Musquash Lake, Cook County

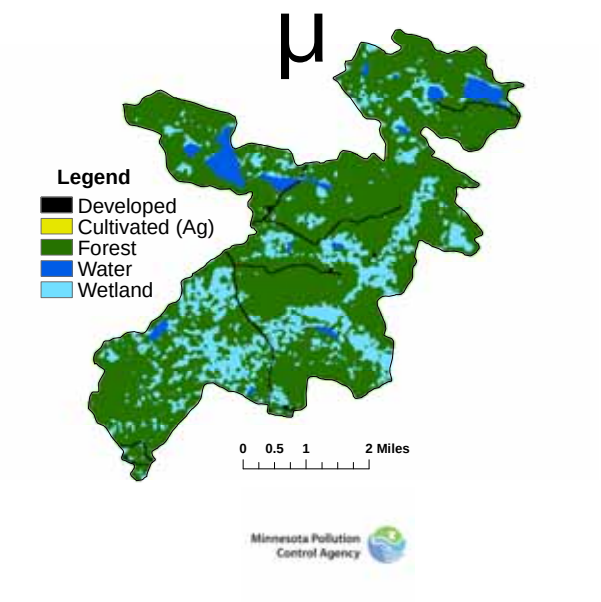
National Lake Assessment Project (NLAP)

Sample Date: August 1, 2007

Minnesota Lake ID: 16-0104
Area: 133 acres
Watershed Area: 13,413 acres
Ecoregion: Northern Lakes and Forests (NLF)

NLAP ID:1274
Maximum Depth: 26 ft
Mean Depth: 17 ft

Musquash Lake Land Use



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

Land Use	Musquash Lake Land Use %	NLF Typical Land Use %
Developed	1	0 – 7
Cultivated (Ag)	0	<1
Pasture & Open	0	0 – 6
Forest	75	54 – 87
Water & Wetland	24	14 – 31
Feedlots (#)	0	

Minnesota Pollution Control Agency • 520 Lafayette Rd. N., St. Paul, MN 55155-4194 • www.pca.state.mn.us
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Musquash 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	Musquash Lake	NLF
Number of reference lakes	1	32
Total Phosphorus (µg/L)	4	14 – 27
Chlorophyll-a (µg/L)		4 – 10
Secchi Disk (feet) (meters)	15.4 4.7	8 -15 2.4 – 4.6
Total Kjeldahl Nitrogen (mg/L)	0.3	0.4 – 0.75
Alkalinity (mg/L)		40 – 140
Color (Pt-Co U)	5	10 – 35
pH (SU)	7.4	7.2 – 8.3
Chloride (mg/L)	0.3	0.6 – 1.2
Total Suspended Solids (mg/L)		<1 – 2
Total Suspended Inorganic Solids (mg/L)		<1 - 2
Conductivity (umhos/cm)	20.6	50 – 250
TN:TP ratio	75:1	25:1 - 35:1
Microcystin(µg/L) WHO risk Category*	Near Shore <0.15	Index Site <0.15	<10 Low Risk 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: mixed with no temperature layer (polymictic)