

Pike River Unnamed Tributary

Road Salt Monitoring Data Summary February 2012 – May 2014¹



Photo courtesy of Jim Beecher

Volunteers: Chris Blaine

Specific conductance summary:

- 37 measurements taken
- Minimum: 188 $\mu\text{S}/\text{cm}$ on 5/10/2012
- Maximum: 1455 $\mu\text{S}/\text{cm}$ on 2/17/2012
- Mean: 806 $\mu\text{S}/\text{cm}$

Chloride (Cl^-) summary:

- 38 samples collected
- Minimum: 11.6 mg/L on 2/24/2014
- Maximum: 312.6 mg/L on 2/17/2012
- Mean: 97 mg/L

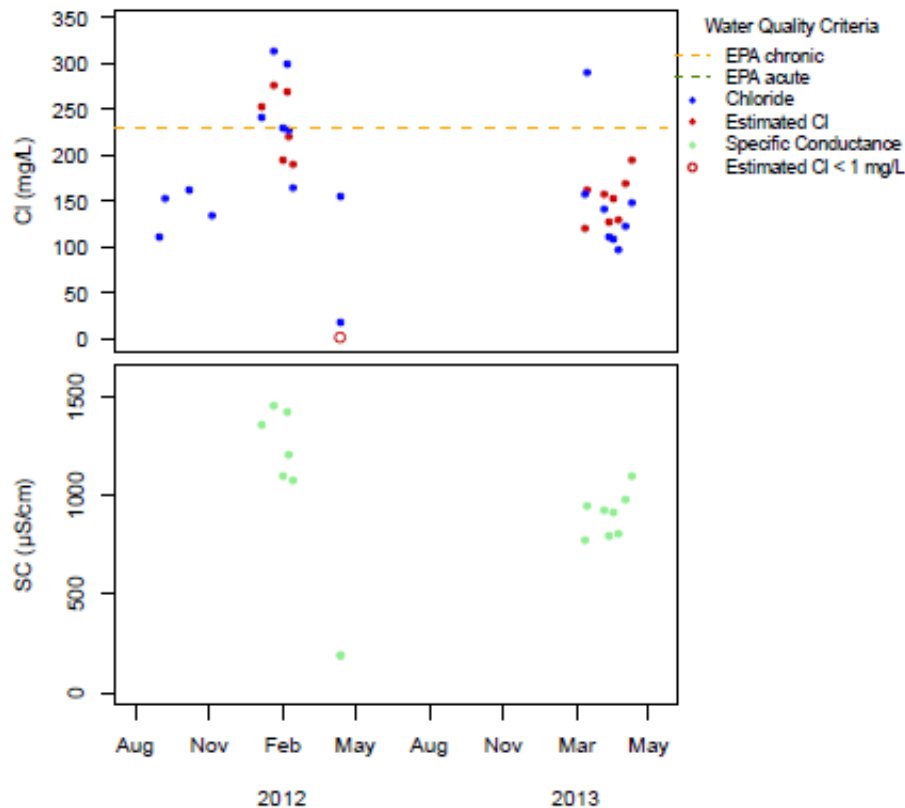
EPA Acute and Chronic Exceedences for Chloride²:

The EPA acute chloride standard of 860 mg/L has not been exceeded at this site.

However, the EPA chronic chloride standard of 230 mg/L was exceeded seven times at this site:

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|--|--------------------------------------|
| ○ 243 mg/L on 2/2/2012 (measured) | ○ 313 mg/L on 2/17/2012 (measured) |
| ○ 230 mg/L on 2/29/2012 (measured) | ○ 300 mg/L on 3/5/2012 (measured) |
| ○ 260 mg/L on 3/7/2012 (calculated) ³ | ○ 231 mg/L on 3/12/2012 (calculated) |
| ○ 290 mg/L on 3/14/2013 (measured) | ○ 235 mg/L on 5/9/2013 (calculated) |

Results Over Time³:



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