

Jarrett Creek 100m upstream of Lake Menomin

Road Salt Monitoring Data Summary December 2012 – June 2013



Photo by Lisa Ludwig

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Specific conductance summary:

- 40 measurements taken
- Minimum: 300 $\mu\text{S}/\text{cm}$ on 4/10/2013
- Maximum: 5100 $\mu\text{S}/\text{cm}$ on 1/29/2013
- Mean: 861 $\mu\text{S}/\text{cm}$

Chloride (Cl⁻) summary:

- 5 samples collected
- Minimum: 48.6 mg/L on 4/10/2013
- Maximum: 1530 mg/L on 1/29/2013
- Mean: 467 mg/L

EPA Acute and Chronic Exceedences for Chloride¹:

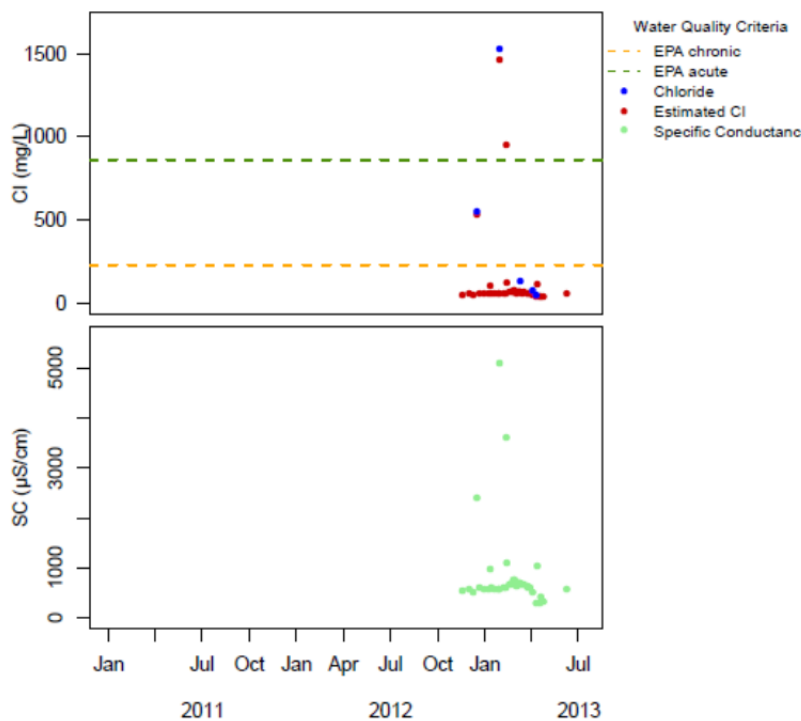
The EPA acute chloride standard of 860 mg/L was exceeded twice at this site.

- 1530 mg/L on 1/29/2013 (measured)
- 948 mg/L on 2/11/2013 (calculated)

In addition, the EPA chronic chloride standard of 230 mg/L was exceeded once at this site:

- 555 mg/L on 12/16/2012 (measured)
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Results Over Time²:



¹ Source: EPA. 1988. Ambient Water Quality Criteria for Chloride. EPA 440/6-88-001.

² Calculated chloride: When $\text{SC} > 1540 \mu\text{S}/\text{cm}$ was $\text{Cl} = 0.3441 * \text{SC} - 291$, $\text{adj}R^2 = 0.98$; when $\text{SC} \leq 1540 \mu\text{S}/\text{cm}$ was $\text{Cl} = 1.044 * (\exp(0.001609 * \text{SC} + 3.046))$, $\text{adj}R^2 = 0.65$. Equations based on data from both Madison and Milwaukee.