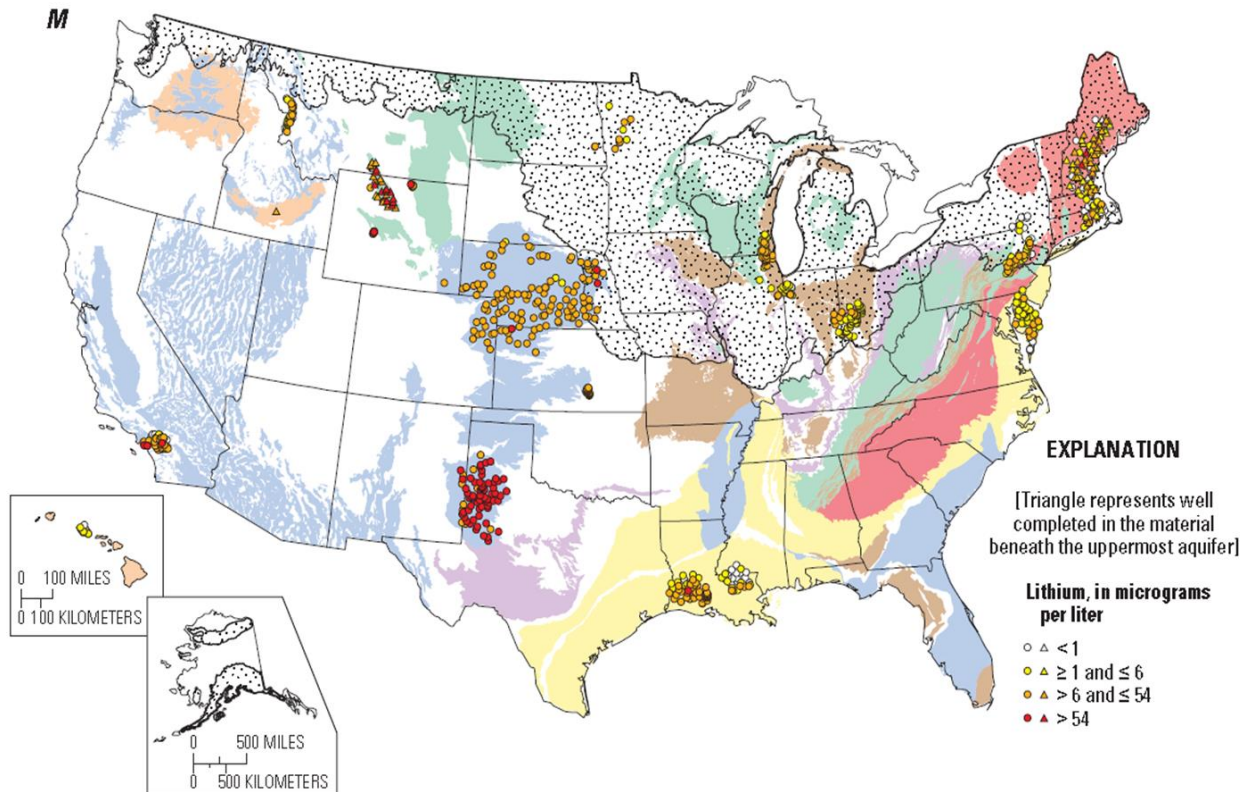


LITHIUM IN YOUR DRINKING WATER

East Windsor Municipal Utilities Authority is regulated by the federal EPA and NJDEP. Every 3 to 5 years, the EPA requires sampling of certain elements and chemical compounds. In 2024/2025, East Windsor MUA sampled for PFAS and several Gen X chemicals along with Lithium. East Windsor MUA had a non-detect for PFAS and the Gen X chemicals in all its wells. We had traces of lithium in our wells. Below are the results of the 4 sample sites:

Lithium Results				
	ug/L	ug/L		
TP001001	ND	ND		
TP004011	13.4	16.4		
TP002005	14.7	13.4		
TP009018	25.1	24.0		
Note: Readings are in Parts Per Billion (ug/L)				

Lithium occurs naturally in groundwater across the United States, but concentrations vary dramatically by region.



lithium is used widely in the pharmaceutical industry for bipolar disorder and depression. Some research suggests areas with naturally higher lithium levels show **reduced suicide rates and**

LITHIUM IN YOUR DRINKING WATER

potential neuroprotective benefits. Environmental exposures in water happens at much lower doses. Therapeutic (medical) doses of Lithium usually range from 600 – 1,200 mg/l

Lithium in food & Beverages

Lithium is known to be in red wine ($17.88 \pm 8.70 \mu\text{g/L}$), white wines ($13.55 \pm 10.33 \mu\text{g/L}$), beers ($7.38 \pm 4.76 \mu\text{g/L}$), and fruit juices ($7.11 \pm 6.27 \mu\text{g/L}$) Lower values were measured in ciders ($4.05 \pm 4.83 \mu\text{g/L}$). Bottled waters ($18.10 \pm 4.08 \mu\text{g/L}$). A particular category was designated for plants for teas ($0.19 \pm 5.72 \text{ mg/kg}$) and coffee seeds ($0.01 \pm 0.03 \text{ mg/kg}$). Lithium is Known for being in wheat, barley, rice, and all vegetables.

Conclusion

The federal EPA has not come out with any standards or Maximum Contaminant Levels for Lithium. There have not been any studies on lithium and its effects on humans in the drinking water. East Windsor MUA will continue to monitor for this element. According to the USGS study and the concerns among toxicologists, a recommended level of 60 ug/l for lithium was proposed. East Windsor MUA's water was a ND – 25.1 ug/l and is far below that standard.