

Salt Management, Mitigation and Remediation

NSWA Road Salt
Management Workshop

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City of Leduc's Salt Management Plan

- Developed in 2017 in response to the City's salt usage
- In compliance with the 2004 Code of Practice for the Environmental Management of Road Salts
- Developed a list action items and defined best practices and procedures
- Allowed for opportunities to trial innovative products.

2017

City of Leduc Salt Management Plan



City of Leduc
12/4/2017

Salt Management Plan Action Items

- Update Snow and Ice Control Policy
- Equipment upgrades and calibrations
- Storm response and Salt use record keeping
- Development of application rates
- Snow storage facility monitoring
- Monitor salt vulnerable areas
- Increased public communications
- Formalize snow and ice control training requirements
- Technology review
- Spill response policy



Salt Management

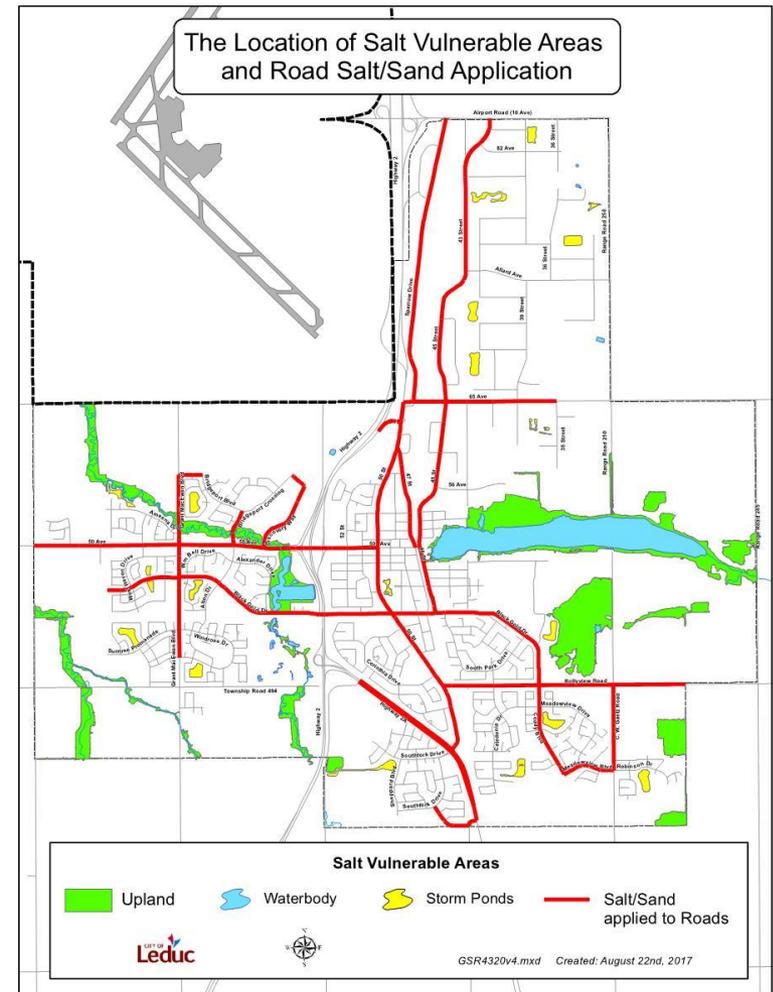
- Follow the 4-R's of Salt Management:
 - Right material
 - Right amount
 - Right place, and
 - Right time



- Indoor storage of winter maintenance materials.
- One Engineered snow dump facility and two temporary snow dump facilities.
- Utilize pre-treated sand, dry sand, fractured rock (Chips).
- Residential sand and chip bin program.

Snow and Ice Control Operations

- Salt and Sand is only applied to collector and arterial roads on an as needed basis.
- All residential roads are treated with fractured rock and no sand or salt.
- Snow is removed to bare asphalt and brought to the appropriate snow storage facility.
 - Clean vs Dirty snow.
- Roads are swept early in the spring to remove contaminants and collect reusable products.



Salt Mitigation

- Removed Calcium Chloride as a dust suppressant.
- Utilization of Beet55 (Beet Juice)
- Development of a new Engineered snow storage facility.
- Equipment modifications and procurement
 - Industrial snow blowers
 - Underbelly plow
 - Ice breakers
- Installation of stormwater interceptors.
- Pilot of new winter maintenance products.



Remediation

- Drawdown wells for chloride blooms in groundwater.
- Melt water pre-treatment through osmosis
- Land reclamations through Phytoremediation
- Material cleaning and reuse



For any questions and inquires please
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