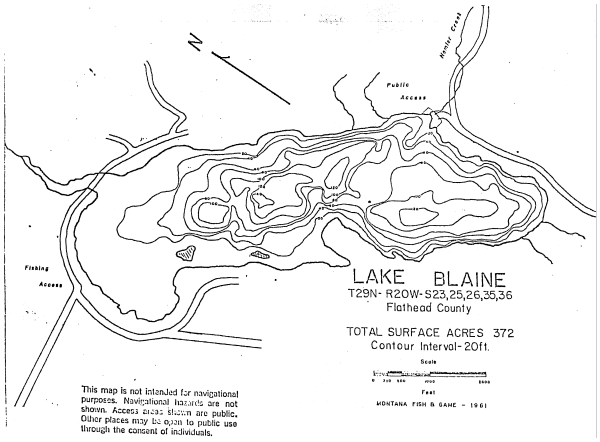
Lake Blaine

Surface Area: 382 acres
Maximum Depth: 141 feet (43 meters)
Drainage Size: 18,963 acres
Shoreline Length: 21,943 feet (4.16 miles)
Elevation: 2,999 feet (914 meters)



Location: 48.245208 N, 114.119476 W

GENERAL INFORMATION

The lake is located in Flathead County. Surrounding land ownership is entirely private. No formal public access exists on Lake Blaine; however, volunteers reported that a lakefront landowner allows informal public access on their property at the north end of the lake. Lake Blaine's catchment area is composed of glacial till (53%), Appekunney argillite belt series (36%) and glacial lake deposits (2%) (Ellis & Craft, 2008).

FISHERIES INFORMATION

Fish distribution records indicate a presence of brook trout, kokanee, lake trout, largemouth bass, largescale sucker, longnose sucker, northern pike, northern pike minnow, rainbow trout, sunfish, westslope cutthroat trout, and yellow perch. For more information see: https://fwp.mt.gov/fish/stocking.html

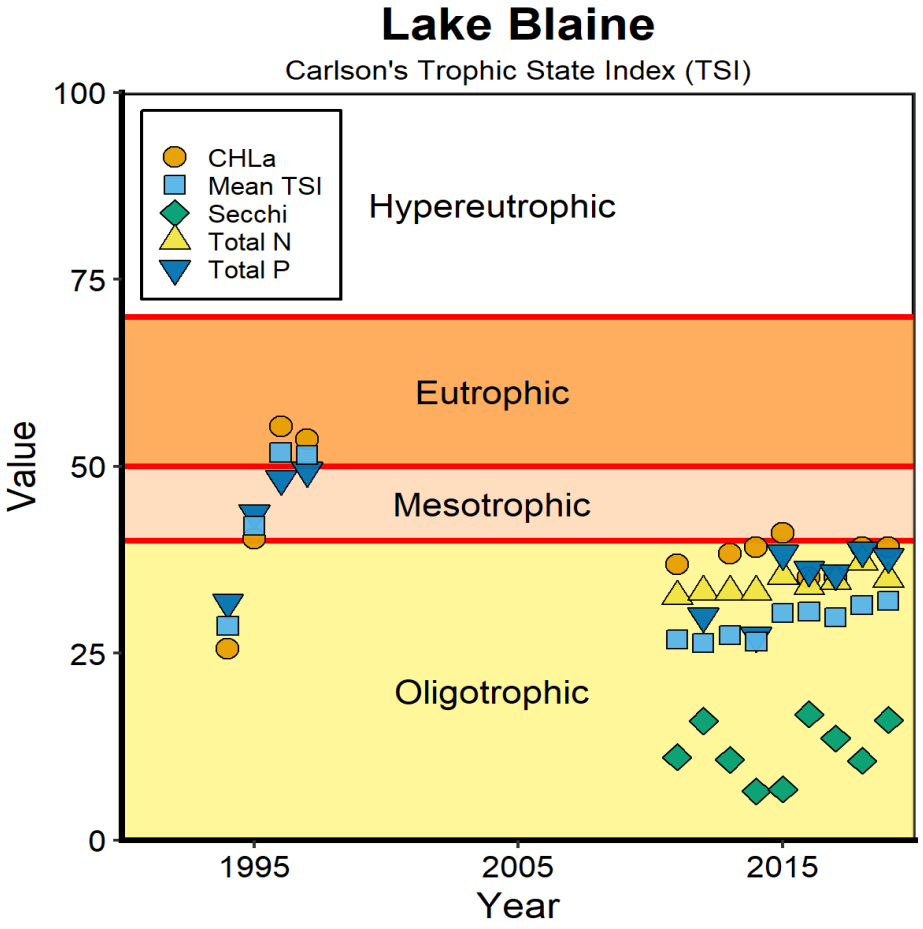
Lake Blaine panoramic. Photo courtesy Gayle Chaffey.

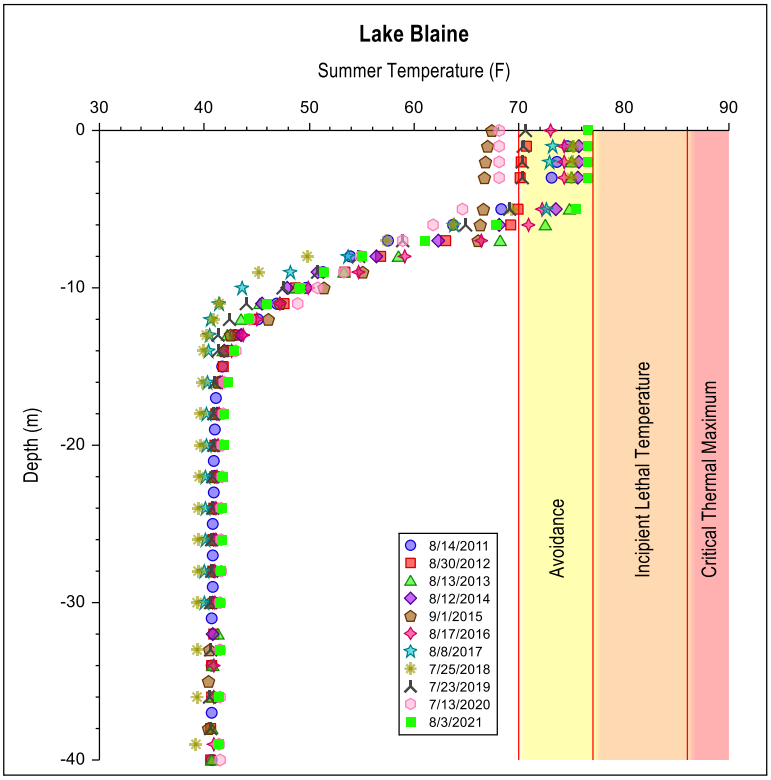
ADDITIONAL INFORMATION

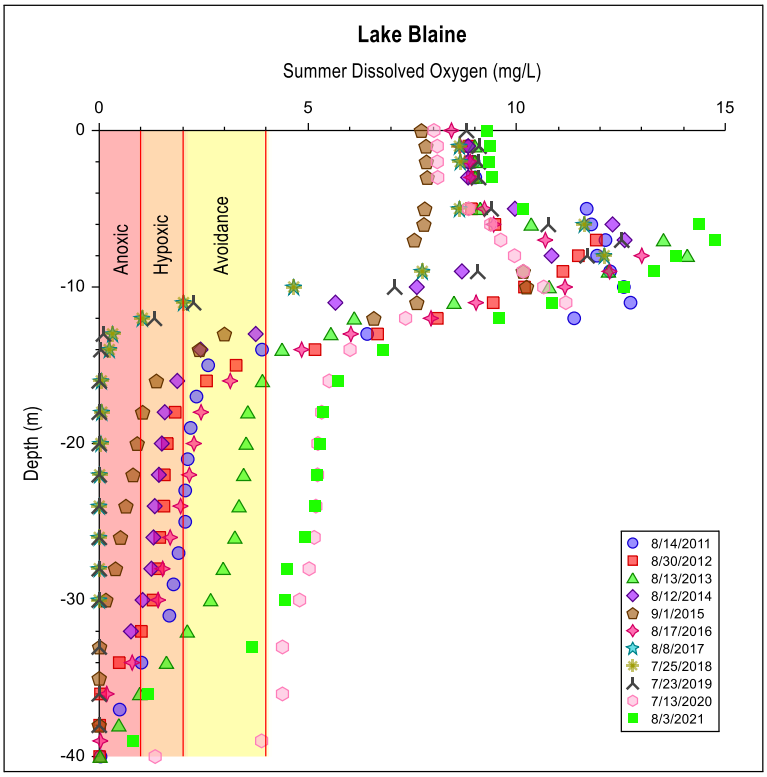
- Current NMLN citizen volunteers include: Gayle Chaffey and Dan Labbitt

LAKE METRICS SUMMARY AND SCORES

Metric	Score	Description
Cold-water fish habitat	High	Temperature and oxygen profiles show that Lake Blaine was stratified during all summer sampling dates. Temperature profiles indicate that Lake Blaine has been within the avoidance threshold range for salmonids at depths of up to 6 meters during July and August. Oxygen profiles suggest that the lake has been between avoidance and anoxic concentration thresholds for salmonids at depths greater than 14 meters. Anoxia has been observed at depths greater than 15 meters.
Nutrient Levels	Medium	Lake Blaine often ranks medium for medium lakes for total phosphorus, total nitrogen, and chlorophyll (*a*).
Nutrient Trend	consistent	No trend is apparent.
Trophic Status	Oligo-mesotrophic	Carlson's Trophic Index trend shows Lake Blaine is consistently oligo-mesotrophic.
Dreissenid Colonization Potential (Calcium)	High	Lake Blaine's 2011/2016 average calcium concentration was reported at 33.2mg/L classifying it as a high risk for zebra mussel colonization. The 2012 alkalinity level was reported at 130mg/L.
Known AIS infestations	None	




Lake Blaine
Summer Temperature (F)
30
40
50
60
70
80
90
0
-10
-20
-30
-40
Depth (m)
Avoidance
Incipient Lethal Temperature
Critical Thermal Maximum
8/14/2011
8/30/2012
8/13/2013
8/12/2014
9/1/2015
8/17/2016
8/8/2017
7/25/2018
7/23/2019
7/13/2020
8/3/2021


Lake Blaine
Summer Dissolved Oxygen (mg/L)
0
5
10
15
0
-10
-20
-30
-40
Depth (m)
Anoxic
Hypoxic
Avoidance
8/14/2011
8/30/2012
8/13/2013
8/12/2014
9/1/2015
8/17/2016
8/8/2017
7/25/2018
7/23/2019
7/13/2020
8/3/2021