

Pike River at Middle Entrance Walking Bridge

Road Salt Monitoring Data Summary February 2012 – May 2014¹



Photo courtesy of Jim Beecher

Volunteers: Chris Blaine

Specific conductance summary:

- 40 measurements taken
- Minimum: 540 $\mu\text{S}/\text{cm}$ on 3/11/2013
- Maximum: 2275 $\mu\text{S}/\text{cm}$ on 2/20/2014
- Mean: 1028 $\mu\text{S}/\text{cm}$

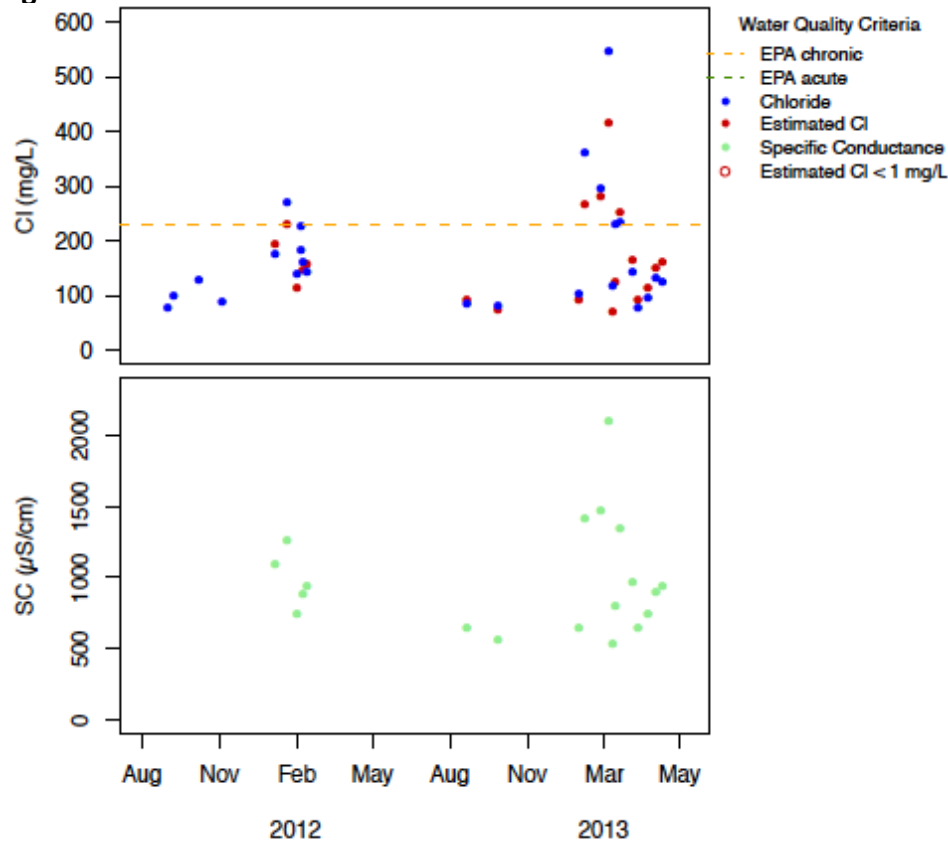
Chloride (Cl^-) summary:

- 43 samples collected
- Minimum: 77.4 mg/L on 9/28/2011
- Maximum: 661.3 mg/L on 2/20/2014
- Mean: 213 mg/L

EPA Acute and Chronic Exceedences for Chloride²:

The EPA acute chloride standard of 860 mg/L has not been exceeded at this site based on volunteer monitoring. However, the EPA chronic chloride standard of 230 mg/L has been exceeded on a number of occasions. In addition to those shown below, 12 of 13 site visits made in 2014 between February 20 and May 1 exceeded the limit. These ranged from 243 mg/L to 661 mg/L.

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 $\text{Cl} = 0.346 \times \text{SC} - 309.8$, $\text{adjR}^2 = 0.97$.