Wabedo Township Comprehensive Plan - Appendix B – Water Quality

A little over 1/3 of Wabedo Township is comprised of water. There are approximately 40 bodies of water located in the township with the four largest being: the eastern part of Woman Lake, Little Boy Lake, Wabedo Lake, and Mule Lake. Water quality in the area is generally considered to be good.

Secchi readings are a measure of light penetration in the water and an indicator of water quality. The Carlson Trophic State Index (TSI) converts secchi readings (as well as other measures) to an index which shows the condition of the water quality. The above four lakes TSI range from 35 to 47 which is mid to upper range mesotrophic. This means the water is moderately clear, but there is an increasing possibility of anoxia in hypolimnion during summer. Secchi readings are good tests for long term analysis and cost effective because they are done by volunteers.

The names of some of the other water bodies are: Rice Lake, Hunter Lake, McCarthy Lake, Cooper Lake, Jack Lake, Heffron Lake, Brackett Lake, Swede Lake, and Shurd Lakes.

The Secchi readings average for Wabedo, Little Boy, and Cooper for the years 1992-1996 are as follows:

Secchi Means (in feet) for years '92-'96

Lake	Site	1992	1993	1994	1995	1996	# readings '96
Wabedo	N.E.	11.0	9.06	8.90	9.10	9.0	24
Wabedo	S.E.	9.43	9.08	8.90	9.74	9.9	18
Wabedo	S.W.	N/A	N/A	9.30	10.08	10.0	18
Little Boy	only	10.0	9.57	11.43	10.25	9.9	18
Cooper	only	N/A	11.08	10.80	10.70	11.1	13

The residence time of a lake is the time it takes for the water in the basin to be replaced and the nutrients to be washed out. The residence times for a few of the lakes are:

•	Woman Lake N.E.	=	139 days
•	Woman Lake S.E.	=	2.16 years
•	Rice Lake	=	8 days
•	Wabedo N.E.	=	1.29 years
•	Wabedo S.E.	=	4.53 years
•	Little Boy	=	3.86 years

Graphs of secchi readings for some of the lakes in Wabedo Township are on the following pages.



