

2013 WATER QUALITY REPORT

Again this year we were registered with the Cooperative Lakes Monitoring Program (CLMP) to monitor the clarity, phosphorus, chlorophyll, dissolved oxygen, and temperature of our lake. For those of you who appreciate such stuff, on the next page you will find some of the specific results of those tests for the past ten years. The rest of you may wish to just skip that page.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CLARITY										
min	13.0	12.0	10.0	11.0	11.5	12.0	7.0	8.0	11.0	13.0
max	26.0	29.0	30.0	29.0	28.0	27.0	29.0	31.5	25.5	24.0
average	16.4	19.1	16.7	17.4	16.6	18.1	19.1	17.5	17.5	19.0
TSI	37	35	37	36	37	35	35	36	36	35
PHOSPHOROUS(ug/l)										
spring	6.0	6.0	6.0	6.0	7.0	6.0	N/R	8.0	8.0	6.0
fall	6.0	9.0	5.0	N/R	4.0	5.0	11.0	8.0	15.0	5.0
TSI	30	36	27	N/R	<27	27	39	34	43	27
CHLOROPHYLL(ug/l)										
May	1.3	1.0	1.7	1.2	1.8	1.2	1.0	1.3	1.6	1.6
June	2.0	2.8	1.7	1.9	2.2	2.1	1.4	2.2	<1.0	1.6
July	2.0	2.9	1.4	1.9	2.5	2.1	1.1	2.3	1.7	2.5
Aug	2.9	2.2	2.0	N/R	1.8	1.5	1.9	1.4	1.3	1.3
Sept	2.5	2.9	1.1	N/R	2.1	1.9	1.5	1.4	1.5	1.3
average	2.1	2.4	1.6	N/R	2.1	1.8	1.4	1.7	1.5	1.7
TSI	37	41	36	N/R	38	37	34	34	35	35
DISSOLVED OXYGEN/TEMPERATURE										
This test measures the temperature of the water at 5 foot increments from top to bottom.										
We participate in this measurement, gathering data every two weeks throughout the season.										
Results since 2003 are virtually identical every year, indicating a very stable condition.										
TSI Trophic State Index: a numerical index calculated from water quality data. The lower the index, the better the quality. Each of our TSI values put Ann Lake in the range of a very good quality lake.										
NR Not recorded/reported										

I present this chart again (I used it in the report last year also) for two reasons. First, the value, and the primary reason for testing after all, is to monitor the trends and be alert for significant changes. You may note that our results, over the years, continue to be rather stable. That's a good thing!

Secondly, we were concerned last year that the phosphorous reading in the fall of 2012 was significantly elevated from the trend. We were anxious last year to determine whether that's a change that deserves attention, or just an aberration in the test. You will notice that the results in 2013 were not only back in line, they were actually the lowest they've been since 2009.

I conclude by assuring you that these results indicate that our lake continues to be far better quality than average amongst the lakes in the state that participate in the CLMP. In addition to the monitoring that we do, the Almira Township Board has engaged the Lake Ann Water Quality Lab to conduct weekly tests for e-coli at the public beach.

Dave Maxson