

# Snow and Ice Clearing

RMS update

PREMS November 2016



# RMS snow and ice clearing

## Historical perspective

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- Roads and Maritime manage snow and ice clearing.
  - Kosciuszko Road and Alpine Way: Stadelmans (Contractor)
  - Snowy Mountains Highway: Roads and Maritime crew
- Use predominantly wet salt mix
- Dry salt sometimes used in cold conditions.
- Grit no longer used.
- Poor tracking of salt application location and quantity.

# RMS snow and ice clearing

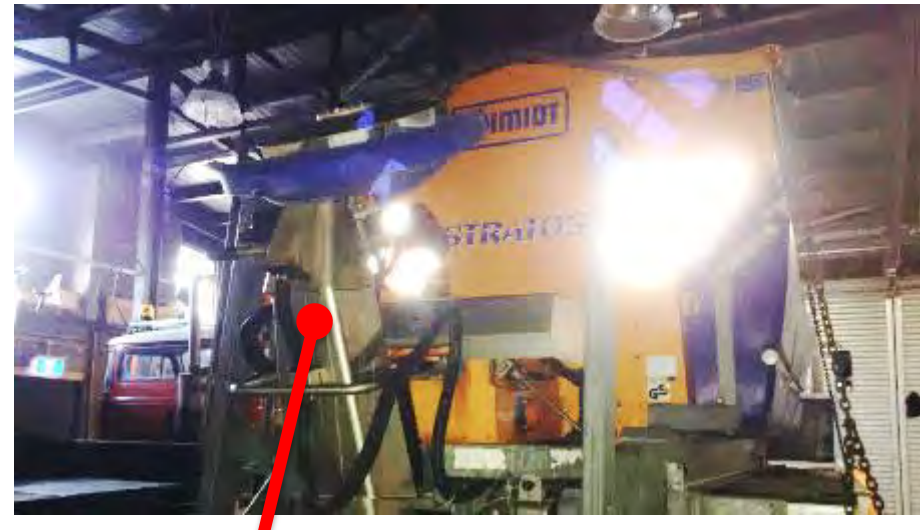
## Thermologic system

- Has been used for contract and RMS snow and ice clearing for a number of years.
- Measures road temperature and considers weather to calculate application rate.
- Updated to Winter Logic system for 2017.



Dry hopper

Wet mix tank



Applicator with Thermologic system

# RMS snow and ice clearing

## Winterlogic system

- Both contract and RMS crews for 2017
- Thermologic system used to calculate application rate.
- Winterlogic tracks application using GPS system.
- Reduced environmental impact.
- Will be calibrated for Australian conditions.
- System can be overridden by operator if required
- Improved safety:
  - Driver free to operate vehicle.
  - Allow for operator flexibility to manage fatigue and rostering.



# RMS snow and ice clearing

## Wilson's Valley Depot

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Bulk Rock salt



Wet Salt Batching tank

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## Wilson's Valley Depot

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Bunded wash down bay



Pump out

# RMS snow and ice clearing

## University of Canberra project

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- The effect of salts on salinity levels in Australian streams has largely not been studied.
- Salinity levels in Australian alpine streams are typically extremely low
- Aquatic fauna may be sensitive
- UoC project investigating impact of salts on ecological health of alpine streams.
- Funded by the Australian Alps national parks Cooperative Management Program.
- Develop provisional salinity targets for assessing the environmental risk of salt from roads and car parks to alpine streams.



# RMS snow and ice clearing

## University of Canberra project

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- Study sites in both NSW (near Perisher) and Victoria (Falls Creek area)
- Sampling macroinvertebrate abundance and diversity at each site before winter and after.
- Sampling water quality at each site before and after winter inc. DO%, EC, Temp, pH and Turbidity
- Installing data loggers that automatically measure the salinity of the water and water temperature every 15mins in the field
- Organise and sort the macroinvertebrate samples to determine if salt has any effects on diversity, abundance or size.
- New RMS system will allow provide much better input data



Sampling Pipers Creek  
Kosciuszko Road