

WWMD – Drawdown FAQ

1) What is going to happen?

- a. The water level in the Waterford Waterway is proposed to be drawn down four to five feet, as measured at the face of the dam. For much of the waterway, a channel for the Fox River will be left. Within Tichigan Lake proper there will be less of an impact because of increased depth. The final drawdown depth will be determined as the drawdown progresses based on the ability to keep Tichigan Lake proper connected to the rest of the waterway to allow passage for fish and other aquatic organisms.

2) Why is this happening?

- a. To reduce the extent of aquatic invasive species (primarily Eurasian water-milfoil) in shallow areas by exposing them to freezing conditions as a control option outside of repeated herbicide applications and to alleviate navigational nuisance in these areas caused by the dense plant growth. Additionally, some native plants can reestablish themselves as fluctuating water levels mimic natural processes. This can cause germination of seed banks present in sediment, increasing native plant diversity.

As a secondary effect, some areas may see some compaction and decomposition of soft sediment, or muck, leading to a small increase in depth (up to 6 inches) when refilled. The main channel areas should offer substantial head cutting due to increased flow offering the potential for additional depths of up to 1 – 2 feet in main channel areas after refill.

3) When is this happening?

- a. The drawdown is proposed to begin on Monday September 18, 2017 at a rate of 4 inches per day. Final depth should be obtained on or around October 1, 2017. Once at final depth, it will continue at that level, barring any major storm events, throughout the winter and filled by March 1, 2018 or later, depending on ice and weather conditions. Refill rate may not exceed 4 inches per day and would begin on or around February 17th, 2018 at the earliest.

If water temperatures allow as outlined in the permit the drawdown may begin at a later date, but must be completed before water temperatures go below 55 degrees Fahrenheit.

4) Who is responsible for the drawdown?

- a. The drawdown is being requested by the Waterford Waterway Management District, the dam is owned by Racine County, and the WDNR is responsible for issuing the permit, a copy of which is available on the WWMD website. The Districts consultant is Wisconsin Lake and Pond and Resource.

5) How much does this cost?

- a. Costs are minimal, and for the most part have already been spent. These covered permit fee, public hearings, mailings and Opinion Survey. As our dam does not generate electricity, there is no financial impact to the draw down.
There are significant savings that we hope to achieve. We currently spend ~\$170,000 a year on Aquatic Plant Management. The hope is to save at least half this amount, possibly as much as \$100,000. This equates to over \$100 per household.

6) What will access be like when drawn down?

- a. Due to the shallow water within the river channel, access from both the Town ramp on the south and DNR ramp on the north will be limited to small, carry in only craft during the drawdown. Private access points on Tichigan Lake proper for ice fishing should see no affect due to the drawdown.

7) How will this impact the fish?

- a. A slow, controlled systematic drawdown of 4" per day will allow fish, amphibians, reptiles, and other aquatic organisms to move freely to deeper areas as water level recedes. Tichigan Lake proper will be monitored to ensure it will continue to have ample water volume to be a refuge for fish to move in and out of. Some fish may continue their natural migration patterns and move up or downstream into the river as well.

8) How will this impact the river downstream of the dam?

- a. During the drawdown, normal flows will be maintained, typically equal to that during this time of the year at full pool. Little to no impact is anticipated to the area below the dam gates. It is likely that no water is will go over the spillway on the eastern arm of the dam structure, which will be the only anticipated change downstream.

9) How will this impact the river upstream of Bridge Drive?

- a. As the distance North from the dam increases, impact on water level decreases. Around the State line (approximately 1 mile North of Bridge Drive) no effects are expected.

10) Will the drawdown affect my well?

- a. If the well is constructed as per code requirements it is very unlikely it would be affected by a drawdown of 5'. Ground water typically contributes to surface water, not vice versa.
In 2 of the recent permanent dam removals in Wisconsin; Campbellsport dam (Milwaukee River) and Merrill Ward Paper dam (Prairie River), there were no reported instances of wells drying up or having problems during or after dam removal.

11) Is this project related to the drawdown downstream for the Rochester Dam portion of the Fox River?

- a. No. This project is separate and not related to current projects and past or proposed future drawdowns of the section of the Fox River held up by the Rochester Dam.

12) How many times will the Waterford Waterway be drawn down?

- a. Multiple drawdowns will not happen as the permit allows for a one time overwinter drawdown. If future drawdowns are requested a new permit will be needed.

13) What will the waterway look like next year?

- a. When refilled, the waterway will be much the same as in years past. There will likely be better boat access and navigation through the shallow bays due to some sediment compaction and lesser numbers of aquatic invasive species and overall vegetation.

Additionally, access from the DNR launch to north through Conservancy Bay may become easier as the drawdown will likely offer substantial channel head cutting and increase the depth through the delta area that is currently shallow and filled with sediment. This channel will be mapped with GPS when drawdown so channel markers can be placed there upon refill.

14) How long will the positive effects of the drawdown last?

- a. Typically the reduction in aquatic plants, increase in species diversity, and reduction of sedimentation in shallow areas off the main channel and back bays should last 2 years and sometimes 3 years, possibly more. Each system is different in how it responds and it is based on the type of winter weather conditions present during the drawdown period. The increased main channel depth in Conservancy Bay and throughout the reservoir should last substantially longer.

15) Can I dredge the area around my property during the drawdown?

- a. Yes, but depending on the size and method of digging or dredging below a WDNR permit may be necessary. Information on dredging can be obtained from the WDNR website at <http://dnr.wi.gov/topic/Waterways/construction/dredging.html>. If you plan to complete any dredging it is suggested to begin the permitting process immediately and, if possible, combine your project with neighbors.

i. MANUAL DREDGING

In general, a permit is NOT required if you dredge a small area in front of your property without using mechanical equipment, but you MUST request an exemption determination from the DNR. An exemption can be obtained at no charge and must meet all of the conditions at the following link <http://dnr.wi.gov/topic/waterways/documents/permitExemptionChecklists/14-manualDredging.pdf>. A few of these are outlined below:

- Use hand held devices only
- Each property owner may not exceed an area 100 square feet in size to a depth of one foot.
- Applicant is, or has permission from, the riparian owner
- Dredged material cannot be placed in a wetland, floodway, or below the ordinary high water mark
- A Chapter 30 Exemption Determination Request can be found here: <http://dnr.wi.gov/files/PDF/forms/3500/3500-107.pdf>

For manually dredged areas that exceed 100 square feet and are less than 270 square feet a general permit must be obtained at a fee. A complete checklist of requirements and application instructions can be found at the following link:

<http://dnr.wi.gov/topic/waterways/documents/PermitDocs/GPs/GP-ManualDredging.pdf>

ii. MECHANICAL DREDGING

A permit MUST be obtained for any mechanical dredging at a fee. Multiple property owners may be covered under one permit. A complete checklist of requirements for a mechanical dredging permit can be found here:

<http://dnr.wi.gov/topic/Waterways/documents/PermitDocs/IPs/IP-dredgingLakes.pdf>

16) Who can I contact for further information?

- a. You can contact the following organizations:

Waterford Waterway Management District

Mike Waghorn, (312) 952-1959, mikewaghorn@yahoo.com

Wisconsin Department of Natural Resources

Elaine Johnson – water management specialist, (262) 571-2136, elaine.johnson@wisconsin.gov

Craig Helker – water resources biologist, (262) 884-2357, craig.helker@wisconsin.gov

Wisconsin Lake & Pond Resource, LLC

James Scharl, (920) 872-2032, jim@wisconsinlpr.com

17) Who can I contact for personal dredging?

- a. We are aware of two local companies that can work with you on dredging your frontage:

Eco Waterway Services

Gregg Jablonowski, (414) 659-1953 gjablonowski@ecowaterway.com

Arbor Earth & Stone

Jason Dolphin, (262) 993-5999 arborearthandstone@gmail.com