

Kinnickinnic River at 11th St Road Salt Monitoring Data Summary February 2011 – March 2014¹



Photo courtesy of Jim Beecher

Volunteers: Joe Rath

Specific conductance summary:

- 18 measurements taken
- Minimum: 3 $\mu\text{S}/\text{cm}$ on 2/11/2013
- Maximum: 14900 $\mu\text{S}/\text{cm}$ on 1/28/2013
- Mean: 1660 $\mu\text{S}/\text{cm}$

Chloride (Cl⁻) summary:

- 11 samples collected
- Minimum: 307 mg/L on 10/7/2011
- Maximum: 4890 mg/L on 2/28/2013
- Mean: 1574 mg/L

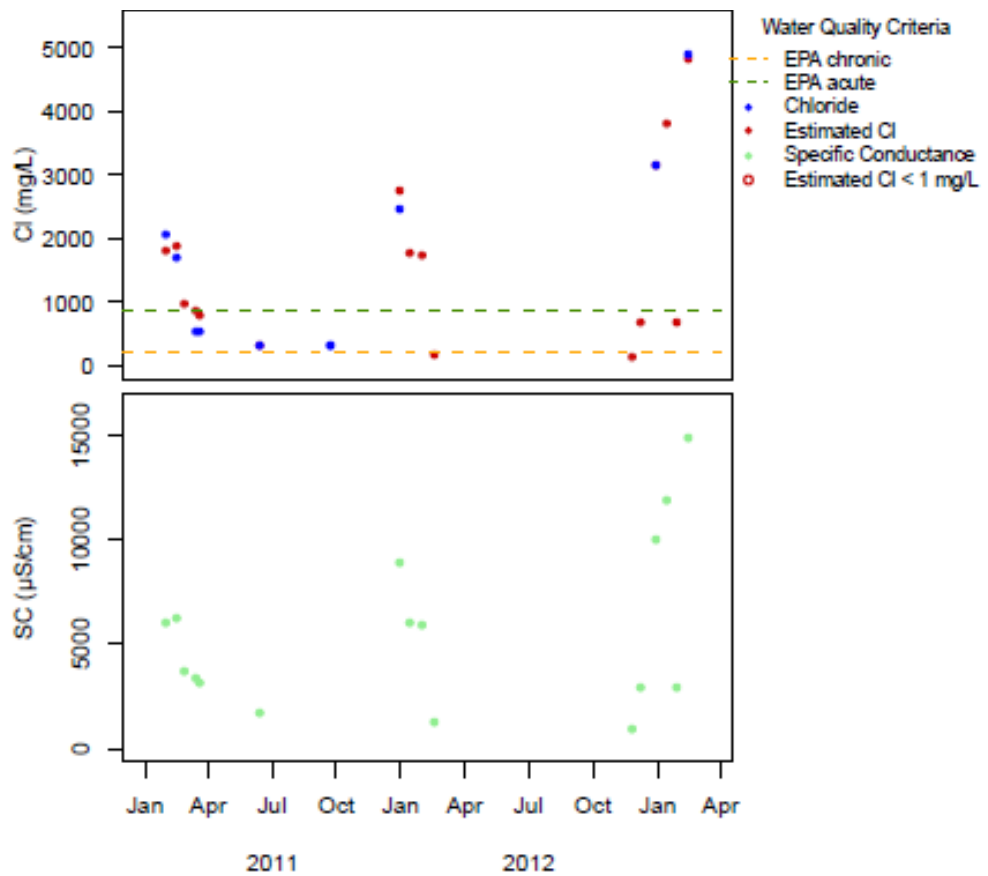
EPA Acute and Chronic Exceedences for Chloride²:

The EPA acute chloride standard of 860 mg/L was exceeded numerous times at this site. In addition to those exceedences shown on the graph below, the following were measured or predicted:

- 1010 mg/L on 2/22/2014 (measured)
- 1213 mg/L on 3/31/2014 (calculated)³

In addition, the EPA chronic chloride standard of 230 mg/L was exceeded five times, as displayed on the graph below:

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