Six Mile Creek at Mill Rd

Road Salt Monitoring Data Summary

February –December 2011

Photo courtesy of Jim Beecher

Volunteers: Erin and Jake Vennie-Vollrath

Specific conductance summary:

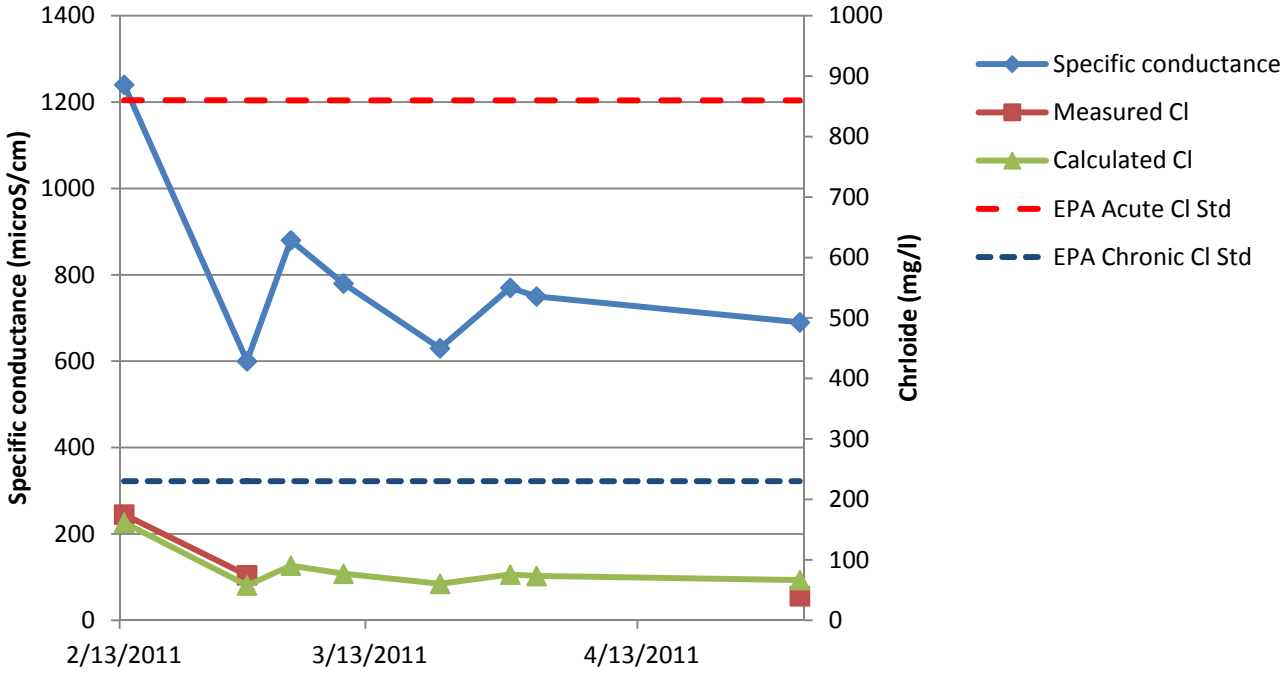
- 8 measurements taken
- Minimum: 600 µS/cm on 2/17/2011
- Maximum: 1240 µS/cm on 2/14/2011
- Mean: 793 µS/cm

Chloride (Cl^-) summary:

- 3 samples collected
- Minimum: 40 mg/L 9/3/2011
- Maximum: 175 mg/L 2/14/2011
- Mean: 97 mg/L

EPA Acute and Chronic Exceedences for Chloride[1]:
Neither the EPA acute nor chronic chloride standards were exceeded at this site based on volunteer monitoring in 2011.

Results Over Time[2]:



[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 µS/cm was Cl = 0.3441 * SC – 291, adjR^2 = 0.98; and when specific conductance ≤ 1540 µS/cm was Cl = 1.044 * (exp(0.001609 * SC + 3.046)), adj R^2 = 0.65.