

Glasgow City Council Internal Audit Section Committee Summary

Item 5(d)

17th September 2025

Neighbourhoods, Regeneration & Sustainability – Flood Management Arrangements

1 Introduction

- 1.1 As part of the agreed Internal Audit Plan, we have carried out a review of the Council's flood management arrangements.
- 1.2 The impacts of flooding experienced by individuals, communities and businesses can be devastating and long lasting. The likelihood of flooding occurring is likely to increase as climate change takes effect.
- 1.3 To reduce the risk of any such future events and improve the Council's ability to manage and recover from incidences of flooding which do occur, the Council is a lead member of the Metropolitan Glasgow Strategic Drainage Partnership (MGSDP). This is a collaborative public body partnership for flood risk management across the Metropolitan Glasgow area. The Council's current Flood Management Capital Programme is delivered via City Deal.
- 1.4 In addition, a preventative maintenance gully cleaning programme is in place to prevent flooding by maintaining the road drainage network and to improve its efficiency. The Council has approximately 75,000 road gullies which are cleaned on a risk and cyclic based approach. This programme is managed by Neighbourhoods, Regeneration & Sustainability (NRS) - Roads Maintenance. The allocated budget for 2024/25 was £0.75m. This has now been increased to £1.35m for 2025/26.
- 1.5 NRS is also responsible for the incident response process required by the Council for managing its reaction to severe weather incidents, including flooding, which could impact on carriageways, footpaths and cycle ways.
- 1.6 The purpose of the audit was to gain assurance that the flood management arrangements in place are fit for purpose and are operating effectively. The scope of the audit included review of key controls in the following areas:
 - Documented policies, procedures and guidelines.
 - Roles and Responsibilities.
 - Risk management processes.
 - Governance arrangements for the implementation of Flood Risk Management actions.
 - Flood prevention activities, and
 - Incident response processes.

- 1.7 The audit focused on the management arrangements and did not review the efficacy of the flood prevention measures.

2 Audit Opinion

- 2.1 Based on the audit work carried out, a reasonable level of assurance can be placed upon the control environment. The audit has identified some scope for improvement in the existing arrangements and two recommendations which management should address.

3 Main Findings

- 3.1 Some key controls are in place and generally operating effectively. The Council's flood management capital projects follow the governance arrangements in place for City Deal. This included the development of Strategic Business Cases and Outline Business Cases for the programme of works, and the status of projects are reported to the City Deal Executive Board. Dashboard reports are also provided to this Board detailing the actions taken and status of projects to reduce flood risk. These are reported and monitored on a quarterly basis.
- 3.2 The Scottish Environment Protection Agency (SEPA) is the main source for information relating to flooding guidance and projections. The Council maintains regular engagement with SEPA, as well as other stakeholders, via the MGSDP. SEPA guidance is used to identify potentially vulnerable areas for flooding and when identifying suitable Flood Management capital projects.
- 3.3 The Senior Officer was able to identify the main risks to delivering the flood management capital works and these are documented within both the MGSDP Programme Risk Register and the Glasgow City Region (GCR) City Deal Programme Risk Register which are reported regularly to the relevant governance board.
- 3.4 The Council is a lead body within the MGSDP and a member of Council staff operates as the MGSDP Manager. The responsibilities of this role are clear and through discussion and review of documentation, were demonstrated as being fulfilled. The funding of this role is split between partner organisations, and this too is adequately documented.
- 3.5 We noted that the appropriate Council staff are in place to handle the initial response to flooding related incidents. Responsibilities for responding to this type of incident are documented and clearly understood by the responsible officers. Additionally, we noted that the process for escalation is also clear and understood. We reviewed the response and management of a recent weather event and were able to verify that the expected communication, actions and completion of documentation were undertaken as expected.

3.6 As part of the gully cleaning programme, NRS has three priority levels (flood routes, arterial routes, and neighbourhood gullies) as outlined in the Roads Maintenance Manual. Flood routes are roads identified as having the highest risk of being impacted by flooding and are programmed to be attended three times per year. Arterial routes are programmed to be attended on an annual basis. Following review, we identified that flood routes had been attended twice in 2024/25 instead of the expected three times and we were advised this was due to budget constraints. However, we confirmed that on receipt of the new financial year budget, the programme for flood routes was recommenced in April 2025. Arterial routes were attended as expected and records of these held. The neighbourhood gullies are classed as the lowest risk and are programmed to be visited once every three years. Records of completed works are recorded locally within NRS Depots and held electronically. A process is in place to have gullies re-classified as flood routes or arterial routes where required.

3.7 However, we noted that there are some areas where controls could be further strengthened. Through discussion with key officers, they were able to outline the process for programming and recording of the gully cleaning programme, however we identified that there is no formal documented procedure in place.

3.8 The neighbourhood gully cleaning works are carried out by the NRS Roads Gartcraig Depot, recorded locally and the outcomes are published on the Council website. We reviewed the records for the last 3 programmed areas, which included 410 streets and found there was no record of works undertaken in 155 of these streets. For 66 of the 155, an explanation had been recorded locally noting the reason works had not been undertaken. The other 89 streets had no recorded explanation for the works not being completed. We also identified three instances where the figures for gullies attended and gullies cleaned published on the website did not match those recorded locally.

3.9 An action plan is provided at section four outlining our observations, risks, and recommendations. We have made two recommendations for improvement. The priority of each recommendation is:

Priority	Definition	Total
High	Key controls absent, not being operated as designed or could be improved. Urgent attention required.	0
Medium	Less critically important controls absent, not being operated as designed or could be improved.	2
Low	Lower-level controls absent, not being operated as designed or could be improved.	0
Service Improvement	Opportunities for business improvement and/or efficiencies have been identified.	0

- 3.10 The audit has been undertaken in accordance with the Public Sector Internal Audit Standards.
- 3.11 We would like to thank officers involved in this audit for their cooperation and assistance.
- 3.12 It is recommended that the Head of Audit and Inspection submits a further report to Committee on the implementation of the actions contained in the attached Action Plan.

4 Action Plan

No.	Observation and Risk	Recommendation	Priority	Management Response
Key Control: Documented procedures are in place, reflective of current working practices and officers are aware of their role in the process.				
1	<p>There is a gully cleaning programme in place to maintain the road drainage network within Glasgow. The frequency with which flood, arterial and neighbourhood gullies are to be attended is detailed within the Roads Maintenance Manual.</p> <p>Through discussion with key staff, they were able to outline the process for the programming, recording of gully clearances and scheduling of follow up visits however there are no formal documented procedures in place.</p> <p>The absence of documented procedures increases the risk of errors being made and inconsistent practices.</p>	<p>NRS management should ensure that the full process for programming gully clearance works, including the rescheduling of follow up visits is formally documented, and detailed procedures developed.</p> <p>Thereafter, these should be appropriately approved and communicated to all relevant staff with the reminder of adhering to requirements outlined.</p>	Medium	<p>Response: Accepted</p> <p>An Activity Work Instruction (AWI) is to be written and included in Gartcraig Depot's Quality Procedures. The AWI will include record keeping and follow visit process. The AWI will be shared with relevant staff to ensure compliance.</p> <p>Officer Responsible for Implementation:</p> <p>Group Manager Roads and Lighting Direct Services Gartcraig Depot.</p> <p>Timescales for Implementation:</p> <p>30 November 2025.</p>

No.	Observation and Risk	Recommendation	Priority	Management Response
Key Control: Flood prevention activities are undertaken as expected.				
2	<p>We reviewed the supporting data for the last three sets of published figures to verify neighbourhood gully cleaning works had been completed. These are recorded locally on area spreadsheets with works logged on a street-by-street basis. Where works have not been undertaken, a suitable explanation should be recorded.</p> <p>From a total of 410 streets programmed, there was no record of works undertaken for 155 of these streets (37.8%). For 66 of the 155 streets (42.6%), an explanation had been recorded locally noting the reason works had not been undertaken such as "Vehicle diverted to attend flooding" The other 89 streets (57.4%) had no recorded reason for the apparent lack of works. Management indicated that this was a recording oversight. We verified that these streets were subsequently revisited in line with procedure.</p> <p>We also identified three instances where the figures recorded locally did not match those published on the Council website. We were advised that this was as a result of human error and of streets being re-attended without the website figures being subsequently updated.</p>	<p>NRS Management should review the current gully cleaning arrangements to ensure that processes are put in place for:</p> <ul style="list-style-type: none"> The recording and reporting of gully cleaning works to ensure that where works have not been undertaken valid reasons for this are recorded. Appropriate checks are in place to ensure that figures published online are accurate. <p>Management should also conduct a review their current programming of works with a view to maximising the volume of gully cleanings which are completed.</p>	Medium	<p>Response: Accepted</p> <p>Manual record keeping is to be replaced by a digital collector app with drop down menus which will be used during the cyclic gully cleaning programmes to improve the accuracy of record keeping. A verification process will be implemented to ensure online published data is accurate.</p> <p>Officer Responsible for Implementation:</p> <p>Group Manager, Roads and Lighting Direct Services, Gartcraig Depot.</p> <p>Timescales for Implementation:</p> <p>30 November 2025.</p>

No.	Observation and Risk	Recommendation	Priority	Management Response
	Without appropriate checks in place, there is an increased risk that publicly published figures are incorrect. There is also an increased flood risk and that gully cleaning works are not undertaken as expected or within expected timescales if details are not adequately recorded.			