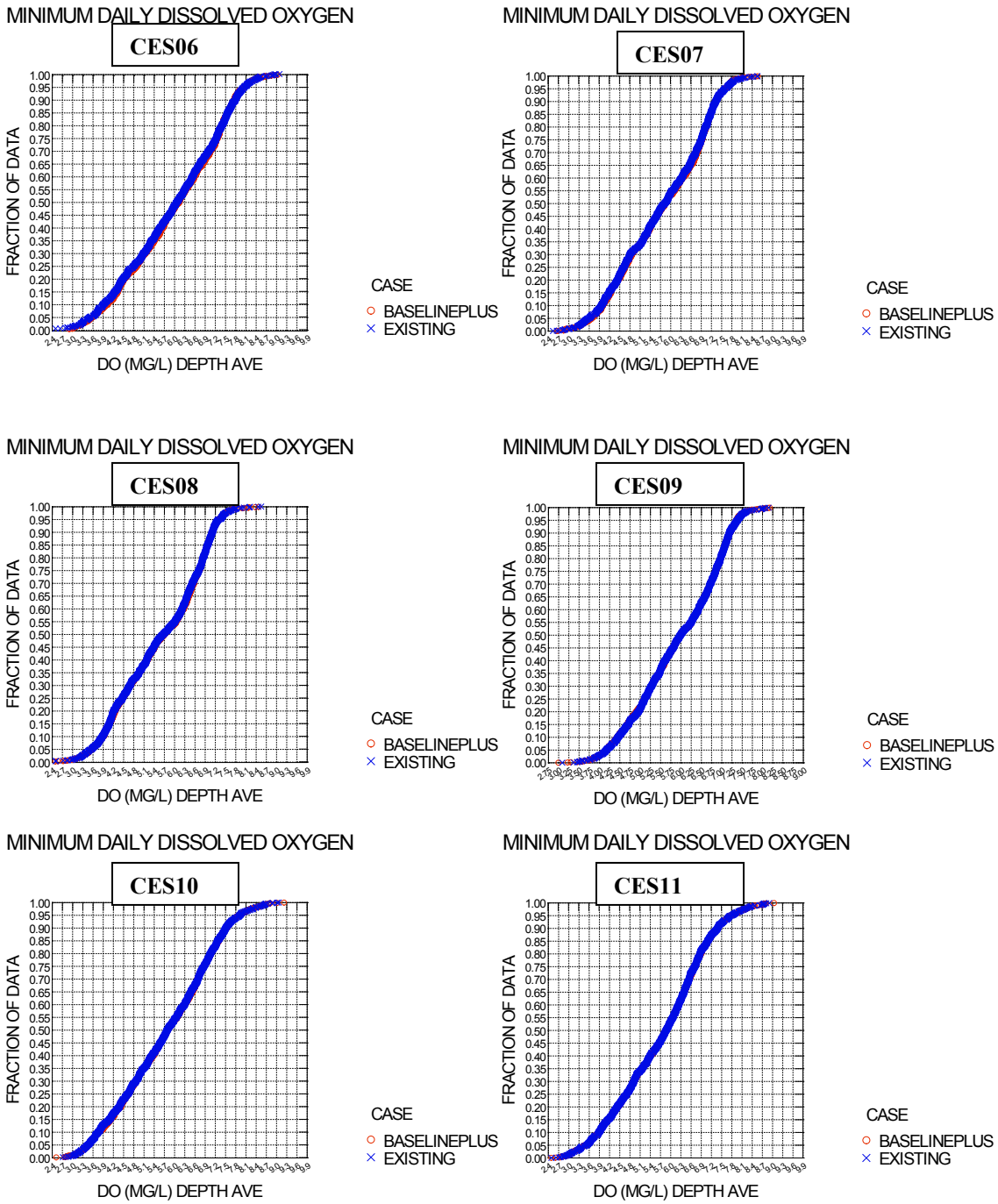
The Class III marine criterion for DO states that is shall not average less than 5.0 mg/L in a 24-hour period and shall never be less than 4.0 mg/L. Normal daily and seasonal fluctuations above these levels shall be maintained (Subsection 62-302.530[30], F.A.C.). Both the percentage of days that the daily minimum was below 4.0 mg/L and the percentage of days that the daily average was below 5.0 mg/L were calculated for each scenario.

Depth Averaged Comparisons

Cumulative frequency plots comparing the minimum daily and daily average DO depth averaged concentrations for the Existing Conditions and Baseline-Plus scenarios for each station are illustrated in the following figures.

Minimum Daily DO Station Plots





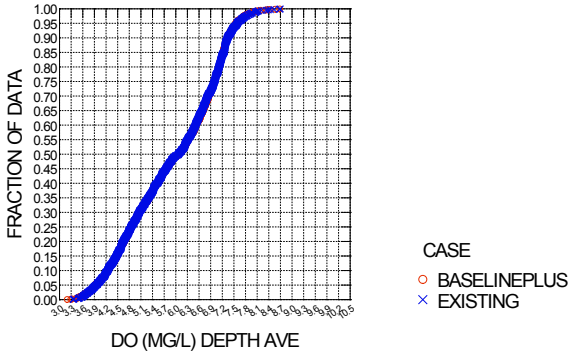
The following table summarizes the percent of days over the 1,090-day simulation period in which the daily minimum DO was below 4 mg/L for each scenario. Differences between the Existing Conditions and Baseline-Plus scenarios ranged between -0.19 and 2.08 percent.

Station	Cell	Number of Days	Existing Conditions Days below 4 mg/L	Existing Conditions % Days below 4 mg/L	Baseline-Plus Days below 4 mg/L	Baseline-Plus % Days below 4 mg/L
CES04	I47J17	1,090	211	19.36%	191	17.52%
CES05	I39J16	1,090	187	17.16%	185	16.97%
CES06	I32J17	1,090	118	10.83%	103	9.45%
CES07	I23J18	1,090	115	10.55%	105	9.63%
CES08	I19J19	1,090	140	12.84%	142	13.03%
CES09	I15J16	1,090	33	3.03%	32	2.94%
CES10	I9J18	1,090	151	13.85%	141	12.94%
CES11	I8J14	1,090	131	12.02%	133	12.20%

Daily Average DO Station Plots

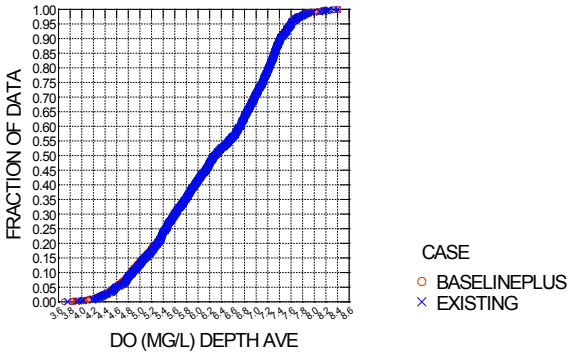
CES04

MEAN DAILY DISSOLVED OXYGEN



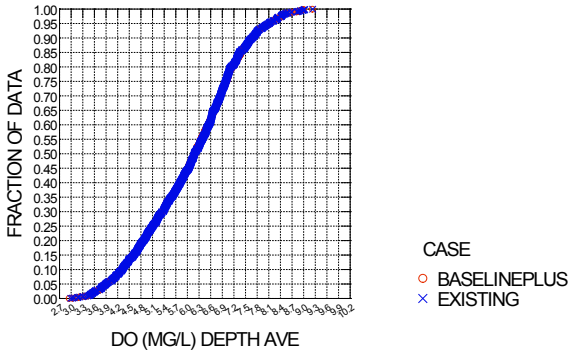
CES05

MEAN DAILY DISSOLVED OXYGEN



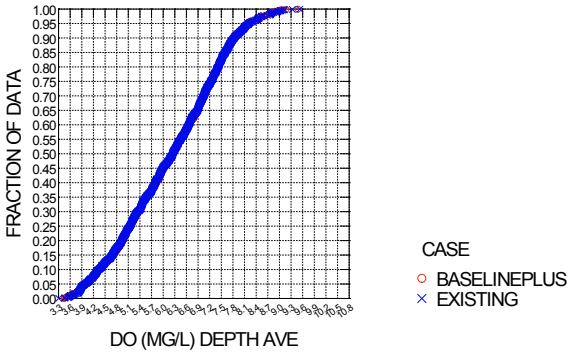
CES06

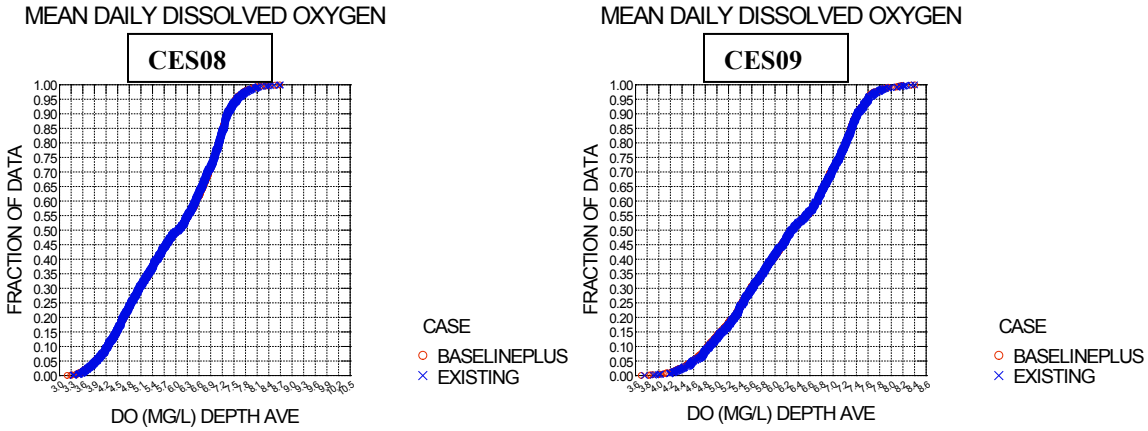
MEAN DAILY DISSOLVED OXYGEN

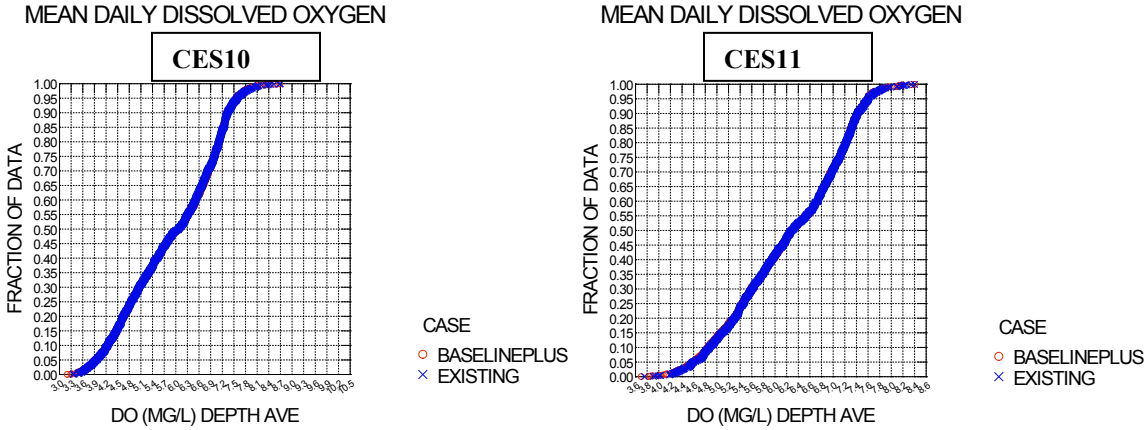


CES07

MEAN DAILY DISSOLVED OXYGEN




MEAN DAILY DISSOLVED OXYGEN
CES08
FRACTION OF DATA
DO (MG/L) DEPTH AVE
CASE
BASELINEPLUS
EXISTING
MEAN DAILY DISSOLVED OXYGEN
CES09
FRACTION OF DATA
DO (MG/L) DEPTH AVE
CASE
BASELINEPLUS
EXISTING


MEAN DAILY DISSOLVED OXYGEN
CES10
FRACTION OF DATA
DO (MG/L) DEPTH AVE
CASE
BASELINEPLUS
EXISTING
MEAN DAILY DISSOLVED OXYGEN
CES11
FRACTION OF DATA
DO (MG/L) DEPTH AVE
CASE
BASELINEPLUS
EXISTING

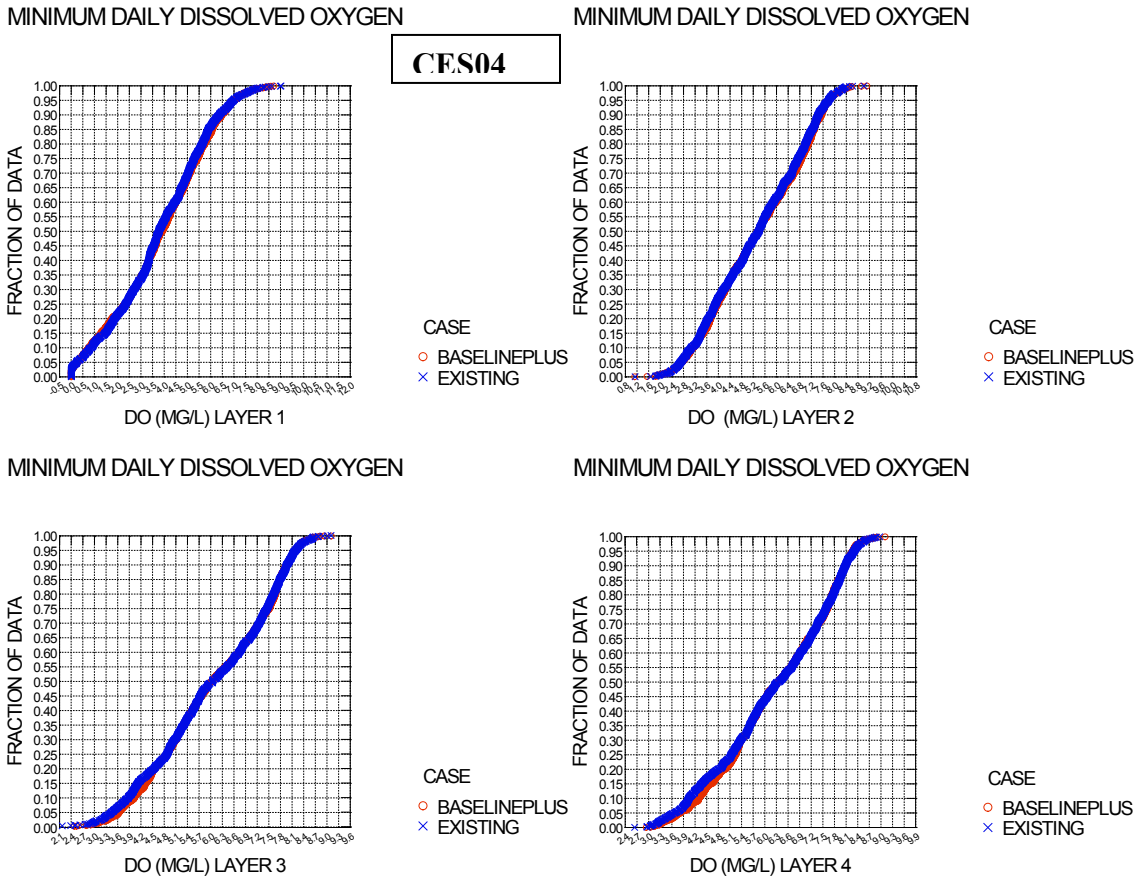
The following table summarizes the percent of days over the 1,090-day simulation period in which the daily average DO was below 5 mg/L for each scenario. Differences between the Existing Conditions and Baseline-Plus scenarios ranged between 0.10 and 0.83 percent.

Station	Cell	Number of Days	Existing Conditions Days below 5 mg/L	Existing Conditions % Days below 5 mg/L	Baseline-Plus Days below 5 mg/L	Baseline-Plus % Days below 5 mg/L
CES04	I47J17	1,090	365	33.49%	358	32.84%
CES05	I39J16	1,090	312	28.62%	307	28.17%
CES06	I32J17	1,090	216	19.82%	215	19.72%
CES07	I23J18	1,090	291	26.70%	282	25.87%
CES08	I19J19	1,090	312	28.62%	313	28.72%
CES09	I15J16	1,090	139	12.75%	148	13.58%
CES10	I9J18	1,090	239	21.93%	231	21.19%
CES11	I8J14	1,090	251	23.03%	254	23.30%

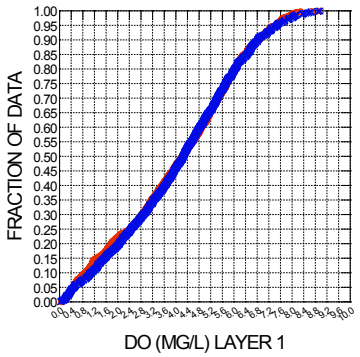
Vertical Layer Comparisons

Cumulative frequency plots comparing the minimum daily and daily average DO concentrations by layer for the Existing Conditions and Baseline-Plus scenarios for each station are illustrated in the following figures. The model partitioned the vertical water column into four layers, with Layer 1 representing the bottom later and Layer 4, the surface layer.

Daily Minimum DO Model Layer by Station Plots



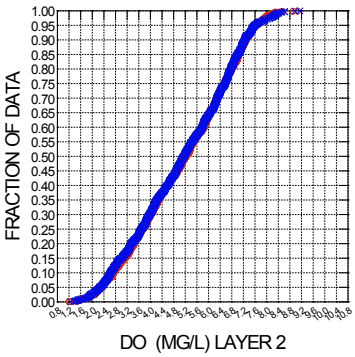
MINIMUM DAILY DISSOLVED OXYGEN



CES05

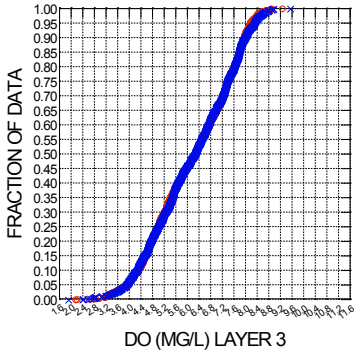
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



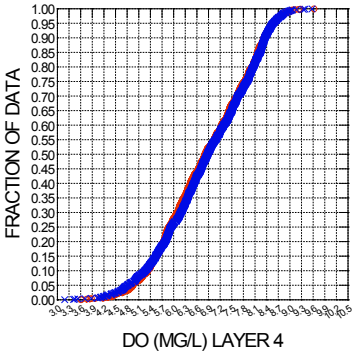
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



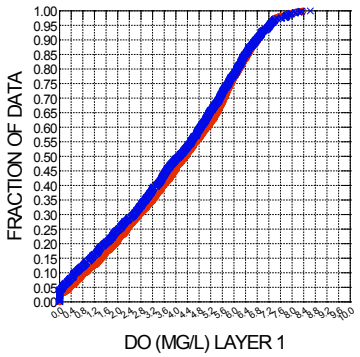
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



CASE
○ BASELINEPLUS
× EXISTING

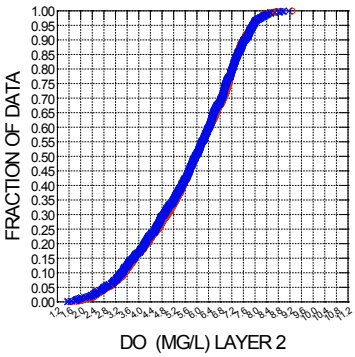
MINIMUM DAILY DISSOLVED OXYGEN



CES06

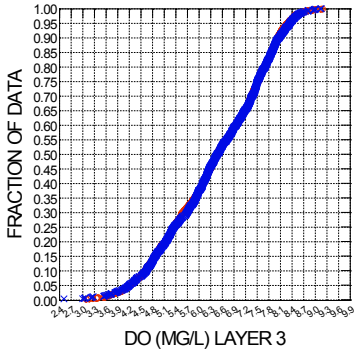
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



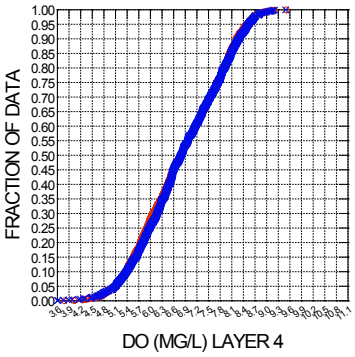
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



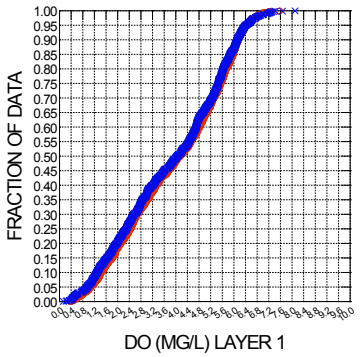
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



CASE
○ BASELINEPLUS
× EXISTING

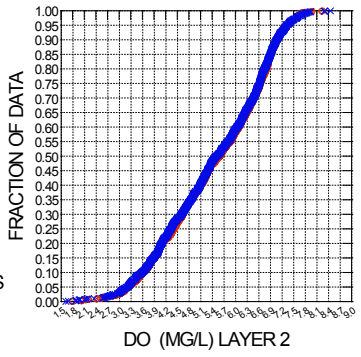
MINIMUM DAILY DISSOLVED OXYGEN



CES07

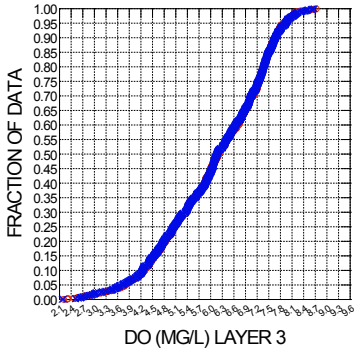
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



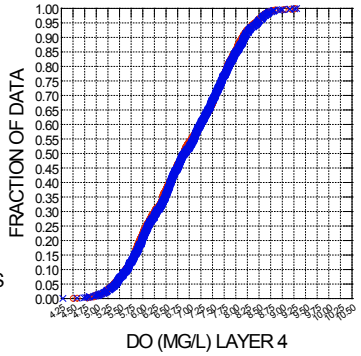
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



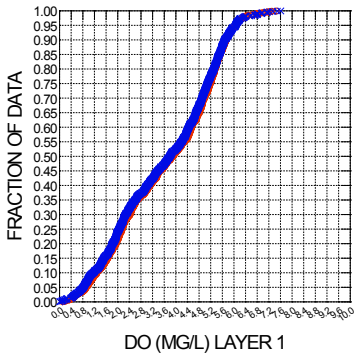
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



CASE
○ BASELINEPLUS
× EXISTING

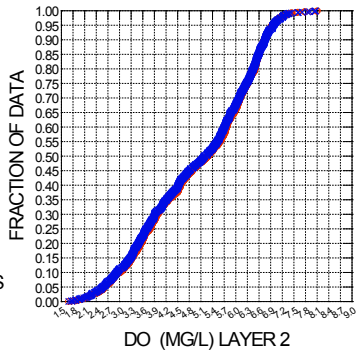
MINIMUM DAILY DISSOLVED OXYGEN



CES08

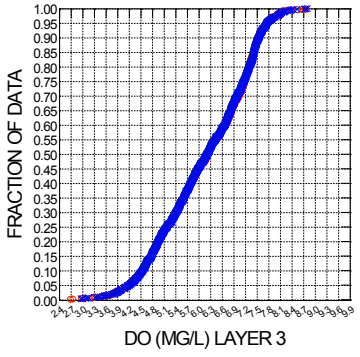
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



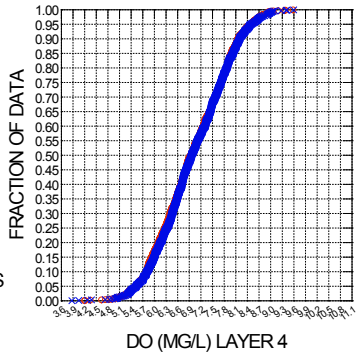
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



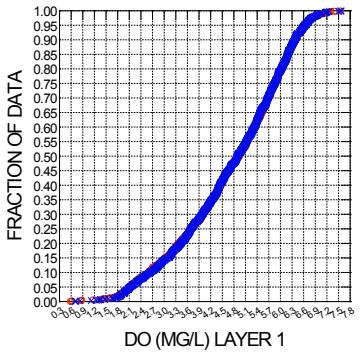
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



CASE
○ BASELINEPLUS
× EXISTING

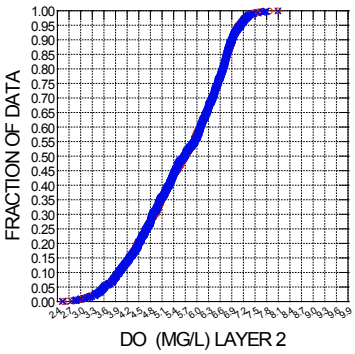
MINIMUM DAILY DISSOLVED OXYGEN



CES09

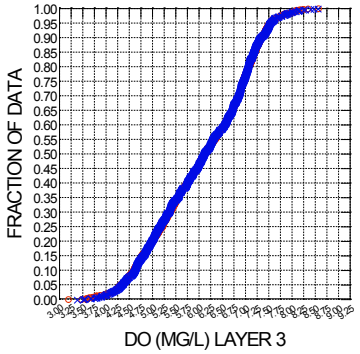
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



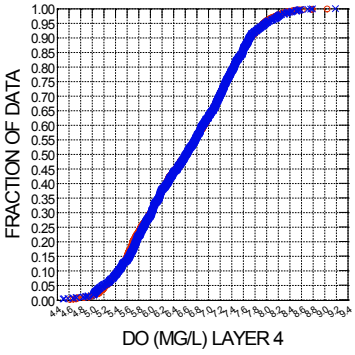
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



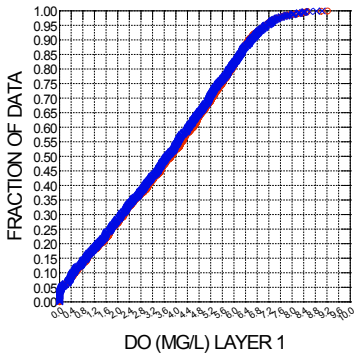
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



CASE
○ BASELINEPLUS
× EXISTING

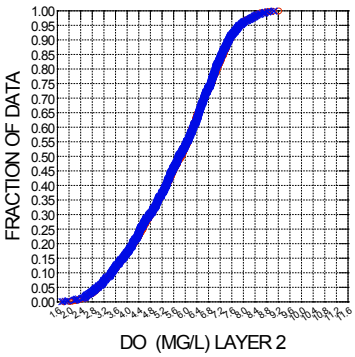
MINIMUM DAILY DISSOLVED OXYGEN



CES10

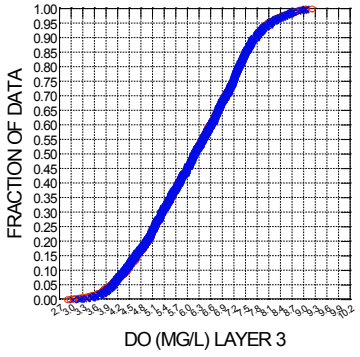
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



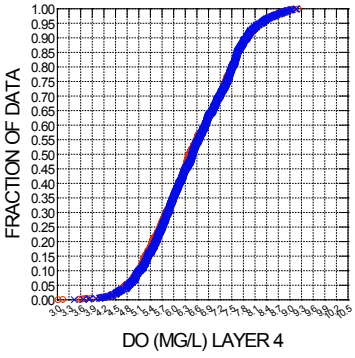
CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN

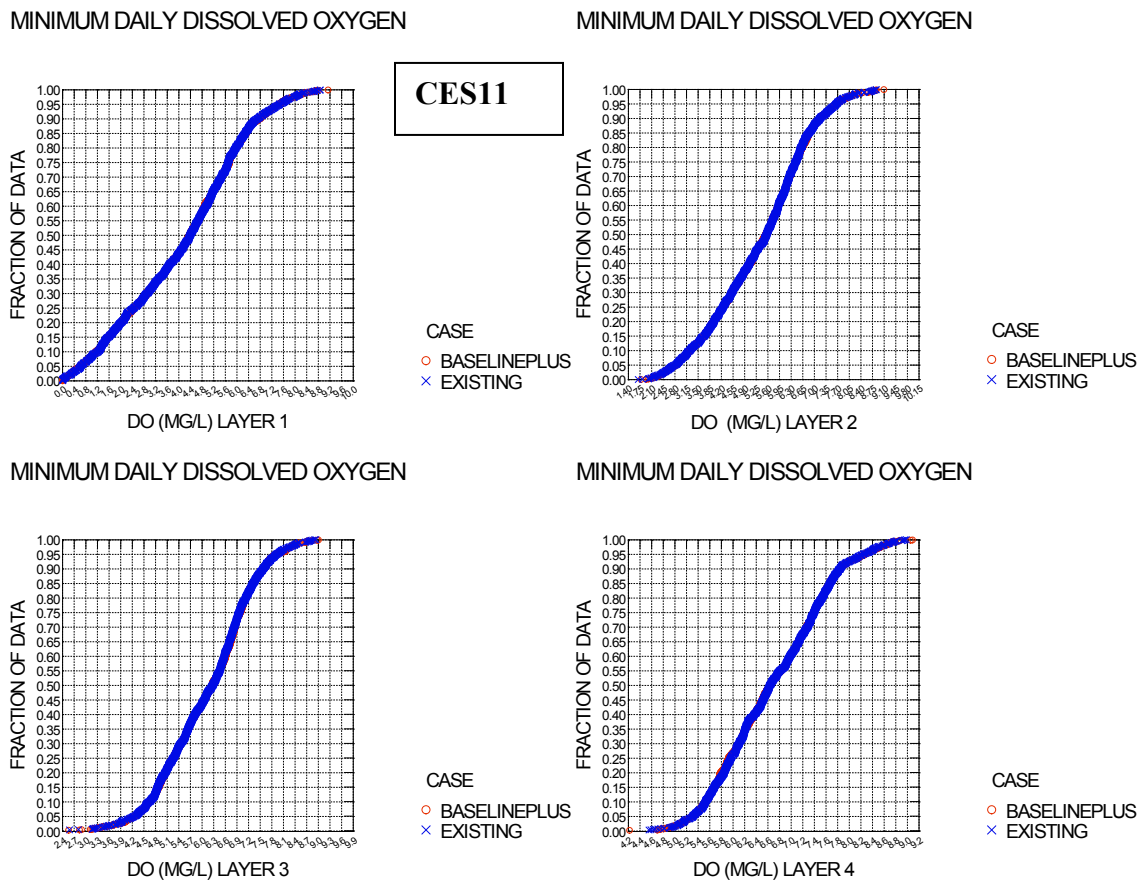


CASE
○ BASELINEPLUS
× EXISTING

MINIMUM DAILY DISSOLVED OXYGEN



CASE
○ BASELINEPLUS
× EXISTING



Comparison of Daily Minimum DO Concentrations in Layer 1 (Bottom)

Station	Layer	Number of Days	Existing Conditions Days below 4 mg/L	Existing Conditions Days below 4 mg/L	Baseline-Plus Days below 4 mg/L	Baseline-Plus Days below 4 mg/L
CES04	1	1,090	586	53.76%	560	51.38%
CES05	1	1,090	502	46.06%	513	47.06%
CES06	1	1,090	535	49.08%	495	45.41%
CES07	1	1,090	537	49.27%	525	48.17%
CES08	1	1,090	573	52.57%	560	51.38%
CES09	1	1,090	329	30.18%	325	29.82%
CES10	1	1,090	588	53.94%	569	52.20%
CES11	1	1,090	478	43.85%	474	43.49%

Comparison of Daily Minimum DO Concentrations in Layer 2

Station	Layer	Number of Days	Existing Conditions Days below 4 mg/L	Existing Conditions % Days below 4 mg/L	Baseline-Plus Days below 4 mg/L	Baseline-Plus % Days below 4 mg/L
CES04	2	1,090	297	27.25%	274	25.14%
CES05	2	1,090	332	30.46%	321	29.45%
CES06	2	1,090	185	16.97%	184	16.88%
CES07	2	1,090	182	16.70%	183	16.79%
CES08	2	1,090	342	31.38%	329	30.18%
CES09	2	1,090	113	10.37%	112	10.28%
CES10	2	1,090	186	17.06%	182	16.70%
CES11	2	1,090	227	20.83%	228	20.92%

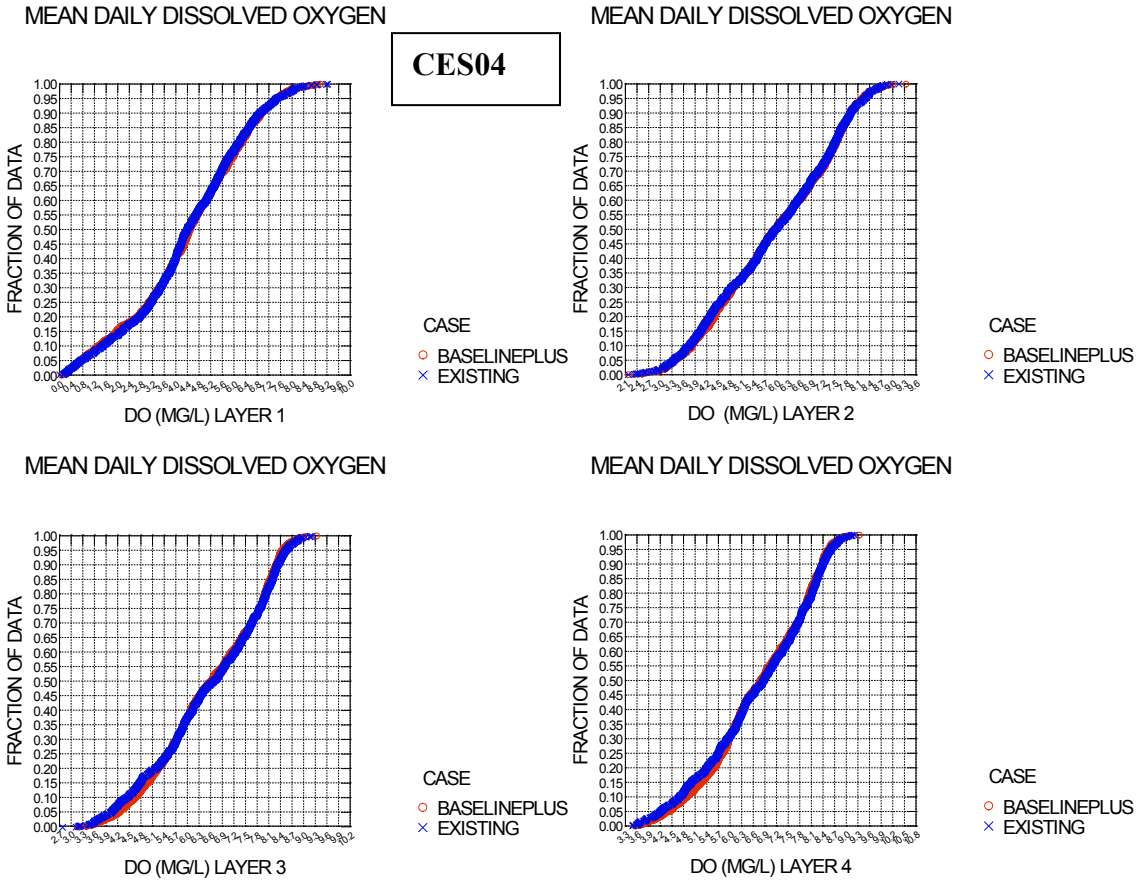
Comparison of Daily Minimum DO Concentrations in Layer 3

Station	Layer	Number of Days	Existing Conditions Days below 4 mg/L	Existing Conditions % Days below 4 mg/L	Baseline-Plus Days below 4 mg/L	Baseline-Plus % Days below 4 mg/L
CES04	3	1,090	134	12.29%	101	9.27%
CES05	3	1,090	69	6.33%	65	5.96%
CES06	3	1,090	33	3.03%	30	2.75%
CES07	3	1,090	78	7.16%	75	6.88%
CES08	3	1,090	38	3.49%	34	3.12%
CES09	3	1,090	18	1.65%	21	1.93%
CES10	3	1,090	45	4.13%	53	4.86%
CES11	3	1,090	38	3.49%	31	2.84%

Comparison of Daily Minimum DO Concentrations in Layer 4 (Surface)

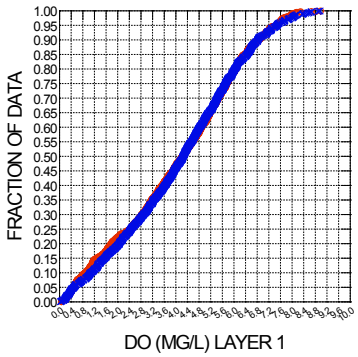
Station	Layer	Number of Days	Existing Conditions Days below 4 mg/L	Existing Conditions % Days below 4 mg/L	Baseline-Plus Days below 4 mg/L	Baseline-Plus % Days below 4 mg/L
CES04	4	1,090	92	8.44%	67	6.15%
CES05	4	1,090	6	0.55%	6	0.55%
CES06	4	1,090	5	0.46%	1	0.09%
CES07	4	1,090	0	0.00%	0	0.00%
CES08	4	1,090	1	0.09%	0	0.00%
CES09	4	1,090	0	0.00%	0	0.00%
CES10	4	1,090	4	0.37%	7	0.64%
CES11	4	1,090	0	0.00%	0	0.00%

Daily Average DO Model Layer by Station Plots

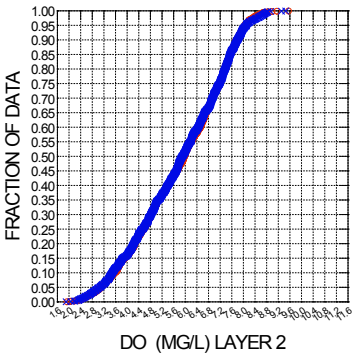


CES05

MEAN DAILY DISSOLVED OXYGEN



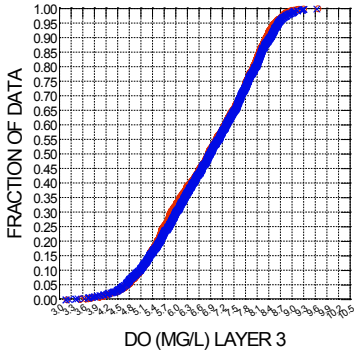
MEAN DAILY DISSOLVED OXYGEN



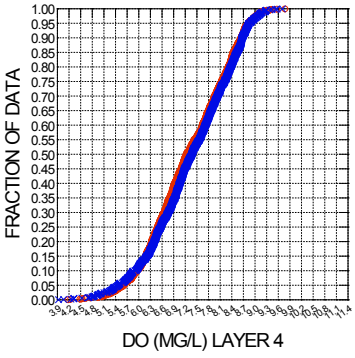
CASE
○ BASELINEPLUS
× EXISTING

CASE
○ BASELINEPLUS
× EXISTING

MEAN DAILY DISSOLVED OXYGEN

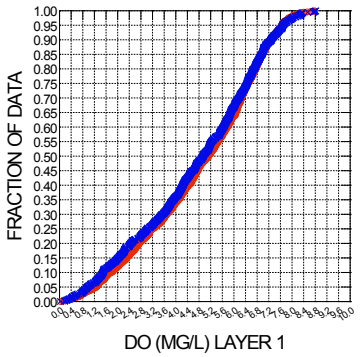


MEAN DAILY DISSOLVED OXYGEN



CASE
○ BASELINEPLUS
× EXISTING

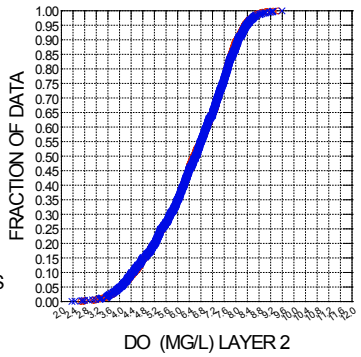
MEAN DAILY DISSOLVED OXYGEN



CES06

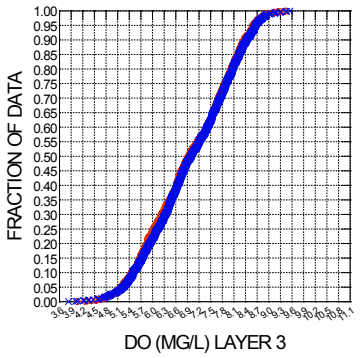
CASE
○ BASELINEPLUS
× EXISTING

MEAN DAILY DISSOLVED OXYGEN



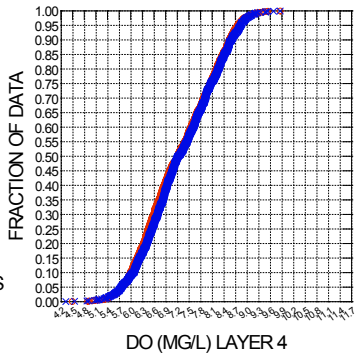
CASE
○ BASELINEPLUS
× EXISTING

MEAN DAILY DISSOLVED OXYGEN



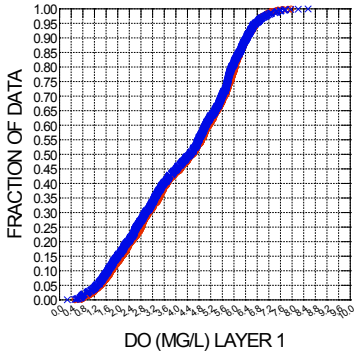
CASE
○ BASELINEPLUS
× EXISTING

MEAN DAILY DISSOLVED OXYGEN



CASE
○ BASELINEPLUS
× EXISTING

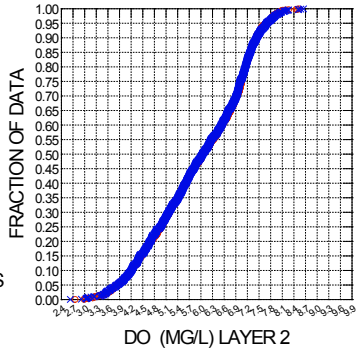
MEAN DAILY DISSOLVED OXYGEN



CES07

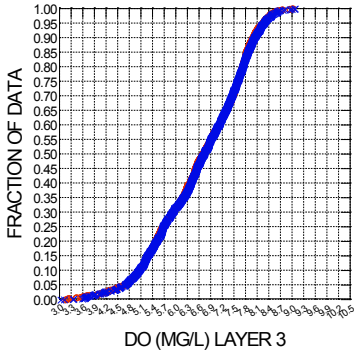
CASE
○ BASELINEPLUS
× EXISTING

MEAN DAILY DISSOLVED OXYGEN



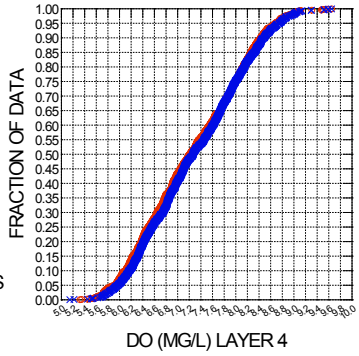
CASE
○ BASELINEPLUS
× EXISTING

MEAN DAILY DISSOLVED OXYGEN



CASE
○ BASELINEPLUS
× EXISTING

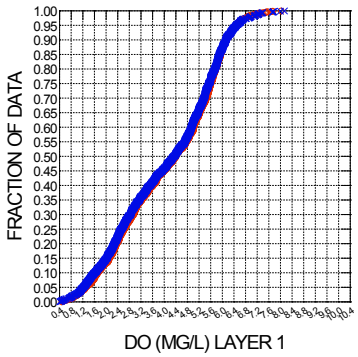
MEAN DAILY DISSOLVED OXYGEN



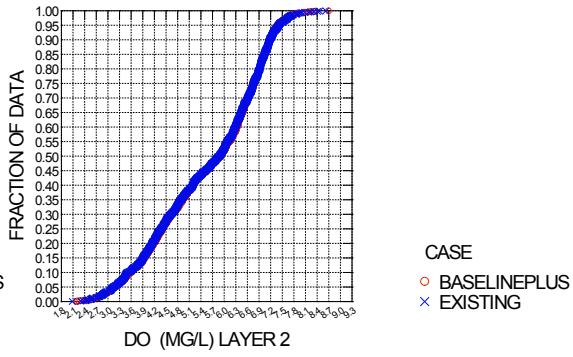
CASE
○ BASELINEPLUS
× EXISTING

CES08

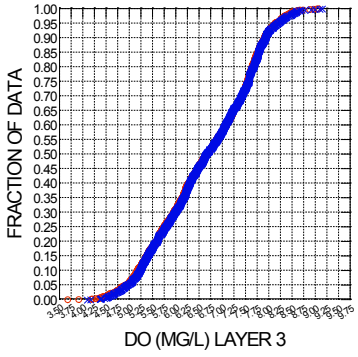
MEAN DAILY DISSOLVED OXYGEN



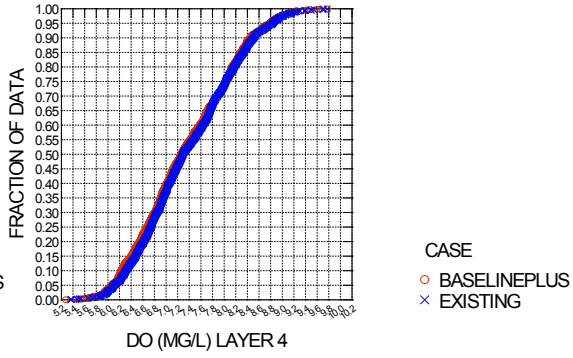
MEAN DAILY DISSOLVED OXYGEN



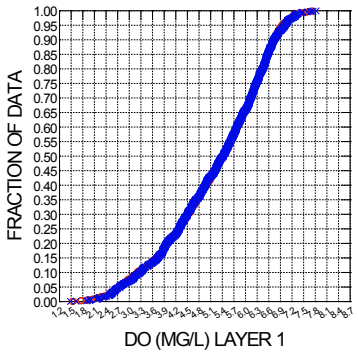
MEAN DAILY DISSOLVED OXYGEN



MEAN DAILY DISSOLVED OXYGEN



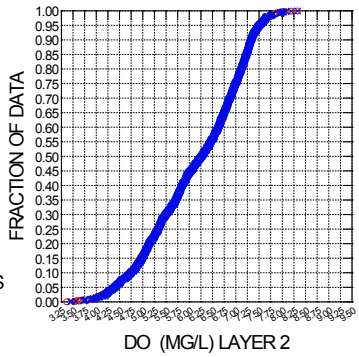
MEAN DAILY DISSOLVED OXYGEN



CES09

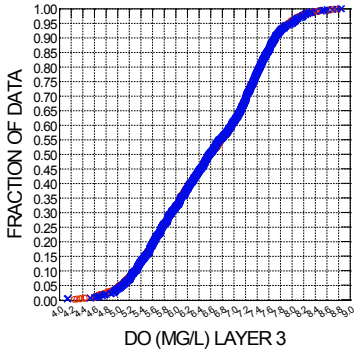
CASE
○ BASELINEPLUS
× EXISTING

MEAN DAILY DISSOLVED OXYGEN



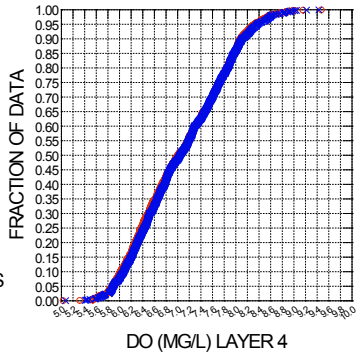
CASE
○ BASELINEPLUS
× EXISTING

MEAN DAILY DISSOLVED OXYGEN



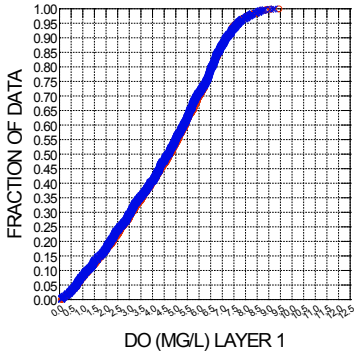
CASE
○ BASELINEPLUS
× EXISTING

MEAN DAILY DISSOLVED OXYGEN



CASE
○ BASELINEPLUS
× EXISTING

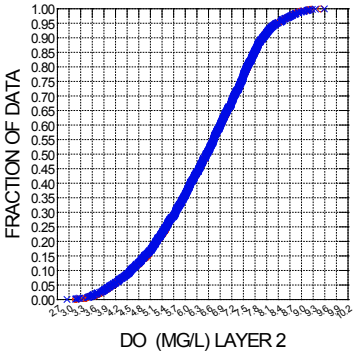
MEAN DAILY DISSOLVED OXYGEN



CES10

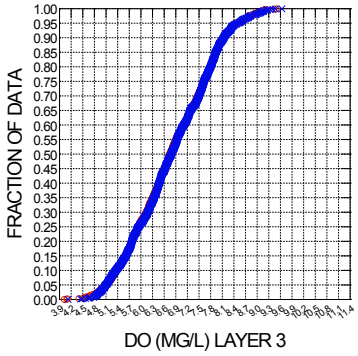
CASE
○ BASELINEPLUS
× EXISTING

MEAN DAILY DISSOLVED OXYGEN



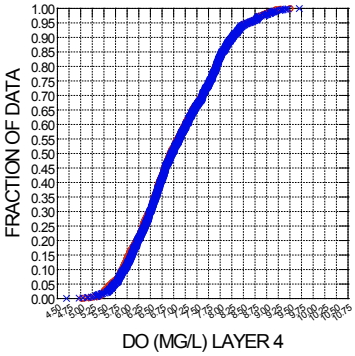
CASE
○ BASELINEPLUS
× EXISTING

MEAN DAILY DISSOLVED OXYGEN

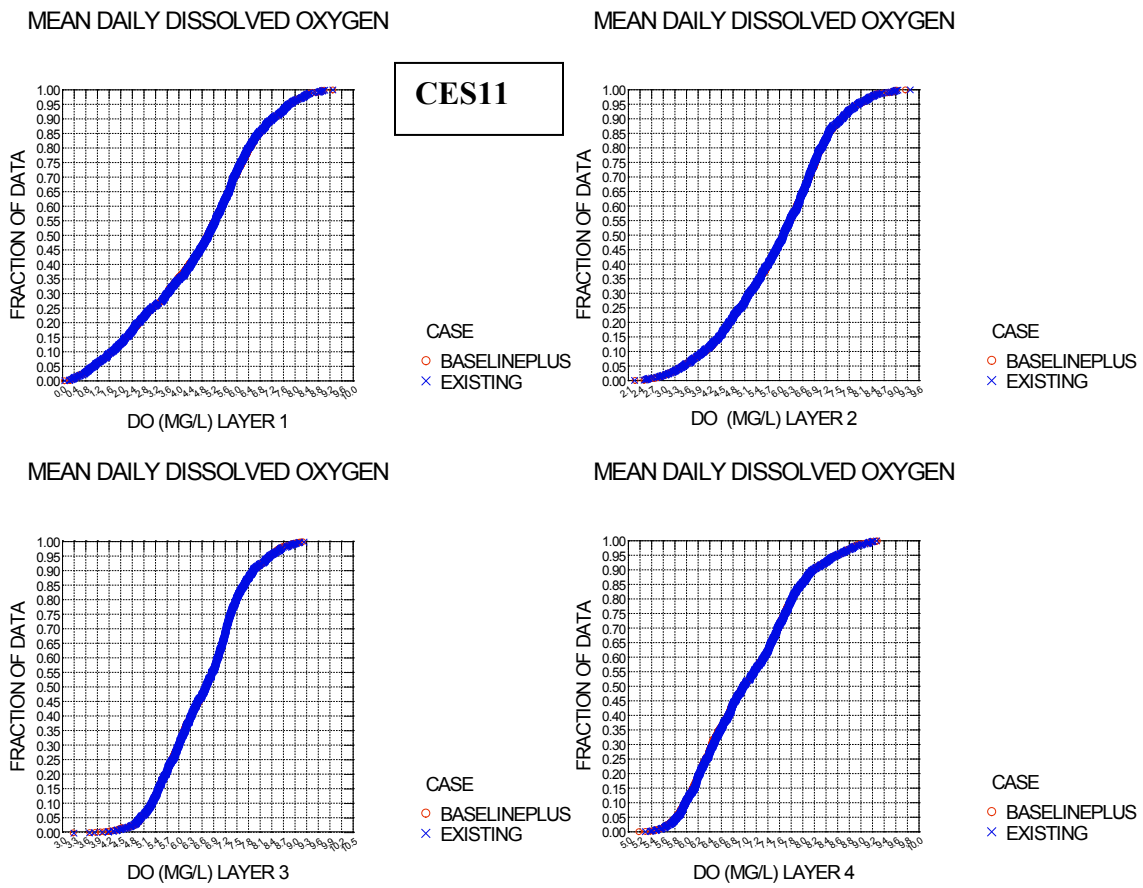


CASE
○ BASELINEPLUS
× EXISTING

MEAN DAILY DISSOLVED OXYGEN



CASE
○ BASELINEPLUS
× EXISTING



Comparison of Daily Average DO Concentrations in Layer 1 (Bottom)

Station	Layer	Number of Days	Existing Conditions Days below 5 mg/L	Existing Conditions % Days below 5 mg/L	Baseline-Plus Days below 5 mg/L	Baseline-Plus % Days below 5 mg/L
CES04	1	1,090	647	59.36%	646	59.27%
CES05	1	1,090	688	63.12%	670	61.47%
CES06	1	1,090	555	50.92%	529	48.53%
CES07	1	1,090	650	59.63%	625	57.34%
CES08	1	1,090	676	62.02%	646	59.27%
CES09	1	1,090	448	41.10%	437	40.09%
CES10	1	1,090	603	55.32%	584	53.58%
CES11	1	1,090	541	49.63%	550	50.46%

Comparison of Daily Average DO Concentrations in Layer 2

Station	Layer	Number of Days	Existing Conditions Days below 5 mg/L	Existing Conditions % Days below 5 mg/L	Baseline-Plus Days below 5 mg/L	Baseline-Plus % Days below 5 mg/L
CES04	2	1,090	347	31.83%	346	31.74%
CES05	2	1,090	370	33.94%	362	33.21%
CES06	2	1,090	183	16.79%	180	16.51%
CES07	2	1,090	284	26.06%	276	25.32%
CES08	2	1,090	404	37.06%	393	36.06%
CES09	2	1,090	169	15.50%	172	15.78%
CES10	2	1,090	170	15.60%	159	14.59%
CES11	2	1,090	274	25.14%	275	25.23%

Comparison of Daily Average DO Concentrations in Layer 3

Station	Layer	Number of Days	Existing Conditions Days below 5 mg/L	Existing Conditions % Days below 5 mg/L	Baseline-Plus Days below 5 mg/L	Baseline-Plus % Days below 5 mg/L
CES04	3	1,090	200	18.35%	167	15.32%
CES05	3	1,090	102	9.36%	92	8.44%
CES06	3	1,090	30	2.75%	30	2.75%
CES07	3	1,090	98	8.99%	104	9.54%
CES08	3	1,090	59	5.41%	65	5.96%
CES09	3	1,090	38	3.49%	45	4.13%
CES10	3	1,090	37	3.39%	44	4.04%
CES11	3	1,090	55	5.05%	47	4.31%

Comparison of Daily Average DO Concentrations in Layer 4 (Surface)

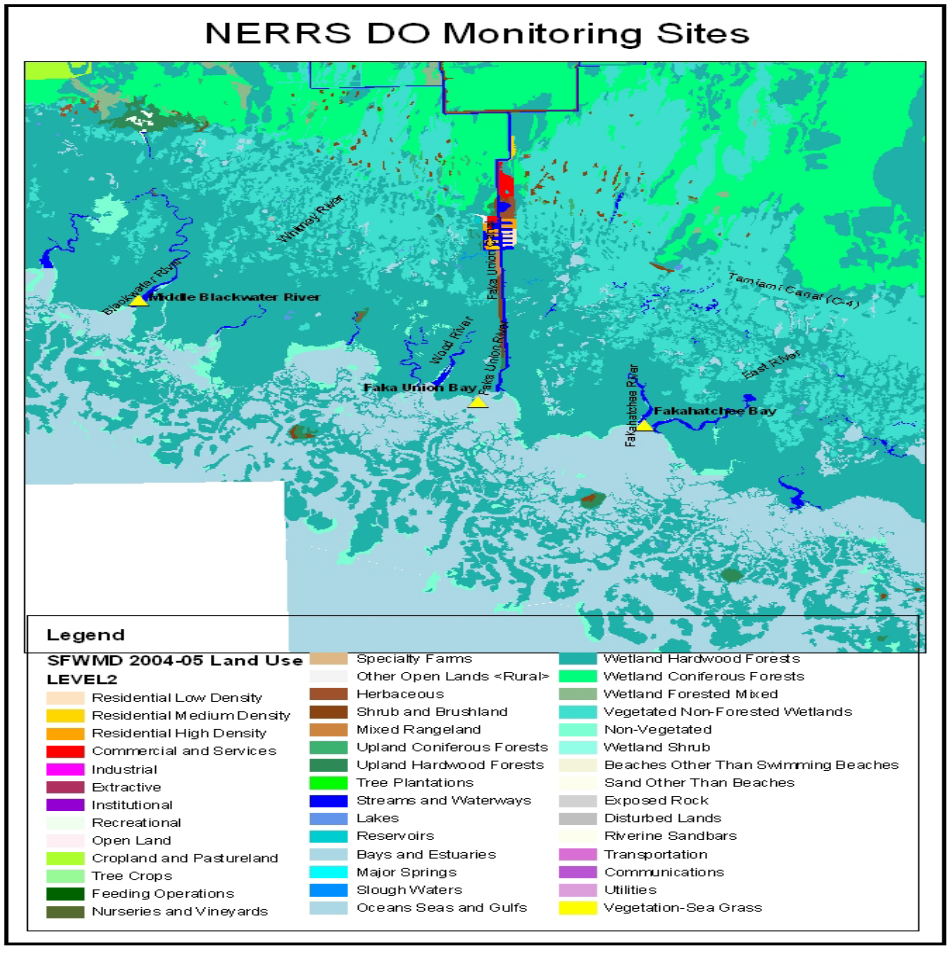
Station	Layer	Number of Days	Existing Conditions Days below 5 mg/L	Existing Conditions % Days below 5 mg/L	Baseline-Plus Days below 5 mg/L	Baseline-Plus % Days below 5 mg/L
CES04	4	1,090	163	14.95%	124	11.38%
CES05	4	1,090	22	2.02%	11	1.01%
CES06	4	1,090	4	0.37%	3	0.28%
CES07	4	1,090	0	0.00%	0	0.00%
CES08	4	1,090	0	0.00%	0	0.00%
CES09	4	1,090	0	0.00%	0	0.00%
CES10	4	1,090	2	0.18%	0	0.00%
CES11	4	1,090	0	0.00%	0	0.00%

The following table summarizes the percent differences between the existing and baseline+ scenarios in the percentile of days with a daily minimum below 4 mg/L or a daily average below 5 mg/L.

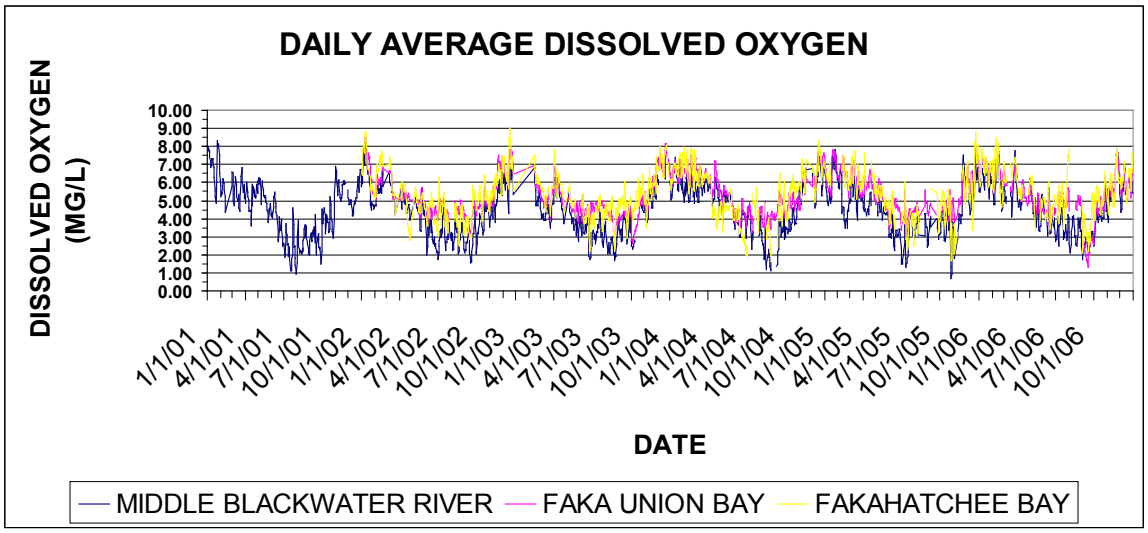
Layer	Δ % Days below 5 mg/L	Δ % Days below 4 mg/L
1	0.09 – 2.75	0.36 – 3.67
2	0.09 – 1.01	0.09 – 2.11
3	0.00 – 3.03	0.28 – 3.02
4	0.00 – 3.57	0.00 – 2.29

Comparison of model DO concentrations with observations from a minimally impacted area

Continuous DO measurements (recorded at 30-minute intervals) from 3 sites maintained by the Rookery Bay National Estuarine Research Reserve System (NERRS) were retrieved and processed to obtain daily minimum and daily average concentrations. Stations included the Middle Blackwater River (25° 56' 3.48 N, 81° 35' 44.16 W) for the 2001–06 period, Faka Union Bay (25° 54' 1.80 N, 81° 30' 57.24 W) for the 2002–06 period, and Fakahatchee Bay (25° 53' 31.92 N, 81° 28' 37.20 W) for the 2002–06 period. The following figure illustrates station locations and surrounding land uses based on the SFWMD's Level 2 2004–05 land use coverage.

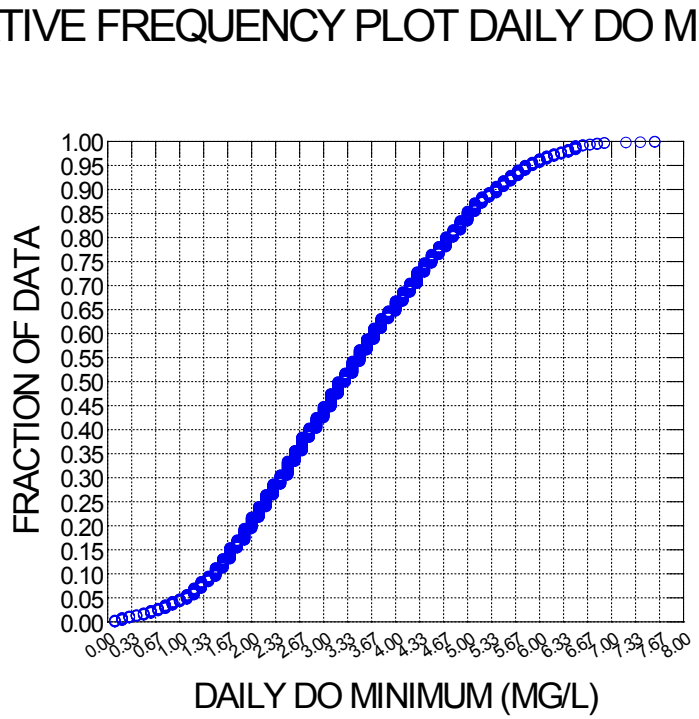


The following graph illustrates the time series of DO recorded at these three stations.

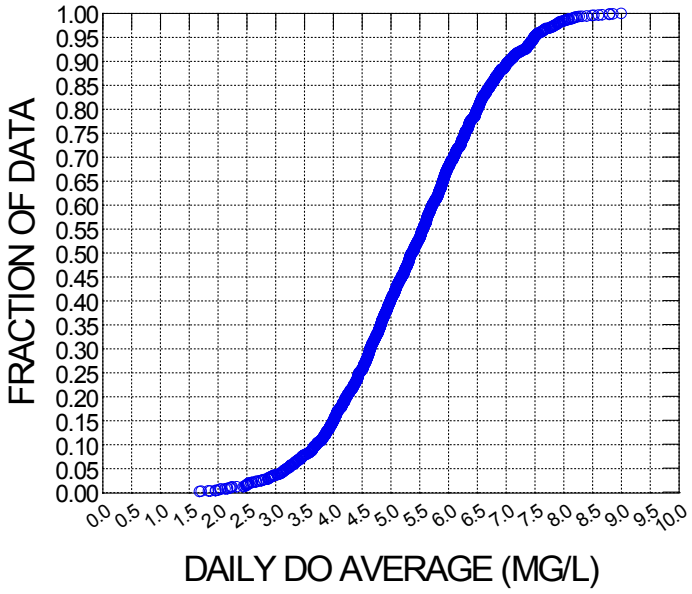


Observations from the three sites were processed in the same manner as the model scenarios to create daily minimum and daily average DO concentrations. Cumulative frequency plots and summary statistics are presented below for each site.

Fakahatchee Bay



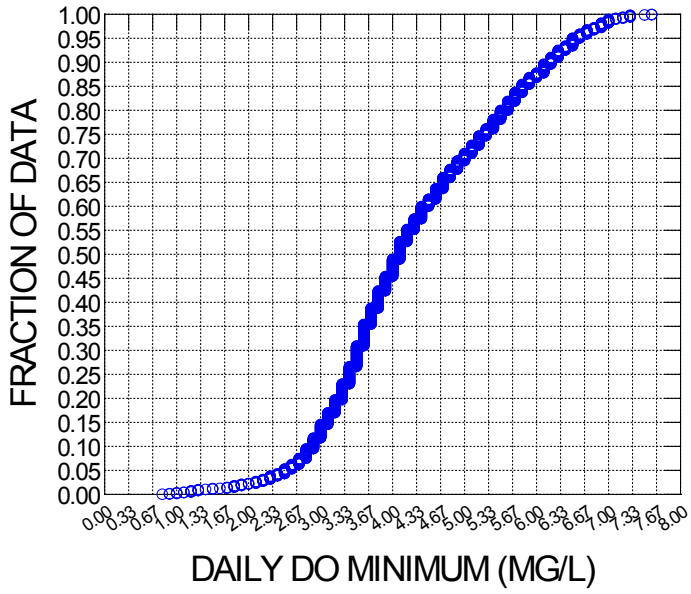
CUMULATIVE FREQUENCY PLOT DAILY DO AVE (2002-2006)



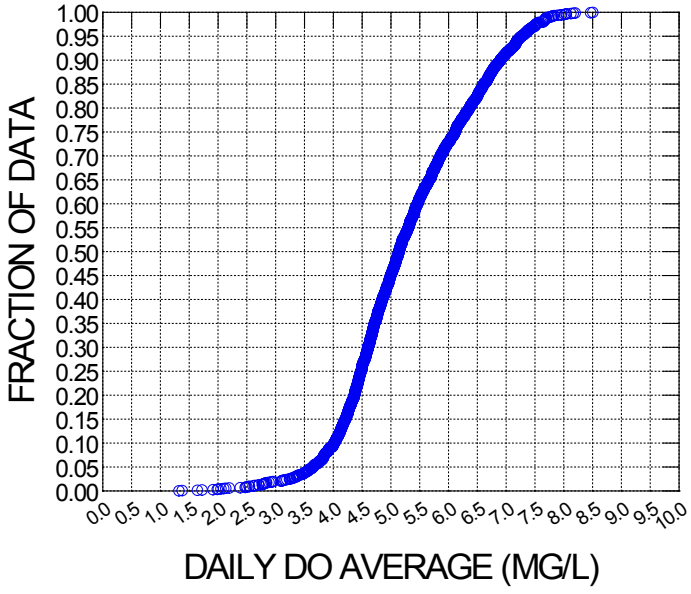
STATISTIC	DOMINMGL	DOMEANMGL
N of cases	1,538	1,538
Minimum	0.100	1.673
Maximum	7.600	8.994
Mean	3.349	5.364
Standard Dev	1.490	1.299
1 %	0.300	2.240
5 %	1.100	3.222
10 %	1.500	3.710
20 %	2.000	4.236
25 %	2.200	4.454
30 %	2.400	4.637
40 %	2.800	4.992
50 %	3.300	5.366
60 %	3.700	5.719
70 %	4.200	6.090
75 %	4.500	6.283
80 %	4.700	6.502
90 %	5.400	7.052
95 %	5.860	7.482
99 %	6.500	8.163

Faka Union Bay

CUMULATIVE FREQUENCY PLOT DAILY DO MIN (2002-2006)



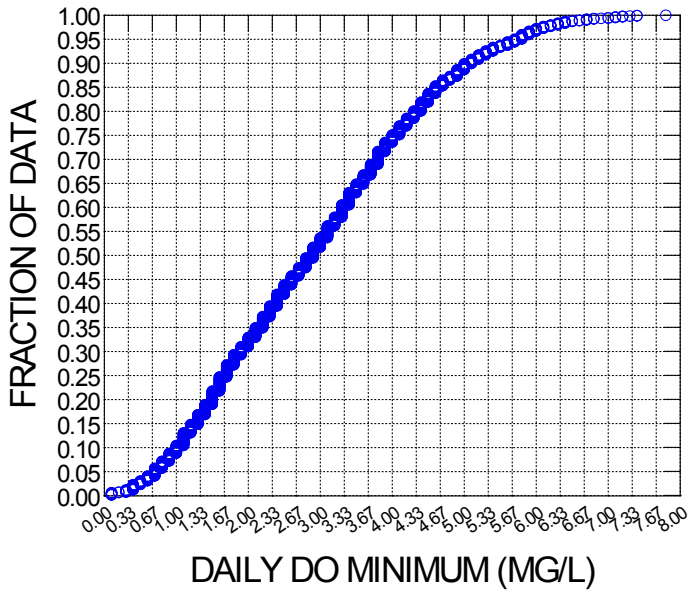
CUMULATIVE FREQUENCY PLOT DAILY DO AVE (2002-2006)



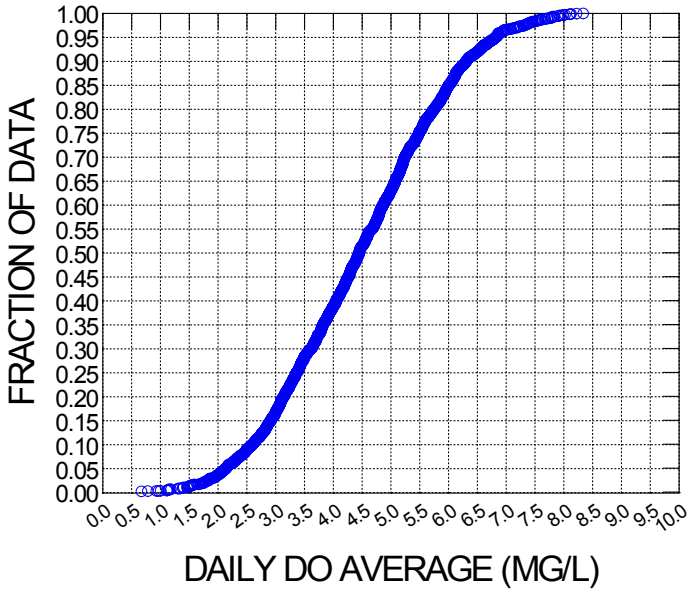
STATISTIC	DOMINMGL	DOMEANMGL
N of cases	1,694	1,694
Minimum	0.800	1.319
Maximum	7.600	8.502
Mean	4.310	5.285
Standard Dev	1.274	1.140
1 %	1.344	2.569
5 %	2.500	3.642
10 %	2.900	4.010
20 %	3.300	4.367
25 %	3.400	4.479
30 %	3.500	4.602
40 %	3.800	4.848
50 %	4.100	5.139
60 %	4.490	5.458
70 %	5.000	5.861
75 %	5.300	6.112
80 %	5.570	6.363
90 %	6.200	6.900
95 %	6.500	7.268
99 %	7.100	7.747

Middle Blackwater River

CUMULATIVE FREQUENCY PLOT DAILY DO MIN (2001-2006)



CUMULATIVE FREQUENCY PLOT DAILY DO AVE (2001-2006)



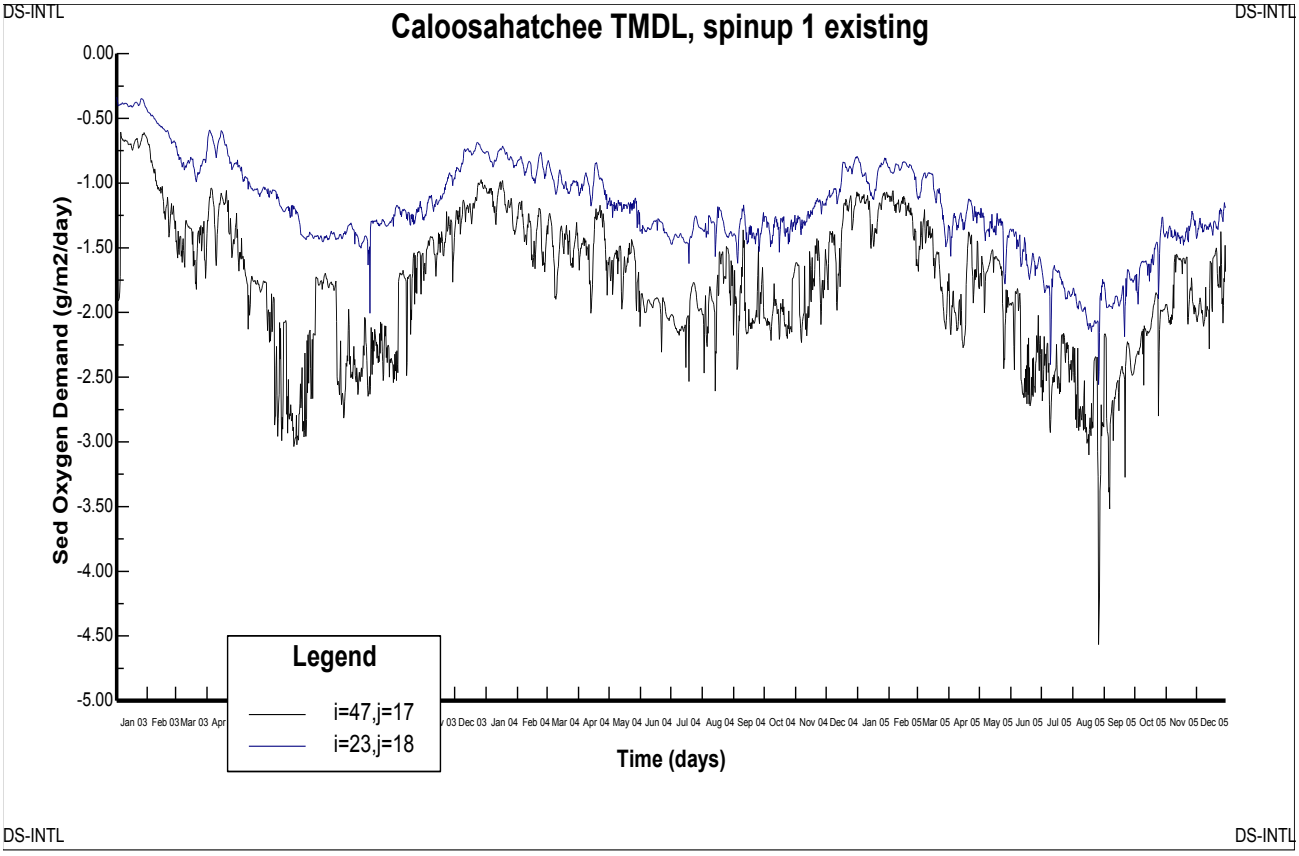
STATISTIC	DOMINMGL	DOMEANMGL
N of cases	1,898	1,898
Minimum	0.100	0.667
Maximum	7.800	8.335
Mean	2.957	4.461
Standard Dev	1.544	1.431
1 %	0.300	1.475
5 %	0.700	2.141
10 %	1.000	2.602
20 %	1.500	3.144
25 %	1.700	3.365
30 %	1.900	3.625
40 %	2.400	4.050
50 %	2.900	4.451
60 %	3.300	4.863
70 %	3.800	5.244
75 %	4.000	5.490
80 %	4.300	5.750
90 %	5.100	6.310
95 %	5.760	6.824
99 %	6.700	7.762

According to the continuous monitoring data reported at these 3 sites, DO concentrations were below the Class III daily minimum marine criterion of 4 mg/L from 45 percent (Faka Union site) to 75 percent (Middle Blackwater River site) of the time. The Class III daily average marine criterion of 5 mg/L was not met between 40 percent (Fakahatchee Bay site) and 65 percent (Middle Blackwater River site) of the time.

Processes influencing DO incorporated in the EFDC Model

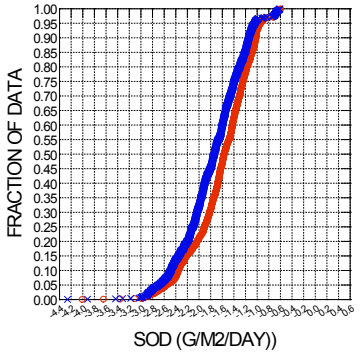
The Environmental Fluids Dynamic Code (EFDC) Model applied in the Caloosahatchee Estuary is a coupled hydrodynamic and water quality model. Three-dimensional advection and vertical and horizontal turbulent diffusion are part of the water column transport. Processes included in water quality that influence DO include reaeration, photosynthesis, respiration, nitrification, the decomposition of dissolved organic carbon (DOC), chemical oxygen demand (COD), and sediment oxygen demand (SOD).

The following figure illustrates model-predicted SOD rates under the Existing Conditions scenario at two stations: CES04 (I47J17) and CES07 (I23J18).



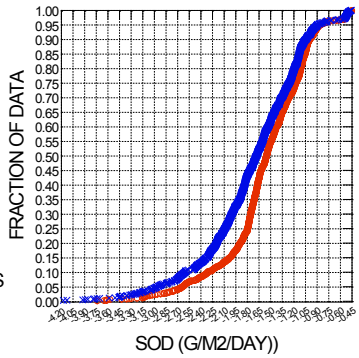
Model-predicted SOD rates for both the Existing Conditions and Baseline-Plus simulations for Stations CES04 – CES11 are presented in the following figures. Note that since SOD represents a sink or loss of oxygen from the water column, values are negative. The larger the negative value, the greater the oxygen demand.

CES04 DAILY SODS



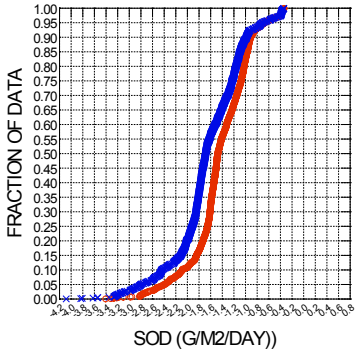
CASE
BASELINEPLUS
EXISTING

CES05 DAILY SODS



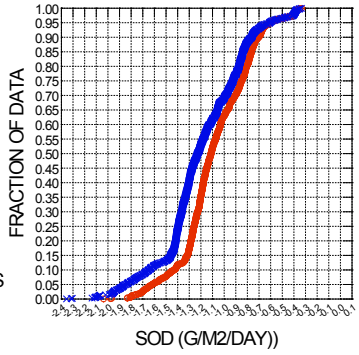
CASE
BASELINEPLUS
EXISTING

CES06 DAILY SODS

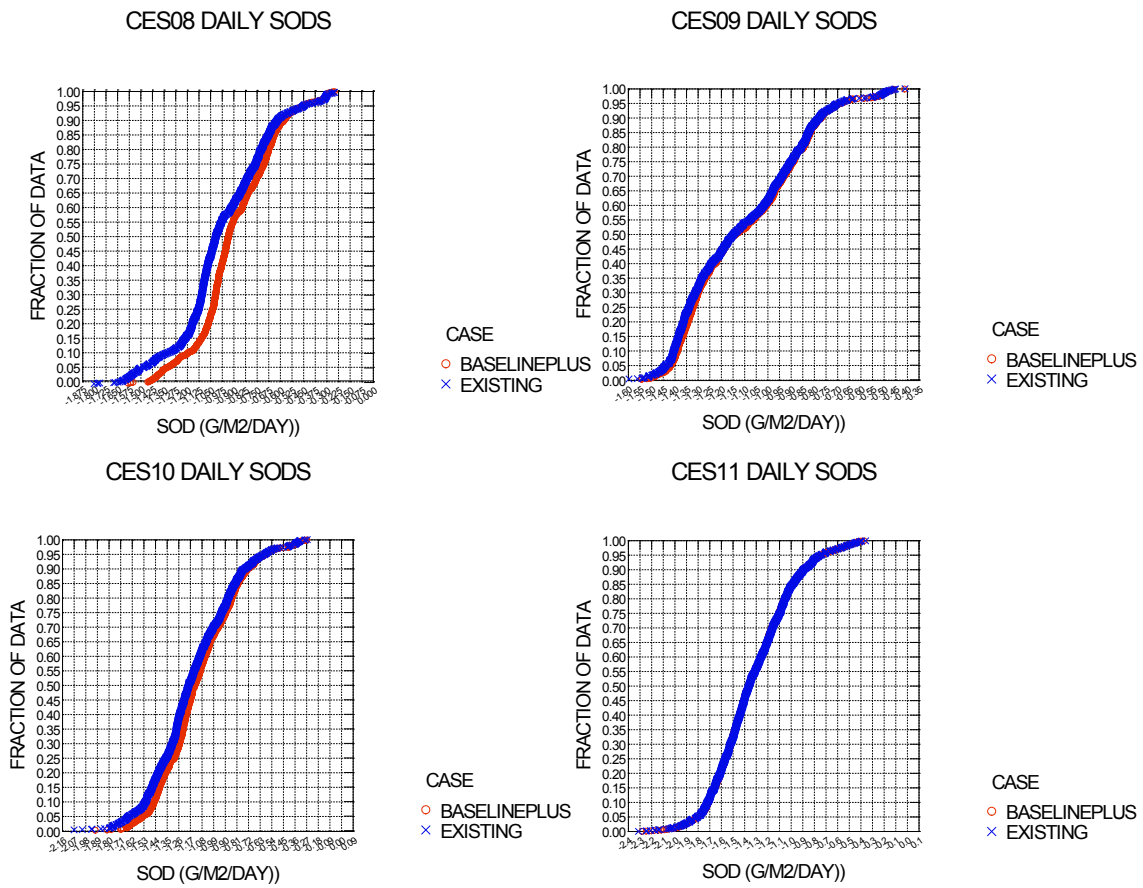


CASE
BASELINEPLUS
EXISTING

CES07 DAILY SODS



CASE
BASELINEPLUS
EXISTING



Statistical summary of SOD rates in the Existing Conditions and Baseline-Plus simulations (units are grams per square meter per day [g/m^2/day])

Station	Existing Conditions Minimum	Existing Conditions 25th	Existing Conditions Median	Existing Conditions 75th	Existing Conditions Maximum	Baseline-Plus Minimum	Baseline-Plus 25th	Baseline-Plus Median	Baseline-Plus 75th	Baseline-Plus Maximum
CES04	-4.26	-2.10	-1.74	-1.40	-0.61	-4.01	-1.91	-1.57	-1.24	-0.60
CES05	-4.17	-2.09	-1.68	-1.26	-0.46	-3.74	-1.80	-1.55	-1.17	-0.45
CES06	-4.08	-1.92	-1.69	-1.23	-0.34	-3.41	-1.65	-1.48	-1.07	-0.34
CES07	-2.36	-1.39	-1.23	-0.92	-0.34	-2.04	-1.26	-1.11	-0.85	-0.33
CES08	-1.80	-1.13	-1.02	-0.76	-0.25	-1.58	-1.04	-0.94	-0.71	-0.25
CES09	-1.60	-1.34	-1.15	-0.90	-0.41	-1.54	-1.32	-1.14	-0.89	-0.41
CES10	-2.07	-1.36	-1.18	-0.93	-0.27	-1.91	-1.29	-1.14	-0.90	-0.27
CES11	-2.31	-1.57	-1.37	-1.10	-0.36	-2.28	-1.56	-1.37	-1.11	-0.37

The SFWMD funded a study, *The Characterization and Quantification of Benthic Nutrient Fluxes in the Caloosahatchee River and Estuary,* that was conducted by the University of Massachusetts–Dartmouth School of Marine Science and Technology (SMAST). Sediment cores were collected at 50 stations in February 2008, distributed throughout the three main segments of the Caloosahatchee River and Estuary. Sampling occurred during the dry season,

when flux rates were likely to represent the lowest rates over the seasonal cycle. Cores were incubated under both light and dark conditions in temperature-controlled baths maintained at *in situ* conditions. Contours of SOD fluxes for both the light and dark incubations were presented in Figure 9 of the final report from SMAST. Contour intervals over the light incubation ranged between -53.96 millimoles per square meter per day (mmoles/m^2/day) (-1.73 g/m^2/day) to 8.96 mmoles/m^2/day (0.29 g/m^2/day).

As noted in the figure, net oxygen production was measured in shallow areas of the lower region of the lower basin. Contour intervals over the dark incubation ranged between -51.78 mmoles/m^2/day (-1.66 g/m^2/day) to -13.67 mmoles/m^2/day (-0.44 g/m^2/day). Table 5 of the document summarized results for the upper and lower estuary. The lower estuary represented Cores CRE-1 through CRE-25 and covered the area between Little Shell Island and Fourmile Island. The upper estuary was represented by Cores CRE-26 through CRE-50 and covered the area between Fourmile Island and just above the Interstate 75 bridge.

Segment	SOD Flux mmole/m^2/day (g/m^2/day) Light Incubation Average	SOD Flux mmole/m^2/day (g/m^2/day) Dark Incubation Average
Upper Estuary	-31.26 (-1.00)	-30.76 (-0.98)
Lower Estuary	-16.04 (-0.51)	-22.81 (-0.73)

The SFWMD also contracted with the University of Maryland Center for Environmental Sciences (UMCES) to conduct *in situ* chamber incubations at three sites in the Caloosahatchee Estuary to compare the two techniques (*An Assessment of Processes Controlling Benthic Nutrient Fluxes in the Calooahatchee River and Estuary and the St. Lucie Estuary River and Estuary, August 2008*). Sampling occurred from February 11 to 14, 2008, and involved both *in situ* chamber measurements and sediment core flux measurements. Tables 8 and 9 in the report summarized the *in situ* and sediment core flux results, respectively. Rates in Tables 8 and 9 were converted from micromoles per square meter per hour (umol/m^2/h) to umol/m^2/day.

Station	Treatment	O_2 Flux umol/m^2/day (g/m^2/day) Chamber	O_2 Flux umol/m^2/day (g/m^2/day) Core
CRE-46	Light	-27,816 (-0.89)	-36,384 (-1.16)
CRE-46	Dark	-61,968 (-1.38)	-37,272 (-1.119)
CRE-24	Light	-111,480 (-3.58)	-21,768 (-0.70)
CRE-24	Dark	-27,096 (-0.87)	42,600 (1.36)
CRE-36B	Light	13,416 (0.42)	-21,480 (-0.69)
CRE-36B	Dark	-21,408 (-0.68)	11,760 (0.38)

Under the Existing Conditions scenario, the 25th and 75th percentile SOD fluxes for Stations CES04 – CES11 in the model ranged between -2.1 and -0.76 g/m^2/day. SOD fluxes from the SMAST and UMCES field studies conducted in February 2008 were generally in the -1.5 to -0.5 g/m^2/day range. Both studies did report sites where there was a net oxygen production. Model SOD fluxes were not inconsistent with the February 2008 field measurements.

Subsequent work on the model will include evaluating the significance of individual processes such as reaeration, photosynthesis, respiration, and organic material decomposition on the DO mass balance as well as DO response to changes in water quality due to implementation of management activities.

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