

Neenah Slough at CTH JJ

Road Salt Monitoring Data Summary

December 2011- December 2012



Photo courtesy of Jim Beecher

Volunteers: Frank and Lynn Druecke, and Janet Moldenhauer

Specific conductance summary:

- 8 measurements taken
- Minimum: 800 $\mu\text{S}/\text{cm}$ on 5/2/2012
- Maximum: 1570 $\mu\text{S}/\text{cm}$ on 2/23/2012
- Mean: 1186 $\mu\text{S}/\text{cm}$

Chloride (Cl⁻) summary:

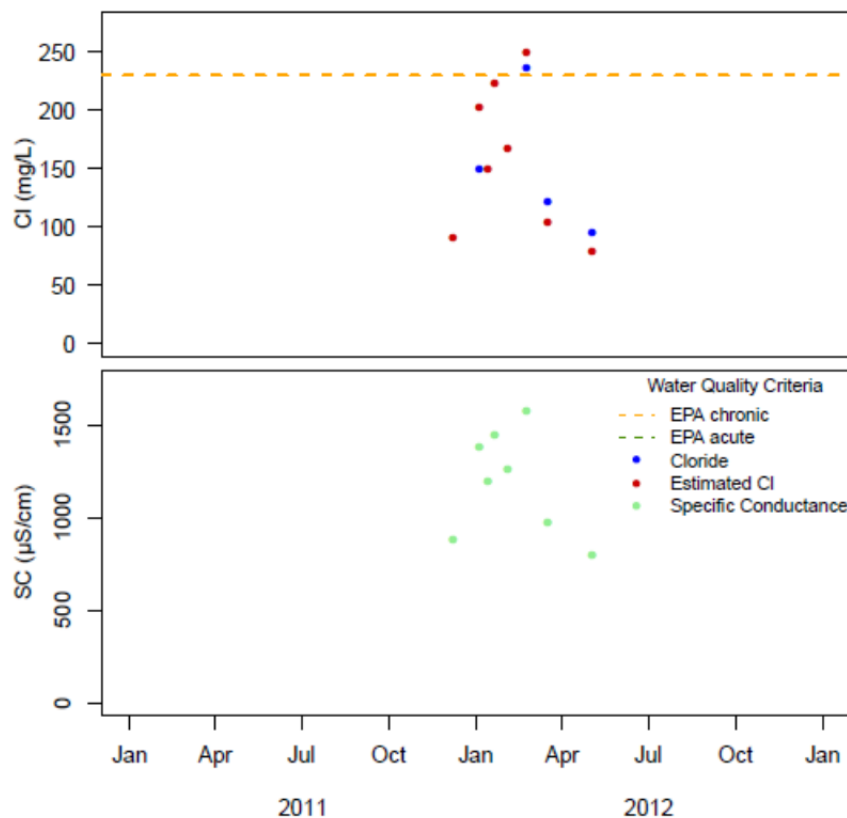
- 5 samples collected
- Minimum: 94.5 mg/L on 5/2/2012
- Maximum: 237 mg/L on 2/23/2012
- Mean: 165 mg/L

EPA Acute and Chronic Exceedences for Chloride¹:

The EPA acute chloride standard of 860 mg/L was not exceeded at this site in 2011 or in 2012. The EPA chronic chloride standard of 230 mg/L was not exceeded at this site in 2011, but was exceeded one time in 2012:

- 237 mg/L on 2/23/2012 (measured)

Results Over Time²:



¹ EPA acute chloride standard: The one-hour average concentration should not exceed 860 mg/L more than once every three years. EPA chronic chloride standard: The four day average concentration should not exceed 230 mg/L more than once every three years on average. 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.