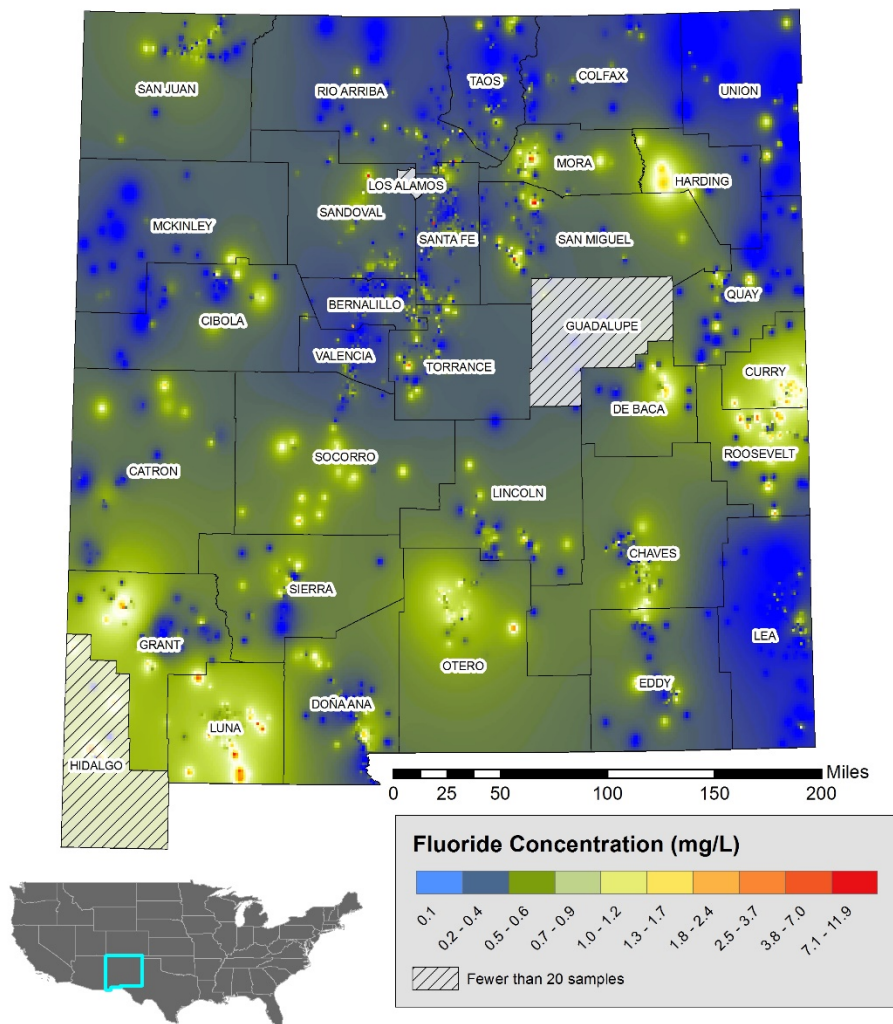# Fluoride Distribution in New Mexico Private Wells

Wells Sampled December 1950 – November 2018

Fluoride levels in water samples from private wells vary between New Mexico counties and even within the same county. The groundwater system in New Mexico is very complex. This complexity can lead to large fluoride concentration variability even amongst neighboring wells. **Therefore, to know the fluoride concentration in your water from your own well, you need to test.** The allowed drinking water fluoride concentration to prevent dental fluorosis is 2 milligrams per liter (mg/L), and to prevent skeletal fluorosis is 4 mg/L. The primary Environmental Protection Agency (EPA) Safe Drinking Water standard concentration for fluoride is 4 mg/L and the secondary standard is 2 mg/L.

Fluoride Distribution in New Mexico Private Wells
Wells Sampled December 1950 – November 2018
Interpolated* Groundwater Fluoride Concentrations (mg/L) from Private Wells Data

Fluoride Concentration (mg/L)

0.1 | 0.2 - 0.4 | 0.5 - 0.6 | 0.7 - 0.9 | 1.0 - 1.2 | 1.3 - 1.7 | 1.8 - 2.4 | 2.5 - 3.7 | 3.8 - 7.0 | 7.1 - 11.9

Fewer than 20 samples

Data Sources: NMED Water Fairs, NMBGMR private wells, USEPA, USGS NWIS private wells, NMDOH biomonitoring, Bernalillo County, Santa Fe County
*Interpolated Using QGIS 3.4.3 inverse distance weighted.

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New Mexico Private Well Inventory

Fluoride Test Results Summary December 1950 – November 2018

County	# of tests	% Tests above Secondary MCL (2 mg/L)	% Tests above Primary MCL (4 mg/L)	Concentration of Fluoride in Milligrams per Liter (mg/L)						
				Mean	Std. D.	Max	95th Percentile	Median	5th Percentile	Min Detected value
Bernalillo	1215	3.0	0.3	0.3	0.7	11.0	1.6	0.01	0.01	0.01
Catron	162	3.1	0.6	0.5	0.6	5.4	1.3	0.32	0.01	0.01
Chaves	308	0.3	0.0	0.6	0.6	2.2	1.4	0.75	0.01	0.01
Cibola	145	2.1	0.0	0.5	0.6	3.8	1.6	0.25	0.01	0.01
Colfax	135	0.7	0.0	0.3	0.5	3.8	1.0	0.01	0.01	0.01
Curry	102	14.7	0.0	1.1	0.9	2.9	2.4	1.18	0.01	0.01
De Baca	50	8.0	2.0	0.8	1.1	5.1	2.3	0.01	0.01	0.01
Doña Ana	565	2.5	0.9	0.4	0.6	4.6	1.6	0.26	0.01	0.01
Eddy	157	3.8	0.6	0.5	0.7	4.1	1.8	0.01	0.01	0.01
Grant	250	12.8	1.2	0.7	1.3	11.9	2.8	0.25	0.01	0.01
Guadalupe	10	0.0	0.0	0.2	0.3	1.0	1.0	0.01	0.01	0.01
Harding	36	27.8	5.6	1.6	1.3	5.2	4.8	1.60	0.01	0.01
Hidalgo	11	45.5	0.0	1.4	1.4	3.8	3.8	1.40	0.01	0.01
Lea	948	0.3	0.0	0.2	0.4	2.5	1.2	0.01	0.01	0.01
Lincoln	156	1.9	0.0	0.4	0.5	2.4	1.4	0.05	0.01	0.01
Los Alamos	3	0.0	0.0	0.2	0.3	0.5	0.5	0.01	0.01	0.01
Luna	323	7.1	1.6	0.9	0.8	6.0	2.4	0.73	0.34	0.01
McKinley	42	2.4	0.0	0.3	0.5	2.0	1.7	0.01	0.01	0.01
Mora	113	8.9	1.8	0.9	1.8	14.5	3.1	0.46	0.01	0.01
Otero	165	4.2	0.6	0.9	0.7	4.3	1.9	0.81	0.11	0.01
Quay	164	2.4	0.0	0.3	0.7	2.9	2.0	0.01	0.01	0.01
Rio Arriba	705	2.8	0.7	0.4	0.9	11.9	1.6	0.01	0.01	0.01
Roosevelt	124	12.9	0.0	0.9	1.0	4.0	3.0	0.01	0.01	0.01
San Juan	732	1.6	0.1	0.5	0.5	4.5	1.4	0.45	0.01	0.01
San Miguel	330	3.3	0.9	0.4	1.3	17.0	1.5	0.01	0.01	0.01
Sandoval	744	1.9	0.1	0.5	0.5	5.3	1.3	0.41	0.01	0.01
Santa Fe	2981	2.2	0.2	0.4	0.7	15.0	1.4	0.02	0.01	0.00
Sierra	187	3.2	0.0	0.4	0.7	2.9	2.0	0.01	0.01	0.01
Socorro	240	2.9	0.0	0.6	0.6	3.4	1.6	0.45	0.01	0.01
Taos	836	1.3	0.5	0.3	0.6	7.8	1.1	0.01	0.01	0.01
Torrance	217	1.8	0.5	0.5	0.8	8.3	1.5	0.32	0.01	0.01
Union	303	0.0	0.0	0.1	0.3	2.0	0.9	0.01	0.01	0.01
Valencia	619	0.2	0.6	0.3	0.4	2.2	1.0	0.01	0.01	0.01

- Indicates insufficient data to calculate statistics; N/A indicates Not Applicable; *Minimum detected value calculated as half the detection limit (DL) for concentrations less than DL for samples with DL provided; DL varies

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