Illinois Tollway Chloride Offset Program

Presented by the Illinois Tollway Environmental Unit
April 2017
Environmental regulations
• Clean Water Act (CWA) uses designations and stream condition assessments

Environmental permitting
• CWA Section 401 Water Quality permits
• National Pollutant Discharge Elimination System permit

Moving forward
• Expand our toolbox to gain regulatory compliance
Environmental Regulations

General-use water quality standard for chlorides
- Not to exceed 500 mg/L (~1 tsp/5 gal)

Impaired waters
- Waters that are too polluted or otherwise degraded to meet water quality standards

Total maximum daily loads
- Pollution budget that includes calculation of maximum amount of a pollutant that can occur in a waterbody and allocates the necessary reductions to one or more pollutant sources
Environmental Permitting

Clean Water Act Section 401 Water Quality permits

Elgin O’Hare Western Access Project permit conditions
• Offset 4,860 tons per year of salt with local communities

Jane Addams Memorial Tollway (I-90) eastern segment permit conditions
• Offset 572 tons per year of salt with local communities

National Pollutant Discharge Elimination System permit
• Monitoring for pollutants associated with a TMDL
Our Expanded Toolbox

Current efforts
• Participate in watershed groups
• Provide internal staff updates and trainings
• Annual facility inspections

New efforts
• Pursue time-limited water quality standard (TLWQS)/water quality variance for chloride
• Pursue seasonal general-use water quality standards

Presented by Bryan Wagner on April 24, 2017
Our Expanded Toolbox

Tools
• De-icing
  • Preventing the bonding of ice to pavement
• Pre-wetting
  • Application of a liquid chloride product to rock salt
  • Reduces loss by 30 percent
  • Mobile brine makers

Possible expansion
• Anti-icing
  • Application of a liquid chloride product to the pavement prior to a storm event
Thank you

Questions

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