



Division of Ecological & Water Resources  
Region 4 (Southern Region)  
21371 Highway 15 South  
New Ulm, MN 56073

September 1, 2021

Heron Lake Watershed District  
1008 3rd Ave  
Heron Lake, MN 56137  
admin@hlwdonline.org

Re: Potential Impact to Calcareous Fen from JD3 Improvement

Dear Heron Lake Watershed District Drainage Authority,

The DNR has not received sufficient information to conclude that the South Heron Lake Fen will not be impacted by the proposed improvement of Heron Lake Watershed District Judicial Ditch 3. Additionally, the information submitted does not verify that an Environmental Assessment Worksheet (EAW) is not required per Minnesota Administrative Rules 4410. We recommend that you delay any decisions about the proposed improvement (as well as any related improvements i.e. JD3 laterals) until after the DNR provides concurrence that the fen will not be impacted. Calcareous fens are afforded special protection per Minn. Stat. § 103G.223. Construction may not begin until the DNR concurs that the project will not impact the calcareous fen.

The August 11 ISG memo demonstrated serious issues with the modeling results. Furthermore, a comprehensive modeling report (as requested in the FER Advisory letter) was not provided for review. Some of the identified issues from the August 11 ISG memo include:

- Observed lake level data indicate that the lake level has risen by 4 or more feet numerous times within the past 20 years. In other words, the lake has demonstrated a 4 foot rise in response to a roughly 5 or 10-year rainfall event. However, the presented modeling scenarios indicate that South Heron Lake is expected to rise only 2.08 feet (from 1397.00 to 1399.08 – Table 1) and 0.38 feet (1403.00 to 1403.38 – Table 2) from the 100-year rainfall event. Therefore, the model substantially underestimates lake level fluctuations.
- Table 1 shows a model scenario where the water elevation is assumed to be 1397 feet. However, the lowest ever recorded elevation of South Heron Lake is 1398 feet. Therefore, this scenario does not use a realistic initial condition.
- Table 2 shows that the modeled lake level rise is identical for the 10-year, 25-year, and 100-year rainfall events. Therefore, this scenario illustrates a likely modeling or reporting error.

The August 11 ISG memo indicated that bathymetry data was not available. We have attached the bathymetry map for your reference and use.

Due to these factors, the DNR does not have sufficient information to confirm that this project will not impact the calcareous fen or that an EAW is not required.

Please schedule a meeting with the DNR to further discuss modeling needs, potential calcareous fen impacts, and the potential need for an EAW. Please contact Area Hydrologist Tom Kresko at 507.832.6045 or direct information to the Regional Drainage email at [Region4Drainage.dnr@state.mn.us](mailto:Region4Drainage.dnr@state.mn.us).

Sincerely,

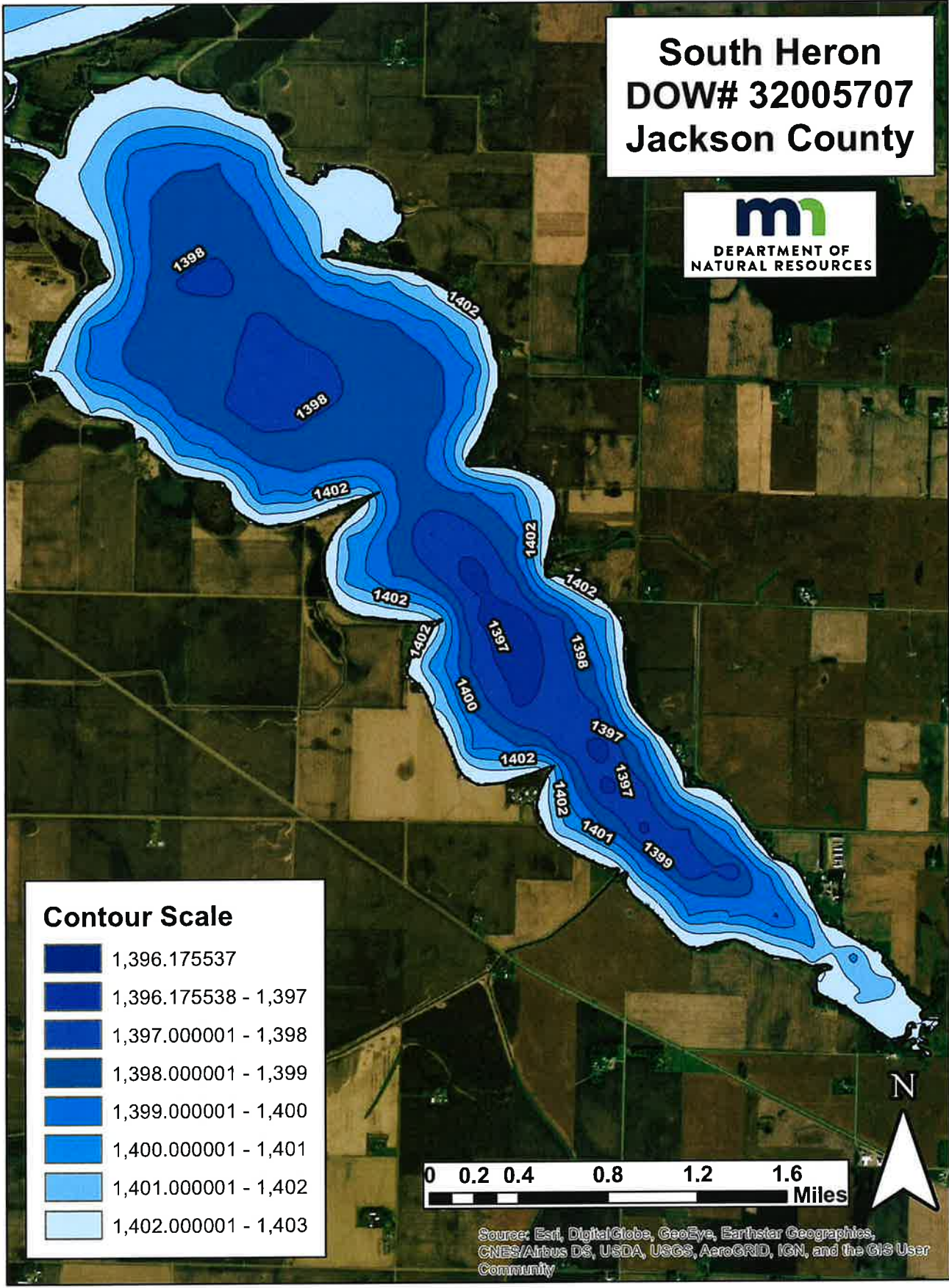










Todd Kolander

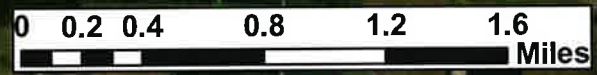
DNR Southern Region, Ecological and Water Resources South District Manager

cc: Joanne Boettcher, DNR Regional Environmental Assessment Ecologist  
Tom Kresko, DNR Area Hydrologist  
Michael Swenson, DNR Groundwater Hydrologist  
Megan Benage, DNR Regional Ecologist  
Jennie Skancke, DNR Wetland Consultant  
Tim Gieseke, Liz Harper, Scott Roemhildt, South Region DNR EWR Management  
Katherine Pekarek-Scott & Paul Davis, MPCA  
Ed Lenz & Rita Weaver, BWSR  
Chuck Brandel, Project Engineer

# South Heron DOW# 32005707 Jackson County



Contour Scale	
	1,396.175537
	1,396.175538 - 1,397
	1,397.000001 - 1,398
	1,398.000001 - 1,399
	1,399.000001 - 1,400
	1,400.000001 - 1,401
	1,401.000001 - 1,402
	1,402.000001 - 1,403



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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