Over the past several months, during the many planning commission worksessions on Wilderness Crossing, we have heard assurances from the developer, Rapidan Service Authority (RSA), and District 5 Supervisor Lee Frame, as most recently reflected in his April 21 column in Lake Currents (page 17) to Lake of the Woods residents, that "There is plenty of water in the Rapidan." Indeed, most historic flow rates have been sufficient to supply the needs of RSA users in the Germanna-Wilderness area. However, Supervisor Frame's editorial also notes that since 1930, there have been three periods when the flow rate has fallen below 3 MGD, the permitted rate of withdrawal for RSA. Considering drought conditions, especially during 1930 and 2002, we might rephrase that assessment to "There is plenty of water in the Rapidan, until there isn't!"

I should note that such a rosy assessment of the water supply situation for this region was not shared by the professional engineering firm, which conducted the original water supply study for the County in 2005. That study raised concerns that – considering plans for development in the Germanna-Wilderness area – the region would likely fall short within a decade or two without increasing the water supply. The substantive recommendations of that study called for: (1) increasing withdrawal rates from the Rapidan, (2) commencing planning for reservoir capacity, and (3) initiating coordinated water supply planning with neighboring municipalities. The County chose to limit the principal actions to taking more water out of the river.

The developer has proffered two areas for water impoundments for reservoirs that will provide some relief (approximately 60 days) should flow rates fall below permitted withdrawal levels. While Supervisor Frame's column envisions supplying these reservoirs from the Rapidan during periods of adequate flow rates, we should note that such a provision will require DEQ permitting. Supervisor Frame also envisions that the pace of development of this project — meaning permit approvals — could be linked to water availability. Considering the extent of uncertainty about the type and number of industrial users (and therefore water usage), can we be assured that cessation of issuing permits or termination of existing permits will be sufficient to respond to a potential water crisis? I imagine that the likely response by the County would be to continue permitting and development, as droughts might be considered only temporary setbacks.

It has been suggested that one of the future reservoirs would be at least partially supplied by impounding Wilderness Run (the eastern boundary of Wilderness Crossing). Since Wilderness Run forms part of the border with Spotsylvania County, the possibility of such an impoundment has raised concerns in Spotsylvania. Those concerns were voiced in a letter from the Spotsylvania County Planning Commission on April 27, 2013, to the Orange County Planning Commission, and again on April 21, 2023, from the Spotsylvania County Administrator on behalf of the Board of Supervisors, for the lack of communication by Orange County. This is a matter of concern for Orange County officials, considering the likely need for coordination with Spotsylvania on water usage matters during periods of drought.

It has been stated numerous times during these deliberations that the permitting process for reservoirs typically takes more than 10 years and involves numerous federal and state permitting agencies, even before construction can commence. Considering that forecasted frequency and duration of severe droughts in the next 40 years will likely exceed what we've seen before, should we be assured that the proposed reservoir capacity will be sufficient for emergency needs? We have experienced droughts, such as the recent one from 1998 to 2002, that last longer than 60 days. The proposed reservoir capacity could be rapidly diminished in such a drought, considering also that reservoirs also tend to evaporate faster during periods of drought.

Considering the potential severity of water shortages when they do occur, and the likelihood of more frequent occurrence in the next 40 years, I would urge the Board of Supervisors to address these concerns before approving Wilderness Crossing:

- (1) Provide greater clarity on the type and number of industrial users to clarify a more realistic water usage estimate.
- (2) Address county water supply coordination with neighboring municipalities before drought conditions occur.

Thank you.

Roy Jacobson

Gordonsville