

BGS Neighbor Complaint

Wednesday, January 4, 2023 3:36 PM

Kurt Levetzow noted that neighbor, Freese's, has complained that the water level in their pond adjacent to the Burlington Generating Station is low and that there is a brown color under the ice, which has not occurred prior to the closure work commencing at the CCR impoundment.

References

- 12.12.22 Final Closure Plan (Closure Plan) https://ccr.alliantenergy.com/Burlington?utm_source=WS&utm_campaign=Burlington&utm_source=WS&utm_campaign=Burlington
- 2020 Annual GW Report (2020 Report)
- 2021 Annual GW Report (2021 Report)
- DM County Assessor's Website
- <https://rivergages.mvr.usace.army.mil/WaterControl/stationinfo2.cfm?sid=BRLI4&fid=BRLI4&dt=S&pcode=HG>
- <https://www.drought.gov/states/iowa/county/des%20moines>
- <https://isugisf.maps.arcgis.com/apps/webappviewer/index.html?id=47acfd9d3b6548d498b0ad2604252a5c>
- <https://desmoines.iowaassessors.com/sale.php?gid=19492&sid=126>

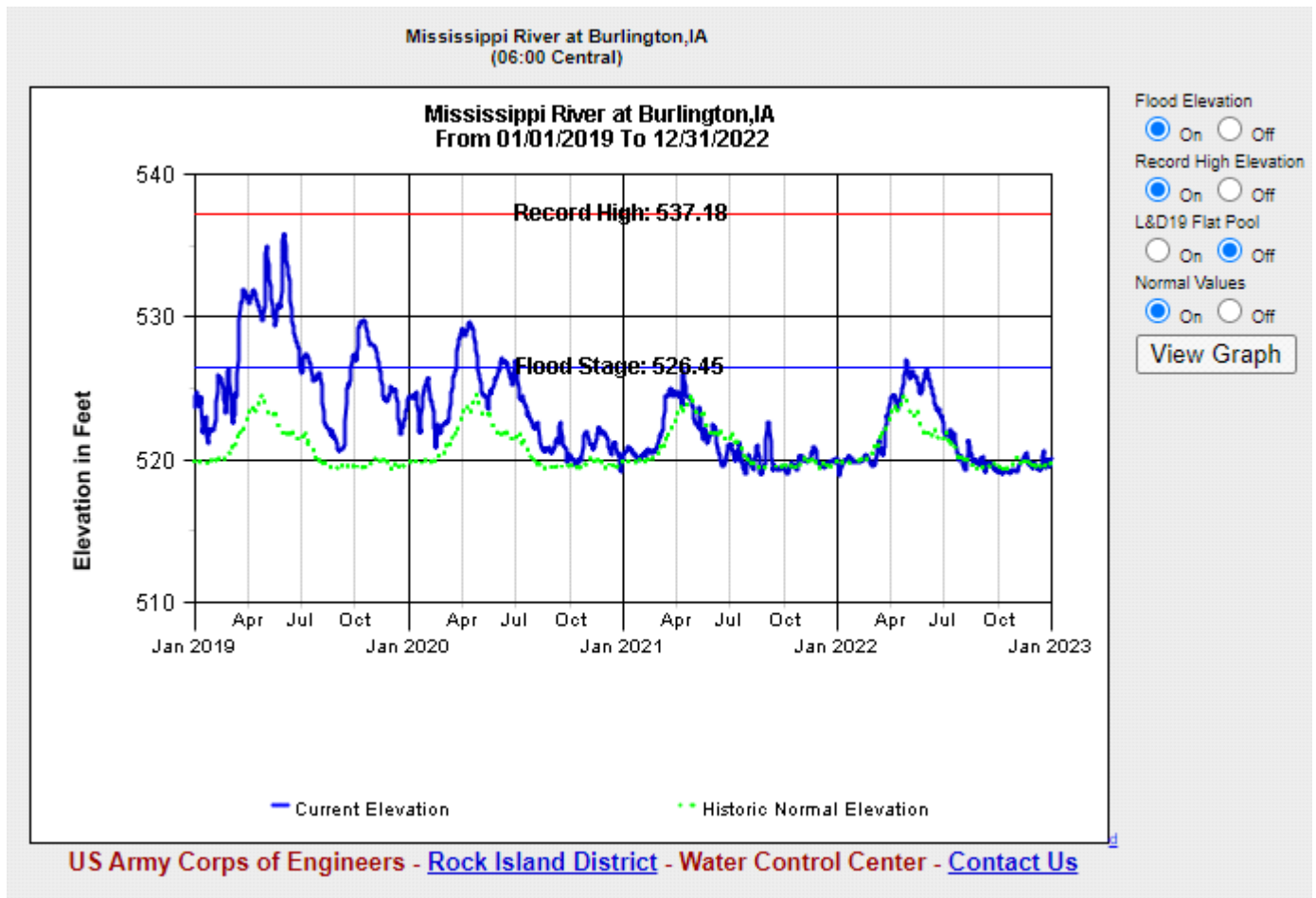
Notes

- Potentiometric Surface Maps were not included in the Annual GW Reports until 2020.
- The Closure Plan shows groundwater and impoundment liquid levels in 2019.
- MW-310 and MW-311 are closest to the Freese's pond.
 - Based on potentiometric data, the Freese's pond is upgradient from the impoundments and the river.
 - Boring logs in the Annual GW Reports.
 - MW-310 Ground at 532.23, MW-311 at 532.69
 - MW-311 has sand from 4 to 8 feet, and sands from 16 to 23 feet, plus some silt.
 - MW-310 has sands from 12 to 22 feet.
- Closure Plan shows plans to dewater as part of construction but elevation not stated.
 - Stormwater pond bottom elevation approximately 512.
- River elevations at the timeframe of the groundwater elevation measurements were above normal historical values with the exception of October 2021.
- According to drought monitor, Des Moines County is abnormally dry to in a moderate drought.
- 1970s aerial imagery shows general land disturbance in the area, with the pond being essentially the shape it is today in the 1980s imagery.
- Property was purchased in 2010 from Cessford Construction who operates quarries and sand pits.

Elevations

Date	MW-310	MW-311	Water Table	Impoundment Level	Notes	
April 2019 (WT) November 2019 (Impoundment)			528	528	Page 31 of Closure Plan, Section A-A'	
April 2019 (WT) November 2019 (Impoundment)			529	532	Page 31 of Closure Plan, Section B-B'	
June 2020	525.36	524.05			Page 29 of 2020 Report	

September 2020	524.13	520.87		Page 30 of 2020 Report
April 2021	525.46	523.89		Page 33 of 2021 Report
October 2021	524.69	522.00		Page 35 of 2021 Report



Screen clipping taken: 1/4/2023 4:19 PM <https://rivergages.mvr.usace.army.mil/WaterControl/shefgraph-historic.cfm?sid=BRLI4>

Summary

It is understood that river levels are currently low due to unusually dry to drought conditions in the upper Midwest. Further, boring logs on Alliant's properties along with the likelihood the pond was a former sand/gravel pit indicate a hydraulic connection between the river and the Freese's pond. Therefore, the lower river levels and/or the planned dewatering of the CCR impoundments that lie between the river and pond could influence the pond elevation. In addition, the groundwater gradient on Alliant's property flows toward the river.