

Illinois Tollway Chloride Offset Program



Presented by the Illinois Tollway Environmental Unit April 2017

Agenda



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

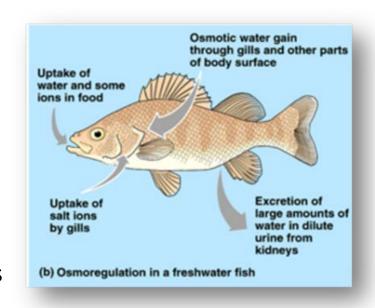
Environmental Regulations

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

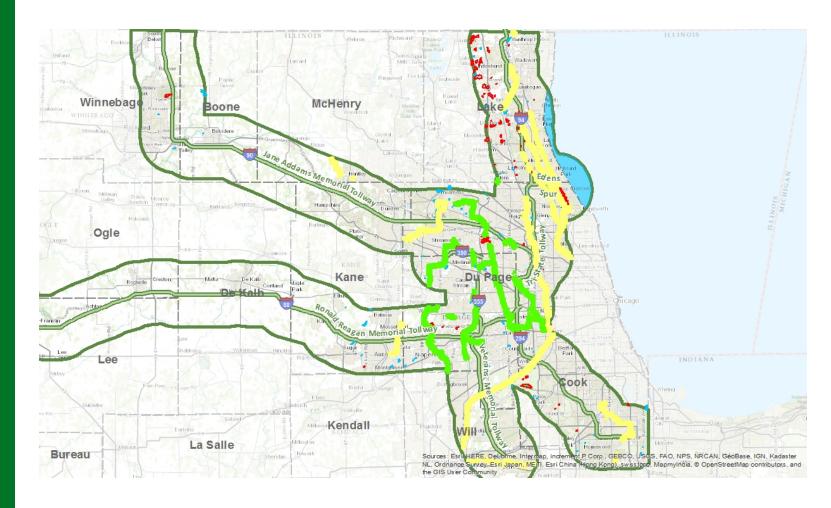


Total maximum daily loads

 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



Chloride Affects On Local Area Stream





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



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

Bryan Wagner

Environmental Program and Policy Manager