

District of Powers Lake 2012 Chairperson's Letter

It was four years ago when we had "slow no wake" posted for an extended period of time because of too much precipitation. This summer, the heat wave and drought are probably the most important lake issues on the minds of District of Powers Lake (DPL) members. Unfortunately, we have generally been trending downward in the amount of precipitation for several years and therefore the lake water level has declined accordingly. The last major drought that I remember was in 1988, and it was worse than our present condition, but things normalized and the lake recovered. Hopefully it will do that again, but we desperately need an extended period of precipitation to get back to normal.

As some of you know, our lake level is set by a road culvert under Powers Lake Road on the southwest side of Powers Lake. This 6.0' W x 1.4' H concrete box culvert fixes the normal water level of the lake. However, there is no downside protection. If we had an extremely severe precipitation event, the water in the lake would overflow the road and continue its normal course to Tombeau Lake, which outlets into a tributary of Nippersink Creek, and then into Nippersink Creek which flows into the Fox River.

Our original report entitled "A Management Plan for Powers Lake" (which is posted on our website) contains great information about the lake. Such as it is 459 acres in size at normal water level, it has a mean depth of 16 feet and a maximum depth of 33 feet, with 17% of the lake being less than five feet in depth and 37% being greater than 20 feet in depth. The lake is partially fed by drainage from the 2,368 acre watershed tributary to the lake. Recent review of more current topographic data indicates that the watershed is slightly larger than the previously reported value at 2,562 acres.

The most recent report on the lake is entitled "A Lake Protection Plan for Powers Lake, Kenosha and Walworth Counties, Wisconsin". It was authorized 2007 and was completed by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) in November 2011. This report is different from their first report in that it uses 20 years of data and two community surveys conducted in 2000 and 2010 to improve upon our understanding of Powers Lake and the approximately 280 members of the DPL.

The recent report uses the term "drainage lake meaning that the lake has a defined inflow and a defined outflow ... and receives most of its water from direct precipitation onto the lake's surface and surface runoff from the surrounding tributary area" to describe the lake. It is estimated that the lake typically receives about 35% of its water from groundwater, about 40% from precipitation onto the lake surface, and about 25% from runoff from the surrounding land surface and the intermittent stream flowing into the lake from the wetland complex northeast of the lake. This is how the lake is sustained, with a critical balance between precipitation and evaporation, with an annual precipitation of approximately 35 inches, and an annual evaporation of approximately 32 inches.

Your DPL Board of Commissioners has relied on SEWRPC, other agencies and/or specialty consultants to prepare reports/investigations on lake matters over our 27 years of existence. SEWRPC is our regional planning commission with a planning area of seven counties in southeastern Wisconsin and is located in Waukesha, WI. In recognition of their most recent assistance to the DPL in the preparation of "A Lake Protection Plan", we have prepared a proposed resolution for discussion, consideration and action at

our annual meeting. We hope that you will positively consider this resolution and furthermore take the time to read the Lake Protection Plan once it is posted on our website, www.districtofpowerslake.org.

Respectfully Submitted,

Jim Michels

DPL Chairperson