

# Pike River at CTH Y north of CTH E

## Road Salt Monitoring Data Summary February 2012 – May 2014<sup>1</sup>



Photo courtesy of Jim Beecher

**Volunteers:** Chris Blaine

### Specific conductance summary:

- 40 measurements taken
- Minimum: 495  $\mu\text{S}/\text{cm}$  on 3/11/2013
- Maximum: 1593  $\mu\text{S}/\text{cm}$  on 2/20/2014
- Mean: 915  $\mu\text{S}/\text{cm}$

### Chloride (Cl<sup>-</sup>) summary:

- 42 samples collected
- Minimum: 67.7 mg/L on 10/4/2012
- Maximum: 497.8 mg/L on 2/20/2014
- Mean: 178 mg/L

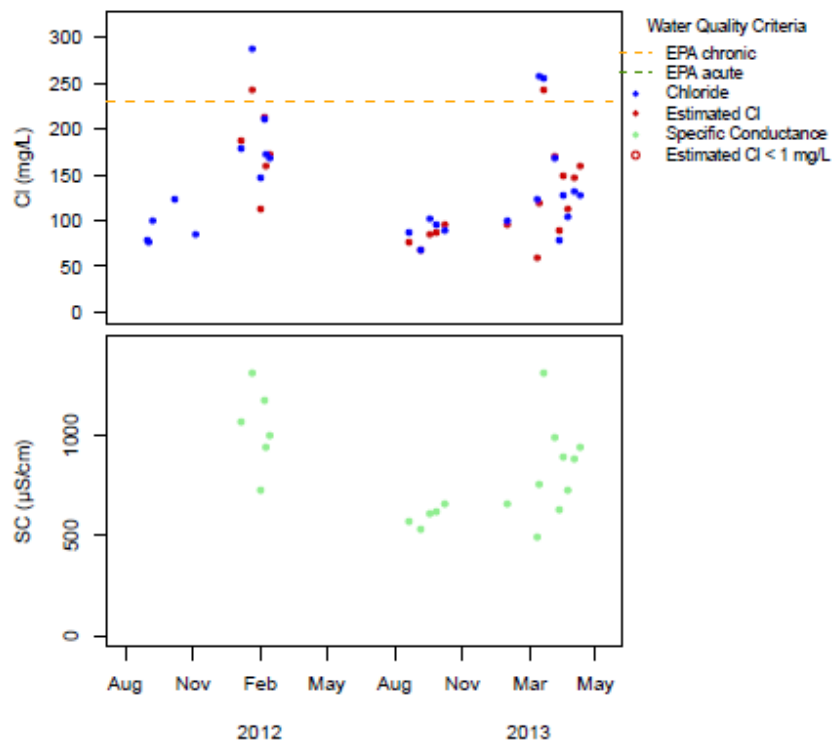
### EPA Acute and Chronic Exceedences for Chloride<sup>2</sup>:

The EPA acute chloride standard of 860 mg/L was not exceeded at this site based on volunteer monitoring.

However, the EPA chronic chloride standard of 230 mg/L was exceeded at this site a few times in 2012 and 2013, and on nearly every monitoring date in 2014. 2014 exceedences were as follows:

- 498 mg/L on 2/20/2014 (measured)
- 330 mg/L on 4/10/2014 (measured)
- 267 mg/L on 4/15/2014 (measured)
- 370 mg/L on 5/1/2014 (measured)
- 295 mg/L on 4/16/2014 (measured)
- 396 mg/L on 4/13/2014 (measured)
- 476 mg/L on 4/28/2014 (measured)

### Results Through December 2013<sup>3</sup>:



<sup>1</sup> All data in SWIMS as of 8/26/2014 were downloaded

<sup>2</sup> Source: EPA. 1988. Ambient Water Quality Criteria for Chloride. EPA 440/6-88-001.

<sup>3</sup> Calculated chloride:  $\text{Cl} = 0.225 \times \text{SC} - 52.3$   $\text{adjR}^2 = 0.74$ , except when  $\text{SC} > 2250$ , then  $\text{Cl} = 0.346 \times \text{SC} - 309.8$ ,  $\text{adjR}^2 = 0.97$ .