



# DAKOTA WATER WATCH

Making time for monitoring

## 2008 Project Update #2

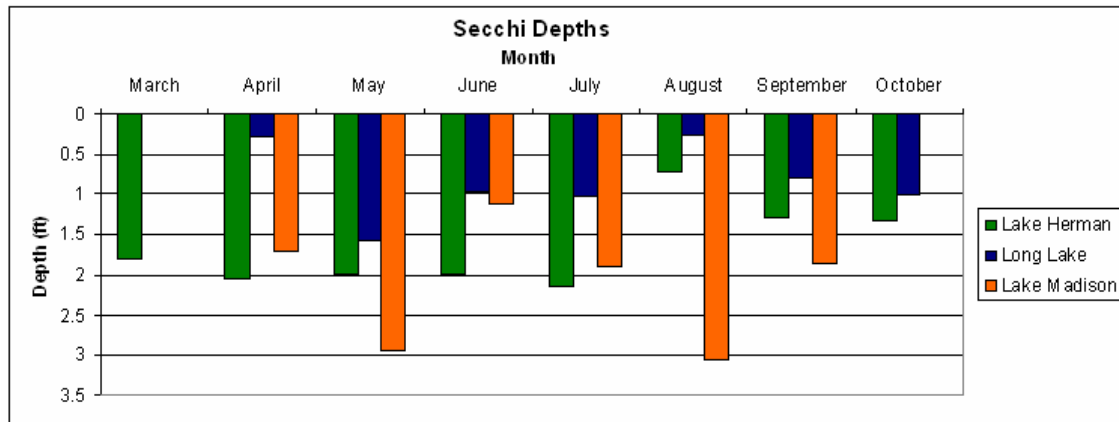
Hello again to all citizen monitors,

This is the second and final update for 2008 and will feature secchi disk depth readings and *E. coli* results for the entire 2008 sampling season. Much of this data was presented in the first update but this will include a few missing data points as well as the months of September and October.

Table 1 shows average Secchi depth measurements by month as well as a yearly average for each lake. Lake Cochrane remained the clearest lake with a yearly average of 16.79 feet. Grass Lake had the poorest clarity at 0.26 feet, although it was based off of only one set of measurements, taken in July. Long Lake along with Lakes Herman and Madison had complete enough data sets to graph their Secchi depths over most of the season (Figure 1).

**Table 1. Average Secchi Depths for each water body by month.**

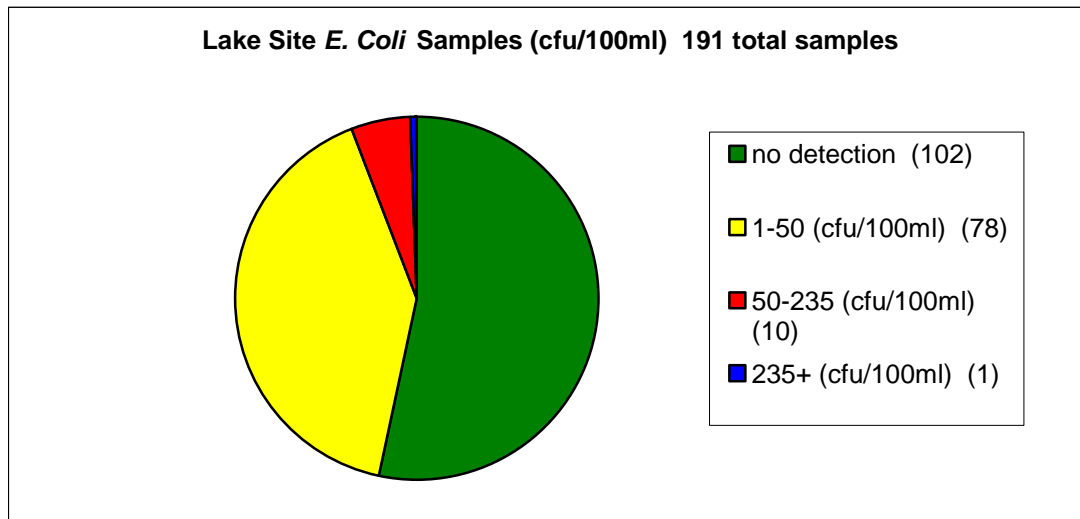
	Average Secchi Depth (in feet) By Month								Yearly Average
	March	April	May	June	July	August	September	October	
Big Sioux River	-----	-----	-----	0.49	-----	-----	-----	0.93	0.71
Brant Lake	-----	-----	-----	3.15	2.61	3.14	0.93	-----	2.46
Grass Lake	-----	-----	-----	-----	0.26	-----	-----	-----	0.26
Lake Andes	-----	-----	-----	-----	-----	1.21	1.20	0.94	1.12
Lake Cochrane	-----	-----	>26.00	18	8.84	-----	-----	-----	13.42
Lake Herman	1.8	2.03	1.98	1.99	2.15	0.72	1.29	1.31	1.66
Lake Kampeska	-----	-----	-----	3.12	1.89	2.84	2.13	2.65	2.53
Lake Madison	-----	1.72	2.94	1.12	1.9	3.05	1.86	1.48	2.01
Lake Pocasse	-----	-----	4.27	-----	1.38	-----	-----	-----	2.83
Park Creek	-----	-----	-----	1.18	0.75	-----	-----	-----	0.97
Long Lake	-----	0.29	1.57	0.95	1.02	0.25	0.79	1.02	0.84
Round Lake	-----	-----	2.26	1.31	0.98	-----	-----	-----	1.52
Split Rock Creek	-----	-----	-----	0.56	0.46	0.56	0.62	0.59	0.56



**Figure 1. Secchi Depths for Long Lake, Lakes Herman and Madison.**



A total of 191 bacteria samples were taken this past year from our monitored lakes. Only one sample exceeded the EPA recommendation for intense swimming ( $\leq 235$  cfu/100ml). That sample occurred in August at Lake Herman and is shown in Table 2 in red. The vast majority of samples showed fewer than 50 cfu/100ml and 53% of all samples were no detections (Figure 2).



**Figure 2. *E. coli* samples grouped by number of colony forming unites from monitored lakes**

#### **Further Information**

This winter, we will be preparing a complete final report of all data collected by Dakota Water Watch that we hope to have done early in the new year. This report will contain even more information and go more in-depth with each lake individually.

If anyone has data sheets that they have not turned in please do as soon as possible so they can be added to the other data.

We are still waiting for the Missouri River Institute to finish a beta version of an online database that would allow volunteers to enter their data directly into the database and allow them to receive up to date feedback.

Oakwood Lakes and the Four Lakes Association (Thompson, Whitewood, Henry, and Preston) are planning to join Dakota Water Watch and begin monitoring in the 2009 season. Lake Campbell is considering resuming monitoring next season as well.

Don't forget that if you would like us to come and present the 2008 results from Dakota Water Watch at your lake association meeting, to let us know so we can make the appropriate preparations.

Once again, thank you very much for your time and effort over the past few months and we hope that you will all return and help out Dakota Water Watch next year!

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