MMSD

- Regional, serving ~350,000 people in cities, villages, towns, rural septic
- 40 million gallons per day
- Mission: Protecting public health and the environment
Nine Springs Wastewater Treatment Plant
WI Water Quality Criterion for Chloride: 395 mg/L
Over 100 tons of salt per day to the plant

57%

~15%
Chloride on the Rise

MMSD Effluent Chloride Conc (annual average, mg/L)


Traditional Approach: Build
Facility Upgrades

NPV: $400 million to $2.3 billion
→ 55% to 500% increase in sewer charges
Alternative: Prevention

• Less expensive and more efficient to reduce sources of salt to the plant

• Not just softener salt, but road salt too
Prevention Strategies

• Funding incentives
  • MMSD grants, rebates

• Outreach/education
  • One-on-one meetings
  • [link: www.WiSaltWise.com]
  • Today’s training

• Permits
  • One industrial chloride permit
  • General permit provision
Today’s Takeaways

• Understand water softening and factors that affect efficiency
• Become familiar with technologies available to reduce facility salt use
• Learn how other facilities have reduced salt
• Get ideas for applying today’s lessons and MMSD rebates to salt reduction projects at your facility