



# Minnesota Pollution Control Agency

520 Lafayette Road  
St. Paul, MN 55155-4194

# North Ash Lake, Lincoln County

National Lake Assessment Project (NLAP)

Sample Date: July 10, 2007

**Minnesota Lake ID:** 41-0055

**Area:** 84 acres

**Watershed Area:** 3,778 acres

**Ecoregion:** Northern Glaciated Plains (NGP)

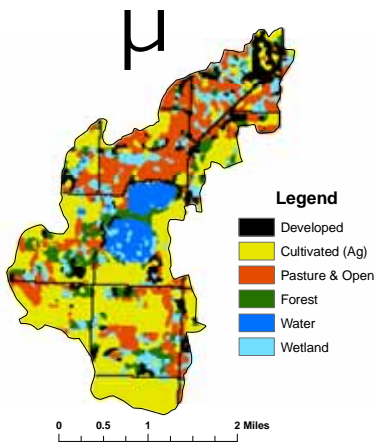
**NLAP ID:** 1111

**Maximum Depth:** 3.5 ft

**Mean Depth:** 3 ft



North Ash Lake Land Use



Land Use	N. Ash Lake Land Use %	NGP Typical Land Use %
<b>Developed</b>	<b>13</b>	<b>0 – 2</b>
<b>Cultivated (Ag)</b>	<b>38</b>	<b>60 – 82</b>
<b>Pasture &amp; Open</b>	<b>23</b>	<b>5 – 15</b>
<b>Forest</b>	<b>8</b>	<b>0 – 1</b>
<b>Water &amp; Wetland</b>	<b>18</b>	<b>8 – 26</b>
<b>Feedlots (#)</b>	<b>5</b>	

Minnesota 2000 Level 1 Landsat Landcover  
Classification.img

University of Minnesota Remote & Geospatial Analysis Lab

**North Ash Lake 2007 as compared to typical range for NGP ecoregion reference lakes. Single NLAP visit based on U.S. Environmental Protection Agency protocol as compared to typical range for summer-means.**

Parameter	North Ash	NGP
Number of reference lakes	1	13
Total Phosphorus (µg/L)	193	122 – 160
Chlorophyll mean (µg/L)	46	36 – 61
Secchi Disk (feet)	1	1.3 - 2.6
(meters)	0.3	0.4 – 0.8
Total Kjeldahl Nitrogen (mg/L)	1.5	1.8 – 2.3
Alkalinity (mg/L)		160 – 260
Color (Pt-Co U)	18	20 – 30
pH (SU)	8.1	8.3 – 8.6
Chloride (mg/L)	13	11 - 18
Total Suspended Solids (mg/L)		10 – 30
Total Suspended Inorganic Solids (mg/L)		5 – 15
Conductivity (umhos/cm)	828	640 – 900
TN:TP ratio	8:1	13:1 - 17:1
Microcystin(µg/L)	Near Shore	<10 Low Risk
WHO risk Category*	Index Site	10-20 Moderate Risk
	4.9	3.5
		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: mixed with no temperature layer (polymictic)**

