

## 2009/2010/2011 Water Quality Summaries

Below is the trophic state index (TSI) for six of our lakes. The TSI is determined by collecting measurements and water samples to determine.

- Secchi disk reading.
- Chlorophyll - a.
- Total phosphorus.

This program is funded and coordinated by the Whitefish Area Property Owners Association. Volunteers collect the measurements and samples monthly from May to September.

<b>Lake <u>Average</u></b>	<b><u>Secchi</u> <u>Feet</u></b>	<b><u>Total Phosphate</u> <u>ug/l</u></b>	<b><u>Chi-a</u> <u>ug/l</u></b>	<b><u>TSI</u></b>
<b>Butterfield</b>				
2009	16.8	18.5	2.0	40.0
2010	16.1	14.2	3.5	41.2
2011	16.3	14.0	3.6	40.7
<b>Eagle (Data from middle bay)</b>				
2009	10.1	19.4	3.5	44.5
2010	11.6	16.0	3.8	43.5
2011	8.8	18.0	5.1	46.3
<b>East Fox</b>				
2009	16.3	13.0	1.8	38.2
2010	15.0	14.4	3.0	41.2
2011	15.2	15.4	3.5	41.4
<b>Kego</b>				
2009	6.9	32.0	6.5	50.8
2010	6.9	24.6	4.9	48.3
2011	7.7	24.2	7.5	49.4
<b>Mitchell</b>				
2009	8.4	20.2	3.4	45.5
2010	9.1	26.6	4.3	47.3
2011	6.6	23.0	6.4	49.4
<b>West Fox</b>				
2009	14.9	12.8	3.4	40.6
2010	14.8	18.8	3.5	42.0
2011	13.8	14.0	5.1	42.7

The lower the TSI the better the water quality. When we compare the 2011 TSI reading to the three year TSI average all the readings were worse than the average for all the lakes in 2011.

For a more complete description of the TSI monitoring program please go to our web site and click on water quality.

[www.minnesotawaters.org/group/fiftylakes/welcome](http://www.minnesotawaters.org/group/fiftylakes/welcome)