DEPARTMENT OF NATURAL RESOURCES

Minnesota Department of Natural Resources Ecological and Water Resources 1035 South Benton Drive Sauk Rapids, MN 56379

March 31, 2023

Pulaski Lake Improvement District Attn: Jon Tank P.O. Box 332 Buffalo, MN 55313

RE: Request to pump to lowest elevation allowed under permit 1987-3002

Dear Mr. Tank,

On February 22, 2023, I received a request via DNR's online permitting system (MPARS), that the Pulaski Lake Improvement District (PLID) would like to utilize the option specified under the condition in Permit 1987-3002 titled "Pumping Authorization Required". The request states, "The PLID would like to request an early drawn down given the recent precipitation. We would like to do this when Buffalo Lake is close to ice out."

Through phone conversations seeking clarity on this request. The PLID President told me that they would like to begin pumping prior to Pulaski Lake reaching the elevation of 966 feet (NGVD 1929) and that the PLID would like to draw the lake down to the maximum lowest level allowed of 964.5 feet per permit 1987-3002.

The reason for requesting the lowest elevation possible is to provide additional storage capacity within the lake to accommodate the projected snow melt and precipitation during the spring and summer season. The goal is to alleviate flooding concerns around Pulaski Lake, until a filtration apparatus in the outlet pumping system is installed to address the zebra mussel infestation.

Modeling of the minor watershed was conducted by DNR Floodplain Engineers to evaluate the potential for flooding from snow melt and to ensure that the receiving waters (Buffalo Lake) will not be put at risk from this authorization.

Model results show that the request is warranted to avoid impacts to private structures and public infrastructure around the Pulaski Lake due to the risk of spring flooding. The model also illustrated that flooding would not be exacerbated in the receiving waters if all pumping ceased when Buffalo Lake water levels reached an elevation 915.5 feet (NGVD 1929).

Based on these findings the request is authorized to maintain Pulaski Lake at an elevation of 964.5 feet under the following conditions.

- 1. The elevation in Buffalo Lake is not at or above 915.5 feet (NGVD 1929). If Buffalo reaches or exceeds this elevation all pumping activities are to cease immediately.
- 2. Water elevations for Buffalo Lake and Pulaski Lake are to be taken daily.
- 3. Pumping is to cease by May 1st or when zebra mussel veligers are found in the water column, whichever comes first.
- 4. Water temperatures are to be taken daily at a depth of five feet and submitted to the DNR on a weekly basis.
- 5. Veliger sampling tests are to begin immediately when water temperatures at a depth of 5 feet reach 48 degrees Fahrenheit. Once water reaches this temperature pumping can continue for a maximum of 10 days or when veligers are found in the water column, whichever comes first. Veliger sampling to be conducted at the following intervals: first when 48 degrees is reached, then 5 days later, then 8 days later, and everyday afterwards until the 10th day. All veliger sample results are to be submitted to the DNR within 3 days.
- 6. The Pulaski Lake elevation can be maintained at 964.5 until May 1st or until conditions 2 and 3 are met, whichever comes first.

If you have any questions, please contact me at 320-223-7850 or at james.bedell@state.mn.us

Sincerely,

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James Bedell Area Hydrologist

Ec. Tim Crocker, DNR R3 North District Manager Constance Holth, DNR R3 Hydrologist Supervisor Dan Lais, DNR Region 3 Manager Dan Miller, DNR Water Use Consultant Christine Jurek, DNR Region 3 North AIS Specialist Kelly Pennington, DNR Invasive Species Unit Supervisor Dustie Speldrich, DNR Water Resources Enforcement Officer Clint Fitzgerald, DNR Conservation Officer Justin Kannas, City of Buffalo Engineer Taylor Gronau, City of Buffalo Administrator