

Pike Creek at 41

Road Salt Monitoring Data Summary February 2012 – May 2014¹



Photo courtesy of Jim Beecher

Volunteers: Chris Blaine

Specific conductance summary:

- 48 measurements taken
- Minimum: 445 $\mu\text{S}/\text{cm}$ on 3/12/2012
- Maximum: 11700 $\mu\text{S}/\text{cm}$ on 3/6/2013
- Mean: 1665 $\mu\text{S}/\text{cm}$

Chloride (Cl⁻) summary:

- 47 samples collected
- Minimum: 80.7 mg/L on 3/12/2012
- Maximum: 3473 mg/L on 3/6/2013
- Mean: 415 mg/L

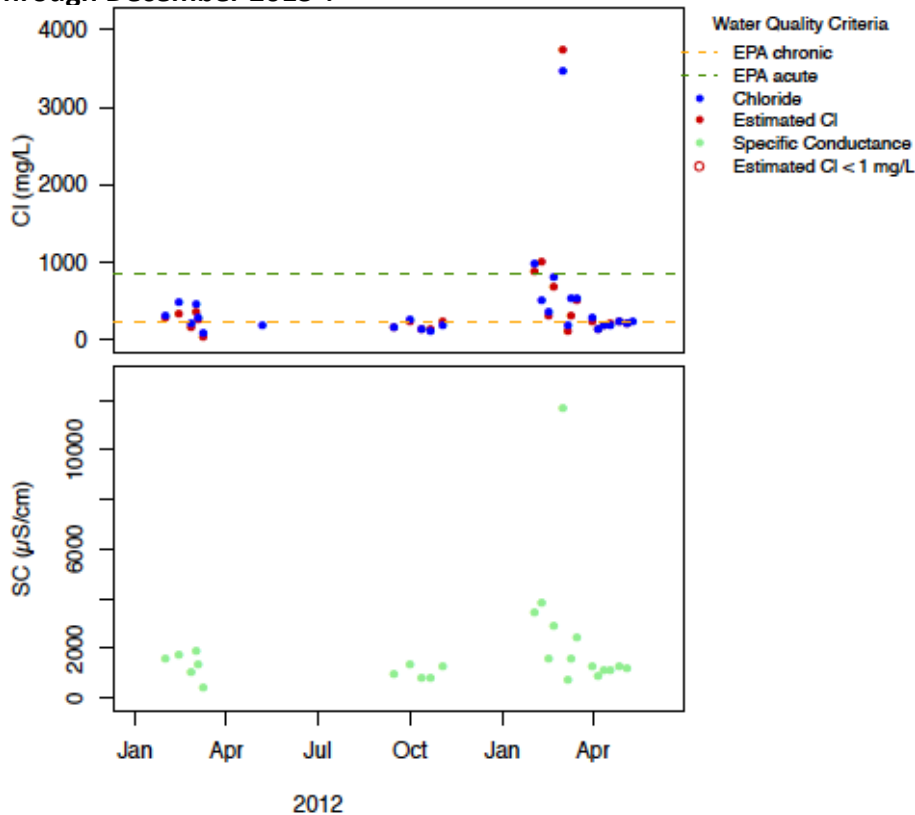
EPA Acute and Chronic Exceedences for Chloride²:

The EPA acute chloride standard of 860 mg/L was exceeded three times at this site based on volunteer monitoring:

- 994 mg/L on 2/6/2013 (measured)
- 1008 mg/L on 2/13/2013 (calculated)³
- 3473 mg/L on 3/6/2013 (measured)

In addition, the EPA chronic chloride standard of 230 mg/L was met or exceeded 33 times at this site. This includes all 14 measurements made between February and May 2014.

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