

Pike River at Walking Bridge-Carthage College

Road Salt Monitoring Data Summary February 2012 – May 2013¹



Photo courtesy of Jim Beecher

Volunteers: Chris Blaine

Specific conductance summary:

- 24 measurements taken
- Minimum: 460 $\mu\text{S}/\text{cm}$ on 3/11/2013
- Maximum: 3450 $\mu\text{S}/\text{cm}$ on 3/6/2013
- Mean: 1004 $\mu\text{S}/\text{cm}$

Chloride (Cl^-) summary:

- 28 samples collected
- Minimum: 59.4 mg/L on 10/4/2012
- Maximum: 1003 mg/L on 3/6/2013
- Mean: 180 mg/L

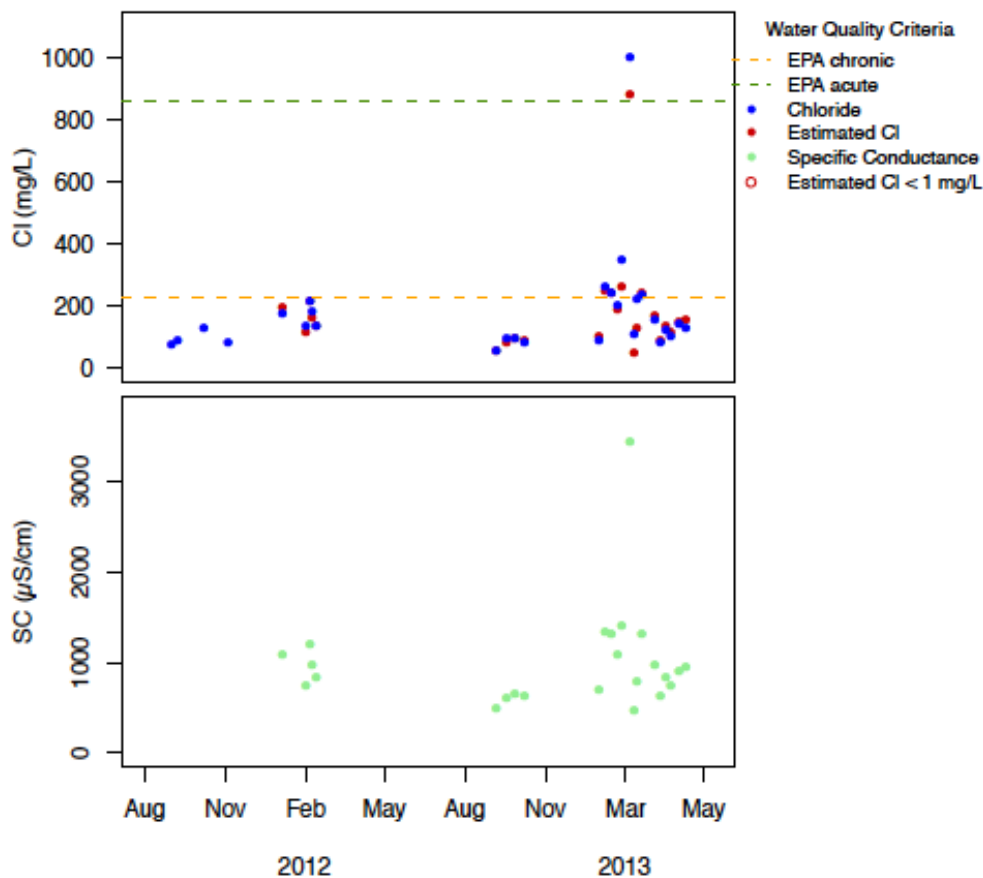
EPA Acute and Chronic Exceedences for Chloride²:

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

- 1003 mg/L on 3/6/2013 (measured)

In addition, the chronic chloride standard of 230 mg/L was exceeded seven times at this site based on volunteer monitoring. These exceedences are 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: $\text{Cl} = 0.225 \times \text{SC} - 52.3$ $\text{adjR}^2 = 0.74$, except when $\text{SC} > 2250$, then $\text{Cl} = 0.346 \times \text{SC} - 309.8$, $\text{adjR}^2 = 0.97$