

Pike River north of mouth to Lake Michigan

Road Salt Monitoring Data Summary September 2011 – December 2012



Volunteers Katie Jones, Christine Blaine, Rachel Martin, Jordan Burkholder, and Tom Baran. Photo courtesy of Jim Beecher

Specific conductance summary:

- 8 measurements taken
- Minimum: 360 $\mu\text{S}/\text{cm}$ on 9/18/2012
- Maximum: 800 $\mu\text{S}/\text{cm}$ on 2/29/2012
- Mean: 563 $\mu\text{S}/\text{cm}$

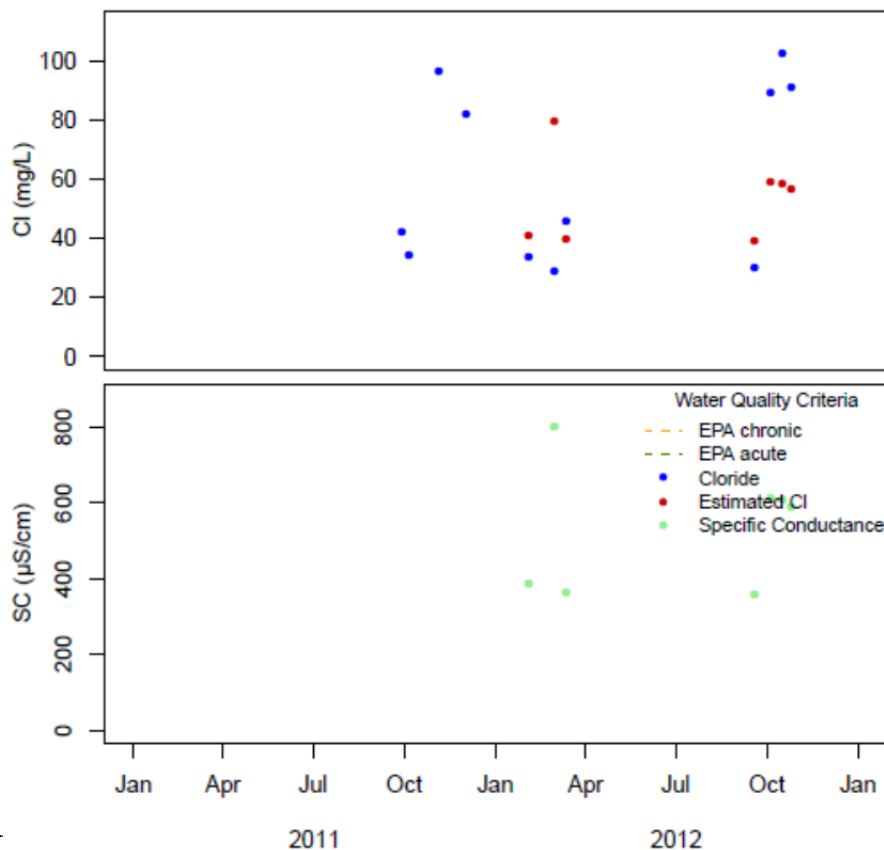
Chloride (Cl^-) summary:

- 12 samples collected
- Minimum: 28.6 mg/L on 2/29/2012
- Maximum: 108.5 mg/L on 11/6/2012
- Mean: 65 mg/L

EPA Acute and Chronic Exceedences for Chloride¹:

Neither the EPA acute chloride standard of 860 mg/L nor the chronic chloride standard of 230 mg/L was exceeded at this site based on volunteer monitoring in 2011 or in 2012.

Results Over Time²:



¹ Acute standard: The one-hour average should not exceed 860 mg/L more than once every three years. Chronic standard: The four day average should not exceed 230 mg/L more than once every three years. Source: EPA. 1988. Ambient Water Quality Criteria for Chloride. EPA 440/6-88-001.

² Calculated chloride: When $\text{SC} > 1540 \mu\text{S}/\text{cm}$ was $\text{Cl} = 0.3441 * \text{SC} - 291$, $\text{adj}R^2 = 0.98$; when $\text{SC} \leq 1540 \mu\text{S}/\text{cm}$ was $\text{Cl} = 1.044 * (\exp(0.001609 * \text{SC} + 3.046))$, $\text{adj}R^2 = 0.65$. Equations based on data from both Madison and Milwaukee.