



HYDROGEOLOGISTS ■ ENGINEERS ■ ENVIRONMENTAL SCIENTISTS

September 19, 2007

Namakagon Lake Association
C/O Mr. Steve Riley
Triple Crown Nutrition Inc.
319 Barry Avenue South, Ste. 303
Wayzata, MN 55391

RE: Lake Namakagon Aquatic Plant Inspection Results

Dear Mr. Riley:

Liesch Environmental Services, Inc. (Liesch) has completed the series of aquatic plant inspections on Lake Namakagon for the Namakagon Lake Association's April 2007 contract with Liesch as part of the Wisconsin Department of Natural Resources (WDNR) Aquatic Invasive Species (AIS) Control Grant titled *Lake Namakagon Aquatic Invasive Species Education, Prevention & Investigation*. The methods and results of the sampling events are described in this letter report.

Methods

Liesch followed a modified WDNR procedure for conducting baseline aquatic plant sampling, described below.

Liesch mobilized to Lake Namakagon three times over the course of the summer of 2007. The first sampling event occurred on June 20th and 21st; the second on July 17th and 18th; and the third sampling event occurring on August 22nd and 23rd. During each event, when possible, Liesch sampled a wedge of approximately 10 sampling points in the vicinity of the nine boat landings located on the Lake Namakagon Chain, with the point of the wedge facing the boat landing. Liesch also sampled nine strategic bays, which were identified as bays that are the recipient of a predominantly northern wind fetch. Liesch sampled each of the bays by sampling a wedge of 10 sampling points, with the point of the wedge facing the lake.

At each sampling point Mr. Krueger recorded data that included: GPS location, depth of water, bottom type, device used to obtain the sample, density of vegetation collected on sampling device, and plant species collected on sampling device. All information was recorded on field data sheets (included as **Appendix A**). A lake map of the Namakagon Chain that outlines the areas sampled is included as **Appendix B**, along with the maps of the Garden, Jackson and Namakagon Lakes that depict the WDNR derived sampling points. Aquatic plant samples were obtained by raking the bottom of the lake with a double-sided rake for a distance of approximately two feet, then bringing the samples to the surface for identification.

GPS coordinates for sampling were provided by the WDNR. Liesch used the predetermined WDNR sampling points for all sample locations with the exception of the sampling points taken within the Lakewoods Marina. Latitude and longitude coordinates for five sampling sites located

within the Lakewoods Marina are included as **Appendix C**. The coordinates that correspond to the WDNR predetermined sampling sites are included as **Appendix D**.

Results

Throughout the course of the sampling events Liesch observed the following plant species at the sampling sites: Northern Water Millfoil (*Myriophyllum sibiricum*), Common waterweed (*Elodea Canadensis*), Large Leaf Pondweed (*Potamogeton amplifolius*), Creeping Pondweed (*Ranunculus flammula*), Flatstem Pondweed (*Potamogeton spirillus*), Claspig Leaf Pondweed (*Potamogeton richardsonii*), Small Pondweed (*Potamogeton pusillus*), Wild Celery (*Vallisneria americana*), Pickerelweed (*Pontederia cordata*), Hardstem Bullrush (*Scirpus acutus*), Yellow Pond Lily (*Nuphar variegata*), Coontail (*Ceratophyllum demersum*), Common Bladderwort (*Urticularia gibba*), Watersheid (*Brasenia schreberi*), Water Marigold (*Bidens beckii*), Creeping Spike Rush, (*Eleocharis robbinsii*), Creeping Bladderwort (*Urtica gibba*), Water Stargrass (*Zosterella dubia*), and Narrow-leaved cattail (*Typha angustifolia*). Liesch has included a list of species found at each location sampled in **Appendix E**.

Liesch did not observe any Eurasian Water Millfoil on the Lake Namakagon Chain at the points sampled.

Sincerely,

LIESCH ENVIRONMENTAL SERVICES, INC.


Jacob Krueger
Project Manager

Appendices

- Appendix A Field Data Sheets
- Appendix B Maps
- Appendix C Lakewoods Marina Latitude and Longitude Coordinates
- Appendix D WDNR Predetermined Latitude and Longitude Coordinates
- Appendix E Plant Species Sampled

K:\49062\Aquatic Plant Baseline Sampling Report.doc

Appendix A

Field Data Sheets

Site #	Depth (ft)	Dominant sediment type Muck (M), sand (S), Rock (R)	Rake pole (P) or rake rope (R)	Comments	CLP	Northern Water Milfoil	Large Leaf Pondweed (Musk Grass)	Elodea	Creeping Pondweed	Water Marigold	Clasping Leaf Pondweed	Wild Celery	Pickrel Weed	Hardstem Bulrush	Yellow Pond Lily	Coontail	Common Bladdernot	Small Pondweed	Cattail
70	4.0	M	P	3		X		X							X				
A	3.1	M	P	3							X				X				
B	3.5	M	P	3										X					
C	4.0	M	P	3												X			
D	4.5	M	P	3															
E	5.0	M	P	3															
99	11.5	S	R	No Recovery															
126	19.7	S	R	No Recovery															

Observers for this page: names and hours worked by each: Jacob Krueger
 Lakewoods Landing County: Bayfield Date: August 23, 2007
 Lake: Namakagon

Site #	Depth (ft)	Dominant sediment type Muck (M), sand (S), Rock (R)	Rake pole (P) or rake rope (R)	Comments	EWM	GLP	Northern Water Milfoil	Large Leaf Pondweed (Muskgrass)	Elodea	Creeping Pondweed	Water Margold	Clasping Leaf Pondweed	Wild Celery	Pickrel Weed	Hardstem Bullrush	Yellow Pond Lily	Coontail	Common Bladdervort	Small Pondweed	Cattail
208	15	S	R	No Recovery																
207	14	S	R	No Recovery																
206	14	S	R	No Recovery																
205	9.9	S	R	1			+													
204	10	S	R	1			+													
203	7.5	M	P	1				+												
202	7	M	P	2				+												
201	7	M	P	2				+			+									
161	1.5	S	P	2				+					+							
162	2	S	P	2									+							

Observers for this page: names and hours worked by each: Jacob Krueger

Lake: Namakagon County: Bayfield Date: June 21, 2007

4 Seasons Landing

Site #	Depth (ft)	Dominant sediment type	Muck (M), sand (S), Rock (R)	Rake pole (P) or rake rope (R)	comments	EWM	CLP	Northern Water Milfoil	Large Leaf Pondweed (Musk Grass)	Elodea	Creeping Pondweed	Flatstem Pondweed	Water Marigold	Clasping Leaf Pondweed	Wild Celery	Pickrel Weed	Hardstem Bullrush	Yellow Pond Lily	Coontail	Common Bladdernut	Small Pondweed	Catall		
199	3	M	P	3				+											+				x	
200	5.5	M	P	3			+							+										
158	6	M	P	3			+																	
127	0.5	M	P	3												+								
159	6.5	M	P	2												+								
160	5	M	P	3				+				+												
243	6.5	M	P	2																				
244	6.5	R	P	1																				
245	9.6	S	P	1																				
246	1.5	S	P	1																				

Observers for this page: names and hours worked by each: Jacob Krueger
 Lake: Namakagon 4 Seasons Bay County: Bayfield Date: July 18, 2007

Site #	Depth (ft)	Dominant sediment type Muck (M), Sand (S), Rock (R)	Comments rake pole (P) or rake rope (R)	CLP	Northern Water Milfoil	Large Leaf Pondweed (Musk Grass)	Elodea	Creeping Pondweed	Flats Pondweed	Water Marigold	Clasping Leaf Pondweed	Wild Celery	Pickrel Weed	Hardstem Bulrush	Coontail	Common Bladderwort	Small Pondweed	Watershield
586	10.3	SIM	R 2				X		X									
554	10.7	SIM	R 1				X		X									
519	9.2	SIM	R 1						X									
553	10.5	SIM	R 2						X									
518	9.7	SIM	P 1															
478	3.5	S	P 2															X
517	4.7	SIM	P 3															
551	9.9	SIM	R 1															
582	10.2	SIM	R 1															
617	2.8	M	P 3															
DECAYING ORGANIC MATTER																		

Observers for this page: names and hours worked by each: Jacob Krueger

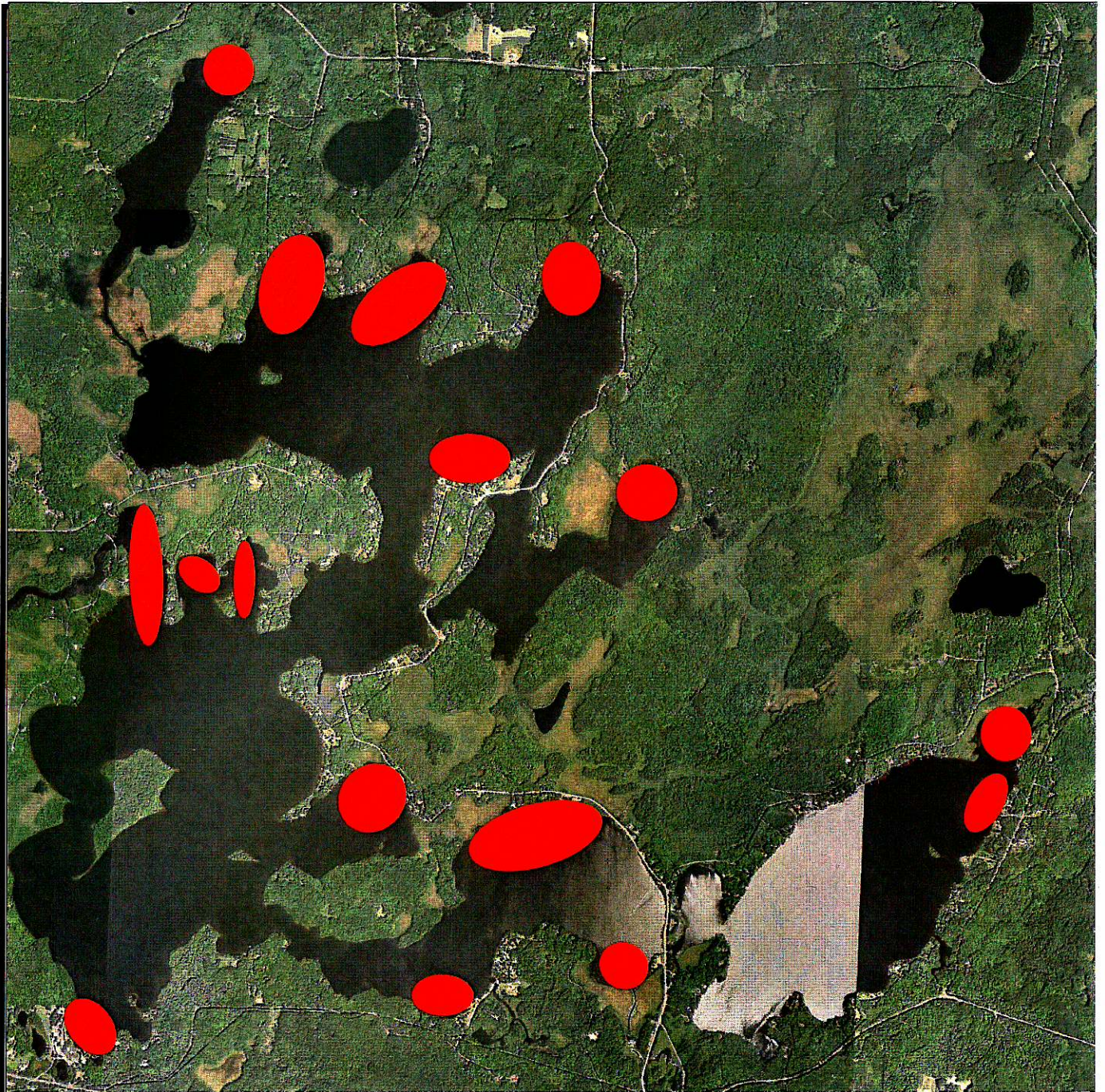
Lake: Namakagon Funny's Landing County: Bayfield Date: June 21, 2007

Site #		Depth (ft)	Dominant sediment type Muck (M), sand (S), Rock (R)	Rake pole (P) or rake rope (R)	Comments	EWM	CLP	Decaying Organic Matter																												
								Northern Water Milfoil	Large Leaf Pondweed (Musk Grass)	Elodea	Creeping Pondweed	Water Marigold	Flatstem Pondweed	Water Margold	Clasping Leaf Pondweed	Wild Celery	Prickel Weed	Hardstem Bullrush	Yellow Pond Lily	Coontail	Common Bladdernort	Small Pondweed	Waterfield	Waterstar Grass	Creeping Bladdernort											
617	3.0	M	P	3			X																													
582	9.5	M	P	2																																
551	10.0	M	R	1																																
517	5.0	M	P	3																																
478	3.5	S	P	2																																
518	10.2	S	R	3																																
519	9.1	S	P	3																																
553	9.3	S	P	2																																
554	10.3	S	R	2																																
586	10.5	S	R	2																																

Observers for this page: names and hours worked by each: Jacob Krueger
 Lake: Namakagon
 Funny's Landing
 County: Bayfield
 Date: August 22, 2007

Appendix B

Maps



 AREA CONTAINING SAMPLING POINTS

J:FIGURES/49062/SAMPLING LOCATIONS

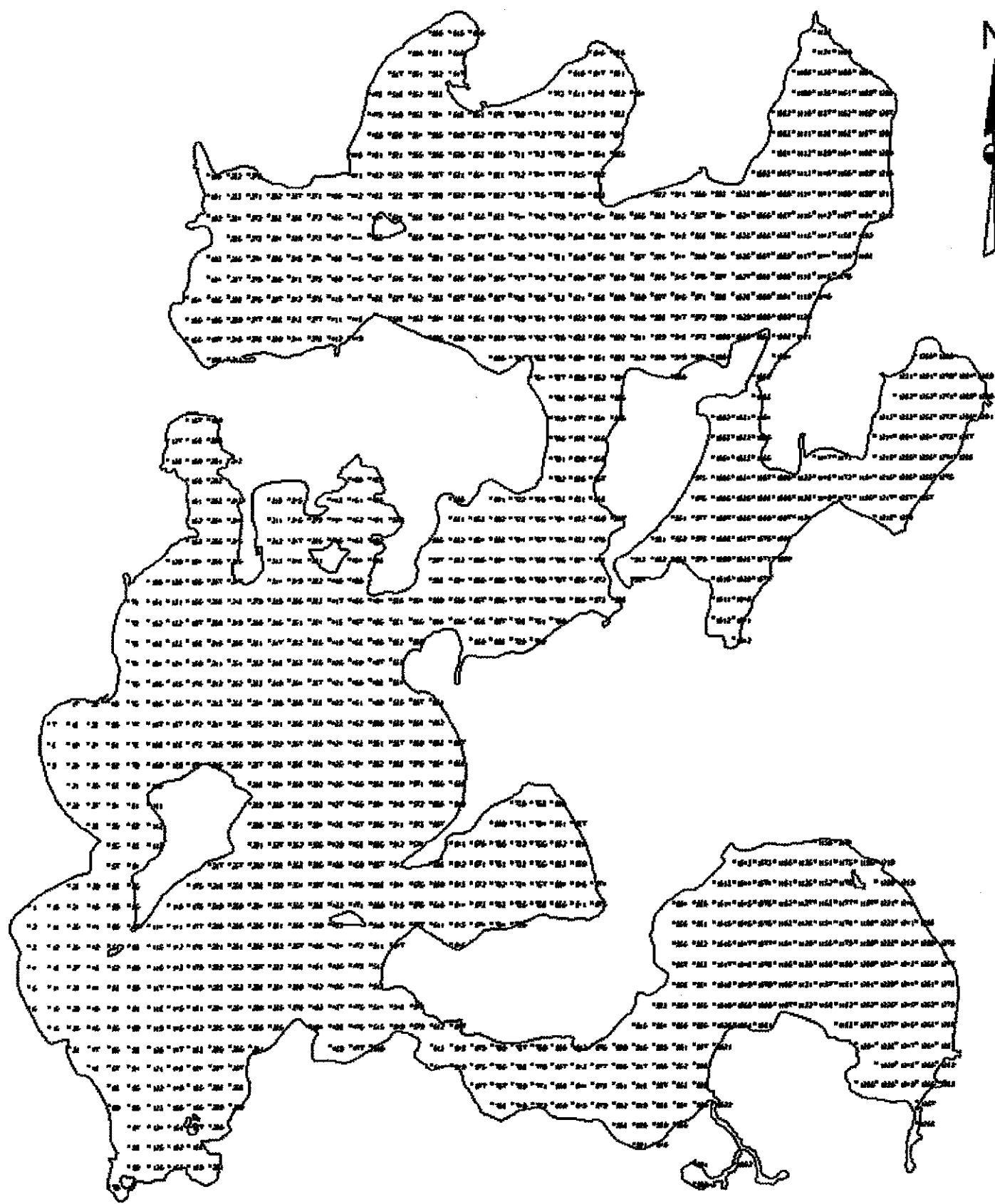


Hydrogeologists • Engineers • Environmental Scientists

LIESCH ENVIRONMENTAL SERVICES, INC.
6000 GISHOLT DRIVE, SUITE 203
MADISON, WI 53713

SAMPLING LOCATIONS

LAKE NAMAKAGONA QUATIC PLANT
INSPECTIONS 2007
CABLE, WISCONSIN



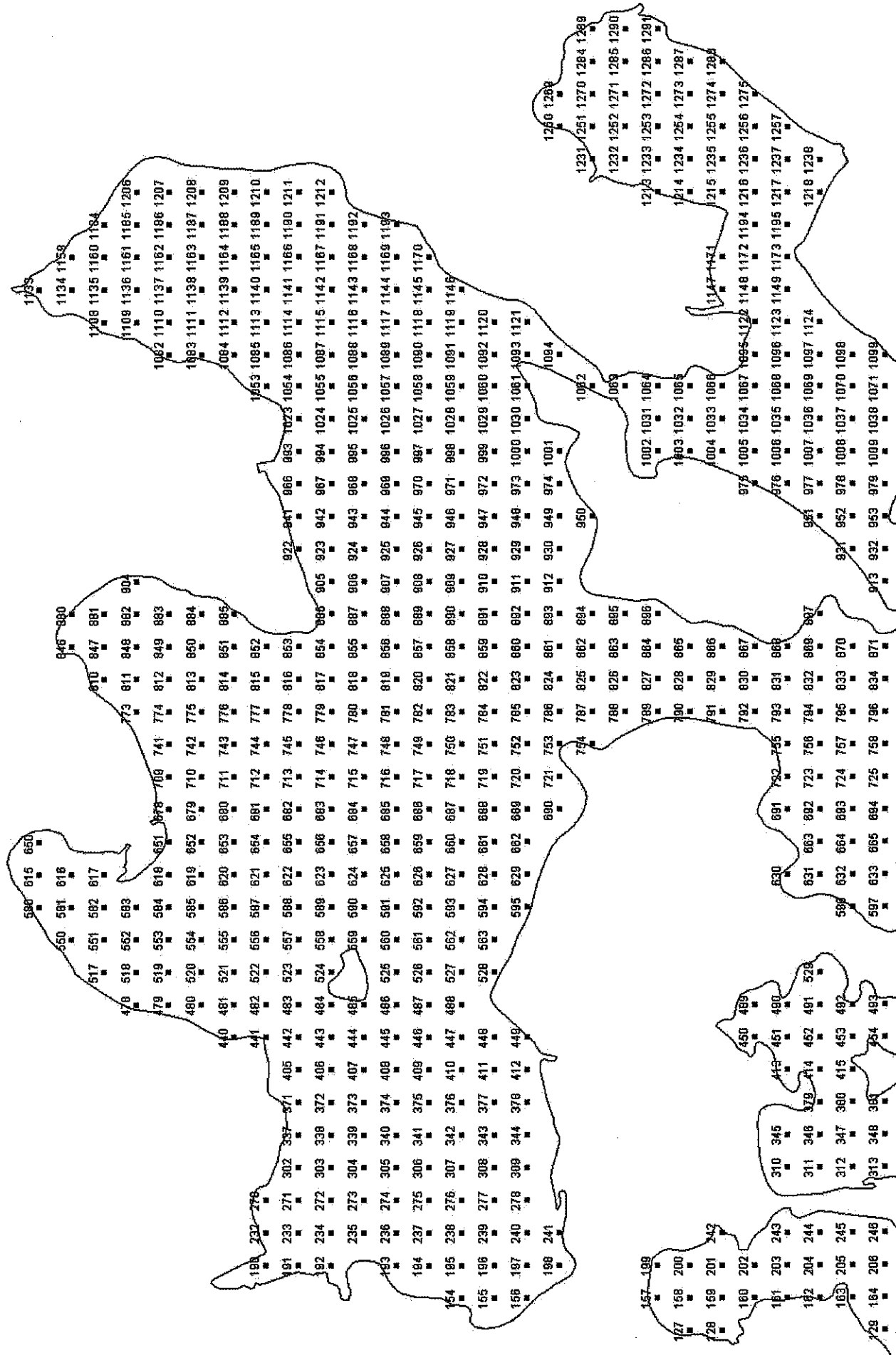
1291 Sampling Points
2607 Acres

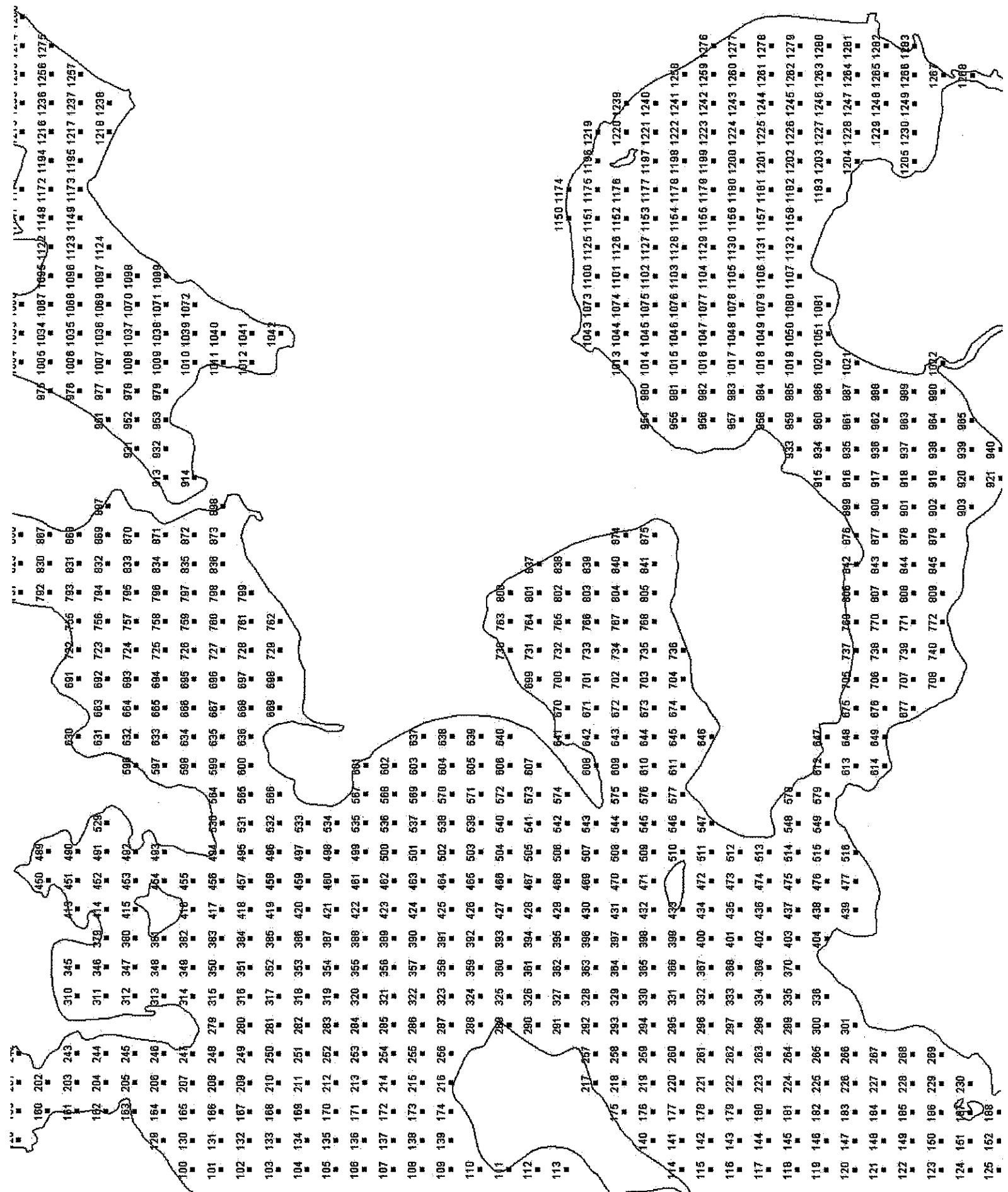
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Namekagon_poly.shp

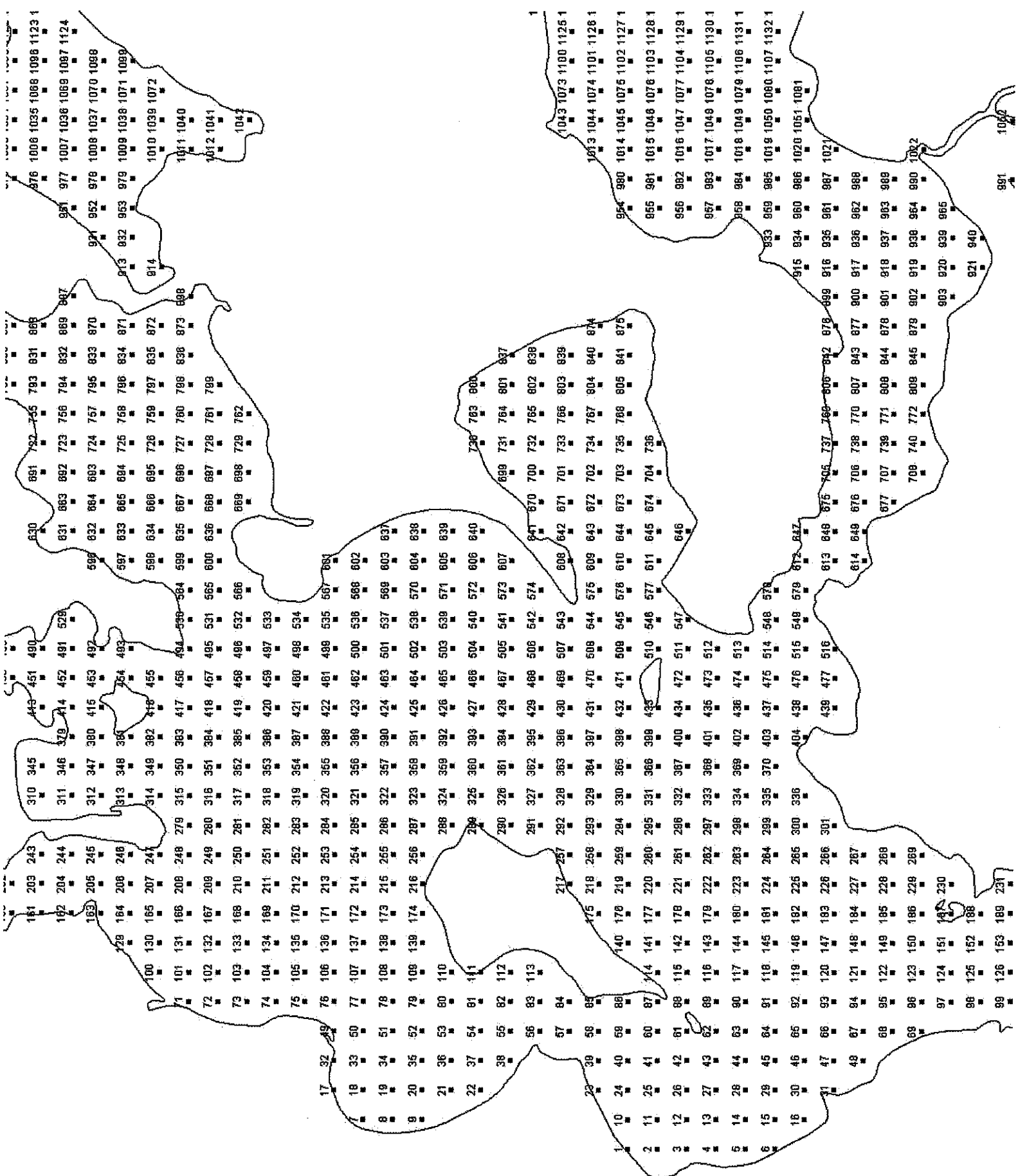
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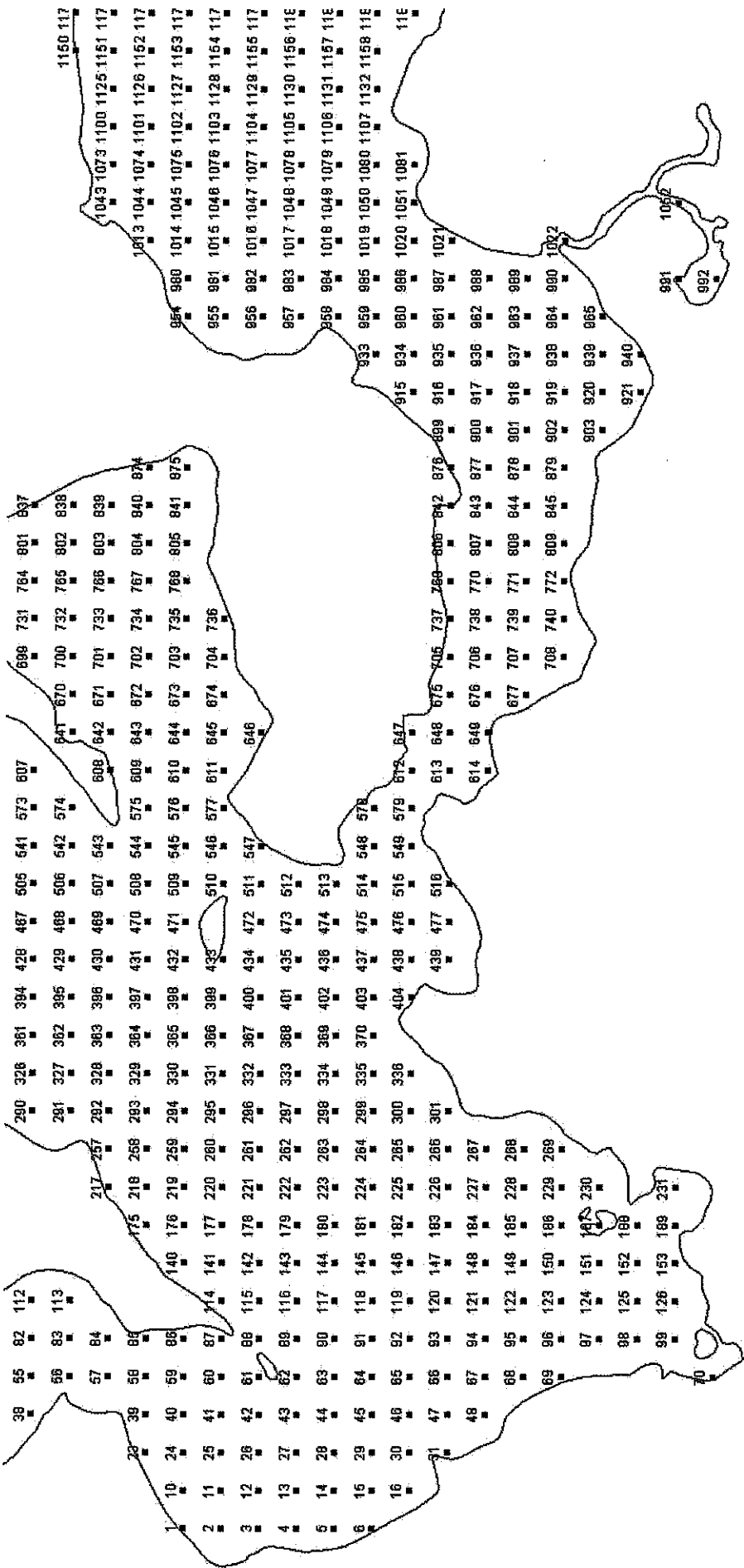
1 Miles

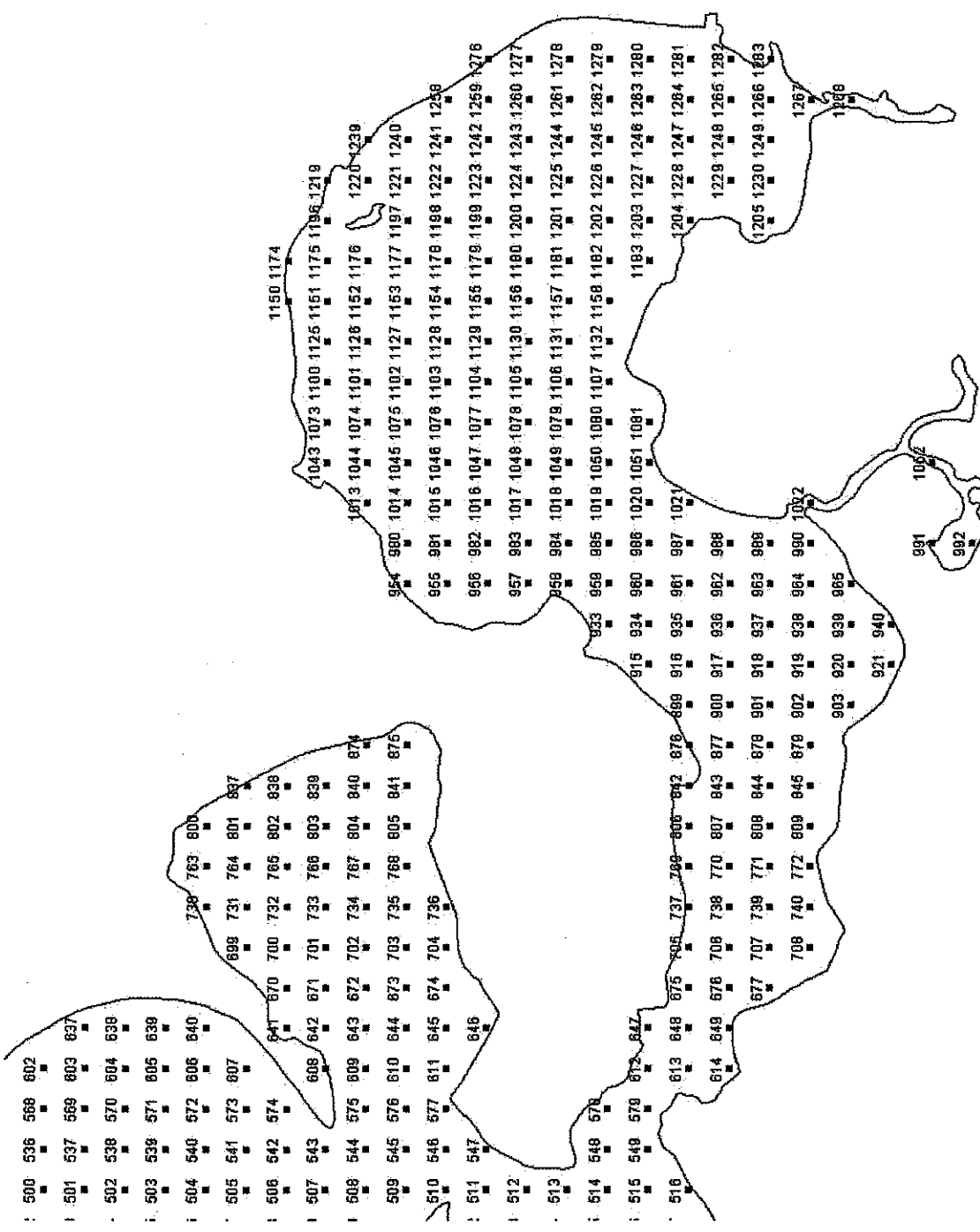


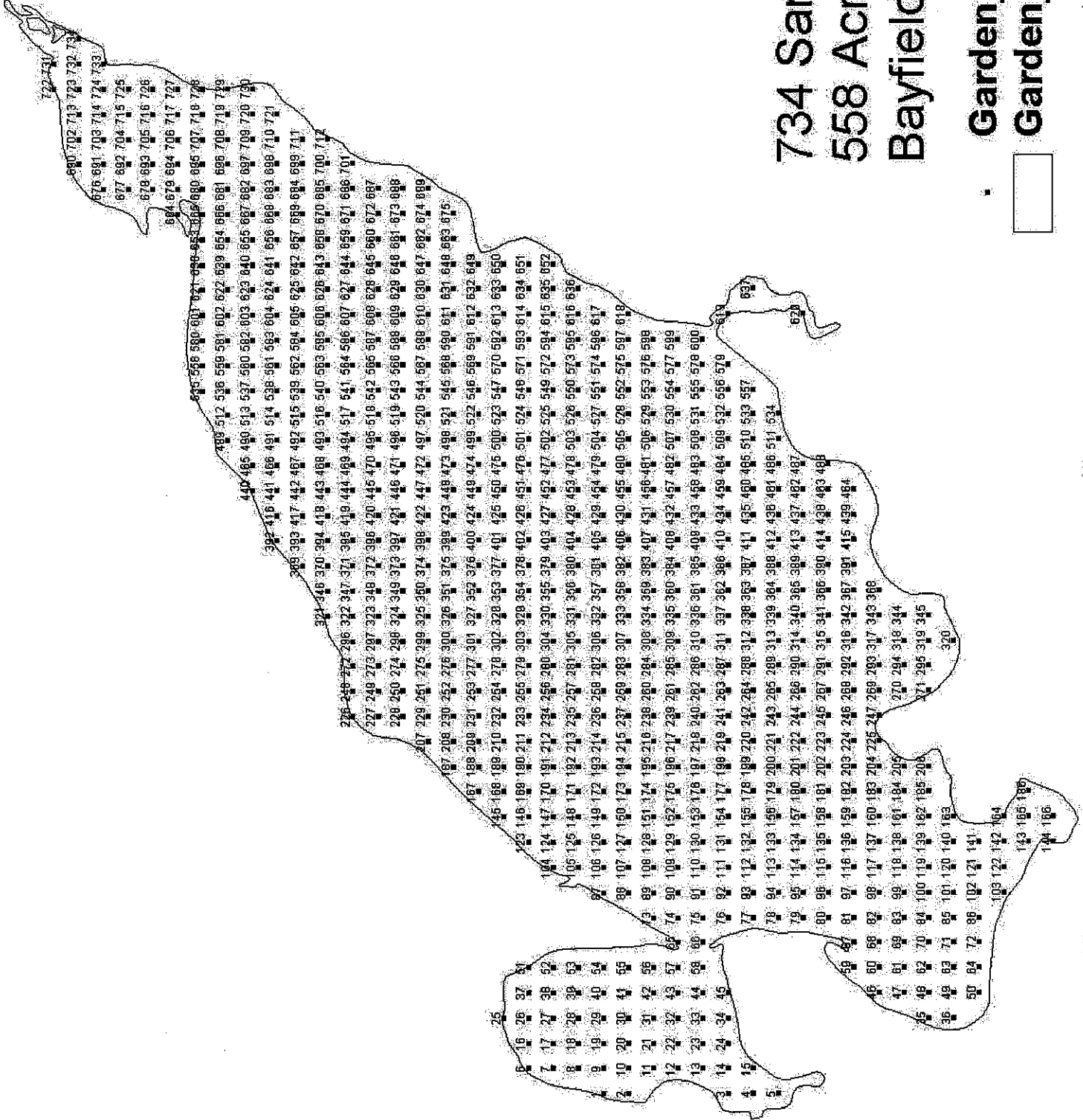












734 Sampling Points 558 Acres Bayfield County

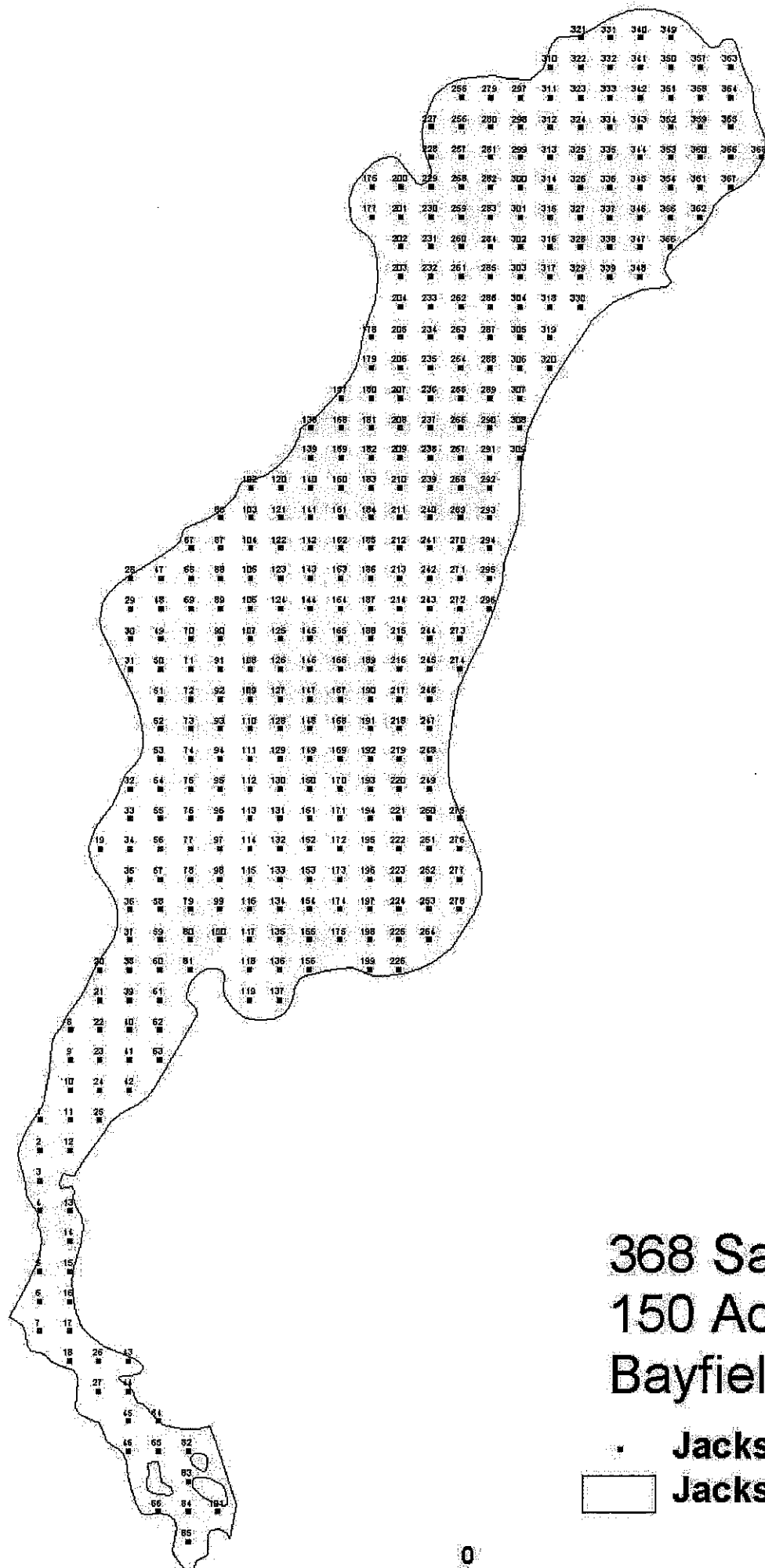
- Garden_Ik_55mpts.shp
- Garden_Ik_poly.shp

0.6

0

0.6 Miles

N



368 Sampling Points
150 Acres
Bayfield County

- Jackson_1k_40mpts.shp
- Jackson_1k_poly.shp

0.4

0

0.4 Miles



Appendix C

Lakewoods Marina Latitude and Longitude Coordinates

Corrdinates for Sampling Locations Within the Lakewoods Marina

<u>Point</u>	<u>Latitude</u>	<u>Longitude</u>
A	46° 11.938' N	91° 07.335' W
B	46° 11.926' N	91° 07.318' W
C	46° 11.906' N	91° 07.314' W
D	46° 11.918' N	91° 07.348' W
E	46° 11.899' N	91° 07.328' W

Appendix D

WDNR Predetermined Latitude and Longitude Coordinates

WDNR Predetermined Sampling Sites

<u>Lake</u>	<u>Location</u>	<u>Points</u>
	North Bay	
Jackson Lake		345, 353, 359, 358, 357, 363, 344, 343, 333
	Boat Launch	
Garden Lake		711, 712, 700, 685, 701, 686, 672, 699, 698, 682
	North Bay	
		705, 692, 671, 703, 704, 715, 714, 713, 724, 723
Namakagon Lake		
	Namakagon Chief Boat Launch	1283, 1266, 1267, 1249, 1230, 1205, 1265, 1247, 1227, 1202
	CTH D Boat Launch	1150, 1151, 1152, 1126, 1102, 1174, 1175, 1197, 1122, 1176
	Garmish Boat Launch	921, 920, 919, 902, 879, 903, 940, 939, 964, 965
	Lake Woods Boat Launch	97, 98, 99, 70, 126, 153
	Four Seasons Boat Launch	208, 207, 206, 205, 204, 203, 202, 201, 161, 162
	Chicago Avenue Boat Launch	950, 912, 930, 949, 974, 1000, 973, 949, 929, 911
	Federal Camp Ground Boat Launch	1111, 1110, 1137, 1109, 1136, 1161, 1108, 1135, 1134, 1159
	Funny's Boat Launch	586, 554, 519, 553, 518, 478, 517, 551, 582, 617
	Governors Island Bay	310, 311, 346, 379, 415, 454, 453, 452, 451, 450

WDNR Predetermined Sampling Sites

Mumm's Bay

733, 766, 803, 839, 732, 731, 730, 800, 801, 765

Sawmill Bay

880, 847, 811, 774, 742, 711, 743, 813, 849, 882

Sugar Bay

1250, 1269, 1270, 1252, 1233, 1253, 1272, 1286, 1290, 1289, 1291

4 Seasons Bay

199, 200, 158, 127, 159, 160, 243, 244, 245, 246

CTH D Bay

954, 980, 1014, 1044, 1074, 1101, 1073, 1100, 1125, 955

Funny's Bay

618, 584, 552, 583, 550, 581, 616, 580, 615, 650

Lake Namakagon Points Sampled

Attributes of Namekagon_90mpts.shp

Plotid	Plotrow	Plotcol	Xcoord	Ycoord	Easting	Northing	Latitude	Longitude
70	58	5	433372	636755	433372.4	636755.2	46.19886	-91.12279
97	55	6	433462	637025	433462.4	637025.2	46.2013	-91.12167
98	56	6	433462	636935	433462.4	636935.2	46.20049	-91.12165
99	57	6	433462	636845	433462.4	636845.2	46.19968	-91.12164
125	56	7	433552	636935	433552.4	636935.2	46.2005	-91.12049
126	57	7	433552	636845	433552.4	636845.2	46.19969	-91.12047
127	21	8	433642	640085	433642.4	640085.2	46.22886	-91.1199
153	57	8	433642	636845	433642.4	636845.2	46.1997	-91.1193
158	21	9	433732	640085	433732.4	640085.2	46.22887	-91.11873
159	22	9	433732	639995	433732.4	639995.2	46.22806	-91.11871
161	24	9	433732	639815	433732.4	639815.2	46.22644	-91.11868
162	25	9	433732	639725	433732.4	639725.2	46.22563	-91.11866
199	20	10	433822	640175	433822.4	640175.2	46.22969	-91.11758
200	21	10	433822	640085	433822.4	640085.2	46.22888	-91.11756
201	22	10	433822	639995	433822.4	639995.2	46.22807	-91.11755
202	23	10	433822	639905	433822.4	639905.2	46.22726	-91.11753
203	24	10	433822	639815	433822.4	639815.2	46.22645	-91.11751
204	25	10	433822	639725	433822.4	639725.2	46.22564	-91.1175
205	26	10	433822	639635	433822.4	639635.2	46.22483	-91.11748
206	27	10	433822	639545	433822.4	639545.2	46.22402	-91.11746
207	28	10	433822	639455	433822.4	639455.2	46.22321	-91.11745
208	29	10	433822	639365	433822.4	639365.2	46.2224	-91.11743
243	24	11	433912	639815	433912.4	639815.2	46.22646	-91.11635
244	25	11	433912	639725	433912.4	639725.2	46.22565	-91.11633
245	26	11	433912	639635	433912.4	639635.2	46.22484	-91.11631
246	27	11	433912	639545	433912.4	639545.2	46.22403	-91.1163
310	24	13	434092	639815	434092.4	639815.2	46.22649	-91.11401
311	25	13	434092	639725	434092.4	639725.2	46.22568	-91.114
346	25	14	434182	639725	434182.4	639725.2	46.22569	-91.11283
379	25	15	434272	639725	434272.4	639725.2	46.2257	-91.11166
415	26	16	434362	639635	434362.4	639635.2	46.2249	-91.11048
450	23	17	434452	639905	434452.4	639905.2	46.22734	-91.10936
451	24	17	434452	639815	434452.4	639815.2	46.22653	-91.10934
452	25	17	434452	639725	434452.4	639725.2	46.22572	-91.10933
453	26	17	434452	639635	434452.4	639635.2	46.22491	-91.10931
454	27	17	434452	639545	434452.4	639545.2	46.2241	-91.1093
478	4	18	434542	641615	434542.4	641615.2	46.24274	-91.1085
517	3	19	434632	641705	434632.4	641705.2	46.24356	-91.10735
518	4	19	434632	641615	434632.4	641615.2	46.24275	-91.10734
519	5	19	434632	641525	434632.4	641525.2	46.24194	-91.10732
550	2	20	434722	641795	434722.4	641795.2	46.24438	-91.1062
551	3	20	434722	641705	434722.4	641705.2	46.24357	-91.10619
552	4	20	434722	641615	434722.4	641615.2	46.24276	-91.10617
553	5	20	434722	641525	434722.4	641525.2	46.24195	-91.10615
554	6	20	434722	641435	434722.4	641435.2	46.24114	-91.10614
580	1	21	434812	641885	434812.4	641885.2	46.2452	-91.10505
581	2	21	434812	641795	434812.4	641795.2	46.24439	-91.10503
582	3	21	434812	641705	434812.4	641705.2	46.24358	-91.10502
583	4	21	434812	641615	434812.4	641615.2	46.24277	-91.105
584	5	21	434812	641525	434812.4	641525.2	46.24196	-91.10499

Lake Namakagon Points Sampled

615	1	22	434902	641885	434902.4	641885.2	46.24521	-91.10388
616	2	22	434902	641795	434902.4	641795.2	46.2444	-91.10387
617	3	22	434902	641705	434902.4	641705.2	46.24359	-91.10385
618	5	22	434902	641525	434902.4	641525.2	46.24197	-91.10382
650	1	23	434992	641885	434992.4	641885.2	46.24523	-91.10272
711	7	25	435172	641345	435172.4	641345.2	46.24039	-91.10028
730	39	25	435172	638465	435172.4	638465.2	46.21447	-91.09977
731	40	25	435172	638375	435172.4	638375.2	46.21366	-91.09975
732	41	25	435172	638285	435172.4	638285.2	46.21285	-91.09973
733	42	25	435172	638195	435172.4	638195.2	46.21204	-91.09972
742	6	26	435262	641435	435262.4	641435.2	46.24121	-91.09913
743	7	26	435262	641345	435262.4	641345.2	46.2404	-91.09912
765	41	26	435262	638285	435262.4	638285.2	46.21287	-91.09857
766	42	26	435262	638195	435262.4	638195.2	46.21206	-91.09855
774	5	27	435352	641525	435352.4	641525.2	46.24203	-91.09798
800	39	27	435352	638465	435352.4	638465.2	46.2145	-91.09743
801	40	27	435352	638375	435352.4	638375.2	46.21369	-91.09742
803	42	27	435352	638195	435352.4	638195.2	46.21207	-91.09739
811	4	28	435442	641615	435442.4	641615.2	46.24285	-91.09683
813	6	28	435442	641435	435442.4	641435.2	46.24123	-91.0968
839	42	28	435442	638195	435442.4	638195.2	46.21208	-91.09622
847	3	29	435532	641705	435532.4	641705.2	46.24367	-91.09568
849	5	29	435532	641525	435532.4	641525.2	46.24205	-91.09565
880	2	30	435622	641795	435622.4	641795.2	46.24449	-91.09453
882	4	30	435622	641615	435622.4	641615.2	46.24287	-91.0945
902	54	30	435622	637115	435622.4	637115.2	46.20238	-91.09369
903	55	30	435622	637025	435622.4	637025.2	46.20157	-91.09368
911	16	31	435712	640535	435712.4	640535.2	46.23317	-91.09314
912	17	31	435712	640445	435712.4	640445.2	46.23236	-91.09312
919	54	31	435712	637115	435712.4	637115.2	46.20239	-91.09253
920	55	31	435712	637025	435712.4	637025.2	46.20158	-91.09251
921	56	31	435712	636935	435712.4	636935.2	46.20077	-91.09249
929	16	32	435802	640535	435802.4	640535.2	46.23318	-91.09197
930	17	32	435802	640445	435802.4	640445.2	46.23237	-91.09195
938	54	32	435802	637115	435802.4	637115.2	46.2024	-91.09136
939	55	32	435802	637025	435802.4	637025.2	46.20159	-91.09134
940	56	32	435802	636935	435802.4	636935.2	46.20078	-91.09133
948	16	33	435892	640535	435892.4	640535.2	46.23319	-91.0908
949	17	33	435892	640445	435892.4	640445.2	46.23238	-91.09079
950	18	33	435892	640355	435892.4	640355.2	46.23157	-91.09077
954	44	33	435892	638015	435892.4	638015.2	46.21051	-91.09035
964	54	33	435892	637115	435892.4	637115.2	46.20242	-91.09019
965	55	33	435892	637025	435892.4	637025.2	46.20161	-91.09018
973	16	34	435982	640535	435982.4	640535.2	46.2332	-91.08964
974	17	34	435982	640445	435982.4	640445.2	46.23239	-91.08962
980	44	34	435982	638015	435982.4	638015.2	46.21053	-91.08919
1000	16	35	436072	640535	436072.4	640535.2	46.23321	-91.08847
1014	44	35	436072	638015	436072.4	638015.2	46.21054	-91.08802
1044	43	36	436162	638105	436162.4	638105.2	46.21136	-91.08687
1073	42	37	436252	638195	436252.4	638195.2	46.21218	-91.08572
1074	43	37	436252	638105	436252.4	638105.2	46.21137	-91.0857
1100	42	38	436342	638195	436342.4	638195.2	46.21219	-91.08455

Lake Namakagon Points Sampled

1101	43	38	436342	638105	436342.4	638105.2	46.21138	-91.08454
1102	44	38	436342	638015	436342.4	638015.2	46.21057	-91.08452
1108	3	39	436432	641705	436432.4	641705.2	46.24378	-91.08401
1109	4	39	436432	641615	436432.4	641615.2	46.24297	-91.08399
1110	5	39	436432	641525	436432.4	641525.2	46.24216	-91.08398
1111	6	39	436432	641435	436432.4	641435.2	46.24135	-91.08396
1125	42	39	436432	638195	436432.4	638195.2	46.2122	-91.08339
1126	43	39	436432	638105	436432.4	638105.2	46.21139	-91.08337
1134	2	40	436522	641795	436522.4	641795.2	46.24461	-91.08286
1135	3	40	436522	641705	436522.4	641705.2	46.2438	-91.08284
1136	4	40	436522	641615	436522.4	641615.2	46.24299	-91.08282
1137	5	40	436522	641525	436522.4	641525.2	46.24218	-91.08281
1150	41	40	436522	638285	436522.4	638285.2	46.21302	-91.08224
1151	42	40	436522	638195	436522.4	638195.2	46.21221	-91.08222
1152	43	40	436522	638105	436522.4	638105.2	46.2114	-91.0822
1159	2	41	436612	641795	436612.4	641795.2	46.24462	-91.08169
1161	4	41	436612	641615	436612.4	641615.2	46.243	-91.08166
1174	41	41	436612	638285	436612.4	638285.2	46.21303	-91.08107
1175	42	41	436612	638195	436612.4	638195.2	46.21222	-91.08105
1197	44	42	436702	638015	436702.4	638015.2	46.21061	-91.07985
1202	49	42	436702	637565	436702.4	637565.2	46.20656	-91.07978
1205	53	42	436702	637205	436702.4	637205.2	46.20332	-91.07971
1222	45	43	436792	637925	436792.4	637925.2	46.20981	-91.07867
1227	50	43	436792	637475	436792.4	637475.2	46.20577	-91.07859
1230	53	43	436792	637205	436792.4	637205.2	46.20334	-91.07855
1233	20	44	436882	640175	436882.4	640175.2	46.23007	-91.0779
1247	51	44	436882	637385	436882.4	637385.2	46.20497	-91.07741
1249	53	44	436882	637205	436882.4	637205.2	46.20335	-91.07738
1250	17	45	436972	640445	436972.4	640445.2	46.23251	-91.07678
1252	19	45	436972	640265	436972.4	640265.2	46.23089	-91.07675
1253	20	45	436972	640175	436972.4	640175.2	46.23008	-91.07674
1265	52	45	436972	637295	436972.4	637295.2	46.20417	-91.07623
1266	53	45	436972	637205	436972.4	637205.2	46.20336	-91.07621
1267	54	45	436972	637115	436972.4	637115.2	46.20255	-91.0762
1269	17	46	437062	640445	437062.4	640445.2	46.23252	-91.07562
1270	18	46	437062	640355	437062.4	640355.2	46.23171	-91.0756
1272	20	46	437062	640175	437062.4	640175.2	46.23009	-91.07557
1283	53	46	437062	637205	437062.4	637205.2	46.20337	-91.07505
1286	20	47	437152	640175	437152.4	640175.2	46.23011	-91.0744
1289	18	48	437242	640355	437242.4	640355.2	46.23174	-91.07327
1290	19	48	437242	640265	437242.4	640265.2	46.23093	-91.07325

Garden Lake Points Sampled

Attributes of Garden_lk_55mpts.shp

Plotid	Plotrow	Plotcol	Xcoord	Ycoord	Easting	Northing	Latitude	Longitude
672	15	36	439141	638173	439140.9	638173.2	46.21233	-91.04827
676	4	37	439196	638778	439195.9	638778.2	46.21778	-91.04766
682	10	37	439196	638448	439195.9	638448.2	46.21481	-91.04761
685	13	37	439196	638283	439195.9	638283.2	46.21333	-91.04758
686	14	37	439196	638228	439195.9	638228.2	46.21283	-91.04757
692	5	38	439251	638723	439250.9	638723.2	46.21729	-91.04694
698	11	38	439251	638393	439250.9	638393.2	46.21432	-91.04689
699	12	38	439251	638338	439250.9	638338.2	46.21383	-91.04688
700	13	38	439251	638283	439250.9	638283.2	46.21333	-91.04687
701	14	38	439251	638228	439250.9	638228.2	46.21284	-91.04686
703	4	39	439306	638778	439305.9	638778.2	46.21779	-91.04624
704	5	39	439306	638723	439305.9	638723.2	46.2173	-91.04623
705	6	39	439306	638668	439305.9	638668.2	46.2168	-91.04622
711	12	39	439306	638338	439305.9	638338.2	46.21383	-91.04616
712	13	39	439306	638283	439305.9	638283.2	46.21334	-91.04615
713	3	40	439361	638833	439360.9	638833.2	46.21829	-91.04554
714	4	40	439361	638778	439360.9	638778.2	46.2178	-91.04553
715	5	40	439361	638723	439360.9	638723.2	46.2173	-91.04552
724	4	41	439416	638778	439415.9	638778.2	46.21781	-91.04481
732	3	42	439471	638833	439470.9	638833.2	46.21831	-91.04411

Jackson Lake Points Sampled

Attributes of Jackson_lk_40mpts.shp

Plotid	Plotrow	Plotcol	Xcoord	Ycoord	Easting	Northing	Latitude	Longitude
321	1	19	434260	643121	434259.6	643120.8	46.25625	-91.11244
333	3	20	434300	643041	434299.6	643040.8	46.25554	-91.11191
343	4	21	434340	643001	434339.6	643000.8	46.25518	-91.11139
344	5	21	434340	642961	434339.6	642960.8	46.25482	-91.11138
345	6	21	434340	642921	434339.6	642920.8	46.25446	-91.11137
353	5	22	434380	642961	434379.6	642960.8	46.25483	-91.11086
357	2	23	434420	643081	434419.6	643080.8	46.25591	-91.11036
358	3	23	434420	643041	434419.6	643040.8	46.25555	-91.11035
359	4	23	434420	643001	434419.6	643000.8	46.25519	-91.11035
363	2	24	434460	643081	434459.6	643080.8	46.25592	-91.10984

Appendix E

Plant Species Sampled

NAMAKAGON CHAIN SPECIES SAMPLED

County Road D Boat Landing

Plant Species Sampled

Common waterweed, *Elodea canadensis*
Large Leaf Pondweed, *Potamogeton amplifolius*
Creeping Pondweed, *Ranunculus flammula*
Flatstem Pondweed, *Potamogeton spirillus*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Small Pondweed, *Potamogeton pusillus*
Coontail, *Ceratophyllum demersum*

County Road D Bay

Plant Species Sampled

Northern Water Millfoil, *Myriophyllum sibiricum*
Common waterweed, *Elodea canadensis*
Large Leaf Pondweed, *Potamogeton amplifolius*
Creeping Pondweed, *Ranunculus flammula*
Water Marigold, *Bidens beckii*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Small Pondweed, *Potamogeton pusillus*
Coontail, *Ceratophyllum demersum*

Namakagon Chief Landing

Plant Species Sampled

Northern Water Millfoil, *Myriophyllum sibiricum*
Common waterweed, *Elodea canadensis*
Large Leaf Pondweed, *Potamogeton amplifolius*
Creeping Pondweed, *Ranunculus flammula*
Flatstem Pondweed, *Potamogeton spirillus*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Wild Celery, *Vallisneria americana*
Pickerelweed, *Pontederia cordata*
Yellow Pond Lily, *Nuphar variegata*
Coontail, *Ceratophyllum demersum*
Water Marigold, *Bidens beckii*

Garden Lake Landing

Plant Species Sampled

Common waterweed, *Elodea canadensis*
Creeping Pondweed, *Ranunculus flammula*
Flatstem Pondweed, *Potamogeton spirillus*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Wild Celery, *Vallisneria Americana*
Coontail, *Ceratophyllum demersum*
Small Pondweed, *Potamogeton pusillus*
Northern Water Millfoil, *Myriophyllum sibiricum*

Garden Lake Bay

Plant Species Sampled

Northern Water Millfoil, *Myriophyllum sibiricum*
Flatstem Pondweed, *Potamogeton spirillus*
Wild Celery, *Vallisneria americana*
Yellow Pond Lily, *Nuphar variegata*
Coontail, *Ceratophyllum demersum*
Common waterweed, *Elodea canadensis*
Creeping Pondweed, *Ranunculus flammula*
Watersheild, *Brasenia schreberi*

Garmisch Landing

Plant Species Sampled

Common waterweed, *Elodea canadensis*
Flatstem Pondweed, *Potamogeton spirillus*
Northern Water Millfoil, *Myriophyllum sibiricum*
Large Leaf Pondweed, *Potamogeton amplifolius*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Yellow Pond Lily, *Nuphar variegata*
Creeping Pondweed, *Ranunculus flammula*

Lakewoods Landing

Plant Species Sampled

Northern Water Millfoil, *Myriophyllum sibiricum*
Common waterweed, *Elodea canadensis*
Large Leaf Pondweed, *Potamogeton amplifolius*
Flatstem Pondweed, *Potamogeton spirillus*

Clasping Leaf Pondweed, *Potamogeton richardsonii*
Wild Celery, *Vallisneria americana*
Yellow Pond Lily, *Nuphar variegata*
Coontail, *Ceratophyllum demersum*

Mumms Bay

Plant Species Sampled

Northern Water Millfoil, *Myriophyllum sibiricum*
Flatstem Pondweed, *Potamogeton spirillus*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Water Marigold, *Bidens beckii*
Coontail, *Ceratophyllum demersum*
Creeping Pondweed, *Ranunculus flammula*
Common Bladderwort, *Urticularia gibba*

Four Seasons Landing

Plant Species Sampled

Common waterweed, *Elodea canadensis*
Creeping Pondweed, *Ranunculus flammula*
Flatstem Pondweed, *Potamogeton spirillus*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Pickerelweed, *Pontederia cordata*
Hardstem Bullrush, *Scirpus acutus*
Yellow Pond Lily, *Nuphar variegata*
Coontail, *Ceratophyllum demersum*
Narrow-leaved cattail, *Typha angustifolia*
Small Pondweed, *Potamogeton pusillus*

Four Seasons Bay

Plant Species Sampled

Northern Water Millfoil, *Myriophyllum sibiricum*
Common waterweed, *Elodea canadensis*
Creeping Pondweed, *Ranunculus flammula*
Flatstem Pondweed, *Potamogeton spirillus*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Pickerelweed, *Pontederia cordata*
Hardstem Bullrush, *Scirpus acutus*
Coontail, *Ceratophyllum demersum*
Water Marigold, *Bidens beckii*
Narrow-leaved cattail, *Typha angustifolia*

Large Leaf Pondweed, *Potamogeton amplifolius*

Governors Island Bay Plant Species Sampled

Northern Water Millfoil, *Myriophyllum sibiricum*
Common waterweed, *Elodea canadensis*
Flatstem Pondweed, *Potamogeton spirillus*
Wild Celery, *Vallisneria americana*
Yellow Pond Lily, *Nuphar variegata*
Coontail, *Ceratophyllum demersum*
Common Bladderwort, *Urticularia gibba*
Water Marigold, *Bidens beckii*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Pickerelweed, *Pontederia cordata*
Creeping Bladderwort, *Urtica gibba*

Chicago Avenue Landing Plant Species Sampled

Common waterweed, *Elodea canadensis*
Creeping Pondweed, *Ranunculus flammula*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Small Pondweed, *Potamogeton pusillus*
Large Leaf Pondweed, *Potamogeton amplifolius*

Federal Campground Landing Plant Species Sampled

Northern Water Millfoil, *Myriophyllum sibiricum*
Common waterweed, *Elodea canadensis*
Large Leaf Pondweed, *Potamogeton amplifolius*
Creeping Pondweed, *Ranunculus flammula*
Flatstem Pondweed, *Potamogeton spirillus*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Wild Celery, *Vallisneria americana*
Small Pondweed, *Potamogeton pusillus*

Sugar Bay Plant Species Sampled

Northern Water Millfoil, *Myriophyllum sibiricum*

Common waterweed, *Elodea canadensis*
Flatstem Pondweed, *Potamogeton spirillus*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Wild Celery, *Vallisneria americana*
Pickerelweed, *Pontederia cordata*
Yellow Pond Lily, *Nuphar variegata*
Watersheild, *Brasenia schreberi*
Large Leaf Pondweed, *Potamogeton amplifolius*
Coontail, *Ceratophyllum demersum*
Creeping Bladderwort, *Urtica gibba*

Sawmill Bay

Plant Species Sampled

Large Leaf Pondweed, *Potamogeton amplifolius*
Flatstem Pondweed, *Potamogeton spirillus*
Wild Celery, *Vallisneria americana*
Water Marigold, *Bidens beckii*
Common waterweed, *Elodea canadensis*
Creeping Bladderwort, *Urtica gibba*

Funny's Landing

Plant Species Sampled

Northern Water Millfoil, *Myriophyllum sibiricum*
Common waterweed, *Elodea canadensis*
Large Leaf Pondweed, *Potamogeton amplifolius*
Creeping Pondweed, *Ranunculus flammula*
Flatstem Pondweed, *Potamogeton spirillus*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Small Pondweed, *Potamogeton pusillus*
Wild Celery, *Vallisneria americana*
Yellow Pond Lily, *Nuphar variegata*
Coontail, *Ceratophyllum demersum*
Water Marigold, *Bidens beckii*
Creeping Bladderwort, *Urtica gibba*
Watersheild, *Brasenia schreberi*
Water Stargrass, *Zosterella dubia*

Funny's Bay

Plant Species Sampled

Common waterweed, *Elodea canadensis*

Large Leaf Pondweed, *Potamogeton amplifolius*
Creeping Pondweed, *Ranunculus flammula*
Flatstem Pondweed, *Potamogeton spirillus*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Yellow Pond Lily, *Nuphar variegata*
Coontail, *Ceratophyllum demersum*
Water Marigold, *Bidens beckii*
Creeping Bladderwort, *Urtica gibba*

Jackson Lake Bay Plant Species Sampled

Northern Water Millfoil, *Myriophyllum sibiricum*
Common waterweed, *Elodea canadensis*
Flatstem Pondweed, *Potamogeton spirillus*
Creeping Pondweed, *Ranunculus flammula*
Clasping Leaf Pondweed, *Potamogeton richardsonii*
Wild Celery, *Vallisneria americana*
Pickerelweed, *Pontederia cordata*
Yellow Pond Lily, *Nuphar variegata*
Coontail, *Ceratophyllum demersum*
Common Bladderwort, *Urticularia gibba*
Watersheild, *Brasenia schreberi*
Creeping Spike Rush, *Eleocharis robbinsii*
Sedge, *Species....*