



# Minnesota Pollution Control Agency

520 Lafayette Road  
St. Paul, MN 55155-4194

# Pickereel Lake, Becker County

National Lake Assessment Project (NLAP)

Sample Date: July 31, 2007

**Minnesota Lake ID:** 03-0287

**Area:** 344 acres

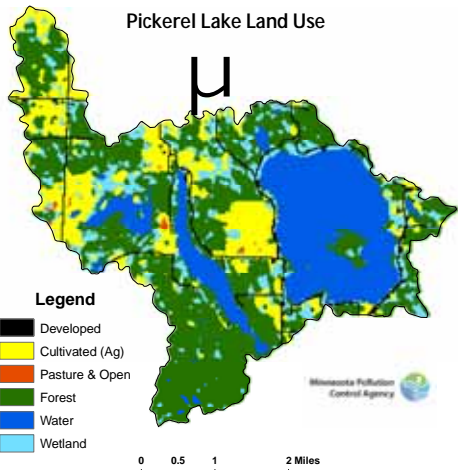
**Watershed Area:** 4,420 acres

**Ecoregion:** Northern Lakes and Forests (NLF)

**NLAP ID:** 0110

**Maximum Depth:** 74 ft

**Mean Depth:** 40 ft



Minnesota 2000 Level 1 Landsat Landcover Classification.img  
University of Minnesota Remote & Geospatial Analysis Lab

Land Use	Pickereel Lake Land Use %	NLF Typical Land Use %
Developed	4	0 – 7
Cultivated (Ag)	16	<1
Pasture & Open	0	0 – 6
Forest	43	54 – 87
Water & Wetland	36	14 – 31
Feedlots (#)	1	

**Pickerel 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	Pickerel Lake	NLF
Number of reference lakes	1	32
Total Phosphorus (µg/L)	9	14 – 27
Chlorophyll-a (µg/L)	2	4 – 10
Secchi Disk (feet)	12.5	8 -15
(meters)	3.8	2.4 – 4.6
Total Kjeldahl Nitrogen (mg/L)	0.61	0.4 – 0.75
Alkalinity (mg/L)	130	40 – 140
Color (Pt-Co U)	5	10 – 35
pH (SU)	8.6	7.2 – 8.3
Chloride (mg/L)	3.3	0.6 – 1.2
Total Suspended Solids (mg/L)	1	<1 – 2
Total Suspended Inorganic Solids (mg/L)	0.2	<1 - 2
Conductivity (umhos/cm)	185	50 – 250
TN:TP ratio	68:1	25:1 - 35:1
Microcystin(µg/L)	Near Shore	<10 Low Risk
WHO risk Category*	Index Site <0.15	10-20 Moderate Risk 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 Profile for  
 Pickerel Lake. July 31, 2007.  
 Temp. (C) and DO (mg/L)**

