NWSRG
NATIONAL WINTER SERVICE RESEARCH GROUP

nwsrg.org

Bikes & winter & BEAR
Oh my!

David Wright, BEAR Scotland
Paddy Hastie, Peacock Salt

Dedicated to advancing understanding of best practice for winter service delivery

“Scotland’s active travel ambition is to make walking, wheeling and cycling the most popular way to travel for short trips by 2030.”

Transport Scotland

Guidance section 11

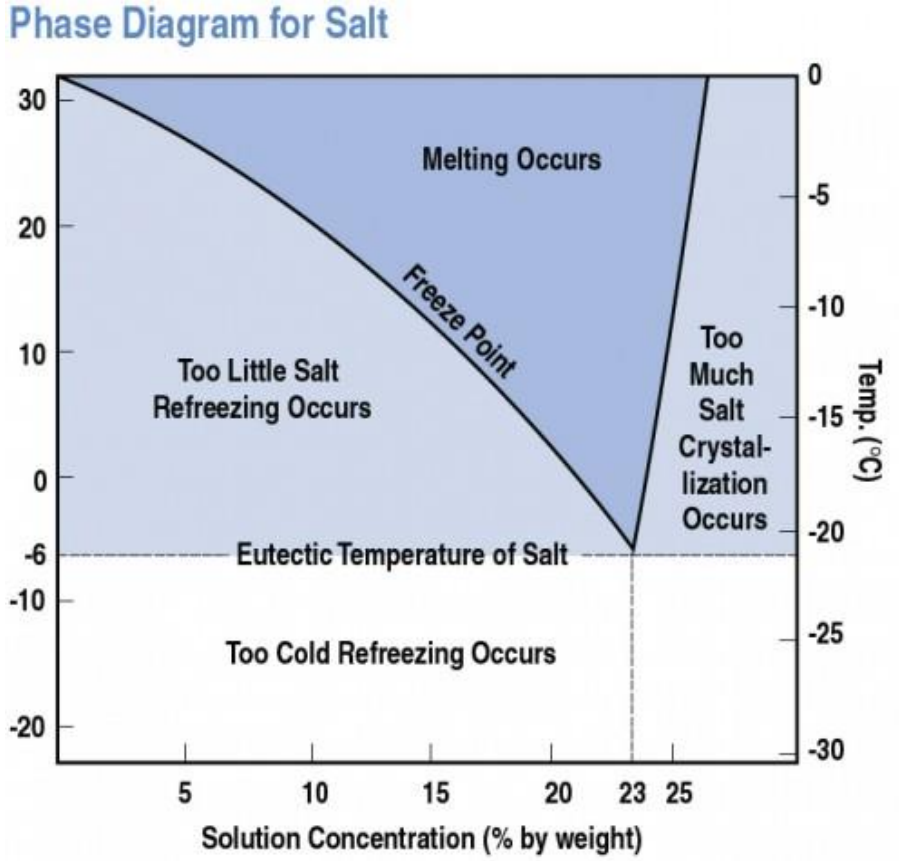
Winter Service on Footways and Cycleways

- Best practice for active travel routes
- Case studies
- De-icers, equipment, planning

De-icers

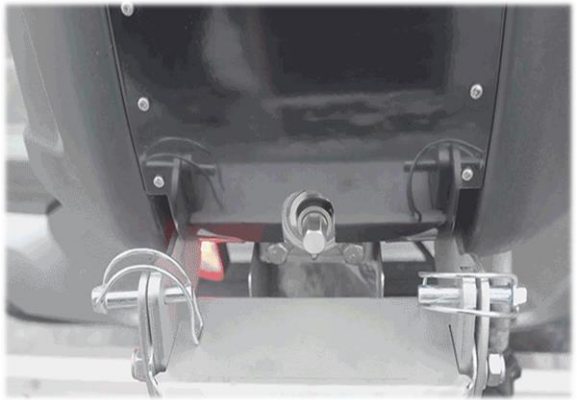
All about the chemistry

- Salt requires activation to de-ice
- Traffic normally needed
- Active travel routes are ‘quieter’
- Liquids activate immediately
- Liquids with benefits… for metal, marine environment and vegetation



Applications

- Applications
  - Pre-Wet Salt
    - 70:30 salt:brine
  - Direct Liquid Application
    - Cycleways
    - Footpaths
    - Pedestrian Areas
    - Bridge decks



Look out the window

STRUNW

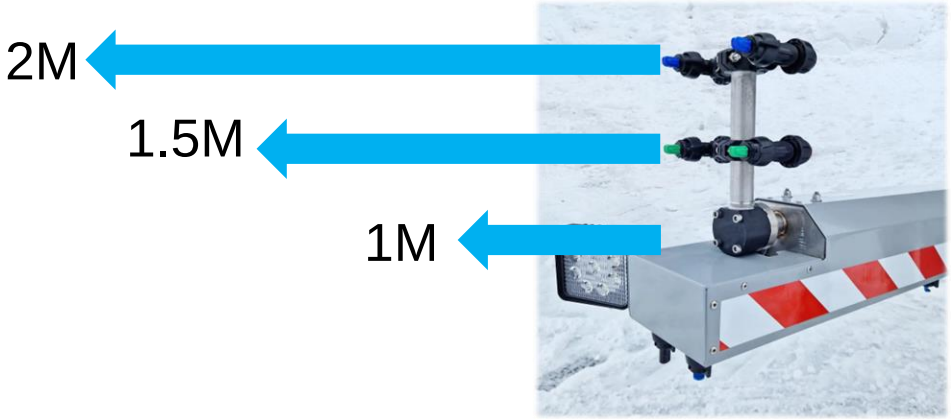
- Began in 2022
- Covering 1,422km roads
- 13 depots
- 12 footpath / cycleway routes approx 120km
- Footways receive precautionary treatment below 1’C

Challenge

- Variable path widths
- Routes begin up to 4km from depots
- Segregated and carriageway adjacent
- Route range from 280 - 1,310L brine
- Option for switching to salt in snow conditions

Solution

- 500L sprayer from Hilltip
- Mounted onto pickup trucks
- Tackle varying width footpath, whilst travelling on road
- Brine application at 20ml/m2
- Tracked with Htrack
- Spray width ejecting up to 2m LHS, optional downward & RHS spray



Outcome

- Utilised existing brine supply
- 7 vehicles able to cover 12 routes
- Supplement by tractor gritters for snow
- Treatment timeframe achieved (before 0600)
- Improved safety for active travel users