

Report To: Safe, Sustainable Communities Committee Date: 10 March 2009

**Report By: Corporate Director Environment and
Community Protection**

**Report No:
ER/RDS/RG09/026**

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Subject: Winter Maintenance 2008/2009 Update

1.0 PURPOSE

1.1 To provide information regarding the extreme winter weather of 2008/9.

2.0 SUMMARY

2.1 The current winter is the most severe in recent years. This has led to a significant increase in winter maintenance operations and corresponding expenditure resulting in unforeseen budget pressures.

3.0 RECOMMENDATIONS

3.1 Members are asked to note the contents of this report and the likely impact on the budget.

Alan G. Barnes
Head of Environmental Services

4.0 BACKGROUND

- 4.1 Inverclyde Council has a statutory obligation in terms of the Roads (Scotland) 1984 Act to take such steps as it considers reasonable to prevent snow and ice endangering the safe passage of pedestrians and vehicles over Public roads.
- 4.2 Environmental Services (Roads) discharge this obligation in accordance with the policies in it's " Procedures and Resources" document published in October each year.

5.0 PROPOSALS

- 5.1 That members consider the information as presented

5.2 Weather

It has been widely reported that this has probably been the most severe winter for 20 years in terms of nights of sub-zero temperatures. It is certainly the worst in the lifetime of Inverclyde Council. Although the snow events have been relatively minor in terms of depth of precipitation, the fact that temperatures have remained low has meant that the snow/ice hazards have persisted for days requiring extensive treatment rather than thawing naturally.

It is worth noting the current arrangements and resources the Council has to deal with winter maintenance.

Between the beginning of October and the end of March one of three Winter Controllers is on duty 24 hours/day, for a week at a time, to make decisions based on regularly updated weather reports with regards to resources and action needed to deal with adverse weather predictions. Winter Controllers have access to current weather data throughout this period and are contacted at anytime by the Meteo Group, the Council's weather systems provider, when there are any changes to their weather predictions.

When action is required the duty Winter Controller will contact the duty Winter Supervisor and advise him of the action required including timing and the resources that need to be mobilised.

There are seven Winter Supervisors who rotate this duty a week at a time between the beginning of November and the end of March each year.

The Winter Supervisor will mobilise the appropriate number of drivers, lorries, gritters and loaders and monitor progress on the action being undertaken including reporting back to the Winter Controller on conditions where appropriate.

Each week there are eight HGV drivers and one loader driver on standby to cover gritting and snow clearing operations. These standby crews do one week on and one week off in addition to their normal working week. The eight drivers per week are split into a morning and evening shift, an arrangement which is dictated by the Working Time Directive for Drivers Hours Regulations. Under normal gritting arrangements four gritters are mobilised to cover the primary and secondary routes which account for 42% of the roads network. When these priority routes have sufficient salt coverage and where there is ongoing freezing conditions then tertiary routes are also gritted which adds a further 20% coverage to the roads network.

During snow clearing the operations are focused on four main routes which will be continuously ploughed until the roads are black. Thereafter the snow clearing operation will work through the roads network based on the priority routes as stated in the Council's Winter Maintenance Procedures and Resources document. During snow clearing operations it is necessary to double man gritters for safety reasons and to provide assistance with plough adjustments etc.

When dealing with adverse weather conditions that have not been predicted, and can be regarded as an emergency, then roads maintenance operations become exempt from the requirements of the Working Time Directive for Drivers Hours Regulations.

There are 22 roads operatives. All are involved in the standby arrangements to provide

winter maintenance operations and assistance during other roads emergencies.

When ongoing adverse weather conditions require additional resources then these are sourced from within other areas of the Service, external contractors and four Farmers who are contracted to assist in the more remote routes within Inverclyde.

Apart from the snow we have suffered an unprecedented high number of “freezing rain” events where rain falls onto frozen surfaces. On the occasions when this has occurred it has resulted in virtually 100% of paved surfaces in Inverclyde being iced over almost simultaneously, the exception being the carriageways we have managed to treat between showers. Again, with temperatures remaining sub zero extensive treatment has been required using our own resources and others within the Service over a period of days.

Another problem scenario is the “marginal night” where the road surface temperature oscillates around zero. On a number of occasions this winter it has been combined with intermittent showers. These showers, sometimes localised, can wash off the salt necessitating retreatment perhaps more than once.

Up to and including 12th February and 15 weeks into the 22 week 2008/09 winter period we have carried out 79 full grits covering our 8 No. principal routes. This compares with 31 in 2007/8 and 24 in 2006/07 over the same period.

5.3 Salt Usage

Over the previous 5 winters the average rock salt consumption was 1512 tonnes. This winter, up to 12th February, we have already used 2482 tonnes. The current price of rock salt through our collaborative contract led by South Ayrshire Council is £24.33/tonne.

5.4 Grit Bins

In accordance with our Procedures and Resources policy, grit bins are located at strategic locations throughout the urban area. They are normally located on streets not covered by gritting routes and are very useful for residents who are prepared to “self help” in times of adverse winter weather.

Over the years grit bin provision has increased with many new housing developments having short cul-de-sacs. At the start of this winter 218 bins were in place. However, following the unusually severe weather event at the beginning of December we were inundated with over 100 requests for grit bins over a 2 day period. The 12 bins we had in reserve were deployed and remaining applicants told that we would review our priorities before next winter.

In an average winter grit bins are topped up on a regular basis. During this winters' severe weather events, however, we found the bins were being emptied on a daily basis. With each bin holding around 0.4 tonnes of salt, servicing of even 230 is an onerous task given the conflicting demand on resources for gritting

5.5 Consequential Damage

A significant contributory factor to the deterioration of carriageway and to a lesser extent footway surfacing material is the freeze/thaw cycle when water is present. Water enters minute cracks, freezes and expands causing a potential break up of the constituent elements. This can be exacerbated by the suction effect of vehicle tyres passing over the wet surface. Thus, the relatively high proportion of freeze/thaw cycles we have experienced this winter has caused extensive damage to parts of the network. Potholes and lesser defects can develop literally within days and require to be repaired promptly to mitigate public liability claims. A significant programme of patching repairs will require to be undertaken next month and into the new financial year.

It is difficult to put a financial cost on the long term damage to the roads network that the recent weather has caused however it has been estimated, prior to the recent adverse weather, that over £5million per year is needed over the next five years to bring roads back to a ‘fit for purpose’ condition within Inverclyde. In the short term it is estimated that between £50k - £75k of revenue funds will be required to carry out patching and pot hole repairs in addition to what would normally be spent at this time of year. The cost of

this will be contained within next years revenue budget. This means that potential revenue resurfacing projects will be scaled back to accommodate this.

5.6 Budget Implications

At the start of each Financial year a proportion of our Revenue Budget is set aside for the provision of a winter maintenance service. The sum of £246,000 for 2008/09 was based on the "average" winter over the previous few years. Because of the circumstances as highlighted above the projected spend to the end of this winter is £343,000. Because funding for major projects now comes from the Capital Budget our Revenue allocation is almost entirely used for cyclic maintenance with very little scope for savings late on in the year. However it has been possible to re-allocate £60,000 from other activities to winter maintenance leaving a potential shortfall of £37,000. This projected overspend has been included in the Revenue Budget Monitoring Report that has also been submitted to this Committee.

6.0 IMPLICATIONS

6.1 Legal

There are no legal implications.

6.2 Financial

There is a projected overspend in the Winter Maintenance element of the Roads 2008/09 Revenue budget of £37,000.

Cost Centre	Budget Heading	Budget Year	Proposed variance this report	Virement from	Other Comments
00649 000 30110	Winter Maintenance Materials	2008/09	£32,000	N/A	
00649 000 30001	Basic Contract (Winter Maintenance)	2008/09	£65,000	N/A	
00649 000 30001	Basic Contract (Misc)	2008/09	(£60,000)	N/A	
	Total		£37,000		