

In 2008, the Racine County Drainage District (RCDD) requested changes to the operating order of the Rochester dam that included a winter drawdown of the system along with a temporary lower level during storm events. Although an EA was nearly completed by the DNR in December 2008, we still have no decision today. Changes in other local orders since 2000 have been detrimental to this drainage district and are one of the primary reasons we have made this request. The district noticed the benefit of winter drawdowns during dredging projects. Without the previous two foot winter drawdown of Wind Lake, the canal system is overloaded in the early springs while still frozen with ice.

The RCDD has been cooperating with the DNR for over five years on three different requests and is still waiting for decisions on all permits and changes. These requests are as follows:

1. Dredging permit for Phase 2 of main canal
2. Winter drawdown change in Rochester operating order
3. Lower minimum level change in Rochester operating order during storm events and high flows

Shared frustration among assessment recipients, local tax payers, Village Boards, the Drainage Board, and concerned citizens has brought all interested parties together to address common needs and concerns and organize an amended request of the DNR.

Common discussion points and items that were agreed upon by interested parties are:

1. The need for RCDD to have a complete drawdown of the system during dredging projects.
2. A minor drawdown of the system to 3.0 (annually as of Oct 1st) would help winter ice issues and also allow sufficient water depth in the system for fish, animals, hunting and winter recreation.
3. A modification to update the Rochester dam east spillway could provide a fish passage and help regulate a winter drawdown.
4. Request a change in the decision date for a complete drawdown from October 1st to December 1st. This change would allow RCDD more time to assess the conditions and determine if the drawdown is actually necessary. With this change, if conditions don't allow work to be performed, a needless complete drawdown may be prevented.
5. Lower minimum levels in Rochester during high flows and storm events will benefit all interested parties by helping to prevent erosion and flooding damage. 3.36

In order to implement a 3.0 winter water level, a request to renovate the east spillway at the Rochester dam would be recommended. A redesigned spillway that would be adjustable between 3.0 and 4.2 should be constructed to be kayak and canoe friendly, a fish passage, and a working spillway to help achieve proper water levels.

If the 3.0 winter level is approved and implemented, can the complete drawdown during dredging projects take place Dec 1st through the end of February? This time period would be closer to the scheduling of dredging projects being performed. This may help prevent complete drawdowns of the system when circumstances occur that prevent the dredging from being performed that year.

Attached is an amended request of changes to the Rochester Dam Operating Order that is supported by RCDD, the Village of Waterford, the Village of Rochester, and other concerned citizens.

May 18, 2015

The Racine County Drainage District (RCDD) is requesting a change to the operational order of the Rochester Dam to include a winter drawdown of the system, and therefore change the current minimum water elevation from of 4.20 ft. on gauge* to 3.0 during the winter drawdown. This new winter level is expected to be maintained by a newly designed spillway at Rochester. They are also proposing a lower minimum water level to 3.36 ft. on the gauge during "precipitation events" when the gates are substantially opened at Waterford and Wind Lake Dams.

AMENDED REQUEST by Racine County Drainage District Commission
Supported by, NDDD, Waterford Village Board, Rochester Village Board, and Area Citizen Group

A 6th and 7th provision are requested for the "winter drawdown" and "precipitation and high flow events" for the Operational Order of the Rochester Dam:

6. Winter drawdown of the system will begin on October 1st of each year, with a new winter level of 3.0 being achieved by October 15th. This will be accomplished by gradually opening the radial gates. Restoring of the system will begin March 1st. This will be accomplished by gradually closing the radial gates with the system expected to return to at least the minimum water elevation of 4.20 ft. on gauge* by March 15th.

7. The normal water elevation of 4.70 ft. on gauge* will be maintained as nearly as practical after March 15th until the drawdown begins again on October 1st. However, during high flow periods when the Wind Lake and/or Waterford Dams open the gates to 50% or more, the Rochester Dam will be allowed to temporarily drop below the minimum water elevation of 4.20 ft. on gauge*, to a water elevation no lower than 3.36 ft. on gauge*. When the Wind Lake and/or Waterford Dams close their gates to less than 50%, the radial gates will then be slowly closed to restore operations to the normal water elevation and will be maintained as nearly as practical, until such a time that another high flow period arrives or the winter drawdown begins.

Additional Notes to DNR regarding requested operating order changes

In order to implement a 3.0 winter water level, a request to renovate the east spillway at the Rochester dam would be recommended. A redesigned spillway that would be adjustable between 3.0 and 4.2 should be constructed to be kayak and canoe friendly, a fish passage, and a working spillway to help achieve proper water levels.

Another question for DNR is if the 3.0 winter level is approved and implemented, can the complete drawdown during dredging projects take place Dec 1 thru Feb. This time period would be closer to the scheduling of dredging projects being performed. This may help prevent complete drawdowns of the system when circumstances occur that prevent the dredging from being performed that year.