



Community Focused Sampling Results

Prepared for the Eureka Board of Supervisors

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2023 Community Focused Sampling

- **Participant request forms mailed to 528 well owners**
- **112 participated (21% participation)**

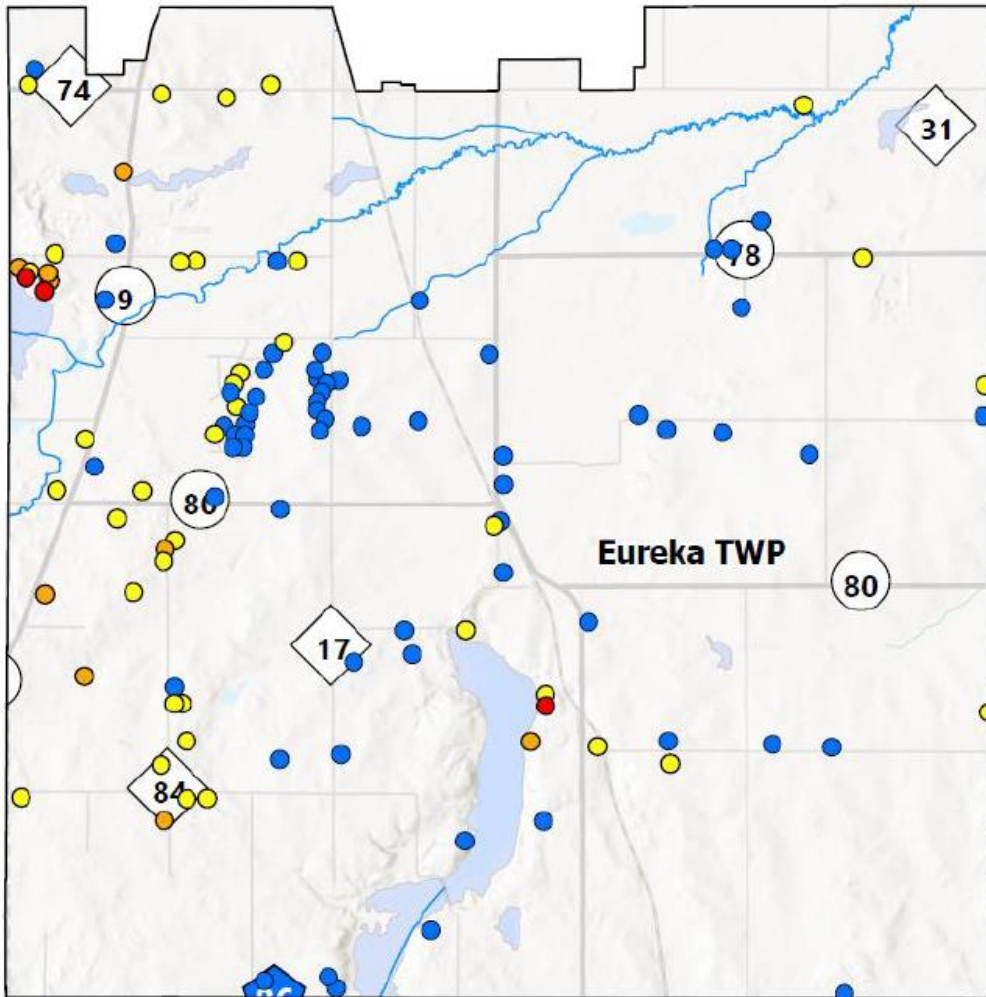
Outside Untreated

- Arsenic
- Nitrate
- Manganese
- Chloride – outside only

Inside Treated or Untreated

- Arsenic – if outside sample above 0.05 µg/L
- Nitrate – if outside sample above 3 mg/L
- Manganese – if outside sample above 90 µg/L
- **Lead – every inside sample**

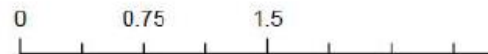
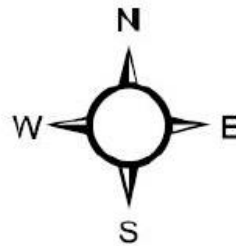
Arsenic



EUREKA TWP
Arsenic (µg/L)
of samples = 112

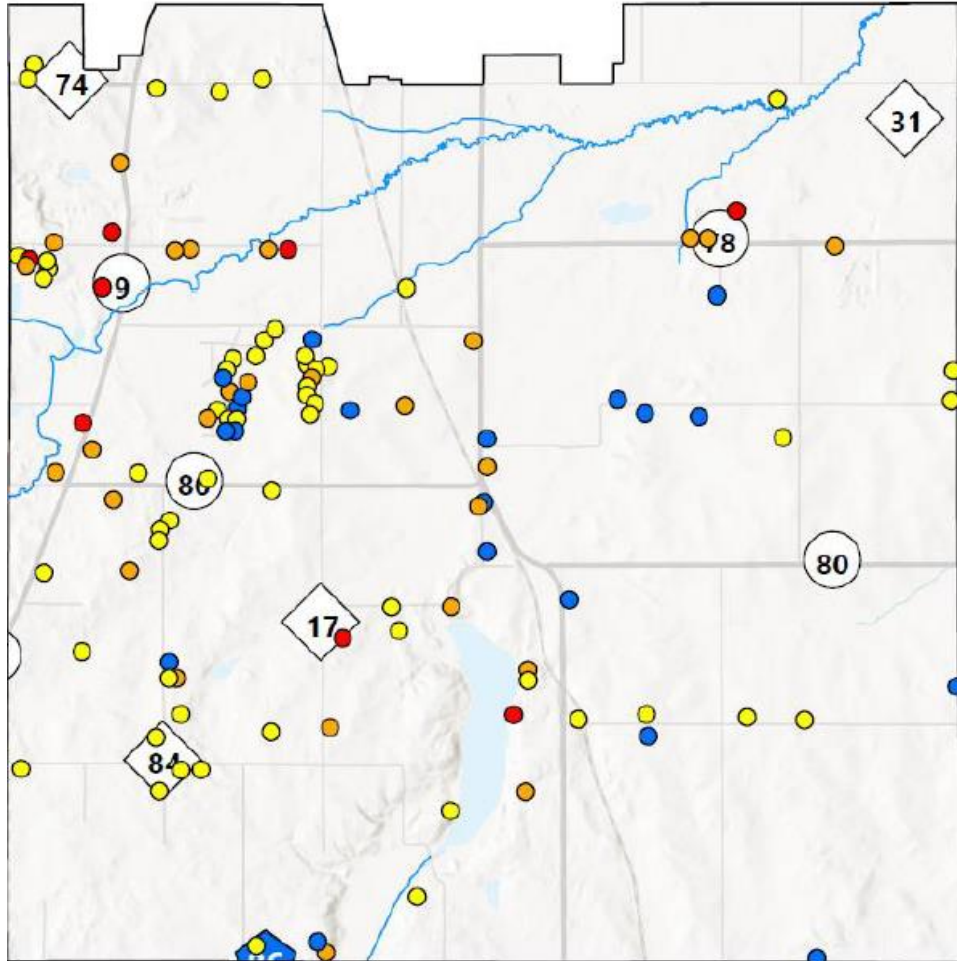
- Greater than 10 (3)
- 3 - 9.9 (9)
- 0.05 - 2.9 (38)
- Less than 0.05 (62)

10 µg/L - Drinking Water
Standard for Arsenic



- Drinking water guideline – **10 µg/L no amount is safe to drink.**
- Found in 44% of outside samples.
- Found in 70% of inside samples.
- No inside samples exceeded drinking water guidelines.

Manganese

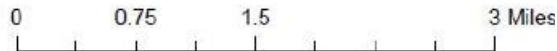
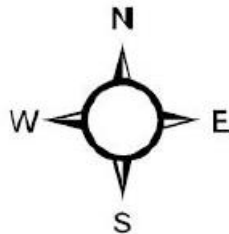


EUREKA TWP
Manganese ($\mu\text{g/L}$)
of samples = 112

- Greater than 300 (8)
- 100 - 299 (28)
- 5 - 99 (56)
- Less than 5 (20)

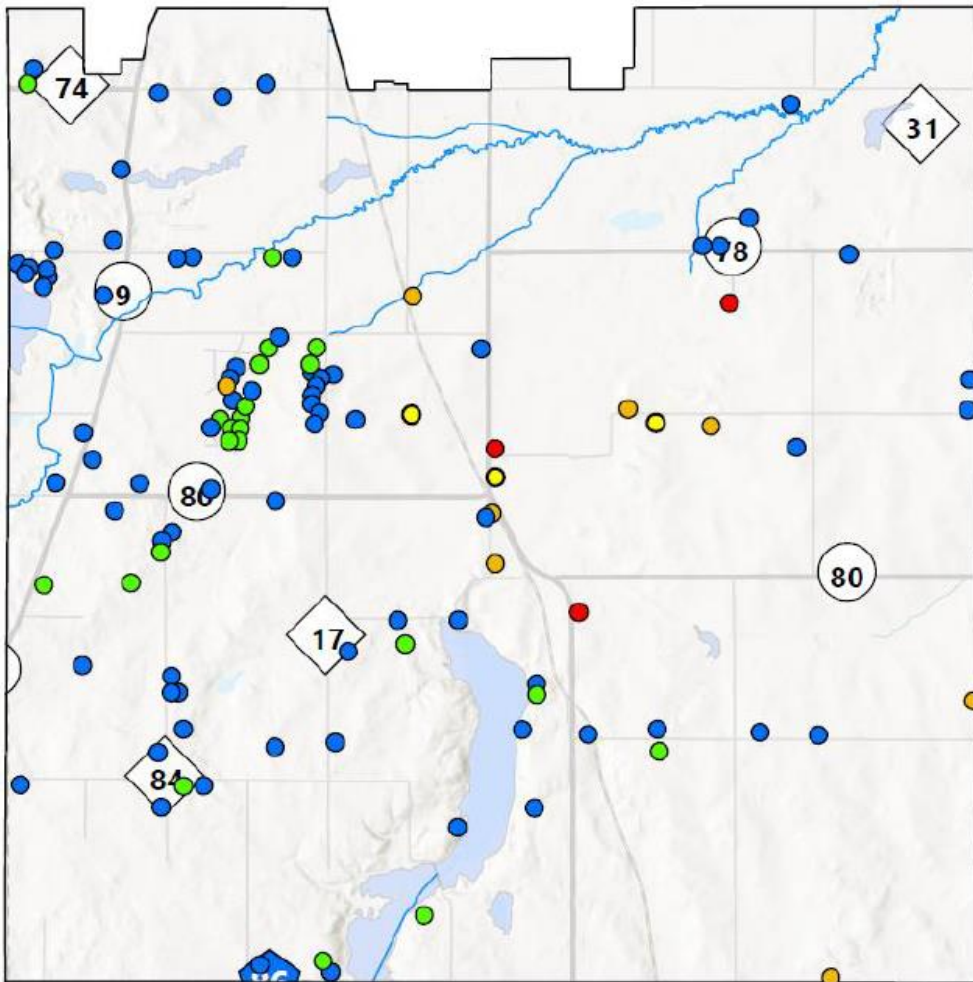
100 $\mu\text{g/L}$ - Recommended limit
for infants younger than one-year
old who consume tap water or
formula from tap water.

300 $\mu\text{g/L}$ - Recommended for
children older than one-year old
and adults.



- Drinking water guideline =
 - 100 mg/L (infants)
 - 300 mg/L (adults)
- Found in 91% of outside samples.
- 19% of samples exceeded drinking water guidelines.

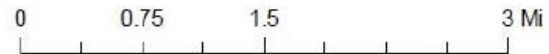
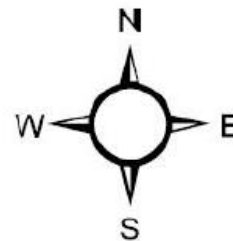
Nitrate



EUREKA TWP
Nitrate (mg/L)
of samples = 112

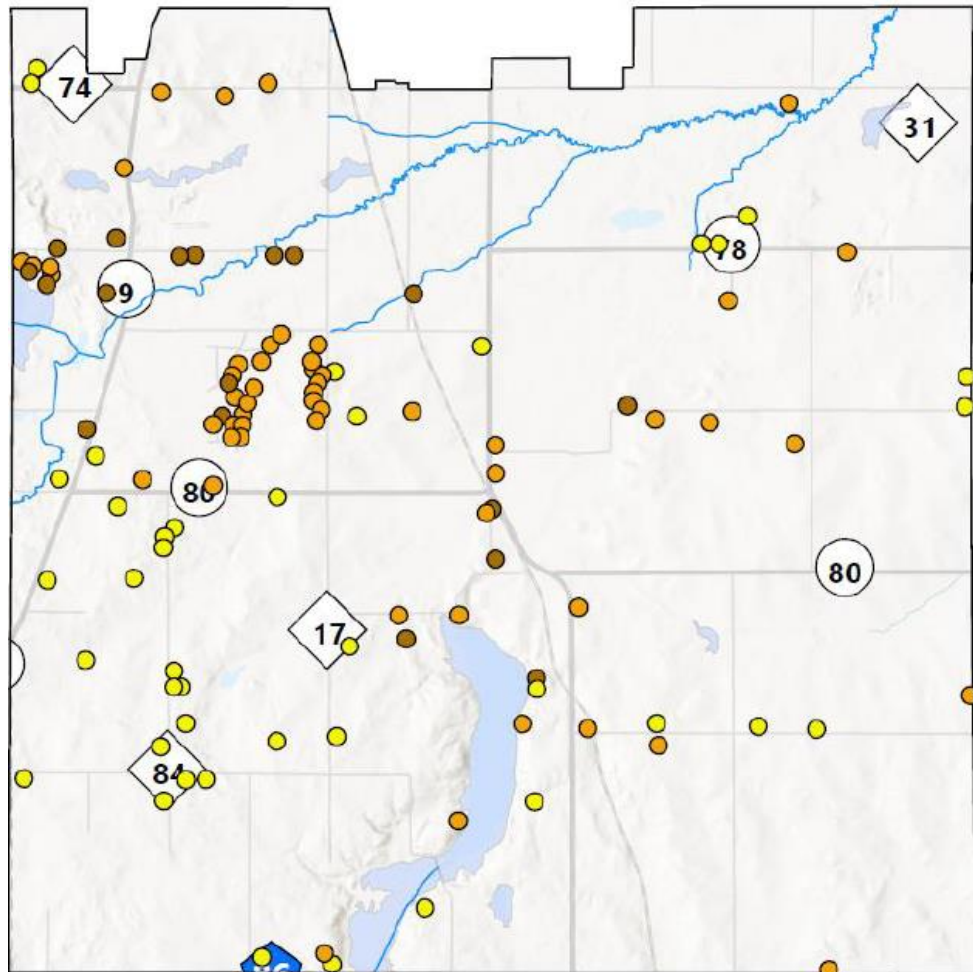
- Greater than 10 (3)
- 5 - 9.9 (8)
- 3 - 4.9 (3)
- 0.05 - 2.9 (24)
- Less than 0.05 (74)

10 mg/L - Drinking Water
Standard for Nitrate



- Drinking water guideline = 10 mg/L
- Found in 33% of outside samples.
- 6% of inside samples exceeded drinking water guidelines.

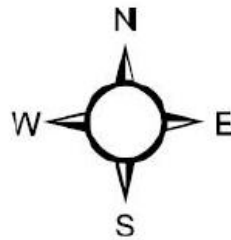
Chloride



EUREKA TWP
Chloride (mg/L)
of samples = 112

- Greater than 100 (0)
- 25 - 99 (19)
- 3 - 24 (53)
- Less than 3 (40)

250 mg/L - Drinking Water
Standard for Chloride



- Drinking water guideline = 250 mg/L
- Found in 64% of outside samples.
- 0 inside samples exceeded drinking water guideline.

Lead

- Sources: lead services lines and plumbing fixtures, pipes and solder installed before 1986 could have high levels of lead
- Water quality guideline is 15 µg/L, however, there is **no amount of lead is safe to drink**
- 33% of inside samples had lead detected
- 2 wells exceeded the 15 µg/L water quality guideline



Summary

Key Takeaways:

- Nitrate and Manganese is the main concern for Eureka TWP.
- Chloride is becoming a growing concern for groundwater
- Arsenic and Lead could be concerns – neither are safe to drink

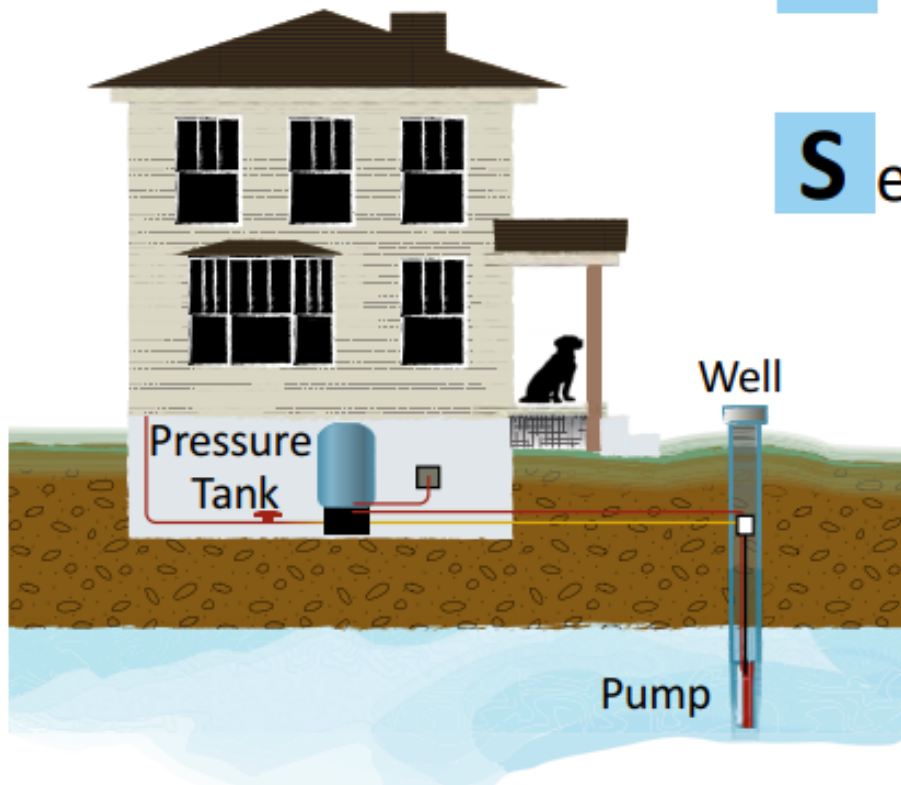
Recommendations:

- Continue to sample wells per MDH guidelines



You and your licensed well contractor have important roles in keeping your well safe. A safe well helps keep your household healthy and protects Minnesota's groundwater. Remember your role by remembering TIPS. →

Keep all well records related to well construction, maintenance, repairs, disinfection, sediment removal, and testing.



Test your water.

Inspect your well.

Protect your well.

Seal unused wells.

Questions

1.2 million Minnesotans
get their drinking water from a
private well.