

# Frequently Asked Questions – Wind Lake Dam

## *Why is Wind Lake so low?*

The simple answer: there has been no rain and no runoff into Wind Lake. Almost 75% of Wind Lake's water comes through the Muskego Canal. The rest comes from runoff from surrounding land directly into Wind Lake. No water has come from Big Muskego since early July.

Wind Lake can lose as much as ¼" to ½" of water in the lake each day because of evaporation. This was proven during a two year study of actual conditions on Wind Lake by US Geological Survey (USGS). When temperatures are as high as they have been this year, with sunny days and no rain, the lake level drops quickly.

The Wind Lake dam has been completely closed since May 16, 2016.

## *My neighbor is pumping water from Wind Lake. Is that legal?*

Yes. Riparian landowners are allowed to pull water from their lake. The amount that is removed is negligible.

## *Who owns and operates the Wind Lake Dam?*

Racine County. They also own and operate the Rochester and Waterford dams. All three dams are part of the Fox River waterway.

## *I think the farmers are controlling the operation of the Dam and are taking our water. Who decides how it should be operated?*

The Dam operation is regulated by the Wisconsin Department of Natural Resources (WDNR) following an operational order that dictates the water levels to be maintained. The Rochester Dam operates under a court order from the 1980s, which also has a specific water level range that must be maintained.

The top of the spillway is the legal level of Wind Lake during the summer. In winter, the legal level is 6" lower. The County hires the dam operator for all three dams. The Wind Lake operator is in regular contact with the City of Muskego who operates the Big Muskego Dam. That communication allows for even, consistent management and minimally fluctuating lake levels. Prior to the establishment of that communication, the lake level would fluctuate significantly.

The operator reports to the County and submits monthly, detailed reports to WDNR.

## *I think the Dam is not operated correctly. What can I do?*

Call WDNR or Racine County Public Works.

***Sometimes it looks like there are leaks in the dam and we should be keeping the water in Wind Lake. Why don't they fix it?***

There have been leaks. Currently there is some repair work that will be done this fall. The County hires an engineering firm who is licensed and trained to inspect all of the County's dams. Few engineers in this region have the certification for dam inspections.

***Doesn't water leak through the bottom of the gates?***

When dam gates are open, and then closed, it can take three or four days for the bottom of the gate to re-seal. Small leaking areas eventually fill with calcium carbonate, sediment, debris, and dirt and form a seal.

***Someone at the bar said that dam is being changed in the middle of the night and our water is being let out. Is that true?***

No. The public records of the dam operator, the USGS lake level recorder, the USGS canal water level recorder, and the Waterford and Rochester dam level recorders, all confirm that there are no midnight, renegade operations. Levels are constant and consistent with the amount of rain and water flow.

The entire "chain" from Muskego to the canal to Wind Lake to the dam and all points south beyond Rochester Dam, are all monitored by USGS gauges. They are an unbiased, Federal agency who collects and records water levels and quality. They have no interest in the local politics.

***At the 2015 Annual Meeting, a board member said the dam was not being operated correctly and that because only one gate is being used, it puts intense pressure on the gates. Why doesn't the operator open both gates?***

The board member's statement was not correct. Dams are engineered and built to withstand all the pressure that is behind them, whether the gates are in an open position, a closed position, or somewhere in between. Wind Lake has two gates. Rochester has four gates. Sometimes they are all open, but most often, the adjustments are made using one gate. Doing this also minimizes the bottom leaks after the gates close (see above).

***I have property on a lake up North. Our dam is always partially open because our permit says we have to maintain a flow to keep water in the downstream channel. Doesn't Wind Lake have to do that?***

No. The WDNR recognizes that the downstream canal receives the Norway Sanitary District discharges and as such is able to maintain a minimum flow without the dam being opened. The water levels in the downstream canal are controlled by the Rochester dam operation.