

Little Menomonee River Hwy 145

Road Salt Monitoring Data Summary

February 2011– March 2014¹



Photo courtesy of Jim Beecher

Volunteers: Joe Rath

Specific conductance summary:

- 29 measurements taken
- Minimum: 460 $\mu\text{S}/\text{cm}$ on 5/25/2011
- Maximum: 13100 $\mu\text{S}/\text{cm}$ on 1/28/2013
- Mean: 2260 $\mu\text{S}/\text{cm}$

Chloride (Cl⁻) summary:

- 10 samples collected
- Minimum: 103 mg/L on 10/24/2011
- Maximum: 4190 mg/L on 1/28/2013
- Mean: 946 mg/L

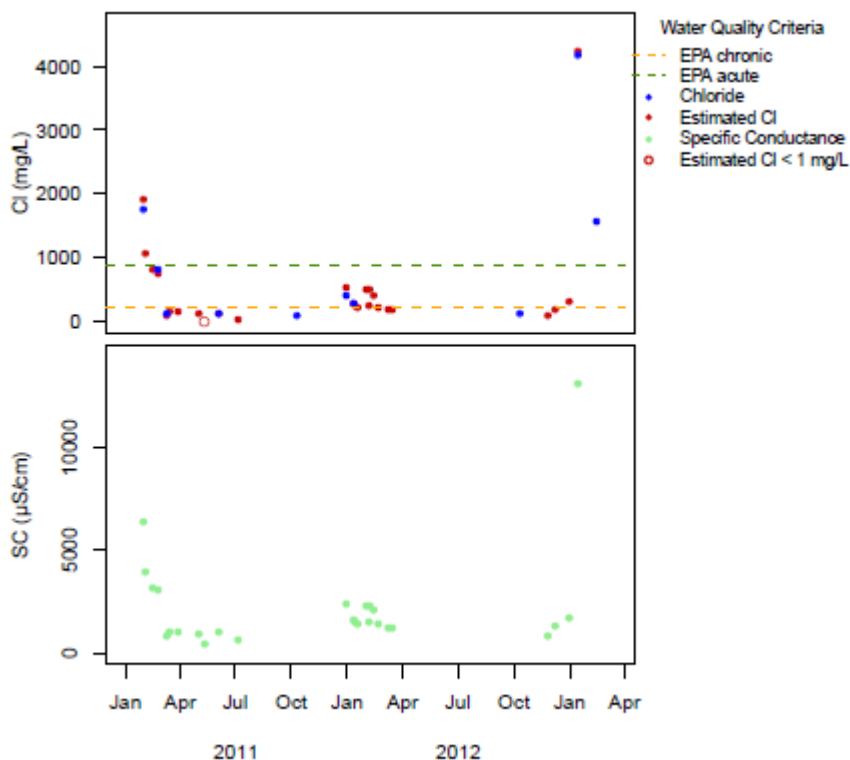
EPA Acute and Chronic Exceedences for Chloride²:

The EPA acute chloride standard of 860 mg/L has been exceeded four times at this site based on volunteer monitoring efforts. These exceedences are shown on the graph below.

In addition, the EPA chronic chloride standard of 230 mg/L was measured or calculated to have been exceeded 13 times at the site. In addition to those exceedences shown on the graph below, these exceedences were predicted³:

- 659 mg/L on 1/25/2014
- 590 mg/L on 2/18/2014
- 279 mg/L on 3/28/2014

Results Through December 2013³:



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

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