**Wabana Lake Itasca County**

**Summary**

Wabana Lake is located 13.5 miles north of Grand Rapids, MN in Itasca County. Wabana Lake has three inlets and one outlet, which classify it as a drainage lake. **Wabana Lake is part of the Wabana Chain of Lakes Association (WCOLA). The association is involved in activities such as water quality monitoring and education.**

There is an improving trend in water quality. Water quality data have been collected on Wabana Lake from 1994-2015. These data show that the lake is oligotrophic (TSI = 36) with very clear water conditions most of the summer and excellent recreational opportunities.

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| **Lake Vitals** |  | **Long-term Trends** |
| **MN Lake ID:** | 31-0392-00 | Recommend minimum of 8-10 years of data with 4+ readings per season. Minimum confidence accepted by MPCA is 90% |
| **Ecoregion:** | Northern Lakes and Forests |
| **Major Watershed:** | Mississippi R. –Grand Rapids |  |
| **Surface area** | 2221 acres |  |
| **% Littoral area:** | 46% | **Total Phosphorus:** Improving |
| **Max depth:** | 115 (ft) 35 (m) | **Chlorophyll-a:** Improving |
| **Aquatic Invasive Species:** | None | **Secchi Depth:** Improving (1992-2015) |

**Water Quality Characteristics**

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| **Parameters** | **Site 202** |  | **Trophic State Index** | |
| Total Phosphorus Mean (ug/L): | **9.2** |  | **Trophic State:** Oligotrophic (36) | |
| Total Phosphorus Min (ug/L): | <5.0 |  | The figure below shows the minimum and maximum values with the arrows and the mean with the black dot. | |
| Total Phosphorus Max (ug/L): | 20.0 |  |
| Number of Observations: | 38 | TPCHLASD_gradients.jpg |  |  |
|  |  |  |  |  |
| Chlorophyll-a Mean (ug/L): | **2.2** |  |  |  |
| Chlorophyll-a Min (ug/L): | <1 |  |  |  |
| Chlorophyll-a Max (ug/L): | 4.0 |  |  |  |
| Number of Observations: | 33 |  |  |  |
|  |  |  |  |  |
| Secchi Depth Mean (ft): | **19.0** |  |  |  |
| Secchi Depth Min (ft): | 13.0 |  |  |  |
| Secchi Depth Max (ft): | 35.1 |  |  |  |
| Number of Observations: | 121 |  |  |  |

**Historical Data Summary**

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| **Monitoring Program** | **Laboratory** | **Years** |
| Citizen Lake Monitoring Program | - | 1975-1977, 1988, 1990, 1992-2015 |
| Clean Water Legacy Surface Water Monitoring | - | 2015 |
| Water Quality Inventory of Itasca County Lakes | - | 2001 |
| Lake Monitoring Program | - | 2000 |
| MPCA Lake Monitoring Program Project | - | 1985, 1988, 1991 |
| Itasca County Lake Assessment (+JLCWP) | - | 2001-2002 |
| Bigfork River Watershed Priority Waters Assessment | Natural Resource Research Inst. | 2001-2002 |
| Paleo Lakes | - | 2001-2002 |
| Wabana Chain of Lakes | Itasca Community College | 2010, 2014 |
| Wabana Chain of Lakes | Instrumental Research | 2005, 2008 |
| Wabana Chain of Lakes | MN Chippewa Tribe | 1999, 2003 |