



## How do we carry out Winter Operations?

- Winter Season runs from October to April.
- Winter Service Operations Plan
- During Working Hours all Office and Manual Staff are available to assist with response.
  - 12 Technical Staff
  - 120 Roads Workforce (& 20 additional staff )



## How do we carry out Winter Operations?

- Out with normal working hours a Standby Rota operates, for Dumfries & Galloway;
  - 4 Duty Officers (& 1 Duty Co-Coordinator)
  - 5 Foremen
  - 18 Drivers
  - Second Men (requirement when Snow Ploughing)



# What are the main revisions to Appendix H and how can they help you?

- Salt storage and management
- Vehicle calibration and monitoring
- De-icing materials and technology
- Spread rates for precautionary salting
- Decision making
- Weather situations snow, ice, freezing rain
- Extreme cold
- Common Sense and Good Practice



### **Dedicated winter vehicles**

### **Calibration and tracking**





# **Salt Storage -** spread rates, resilience & salt management system

Harthill 3800

• Wayside 1600

Abercromby 4200

Barnkirk 2700

Commerce Rd 1100

• Total 13400





## **Decision Making**

- Treatment Decisions are made on the basis of Appendix H;
  - Gives framework for decisions
  - Legal perspective on decisions





24 HOUR SUMMARY FORECAST FOR DUMFRIES AND GALLOWAY COUNCIL

FORECAST FOR 20/01/2010 12:00 TO 21/01/2010 12:00

RSTs below zero. Occasional light snow Confidence HIGH

#### General Synopsis

Observations »

Message Board »

Adverse Weather »

Probabilistic Forecast (EPS) »

Winter Service Reporting »

MeteoGroup UK »

Radar »

Maps »

Satellite »

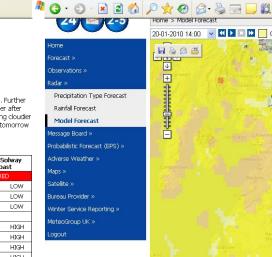
Cloudy with further rain at times this afternoon, possibly falling as sleet or wet snow across higher routes. Further drizzle and occasional patchy light rain/snow flurries during the evening. Becoming drier, clearer and colder after midnight across much of the county, with RSTs falling below zero, leading to ice and hoar frost. Remaining cloudler across the south-west of the county though with RSTs staying above zero here. Mainly cloudy but dry tomorrow

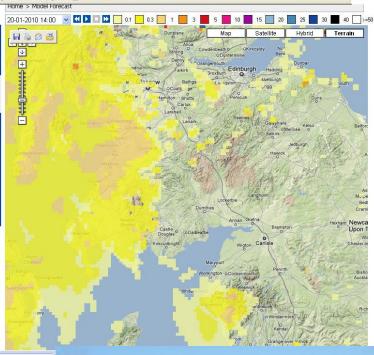
#### Hazards and temperatures

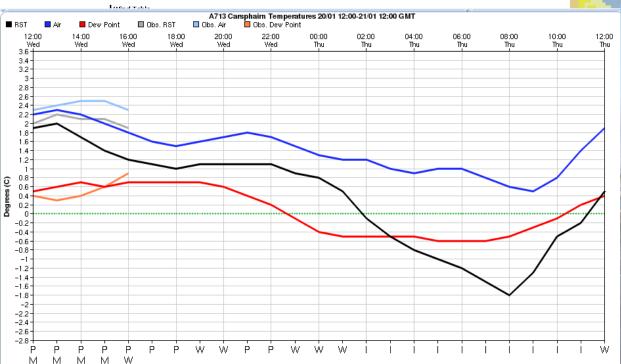
	D&G Dumfries		D&G Inland East		D&G Inland West		D&G Rhins		D&G Solway Coast		
Readiness Colour	RED		RED		RED		GREEN		RED		
Hoar Frost	01-11	HIGH	00-12	HIGH	00-11	HIGH	N	HIGH	06-08	LOW	
Ice	01-11	HIGH	00-12	HIGH	00-11	HIGH	N	HIGH	06-08	LOW	
Snow	N	LOW	12-00	LOW	12-00	LOW	N	HIGH	N	LOW	
Snow Level (m)	N/A		200		200		N/A		N/A		
Drifting	N	HIGH	N	HIGH	N	HIGH	N	HIGH	N	HIGH	
Heavy Rain	N	HIGH	N	HIGH	N	HIGH	N	HIGH	N	HIGH	
Fog	N	HIGH	N	HIGH	N	HIGH	N	HIGH	N	HIGH	
Freezing Rain	N	HIGH	N	HIGH	N	HIGH	N	HIGH	N	HIGH	
Minimum Air Temp							3	3.0	1.	.0	
Urban Min RST							3	1.5	0.	.5	
Urban RST period < O	03-	-09	03-	-09	05	09		N	P	1	
Min RST								2.5			
RST period < 0	01-11		00-12		00-11		N		06-08		

#### Snow Summary

Light snow is possible above 200m both this afternoon and this evening, but any accumulations will be less than 1cm.

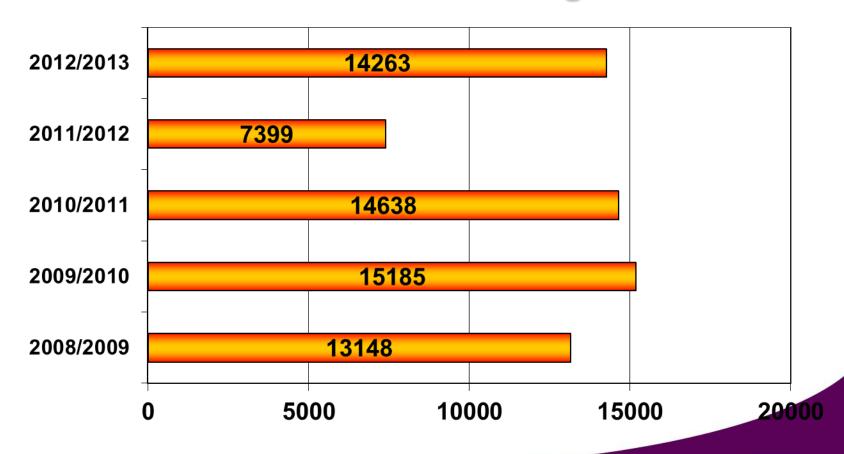








## Salt and Salt/Grit Usage





### What has Dumfries & Galloway implemented

- Fleet arrangement( cost)
- Salt storage reviews
- Testing processes
- Calibrations
- Route optimisation
- Driver training
- Better public communication



### Results of implementation to date

- Annual Cost savings
- Clear guidance to enhance policy
- Long term improvement through a guidance framework for continuous improvement



### **Grit Bins**

- There are 750 Grit Bins located throughout the Dumfries & Galloway area, including 150 provided through the Community Resilience scheme.
- Grit Bins are primarily there to allow "self help", out with Primary
  & Secondary treatment routes, on;
  - steeper urban streets prone to icing
  - busy pedestrian areas
  - in certain rural areas with a concentration of houses



# **Unimog Snowblower**



Dumfries & COUNCIL

## Appendix H does not have all the solutions







# Questions?

