Starkweather, E. Br. at Commercial

Road Salt Monitoring Data Summary February 2011 – December 2013¹



Photo courtesy of Jim Beecher

Volunteers: Erin and Jake Vennie-Vollrath **Specific conductance summary:**

28 measurements taken

• Minimum: 370 μS/cm on 9/3/2011

• Maximum: 5500 μS/cm on 1/24/2012

• Mean: 1780 μS/cm

Chloride (Cl⁻) summary:

5 samples collected

• Minimum: 44.8 mg/L on 9/3/2011

• Maximum: 1610 mg/L on 1/24/2012

Mean: 572 mg/L

EPA Acute and Chronic Exceedences for Chloride²:

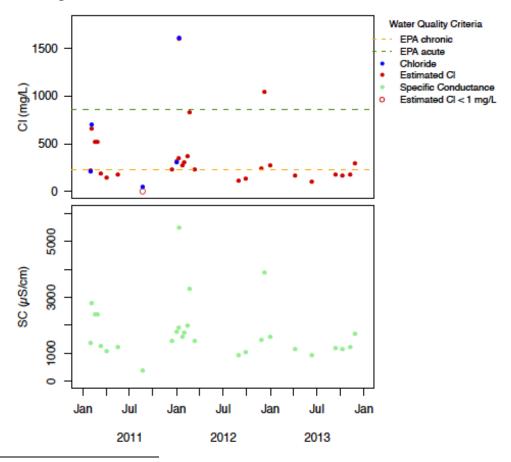
The EPA acute chloride standard of 860 mg/L was exceeded twice:

o 1610 mg/L on 1/24/2012 (measured)

o 1040 mg/L on 12/21/2012 (calculated)³

The EPA chronic chloride standard of 230 mg/L was exceeded thirteen times at this site. These measured and predicted exceedences are displayed on the graph below.

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: $CI = 0.242 \times SC - 115.2 \text{ adjR}^2 = 0.8$, except when SC > 2250, then $CI = 0.346 \times SC - 309.8$, $AdjR^2 = 0.97$