

Mud Creek at Spencer St

Road Salt Monitoring Data Summary

December 2011- August 2014¹



Photo by Jim Beecher

Volunteer: Paul Gravunder

Specific conductance summary:

- 42 measurements taken
- Minimum: 360 $\mu\text{S}/\text{cm}$ on 11/17/2013
- Maximum: 4200 $\mu\text{S}/\text{cm}$ on 2/24/2013
- Mean: 1586 $\mu\text{S}/\text{cm}$

Chloride (Cl⁻) summary:

- 11 samples collected
- Minimum: 134 mg/L on 5/13/2012
- Maximum: 1120 mg/L on 2/24/2013
- Mean: 460 mg/L

EPA Acute and Chronic Exceedences for Chloride²:

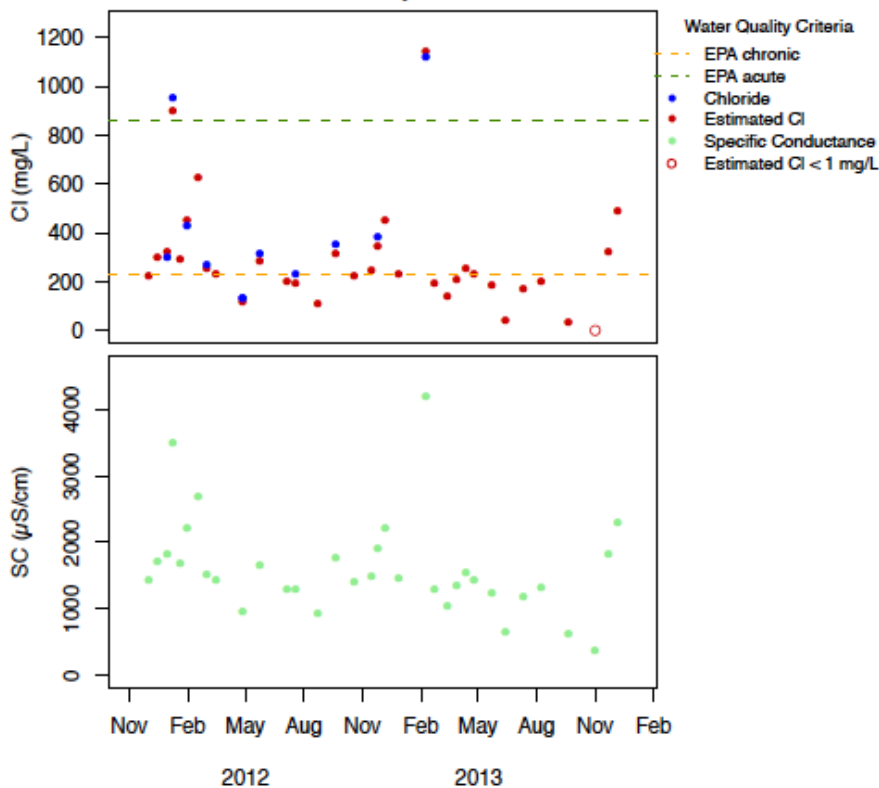
The EPA acute chloride standard of 860 mg/L has been exceeded twice at this site:

- 955 mg/L on 1/24/2014 (measured)
- 1120 mg/L on 2/24/2013 (measured)

The EPA chronic chloride standard of 230 mg/L was measured or predicted to have been met or exceeded on a number of occasions between December 2011 and August 2014. In addition to the exceedences shown on the graph below, measured or calculated estimations suggest the following exceedences in 2014:

- 557 mg/L on 3/15/2014 (measured)
- 236 mg/L on 7/12/2014 (calculated)
- 301 mg/L on 4/26/2014 (calculated)³
- 262 mg/L on 8/3/2014 (calculated)

Results Through December 2013³:



¹ All data in SWIMS as of 8/26/2014 were downloaded

² Source: EPA. 1988. Ambient Water Quality Criteria for Chloride. EPA 440/6-88-001.

³ Calculated chloride: $\text{Cl} = 0.242 * \text{SC} - 115.2$, $\text{adjR}^2 = 0.8$, except when $\text{SC} > 2250$, then $\text{Cl} = 0.346 * \text{SC} - 309.8$, $\text{adjR}^2 = 0.97$