

Galloway at Third Street

Road Salt Monitoring Data Summary

November 2012 – June 2013



Photo by Lisa Ludwig

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Specific conductance summary:

- 40 measurements taken
- Minimum: 170 $\mu\text{S}/\text{cm}$ on 4/10/2013
- Maximum: 4600 $\mu\text{S}/\text{cm}$ on 1/29/2013
- Mean: 839 $\mu\text{S}/\text{cm}$

Chloride (Cl⁻) summary:

- 0 samples collected (Galloway at Red Cedar River used as surrogate)

EPA Acute and Chronic Exceedences for Chloride¹:

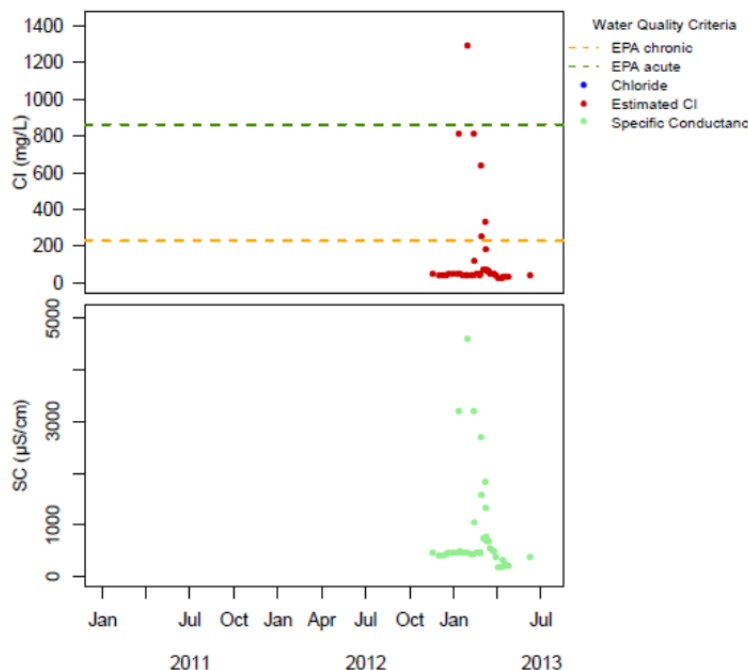
The EPA acute chloride standard of 860 mg/L was exceeded once at this site.

- 1530 mg/L on 1/29/2013 (measured)

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

- 253 mg/L on 2/27/2012 (calculated)
- 638 mg/L on 2/26/2013 (calculated)
- 810 mg/L on 2/11/2013 (calculated)
- 335 mg/L on 3/7/2013 (calculated)
- 810 mg/L on 1/11/2013 (calculated)

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