

The MPCA criteria are inherently subjective with phrasing such as "typically", "generally" and "may or not may." There is no rule that a majority of the 12 criteria should determine the outcome. I would argue that three of the criteria could be judged pivotal: depth, area, and fetch. Consider a very large lake somewhere in northern Minnesota. It could be 50 miles across and 100 feet deep, but still satisfy many of the criteria of a wetland: mucky substrate, ringed with a shoreline of cattails, etc. But no one would ever classify this huge open body of water as a wetland.

Silver is 15-20 feet deep in places, with an open fetch of many dozens of acres. These facts should, in themselves, end all argument, in my opinion. Note that the MPCA criteria state that a wetland "rarely has a significant fetch." Now "rarely" is a subjective word, but it is a much stronger one than "typically." It suggests that classifying a lake such as Silver as a wetland would be "rare" and so essentially *all* the other criteria would have to tip in favor of it being a wetland.

1) Depth. The Watershed District lists the maximum depth as 12 feet. Three of us have independently measured it to be deeper: 15 to 25 feet deep in places. Regardless, here it strongly qualifies as a shallow lake. (It's borderline a deep lake!) A wetland is typically less than 7 feet deep.

2) Littoral Area: if one includes the entire wetted basin, so all the marshy areas to the east, then the percentage of littoral area is high but still nowhere near the 100% that is "typical" of wetlands. So here Silver strongly qualifies as a shallow lake. (I would argue that parts of Silver should be classified as wetlands and the rest as a lake. After all, a large lake somewhere in northern Minnesota could be adjacent to an even larger area of wetlands. One wouldn't include the entire drainage basin in an argument about whether the open body is a lake or not.)

3) Area: the area is far greater than 10 acres, so this strongly qualifies Silver as a shallow lake.

4) Thermal Stratification: the criteria are the same for shallow lakes and wetlands, so this one doesn't count.

5) Fetch: as discussed above, this one strongly and unequivocally qualifies Silver as a shallow lake.

6) Substrate. Silver's substrate falls under "mucky to unconsolidated", so this qualifies Silver as a wetland. (The fact that it is unconsolidated is, in fact, the main reason why the lake is impaired. Since the 1940's, the amount of sediment accumulating in the lake has resulted in very poor water clarity. The paleo study indicates that, in the past, water clarity was much better, so the substrate was likely much more consolidated then.)

7) Shoreline features: this one places Silver in the wetland category. (But "generally wave formed" for shallow lakes is a weak qualifier.)

8) Emergent vegetation & relative amount of open water: wetlands "often have minimum open water." Nearly 50% of Silver Lake is open (more if one excludes the wetland fringes of the basin.) Now "often" is a weak qualifier, but again, this criteria qualifies Silver as a shallow lake.

9) Submergent vegetation: similar criteria for shallow lakes and wetlands, so this one doesn't count.

10) Dissolved Oxygen: this one places Silver in the shallow lake category, according to the Watershed District Data.

11) Fishery: this is one where we should argue that there is a factual error. The DNR stocked Silver Lake up until 1943, around the time that the water quality started to seriously degrade. (The Watershed District lists this fact on their pamphlet for Silver Lake.) Accordingly, the lake has the potential to support fishing. I myself have fished, as have the neighbors.

12) Uses: this is another one where we should argue that there is a factual error. There are numerous docks on Silver Lake. Residents regularly kayak and canoe. I swim in the lake daily. (I really do!) There is definitely "boating" and "limited swimming" occurring, which places Silver in the shallow lake category.

I conclude that 8 of the criteria suggest shallow lake; 2 are neutral; and only 2 suggest wetland! I don't think that any of my arguments stretch the truth in any way.