March 8, 2021

Dear Supervisor _____,

I am a local scientist specializing in hydrology and the connections between surface water and ground water. I have been practicing in Humboldt County for four decades after having gotten my Masters Degree in Wildland Hydrology from HSU. I have been a consultant for several non-profits implementing restoration projects to improve low flows in our salmon and steelhead streams.

Lately I have been contacted by landowners concerned about new water wells being installed by their neighbors for commercial cannabis farms. They worry that the new wells will reduce their water supplies during the dry season, and that the County's permitting process may not recognize this distinct possibility. Their worries may be well justified, but without intensive study, no one can say for sure, not the permit seeker, the well driller, or those that may suffer from the new groundwater extractions. Yet the County seems poised to approve new or expanding grows with industrial-sized water needs in a vacuum of factual information.

There are alternatives to digging ever more wells to satisfy the growing needs of the cannabis industry. Water storage (tanks) is the answer, along with growing practices that emphasize efficient water use for irrigation. One of my clients, the Sanctuary Forest in the Upper Mattole, has been promoting increased storage so that dry season pumping from creeks and aquifers can be reduced. They have demonstrated through monitoring and analysis that this approach works. Pumping from wells to fill storage tanks, or using rain water catchment from roofs, outside of the dry season allows water extraction from creeks and aquifers to become seasonal, with forbearance during the driest part of the year.

Please consider the hydrologic impacts of new and expanding cannabis farms in the permitting process. Respecting the concerns of people likely to be affected will help prevent future disputes over water and promote peaceful communities rather than lead to our own water wars that will pit neighbor against neighbor.

Randy Klein

Hydrologist

Arcata, CA 95521