



## Union Lake/Sarah Pump

### When can the pump start?

Pumping may begin when levels meet the criteria in the permit from 1999. Water can be pumped down to the ordinary high water level (OHWL). The Watershed District monitors the gauge at Climax to determine when the pump can begin. The height at the gauge must be below 12. When that criteria has been met, and the Watershed District has verified that the drainage way is clear, and that the equipment has been properly inspected, the MnDNR will provide additional approval to begin.

### What is the “Ordinary High”?

- The ordinary high water level for Union is 1211.4 (NGVD 1929 datum or 1212.6 NAVD1988 datum).
- The outlet is at 1211.0, where the pump is (NGVD 1929 datum or 1212.2 NAVD 1988 datum).
- The OHWL for Sarah is 1211.6 (NGVD 1929 datum or 1212.8 NAVD 1988 datum)
- The OHWL for the outlet is at 1211.6 (NGVD 1929 datum or 1212.8 NAVD 1988 datum), (where the culvert crosses under the road between the two lakes.)
- The OHWL for the outlet and Lake Sarah are at the same elevations as they have been in the past and were figured in as part of the permit for the outlet to alleviate Sarah from the flooding back in the late 1990's to early 2000's.

### Can we manually adjust levels on each lake?

A common request during regular years from some landowners is to raise the levels on Lake Sarah. Lakes are to function as normally as possible for fish and aquatic life and habitat. Continuing to raise and lower levels alters fish communities spawning, species diversity, plant diversity and overall health of the lakes. This project was not meant to function as a bathtub; pull the plug when we want it lower and put the plug in when someone wants it higher. The project intent was for special circumstances to avoid economic devastation during extremely high water.

Sarah and Union are about equal in elevation for both the OHWL and the outlets. For example, it would be hard to hold water higher in one without impacting the other just based on gravity and elevation changes. This means there is no way to keep Sarah higher without impacting Union.

### When does the district “stop” pumping?

Through the years, the district and the Lake Improvement District (LID) have learned best management practices for managing the water during pumping times. Often times, with the recommendation of the LID, the district will stop the pump just shy of the OHW levels. In doing so, it allows for flexibility to start the pump again that same season, without working through the entire process of the permit requirements, and it allows for both parties to monitor for evaporation.

Pumping the water too low, without considering any projected droughts or rainfalls, would be irresponsible. Many factors are considered when a pause is implemented for pumping during high water. Decisions are made in coordination with the LID and the Watershed District.

## Who can I contact with concerns?

Sand Hill River Watershed District office at 218-945-3204.