

Abbot Lake

Surface Area: 41 acres

Maximum Depth: 20 feet (6.1 meters)

Drainage Size: 2,043 acres

Shoreline Length: 7,963 feet (1.52 miles)

Elevation: 2,998 feet (914 meters)

GENERAL INFORMATION

Abbot Lake is situated on glacial till and alluvium on the valley floor. The Lake is located four miles north of Bigfork, Montana in Flathead County. There is no public access to Abbot Lake. Since 2011, high water has connected Abbot Lake to Echo Lake and Peterson Lake. Volunteers reported increased recreational boat use, which may have been a result of the “no wake” restriction on Echo.

FISHERIES INFORMATION

Fish distribution records indicate a presence of largemouth bass, northern pike, pumpkinseed, and yellow perch. Abbot Lake is stocked annually with kokanee. For more information see: <https://fwp.mt.gov/fish/stocking.html>

ADDITIONAL INFORMATION

- Lakeshore home owners have reported increased erosion since 2011 due to increased recreational use from boats that have ballast tanks. In 2014, photographs were taken documenting shoreline erosion.
- Current NMLN citizen volunteers include: Sarah Dakin



Location: 48.11772 N, 114.05183 W

LAKE METRICS SUMMARY AND SCORES

Metric	Score	Description
Cold-water fish habitat	Medium	All oxygen and temperature depth profiles taken in late summer show Abbot Lake as evenly mixed during summer and fall samplings. Temperature profiles show that Abbot Lake has been within the avoidance threshold range for salmonids during all summer sampling dates, and is considered a warm water fishery.
Nutrient Levels	High	Abbot Lake often ranks medium among small lakes (surface area <100 acres) for total phosphorus, total nitrogen, and chlorophyll (a)
Nutrient Trend	consistent	Phosphorus levels are steady
Trophic Status	Oligo-meso-trophic	Carlson's Trophic Index trends show Abbot as consistently oligo-mesotrophic.
Dreissenid Colonization Potential (Calcium)	High	Abbot Lake's 2010, 2011, and 2016 average calcium concentration was 30.4mg/L classifying it as a high risk for zebra mussel colonization. 2012 alkalinity level was reported at 140mg/L.
Known AIS infestations	None	

