

UPPER COLUMBIA LAKES NETWORK / NORTHWEST LAKES MONITORING

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Community Science At Work

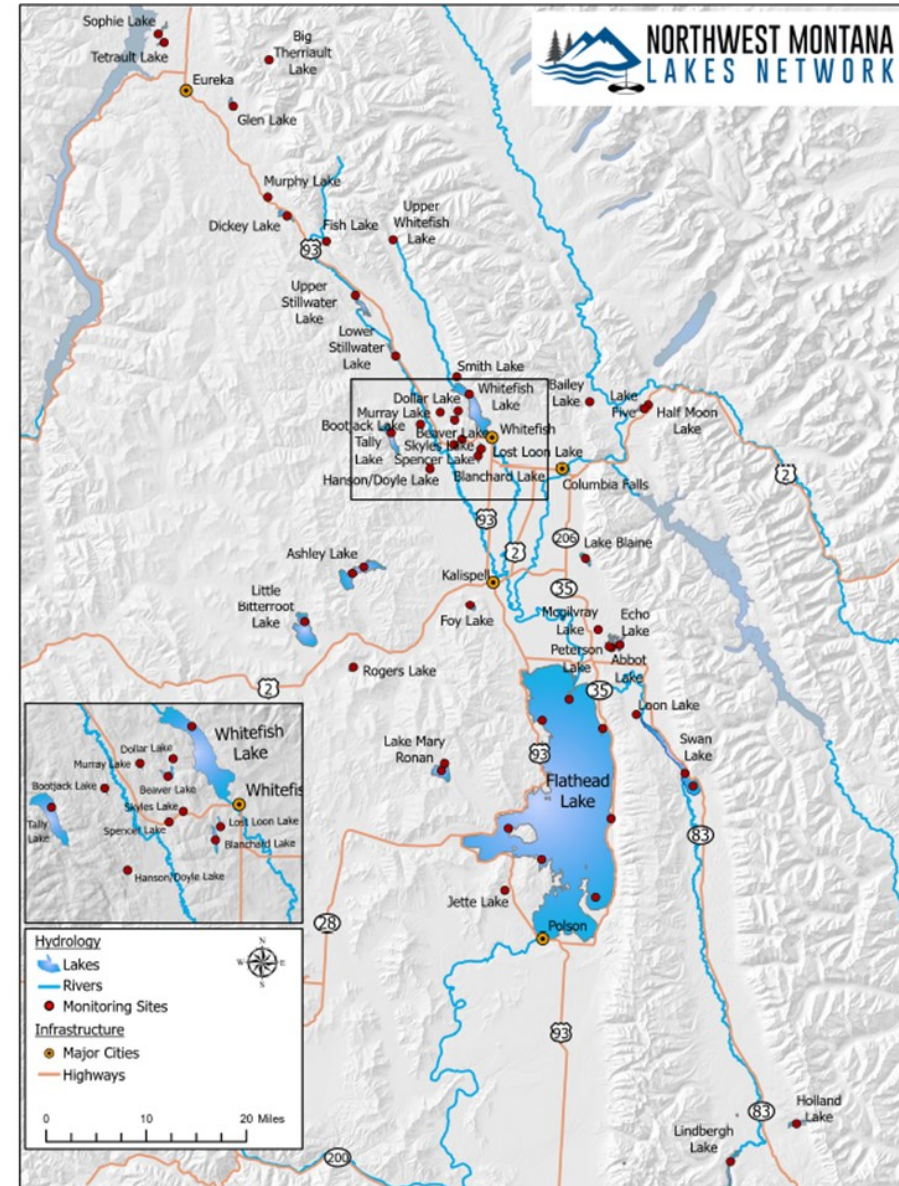
Northwest Montana Lakes Network

Partnership between WLI and FWP since 2010

Focus : Citizen scientist/ volunteers monitor water quality, Aquatic Invasive Species (AIS) (visual surveys) and promote watershed stewardship in northwest Montana.

41 lakes, 50 sites, and over 50 volunteers

Counties:
Flathead, Lincoln, Lake & Missoula



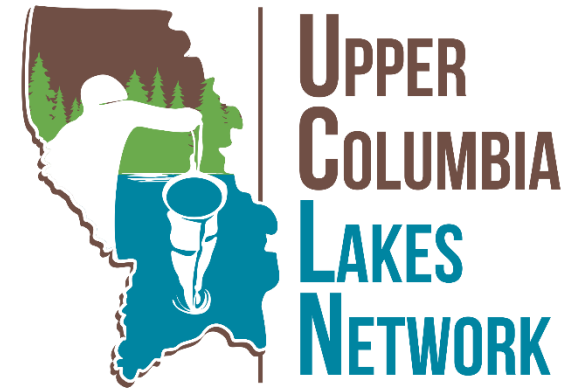
WLI Data Collection

- Water chemistry samples: total phosphorus, total nitrogen, chlorophyll(*a*)
- Hydrolab MS5 profile: dissolved oxygen, temperature, conductivity, pH, total dissolved solids and salinity
- Plankton samples for detection of zebra and quagga mussels – microscopy and eDNA



Upper Columbia Lakes Network (UCLN)

- Partnership with Western Montana Conservation Commission (WMCC).
- Focus: AIS early detection sampling with plankton nets for microscopy analysis by providing sampling kits and training.
- UCLN citizen scientists monitor for invasive mussels using a plankton tow net and plants by visual inspection.
- 17 lakes ~12 volunteers
- Increased funding in this program in 2024 allowed WLI to run eDNA samples.



- 210 microscopy samples were collected in 2024
- 66 eDNA samples





Summary



- WLI trains volunteers, provides the equipment, hosts the websites, submits the data to survey 123, NALMS Secchi dip in.
- For citizen scientists, the rewards are a sense of stewardship & community, a greater awareness of resource issues, and an expanded insight into the importance of AIS early detection and monitoring.
- For us, citizen science provides a wealth of baseline data that increases our understanding of each lake and its threats, while enabling us to monitor dozens of geographically dispersed lakes despite personnel and funding constraints.

