

Pike River Between CTH Y and Sheridan Rd

Road Salt Monitoring Data Summary February 2012 – May 2014¹



Photo courtesy of Jim Beecher

Volunteers: Chris Blaine

Specific conductance summary:

- 41 measurements taken
- Minimum: 360 $\mu\text{S}/\text{cm}$ on 3/11/2013
- Maximum: 1600 $\mu\text{S}/\text{cm}$ on 2/20/2014
- Mean: 921 $\mu\text{S}/\text{cm}$

Chloride (Cl) summary:

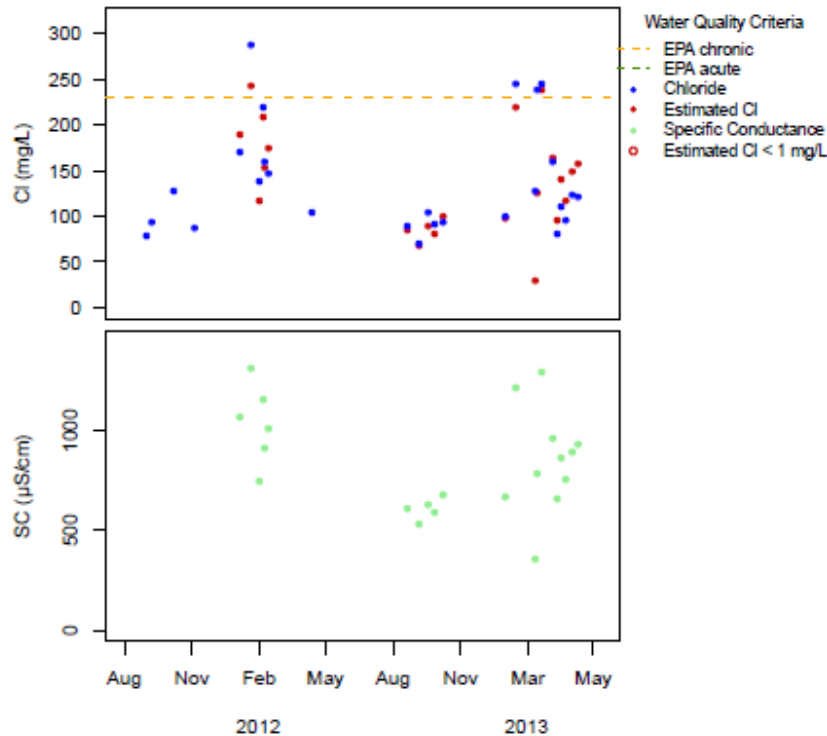
- 43 samples collected
- Minimum: 69.3 mg/L on 10/4/2012
- Maximum: 434.8 mg/L on 4/28/2014
- Mean: 180 mg/L

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 exceedences shown on the graph below, the following were predicted:

- | | |
|------------------------------------|------------------------------------|
| ○ 429 mg/L on 2/20/2014 (measured) | ○ 301 mg/L on 3/12/2014 (measured) |
| ○ 235 mg/L on 3/28/2014 (measured) | ○ 234 mg/L on 3/31/2014 (measured) |
| ○ 279 mg/L on 4/6/2014 (measured) | ○ 327 mg/L on 4/10/2014 (measured) |
| ○ 427 mg/L on 4/13/2014 (measured) | ○ 257 mg/L on 4/15/2014 (measured) |
| ○ 435 on 4/28/2014 (measured) | ○ 338 mg/L on 5/1/2014 (measured) |

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