



Minnesota Pollution Control Agency

520 Lafayette Road
St. Paul, MN 55155-4194

Pelican Lake, Crow Wing County

National Lake Assessment Project (NLAP)

Sample Date: July 11, 2007

Minnesota Lake ID: 18-0308

Area: 8,342 acres

Watershed Area: 18,262 acres

Ecoregion: Northern Lakes and Forests (NLF)

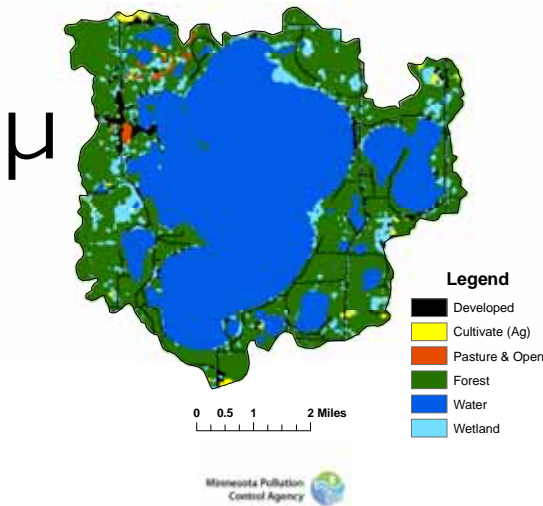
NLAP ID: 0238

Maximum Depth: 104 ft

Mean Depth: 60 ft



Pelican Lake Land Use



Land Use	Pelican Lake Land Use %	NLF Typical Land Use %
Developed	4	0 – 7
Cultivated (Ag)	1	<1
Pasture & Open	1	0 – 6
Forest	38	54 – 87
Water & Wetland	56	14 – 31
Feedlots (#)	0	

Minnesota 2000 Landsat Landcover Classification.img

University of Minnesota Remote & Geospatial Analysis Lab

Pelican Lake 2007 as compared to typical range for NLF ecoregion reference lakes. Single NLAP visit based on U.S. Environmental Protection Agency protocol as compared to typical range for summer-means. Data from Minnesota Department of Health (MDH) laboratory.

Parameter	Pelican Lake	NLF
Number of reference lakes	1	32
Total Phosphorus (µg/L)	8	14 – 27
Chlorophyll-a (µg/L)	2.22	4 – 10
Secchi Disk (feet)	3.3	8 -15
(meters)	1.0	2.4 – 4.6
Total Kjeldahl Nitrogen (mg/L)	0.43	0.4 – 0.75
Alkalinity (mg/L)	110	40 – 140
Color (Pt-Co U)	5	10 – 35
pH (SU)	8.3	7.2 – 8.3
Chloride (mg/L)	2.3	0.6 – 1.2
Total Suspended Solids (mg/L)	<1	<1 – 2
Total Suspended Inorganic Solids (mg/L)	<1	<1 - 2
Conductivity (umhos/cm)	146	50 – 250
TN:TP ratio	54:1	25:1 - 35:1
Microcystin(µg/L)	Near Shore	<10 Low Risk
WHO risk Category*	Index Site	10-20 Moderate Risk
	<0.15	20- 200 High Risk

* Guidelines for safe recreational water environments (World Health Organization, 2003)

µg/L = micrograms per liter
 mg/L = milligrams per liter
 umhos/cm = micromhos per centimeter

Pt-Co-U = Platinum Cobalt Units
 SU = Standard Units

Mixing Status: thermally stratified (dimictic)

Temperature and Dissolved Oxygen for Pelican Lake. July 11, 2007. Temp. (C) and DO (mg/L)

