

Lake Mary Ronan

Surface Area: 1,513 acres

Maximum Depth: 47 feet (14.3 meters)

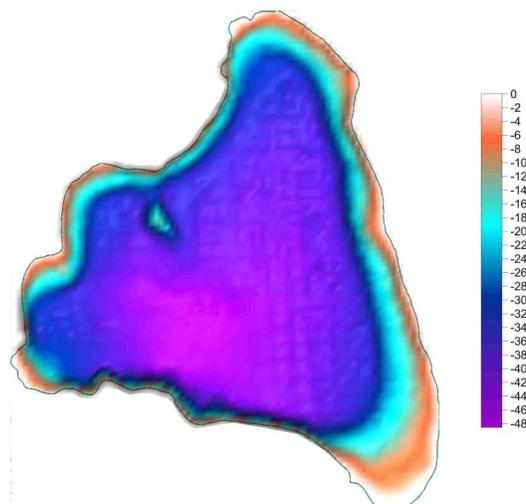
Drainage Size: 18,977 acres

Shoreline Length: 36,960 feet (7 miles)

Elevation: 3,711 feet (1,131 meters)

GENERAL INFORMATION

Lake Mary Ronan is located in Lake County. There is one motorized public access site located on the east side of the lake. There are two monitoring locations on the lake. The east site is closer to the shoreline where there are houses, and the west site is located more mid-lake. There is one motorized public access site located on the east side of the lake. The geology of the drainage area is dominated by the Ravalli group belt series (87%) with the remainder split between the Wallace formation belt series (4%) and glacial till (1%) (Ellis & Craft, 2008).



Location: 48.125527 N, 114.716626 W

FISHERIES INFORMATION

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

ADDITIONAL INFORMATION

- Lake Mary Ronan is 303d listed for Chlorophyll (*a*).
- Current NMLN citizen volunteers include: Jim & Ann Grant and Lynn Maas
- Through the Friends of Lake Mary Ronan, Lynn Maas and Jim and Ann Grant took the initiative to expand their sampling work and requested assistance from the Montana Department of Environmental Quality's (DEQ) Volunteer Monitoring Lab Analysis Support Program. The group received funding for a short term, intensified lake and stream sampling plan to identify nutrient sources and ultimately help reduce the likelihood of algae blooms. They collect monthly water samples from April through October to evaluate water quality of Lake Mary Ronan and its inlet and outlet streams to estimate the relative contribution of pollution sources in the watershed. This effort will lead to the production of a Watershed Restoration Plan to improve overall water quality.

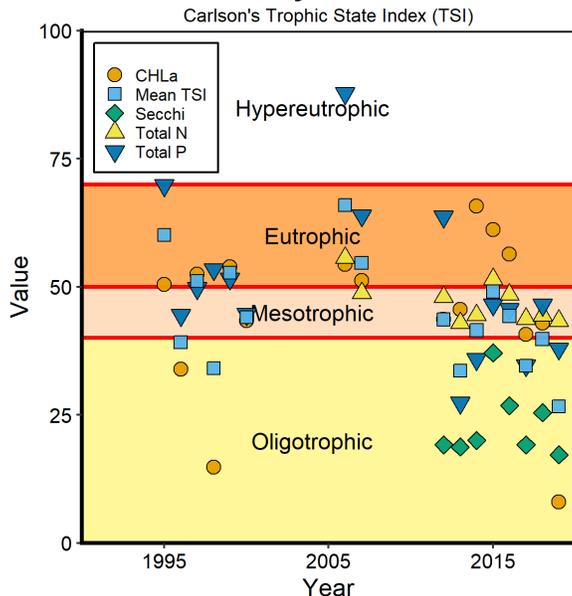


Jim and Ann Grant and Lynn Maas collect samples on Lake Mary Ronan in 2020.

LAKE METRICS SUMMARY AND SCORES

Metric	Score	Description
Cold-water fish habitat	Medium	Temperature profiles indicate that Mary Ronan East has been within the avoidance threshold range for salmonids at depths of up to 6 meters during August. Oxygen profiles show that Mary Ronan East has been between avoidance and anoxic concentration thresholds for salmonids at depths greater than 6 meters. Anoxia has been observed at depths greater than 8 meters. Temperature profiles indicate that Mary Ronan West has been within the avoidance threshold range for salmonids at depths of up to 6 meters during July and August. Oxygen profiles suggest that Mary Ronan West has been between avoidance and anoxic concentration thresholds for salmonids at depths greater than 8 meters. Anoxia has been observed at depths greater than 9 meters.
Nutrient Levels	High	Lake Mary Ronan west and east continue to rank highest among large lakes for total phosphorus, total nitrogen, and chlorophyll (a) .
Nutrient Trend	Consistent-Increasing	There is no apparent trend for Lake Mary Ronan East but Lake Mary Ronan West appears to be increasing in nutrients since 2011.
Trophic Status	Meso-Eutrophic	Carlson's Trophic Index trend shows Lake Mary Ronan is consistently meso-eutrophic.
Dreissenid Colonization Potential (Calcium)	Low	The lake's 2010, 2011, and 2016 average calcium concentration was 16.2 mg/L classifying it as a low risk for zebra mussel colonization. The 2012 alkalinity level was reported at 54 mg/L.
Known AIS infestations	None	In 2011, a EWM survey was conducted at many locations including the public access site yielding no suspect results. Additional surveying is recommended based on nutrient levels, lake size, recreational use, and the amount of macrophytes observed during the initial survey.

Lake Mary Ronan, East



Lake Mary Ronan, West

