



Friends of Toppenish Creek

February 28, 2025

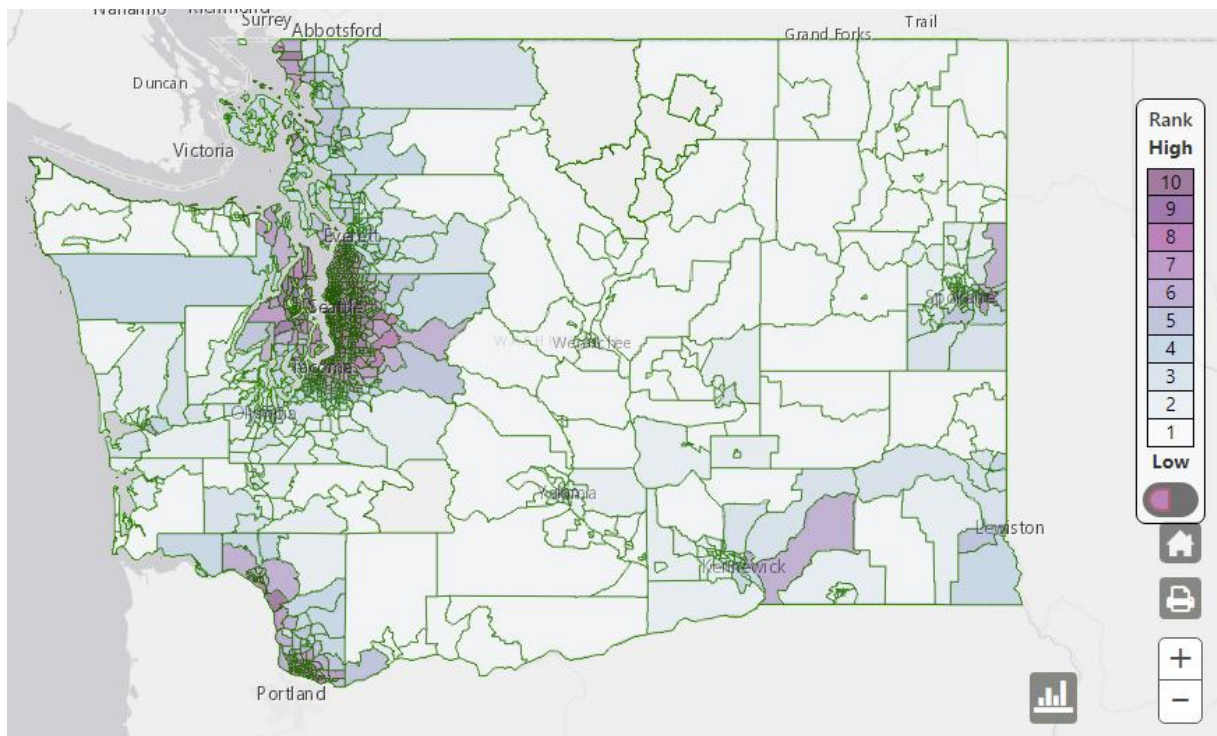
WA State Dept. of Health
Washington Tracking Network
DOH.WTN@doh.wa.gov.

Dear WA Tracking Network,

Friends of Toppenish Creek is a 501(C)(3) non-profit group in Yakima County with a mission to protect the natural environment and public health.

We have concerns about a section of the WA Health Disparities Map that appears to convey erroneous information about the Lower Yakima Valley, an area between Union Gap and Prosser with a high concentration of dairies that emit large volumes of pollutants.

Please, consider the Environmental Health Disparities Map for *Toxic Releases from Facilities* - [Information by Location | Washington Tracking Network \(WTN\)](#)



The Yakima Valley appears quite safe because toxic releases from CAFO dairies are not counted and not mapped. This is wrong.

Here is the evidence:

Estimates of Emissions from Dairy Cows

The largest source of air pollution in Yakima County, after wildfires, is dairy. There are about 100,000 milk cows in the county, about 36% of all Washington milk cows. FOTC has estimated air emissions for these cows based on data collected from a Lower Yakima Valley dairy during the National Air Emissions Monitoring Study and based on estimates that the U.S. Environmental Protection Agency provides to the states to assist with greenhouse gas reporting. These are estimates, but they are close enough to reality to illustrate the issue.

From Environmental Protection Agency Models for Washington State available at [State Inventory and Projection Tool | US EPA](#)

Methane

Manure Management 43,041,000,000 g/year for 275,000 cows = 428.80 g/day/cow

Enteric Fermentation 150.9 kg/cow per year = 410.96 g/day/cow

Total Methane 839.76 g/cow/day

From *Emissions Data from Two Dairy Freestall Barns in Washington* – National Air Emissions Monitoring Study available at [ASAE Journal | US EPA ARCHIVE DOCUMENT](#)

Ammonia

Barn 2: 56.5 g/day/cow

Barn 4: 56.5 g/day/cow

56.5 g/day/cow average

Hydrogen Sulfide

Barn 2: 1.08 g/day/cow

Barn 4: 1.15 g/d/cow

1.12 g/day/cow average

Volatile Organic Compounds

Barn 2: 86.67 g/day/cow

Barn 4: 145.71 g/day/cow

116.19 g/day/cow average

PM 2.5

Barn 2: 5.25 g/day/cow

Barn 4: 1.90 g/day/cow

3.58 g/day/cow average

PM 10

Barn 2: 6.94 g/day/cow

Barn 4: 10.0 g/day/cow

8.47 g/day/cow average

Estimated daily emissions from dairy cows

Pollutant	Grams/cow/day	Lbs./cow/day
Methane (Manure Mgmt. + Enteric)	839.76	1.849692
Ammonia	56.50	0.124449
Hydrogen Sulfide	1.12	0.002467
VOCs	116.19	0.255925
PM 2.5	3.58	0.007885
PM 10	8.47	0.018656

Estimated Emissions from 100,000 milk cows in Yakima County in Metric Tons and Tons Per Year based on NAEMS data and EPA models.

Pollutants		Metric tons	Tons
Methane		30,651	33,716
Ammonia		2,062	2,270
Hydrogen Sulfide		41	45
VOCs		4,241	4,665
PM 2.5		131	144
PM 10		309	340

If the forty LYV dairies were considered together this would constitute a Title V source of air emissions. The larger LYV CAFO dairies individually meet those criteria.

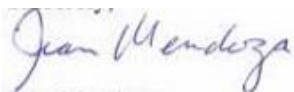
To put these numbers in perspective, here are Title V (Major Sources) of Air Emissions in Yakima County in tons per year for 2023 from Washington Emissions Inventory Reporting System (WEIRS) available at [Emissions inventory reporting - Washington State Department of Ecology](#)

Source	PM 10	PM 2.5	SO ₂	NOX	VOC	CO	NH ₃
Novolex Shields	0	0	0	1.6	352.8	2.3	0
Terrace Heights Landfill	24.398	4.1377	1.48	2.28	19.62	6.8	0

Are you able to make corrections to the WA Environmental Health Disparities Map so this section is relevant to the people of Yakima County?

Thank you so much for considering our request.

Sincerely,



Executive Director, Friends of Toppenish Creek

3142 Signal Peak Road
White Swan, WA 98952