Yahara River at Tenney
Road Salt Monitoring Data Summary
February – December 2011

Volunteers: Christina and Ian Anderson

Specific conductance summary:
- 11 measurements taken
- Minimum: 430 µS/cm on 4/2/2011
- Maximum: 540 µS/cm on 2/13/2011
- Mean: 487 µS/cm

Chloride (Cl⁻) summary:
- 6 samples collected
- Minimum: 44.1 mg/L 3/18/2011
- Maximum: 48.8 mg/L 9/30/2011
- Mean: 46.8 mg/L

EPA Acute and Chronic Exceedences for Chloride¹:
Neither the EPA acute nor chronic chloride standards were exceeded at this site based on volunteer monitoring in 2011.

Results Over Time²:

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

² Two regression equations calculated based on specific conductance and chloride data collected from the Madison and Milwaukee areas collectively. The equation used when specific conductance >1540 µS/cm was Cl⁻ = 0.3441 * SC – 291, adjR² = 0.98; and when specific conductance ≤ 1540 µS/cm was Cl⁻ = 1.044 * (exp(0.001609 * SC + 3.046)), adj R² = 0.65.