

Root River at Puetz Rd

Road Salt Monitoring Data Summary February 2011–December 2013¹



Photo courtesy of Jim Beecher

Volunteer: Kevin Hensiak

Specific conductance summary:

- 42 measurements taken
- Minimum: 18.4 $\mu\text{S}/\text{cm}$ on 2/20/2011
- Maximum: 5700 $\mu\text{S}/\text{cm}$ on 2/16/2011
- Mean: 1567 $\mu\text{S}/\text{cm}$

Chloride (Cl⁻) summary:

- 8 samples collected
- Minimum: 111 mg/L on 9/28/2011
- Maximum: 1100 mg/L on 3/1/2011
- Mean: 426 mg/L

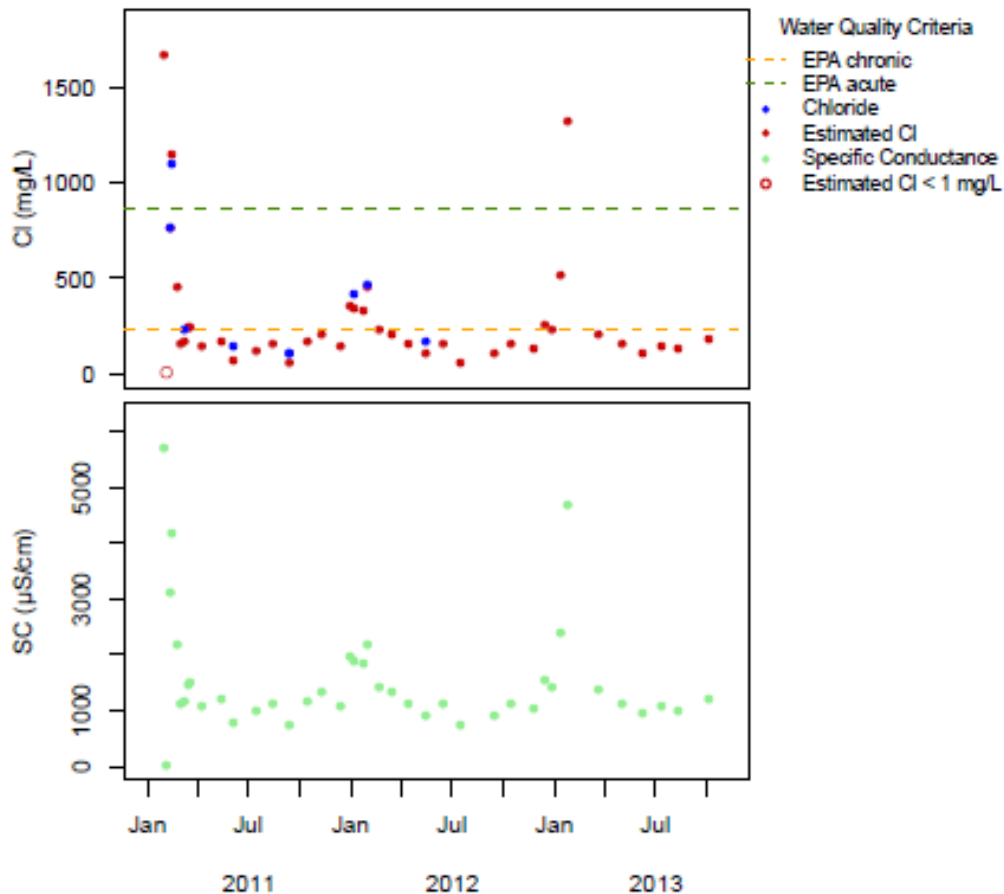
EPA Acute and Chronic Exceedences for Chloride²:

The EPA acute chloride standard of 860 mg/L was exceeded three times at this site:

- 1662 mg/L on 2/16/2011 (calculated)³
- 1100 mg/L on 3/1/2011 (measured)
- 1316 mg/L on 2/1/2013 (calculated)

In addition, the EPA chronic chloride standard of 230 mg/L was predicted to have been exceeded 10 times as shown 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: $\text{Cl} = 0.242 \times \text{SC} - 115.2$ $\text{adjR}^2 = 0.8$, except when $\text{SC} > 2250$, then $\text{Cl} = 0.346 * \text{SC} - 309.8$, $\text{adjR}^2 = 0.97$