

June 7, 2021

Dear WA Dept. of Ecology,

The Friends of Toppenish Creek (FOTC) appreciate the opportunity to comment on Ecology's *Draft 2021 Columbia River Basin Long-Term Water Supply and Demand Forecast*.

FOTC is a 501 C 3 non-profit located in the Lower Yakima Valley (LYV):

Friends of Toppenish Creek is dedicated to protecting the rights of rural communities and improving oversight of industrial agriculture. FOTC operates under the simple principle that all people deserve clean air, clean water and protection from abuse that results when profit is favored over people. FOTC works through public education, citizen investigations, research, legislation, special events, and direct action.

Our comments concern the disproportionate impact that concentrated animal feeding operation (CAFO) dairies have on LYV groundwater. This relationship should be described in detail in the *Long-Term Water Supply and Demand Forecast*.

The Draft tells us that the Grand Ronde aquifer in the LYV is declining at a rate of 3 to 9 feet per year. The Wanapum aquifer in the LYV is declining at a rate of 2 to 5 feet per year. (Pages 53, 224 & 227)

According to the Draft the time frame for 25% drawdown in saturated thickness of the LYV aquifer is from 26 to 50 years. The time frame for 25% drawdown in saturated thickness in the Eastern Benton area that includes the Moxee area is 11 to 25 years. (Pages 55 & 229) This is a crisis.

FOTC asserts that this decline is in large part due to the proliferation of CAFO dairies in Yakima County. According to the National Agricultural Statistics Service 38% of all Washington dairy cows are housed in Yakima County. Most of these animals are located within 271 square miles of the LYV in what is called the LYV Groundwater Management Area.

Depending on age and size, normal cattle drink 10 to 15 gallons of water per day. High producing milk cows are different. To produce 7 gallons of milk a day, cows require 50 to 100 gallons of water per day, depending on the ambient temperature. Yakima County is hot during the summer months and 100 gallons of water per day per milk cow is not uncommon. In addition, under Washington law, dairies are allowed to withdraw free groundwater for flushing manure from the barns and milk parlors.

A simple pencil and paper exercise says that 100,000 milk cows times 80 gallons per day equals 8 million gallons per day for dairy cows in the LYV. According to the Draft (Page 9) all the livestock in all Eastern Washington require 20 million gallons per day.<sup>2</sup>

Ecology should not pretend that things are alright in the Yakima Valley because the average impact of animal agriculture in Eastern Washington is small. There is no comfort in averages. If a man stands with one foot in boiling water and the other in freezing water, he has a normal temperature – on average.

When aquifers in the LYV decline this means:

- 1. Changes in the interface between groundwater and the impaired Lower Yakima River. If aquifers decline, water will move from the river to the groundwater, rather than from the groundwater to the river.
- 2. Crop farmers and orchardists will have to drill deeper emergency wells to water their fields during droughts. In 2015 when orchardists accessed emergency wells, many had run dry.
- 3. Small cities will have to drill newer, deeper, and more expensive municipal wells when older wells run dry as happened in Mabton in 2016.

https://www.nass.usda.gov/Statistics\_by\_State/Washington/Publications/Livestock/2021/CE\_CAT.pdf
76% of all Washington cattle live in Eastern Washington. 21% of all Washington cattle live in Yakima County.
61% of all Washington dairy cows live in Eastern Washington. 38% of all Washington dairy cows live in Yakima County.

The 2016 Columbia River Basin Long-Term Water Supply and Demand Forecast (Page 13) stated that stock watering consumed 0.45% of all agricultural water consumption in Eastern Washington. Available at <a href="https://apps.ecology.wa.gov/publications/documents/1612001.pdf">https://apps.ecology.wa.gov/publications/documents/1612001.pdf</a>
The 2021 Draft estimates that stock watering will now consume 0.68% of all agricultural water consumption.)

Lawmakers and policy makers rely on forecasts such as this Draft to make decisions for the greater good. They need to know the impact of CAFOs on water supply in the LYV. Please add a section that spells out the hydrodynamics in this important part of Washington State.

Sincerely,

Jean Mendoza

Executive Director, Friends of Toppenish Creek

3142 Signal Peak Road White Swan, WA 98952

Jean Mundiza