

Manchester Urban Ponds Restoration Program

Average Water Quality Measurements Tables 2000 – 2012

Average Epilimnetic (<i>Top Layer of Water</i>) Total Phosphorus Measurements (mg/l)													
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Crystal Lake	0.011	0.012	0.013	0.010	0.010	0.014	0.017	0.013	0.010	0.013	0.012	0.026	0.010
Dorrs Pond	0.045	0.024	0.023	0.024	0.030	0.026	0.030	0.022	0.027	0.028	0.026	0.025	0.101
Maxwell Pond/ Black Brook	0.014	0.018	0.014	0.018	0.020	0.020	0.018	0.022	0.023	0.025	0.019	0.210	N/A
Nutts Pond	0.017	0.023	0.024	0.030	0.020	0.028	0.024	0.023	0.019	0.018	0.015	0.019	0.015
Pine Island Pond	0.024	0.016	0.026	0.029	0.020	0.020	0.026	0.022	0.029	0.021	0.020	0.028	0.027
Stevens Pond	0.019	0.025	0.018	0.017	0.020	0.017	0.031	0.030	0.042	0.036	0.026	0.025	0.025

Average Hypolimnetic (<i>Bottom Layer of Water</i>) Total Phosphorus Measurements (mg/l)													
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Crystal Lake	0.025	0.017	0.014	0.018	0.018	0.013	0.017	0.018	0.017	0.021	0.026	0.020	0.017
Dorrs Pond	0.088	0.029	0.127	0.022	0.030	0.027	0.029	N/A	N/A	N/A	N/A	N/A	N/A
Nutts Pond	0.089	0.097	0.179	0.109	0.080	0.064	0.088	0.045	0.039	0.051	0.101	0.076	0.372
Pine Island Pond	0.028	0.030	0.030	0.031	0.040	0.032	0.032	0.055	0.072	0.029	0.047	0.053	0.194
Stevens Pond	0.042	0.023	0.035	0.027	0.080	0.027	0.034	0.047	0.048	0.066	0.058	0.075	0.166

Average Epilimnetic (<i>Top Layer of Water</i>) Conductivity Measurements (uMhos/cm)													
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Crystal Lake	418	439	442	473	459	511	383	359	422	380	403	416	394
Dorrs Pond	408	831	866	759	644	842	455	631	512	517	765	571	564
Maxwell Pond/ Black Brook	122	155	159	180	151	148	101	131	110	95	165	95	89
Nutts Pond	582	714	588	786	599	877	469	545	620	610	765	610	652
Pine Island Pond	287	383	316	339	256	324	235	252	289	207	428	329	306
Stevens Pond	769	1149	1172	1258	860	1099	578	785	716	688	840	705	636

Average Hypolimnetic (<i>Bottom Layer of Water</i>) Conductivity Measurements (uMhos/cm)													
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Crystal Lake	417	481	433	526	454	525	385	351	435	685	373	416	392
Dorrs Pond	432	825	904	782	653	625	520	N/A	N/A	N/A	N/A	N/A	N/A
Nutts Pond	1769	1960	1798	2018	2193	2615	2160	1124	1544	2447	2143	2407	1776
Pine Island Pond	305	350	318	306	268	320	237	221	328	251	399	340	262
Stevens Pond	792	1634	1126	1606	1041	1742	593	838	1451	1164	854	1553	843

Average Chlorophyll- α Measurements (mg/m 3)													
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Crystal Lake	3.39	4.75	2.66	3.14	4.62	1.79	5.95	2.43	4.23	8.16	1.85	5.51	1.54
Dorrs Pond	30.84	14.75	9.86	18.03	15.09	8.34	12.13	8.83	16.52	8.50	10.69	11.67	5.10
Maxwell Pond/ Black Brook	1.55	3.17	1.68	1.65	2.30	2.33	1.89	5.67	2.42	N/A	N/A	N/A	N/A
Nutts Pond	24.84	14.01	14.34	17.13	19.31	13.49	19.53	4.67	6.96	4.51	3.63	8.86	5.73
Pine Island Pond	8.04	13.20	8.23	2.21	8.97	8.46	11.04	10.63	9.81	3.04	8.04	12.98	11.93
Stevens Pond	8.66	6.26	13.88	4.28	9.44	3.04	63.57	35.47	16.29	12.35	11.33	9.58	32.62

	Average Epilimnetic (<i>Top Layer of Water</i>) Turbidity Measurements (NTU)												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Crystal Lake	0.49	0.89	3.22	0.79	1.64	0.82	1.41	1.79	1.04	1.30	0.67	2.98	0.82
Dorrs Pond	3.76	3.70	1.86	3.42	4.61	2.45	3.13	2.51	3.49	2.47	3.99	3.20	3.32
Maxwell Pond/ Black Brook	2.03	3.40	1.10	2.57	2.12	1.69	1.63	2.09	2.09	2.43	3.87	1.76	1.82
Nutts Pond	0.93	1.80	3.78	2.80	5.32	2.64	1.71	1.43	1.54	1.15	1.08	1.70	1.20
Pine Island Pond	1.34	1.70	3.19	3.54	3.01	2.12	2.65	2.38	2.51	1.56	1.65	2.23	1.96
Stevens Pond	2.36	2.20	2.38	2.63	2.30	1.64	2.98	2.30	2.73	1.37	1.67	2.05	2.28

	Average Transparency (<i>Secchi Disk Without View Scope</i>) Measurements (m)												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Crystal Lake	4.3	3.6	3.2	5.0	3.9	5.4	4.2	4.1	3.4	3.4	5.0	3.0	4.7
Dorrs Pond	1.1	1.3	1.9	1.7	1.7	2.0	2.0	2.0	1.6	1.8	1.5	1.8	2.0
Maxwell Pond/ Black Brook	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	N/A	N/A	N/A	N/A
Nutts Pond	3.1	2.4	2.3	2.3	1.8	2.5	2.5	3.5	2.8	3.4	3.9	2.4	4.0
Pine Island Pond	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	2.0	2.0	2.0	1.5	2.1
Stevens Pond	2.6	2.5	2.9	2.9	2.6	3.2	2.3	2.0	1.9	2.4	2.6	2.4	2.3