
WINTER SERVICE PLAN FOR YEAR 2023/24

Report by Director of Infrastructure & Environment

EXECUTIVE COMMITTEE

12 September 2023

1 PURPOSE AND SUMMARY

- 1.1 This report provides a review of the performance of Scottish Borders Council's Winter Service during 2022/23 and presents, at Appendix A, SBC's proposed Winter Service Plan for 2023/24.**
- 1.2 SBC provides a winter service on almost 3,000km of roads and 787 km of footway across the Scottish Borders. The Winter Service Plan is reviewed annually and presented to Elected Members to outline the steps that aim to make sure, within available resources, that the road and footway network is safe over the upcoming winter.
- 1.3 As part of the Fit for 2024 programme of transformational change, the Council is required to modernise and adapt all of its services to meet present and anticipated future needs in a responsive and agile manner, ensuring that services can continue to be delivered cost effectively and sustainably, while delivering efficiencies and savings where required.
- 1.4 The winter of 2022/23 was not significant in terms of snowfall, which was limited to a few occasions. Incidents of ice and prolonged frost were also less than the previous five-year average and on a par with those experienced the previous winter. This led to a reduced need to treat primary and secondary routes as frequently and resulted in lower-than-average salt usage.
- 1.5 The Winter Service Plan for 2023/24 is on similar lines to the previous 2022/23 Plan in terms of policy, priorities, routes, call out arrangements and resource planning. Section 5 of the report provides details on a revised salt spread rate regime that was trialled, on approximately half of the primary precautionary salting routes, last year. It is proposed that this should be continued in the coming winter.

2 RECOMMENDATIONS

2.1 I recommend that the Executive Committee: -

- (a) Notes the performance of the SBC Winter Service during 2022/23;**
- (b) Endorses the Winter Service Plan for 2023/24;**
- (c) Notes the continuation of a trial in relation to the salting spread rates applied on 50% of the primary precautionary salting routes.**

3 BACKGROUND

- 3.1 The safe passage of people on the road and footway network during winter is very important for the social and the economic needs of the area. Under the Roads (Scotland) Act 1984, Section 34, all roads authorities are required to *‘take such steps as they consider reasonable to prevent snow and ice endangering the safe passage of pedestrians and vehicles over public roads’*. The Council undertakes a Winter Service on almost 3,000km of local road network and 787 km of footway. The Service is provided by the Infrastructure and Environment Department.
- 3.2 To assist in meeting its legal requirements, the Infrastructure and Environment Service produces an annual Winter Service Plan. This describes what steps will be taken to maintain the local road network free from ice and snow; as far as it is considered reasonable within the available budget. A Winter Service Plan has been in place in different forms for over 20 years and is reviewed annually to ensure that it is fit for purpose. The plan provides information about the hierarchy of routes, and details the network, which will benefit from winter maintenance activities, within the framework of that hierarchy. Route hierarchies are long established and have been determined based on factors including traffic volumes, bus routes and access to critical infrastructure including schools, shops and medical centres. Operational capacity and delivery, including the locating of critical infrastructure in which salt is stored, is structured around the hierarchy.
- 3.3 The Council adopts two approaches to safely maintaining the network during the winter:
- a) Prevention – by pre-salting roads to reduce the impact of frost and frozen surfaces on travel conditions; delivered on a routine, planned basis. The road network hierarchy is defined as Primary, Secondary and Tertiary Networks. Planned “pre-salting” is only undertaken on the Primary network. The remaining road network will then come under the “post-treatment” of Secondary and Tertiary networks. The Secondary network is treated after the Primary network, as time and resources permit, and it is believed that winter hazards will continue to present a risk. The Tertiary network will only be treated when hazardous weather conditions persist, all Primary networks have been treated, resources have been committed to treat Secondary routes, and resources have become available.
 - b) Intervention – through large scale snow clearance following extreme winter conditions. This, by its nature, is taken forward on more of an “as required” basis; due to the severity of snow fall. The decision to undertake snow clearance is considered within the context of the Councils emergency planning structure and may also involve community resilience partners.
- 3.4 Delivery of the winter service, depending on the severity of the winter, can lead to concerns being escalated to Members where the public may feel that their particular circumstances deserve a greater response from the Council than they may have received. In creating the winter service plan the Council is communicating its approach to delivery of what it can and cannot

or will not do, depending on the winter weather. Critical success factors include having a reliable fleet and staff/contractor network to be able to deliver our stated plan; access to quality and sufficient quantity of salt; considering the role that resilient community partners can willingly play and how best to support that and maintaining a flexible approach where it is possible to do so. This can vary depending on issues such as the duration that the winter weather has been impacting Borders communities and the specific nature of that impact, e.g. perma-frost or significant volumes of snow. The winter service must also meet the financial constraints in which the Council is operating, therefore it is not within the scope of this report to propose review of or redesign of the hierarchy and delivery model.

- 3.5 Once endorsed by the Executive, the Winter Service Plan is communicated and shared widely with our community. The Plan will be published on the Council’s website and made accessible through other digital platforms. This is further supplemented by publishing treatment routes to improve general public awareness of the Plan.

4 REVIEW OF 2022/23

- 4.1 The Winter of 2022/23 was not significant in terms of snowfall; any snowfalls were moderate to mild and limited to a few occasions that did not lead to any significant impacts on travel. There were some isolated instances of disruption, and this was primarily as a result of vehicle breakdowns rather than a lack of willingness or foresight to provide services. Incidents of ice and prolonged frost were lower in 2022/23 in comparison to the previous five-year average but in line with those experienced the previous winter. This led to a reduced need to treat primary and secondary routes and resulted in a lower-than-average salt usage on roads.

The following key parameters illustrate this:

Years	17/18	18/19	19/20	20/21	21/22	22/23	Comment
Planned Actions	243	168	198	192	154	159	Call outs to undertake preventative actions (previous 5-year annual average = 191)
Aggregate No. of Preventative Runs	3454	3819	4070	4369	4303	4172	Similar to above but dependent on extent of SB area impacted by winter weather (previous 5-year annual average = 4003)
Salt Usage on Roads (,000T)	37.5	17.6	23.5	30.5	18.2	18.6	Used on local (non-Trunk) roads (previous 5-year annual average = 25.5)
Salt usage on Footways (Tonnes)	Not Avail	588	741	1714	680	1278	Used on Footway Network (does not include Grit Bins)

Figures are per financial year

- 4.2 Winter treatments did extend into April, but this has increasingly been the case in recent years.
- 4.3 As in previous years the potential impact of a harsh winter on the NHS was considered by CoSLA and other bodies. This Council, along with other Scottish Local Authorities, committed to undertake as robust a service as possible to minimise any impacts on the Health Service through slips, trips and falls in wintry weather. Community self-help remained a significant tool to assist the Council in its commitments. As in the previous year salt bin usage was above the long-term average with additional refills being undertaken throughout the winter period.
- 4.4 Along with our strong record of community self-help in winter service, the Council has an extremely loyal and highly skilled workforce which it relies upon heavily to deliver its winter service plan. Staff performance was again high across all areas and praise has been shared with the workforce by many in our community and within the council. It is only appropriate to also thank the number of private contractors from across the Borders and South-east Scotland who also helped the Council maintain its high standards in this area.
- 4.5 Discussions continue with our workforce in regard to the arrangements for this coming Winter and Officers remain confident that we will continue to be able to meet the parameters, as set out in the Winter Service Plan, to the best of our ability.

5 CONTINUATION OF TRIAL OF AMENDED SPREAD RATE FOR PRECAUTIONARY SALTING

- 5.1 The service continues to look at innovative, more efficient and environmentally friendly ways of delivering the Council's winter service.
- 5.2 The current salt spread rate matrix (see section 5.5 of the Winter Service Plan) was established in line with industry good practice and guidance in consultation with ELBF (Edinburgh, Lothian, Borders & Fife Councils) a number of years ago.
- 5.3 The code of practice for well-maintained highways was revised in 2016 and provided updated guidance including reference to more recent research by the National Winter Service Research Group (NWSRG). This led to more detailed guidance on the spread rates for precautionary salting operations undertaken in response to predictions of frost and ice formation in normal winter conditions on the UK road network. The majority of Scottish Councils are yet to adopt the revised guidance but it is felt that, coupled with technological development and greater flexibility of incremental adjustments to spread rates, it offers significant potential benefits for winter operations.
- 5.4 The guidance is determined on the basis of research carried out by NWSRG, TRL (Transport Research Lab), Highways England and Transport Scotland over a number of years and is designed to assist authorities in providing

good service levels while complying with their legal obligations and duties in respect to winter weather conditions.

- 5.5 In addition to traditional factors such as the salting technology utilised; the type and condition of the salt; performance and serviceability of the spreader; and road surface temperature the revised guidelines consider wider factors such as traffic levels before, during and after application and residual salt levels on the network in determining the spread rate at which salt should be supplied.
- 5.6 The revised spread rates put forward by NWSRG require greater input and thought from officers in determining the appropriate rates for routes and sections of route. Critically, however, they also offer both environmental benefits and significant potential savings through reduced salt usage. This can be up to 20% in certain conditions.
- 5.7 Following the apparent success of a short pilot in March 2022 it was agreed to extend the revised spread rate trial over the 2022/23 winter to 14 routes (50% of primary routes) with comparative performance under the two spread rate regimes monitored through feedback from operators and any comments received from Members and the general public.
- 5.8 The use of the lower spread-rates is directly related to the prevailing road temperatures with percentage uplifts, where temperatures are predicted to be more extreme, bringing the rates more in line with traditional application rates. As such the real benefit is on more marginal nights where temperatures are only predicted to be just below freezing.
- 5.9 The winter of 2022/23 was characterised by a lot of wet weather which reduced the surety of residual salt from previous applications still being active on routes. In turn this meant that decision makers were on occasions less confident in adopting the new rates of spread and the incidences of usage were less than might have been anticipated.
- 5.10 Notwithstanding this there were 1057 individual recorded treatments across the 14 routes where the trial spread rates were applied and this resulted in a saving of 359 tonnes of salt and a financial saving of £16,164. It should be noted that, as outlined in 5.8 above, not all the treatments resulted in salt savings compared to the traditional matrix.
- 5.11 There was no adverse feedback received from operators, the public, or Members in relation to the performance on the routes where the new salting rates were applied.
- 5.12 While the levels of savings are not, to date, of the scale hoped for, those savings that were made, along with the environmental benefits of reduced salt usage would suggest it is worth continuing the trial in 2023/24. It is hoped that a less rainy winter plus increased confidence in the system will lead to greater application of the trial spread rate matrix.
- 5.13 There are however no plans to extend the trial to further routes at this point in time. There are two main reasons for this. Firstly we are near to the limit of the salt spreading machines that SBC operate that are capable of adjusting their spreading rates by the 1g/square metre increments required

by this regime and secondly the current 14 routes were chosen on the basis of them being most appropriate in terms of climatic conditions and traffic levels.

6 WINTER SERVICE PLAN FOR 2023/24

- 6.1 The Winter Service Plan is always challenging to deliver given the conditions, but by implementing our plan, along with the significant work undertaken by Officers and frontline staff and the support of external contractors, disruption was contained in the previous winter. Planned treatments were undertaken as scheduled, salt stocks were maintained throughout the period and the continued more regular re-stocking of salt-bins was again well received. In these regards the Winter Service Plan can be demonstrated to have worked well in 2022/23 and no significant changes to policy are proposed for the coming winter; with the salt spread rate trial described in section 5 continuing as it did last year.
- 6.2 To support resilience communities more effectively, more flexibility is now available through the introduction of resilient community salt bins. These enable more community self-help in a structured manner, more expediently at minimal cost whilst providing improved community safety and wellbeing outcomes. Salt usage and replenishment rates will continue to be monitored to gauge performance.
- 6.3 The updated Winter Service Plan, at Appendix A, is proposed for adoption for winter 2023/24. It remains a robust plan and clearly defines the approach to primary; secondary; and tertiary salting of the Council's adopted road and footway network; following the principles established in best practice terms as well as in previous winter service plans.

7 IMPLICATIONS

7.1 Financial

- (a) An approved winter maintenance budget of £3.3M exists within Infrastructure & Environment. In addition, a £1M provision within reserves exists for adverse winter weather, for events beyond average conditions.
- (b) Due to the continuing financial pressures affecting the Council, there is a need to continue modernisation of our approach to winter delivery and to investigate ways of minimising the financial impact that winter service delivery has.

7.2 Risk and Mitigations

- (a) Winter and winter hazards for the travelling public present a risk of personal injury, damage to property or vehicles and potentially a risk of fatal accidents taking place on the road and footway network. The Winter Service Plan details how the Council will respond to winter weather events across its network. It does so by clarifying the approach to treatment of roads and footways and sets out the principles employed in reaching decisions and deploying resources. As

well as promoting the potential for travel disruption arising from winter weather, the production and public scrutiny of the Winter Service Plan ensures that the Council is being clear about what it can and cannot reasonably address, within its available resources.

- (b) There is a risk that the WSP does not reflect and address adequately the experiences and/or appropriately plan to manage winter hazards each year. Officers however remain satisfied that the WSP is a demonstrably effective plan which has high levels of compliance in its delivery. The Infrastructure and Environment Service, in conjunction with officers across SBC and partners, monitor and review the delivery of the WSP annually, noting any deficiencies in service provision, with a view to developing solutions and proposing those to members in the autumn for the following year's Winter Plan.
- (c) There is a risk in adopting an updated approach to salt spread rates that on carriageways that the travelling public may have trouble whilst travelling on the network during wintry weather. This is being mitigated by, adopting rigorous testing of the quality of salt supplies, ensuring that up to date information around road traffic volumes at sensitive times is up to date, ensuring that gritters are able to deliver the spread rates as specified, ensuring the pre and mid-winter calibration of spreaders is undertaken, and monitoring the process of salting roads as well as the effects of salt on the road condition during winter events. The decision makers have also all been trained and familiarised with the new updated approach and will be supported to ensure that decisions on salt spread rates throughout winter are taken in a way which does not increase the risks to travelling public during winter weather events.

7.3 Integrated Impact Assessment

An Integrated Impact Assessment has been undertaken in regard to the content of this report and no adverse findings have been observed that would require a fuller IIA to be undertaken.

7.4 Sustainable Development Goals

It is not envisaged that the revised Winter Service Plan will impact on any of the UN Sustainable Development Goals.

7.5 Climate Change

There are no significant impacts on the Council's carbon emissions or climate change contribution that are additional to current operation.

7.6 Rural Proofing

There are no rural proofing issues arising from this report. The Winter Service Plan recognises the rural nature of the Scottish Borders and the importance of maintaining transport links during the winter months.

7.7 Data Protection Impact Statement

There are no personal data implications arising from the proposals contained in this report.

7.8 Changes to Scheme of Administration or Scheme of Delegation

There are no changes which are required to either the Scheme of Administration or the Scheme of Delegation as a result of the proposals in this report.

8 CONSULTATION

8.1 The Director (Finance & Procurement), the Director (Corporate Governance), the Chief Officer Audit and Risk, the Director (People Performance & Change), the Clerk to the Council and Corporate Communications have been consulted and any comments received incorporated into the final report.

Approved by

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