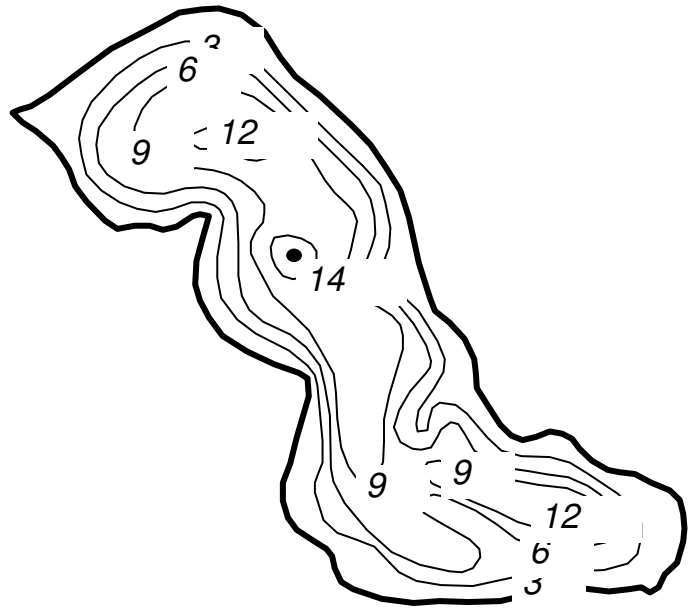


Comfort Lake

2009 Lake Grade: B

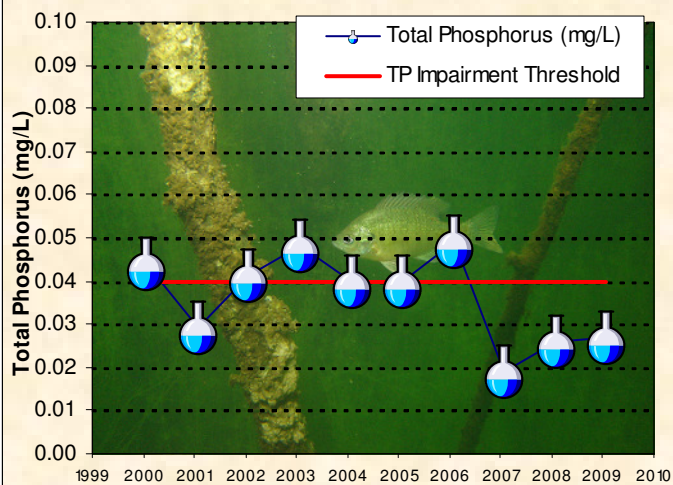
- DNR ID #: 130053
 - Municipality: City of Wyoming
 - Location: Section 27 T33N-R21W
 - Lake Size: 218 Acres
 - Maximum Depth: 47 ft
 - Ordinary High Water Mark: 887.2 ft
 - 41% Littoral
- Note: Littoral area is the portion of the lake <15 ft and dominated by aquatic vegetation.



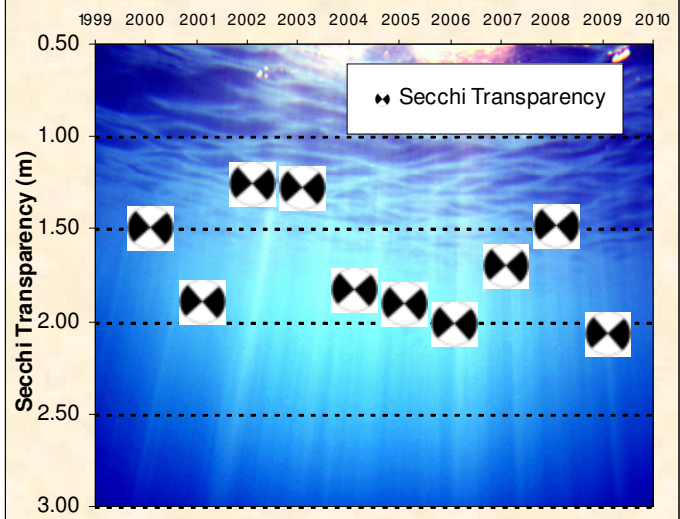
Summary Points

- Comfort Lake was considered a mesotrophic lake in 2009, based on the Carlson Trophic State Index (similar to that experienced in 2007-2008 and better than 2002-2006).
- **Comfort Lake is listed on the MPCA's Impaired Waters List for excessive nutrients.**
- **Curly leaf pondweed (an invasive aquatic plant) is extensive in this lake.**
- Comfort Lake experienced its 3rd best monitored overall water quality to date.
- The major land use is a mix of semi-urban, rural, and agricultural.
- The lake does stratify throughout the summer months.

Average Summer Surface Total Phosphorus



Average Summer Secchi Transparency



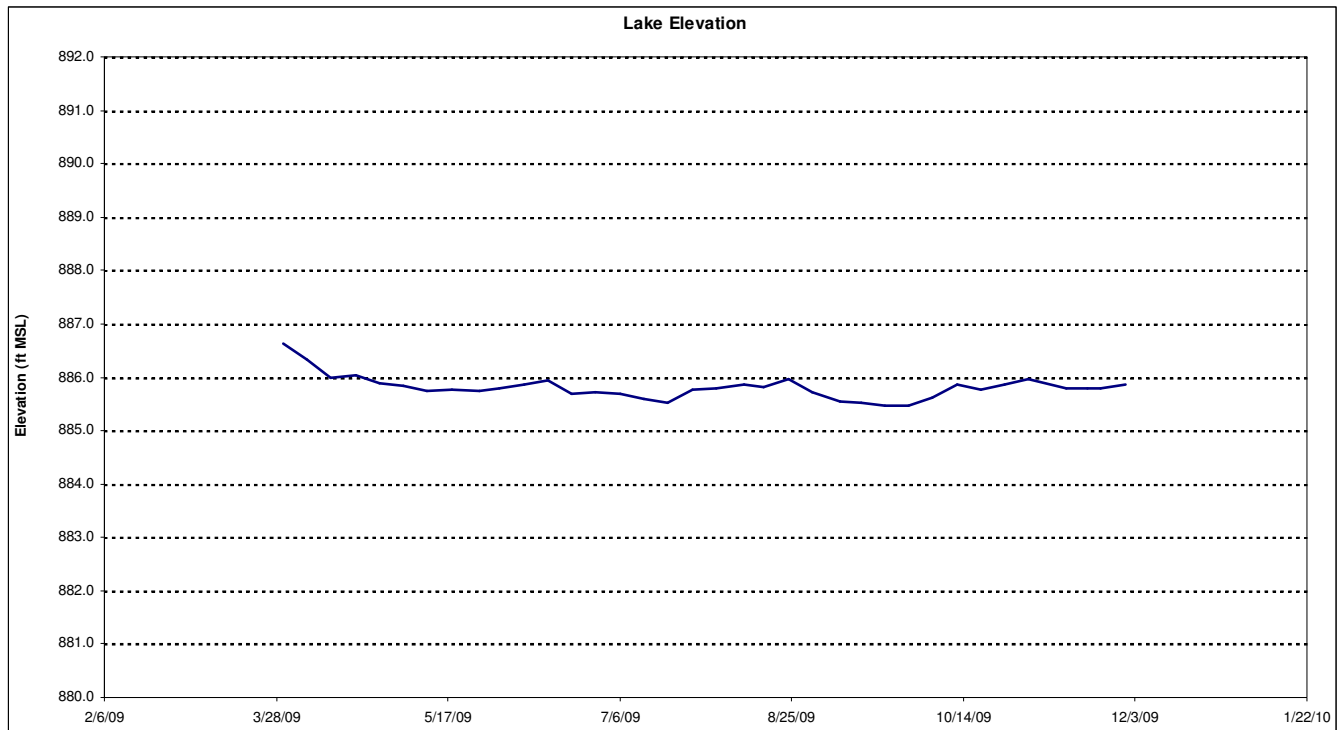
Date	Total Phosphorus (mg/L)	Chlorophyll-a (ug/L)	Total Kjeldahl Nitrogen (mg/L)	Secchi Disk Depth (m)
4/17/09	0.049	26	1.3	1.3
4/30/09	0.039	10	1.3	1.7
5/15/09	0.029	11	1.1	2.2
5/31/09	0.012	3.9	0.72	2.2
6/13/09	0.053	11	1.4	2.3
6/28/09	0.029	8.3	0.97	2.3
7/9/09	0.031	8	0.82	1.9
7/22/09	0.026	5.5	0.91	2.5
8/8/09	0.028	18	0.68	2.35
8/23/09	0.019	16	0.92	
9/4/09	0.021	21	1	1.5
9/18/09	0.028	15	1.1	1.5
10/5/09	0.042	17	1.4	1.7
2009 Summer Average	0.027	11.856	0.947	2.069

Water Quality threshold is 0.04 mg/L TP or higher*

Shallow Lake water quality threshold is 0.06 mg/L or higher*

	High	High Date	Low	Low Date	Average
2009 Elevation (ft)	886.34	4/6/2009	885.47	9/28/2009	885.78

*MPCA description of Impaired Lake's Listing criteria: "At a minimum, a decision that a given lake is impaired for the 303(d) list due to excessive nutrients will be supported by data for both causal and response factors. Data requirements for 303(d) listing consist of 12 or more TP measurements collected from June through September over the most recent 10-year period. Ideally this should represent 12 separate visits to the lake over the course of two summers; however it might also reflect four monthly samples over the course of three years (a typical sampling regimen for many lake monitoring programs). In addition to exceeding the TP guideline thresholds, lakes to be considered for 303(d) listing should have at least 12 Secchi measurements and 12 chlorophyll-a measurements. This amount of data will allow for at least one season (preferably more) of paired TP, chlorophyll-a, and Secchi disk data and provide a basis for evaluating their interrelationships and hence the trophic status of the lake."



Lake Water Quality Summary

	Trophic Status		Lake Grades								
	2009	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
Total Phosphorus (mg/l)	Mesotrophic	B	B	A	C	C	C	C	C	B	C
Chlorophyll-a (ug/l)	Eutrophic	B	A	A	B	B	B	C	C	B	C
Secchi depth (ft)	Mesotrophic	C	C	C	C	C	C	C	C	C	C
Overall	Mesotrophic	B	B	B+	C+	C+	C+	C	C	B	C