

## Severe Weather – Interim Report

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### Policy and Strategy Committee

18 January 2011

#### 1 Purpose of report

- 1.1 To outline proposals for a review of options for future strategy in the city's approach to winter weather preparedness and to highlight some short-term measures to improve the response should there be further severe weather this winter.

#### 2 Summary

- 2.1 The last two winters have been more severe than in many previous years and this raises the question as to whether this is anomalous or is, at face value, suggestive that the UK may face more frequent severe winter weather conditions in the coming years than has previously been anticipated.
- 2.2 In Edinburgh, severe weather conditions have been experienced last winter (December 2009-January 2010) and this winter (end November 2010- early January 2011). The Council's response to these conditions has been very significant in terms of the resources deployed but, despite this, the city has experienced significant disruption, mainly in the high-lying suburbs to the South-West and West of the city.
- 2.3 If such conditions are to become more typical then it is appropriate to review our current strategy and to plan any appropriate adjustments for future years.
- 2.4 It is proposed that a piece of work is undertaken to review preparedness balanced with the probability of, and risks associated with severe weather. This piece of work will be completed in time to inform decision making for winter 2011/12. The work may be summarised as follows;
- (a) To consider future strategic planning options, the three main aspects of the Council's response to severe winter weather emergencies should be reviewed;
- Supply of plant, vehicles, equipment etc
  - Supply of manual labour, and
  - Salt supply

- (b) Consider the role of key strategic partners
- Availability and accuracy of weather forecasting
  - Inter dependency issues with police, fire & health
  - Impact of severe weather on education, business and commerce
- (c) To consider alternative approaches including developing a stronger partnership approach and a stronger community engagement strategy, to encourage participation from the widest possible range of stakeholders.

2.5 Most of the alternative or enhanced approaches to be considered bring with them the potential for significant resource requirement. The financial implications of any new approaches, should they be eventually adopted, would need to be considered through future budget reviews. In the meantime, if the costs of winter maintenance exceed departmental budgets then an exceptional draw upon reserves may be called for.

2.6 A comprehensive de-brief report will be presented to Policy and Strategy Committee at the end of the winter period covering the recent, and any further severe weather emergencies. However, the report also highlights some improvements which can be implemented quickly in order to assist with any further incidents this winter.

### **3 Main report**

#### Overall remit for the review

- 3.1 The severe weather emergency last winter (December 2009 – January 2010) was considered to be exceptional in terms of volume of snowfall, low temperatures and overall duration. However, the recent severe weather is also reported as the worst for decades – December 2010 has been reported as the coldest since met office records began. Some commentators have suggested that such conditions may become more common over the next 10 years. A range of meteorological explanations have been suggested although there is not yet a conclusive picture of what the future holds.
- 3.2 Councils, like other organisations, must make a judgement about the extent to which they prepare for severe weather – as with other risks - taking into account risk levels and costs. On one hand they are open to criticism for under-preparing (and the resultant disruption), yet on the other, they are open to criticism for investment in contingency arrangements which are never, or rarely, fully-utilised (eg plant which sits idle for long periods of time).
- 3.3 Members will appreciate that a “just-in-time” approach is not feasible in these circumstances – during both the recent severe weather emergencies, financial resources have not been the constraint limiting the Council’s response. Rather, the scale of that response is constrained by the availability of plant, vehicles, equipment and manual labour. When Edinburgh experiences severe weather, it is highly likely that much of Scotland will be facing similar conditions (or often much of the UK). In these circumstances, the supply of plant etc is quickly

exhausted. Equally, there are significant challenges in deploying a large manual labour force quickly – so this too needs to be planned in advance. The third resource area requiring consideration is salt supply. Whilst the availability of salt has not been a constraint to the Council's response in either of the two recent emergencies, it has been so for other councils, some of whom actually ran out of salt. However, salt supplies are a continuing concern and it proposed that this potential constraint should also be considered within the review.

3.4 It is therefore proposed that the review should involve analysis of expert advice regarding future weather prospects. This will inform the Council regarding the likelihood of future severe weather emergencies. The second part of the review will cover the resource constraints referred to above, ie

- Supply of plant, vehicles, equipment etc
- Supply of manual labour, and
- Salt supply

3.5 Finally, it is suggested that once the above issues have been considered, there should be a period of engagement with partner organisations, the wider public and key stakeholders regarding options for future strategy.

#### The Council's current response

3.6 Prior to the severe weather of 2009-10, the Council had a relatively stable response to winter weather conditions. The established gritting fleet and routes worked well and, because there were few prolonged spells of severe weather, additional resources from outwith the Council (other than well-established roads sub-contractors) were never considered. Anecdotally, during the limited spells of severe weather, those living in high-lying residential areas suffered disruption as they were often not treated as a consequence of the prioritisation of Category 1 and 2 routes. There has, for many years been a clear arrangement to redeploy streetcleaning and gardening staff onto snow-clearing duties during times of significant snowfall.

3.7 As the seriousness of the 2009-10 situation became apparent, a number of unprecedented steps were taken in order to augment the normal response. This included;

- (a) Redeployment of further staff from non-essential work
- (b) Use of those serving Community Service Orders
- (c) Deployment of contractors on an emergency basis – these were largely contractors who could not fulfil their normal contractual responsibilities due to the weather conditions (eg environmental improvement contractors)
- (d) Provision of food parcels for vulnerable people
- (e) Contact arrangements (telephone calls and visits etc) to keep in touch with vulnerable people

- (f) Targeting of snow-clearance resources to schools, care homes and other important sites
- (g) Use of 4x4 vehicles to enhance access for care and support services for vulnerable people

As a result of these additional measures there were typically 350 people deployed on snow clearing duties.

- 3.8 In May 2010, a report was presented to the Policy and Strategy Committee ("Severe Weather – Review") which, amongst other things, considered higher levels of investment in contingency arrangements for severe weather. The example used in that report was to consider what the additional cost would be of gearing up to treat Category 2 routes simultaneously with Category 1. This relatively modest escalation of preparedness was estimated to cost approximately £1.4m pa and, reflecting the recommendations in the report, members considered that this did not constitute value for money. This view was clearly strongly influenced by the expert advice at the time which suggested that such extreme conditions were unlikely to be repeated in the near future. As stated earlier, these expectations are now being adjusted.
- 3.9 In line with the recommendations of the above report, the Council has invested in a further eight mini-tractors and also took advantage of a lease renewal opportunity to secure an additional five lorries capable of being converted for winter maintenance work. These measures significantly enhanced the fleet at minimal extra cost. Additionally, the Council's salt storage capacity was increased by 38% so that before the winter period began, the Council had some 7,215 tonnes of salt in storage – this compares with 10,000T used over the whole of last winter.
- 3.10 Members will also be aware that a tailored "Severe Weather Emergency Plan" for this Council has now been developed and was approved by Committee in October 2010.
- 3.11 When the recent severe weather began on the weekend of 27/28 November 2010, the above Plan was implemented immediately and the Council's response was certainly more formally managed during those early days than during the previous incident. Of particular significance was the speed with which private contractors were deployed – within 2 days of the first snowfall. The Council's response included all the measures detailed in paragraph 3.7 above, augmented by the following;
- (a) The number of people on snow-clearing duty increased from 350 to 650 largely due to enhanced use of private contractors. In addition to the manual labour supply, this also included significant additional plant, vehicles and equipment. Securing this additional resource, managing it and administering contractual arrangements has been a huge effort and is believed to exceed anything achieved by any other local authority in Scotland.
  - (b) Military assistance was requested – and provided - albeit for a short period in December. No other Scottish council achieved such

assistance, re-inforcing this Council's determination to do everything possible to respond to the exceptional conditions.

- (c) Exceptional measures were taken to relieve pressures in relation to refuse collection. These included permission to use garden waste containers for domestic waste, distribution of over 40 skips and large containers to supermarket car parks etc across the city and hand collection of refuse sacks in some hard-to-reach areas.
- (d) Use of "grit-dumps" to maximise availability of grit in areas where permanent grit bins could not be reached or where demand was particularly high
- (e) Although the Council's salt supply has not yet run out, we did successfully secure 2,000T of salt from the Scottish Government's strategic reserve.
- (f) The communications plan was intensified with daily Member's Briefings throughout the period, supplemented by more detailed briefings from Neighbourhood Managers and significant usage of Twitter and other social media applications.

#### Possible short-term improvements

- 3.12 In light of experience, more formal arrangements have been made with a number of contractors (those offering best value for money and performance) which will allow even faster mobilisation. Once alerted to standby status, these resources will be deployable with 12 hours notice. Beneath these main contractors are sub-contracting arrangements with a wide range of smaller contractors, including some local farmers.
- 3.13 In certain parts of the city "grit dumps" proved popular and it is proposed to enhance this as follows;
  - (a) We will work with neighbourhood Partnerships to identify suitable potential sites and test out the feasibility of resourcing these sites, if at all possible, before heavy snow, or during its early hours. We will also discuss potential additional sites for skips etc for areas worst affected by delays in refuse collection.
  - (b) We will publicise the location of these grit dumps more widely, including identifying them on the Council's website
- 3.14 We will agree a specification of exactly what snow clearing work is required for Special Schools (these have particular vehicle access needs)
- 3.15 We will ensure school opening risk assessments are undertaken, where appropriate, the day before the next scheduled opening so that parents are given maximum notice.
- 3.16 We have ordered/purchased additional snow clearing equipment and will ensure this is readily to hand at all appropriate depots etc in advance of further severe weather.

- 3.17 The coordination arrangements at the gritting control centre, which worked very well during the recent emergency have been formalised and will be incorporated into the Council's Severe Weather Plan.
- 3.18 Likewise, working protocols were developed with the Contact Centre which re-inforced the crucial role it plays. For example, the analysis of requests for "life and limb" assistance were scripted to ensure that only genuine cases were referred to the Neighbourhood Teams.
- 3.19 We are doing everything possible to maximise salt availability both through our normal supplier and also the Scottish Government.
- 3.20 We will make the public aware of which streets have been treated using the Council's website, Twitter etc.
- 3.21 We have established a reserve supply of grit (ready for use with salt in a mix to treat Category 3 streets and footpaths etc)
- 3.22 We will re-issue advice to residents and businesses to ensure there is clarity that they are encouraged to clear the footpaths etc outside their home or business. This will include advice about where to put snow etc.
- 3.23 We are currently assessing the feasibility of fitting snow tyres to refuse collection and other vehicles.

#### Possible alternative approaches and issues for consideration

- 3.24 This review will be conducted on the basis that "nothing is ruled-in or out" in the hope that this will encourage people to come forward with innovative suggestions. However, the list contained at Appendix 1 indicates the sorts of issues that will clearly need to be considered. It is not exhaustive and all further suggestions will be welcomed and fully considered through the project.
- 3.25 Some of the issues listed in the appendix are already "live" in the sense that work has already begun or else policy/practice already exists (eg abandoned vehicles/prioritisation of local facilities/contractual arrangements etc).

#### Council motion

- 3.26 At its meeting on 16 December 2010, the Council received a report on the severe weather emergency which prevailed at the time. In response to this it approved a motion by the Administration, a motion by Councillor Burns and an amendment from the Conservative Group. Some of the points contained within those motions and amendment have been covered within this report and the remainder will be included within the brief for the review project and thus responded to in the full report due to be presented in Summer 2011.

#### Project Management Arrangements

- 3.27 This project is intended to allow the Council and its partners to take a fundamental look at how severe weather is managed in Edinburgh. The initial list of issues in Appendix 1 illustrates the scale and complexity of the project and it is therefore proposed to create a core project team of full-time staff. This

will be supplemented with part-time input from others as necessary. It is anticipated that the full-time staff (including the Project Manager) are likely to be Council staff seconded from other duties though it may be possible to consider external people too. If dedicated resources are not provided for this work then there is a real risk that it will not be completed in time for next winter. Experience has shown that operational managers and their staff simply cannot resource work of this kind in addition to pressing "day-job" workloads.

- 3.28 The project sponsor will be the Director of Services for Communities and the Programme Board will be the Council Management Team. An interim report will be presented to Policy and Strategy Committee in April 2010 and the full report in the summer.

#### **4 Financial Implications**

- 4.1 The cost of the Project Team is estimated to be £50,000 - £100,000 and this will be contained within approved budgets (shared across departments).
- 4.2 The costs of an enhanced response are likely to be very significant indeed and this will be subject to detailed consideration within the final report.
- 4.3 The costs of the short-term actions can be contained within existing budgets.

#### **5 Environmental Impact**

- 5.1 The environmental impact of the various options to be considered will be covered within the final report.

#### **6 Conclusions**

- 6.1 The Council's response to severe weather has developed very significantly over the past two winters. However, some communities have nevertheless experienced significant disruption. The report highlights some measures that are already being taken to further improve this response in the short-term.
- 6.2 Severe weather conditions may not be as unusual as previously thought and, if so, the Council and its partners need to consider whether a different strategy is appropriate.
- 6.3 Costs of the current response level are already very significant and any increased costs will need to be evaluated thoroughly in the context of the financial climate facing the public sector.
- 6.4 Well-resourced project management arrangements are necessary in order to do justice to the importance of this issue.
- 6.5 A full report will be presented to Committee in the summer of 2011 and this will also address any outstanding actions from the motions and amendment approved by the Council at its meeting on 16 December 2010.

## 7 Recommendations

It is recommended that Committee;

- 7.1 Notes the measures already in hand to further improve the Council's response
- 7.2 Endorses the need for a review of the city's strategy for severe winter weather as set out in the report
- 7.3 Endorses the project management and reporting arrangements as set out in the report



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Director of Services for Communities

13/1/11

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Appendices	1 – Initial list of issues for consideration (not exhaustive)
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Wards affected	All
Single Outcome Agreement	
Background Papers	None

## **Appendix 1 – initial list of issues for consideration (not exhaustive)**

- (a) What is the likelihood of more frequent severe weather (to be analysed using data from government sources etc)
- (b) What is best practise from elsewhere (worldwide)?
- (c) What resource would be required in order to keep all roads and footpaths clear?
- (d) Would it be feasible to provide the worst affected communities with mini-tractors or other plant so that they can keep their own streets clear?
- (e) Could Council (and other – eg buses) vehicles be better prepared for severe weather (eg use of snow tyres)?
- (f) What should the Council/Police response be to badly parked or abandoned vehicles?
- (g) Could the use of private contractors be further increased and what are the optimum contractual arrangements?
- (h) Should there be more grit bins, how can they be kept better replenished and how can responsible community use be ensured?
- (i) The scope to develop Neighbourhood Severe Weather Emergency Plans – these would formalise the experience built up over the past 2 winters on how to deploy snow-clearing resources locally.
- (j) To what extent are various local facilities to be prioritised for the purpose of snow-clearing ie schools vs care homes vs 'life and limb' cases vs hospitals vs fire risks (eg bin stores) etc?
- (k) What is the appropriate level of salt storage capacity (relating to any new approaches) and could more be done to guarantee future supplies? Are alternative salt supplies realistic (eg recent reports regarding salt from sea etc)
- (l) Could organised community groups (eg church groups, scouts, sports clubs etc) be incentivised to play a formal role in these emergencies?
- (m) Could new plant/vehicles etc be designed to suit specific purposes (eg excavation of deep ice) and can non-essential plant etc be quickly adapted for emergency use (eg grass cutting equipment)
- (n) Could Council's be given new powers (eg to commandeer plant/vehicles etc) or make better use of existing powers (eg byelaws)?
- (o) Are there alternative sources of large scale manual labour (some work has already been commissioned to look at scope to access unemployed people)?

- (p) Could more be done to protect buildings from risk of frozen pipes etc?
- (q) Could more be done to reduce the risk of harm from broken gutters and snow falling from roofs?
- (r) Should the Council enhance its reserve fuel supplies?
- (s) Could more Council/public/private sector staff be contractually required (and trained etc) for snow clearance work?
- (t) Could communications be improved so that people have a better awareness of the extent of work being done and real time operational information?
- (u) Could the response for vulnerable people be enhanced (eg greater availability of 4x4 vehicles, more food parcels, better database of vulnerable people)?
- (v) Review of arrangements for school closure decision-making (timing and nature of risk-assessments etc)
- (w) Are alternative refuse collection arrangements available for hard-to-reach areas?
- (x) What can be done to minimise damage to roads and pavements during severe weather?
- (y) Does the current categorisation of roads and footpaths need to be tweaked?