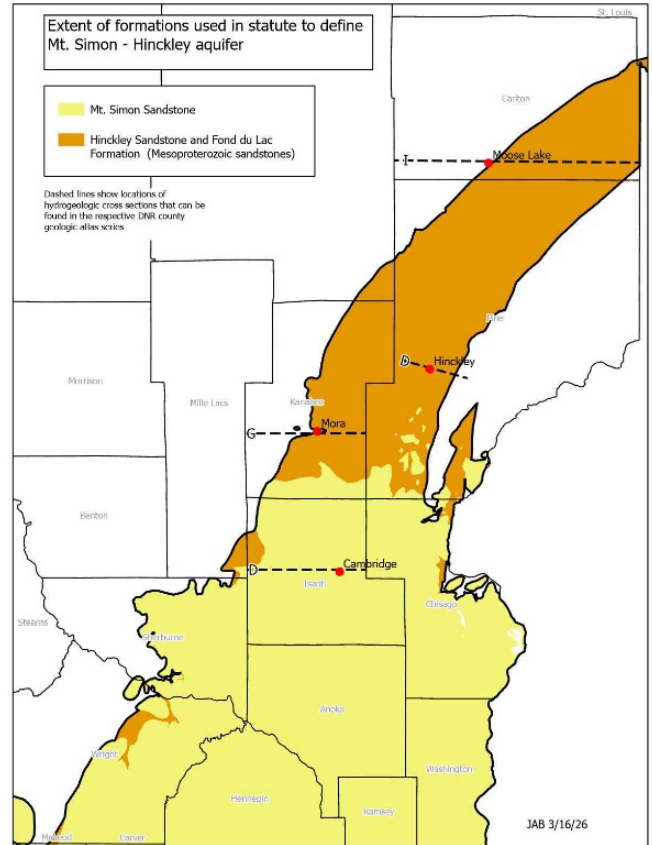


The map to the right depicts where the northern edge of the Mt. Simon aquifer (shown in yellow) erodes away and exposes the Hinckley aquifer (shown in orange). Where the yellow extent on the map gives way to the orange is where the two stacked and hydrologically connected sandstone formations to the south (the Mt. Simon and the Hinckley) become just the Hinckley. The Hinckley aquifer is much shallower and has good recharge in most places compared to the Mt. Simon. **The Kanabec-Isanti and Pine-Chisago County border is an appropriate regulatory boundary where irrigation permits could potentially be allowed to the north, with certain protections.** Where the eroded edge of the Mt. Simon extends above the county line, any irrigation wells should be restricted to a depth limit of 200 feet.



This map shows the recharge characterization of the Hinckley and demonstrates that, at its northern extent, the Hinckley has both high recharge and high pollution sensitivity because it is commonly at or very near the surface. These recharge characteristics are distinctly different from the rest of the recharge area from Wright County and south to the Iowa border, where the Mt. Simon Hinckley recharges at a rate of 5,000 years or more. The Hinckley aquifer's northern extent recharges at a rate of less than 100 to approximately 1,000 years.

