Lower Yakima Valley Safe Drinking Water Act Petition

SUPPLEMENTAL INFORMATION:
Groundwater Studies Demonstrating Increase in Nitrate Contamination in Lower Yakima Valley From 1988 to 2019

1988: WASH. DEP'T OF ECOLOGY, WASHINGTON STATE AGRICULTURAL CHEMICALS PILOT STUDY: FINAL REPORT (Nov. 1990), https://apps.ecology.wa.gov/publications/documents/9046.pdf

- 27 wells sampled for nitrate
- 8 wells showed detectable concentrations
- **0 wells exceeded MCL** of 10 mg/L

1990: WASH. DEP'T OF ECOLOGY, GROUNDWATER QUALITY ASSESSMENT: HORNBY DAIRY LAGOON, SUNNYSIDE, WA (rev. Mar. 1993), https://apps.ecology.wa.gov/publications/documents/92e23.pdf

- 5 monitoring wells sampled near Hornby Dairy Lagoon
- 2 monitoring wells at exceeded MCL

1991: USGS, SURVEY OF GROUNDWATER QUALITY IN THE TOPPENISH CREEK BASIN, YAKAMA INDIAN RESERVATION, WA, 1989-1991 (1998), https://doi.org/10.3133/wri974194; SELECTED WATER-QUALITY DATA FOR THE TOPPENISH CREEK BASIN, YAKIMA INDIAN RESERVATION, WA, 1989 (1994), https://pubs.usgs.gov/of/1993/0486/report.pdf

- 487 wells sampled
- **2 wells (0.4%) exceeded MCL**

2002: WASH. DEP'T OF ECOLOGY, QUALITY OF GROUNDWATER IN PRIVATE WELLS IN THE LOWER YAKIMA VALLEY, 2001-2002 (Dec. 2002), https://apps.ecology.wa.gov/publications/documents/0210074.pdf

- 249 residential drinking water wells sampled
- **40 wells (16%) exceeded MCL**

2010: EPA, RELATION BETWEEN NITRATE IN WATER WELLS & POTENTIAL SOURCES IN THE LOWER YAKIMA VALLEY, WA (rev. Mar. 2013), https://www.epa.gov/sites/default/files/2017-12/documents/lower-yakima-valley-groundwater-report-2013.pdf

- 331 residential drinking water wells sampled
- **67 wells (20%) exceeded MCL**

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2017: USGS, CONCENTRATIONS OF NITRATE IN DRINKING WATER IN THE LOWER YAKIMA RIVER BASIN, GROUNDWATER MANAGEMENT AREA: 2017 (May 2018), https://pubs.usgs.gov/ds/1084/ds1084.pdf

- 156 residential drinking water wells sampled
- **40 wells (26%) exceeded MCL**

2018: QAPP: BENTON COUNTY GROUNDWATER NITRATE MONITORING STUDY (Aug. 2016), https://fortress.wa.gov/ecy/publications/summarypages/1610028.html

- EIM Data
- EIM Study

- 261 wells sampled
- **60 wells (23%) exceeded MCL**

2019: LOWER YAKIMA VALLEY GWMA AMBIENT GROUNDWATER MONITORING WELL INSTALLATION REPORT (2019), https://www.yakimacounty.us/DocumentCenter/View/21362/Yakima-GWMA-Well-Installation-Report-?bidId=

- 29 monitoring wells sampled (excluding wells in dairy cluster area)
- **13 wells (45%) exceed MCL**