

# Willow Creek at Maple Rd

## Road Salt Monitoring Data Summary

### February 2011– March 2014<sup>1</sup>



Photo courtesy of Jim Beecher

**Volunteer:** Joe Rath

#### Specific conductance summary:

- 21 measurements taken
- Minimum: 1000  $\mu\text{S}/\text{cm}$  on 9/20/2011
- Maximum: 1740  $\mu\text{S}/\text{cm}$  on 3/12/2011
- Mean: 1276  $\mu\text{S}/\text{cm}$

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

- 9 samples collected
- Minimum: 103 mg/L on 9/20/2011
- Maximum: 217 mg/L on 2/28/2013
- Mean: 156 mg/L

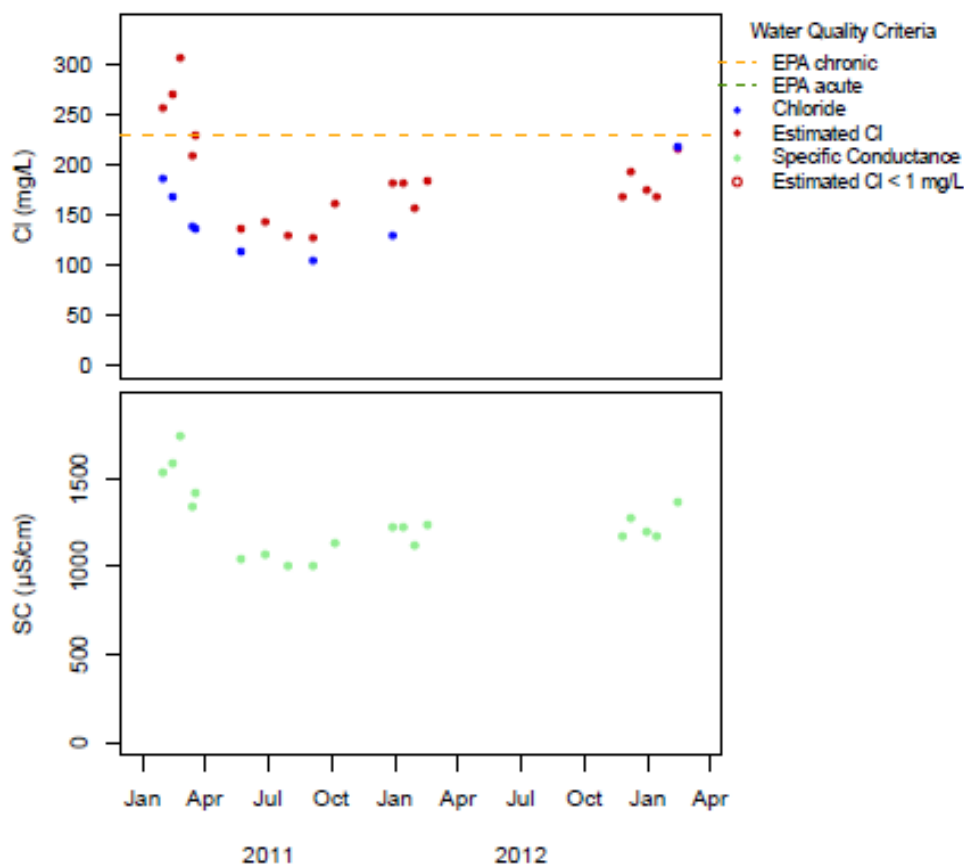
#### EPA Acute and Chronic Exceedences for Chloride<sup>2</sup>:

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

However, the EPA chronic chloride standard of 230 mg/L was predicted to have been met or exceeded four times. In addition to those exceedences shown on the graph below, the following was predicted:

- 289 mg/L on 2/22/2014 (calculated)<sup>3</sup>

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