

Round Lake Landuse 2019

Land Use	Acreage	% of Total
Agricultural	12.31	0.5%
Forest and Grassland	75.01	3.1%
Government and Institutional	50.25	2.1%
Multi Family	41.38	1.7%
Office	3.44	0.1%
Public and Private Open Space	308.74	12.7%
Retail/Commercial	142.16	5.9%
Single Family	894.58	36.8%
Transportation	387.08	15.9%
Utility and Waste Facilities	0.00	0.0%
Water (229.98 acres Round Lake)	412.73	17.0%
Wetlands	99.99	4.1%
Total Acres	2427.66	100.0%

Land Use	Acreage	Runoff Coeff.	Estimated Runoff, acft.	% Total of Estimated Runoff
Agricultural	12.31	0.05	1.7	0.0%
Forest and Grassland	75.01	0.05	10.3	0.3%
Government and Institutional	50.25	0.50	69.1	2.0%
Multi Family	41.38	0.50	56.9	1.7%
Office	3.44	0.85	8.0	0.2%
Public and Private Open Space	308.74	0.15	127.4	3.7%
Retail/Commercial	142.16	0.85	332.3	9.8%
Single Family	894.58	0.30	738.0	21.7%
Transportation	387.08	0.85	904.8	26.6%
Utility and Waste Facilities	0.00	0.30	0.0	0.0%
Water	412.73	1.00	1135.0	33.4%
Wetlands	99.99	0.05	13.7	0.4%
TOTAL	2427.66		3397.3	100.0%

Lake volume

1986.64 acre-feet

Retention Time (years)= lake volume/runoff

0.58 years

213.44 days

Round Lake Shoreline Erosion Condition, 2019

Erosion Category	Length of Shoreline (ft)	Percent of Total Shoreline (%)
None	7393.2	35.9%
Slight	10219.2	49.6%
Moderate	2893.0	14.0%
Severe	115.8	0.6%
Total	20621.2	100.0%

Round Lake Shoreland Buffer Condition, 2019

Buffer Condition	Shoreline Length (ft)	Percent of Total Shoreline (%)
Good	1822.9	8.8%
Fair	659.7	3.2%
Poor	18138.6	88.0%
Total	20621.2	100.0%

Aquatic plant species found at 184 out of 265 sampling sites on Round Lake, August 2019.
Maximum depth that plants were found was 10.7 feet.

	American Pondweed	Brittle Naiad	Chara	Coontail	Curlyleaf Pondweed	Common Duckweed	Elodea	Eurasian Watermilfoil	Flatstem Pondweed	Giant Duckweed	Illinois Pondweed
Absent	259	241	224	154	256	262	251	98	256	263	228
Present	3	17	13	40	6	1	10	47	6	0	19
Common	1	6	13	32	0	2	3	22	3	2	10
Abundant	1	1	10	32	2	0	0	29	0	0	8
Dominant	1	0	5	7	1	0	1	69	0	0	0
% Plant Occurrence	2%	9%	15%	42%	3%	1%	5%	63%	3%	1%	14%

	Sago Pondweed	Slender Naiad	Southern Naiad	Spatterdock	Vallisneria	Watermeal	Water Stargrass	White Water Lily	Leafy Pondweed	Small Pondweed	Spiny Naiad
Absent	233	255	220	264	220	262	221	247	253	264	250
Present	18	8	28	1	19	2	22	9	8	1	9
Common	12	2	15	0	13	1	13	8	3	0	6
Abundant	2	0	2	0	12	0	8	1	1	0	0
Dominant	0	0	0	0	1	0	1	0	0	0	0
% Plant Occurrence	12%	4%	17%	0%	17%	1%	17%	7%	5%	0%	6%

Distribution of rake density on Round Lake across all sampled sites

Rank Density	# of Sites	% of Sites
No Plants	82	30.9
>0 - 10%	46	17.4
10-40%	16	6.0
40-60%	25	9.4
60-90%	50	18.9
>90%	47	17.7
Total Sites with plants	184	69.4
Total	265	100.0

Morphometric Features of Round Lake ~

Data From the July 2007 Bathymetric Survey, LCHD Lakes Management Unit

Contour (Feet)	Area Enclosed (Acres)	Percent of total acres	Volume (Acre-feet)	Depth Zone (Feet)	Area (Acres)	Percent (Depth zone to total acres)	Percent (Acre-feet to Total Volume)
0	229.71	100%	221.54	0 - 1	16.24	7.1%	11.1%
1	213.47	93%	204.45	1 - 2	17.90	7.8%	10.3%
2	195.57	85%	180.64	2 - 3	29.47	12.8%	9.1%
3	166.10	72%	154.52	3 - 4	22.89	10.0%	7.8%
4	143.22	62%	134.39	4 - 5	17.47	7.6%	6.8%
5	125.74	55%	117.48	5 - 6	16.35	7.1%	5.9%
6	109.40	48%	100.56	6 - 7	17.42	7.6%	5.1%
7	91.97	40%	86.65	7 - 8	10.54	4.6%	4.4%
8	81.44	35%	78.65	8 - 9	5.54	2.4%	4.0%
9	75.90	33%	73.65	9 - 10	4.47	1.9%	3.7%
10	71.43	31%	69.36	10 - 11	4.11	1.8%	3.5%
11	67.32	29%	65.42	11 - 12	3.77	1.6%	3.3%
12	63.55	28%	61.79	12 - 13	3.50	1.5%	3.1%
13	60.04	26%	58.36	13 - 14	3.36	1.5%	2.9%
14	56.69	25%	54.99	14 - 15	3.38	1.5%	2.8%
15	53.31	23%	51.53	15 - 16	3.55	1.5%	2.6%
16	49.76	22%	47.78	16 - 17	3.94	1.7%	2.4%
17	45.82	20%	43.20	17 - 18	5.18	2.3%	2.2%
18	40.64	18%	37.19	18 - 19	6.78	3.0%	1.9%
19	33.85	15%	30.43	19 - 20	6.72	2.9%	1.5%
20	27.13	12%	25.02	20 - 21	4.17	1.8%	1.3%
21	22.96	10%	21.19	21 - 22	3.49	1.5%	1.1%
22	19.47	8%	18.13	22 - 23	2.65	1.2%	0.9%
23	16.82	7%	15.74	23 - 24	2.13	0.9%	0.8%
24	14.69	6%	13.58	24 - 25	2.19	1.0%	0.7%
25	12.51	5%	11.11	25 - 26	2.74	1.2%	0.6%
26	9.77	4%	7.24	26 - 27	4.78	2.1%	0.4%
27	4.98	2%	2.97	27 - 28	3.64	1.6%	0.1%
28	1.35	0.6%	1.02	28 - 29	0.62	0.3%	0.1%
29	0.73	0.3%	0.32	29 - 30	0.68	0.3%	0.02%
30	0.05	0.02%	0.09	30+	0.05	0.02%	0.005%
			1989.00		229.71	100%	100%

Maximum Depth of Lake: 30.38 Feet

Average Depth of Lake: 8.66 Feet

Volume of Lake: 1989.00 Acre-Feet

Area of Lake: 229.71 Acres

Shoreline Length: 2.44 Miles

Water elevation at 762.72 feet above mean sea level



Lake County average Floristic Quality Index (FQI) ranking 2000-2019

RANK	LAKE NAME	FQI (w/A)	FQI (native)
1	Cedar Lake	37.4	38.9
2	East Loon Lake	34.7	36.1
3	Deep Lake	29.7	31.2
4	Cranberry Lake	29.7	29.7
5	Round Lake Marsh North	29.1	29.9
6	West Loon Lake	27.1	29.5
7	Sullivan Lake	26.9	28.5
8	Bangs Lake	26.2	27.8
9	Little Silver Lake	25.2	26.7
10	Round Lake	24.9	27.7
11	Independence Grove	24.4	26.8
12	Sun Lake	24.3	26.1
13	Redwing Slough	24.0	25.8
14	Schreiber Lake	23.9	24.8
15	Lakewood Marsh	23.8	24.7
16	Sterling Lake	23.6	25.4
17	Lake Marie	23.5	25.2
18	Pistakee Lake	23.5	25.2
19	Deer Lake	23.5	24.4
20	Druce Lake	23.3	26.6
21	Timber Lake (North)	23.2	24.9
22	Lake of the Hollow	23.0	24.8
23	Third Lake	22.7	25.1
24	Nippersink Lake (Fox Chain)	22.4	23.2
25	Countryside Glen Lake	21.9	22.8
26	Grass Lake	21.5	22.2
27	Davis Lake	21.4	21.4
28	Lake Charles	21.3	23.6
29	Fourth Lake	21.0	23.8
30	Lake Catherine	20.8	21.8
31	Cross Lake	20.7	18.7
32	Broberg Marsh	20.5	21.4
33	ADID 203	20.5	20.5
34	McGreal Lake	20.2	22.1
35	Fox Lake	20.2	21.2
36	Honey Lake	20.0	20.0
37	Lake Barrington	19.9	21.8
38	Lake Kathryn	19.6	20.7
39	Rollins Savannah 2	18.7	19.8
40	Turner Lake	18.6	21.2
41	Salem Lake	18.5	20.2
42	Duck Lake	18.3	19.2
43	Lake Minear	18.0	20.1
44	Wooster Lake	18.0	20.1
45	Old Oak Lake	18.0	19.1
46	Lake Helen	18.0	18.0
47	Lake Zurich	17.7	18.9
48	Redhead Lake	17.7	18.7
49	Hendrick Lake	17.7	17.7
50	Long Lake	17.7	15.8
51	Gages Lake	17.3	20.1
52	Highland Lake	17.3	20.0
53	Grandwood Park Lake	17.2	19.0
54	Seven Acre Lake	17.0	15.5
55	Petite Lake	16.8	18.7
56	Lake Miltmore	16.8	18.7
57	Grays Lake	16.8	18.7
58	Channel Lake	16.8	18.7
59	Windward Lake	16.3	17.6
60	Almond Marsh	16.3	17.3

Lake County average Floristic Quality Index (FQI) ranking 2000-2019

61	Owens Lake	16.3	17.3
62	Butler Lake	16.1	18.1
63	Dunns Lake	15.9	17.0
64	Dog Bone Lake	15.7	15.7
65	Osprey Lake	15.5	17.3
66	Ames Pit	15.1	17.6
67	North Churchill Lake	15.0	15.0
68	Forest Lake	14.8	15.9
69	Dog Training Pond	14.7	15.9
70	Summerhill Estates Lake	14.5	15.5
71	Grand Ave Marsh	14.3	16.3
72	Nippersink Lake	14.3	16.3
73	Taylor Lake	14.3	16.3
74	Manning's Slough	14.1	16.3
75	Spring Lake	14.0	15.2
76	Dugdale Lake	14.0	15.1
77	Eagle Lake (S1)	14.0	15.1
78	Tower Lake	14.0	14.0
79	Hastings Lake	14.0	15.1
80	Lake Matthews	13.9	15.5
81	Longview Meadow Lake	13.9	13.9
82	Fischer Lake	13.6	14.7
83	Sand Lake	13.6	15.4
84	Bishop Lake	13.4	15.0
85	Mary Lee Lake	13.1	15.1
86	Old School Lake	13.1	15.1
87	Waterford Lake	13.1	14.3
88	Crooked Lake	13.0	14.3
89	Acorn Lake	13.0	13.0
90	Lake Tranquility (S1)	12.6	12.6
91	Potomac Lake	12.5	12.5
92	Stone Quarry Lake	12.5	12.5
93	Buffalo Creek Reservoir 1	12.5	11.4
94	Buffalo Creek Reservoir 2	12.5	11.4
95	Kemper Lake 1	12.2	13.4
96	Lake Leo	12.1	14.3
97	Lambs Farm Lake	12.1	14.3
98	Stockholm Lake	12.1	13.5
99	McDonald Lake 1	12.1	12.1
100	Pond-A-Rudy	12.1	12.1
101	Bresen Lake	12.0	13.9
102	Grassy Lake	12.0	12.0
103	Flint Lake Outlet	11.8	13.0
104	Rivershire Pond 2	11.5	13.3
105	Albert Lake	11.5	10.3
106	Deer Lake Meadow Lake	11.4	12.5
107	Hook Lake	11.3	13.4
108	Briarcrest Pond	11.2	12.5
109	Lake Naomi	11.2	12.5
110	Pulaski Pond	11.2	12.5
111	Lake Napa Suwe	11.0	11.0
112	Redwing Marsh	11.0	11.0
113	West Meadow Lake	11.0	11.0
114	Nielsen Pond	10.7	12.0
115	Lake Holloway	10.6	10.6

Lake County average Floristic Quality Index (FQI) ranking 2000-2019

116	Sylvan Lake	10.6	10.6
117	Echo Lake	10.4	10.4
118	College Trail Lake	10.0	10.0
119	Valley Lake	9.9	9.9
120	Beaver Lake	9.9	9.9
121	Werhane Lake	9.8	12.0
122	Fish Lake	9.6	10.6
123	Lake Carina	9.5	12.5
124	Columbus Park Lake	9.2	9.2
125	Lake Lakeland Estates	9.2	9.2
126	Lake Linden	9.2	9.2
127	Bluff Lake	9.1	11.0
128	Big Bear Lake	9.1	11.0
129	Lake Fairfield	9.0	10.4
130	Heron Pond	8.6	9.9
131	Des Plaines Lake	8.6	9.9
132	Kemper Lake 2	8.5	9.8
133	Lake Christa	8.5	9.8
134	Lake Farmington	8.5	9.8
135	Lucy Lake	8.5	9.8
136	Antioch Lake	8.5	8.5
137	East Meadow Lake	8.5	8.5
138	Loch Lomond	8.5	8.5
139	South Churchill Lake	8.5	8.5
140	Lake Fairview	8.5	6.9
141	Timber Lake (South)	8.5	6.9
142	Lake Louise	8.4	8.4
143	Bittersweet Golf Course #13	8.1	8.1
144	Rollins Savannah 1	8.0	8.0
145	Countryside Lake	7.7	11.5
146	Banana Pond	7.5	9.2
147	Fairfield Marsh	7.5	8.7
148	Lake Eleanor	7.5	8.7
149	Slocum Lake	7.1	5.8
150	Lucky Lake	7.0	7.0
151	North Tower Lake	7.0	7.0
152	Lake Forest Pond	6.9	8.5
153	Little Bear Lake	6.9	9.9
154	Ozaukee Lake	6.7	8.7
155	Leisure Lake	6.4	9.0
156	Peterson Pond	6.0	8.5
157	International Mining & Chemical Lake	5.0	7.1
158	ADID 127	5.0	5.0
159	Island Lake	5.0	5.0
160	Liberty Lake	5.0	5.0
161	Lochanora Lake	5.0	5.0
162	Oak Hills Lake	5.0	5.0
163	Slough Lake	5.0	5.0
164	Diamond Lake	3.7	5.5
165	Sand Pond (IDNR)	3.5	5.0
166	Harvey Lake	3.3	5.0
167	Half Day Pit	2.9	5.0
168	Hidden Lake	0.0	0.0
169	McDonald Lake 2	0.0	0.0
170	St. Mary's Lake	0.0	0.0
171	White Lake	0.0	0.0
172	Willow Lake	0.0	0.0
173	Woodland Lake	0.0	0.0
	<i>Mean</i>	14.0	15.0
	<i>Median</i>	13.3	14.5

Lake County average Floristic Quality Index (FQI) ranking 2000-2019

Lake County Average TSI phosphorus (TSIp) ranking 2000-2019.

RANK	LAKE NAME	TP AVE	TSIp
1	Sterling Lake	0.0110	38.73
2	Lake Carina	0.0110	38.73
3	Independence Grove	0.0130	40.38
4	Cedar Lake	0.0130	41.14
5	Highland Lake	0.0140	42.21
6	Windward Lake	0.0160	44.13
7	Lake Minear	0.0164	44.49
8	Sand Pond (IDNR)	0.0165	44.57
9	West Loon	0.0170	45.00
10	Gages Lake	0.0170	45.00
11	Pulaski Pond	0.0180	45.83
12	Ames Pit	0.0190	46.61
13	Round Lake	0.0190	46.61
14	Banana Pond	0.0200	47.35
15	Lake Kathryn	0.0200	47.35
16	Lake Zurich	0.0210	48.05
17	Lake Miltmore	0.0210	47.80
18	Cross Lake	0.0216	48.46
19	Dog Training Pond	0.0220	48.72
20	Sun Lake	0.0220	48.72
21	Deep Lake	0.0230	49.36
22	Lake of the Hollow	0.0230	49.36
23	Stone Quarry Lake	0.0230	49.36
24	Timber Lake (North)	0.0232	49.49
25	Third Lake	0.0242	50.10
26	Bangs Lake	0.0260	51.13
27	Lake Leo	0.0260	51.13
28	Grays Lake	0.0260	51.13
29	Druce Lake	0.0270	51.68
30	Lake Barrington	0.0270	51.68
31	Cranberry Lake	0.0270	51.68
32	Dugdale Lake	0.0270	51.68
33	Peterson Pond	0.0270	51.68
34	Fourth Lake	0.0270	51.68
35	Sand Lake	0.0272	51.78
36	Little Silver Lake	0.0280	52.20
37	Wooster Lake	0.0290	52.71
38	Heron Pond	0.0298	53.10
39	Lambs Farm Lake	0.0310	53.67
40	Old School Lake	0.0310	53.67
41	Harvey Lake	0.0320	54.13
42	Butler Lake	0.0324	54.31
43	Hendrick Lake	0.0340	55.00
44	Little Bear Lake	0.0358	55.74
45	Sullivan Lake	0.0370	56.22
46	Diamond Lake	0.0390	56.98
47	East Loon	0.0400	57.34
48	Schreiber Lake	0.0400	57.34
49	Hook Lake	0.0410	57.70
50	Lake Tranquility (S1)	0.0412	57.77
51	Lake Linden	0.0420	58.05
52	Nielsen Pond	0.0450	59.04