

# Galloway Creek at Red Cedar River

## Road Salt Monitoring Data Summary

November 2012 – August 2014<sup>1</sup>



Photo by Lisa Ludwig

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### Specific conductance summary:

- 69 measurements taken
- Minimum: 170  $\mu\text{S}/\text{cm}$  on 4/29/2014
- Maximum: 6400  $\mu\text{S}/\text{cm}$  on 2/11/2013
- Mean: 884  $\mu\text{S}/\text{cm}$

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

- 7 samples collected
- Minimum: 19.4 mg/L on 4/10/2013
- Maximum: 1550 mg/L on 1/29/2013
- Mean: 517 mg/L

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

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

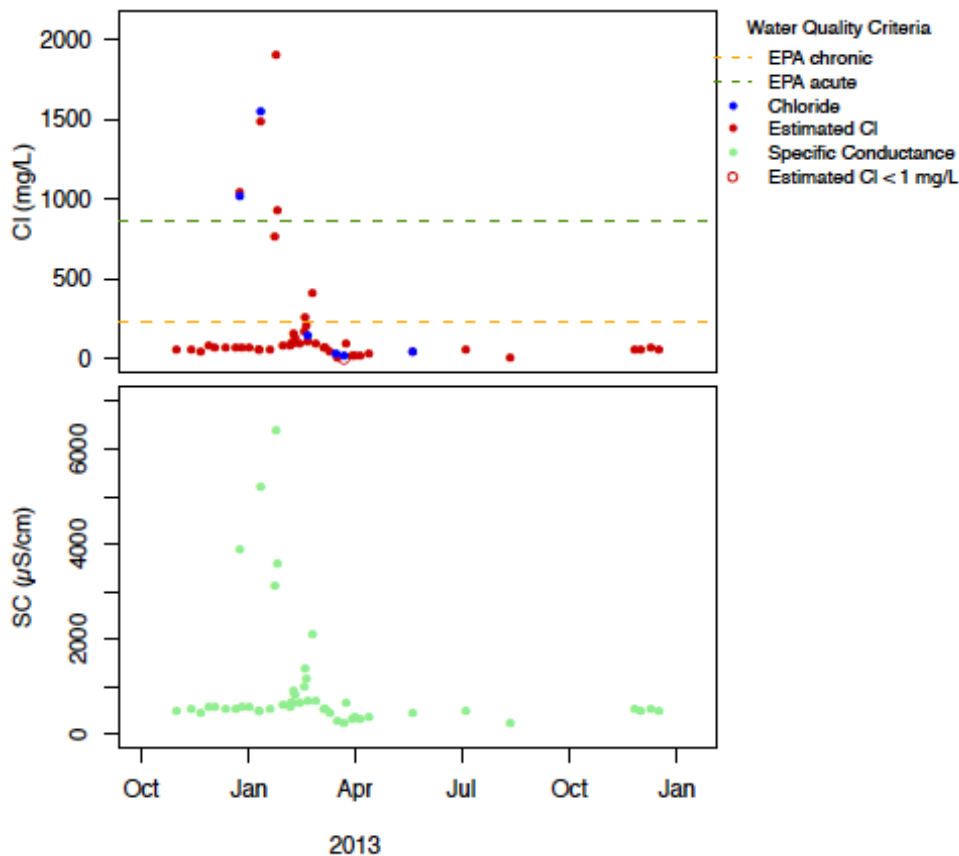
- 1020 mg/L on 1/11/2013 (measured)
- 1550 mg/L on 1/29/2013 (measured)
- 1905 mg/L on 2/11/2013 (calculated)
- 936 mg/L on 2/12/2013 (calculated)

In addition, the EPA chronic chloride standard of 230 mg/L was exceeded six times at this site.

The following exceedences were predicted in addition to those displayed on the graph below:

- 267 mg/L on 3/7/2014 (calculated)
- 763 mg/L on 3/10/2014 (calculated)

### 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:  $\text{Cl} = 0.225 * \text{SC} - 52.3$ ,  $\text{adjR}^2 = 0.74$ , except if  $\text{S} > 2250$ , then  $\text{Cl} = 0.346 * \text{SC} - 309.8$ ,  $\text{adjR}^2 = 0.97$