

## NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that two Joint Public Hearings will be conducted by the Town of Ottawa Plan Commission and a Staff Representative of the Waukesha County Department of Parks and Land Use – Planning and Zoning Division, on **Monday, August 24, 2020, at 7:00 p.m.** Due to the COVID-19 pandemic, **the hearings will be conducted virtually via the Microsoft Teams application** (an Internet connection and a web browser are required). **Phone access will also be available.** The hearings are open to the public and individuals are invited to participate via Microsoft Teams or via telephone.

**PRIOR TO THE HEARINGS, a virtual informational session regarding the hearings, in the form of a 45 minute PowerPoint presentation, will be provided beginning at 6:00 p.m. Interested parties are encouraged to also attend this virtual informational session.**

**To join the informational session and hearings by connecting to Microsoft Teams,** go to the Waukesha County Planning and Zoning Division website at: <https://www.waukeshacounty.gov/planningandzoning>. Refer to the School Section Lake Dam Failure Analysis (DFA) Rezone August 24, 2020 Informational Session and Hearing Link and Documents heading located on the lower portion of the page under **News and Events**. Informational session and hearing documents and links will be posted no later than five days prior to the hearing date.

**To join the informational session and hearings by telephone (Note: This will provide sound only. You will not be able to view the PowerPoint presentation):**

Dial: +1 414-435-2078

Enter Conference ID No.: 595 918 010#

The first hearing will be held to consider the request (RZ64) of the Waukesha County Park and Planning Commission, 515 W. Moreland Blvd., Room AC230, Waukesha, WI, 53188, to apply the C-1 Conservancy Overlay District and regulate it as either C-1 Floodway or C-1 Floodplain within the dam failure zone downstream of the School Section Lake Dam located on School Section Creek. The State requires this zoning action be taken in order to achieve compliance with the State floodplain regulations. Waukesha County Department of Parks and Land Use – Land Resources Division obtained a state permit and grant to repair a breach of the earthen dam for School Section Lake, which occurred in January 2018. One condition of the state dam repair permit and grant was to complete a dam failure analysis, which is a computer modeling of a worse-case scenario of flooding that would result from a complete failure of the earthen dam during a 10-day, 100-year storm event. Another condition of the state permit and grant is to incorporate the results of the dam failure analysis into the existing floodplain zoning maps (referred to as the “hydraulic shadow” of the dam).

Immediately following the above hearing, another joint public hearing will be held to consider the request (RZ65) to amend the text of the Waukesha County Shoreland and Floodland Protection Ordinance to adopt the School Section Lake Dam Failure Analysis and Assessment for the School Section Lake Dam located on School Section Creek.

The new C-1 Conservancy Overlay District boundary will change the floodway/floodplain designation between the School Section Lake Dam and an area approximately 6,800 feet downstream of the dam, but will not affect any residences. A majority of the area affected is already zoned C-1 Conservancy Overlay District. The properties affected by the request are more specifically located in part of Section 17, part of the NE and NW ¼ of Section 18, part of the SE and SW ¼ of Section 7, and part of the SE ¼ of Section 8, T6N, R17E, Town of Ottawa.

Maps of the area are enclosed with the notices sent to the individual property owners affected and will be made available on the Ottawa Town website at: <http://www.tn.ottawa.wi.gov/> and the Waukesha County Department of Parks and Land Use-Planning and Zoning Division website at: <https://www.waukeshacounty.gov/landandparks/planning-and-zoning/>, under **News and Events**, that specifically identifies the proposed C-1 Conservancy Overlay District boundary based on the Dam Failure Zone.

For additional information regarding these Public Hearings, or if you have a comment regarding this matter, **we prefer you forward an e-mail for the record to [sscherer@waukeshacounty.gov](mailto:sscherer@waukeshacounty.gov)**, or via mail to Sandy Scherer, at the **address listed below, no later than August 17, 2020.** You may also contact Sandy Scherer, Ottawa Town Planner, of the Waukesha County Department of Parks and Land Use – Planning and Zoning Division at (262) 548-7790.

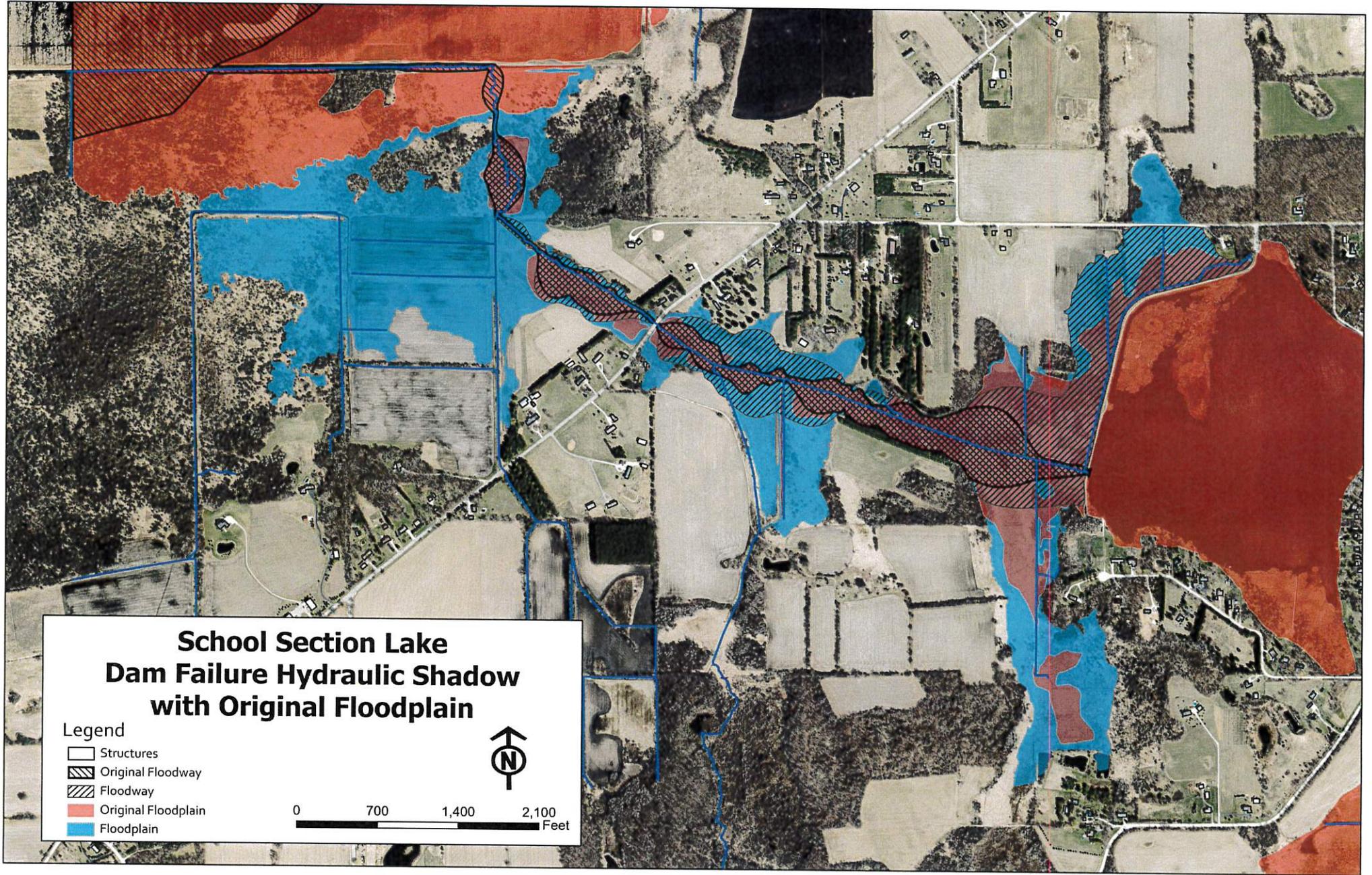
All interested parties will be heard.

WAUKESHA COUNTY DEPARTMENT OF PARKS AND LAND USE

Dale R. Shaver, Director

515 W. Moreland Blvd. Rm. AC230  
Waukesha, WI 53188

Legal Notice to be published in  
the Lake Country Now on  
Wednesday, August 5, 2020, and  
Wednesday, August 12, 2020.



### School Section Lake Dam Failure Hydraulic Shadow with Original Floodplain

Legend

- Structures
- Original Floodway
- Floodway
- Original Floodplain
- Floodplain



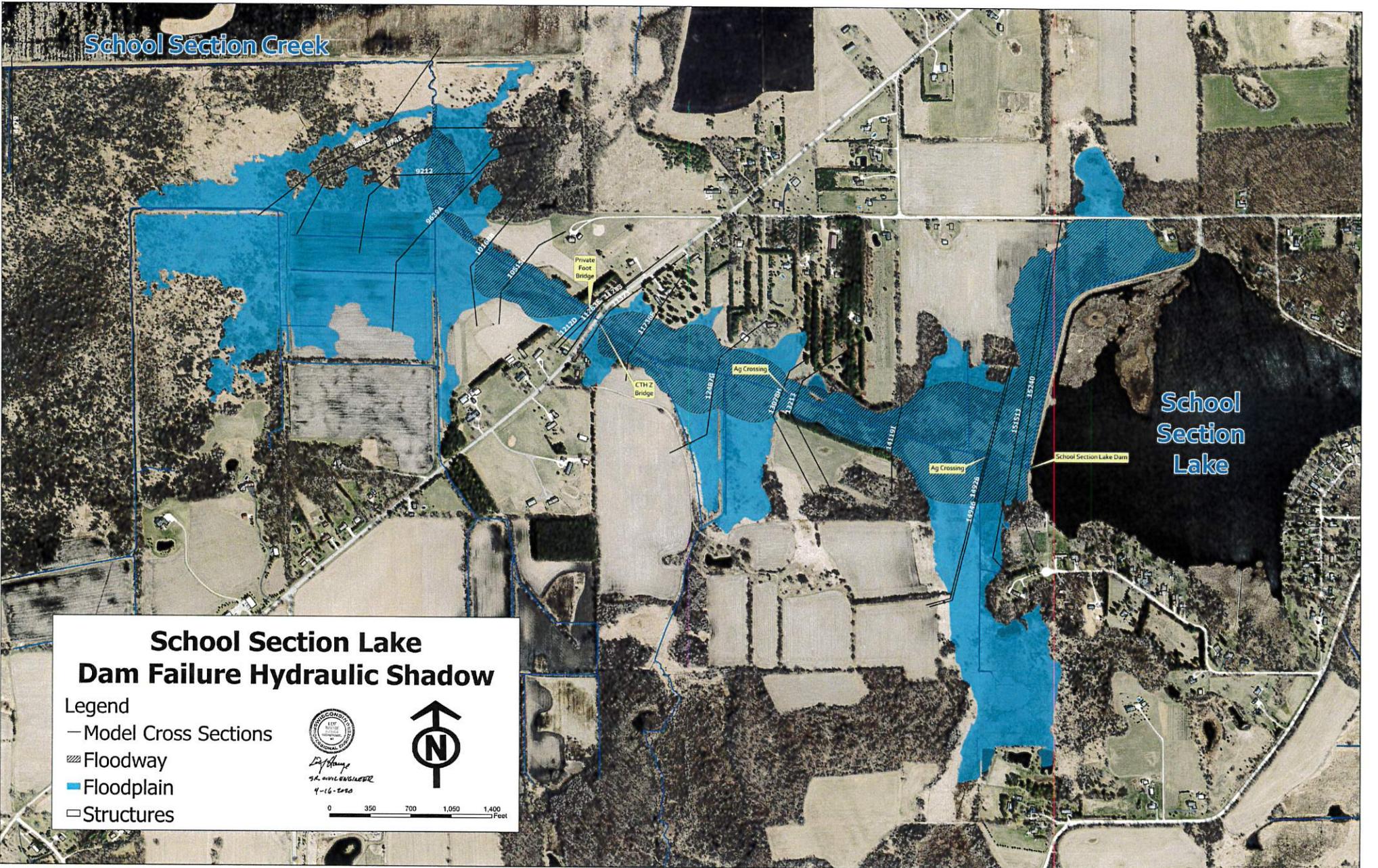
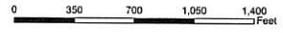
0 700 1,400 2,100 Feet

School Section Creek

School Section Lake

### School Section Lake Dam Failure Hydraulic Shadow

- Legend
- Model Cross Sections
  - ▨ Floodway
  - Floodplain
  - Structures

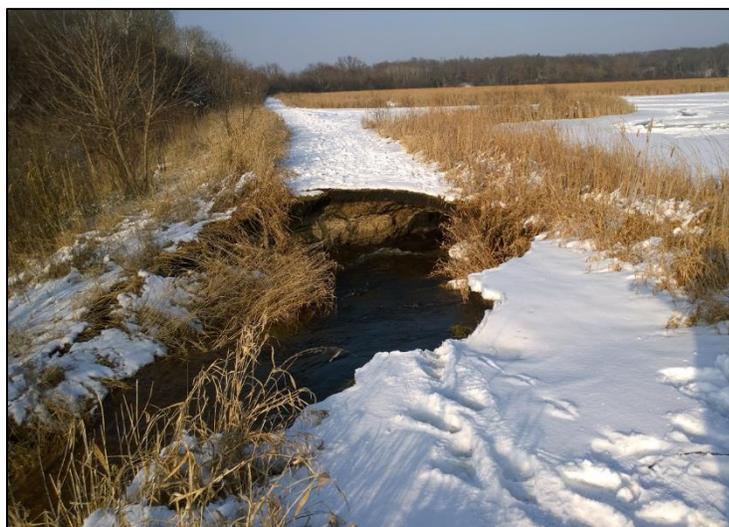


## Fact Sheet

### School Section Lake Dam Repair & Floodplain Rezone

#### Background on the Lake and Dam:

School Section Lake is located in Sections 16 and 17, Town of Ottawa, Waukesha County, WI. It is a 122-acre impoundment of School Section Creek (locally known as School Section Ditch), which drains to the Bark River. The lake was created in 1938 as a Works Progress Administration (WPA) project to provide public recreation opportunities. A 3,000-foot long earthen berm was constructed on the west side of the lake, and a 22-foot wide concrete outlet structure was built with wood stop logs (“spillway”) to control the lake’s water level and the outflow to the creek. The total height of the stop logs is 41.3 inches, while the earthen berm ranges from 0-10 feet high (measured from the bottom of the back slope to the top of the berm). The site became the first Waukesha County Park in 1939, and the County has maintained the earthen berm, spillway and adjacent boat launch on the north end of the lake ever since.



#### Dam Breach

On January 25, 2018, a 20-foot wide gully formed on the earthen berm about 400 feet north of the spillway, believed to be caused by muskrat burrows from both sides of the berm. As the flow through the gully was not more than 1-foot deep, it is considered a partial dam failure.

To prevent further damage to the berm from the breach, the County immediately started to remove stop logs from the spillway to draw down the lake level. The boat launch was closed to public access until the dam could be repaired. A

technical advisory team was assembled in February 2018 to ensure good communication among conservation agencies, lake residents, and local elected officials. The team also coordinated the dam repair project with other related activities, such as: replacing the boat launch, managing lake access and fish populations, and controlling aquatic invasive species.

#### Dam Repairs

In January of 2019, vinyl sheet piling was installed to a 12-foot depth on the earthen berm from the spillway to 525 feet to the north, near the small peninsula/vehicle turn-around area. The water tight sheet piling is also designed to repel muskrats. In spring 2019, the concrete on the upstream face of the spillway was also repaired, all the wood stop logs were replaced, and the water surface elevation of the lake was brought back to the regulated elevation of 852.85 feet NAVD88. Total cost of repairs were \$135,881. The County was awarded a 50% state grant (DNR) to help cover the costs of repairs.

#### DNR Dam Regulations

Because dam failure can represent a significant danger to the public, the regulation of dams in Wisconsin has a rich history dating back to 1917. To prevent failure, new dams are required to meet certain state design and construction standards. State permits are required for all dam construction or repairs,

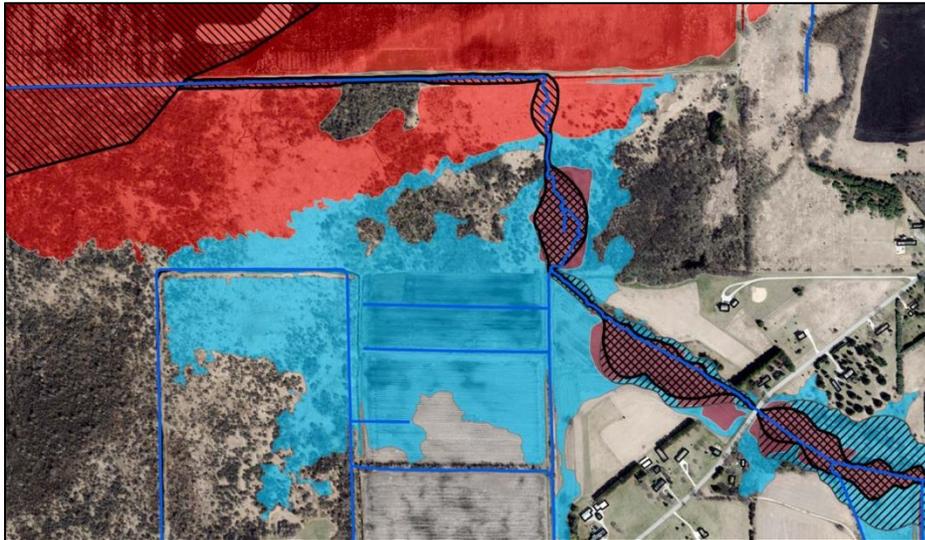
including this repair to the School Section Lake dam. All dam permits and grants must comply with DNR dam regulations, as described in more detail below.

### Dam Failure Analysis

A “dam failure analysis” (DFA) is prescribed in Chapter NR 333 Wisconsin Administrative Code, and must be conducted for all large dams, including School Section Lake. The primary purpose is to identify the potentially affected areas downstream in case a complete dam failure were to occur. A DFA uses local rainfall records and upstream watershed and stream characteristics to calculate peak flows involved in the 10-day, 100-year flood event (1% chance of occurring in any given year). These flows are then routed through the existing lake with the assumption that a complete failure of the dam occurs while the lake level is at its highest elevation (near the top of the berm). The resulting peak flood flows are then matched to actual downstream channel cross-section dimensions and stream gradient to produce a floodplain map, referred to in state code as the “hydraulic shadow” of the dam.

### Floodplain Zoning

To minimize potential loss of life and property damage downstream of dams, Chapter NR 116 Wisconsin Administrative Code requires the floodplain/hydraulic shadow of a dam to be zoned and regulated by municipalities with floodplain zoning ordinances. This type of zoning prevents residences and other structures from being built within this risk area, and provides standards for other development in order to preserve the flood storage and prevent downstream impacts. It does **not** prevent the floodplain area from being used for other purposes such as agriculture, parks or recreation. However, filling is restricted and maintenance of ditches will require spoils to be graded out to prevent loss of floodplain storage.



For School Section Lake, the hydraulic shadow adds 244 acres to the existing floodplain (light blue) and 87 acres to the existing floodway (diagonal hatching only).

“Floodplain” means these areas will likely contain standing water during a total dam failure. “Floodway” means the floodwater will likely have a current

in these areas during a total dam failure. No structures currently exist in either of these areas.

The updated floodplain map is really recognizing what already exists. If the School Section Lake dam were to ever completely fail, best available science shows this is the area that would be affected. Since the dam has never experienced a complete failure in its 82 year history, local residents may not have seen flood waters to this level before. On a related note, for any structure built in the mapped floodplain, basement flooding is a threat regardless of a dam failure due to seasonal high groundwater conditions in the soils.