



# Minnesota Pollution Control Agency

520 Lafayette Road  
St. Paul, MN 55155-4194

# Lost Lake, St. Louis County

National Lake Assessment Project (NLAP)

Sample Date: July 20, 2007

**Minnesota Lake ID:** 69-0611

**Area:** 81 acres

**Watershed Area:** 6,966 acres

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

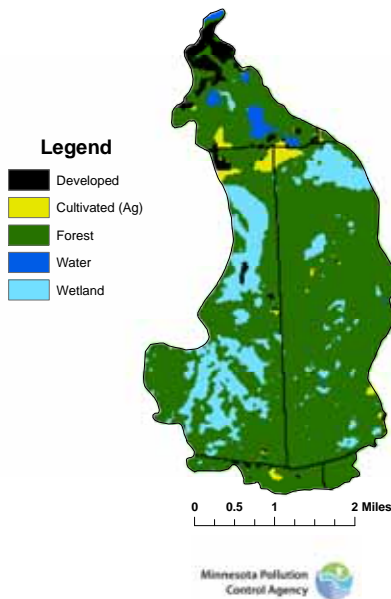
**NLAP ID:** 0318

**Maximum Depth:** 18 ft

**Mean Depth:** 13 ft



## Lost Lake Land Use



μ

Land Use	Lost Lake Land Use %	NLF Typical Land Use %
<b>Developed</b>	<b>5</b>	<b>0 – 7</b>
<b>Cultivated (Ag)</b>	<b>2</b>	<b>&lt;1</b>
<b>Pasture &amp; Open</b>	<b>0</b>	<b>0 – 6</b>
<b>Forest</b>	<b>77</b>	<b>54 – 87</b>
<b>Water &amp; Wetland</b>	<b>16</b>	<b>14 – 31</b>
<b>Feedlots (#)</b>	<b>0</b>	

Minnesota 2000 Level 1 Landsat Landcover Classification.img  
Minnesota Remote and Geospatial Analysis Lab

**Lost 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.**

Parameter	Lost Lake	NLF
Number of reference lakes	1	32
Total Phosphorus (µg/L)	43	14 – 27
Chlorophyll-a (µg/L)	14	4 – 10
Secchi Disk (feet)	5.6	8 -15
(meters)	1.7	2.4 – 4.6
Total Kjeldahl Nitrogen (mg/L)	0.8	0.4 – 0.75
Alkalinity (mg/L)		40 – 140
Color (Pt-Co U)	23	10 – 35
pH (SU)	9.0	7.2 – 8.3
Chloride (mg/L)	37	0.6 – 1.2
Total Suspended Solids (mg/L)		<1 – 2
Total Suspended Inorganic Solids (mg/L)		<1 - 2
Conductivity (umhos/cm)	366	50 – 250
TN:TP ratio	20:1	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

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

umhos/cm = micromhos per centimeter

**Mixing Status: thermally stratified (dimictic)**

**Temperature and Dissolved Oxygen Profile for Lost Lake. July 20, 2007.**  
 Temp (C) and DO (mg/L)

