

Rock Creek at Lake St, Lake Mills

Road Salt Monitoring Data Summary

February –December 2011



Photo courtesy of Jim Beecher

Volunteers: Jim Kerler and Ed Grunden

Specific conductance summary:

- NA

Chloride (Cl⁻) summary:

- 4 samples collected
- Minimum: 20.9 mg/L 3/28/2011
- Maximum: 221 mg/L 2/14/2011
- Mean: 103 mg/L

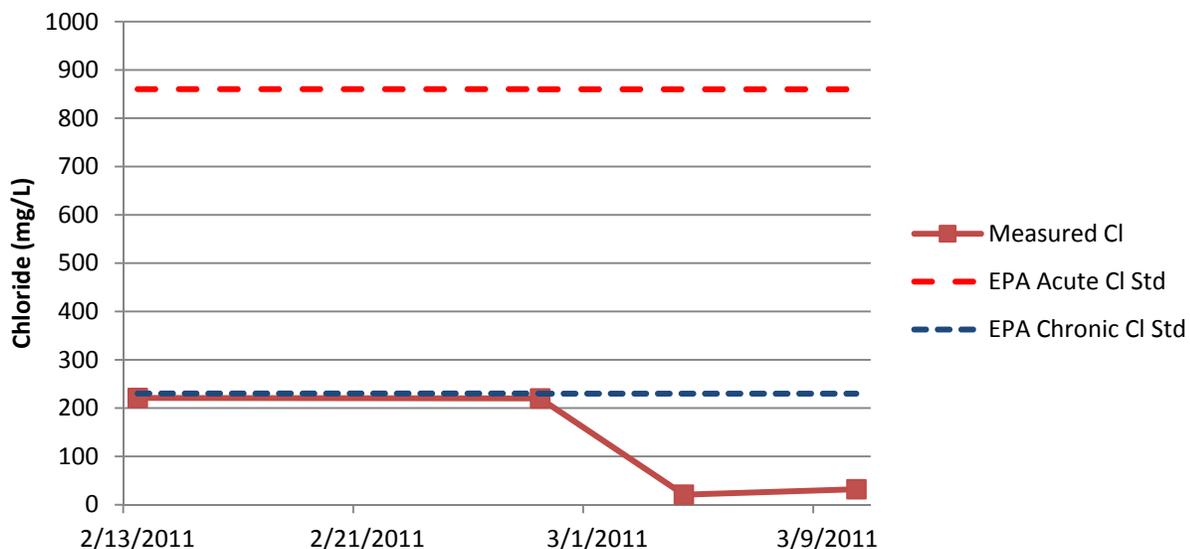
Specific conductance ranges at which to collect grab samples in 2012 for this site:

- Mid-level: NA
- High-level: NA

EPA Acute and Chronic Exceedences for Chloride¹:

Neither the EPA acute nor chronic chloride standards were exceeded at this site based on volunteer monitoring in 2011.:

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 Two regression equations calculated based on specific conductance and chloride data collected from the Madison and Milwaukee areas collectively. The equation used when specific conductance >1540 μ S/cm was $Cl = 0.3441 * SC - 291$, $adjR^2 = 0.98$; and when specific conductance ≤ 1540 μ S/cm was $Cl = 1.044 * (\exp(0.001609 * SC + 3.046))$, $adj R^2 = 0.65$.