

# Badger Mill Creek at Bruce Street

## Road Salt Monitoring Data Summary

December 2011 – June 2014<sup>1</sup>



Photo courtesy of Jim Beecher

**Volunteer:** Bill Keen

### Specific conductance summary:

- 11 measurements taken
- Minimum: 850  $\mu\text{S}/\text{cm}$  on 2/29/2012
- Maximum: 1827  $\mu\text{S}/\text{cm}$  on 6/7/2012
- Mean: 1303  $\mu\text{S}/\text{cm}$

### Chloride ( $\text{Cl}^-$ ) summary:

- 9 samples collected
- Minimum: 193 mg/L on 12/16/2011
- Maximum: 403 mg/L on 1/28/2013
- Mean: 258 mg/L

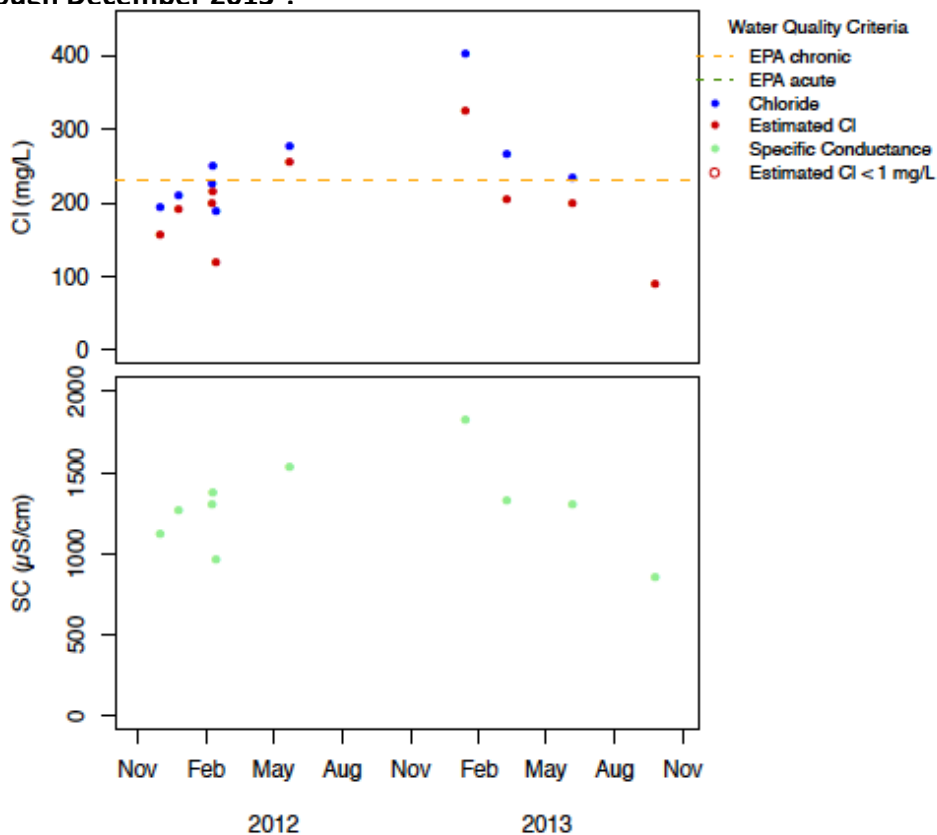
### EPA Acute and Chronic Exceedences for Chloride<sup>2</sup>:

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

However, this monitoring revealed that the EPA chronic chloride standard of 230 mg/L has been exceeded. In addition to exceedences able to be observed on the graph below, the following exceedences was measured:

- 259 mg/L on 6/11/2014

### 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:  $\text{Cl} = 0.242 * \text{SC} - 115.2$ ,  $\text{adjR}^2 = 0.8$ , except when  $\text{SC} > 2250$ , then  $\text{Cl} = 0.346 * \text{SC} - 309.8$ ,  $\text{adjR}^2 = 0.97$