

CROOK COUNTY

OCT 25 2021

PLANNING DEPT

**GROUND WATER ENCROACHMENT
AND OTHER CONCERNS**



One of the many concerns in my first report submitted as Exhibit 21 to the planning department on August 23, 2021 was regarding the amount of ground water Knife River has encountered on the Woodward property. Those concerns include the damming of the water with the earthen plug of overburden and topsoil after removing the gravel which provided the natural drainage system. The ground water had to go somewhere once it was dammed up. As a result, the static water level in places on the Vanier property is now approximately 30" below ground surface and has encroached on several acres of farm land. This farm land is completely saturated and is totally unusable. We cannot drive any equipment across it without getting stuck in the muddy surface. The water continues to advance daily and expand the size of the "mud bog".

The proposed "new field elevation" after mining is represented to be 5-8 feet below the current elevation. That would mean the field level will be 2-3 feet below the current static level of ground water and that would make it impossible to reclaim the land to "current agricultural use" in as good or better condition as required by a DOGAMI permit.



Further concerns regard the reclamation of the ground. I lease the Porfily property (unmined) and the Woodward 13 acres of reclaimed land contiguous with the Porfily property. I manage both properties uniformly regarding water, fertilizer, harvest, etc. There is a reduced yield on the reclaimed Woodward property due to soil compaction that will not allow water to penetrate the soils. There is also a reduced yield on this same property due to low or non-existent fertility levels. The yield difference is between 50 and 60% less than the unmined Porfily property.